Report Submitted to the United States Congress by the Federal Energy Regulatory Commission

Eighth Report to Congress on Progress Made in Licensing and Constructing the Alaska Natural Gas Pipeline

August 26, 2009

# Eighth Report to Congress on the Alaska Pipeline

## I. Executive Summary

This report by the Federal Energy Regulatory Commission (Commission or FERC) is submitted pursuant to section 1810 of the Energy Policy Act of 2005 (EPAct 2005). <sup>1</sup> Section 1810 of EPAct 2005 requires that the Commission submit to Congress semi-annual reports describing the progress made in licensing and constructing an Alaska natural gas pipeline and any impediments thereto. There has been further progress towards development of an Alaska natural gas pipeline over this reporting period.

This report provides an update from the Commission's Seventh Report, submitted on February 20, 2009. During the period covered by this report : 1) Denali – The Alaska Gas Pipeline LLC (Denali), a partnership of BP and ConocoPhillips, continued with the Pre-filing process for its project with the Commission; 2) TransCanada Alaska Company, LLC (TC Alaska) entered the Commission's Pre-filing process for its project; and (3) certain other natural gas transportation projects in Alaska which would not be subject to Federal jurisdiction continued to be developed.

Both Denali and TC Alaska have publicly announced their intentions to conduct their respective Open Seasons (the formal process for obtaining shipper commitments on the pipeline) in 2010. The Commission must review and approve a project sponsors' Open Season plan (package) before they can begin their Open Seasons. A public comment period regarding these Open Season plans will be incorporated into the Commission's review.

## **II. Status Report**

## A. The Commission's Activities

## 1. Denali's Proposal

Denali plans to construct and operate a 48-inch diameter pipeline to transport up to 4 billion cubic feet of natural gas per day (Bcf/d) from the Alaska North Slope to the Alberta Hub for North American consumers. In 2009, under the Commission's Pre-filing process, the Commission's Staff has been working closely with Denali and the federal

<sup>&</sup>lt;sup>1</sup> P.L. 109-58, 119 Stat. 594 (2005), 42 U.S.C § 15801 et seq.

interagency team <sup>2</sup>, exchanging information and coordinating activities to ensure a timely and efficient application development and review process. All items related to Denali's proposal are available to the public in the FERC's eLibrary under Denali's Pre-filing docket (Docket No. PF08-26-000).

The Commission continues to execute its National Environmental Policy Act and Natural Gas Act certificate application responsibilities for Denali's proposal. Staff remains focused on taking the steps necessary to produce an environmental impact statement (EIS) for the project on the timeline defined by the Alaska Natural Gas Pipeline Act (ANGPA). Working with the federal interagency team, the Commission Staff has engaged in significant activities regarding Denali's proposal, as discussed below.

On May 15, 2009, the FERC Staff selected Argonne National Laboratory (Argonne) as the third-party contractor to provide assistance in preparing the environmental impact statement for the Denali project. In this role, Argonne will work under the direct supervision and control of the Commission Staff.

In June 2009, the Staff met in Calgary, Alberta, Canada with Denali, the National Energy Board of Canada (NEB), and Argonne. The meeting with Denali was to review Denali's project efforts in Canada and how those efforts are coordinated with the required field work in Alaska. Staff's discussions with the NEB focused on the permitting process in Canada and how the NEB's process could be synchronized with that of the U.S. federal interagency team. At the meeting with Argonne, the Commission Staff and Argonne established their working relationship and outlined preliminary work products, such as a communications plan.

In August 2009, the Staff traveled to Alaska to meet with agencies that are part of the federal interagency team and to conduct pipeline route reconnaissance. Staff also met with the Alaska Department of Natural Resources. Discussions focused on the agencies' ability to review two projects simultaneously, the need for infrastructure improvements to support project construction, and strategies for engaging Alaska Natives in the project review.

The FERC Staff, accompanied by staff of the Office of the Federal Coordinator, drove the Dalton Highway to Prudhoe Bay, visiting segments of the route and observing field conditions north of Fairbanks. The site visit included a tour of the proposed location of the gas treatment plant and other Prudhoe Bay facilities.

<sup>&</sup>lt;sup>2</sup> In June 2006, 15 federal agencies signed a *Memorandum of Understanding Related to an Alaska Natural Gas Transportation Project* (MOU). This MOU established a project management framework for cooperation among participating federal agencies with responsibilities related to the approval of an Alaska natural gas transportation project.

Since the previous report, Denali has filed several items with the Commission that are required as part of the Pre-filing process. Denali filed its Public Participation Plan on April 21, 2009, outlining Denali's commitment to ensuring that stakeholders have opportunities to provide input during the development of applications to FERC and other governmental agencies. On May 1, 2009, Denali filed with the Commission its first monthly status report. In this report, Denali announced that it had awarded an engineering contract for the gas mainline portion of the project to Bechtel. The contract covers the services required during the preliminary engineering design phase of the mainline project. Major contract elements include pipeline engineering, compressor station engineering, design basis development, cost estimating, scheduling, and procurement planning, as well as infrastructure and logistics assessments. The work to be performed by Bechtel will be used in the development of Denali's commercial terms for its 2010 Open Season.

In June 2009, Denali met in Washington D.C. with the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) to provide a project update and discuss potential special permits that Denali may request in the future. Consistent with governing statutory and regulatory requirements, none of Denali's special permit requests would require action by PHMSA until after the FERC Open Season.

In July, Denali reported that it had completed an updated infrastructure needs assessment to identify those areas in Alaska where improvements or repairs to highways, bridges, ports and airstrips will be helpful to the project. A similar infrastructure assessment has been conducted by the Alaska Department of Transportation and Public Facilities. These infrastructure improvements are primarily long-lead time items that require early planning, design, permitting, and funding. Only a small percentage of the infrastructure project identified in the studies have been completed to date.

In the short-term, Denali is focusing the majority of its efforts on developing the information necessary for holding a successful Open Season during 2010. Denali plans to resume more intensive environmental field surveys in 2010.

#### 2. TC Alaska's Proposal

TC Alaska, the licensee under the State of Alaska's Gasline Inducement Act (AGIA) program, proposes to construct and operate a 48-inch-diameter pipeline with up to 5 Bcf/d of throughput to transport natural gas from the North Slope of Alaska to

markets in North America via the Alberta Hub. On December 5, 2008, TC Alaska was formally issued the AGIA license by the State of Alaska.<sup>3</sup>

On April 23, 2009, TC Alaska requested that the Commission initiate the Prefiling process for its proposal. That request was approved by the Director of the Commission's Office of Energy Projects on May 1, 2009. The Commission Staff has begun working closely with TC Alaska and the federal interagency team on the project, exchanging information and coordinating activities to ensure a timely and efficient application development and review process. All items related to TC Alaska's proposal are placed in FERC's eLibrary under TC Alaska's Pre-filing docket (Docket No. PF09-11-000) and are available to the public.

In its Pre-filing request, TC Alaska reported that it has awarded a number of contracts to develop plans and schedules for the technical work leading up to its Open Season in 2010 and to perform preliminary engineering studies and develop a cost estimate for the project. Further, TC Alaska is setting up a spatial data management system and completing aerial photography on the pipeline route. Work in progress at the time of the Pre-filing request included hydraulic and geothermal modeling; geotechnical hazards analysis; terrain mapping; pipeline and facilities design; construction/logistics planning activities; and a number of technology development initiatives.

Similar to Denali, TC Alaska conducted an infrastructure needs assessment to identify its requirements for highway system and airstrip upgrades. The improvements and repairs are necessary to address size and weight constraints on roads and bridges as well as the additional project-related traffic.

On June 11, 2009, TransCanada Corporation (TransCanada) announced that it had reached an agreement with affiliates of ExxonMobil Corporation to work together on an Alaska gas pipeline. TC Alaska remains the project sponsor with the FERC and will also remain the AGIA licensee. TC Alaska will continue as the primary point of contact with the State of Alaska and the general public for this project. TC Alaska reports that its AGIA obligations to the State of Alaska will remain unaffected. However, TransCanada and ExxonMobil are now jointly advancing all aspects of the project – technical, commercial, regulatory, and financial – by the sharing of certain expenses and information. The partially redacted agreements which established the alignment between

<sup>&</sup>lt;sup>3</sup> The AGIA is the State of Alaska's official vehicle for encouraging a project sponsor to proceed with a federal application for the construction of an Alaska natural gas pipeline. The AGIA license is a state action that does not constrain future federal actions with respect to a proposed pipeline.

TransCanada and ExxonMobil are publicly available on the State of Alaska's AGIA website.  $^4$ 

On July 15, 2009, TC Alaska filed with the Commission its first monthly status report in Docket No. PF09-11-000. Among other details, TC Alaska reported that its study of a preliminary routing corridor through Alaska was continuing. This corridor review will be the basis of the engineering and cost estimating to support its Open Season. TC Alaska also reported that planning has commenced for a limited late summer geophysical program at specific locations along the study corridor. The technology development activities for this period included work on the pipeline reliability model, further integrating strain capacity and strain demand elements, and frost heave testing.

TC Alaska conducted a series of agency meetings in June 2009, to discuss regulatory requirements with the Alaska AGIA State Pipeline Coordinator's Office, Bureau of Land Management, and FERC. TC Alaska reports its recent project activities in Canada include continuing engagement with the federal, territorial and provincial regulatory departments, and with First Nation communities along the route; engineering review of the existing certified route; construction planning; and conducting an environmental information needs analysis and an environmental constraints review.

The Commission Staff's August 2009 visit to Alaska to meet with agencies and tour the prospective pipeline routes was also applicable and beneficial to the progress of TC Alaska's Pre-filing process. As with the Denali project, the FERC staff is taking the steps necessary to produce an EIS for the TC Alaska project on the timeline defined by ANGPA. In 2009, TC Alaska is focusing the majority of its efforts and resources on preparing for a successful Open Season during 2010.

## 3. Open Seasons for Capacity on Alaskan Natural Gas Pipelines

Congress enacted ANGPA in 2004 and, as required, the Commission approved, in Order No. 2005, rules to establish requirements governing the conduct of Open Seasons for capacity on proposals for Alaska natural gas pipeline projects. Order No. 2005 fulfilled the Commission's obligations required by ANGPA's mandate to establish rules within 120 days of the law's October 13, 2004 enactment date. All of the documents related to this rulemaking are on the Commission's e-Library under Docket No. RM05-1-000 and RM05-1-001. The text of the Alaska Open Season rules is now codified in Part 157, Subpart B of the Commission's Regulations, Sections 157.30 through 157.39.

<sup>&</sup>lt;sup>4</sup> See TransCanada and Exxon Partnership Materials which are available at http://www.gov.state.ak.us/agia/agia\_tc-em.php

Specifically, the rules establish standards for creating Open Seasons for initial and voluntary expansion capacity and for allocating capacity to ensure nondiscriminatory access to any Alaska transportation project. Open Seasons are commercial opportunities for potential customers to compete for and acquire capacity on a proposed or existing pipeline. Open Seasons inform project sponsors of shippers' needs so that they may adjust a project design accordingly. While the Open Season is the commercial backbone for any project, it is expected that the Open Season may overlap other design and environmental efforts in a project's development. Also, individual capacity agreements can be struck between project sponsor and prospective shippers outside of an Open Season, subject to the public notification requirements in the Commission's Open Season regulations. <sup>5</sup>

### **B.** Other Projects

The Alaska Gasline Port Authority is the sponsor of an Alaskan LNG proposal which contemplates delivering Prudhoe Bay gas to Valdez by pipeline, where it would be liquefied and shipped on tankers to the Asian market, the West Coast of the U.S. and Mexico, and/or Hawaii. TC Alaska has committed to including the option of transporting natural gas for this proposed LNG project within its Open Season for a mainline pipeline from the Alaska North Slope to Alberta, Canada. The FERC would have regulatory jurisdiction over any Alaska LNG project, including any pipeline dedicated to transporting gas to the LNG facility.

The Alaska Natural Gas Development Authority (ANGDA) is continuing to develop plans to build certain intrastate natural gas pipelines to move Alaska gas to Alaskans. ANGDA is proposing to build a 460-mile-long natural gas pipeline of various diameters from Beluga (southern Alaska) to Fairbanks. This pipeline would initially be used to transport Cook Inlet natural gas from southern Alaska to Fairbanks, and then later connect to either Denali or TC Alaska to bring North Slope natural gas to southern Alaska.

The State of Alaska is using available in-state data to consider four alternatives for delivering in-state gas to Alaskans. The four alternatives are :

<sup>&</sup>lt;sup>5</sup> Direct access to the Commission's Orders regarding the Open Season, Order Nos. 2005 and 2005-A, a fact sheet, and a slide presentation can be found at http://www.ferc.gov/industries/gas/indus-act/angtp.asp

- A pipeline from the Alaska North Slope (both the foothills of the Brooks Range and the Prudhoe Bay area) to the tidewater in Cook Inlet, along the Parks Highway; <sup>6</sup>
- 2) A pipeline from the Alaska North Slope to tidewater in Cook Inlet, along the Richardson & Glenn Highways;
- 3) A spur-line off a main-line to Alberta, down the Parks Highway to Cook Inlet; and
- 4) A spur-line off a main-line to Alberta, down the Glenn & Richardson Highways to Cook Inlet.

The State of Alaska intends to identify the preferred project from the four options, develop the associated right-of-way, a cost analysis, and facilitate discussions and agreements between gas producers and gas purchasers. Once these efforts are complete, assuming the chosen project is economic, the State of Alaska will provide the private sector the opportunity to purchase these assets and develop the project.

## **III. Related Federal and Canadian Activities**

## A. Operations of the Federal Coordinator

The Office of the Federal Coordinator for Alaska Natural Gas Transportation Projects (OFC), pursuant to Section 106 of ANGPA, continues to coordinate the actions of federal agencies regarding Alaska natural gas transportation projects and to provide a liaison function to ensure communication with Congress, the State of Alaska, and federal U.S. and Canadian agencies. As established in the June 2006 MOU, the OFC is responsible for working with the federal interagency team to create a consolidated project Implementation Plan. The OFC is completing the Implementation Plan in phases and will prepare one for each project applicant that enters the FERC Pre-filing process.

On June 9, 2009, the OFC completed the first phase of the Implementation Plan specific to the Denali project. The first phase includes the period of time from beginning the FERC Pre-filing process until the FERC deems Denali's application complete. The second phase of the plan will cover the EIS development period. The OFC currently is

<sup>&</sup>lt;sup>6</sup> ENSTAR Natural Gas Company, a large natural gas distribution company in Alaska, continues to work with the State of Alaska (under the direction of the Governor's office) on route selection, regulatory matters, and permitting for an in-state pipeline.

working on a first phase Implementation Plan specific to the TC Alaska project and expects to complete it by the end of 2009.

The OFC meets regularly with the federal interagency team and with the Senior Intergovernmental Management Team, comprised of the Federal Coordinator and senior government officials for the State of Alaska and the Canadian federal government, as well as representatives from Denali and TC Alaska. The Federal Coordinator continues to negotiate a joint surveillance and monitoring agreement with the State of Alaska as required in Section 106(e) of ANGPA.

## **B. U.S. Department of Energy**

The U.S. Department of Energy's (DOE) program office for the federal loan guarantee program for the Alaska natural gas transportation project monitored the developments of potential project sponsors. When a more complete commercial project emerges from TC Alaska, Denali, or another sponsor(s), DOE will proceed with structuring the loan guarantee program.

## C. Developments in Canada

The regulatory scheme in Canada for the Canadian segments of Denali and TC Alaska has been clarified such that now the role of three agencies is being better coordinated. These agencies are the Major Projects Management Office (MPMO), Northern Pipeline Agency (NPA), and the Canadian Environmental Assessment Agency (CEAA). Both the MPMO and NPA are located within the Natural Resources Canada (NRCan), which is akin to the U.S. Department of Energy. The MPMO will coordinate the Denali project, while the NPA is responsible for managing the TransCanada's proposal in Canada, which is also known as the Foothills Project. The National Energy Board of Canada will also be involved with both projects for tariff and toll issues, as well as evaluating the merits of Denali's proposal in Canada. Canadian officials are developing coordinated permitting timelines for both projects such that permitting and regulatory work in Canada is expected to coincide with permitting and regulatory activity in the United States.

## **IV.** Conclusion

There are now two proposals for a mainline Alaska natural gas pipeline project in the Commission's Pre-filing review process. While Denali and TC Alaska have continued to advance in their detailed planning and project design stages, both companies are currently concentrating the bulk of their efforts on obtaining the information necessary to conduct their respective Open Seasons in 2010. The Alaska Open Season(s) are commercial opportunities for potential customers to compete for and acquire capacity on a proposed Alaska natural gas pipeline(s).

Recent infrastructure needs assessments by Denali, TC Alaska, and the Alaska Department of Transportation and Public Facilities indicate that a large number of projects to improve or repair highways, bridges, ports, and airstrips must be completed prior to initiating construction of an Alaska natural gas pipeline by either Denali or TC Alaska. Because these infrastructure improvements are long-term efforts that require permitting and funding, greater progress in this area must be made to avoid conflicting with the projected timeline for pipeline construction.