Report

Submitted to the

United States Congress

by the Federal Energy Regulatory Commission

Report to Congress on progress made in licensing
and constructing the Alaska natural gas pipeline

February 1, 2006

Report of the Federal Energy Regulatory Commission on progress made in licensing and constructing the Alaska natural gas pipeline

I. Executive Summary

This report by the Federal Energy Regulatory Commission (Commission) is submitted pursuant to section 1810 of the Energy Policy Act of 2005 (EPAct 2005).[1] Section 1810 of EPAct 2005 provides that within 180 days of the date of enactment, and every 180 days thereafter until the Alaska natural gas pipeline commences operation, the Commission shall submit to Congress a report describing the progress made in licensing and constructing the Alaska natural gas pipeline and any impediments thereto.

At present, there are three potential projects being seriously considered for bringing Alaskan natural gas from the Alaskan North Slope to lower 48 state markets. One of these potential projects is the Alaska Natural Gas Transportation System (ANGTS) proposed pursuant to the Alaska Natural Gas Transportation Act of 1976 (ANGTA), Canada's Northern Pipeline Act and an Agreement between the United States and Canada. The Commission granted conditional approval of this project in 1977. A second potential project is the Trans-Alaska Gas System (TAGS), a liquified natural gas (LNG) export project. The third potential project involves a new pipeline to transport gas from the North Slope of Alaska to the Canadian border, which would be authorized pursuant to the provisions of section 103 of the Alaska Natural Gas Pipeline Act (ANGPA)[2] and section 7 of the Natural Gas Act (NGA).[3]

This report describes the status of the three projects, the progress made in advancing each of them, including actions taken by the project sponsors, the Commission, and other federal and state entities, and potential impediments to each of the projects. As discussed in this report, a successful Alaska natural gas pipeline will have to overcome a variety of significant impediments presented by the tremendous size, scope, and cost of any such delivery system, the long lead-time needed to develop such a project, unique environmental and competitive conditions, and the international scope of such a project. These obstacles have all led potential project sponsors to agree that several things need to occur before they can move seriously toward developing their respective proposals. First, project sponsors require fiscal certainty regarding Alaska state tax and royalty payments associated with their respective proposals. Second, certain jurisdictional, permitting, and financing issues needed to be addressed through legislation and regulatory action, both in the United States and in Canada. Third, the potential sponsors require reasonable assurances that over time, the project will be economically feasible. In turn, the North Slope producers must be assured that the project's economic

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[1] P.L. 109-58, 119 Stat. 594 (2005).
[2] P.L. 108-324, 118 Stat. 1220 (2004).
[3] 15 U.S.C 717f.

viability justifies the commercial decision to make a long-term investment in a multi-billion dollar transportation system and to enter into long-term commitments to sell their gas supplies.

The impediments are being addressed by legislative initiative and other governmental action, both at the federal and state level, involving both industry and involved governmental entities.

II. Background – ANGPA and Related Initiatives

Recognizing the importance of Alaska natural gas resources in meeting the rapidly rising demand for natural gas,[4] Congress enacted ANGPA, which became law on October 13, 2004. The objective of this Act is to facilitate the timely development of an Alaska natural gas transportation project to bring Alaskan natural gas to markets in Alaska and the lower 48 states to meet increasing demand. One requirement of ANGPA was that within 120 days from enactment of the Act, the Commission must issue regulations governing the conduct of open seasons for Alaska natural gas transportation projects, including the allocation of capacity.

The Commission issued Order Nos. 2005, and 2005-A, on February 9, and June 1, 2005,[5] respectively, establishing the open-season regulations to govern any Alaska natural gas pipeline facilities, whether authorized under ANGTA or under the NGA pursuant to the provisions of ANGPA. As directed by Congress in ANGPA section 103, the open-season regulations specify the criteria for and timing of any open seasons, promote competition in the exploration, development, and production of Alaska natural gas, and, for any open-season for capacity exceeding the initial capacity, provide for the transportation of natural gas other than from Alaska's North Slope. In addition to providing prospective project sponsors with flexibility in the design of their open seasons, the open-season rules allow pre-subscriptions of capacity. The rules also provide rate certainty for voluntary expansions by specifying that rolled-in rate treatment will attach to voluntary expansions.

III. Alaska Pipeline Status Report

At present, there are three potential projects being considered to bring natural gas from the North Slope of Alaska to markets in the lower 48 states. However, due to the

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[4] *See* Exhibit A attached to this Report. Exhibit A is a chart that illustrates how domestic, Canadian, LNG, and Alaskan natural gas supplies are expected to meet the projected natural gas demand through the year 2020.

[5] *Regulations Governing the Conduct of Open Seasons for Alaska Natural Gas Transportation Projects*, Order No. 2005, FERC Stats. & Regs. ¶ 31,174, *order on reh'g*, Order No. 2005-A, FERC Stats. & Regs. ¶ 31,187 (2005).

tremendous technical, financial, and commercial challenges involved, it is likely that only one of the three projects will be developed.

A. Alaska Natural Gas Transportation System (ANGTS)

The ANGTS, which is currently supported by TransCanada Corporation (TransCanada), is the gas pipeline project approved in accordance with ANGTA, Canada's Northern Pipeline Act and an Agreement between the United States and Canada on Principles Applicable to a Northern Natural Gas Pipeline. The ANGTS consists of a 48-inch pipeline that would parallel the Trans-Alaska Pipeline System (TAPS) from Prudhoe Bay to Delta Junction, then follow the Alaska Highway to the Alaska-Yukon border and continue through Canada to the Alberta hub. In Alberta, the pipeline splits into two legs: the eastern leg terminates near Chicago and the western leg terminates near Antioch, California. The eastern and western legs of the project were constructed in the 1980's. The pipeline would be buried throughout except at major fault and river crossings.

In 1977, an environmental impact statement (EIS) was completed for the project and the Commission issued conditional certificates of public convenience and necessity. In 1980, a renewable 30-year grant of right-of-way across federal lands was issued for the project by the Secretary of Interior pursuant to ANGTA. A State of Alaska right-of-way application was submitted in 1981, but twice suspended. In 2004, the Alaskan Northwest Natural Gas Transportation Company and TransCanada Alaska Company, LLM (wholly-owned subsidiaries of TransCanada) submitted an updated right-of-way application to the state and a final decision on the application and 30-year right-of-way lease have been prepared, but not yet signed. Additionally, TransCanada has filed an application to negotiate under the Alaska Stranded Gas Development Act (SGA); however, there have been no active negotiations between the State of Alaska and TransCanada as yet. This critical stage in the evolution of a viable project is discussed in more detail below.

B. Trans-Alaska Gas System (TAGS)

The TAGS is an LNG export project conceived by the Yukon Pacific Corporation in the 1980's. The proposal calls for a 36-inch pipeline to parallel the TAPS from Prudhoe Bay to Anderson Bay near Valdez, Alaska, where an LNG liquifaction plant would be built to ship the LNG to worldwide markets. The pipeline would be buried throughout except in special design areas.

In 1988, an initial EIS was completed for the project. In 1995, an EIS was completed on the LNG facilities and the Commission issued an order granting Yukon Pacific export authorization. A federal 30-year grant of right-of-way was issued for the project in 1995 by the Alaska State Director of the Bureau of Land Management. The State of Alaska issued a ten-year conditional right-of-way lease in 1988 and renewed the

conditional lease for another ten years in 1998. The state lease is currently held by CSX Corporation. The state conditional right-of-way lease is transferable, upon state approval.

The TAGS project is currently promoted by the Alaska Gas Port Authority (AGPA), which has negotiated with CSX Corporation for rights to the federal grant and state conditional lease. AGPA proposes a 48-inch gas pipeline from Prudhoe Bay to Anderson Bay and includes a 24-inch "spur" gas pipeline from Glennallen to the greater Anchorage Bowl. AGPA has filed an application to negotiate a contract under the SGA; however, there have been no active negotiations as yet between the State of Alaska and AGPA.

C. The Producer Group

The potential project of the Producer Group, comprising BP, ConocoPhillips and ExxonMobil, consists of a 52-inch pipeline that would parallel the TAPS from Prudhoe Bay to Delta Junction, then follow the Alaska Highway to the Alaska-Yukon border and continue through Canada to the Alberta Hub, and ultimately to markets in the lower 48 states. The pipeline would be buried throughout except at certain river crossings. In 2000-2001, the Producer Group conducted a $125 million feasibility study, which determined that a pipeline through Canada to the lower 48 states has the best chance of commercializing Alaska natural gas.

No right-of-way applications have been submitted to state or federal governments; however, members of the Producer Group have met with both state and federal officials regarding the proposal. The State of Alaska and the Producer Group have formed a right-of-way group, which meets regularly to discuss issues surrounding the project. The Producer Group, too, has filed an application to negotiate a contract under the SGA. At present, this is the only prospective sponsor with whom the state is actively negotiating.

D. Alaska Stranded Gas Development Act Negotiations

The SGA permits the state to negotiate fiscal terms regarding payments in lieu of taxes and royalty adjustments in order to encourage new investment to develop the state's stranded gas resources. Potential investors are seeking to substitute the fiscal certainty of contractual payments for the risk of changing state and municipal taxes with respect to any proposed natural gas pipeline project.

The project sponsors have indicated that they will only begin to develop an application once they have successfully negotiated for the fiscal certainty under the SGA. Consequently, this is the first impediment to the development of an Alaska natural gas pipeline project. As noted above, while all three prospective project sponsors have filed applications to commence negotiations with the State of Alaska under the SGA, the Producer Group is the only sponsor with whom the State of Alaska is negotiating at

present. ConocoPhillips and the State of Alaska announced in October 2005 that they had reached an agreement on all terms. While BP and ExxonMobil have not yet reached an agreement on certain contract terms with the state, all parties are committed to resolving their differences in the very near future, according to a gas pipeline update given by Governor Frank Murkowski in a December 16, 2005 press conference.

Once a contract is negotiated, the SGA requires a 30-day public comment period before the governor can submit the agreement to the state legislature for its approval. The legislature may not amend the contract; its only option is to approve or reject the contract. The legislature started its 121-day session on January 12, 2006 and there is a risk that unless the state can process the applications and complete contract negotiations quickly, there might not be enough time for the state legislature to consider and act on the matter during the regular session.

Before a sponsor can file an application for a project authorized under ANGPA section 103, it must conduct studies and field surveys and prepare resource reports, and, as discussed below, the seasonal windows for such studies and surveys are narrow. Consequently, a realistic expectation for the development of an application in 2006 is dependent on the Producer Group reaching an agreement with the State of Alaska under the SGA within the next several weeks.

E. Environmental Review of an Alaska Natural Gas Pipeline

In connection with an Alaska natural gas transportation project authorized under the NGA, section 104 of ANGPA provides that the Commission is the lead agency for purposes of compliance with the National Environmental Policy Act of 1969 (NEPA) and the preparation of a single, consolidated EIS for all federal agencies. ANGPA establishes a streamlined 20-month deadline from the time of the filing of a complete application to final certificate authorization, which includes an 18-month deadline for the completion of NEPA environmental review.

In the event a revised ANGTS moves forward, ANGPA provides that the Secretary of Energy will determine what updated environmental data and analyses are necessary to develop the site-specific terms, conditions and compliance plans required by the President's Decision. Due to the amount of time that has elapsed since ANGTS was approved, the Commission staff expects the Secretary to decide either that a new EIS or a supplemental EIS is needed ANGTA does not stipulate any specific timeline for the Secretary of Energy to complete this process.

The Commission has been active for the past several years in preparing for its official role for its NEPA and certificate application responsibilities. Exhibit B in the Appendix to this report lists many of the siting activities associated with an Alaska natural gas pipeline in which the Commission staff has participated. Based on its

consultations with industry, Commission staff has estimated the development of the application will occur over two field seasons, and take as long as 18 months. Two field seasons may be necessary due to the shortened field season in Alaska when route analysis and surveying can be accomplished. However, if a project sponsor has significant detailed environmental data on its project route, it is possible that this time could be shortened. As of January 5, 2006, no project sponsor has committed to work during the 2006 summer field season. This is significant because mobilization needs to begin early in the calendar year to get the personnel and equipment into the field the following summer.

While the application is under development, the Commission staff will begin its pre-filing process, which will assure a complete application is developed in the shortest amount of time.[6] As part of the pre-filing process, the agency activities will include: familiarizing staff with the project area, attending the project sponsor's stakeholder outreach meetings, conducting Native Alaskan consultation, viewing the route and alternatives, meeting with federal and state agencies and stakeholders, holding NEPA scoping meetings, identifying data gaps, and evaluating the application for completeness. The project sponsor's pre-filing activities will include: project design and engineering, route surveys, infrastructure needs analysis, conducting stakeholder outreach meetings, and preparing permit applications. The prospective applicant will use this time to finalize the application after the NEPA scoping has identified issues and concerns. Further, at the sponsor's discretion the open season period (also required under ANGPA) can run concurrently with the pre-filing and application development process, thus adding no additional time to the overall process.

F. NEPA Memorandum of Understanding Among Involved Federal Agencies

Numerous federal and state agencies will have permitting and other responsibilities for various aspects of an Alaska natural gas transportation project.

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[6] Under section 311(d) of EPAct 2005, the Commission was directed, within 60 days of enactment of EPAct 2005, to promulgate mandatory procedures governing the Commission's pre-filing review process for LNG terminals and related facilities. On October 7, 2005, the Commission issued a final rule, Order No. 665, which codified the optional pre-filing process that the Commission had been using for several years and made it mandatory for LNG terminals and other related facilities, while optional for other jurisdictional facilities. The purpose of the pre-filing process is to encourage the early involvement of interested stakeholders, facilitate interagency cooperation, and identify and resolve issues before an application is filed with the Commission. As a result of discussions with the several prospective sponsors of an Alaska natural gas transportation pipeline project, Commission staff fully expects that whenever any of the prospective project sponsors decide to move forward, they will elect to utilize the Commission's formal pre-filing process.

Alignment among these agencies on issues such as project review and implementation schedules, information requirements, and mitigation is essential to enable agencies to discharge their responsibilities expeditiously. A coordinated project management approach will facilitate and maintain this alignment and expedite completion of an Alaska natural gas transportation project. Since, by authorizing loan guarantees and other financial incentives, the federal government anticipates sharing the financial risk associated with this massive privately financed project, it is of added importance that the project be completed on time and within budget.

The federal agencies involved have been working on a Memorandum of Understanding (MOU) to establish a project management framework, with guidance from the Federal Coordinator and the Commission as the lead NEPA agency, for cooperation among the agencies with responsibilities related to aspects of the approval of an Alaska natural gas transportation project.[7] The goal of this MOU is to commit federal agencies to early coordination and compliance with deadlines and procedures established by relevant agencies, especially deadlines established by the Commission for satisfaction of applicable NEPA requirements. This effort has resulted in a draft MOU that is now being readied for circulation to the participating agencies for signature.

G. Federal Loan Guarantee

On May 27, 2005 the Department of Energy (DOE) published a Notice of Inquiry in the Federal Register seeking public comment on an $18 billion loan guarantee program to encourage construction of a pipeline that will bring Alaskan natural gas to the continental United States. The Notice requested public comment on the loan guarantee program and on specific issues about how the program should be administered. The comment period closed on July 26, 2005 and the DOE received several detailed comments from project sponsors, investment firms and the State of Alaska. No final decision has been made on whether formal DOE regulations to implement the loan guarantee program are needed.

H. Canadian Regulatory Update

The regulatory framework for the Canadian portion of a potential Alaska Highway Gas Pipeline has not yet been determined. On the one hand, Foothills Pipeline insists it has an exclusive right to exercise its existing certificates under the Northern Pipeline Act; on the other hand, the Alaska natural gas producers argue that they have the right to apply

[7] These agencies include the Departments of Agriculture, Commerce, Defense, Energy, Homeland Security, Interior, Labor, State, Transportation, and Treasury, the Advisory Council on Historic Preservation, Environmental Protection Agency, Council on Environmental Quality, Federal Energy Regulatory Commission, and the Office of the Federal Coordinator for the Alaska Natural Gas Pipeline Project.

for a new certificate under the National Energy Board Act. This issue is only likely to be completely resolved after detailed fiscal contracts are finalized in Alaska and commercial negotiations between Foothills and the natural gas producers have taken place. The Government of Canada is considering the issue and has not taken a public position. The Producer Group has long held that one of the key elements in justifying continuation of the project is Canadian agency and First Nation regulatory process clarity.

IV. Progress in the Development of an Alaska Natural Gas Pipeline Project

As a consequence of the legislative initiatives included in ANGPA and the related tax relief provisions, as well as the issuance of the Commission's open season rules, much has been done to address the concerns of potential project sponsors who wanted assurances that the authorization process would be expeditious and streamlined, and that financial safeguards and incentives were in place to help absorb the huge financial costs and risks of such a project. Moreover, ANGPA clarified the status of the authorizations issued under ANGTA.

Actions are being taken by both the industry and the various state and federal governmental agencies with responsibilities in the authorization and permitting process for an Alaska natural gas pipeline project. As reported above, the sponsors of all three active proposals have filed applications to negotiate under the SGA, and the State of Alaska is currently negotiating with the Producer Group in an effort to obtain fiscal certainty over state tax and royalty issues. Governor Murkowski is committed to this effort. One of the three principals has come to terms, and the two other producers continue to negotiate a resolution of the outstanding issues.

The adjudication process for TransCanada's updated state right-of-way application for the ANGTS has been completed. The Alaska Department of Natural Resources Commissioner's Final Decision and a 30-year, transferrable and renewable, right-of-way Lease have been prepared, though yet unsigned.

The Commission has been actively preparing to meet its responsibilities in the authorization process for any Alaska natural gas pipeline project. To this end, the Commission's activities have included: (1) entering into memoranda of agreements with the Regulatory Commission of Alaska and the National Energy Board of Canada; (2) working on a memorandum of understanding with 13 federal agencies and the Office of Federal Coordinator to establish a project management framework that ensures early coordination and compliance with the many deadlines and procedures that will attach to the process; (3) touring the pipeline routes; and (4) conducting meetings with federal and

Alaska agencies, prospective sponsors, and other Alaskan stakeholders as recently as January 2006.[8]

Additionally, the Commission's new open-season rules governing any Alaska natural gas pipeline should be beneficial to the overall development of the project in several ways. First, the rules provide the sponsors with important flexibility to design open seasons that could help yield firm transportation contracts needed to secure the capital to develop and construct the project. Second, the ability to secure the significant capital required to develop and construct the project has been enhanced by the rules' allowance of pre-subscriptions of reserved capacity. Third, the regulations provide that a presumption of rolled-in rate treatment will attach to voluntary expansions of the Alaska gas pipeline.

Finally, as noted in section G of this Report, DOE is considering comments received in response to its May 27, 2005 Notice of Inquiry seeking public comment on an $18 billion loan guarantee program.

V. Impediments to the Project's Development

The logistical and jurisdictional impediments to the successful development of an Alaska natural gas pipeline project are the product of: (1) the tremendous size, scope, and cost of any Alaska pipeline, (2) the long lead-time needed to develop the project, (3) unique environmental and competitive conditions and (4) its international scope. The enactment of ANGPA and ongoing federal agency actions have taken steps toward resolving or mitigating the outstanding jurisdictional and financial concerns. Nonetheless, as described above, none of the potential projects being considered have completed negotiations with the State of Alaska under the SGA. Further, all three prospective sponsors of the Producer Group have stated that they will only begin further development of their respective projects after they have successfully negotiated with the State of Alaska under the SGA. To date, only ConocoPhillips of the Producer Group has come to terms, while BP and ExxonMobil continue to negotiate. If negotiations are not concluded soon, there is a chance that there will be insufficient time to conduct the required studies and field surveys in 2006. In the case of the Producer Group proposal, Canadian governmental and regulatory hurdles must be removed before they will commit to final project development as well.

Further delay, in and of itself, could impede the economic and commercial feasibility of the project. For example, the cost of the ANGPA section 103 (Producer Group) pipeline project has been estimated at $20 billion in 2001 dollars. However, the

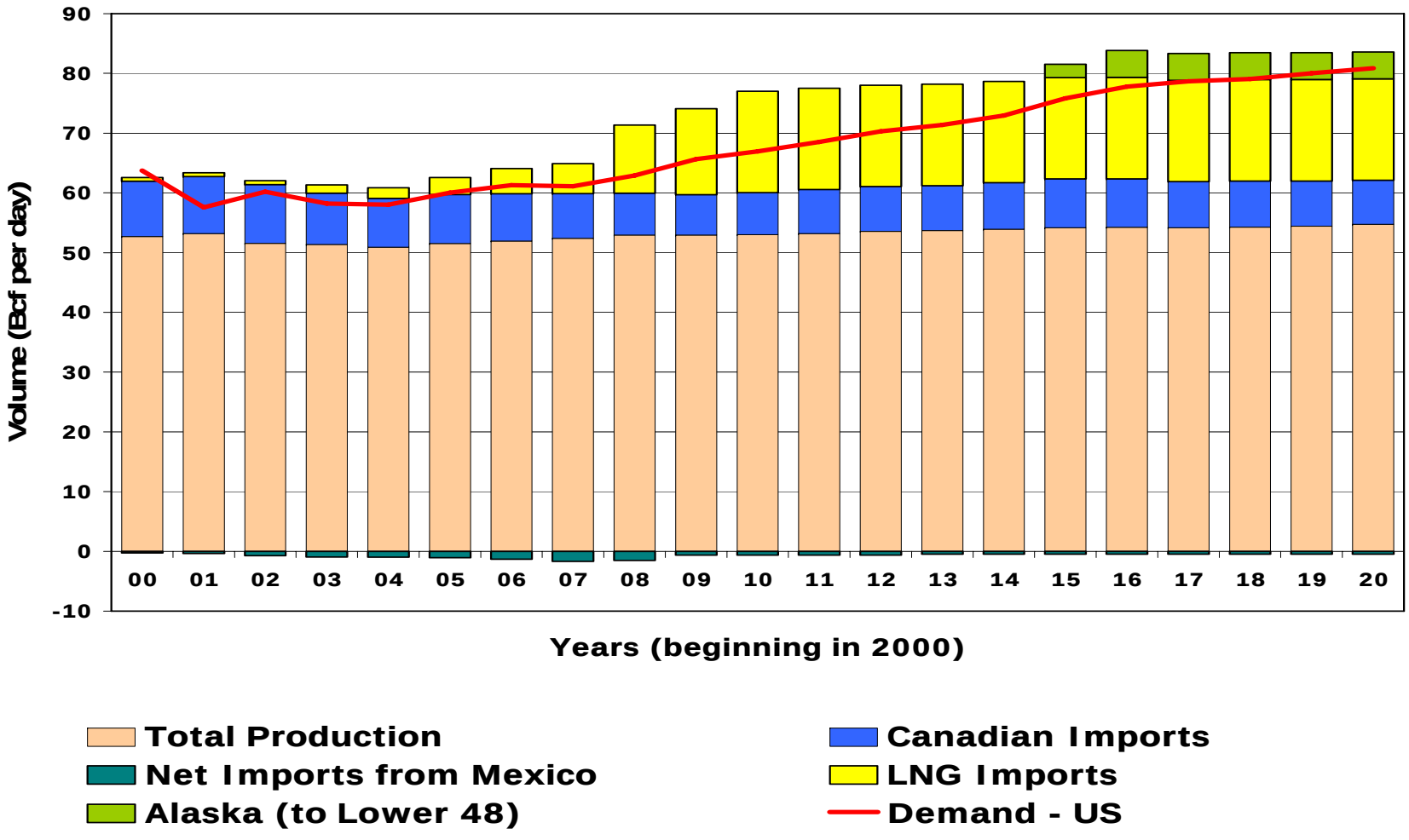
[8] *See* Exhibit B attached to this Report. Exhibit B illustrates the types of Commission staff activities that have occurred in anticipation of and preparation for fulfilling its responsibilities in the authorization process of an Alaska natural gas pipeline.

cost of the steel required to build the pipeline has nearly doubled since that estimate was developed. In addition, the prospective sponsors are well aware that prior experiences with market fluctuations over time led to the earlier suspension of the ANGTS' development, and they are, no doubt, sensitive to the narrow margins of economic feasibility presented by this unique, massive undertaking.

Another uncertainty that threatens to negatively impact an Alaska natural gas pipeline involves the Mackenzie Project which is currently being considered by the Government of Canada. This major pipeline project consists of over 750 miles of 30-inch natural gas transmission pipeline that would transport 1.2 Bcf/d of new Arctic gas to market. The capital cost if this project is estimated at over $7 billion, and it is planned to be in operation by 2011. Although this project is neither a complement to nor competitor of an Alaska natural gas pipeline, its development presents certain problems and risks. First, industry reports indicate that there will not be enough pipeline grade steel available to construct both projects at the same time. Similarly, there could be a shortage of the skilled labor force required to build two technically challenging Arctic projects of such magnitude at the same time.

VI. Conclusion

The effort to develop an Alaska natural gas pipeline has presented profound policy questions spanning almost 30 years and has been the subject of two special acts of Congress, a Presidential decision, an international agreement, multiple Commission proceedings, and a major state statute (the Alaska Stranded Gas Development Act). Nonetheless, the Commission can report that both the industry and governmental agencies are pursuing resolution of all issues, jurisdictional, environmental, permitting, and financing, raised by the development of an Alaska pipeline. As discussed above, many of the impediments are being addressed by legislative initiative and other governmental action, both at the federal and state level, involving both industry and governmental entities. As explained above, however, further development of their respective projects will only occur after the project sponsors have concluded a successful negotiation with the State of Alaska under the SGA.


Volume (Bcf per day)
90
80
70
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Years (beginning in 2000)
Total Production
Net Imports from Mexico
Alaska (to Lower 48)
Canadian Imports
LNG Imports
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Commission Staff Preparatory Activity

January 2003 to Present: Several agencies participate in periodic teleconferences (FERC, BLM, DOT, MMS, DNR, EPA, JPO). Industry representatives participate to present updates on engineering studies and project developments.

August 2003: FERC staff and the BLM meet in Anchorage and Fairbanks to discuss the project and establish a working relationship. Also meet with representatives of the Tanana Chiefs Conference, AK Federation of Natives, Doyon Limited, AK DNR, JPO, AK State Pipeline Coordinator, AK State Legislators, Mayor of the City of Fairbanks, and others. FERC staff tours the pipeline route.

April 2004: FERC staff visits Calgary and meets with Canadian agencies to discuss coordinating respective environmental review and permitting efforts (National Energy Board of Canada (NEB), Northern Pipeline Agency, and Canadian Environmental Assessment Agency).

May 11, 2004: Chairman Wood signs a memorandum of understanding with the NEB to ensure interagency cooperation on an Alaskan Natural Gas Pipeline Project. In 2003, Chairman Wood signs a similar memorandum of understanding with the Regulatory Commission of Alaska with respect to coordinating our two agencies' regulatory activities.

May 2004: The staffs of FERC and US DOT meet with the Alaskan producers to discuss their high strength steel program and discuss streamlining OPS waivers.

August 2004: In response to an invitation from FERC staff, a representative of the Tanana Chiefs Conference (TCC) attends the Commission staff's Native American consultation workshop in Arizona. The FERC staff, in coordination with BLM, will hold a similar workshop in Alaska when the specific project is selected.

November 2004: Representatives of the AK Department of Natural Resources meet with FERC staff in Washington to discuss the relationship between the State and FERC in the pending environmental review.

January 2005: BLM AK State Director and DOI meet with FERC staff and Chairman and separately with DOE to discuss the environmental review and permitting process.

February 2005: DOE, FERC, and DOI begin working to develop an MOU for the project.

May 2005: DOE, FERC, and DOI representatives appear before state legislative committee in Juneau to discuss respective agency roles and interagency coordination efforts.

June 2005: The staffs of FERC and DOI meet to continue planning resource and data needs for EIS.

July 2005: A draft MOU (Alaska Natural Gas Pipeline Federal Interagency Memorandum of Understanding) prepared by FERC, DOE, and DOI is sent to all interested Departments and Agencies for review.

August 2005: FERC staff meets in AK with acting OFC, BLM project team, AK DOT and other agencies to better define the activities that are within the scope of the EIS.

August 2005: Commissioner (Brownell) and staff tour routes, meet with Governor, legislators, RCA, Native Alaskan group, and other stakeholders.

January 2006: FERC staff meets with Native Alaskan group in AK.