Section 1 of Supplemental Filing

Alaska Gasline Port Authority
FE Docket No. 12-75-LNG

Response to DOE Letter of October 4, 2012

November 13, 2012
November 9, 2012

John A. Anderson  
Manager, Natural Gas Regulatory Activities  
Office of Oil and Gas Global Security and Supply  
Office of Fossil Energy  
Department of Energy  
Washington, DC 20585


Dear Mr. Anderson:

This filing is in response to your letter dated October 4, 2012 ("letter") and the meeting held at the Department of Energy, Office of Fossil Energy (DOE/FE) offices on October 11, 2012. The Department of Energy, Office of Fossil Energy’s letter requests that the Alaska Gasline Port Authority ("AGPA") provide additional information pertaining to three areas of AGPA’s application. Those areas included: (1) the availability of a pipeline; (2) the source of gas supply; and (3) the siting of the liquefaction plant. Each of these will be addressed in turn.

I. A Process is in Place to Facilitate Pipeline Construction

The DOE/FE’s letter states that “[n]o pipeline exists, nor has AGPA demonstrated a commitment by any capable party for the construction of a pipeline for the transportation of natural gas from the North Slope to Valdez, Alaska.”
The Alaska Gasline Inducement Act ("AGIA") was passed by the Alaska Legislature in 2007 to "encourage expedited construction of a natural gas pipeline" which among other goals, "encourages oil and gas lessees and other persons to commit to ship natural gas from the North Slope to a gas pipeline system to markets in this state or elsewhere."¹

To that effect, on August 20, 2008 Governor Palin issued Administrative Order No. 242 noting the purpose of AGIA is to: "facilitate development of an LNG project that uses North Slope natural gas transported on the mainline natural gas pipeline developed under a license issued under the Alaska Gasline Inducement Act."² Order 242 also noted that "An LNG project would focus on liquefaction facilities and facilitating agreements between LNG buyers and natural gas producers."

As the AGIA licensee, TransCanada is required to assess the market demand for pipeline capacity "every two years through public nonbinding solicitations or similar means"³ and to "expand the proposed project in reasonable engineering increments and on commercially reasonable terms."⁴ The Alaska State Legislature noted: "it is the intent of the legislature that an AGIA license will enable and encourage an All Alaska gas line/LNG project within the TransCanada Project."⁵

TransCanada and ExxonMobil invited AGPA to participate in its most recent public Solicitation of Interest which closed on September 14, 2012. This Solicitation of Interest encompassed both a gas pipeline to Southcentral Alaska and an Alaska-Canada Pipeline as

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¹ AS 43.90.010.
² Exhibit 1.
³ AS 43.90.130(5).
⁴ AS 43.90.130(6).
⁵ Exhibit 2.
alternative routes. AGPA’s nomination resulted from its success in aggregating interest from Asian buyers, such that “it appears a 19 million ton per annum LNG project at Valdez will be fully subscribed.” The total volume of nomination by AGPA for export was 2.8 bcfd of gas into the inlet of the LNG facility at Valdez. Of that volume, approximately one half was nominated from countries that would qualify for export under this FTA export license. One of the companies noted below, also from an FTA country, has yet to designate a specific volume.

AGPA’s aggregated volume of gas for its nomination of capacity in the gas pipeline proposed by ExxonMobil/TransCanada in their Solicitation of Interest consisted of written confirmation of interest from the following companies:

- POSCO (Korea)
- KOGAS (Korea)
- Korea East-West Power Co., Ltd. (Korea)
- GS Energy Corporation (Korea)
- PT PGN LNG Indonesia
- PTT International Co., Ltd (Thailand)

During the same Solicitation of Interest, a consortium of Japanese companies nominated 2.7 bcfd into the same pipeline. The consortium, known as Resources Energy Inc, (REI) is comprised of six major Japanese companies with a focus of bringing natural gas to Japan. This is responsive to an increased need for natural gas in this country following the devastating

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6 Exhibit 3, Alaska Pipeline Project Solicitation of Interest Notice with cover letter (July 30, 2012).
7 Exhibit 4, Letter to Vincent Lee (September 14, 2012).
8 See Letters of Interest, attached as Exhibit 5.
9 See, Exhibit 3.
earthquake and tsunami last year. As the article notes, REI has expressed an initial preference of an LNG terminal at Valdez.

Most recently, TransCanada and ExxonMobil joined with BP and ConocoPhillips in issuing a letter to Governor Parnell describing their joint efforts to “advance a collective understanding of what would be required for [LNG] exports from Southcentral Alaska.”11 The letter noted “TransCanada’s recently completed non-binding solicitation of interest in accordance with AGIA” resulted in “interest from potential shippers and major players from a broad range of industry sectors and geographic locations.”12 However, “[n]othing in [AGIA] precludes a person from pursuing a gas pipeline independently from [AGIA].”13 Thus, AGPA’s efforts are not contingent upon a successful AGIA project.

II. Source of Gas Supply

The DOE/FE letter next states that “AGPA has not demonstrated a source of supply of natural gas through a commitment, such as a contract, memorandum of understanding, letter of intent, or other agreement with producers of natural gas on the North Slope of Alaska.”

The initial source of gas supply will be the Prudhoe Bay and Point Thomson units, which contain approximately 24.5 and 8.0 tcf of proved gas reserves, respectively.14

The Alaskan North Slope does not have an active market place where natural gas can be purchased on a rolling basis in a competitive trading hub. Instead the basin is primarily

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11 Exhibit 7, Letter to Governor Sean Parnell (October 1, 2012) at 1.
12 Exhibit 7, p. 2.
13 AS 43.90.100(b).
controlled by three companies that have a dominant market share due to their interests in leases executed by the State of Alaska on the Prudhoe Bay and Point Thomson fields. Those leases require that natural gas be sold to companies willing to take the resource to market. As the leading oil and gas treatise explains, “[u]pon discovery of minerals on a leasehold, the lessee is ordinarily under an implied duty to use due diligence to market the product.” As with the other implied covenants in oil and gas leases, it is long recognized that a lessee is obligated to sell gas if it has a reasonable expectation of profit. The operator of Prudhoe Bay has recognized that obligation, and stated it would “delightfully” sell gas to credit worthy entities willing to undertake a pipeline project:

If an entity were to bear the expense and take the risk of building a pipeline, we would be delighted to ship gas on their pipeline provided we had a reasonable expectation of making a profit. Indeed, if a credit worthy entity were willing to buy our gas on commercially reasonable terms, we would sell it to them today.

Economic analysis by both Wood Mackenzie and the Brookings Institute have made clear that an Alaska LNG project out of Valdez is not only competitive, but can deliver LNG to Asia cheaper than many other proposed global LNG projects. As discussed above, AGPA has aggregated the interest of Asian buyers for the express purpose of facilitating the purchase of

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14 See Exhibit 8, Alaska Oil and Gas Report, Alaska Department of Natural Resources Division of Oil & Gas at 8 (November 2009).
15 See Exhibit 9, Howard R. Williams & Charles J. Meyers, Oil and Gas Law § 853 (2004 Supp.).
17 See Exhibit 10, Letter from David Van Tuyll (July 21, 2008) at 2.
North Slope gas at the wellhead for transport through the AGIA licensee project to tidewater at Valdez, where it will be processed into LNG at the AGPA export facility for shipment to Asia.

The Asian buyers that AGPA has been in negotiations with over the past year have expressed their interest and intent to make offers to purchase gas from the North Slope leaseholders and the State of Alaska at the wellhead. However, prior to their engaging in that process they have explained that there would need to be an export license in place. AGPA thus seeks an export license as the next necessary step before it can commence negotiations with the North Slope leaseholders, on behalf of Asian buyers, to secure gas supply contracts.

This approach is in keeping with DOE/FE practice. As identified in the October 4th letter, DOE/FE has granted export licenses in the past without executed supply contracts, including the previously issued non-FTA export license from Port Valdez issued to the Yukon Pacific Corporation. As DOE/FE explained in that process, it is not the role of DOE/FE to select among competing projects nor dictate how North Slope gas will be developed, but instead to ensure export from a proposed project is consistent with the applicable statutory and regulatory framework. Certainly DOE/FE is free to condition the license on future progress toward firm agreements, but it should not act to impair that progress by denying the license at this stage.

III. Siting of the Liquefaction Plant

The DOE/FE letter states "AGPA has not settled on a location for the LNG liquefaction facility or demonstrated that it has entered into a memorandum of understanding, letter of intent,

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19 DOE/FE Opinion and Order No. 350, Order Granting Authorization to Export Liquefied Natural Gas from Alaska, 1 FE ¶ 70,259 (November 16, 1989).
20 DOE/FE Opinion and Order No. 350-A, Order Denying Requests for Rehearing and Modifying Prior Order for Purpose of Clarification, 1 FE ¶ 70,303 (March 8, 1990).
or other agreement to secure title in or a long term lease of the property where such a facility would be located.”

As discussed at the October 11th meeting, AGPA’s inclusion of alternative sites were meant only to illustrate that there are additional site options at Port Valdez. The project plan has always centered on the Anderson Bay site which previously received significant Federal and State regulatory permits while under lease by the Yukon Pacific Corporation. The permits previously granted to YPC for this specific site include:

- Coastal Zone Consistency Determination (State I.D. No. AK87121604/F0). This permit was issued by the Alaska Division of Governmental Coordination. While this type of permit is no longer necessary, it demonstrates that this site was compatible with the then existing requirements to preserve coastal land.

- TAGS Project-wide Final EIS. A total of 22 federal and state agencies participated in development of the FEIS. The work of these agencies demonstrated that a liquefaction plant at the Anderson Bay site would not significantly impact the neighboring wildlife species or their habitat.

- State of Alaska Conditional Right-Of-Way Lease for the Trans-Alaska Gas System (ADL 413342.) This permit was issued by the Alaska Department of Natural Resources. YPC was permitted to secure this conditional ROW prior to securing full financing for the project.

- DOE/FE Authorization for Export of Natural Gas (DOE/FE Opinion and Order No. 350 Granting Authorization to Export Liquefied Natural Gas from Alaska, 1 DOE/OFE 70,259). This license authorized YPC to export LNG up to 14 mtpa to Japan, South Korea, and Taiwan. The authorization was specific to Port Valdez, ordering “with
respect to the place of exportation for the LNG... all locations other than Port Valdez, Alaska are rejected.”

- FERC Anderson Bay Final EIS (Yukon Pacific Corporation LNG Project: Final Environmental Impact Statement.) FERC issued this permit; approximately five and a half years after the DOE issued the export license. This was a detailed and comprehensive report demonstrating the Anderson Bay site would not significantly impact the surrounding environment, and was appropriate for purposes of an LNG plant.

- FERC Authorization for Siting LNG/MT Facility (Order Granting NGA Section 3 Authorization for the Siting, Construction, and Operation of LNG Facility) (71 FERC ¶ 61,197). This permit was also issued by FERC. In support of its application, YPC undertook a large-scale geotechnical and environmental investigation at the Anderson Bay site. Up to 30 scientists, engineers, diamond core drillers and helicopter pilots gathered baseline data necessary to meet the Section 193 siting criteria.

- Anderson Bay LNG/MT Facility Air Quality (PSD) Permit (Prevention of Significant Deterioration [Air Quality] Permit for the Anderson Bay LNG/MT, No. 9771-AC003.) This permit was issued by the Alaska Department of Environmental Conservation (ADEC). As part of the permitting process, YPC established a meteorological monitoring station at Anderson Bay and submitted a meteorological monitoring plan to ADEC for approval. YPC also conducted emissions modeling as part of acquiring the permit for this site.
AGPA has applied to lease the identical footprint of land at Anderson Bay previously
leased to YPC. On September 14, 2012, the State advised AGPA that its leasing review process
“is presently delayed and it may be a few years before adjudication.” AGPA is actively working
to assist the State’s process, but ultimately has little control over its duration.

AGPA has been working since 1999 to bring economical energy to Alaskans by working
for the export of excess gas to the Asian market. Alaskans pay the highest cost of energy in the
nation. Some parts of Alaska pay over $40/mmbtu for energy (diesel) and also have the coldest
weather days in the nation. A recent analysis performed for the AGPA by the PDC Harris Group
concluded the cost of energy in Fairbanks alone could be reduced by as much as 80% with a large
volume gas line from Prudhoe Bay to an LNG terminal in Valdez linked to the Asian market.23

Please let us know if we can provide to you any further information.

Sincerely,

William M. Walker
Legal Counsel
Alaska Gasline Port Authority

WALKER RICHARDS, LLC

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21 Exhibit 13, AGPA Application for Lease of State Land (August 23, 2012).
22 Exhibit 14, Letter from State of Alaska Department of Natural Resources (September 14,
2012) at 1.
23 See, Exhibit 15.
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ADMINISTRATIVE ORDER NO. 242

I, Sarah Palin, Governor of the State of Alaska, under the authority of art. III, secs. 1 and 24, of the Alaska Constitution, and in the interests of efficient administration in accordance with AS 44.17.060, direct the Department of Natural Resources and the Department of Revenue to assist entities, to the extent consistent with state and federal law, in pursuing development of an economically and technically viable liquefied natural gas (LNG) project in this state, such as the project envisioned by the Alaska Gasline Port Authority (AGPA).

PURPOSE

The purpose of this Order is to help facilitate development of an LNG project that uses North Slope natural gas transported on the mainline natural gas pipeline developed under a license issued under the Alaska Gasline Inducement Act, AS 43.90.010 - 43.90.990 (AGIA). An LNG project would focus on liquefaction facilities and facilitating agreements between LNG buyers and natural gas producers, and could also include gas conditioning facilities on the North Slope, pipeline transportation from the mainline to liquefaction, and fractionation facilities at tidewater, as well as the liquefaction facilities.

FINDINGS

1. It is in the best interests of the people of this state and the nation that increased natural gas exploration and production occur in this state and that the necessary transportation and processing facilities be developed to move the natural gas to both in-state and out-of-state energy markets.

2. As provided in AGIA at AS 43.90.250 and 43.90.260, state agency resources associated with developing the AGIA licensed mainline natural gas pipeline will be coordinated through the AGIA coordinator. It is in the best interests of the people of this state to also coordinate state agency resources associated with developing pipeline transportation from the AGIA licensed mainline natural gas pipeline to LNG facilities, and the development of LNG facilities, equipment, related infrastructure, and other LNG-related activities.
ORDER

To further these findings, I, Sarah Palin, Governor of the State of Alaska, order and declare the following:

1. The Department of Natural Resources and the Department of Revenue will, consistent with state and federal laws, assist entities with economically and technically viable LNG project plans that propose to use North Slope gas transported from the mainline natural gas pipeline developed under an AGIA license.

2. The commissioner of the Department of Natural Resources is authorized to assess and coordinate state agency permitting activities necessary to facilitate development of an LNG project that proposes to use North Slope gas, transported from the mainline natural gas pipeline developed under an AGIA license, for in-state and out-of-state energy markets.

3. The commissioner of the Department of Natural Resources and the commissioner of the Department of Revenue may individually or jointly delegate within their departments to facilitate assistance for an in-state LNG project as provided in this Order.

4. Consistent with AS 44.23.020, the attorney general, as legal advisor for the state, shall provide legal services to the Department of Natural Resources and Department of Revenue.

OTHER PROVISIONS

1. This Order is for administrative purposes only. It neither creates any third-party rights nor modifies the statutory and regulatory authority of any state agency.

2. Nothing in this Order affects the authorities or responsibilities of state agencies with permitting, authorization, or oversight authority over natural gas activities and developments, including advocacy by the Department of Law before the Federal Energy Regulatory Commission and state regulatory commissions, and including the state's commitments under AS 43.90.010 - 43.90.990 or any later enacted statute concerning oil and gas activities or development.

This Order takes effect immediately.

DATED at 4:12, Alaska, this 20th day of August, 2008.
The following letter of intent for HB 3001 was offered by Representatives Samuels, LeDoux, Gara, Holmes, Kerttu, Kelly, Crawford, Gatto, Lynn, Buch, Seaton, Gardner, Guttenberg, Kawasaki, Harris, Hawker, Doll, Johnson, Salmon, Meyer, Edgmon, and Cissna:

"The purpose of the award of an exclusive license to TransCanada Alaska Company, LLC and Foothills Pipe Lines Ltd. (hereafter referred to as TransCanada) is to expedite bringing North Slope gas to market. To meet the Alaska Constitution's mandate to develop Alaska's resources for the maximum benefit to Alaskans, it is the intent of the legislature that the executive branch continues to aid project proposals in addition to just a TransCanada pipeline into Canada. It is the intent of the legislature that an AGIA license will enable and encourage an All Alaska gas line/liquefied natural gas (LNG) project within the TransCanada project.

Recognizing that high energy prices have resulted in an energy crisis in communities throughout the state, it is the intent of the legislature that an award of an exclusive license to TransCanada not interfere with the rapid delivery of North Slope gas to Alaskan markets. The legislature urges the construction of a project that would facilitate delivery of in-state gas by way of a project built as part of a TransCanada project.

To prepare for an open season that includes an All Alaska gas line/LNG project in conjunction with the TransCanada project into Canada, it is the intent of the legislature that such project receives the assistance of the executive branch and be granted expedited review and action by state agencies.

Nothing in this letter of intent is intended to alter the obligations of the parties under the law, and nothing in this letter is intended to encourage the violation of these obligations."
July 30, 2012

Alaska Gasline Port Authority
William M. (Bill) Walker
General Counsel & Project Manager
731 N Street,
Anchorage, AK 99501

Re: TransCanada Alaska - Solicitation of Interest for New Natural Gas Pipeline Capacity

Dear Mr. William M. (Bill) Walker

TransCanada Alaska is conducting a non-binding solicitation to determine the interests of potential shippers in making firm pipeline capacity commitments on a pipeline from the Alaska North Slope to Alberta, Canada or to a gas liquefaction terminal at a tidewater location in South-Central Alaska.

The attached brochure provides more detail concerning this solicitation. If you are not the right person for considering this solicitation, please forward this notice to the appropriate personnel within your company.

Thank you in advance for your consideration on this solicitation and if you have any questions, please contact me at (403) 920-7969 or vincent_lee@transcanada.com.

Sincerely,

Vincent Lee
Commercial Manager
Alaska Pipeline Project
Phone: (403) 920-7969
ALASKA Pipeline Project

Proposed Alaska Pipeline Project
- Alaska-Canada Pipeline
- LNG Pipeline
- Gas Treatment Plant
- TransCanada Pipeline System

TransCanada  ExxonMobil

Solicitation of Interest Notice
July 30, 2012
ALASKA PIPELINE PROJECT
SOLICITATION OF INTEREST NOTICE
JULY 30, 2012

Notice

TransCanada Alaska Company LLC ("TC Alaska") will conduct a non-binding Solicitation of Interest ("SOI") for new natural gas pipeline system capacity, beginning at 8:00 a.m. CDT on August 31, 2012 and ending on September 14, 2012 at 5:00 p.m. CDT.

This SOI is being conducted to determine the interests of potential shippers in making firm pipeline capacity commitments on a pipeline from the Alaska North Slope to Alberta, Canada or to a gas liquefaction terminal at a tidewater location in South-Central Alaska ("Alaska Pipeline Project" or "APP"). The objective of the SOI is to determine an indication of desired firm natural gas pipeline transportation capacity and optional firm gas treatment capacity and to identify parties interested in future open season commercial discussions. TC Alaska notes that the Alaska Gasline Inducement Act ("AGIA") AS 43.90.130(5) states that the AGIA Licensee is required to assess the market demand for additional pipeline capacity at least every two years after its first binding open season.

Background

The Alaska Pipeline Project once completed would allow for transportation of natural gas from Alaska's North Slope to markets in Alaska, to Canada and the lower 48 States, or to global liquefied natural gas ("LNG") markets. The North Slope of Alaska holds approximately 35 trillion cubic feet ("Tcf") of currently proven natural gas reserves, and most forecasts estimate that another 100 to 200 Tcf ultimately could be discovered.

The Alaska Pipeline Project is being jointly advanced by affiliates of TransCanada and ExxonMobil. TransCanada and ExxonMobil bring substantial financial strength to the project and are uniquely situated to efficiently and effectively advance its development. TransCanada has extensive North American pipeline construction experience, particularly in cold weather environments, and operates pipeline networks across Canada and in the U.S. TransCanada has proven expertise in efficiently advancing pipeline projects through the regulatory process to construction and operation. ExxonMobil has proven global mega-project management experience and a long history of Arctic project successes and technological innovations. ExxonMobil has repeatedly demonstrated its ability to deliver world-class projects on time and within budget, and has proven expertise in innovative gas treatment, pipeline and compression technologies.
Project Description

The project sponsors propose to design, permit and construct a natural gas treating plant and a natural gas pipeline system beginning near Point Thomson and extending through Alaska over one of multiple alternative routes (see map on cover page).

One route would extend from Point Thomson through points near Prudhoe Bay, Fairbanks, and Delta Junction and then to the Alaska-Canada border, where the pipeline would interconnect to a new pipeline in Canada that would extend to an interconnection point at or near the British Columbia/Alberta border ("Alaska-Canada Pipeline"). From there the natural gas could access the North American markets, including the contiguous United States.

The other route would extend from Point Thomson through points near Prudhoe Bay, Fairbanks, and then to an interconnection point, via alternative routes, with a third-party LNG terminal located at a tidewater location in South-Central Alaska ("LNG Pipeline"). From there the LNG cargoes could access markets across the globe.

The LNG Pipeline and the Alaska-Canada Pipeline are alternative proposals. Depending on potential shippers' interest as evidenced in this SOI and subsequent solicitations or binding Open Season(s), APP will further define the project parameters for the selected route, including cost and schedule, pipeline diameter, and treating and transportation capacity. In either alternative, a minimum of five delivery points will be made available in Alaska on a firm or interruptible basis to all shippers.

For further general project information, including capital costs, rates, expansions, credit standards and other requirements, interested parties are referred to the Alaska Pipeline Project Open Season Notice previously submitted with the Federal Energy Regulatory Commission under docket No. PF09-11-001 (see link on APP website at www.thealaskapipelineproject.com).

Solicitation of Interest Process

Those parties interested in participating in the SOI should contact Vincent Lee with an indication of its desired firm capacity on a pipeline project from the Alaska North Slope at (403) 920-7969 or vincent.lee@transcanada.com between 8:00 a.m. (CDT) on Friday, August 31, 2012 and 5:00 p.m. (CDT) on Friday, September 14, 2012. Individual responses will be kept confidential, except APP reserves the right to communicate publically the consolidated results of the SOI.

Reservation of Rights

APP reserves the right, at its sole discretion, to proceed with further development of the project. APP may hold subsequent non-binding or binding Open Season(s) to further define the project participants or parameters.

Disclaimer

The information contained herein, and information that is provided in response to questions or requests for information, establishes no contractual or other relationship between APP and any other party.
September 14, 2012

Vincent Lee  
Commercial Manager  
Alaska Pipeline Project  
16945 Northchase Drive  
Houston, TX 77060

Re: ExxonMobil/TC Alaska Solicitation of Interest for New Natural Gas Pipeline Capacity, Dated July 30, 2012

Dear Mr. Lee:

Over the past several years the Alaska Gasline Port Authority (AGPA) has been working with liquefied natural gas (LNG) buyers in Asia interested in the purchase of North Slope gas at the wellhead, for LNG off-take at Valdez. Those companies include the following:

| Korea Gas Corporation | PTT International Co., Ltd (Thailand) |
| POSCO (Korea) | Korea East-West Power Co., Ltd. |
| GS Energy Corporation (Korea) | PT PGN LNG Indonesia |

We have received expressions of interest from the above companies for shipment of natural gas on your proposed pipeline in a volume equivalent to 2.8 billion standard cubic feet per day (bcfd) at the inlet of a LNG facility in Valdez, Alaska. This volume, which equates to over 18 million tons per annum of LNG, is very close to the full capacity of all three process trains. Please note that this aggregated volume does not include designated volumes from all of the above referenced companies. Additionally, AGPA continues to respond to interest expressed by other potential project participants and, therefore, fully expects the aggregated volume to increase. Finally, 2.8 bcfd at the inlet of the LNG facility does not take into account the anticipated in-state consumption of gas initially estimated at .25 bcfd (with projected growth up to .5 bcfd).

Board of Directors:  
Jim Whitaker, Chairman · Bert Cottle, Vice-Chair · Merrick Peirce, Treasurer ·  
Mayor Dave Cobb, Secretary · Steven Haagenson · Dave Dangel
Based upon current market interest, it appears a 19 million ton per annum LNG project at Valdez will be fully subscribed. Please advise as to the next steps to advance a large volume gas pipeline to Valdez consistent with the aforementioned interest.

William M. Walker
Project Manager/ General Counsel
Alaska Gasline Port Authority
Jim Whitaker  
Chairman  
Alaska Gasline Port Authority  
731 N Street, Anchorage,  
Alaska 99501, USA  
Phone: 1-907-278-7000  
Facsimile: 1-907-278-7001  

December 29, 2011

Letter of Interest

Dear Mr. Whitaker,

Korea East-West Power Co., Ltd.(hereinafter “EWP”), is a state-owned power generation company and has retained its long-term corporate rating as ‘A’ from Standard & Poor’s.

EWP owns and operates an installed capacity of 8,809 MW, of which 2,100 MW is natural gas fired facilities with a demand of 1.6 million tons as of 2011. Taking into consideration that EWP’s gas fired facilities will increase to 3,540 MW by the year of 2016 and the volume of LNG requirement will rise, EWP has been seeking an opportunity of importing LNG directly from overseas rather than purchasing from KOGAS.

If North Slope gas reserves are developed and used for LNG export targeted at Asia-Pacific market, it will be a great opportunity for EWP and its affiliates’ LNG direct import, since circumstances have recently developed favorably such as US government’s policy changes over LNG export issues and the impending effectuation of FTA between USA and Korea.

Therefore, EWP would like to express its interest in Valdez LNG and hopes to further discuss it with Alaska Gasline Port Authority(hereinafter “AGPA”). It is EWP’s idea that both sides may jointly proceed with Valdez LNG project(hereinafter “Project”) development on a basis of the following understandings:

1) Memorandum of Agreement(hereinafter “MOA”) containing:  
   a) EWP to aggregate LNG of up to 2MMtpa from Gencos in Korea;  
   b) EWP to have an exclusive right to negotiate with AGPA for the volume which will be declared by EWP in a certain timeframe agreed between both parties;  
   c) EWP to have an exclusive right to negotiate with AGPA for gas fired power
plants (hereinafter “Power Plants”) in Alaska for the Project’s captive use and possible extra electricity for others;

d) Both parties to proceed for further phases such as Heads of Agreement, LNG Sales & Purchase Agreement for the Project and developing the Power Plants.

2) LNG pricing formula:
   a) Both parties to agree to a pricing formula comprising ICC, Henry Hub and Russian pipelined gas (if expected to be imported to Korea) linked prices within certain proportions to be agreed between both parties;
   b) AGPA to endeavor to apply a gentler slope to a JCC-linked portion than those of competitors in Asia-Pacific market, so that EWP will not be adversely impacted by higher fuel costs than that of purchasing from KOGAS.

3) EWP’s participation in the Project Team (hereinafter “Team”) as an offtaker:
   a) EWP to be a member of Project Team and JDA, but unlikely to be a member of equity investors in the Project;
   b) Any funding obligations given to EWP are for purposes of proving its seriousness and helping the Project go forward. Hence, any funds provided by EWP shall turn into a development bond which shall be paid back at the financial close with an interest rate of 8% imposed from the date of EWP’s withdrawal from the Team.
   c) EWP’s funding obligations will take effect according to the conditions precedent accomplished as agreed in MOA.

EWP hopes that both parties will further discuss the development plan for the Project in details in the near future.

Sincerely yours,

K. R. Lee

LEE KYUNGRO
Managing Director
Procurement Management Division
Korea East-West Power Co., Ltd.
June 21, 2012

Attn: Mr. Jim Whitaker
Chairman
Alaska Gasline Port Authority
731 N. Street
Anchorage, Alaska 99501

C.C.: Mr. Bill Walker
General Counsel / Project Manager

Re: Valdez LNG Project

Letter of Intention

Dear Mr. Whitaker,

First, I, on behalf of Korea Gas Corporation ("KOGAS"), would like to express my sincere appreciation for providing KOGAS an opportunity to participate in the potential Liquefied Natural Gas project ("the Project") in the state of Alaska, USA.

After receiving a thorough introduction and careful review of which, we are pleased to inform you that it is KOGAS' sincere intention to explore further on the feasibility of the Project jointly with Alaska Gasline Port Authority ("AGPA") and to come up with mutually benefitting result to materialize our joint efforts.
Promptly following the mutually acceptable result of such feasibility exploration, KOGAS will be engaged with AGPA to discuss the commercial framework for KOGAS’ participation in the Project including the construction and operation of LNG facility and marketing of the produced LNG from the facility.

I look forward to joint journey together with AGPA for the success of the Project. Please do not hesitate to contact us for any inquires.

Respectfully yours,

Kwon, Young Sik
Vice President
Head of LNG Procurement Department
Korea Gas Corporation
Via Email Transmission followed by International Mail

Jim Whitaker
Chairman of the Board
Alaska Gasline Port Authority
731 N Street
Anchorage, Alaska 99501

Re: Letter of Interest for Valdez LNG Project

Dear Mr. Whitaker,

I, on behalf of POSCO ("POSCO"), write to formally express POSCO's interest in your Valdez LNG Project in accordance with the principles outlined below.

By way of introduction, POSCO is the World's Most Competitive Steelmaker, leading the industry for more than four decades in the history of Korea and the global market. POSCO holds its core business engagements in an extended spectrum of materials, resources, energy and chemicals. Its subsidiaries have their own foundations in service business areas such as engineering and construction (E&C), information and communications technology (ICT), logistics and trade.

In order to meet its substantial demand for LNG, POSCO is actively seeking to explore the opportunity to import LNG from Alaska.

Accordingly, POSCO proposes that the Alaska Gasline Port Authority ("AGPA") and POSCO jointly explore a commercial framework for POSCO's participation in the Valdez LNG Project as follows:

1. POSCO would like to negotiate with AGPA to enter into a long-term LNG sales and purchase agreement for a purchase of LNG with an annual contract quantity of REDACTED metric tons (the "LNG SPA"), which will be sourced from gas reserves in North Slope and supplied through the first process train in Valdez LNG Terminal.
2. POSCO and AGPA will agree on a pricing formula to be applied in the LNG SPA by utilizing the price index comprising Henry Hub, JCC, and/or KOGAS average purchasing price within certain proportions to be agreed by the parties.

3. The final pricing mechanisms of LNG to be agreed by AGPA and POSCO will incorporate discount relative to the existing LNG import prices in the Korean market, to give a competitive advantage over other suppliers in the Asia-Pacific region.

4. The details of the terms and conditions under which POSCO will purchase LNG would have to be worked out further, as the parties' role and participation become more clear and committed. Upon agreement on detailed terms (including the items described above), POSCO will, without delay, execute definite agreements with AGPA which will specify each party's rights and obligations.

POSCO is ready to discuss with AGPA to define the terms and conditions for our participation in the Valdez LNG Project. If you have any inquiries as to any issues relating to above, please do not hesitate to contact us at your convenience.

We thank you for your consideration and look forward to our business collaboration in the near future.

Sincerely yours,

Chang, In-Hwa
Senior Vice President
POSCO
Jakarta, September 14, 2012

Mr. William M. Walker
General Counsel/Project Manager
Alaska Gasline Port Authority
731 N Street
Anchorage, Alaska 99501

Dear Sir,

In relation to a nonbinding Solicitation of Interest (SOI) from ExxonMobil and Trans Canada Alaska to determine interest in gas from Alaska’s North Slope to an LNG terminal in south-central Alaska, we hereby submit our nonbinding letter of interest for this project.

For your background, PT PGN LNG Indonesia is a subsidiary of PT Perusahaan Gas Negara (Persero) Tbk. PT Perusahaan Gas Negara (Persero) Tbk ["PGN"] is public listed gas state-company that deal with natural gas transmission and distribution business. In 2011, PGN has recorded a market capitalization of USD 9 billion and has delivered 1.64 Bcfd of natural gas through it fully owned and operate transmission and distribution pipeline with total length of close to six thousand kilometers.

We strongly see LNG to be one of the future core business, which will fulfill the rising demand for the contracted customers and the potential market upside due to the government program of oil placement. Recently PGN has started the LNG era by successfully completing, with joint-venture with PT Pertamina and cooperation with Golar LNG, the start of the operation of the 1st LNG Floating Receiving and Storage Terminal ("FSRT") for Jakarta bay and preparing another 3 MTPA FSRT with cooperation with Hoegh LNG for 2014 in Lampung. In parallel we have been actively in the market to secure the LNG supply to our FSRT and hence consider LNG supply from this project as our long run supply.

We recognize that Alaska Gasline Port Authority (Port Authority) has applied to the Department of Energy for an export license to be able to export LNG from Port Valdez to countries with which the U.S. has a Free Trade Agreement (FTA). The Port Authority has received a strong interest from the Asian markets and elsewhere for LNG from Port Valdez. These export volumes will be include in the port Authority’s aggregated volume response to this nonbinding Solicitation of Interest from ExxonMobil and TransCanada Alaska.
At the current stage we are interested in securing 10 mmscfd of gas (1 MTPA of LNG, from a gas pipeline and hereby authorize this volume be added to the volume being aggregated by the Port Authority as part of this nonbinding Solicitation of Interest.

This nomination on our part creates no obligation or relationship between our entity and the Port Authority, ExxonMobil or TransCanada Alaska.

For purpose further clarification, we nominate the following contact person :

Nisi Setyobudi  
Director of Commercial and Operation  
PT PGN LNG Indonesia  
Jakarta 11140 – Indonesia  
Tel : +6221 633.4838  
Fax: +6221 634.8616  
Email: nisi.setyobudi@pgn.co.id & nisi.setyobudi@pgnlna.com

On behalf of PGN LNG Indonesia, we thank you for consideration and look forward to opening a new and strong business partnership with you.

Sincerely yours,

Irawati  
President Director
Via Email Transmission followed by International Mail

February 2, 2012

Jim Whitaker
Chairman of the Board
Alaska Gasline Port Authority
731 N Street
Anchorage, Alaska 99501

Re: Valdez LNG Project

Letter of Interest

Dear Mr. Whitaker,

I, on behalf of GS Energy Corporation ("GS Energy"), write to formally express GS Energy’s interest in your Valdez LNG project in accordance with the principles outlined below.

By way of introduction, GS Energy is an operating holding company that directly and/or through its subsidiaries and affiliates, i.e., GS Caltex Corporation, GS Power Co., Ltd. and GS EPS Co., Ltd., controls, owns and/or operates several natural gas-fired power plants with a total installed capacity of 2,000 mega watts requiring 1.2 million tons per annum ("mtpa") of LNG, and refinery and petrochemical facilities which require 0.5 mtpa of LNG as of 2012.

In order to meet the substantial demand for LNG as stated above, GS Energy is actively seeking to explore an opportunity to directly import LNG from overseas. We are of the view that the U.S. government’s recent policy changes on the LNG export issues, along with the implementation of the Free Trade Agreement between the U.S. and Korea, made the direct import of the LNG products from the Valdez LNG project in Alaska North Slope as a great opportunity for us.

Accordingly, GS Energy proposes that the Alaska Gasline Port Authority ("AGPA") and GS Energy jointly undertake the Valdez LNG project development under the framework as follows:

1. GS Energy will have the exclusive right to negotiate for its purchase of the LNG produced from the Valdez Project in the amount of up to mtpa for its own use and supply to its subsidiaries and affiliates.

2. GS Energy and AGPA will agree on a pricing formula for GS Energy’s LNG purchase using certain references such as JCC, Henry Hub and other internationally reputable pricing indices. Such pricing formula will have a gentler slope for the JCC-linked portion than those of GS Energy’s competitors in Asia-Pacific market.
3. Subject to further discussion and negotiation, GS Energy may participate in the development of the Valdez LNG project as an equity investor or any other status agreed by GS Energy and AGPA.

4. Upon agreement on the more detailed terms (including the items described above), GS Energy will, without delay, execute a definite agreement with AGPA which will stipulates each party’s rights and obligations so agreed by the parties.

GS Energy is ready to discuss with AGPA to define the terms and conditions for our participation in the Valdez Project. If you have any inquiries as to any issues relating to above, please do not hesitate to contact us at your convenience.

Sincerely yours,

[Signature]

W. B. Rha
Vice Chairman and CEO
GS Energy Corporation.
From: Douglas Downard [mailto:douglas.d@ptt-international.com]
Sent: Wednesday, August 01, 2012 6:21 PM
To: bill.walker@walkerrickards.com
Cc: Bill Walker; Padhanaseeth Changkasiri
Subject: Pipeline Open Season/ today's letter from ExxonMobil

August 2, 2012

Dear Bill,

Thank you for your email with invitation to join Alaska Gasline Port Authority (AGPA) in ExxonMobil’s nonbinding Expression of Interest for a gas pipeline from Prudhoe Bay on the North Slope to an LNG terminal in south central Alaska.

I am pleased to inform you that PTT International Co., Ltd. is interested to participate in ExxonMobil’s nonbinding EOI together with AGPA. Our volume would be consistent with that required to feed REDACTED in your proposed REDACTED natural gas liquefaction complex.

Please advise the next step.

Best regards,

Doug Downard
PTTI
Bangkok
trade panel finds harm from China solar panels

Japan firms open Alaska office to pursue LNG

Published: October 24, 2012

By TIM BRADNER — Alaska Journal of Commerce

A consortium of Japanese companies has opened an office in Alaska with hopes of working with the State of Alaska, North Slope producers and TransCanada Corp. on a large Alaska natural gas liquefaction project, and fast-tracking the project to build it by 2017 or 2018.

The consortium, Resources Energy Inc., proposes to develop and own the LNG plant itself at a south Alaska tidewater port but said it could also invest in the pipeline needed to bring North Slope gas south to the plant, said the company's Alaska Manager Mary Ann Pease.

North Slope producers BP, ConocoPhillips and ExxonMobil, as well as independent pipeline company TransCanada, are working on a potential $45 billion to $65 billion Alaska LNG export project, but have not yet committed to investments in preliminary engineering or made decisions on commercial aspects, such as who would own components of the project.

Members of the Japanese consortium include Japan Petroleum Exploration Co. Ltd.; Idemitsu Kosan Co.; JX Nippon Oil and Energy Corp.; Mitsubishi Gas Chemical Co. and Nippon Telephone & Telegraph.

Pease said the group sent a letter to TransCanada indicating an interest in shipping 2.7 billion cubic feet a day through a potential large-diameter pipeline from the North Slope to south Alaska during the pipeline company's recent non-binding Solicitation of Interest to shippers.

TransCanada said it has received "strong interest" in its solicitation but did not identify potential shippers. Resources Energy is now the second group of Asian companies who are acknowledging submitting letters of interest to TransCanada. On Sept. 16, a group of mostly Korean companies submitted a letter of interest through the Alaska Gasline Port Authority, an Alaska municipal group hoping to facilitate a pipeline and LNG project.

Pease said the Japanese group wants to build and own the liquefaction plant and associated LNG tankers and has in mind a plant capable of shipping up to 20 million tons of LNG per year, a project of about the same scale as that being considered by the Slope producer group.

"We need a deep water and ice-free port for the LNG plant so our preference is now Valdez, on Prince William Sound, but studies are still under way and several locations in Southcentral Alaska are being considered," Pease said.

The group wants to move ahead now with a detailed feasibility study and sees a faster timeline for the project than that contemplated by the producer group and TransCanada.

"I believe we can have this project in operation in 2017 or 2018," Pease said.

In an Oct. 1 letter to Gov. Sean Parnell the producer group laid out a work plan for their project that involves a 10-year plan, so that the first LNG would not be shipped until 2023 or 2024.
The producers' work on a large gas project is linked to commitments made in a settlement of litigation with the state over lease disputes at Point Thomson, east of Prudhoe Bay.

Parnell he was satisfied with the Oct. 1 progress report from the producers but state Natural Resources Commissioner Dan Sullivan said separately that the administration is pushing the group to make firm commitments by mid-spring, 2013.

Pease said the Japanese group is ready to commit now to a detailed feasibility study but wants to do it under the auspices of a Memorandum of Understanding with the state.

"Japanese companies are used to doing business on a government-to-government basis, where there is some official involvement of the state," Pease said.

The state negotiated a Memorandum of Understanding with the Alaska Gasline Port Authority in 2004 to assist the port authority in pursuing an LNG project, and Pease said her group would like something similar.

The state is being cautious in its response so far.

The Japanese group met with Sullivan on the matter in July and was referred to a state-owned corporation, Alaska Gasline Development Corp., or AGDC, which is now working on an in-state gas pipeline system.

Pease said AGDC told the group, however, it cannot work with Resources Energy at this time, because the state corporation said it is in the final stages of securing a federal environmental impact statement, or EIS, for its 24-inch in-state pipeline.

Bringing in new parties could complicate and delay a final EIS for that project, the Japanese group was told, according to Pease.

AGDC also said it is limited to transporting 500 million cubic feet per day under terms of a state agreement with TransCanada. That amount is insufficient to meet the export needs of Resources Energy's owners, Pease said.
October 1, 2012

Governor Sean Parnell
550 West 7th Avenue, Suite 1790
Anchorage, Alaska 99501

Dear Governor Parnell:

On March 30, 2012, ExxonMobil, ConocoPhillips and BP submitted a letter informing you of progress in working together on the next generation of North Slope resource development. Since that time, the three producer companies and TransCanada, through its participation in the Alaska Pipeline Project (APP), have maintained momentum and executed important early work to select leading concepts for a potential project. We are writing to update you on the progress that has been made to date.

We established an integrated team, depicted on Attachment 1, committing significant resources and the efforts of over 200 professionals to date to progress this work. This allowed us to combine our respective talents and experience to advance a collective understanding of what would be required for liquefied natural gas (LNG) exports from Southcentral Alaska. Our team has advanced extensive work to refine and understand the opportunities and challenges associated with North Slope natural gas development.

Our companies bring together specific expertise in Arctic operations, pipeline design and construction, and in LNG plant design and operation. Since our joint work began at the end of March, we have built upon more than $700 million in past work by our collective companies, including the joint Alaska Gas Producer Pipeline Team effort in 2001-02, the Denali Project, and APP (including the State's contribution through AGIA). As a result, our work on an LNG development project has been advanced to a new level of understanding. Specifically, the focus of our work includes:

- Developing a design basis for the pipeline, including areas of continuous and discontinuous permafrost
- Investigating multiple ways to remove and dispose of CO₂ and other contaminants
- Assessing use of existing and addition of new Prudhoe Bay field facilities
- Mapping multiple pipeline routing variations
- Assessing multiple pipeline sizes
- Providing for at least five in-state gas off-take points
- Completing preliminary geohazard and marine analysis of 22 LNG site locations
- Developing a design basis for the required LNG tanker fleet
- Evaluating multiple LNG process design alternatives
- Confirming a range of gas blends from the Prudhoe Bay and Point Thomson fields can generate a marketable LNG product

We have narrowed the broad range of alternative development concepts and assessed major project components, including the gas pipeline, gas treatment to remove CO₂ and other impurities, natural gas liquefaction, LNG storage, and marine terminal facilities as described on Attachment 2. Individually,
each of these components would represent a world-class project. Combined, they result in a mega-project of unprecedented scale and challenge, up to 1.7 million tons of steel, a peak construction workforce of up to 15,000, a permanent workforce of over 1,000 in Alaska, and an estimated total cost in today’s dollars of $45 to $65+ billion.

Additional accomplishments include TransCanada’s recently completed non-binding solicitation of interest in accordance with AGIA. TransCanada has publicly reported interest from potential shippers and major players from a broad range of industry sectors and geographic locations. Additionally, TransCanada, on behalf of the APP parties, has advised that a cooperative framework has also been established with the Alaska Gasline Development Corporation for information exchange.

We are encouraged by the synergies and efficiencies identified by our integrated team. While good progress has been made, significant environmental, regulatory, engineering and commercial work remains to reach upcoming decisions to bring North Slope gas to market. A diagram indicating work plans and key decision points is provided on Attachment 3. This attachment describes ranges and durations for engineering and technical work. However, these durations could be extended by external factors including resolution of fiscal terms, regulatory and permitting delays, and legal challenges, among others. As the concept selection technical work reaches closure, additional commercial agreements as well as support from the State of Alaska will be required in order to progress this world-class opportunity.

This opportunity is challenged by its cost, scale, long project lead times, and reliance upon interdependent oil and gas operations with declining production. The facilities currently used for producing oil need to be available over the long-term for producing the associated gas for an LNG project. For these reasons, a healthy, long-term oil business, underpinned by a competitive fiscal framework and LNG project fiscal terms that also address AGIA issues, is required to monetize North Slope natural gas resources. The producers look forward to working with the State to secure fiscal terms necessary to support the unprecedented commitments required for a project of this scope and magnitude and bring the benefits of North Slope gas development to Alaska.

Our next steps are to complete the concept selection phase and work with the State to make meaningful progress on the items detailed above. This work is critical as we consider decisions to progress the next phases of an LNG development project.

Alaska’s North Slope natural gas resources must compete in the global energy markets in order to deliver state revenues, in-state energy supplies, new job opportunities and other economic benefits to Alaskans. While North Slope gas commercialization is challenging, working together, we can maintain the momentum toward our shared vision for Alaska. We will continue to keep you advised of our progress and stand committed to work with the State to responsibly develop its considerable resources.

Sincerely,

Randy Broiles
ExxonMobil
Production Company

Trond-Erik Johansen
ConocoPhillips Alaska, Inc

John Mingé
BP Exploration Alaska

Tony Palmer
TransCanada

Attachments
Southcentral Alaska LNG – Integrated Team

Management Committee
ExxonMobil ConocoPhillips

Commercial Team
Lead: BP

Technical Committee

Technical Team
Lead: ExxonMobil

Producing Fields
Lead: BP

Pipelines
Lead: Alaska Pipeline Project

LNG Plant
Lead: ConocoPhillips

Integration Team
Lead: ExxonMobil

Multimillion Dollar, Four-Company Effort – 125+ Employees, 100+ Contractors
- Joint work commenced March 31, 2012 after completion of the Pt. Thomson Settlement / joint work agreements
- Cooperative effort among the leading North Slope producers and a leading North American pipeline company
- Identified potentially viable LNG project options to monetize ANS natural gas
- Used company strengths, shared information / expertise; built upon past efforts, sought out new ideas
**Attachment 2**

**Alaska Southcentral LNG – Project Concept Description**

**Liquefaction Plant**
- Capacity: 15 – 18 million tonnes per annum (MTA)
- 3 trains (5-6 MTA / train)
- Potential areas: 22 sites assessed in Cook Inlet, Prince William Sound and other Southcentral sites
- Footprint: 400 - 500 acres
- Peak Workforce: 3,500 - 5,000 people
- Required Steel: 100,000 - 150,000 tons

![Image of liquefaction plant]

**Producing Fields**
- ~35 TCF discovered North Slope resource
- Additional exploration potential
- Anchored by Prudhoe Bay and Pt. Thomson with ~20 years supply available
- Use of existing and new North Slope facilities
- Confirmed range of gas blends from PBU/PTU can generate marketable LNG product
- Peak Workforce: 500 - 1,500 people

![Image of producing fields]

**Storage / Loading**
- LNG Storage Tanks, Terminal
- Dock; 1 - 2 Jetties
- Design based on 16 - 20 tankers
- Peak Workforce: 1,000 - 1,500 people

![Image of storage and loading]

**Gas Treating**
- Located at North Slope or Southcentral LNG site
- Remove CO₂ and other gases and dispose / use
- Footprint: 150 - 250 acres
- Peak Workforce: 500 - 2,000 people
- Required Steel: 260,000 - 300,000 tons
- Among largest in world

![Image of gas treating]

**Pipeline**
- Large diameter: 42" - 48" operating at >2,000 psi
- Capacity: 3 - 3.5 billion cubic feet per day
- Length: ~800 miles (similar to TAPS)
- Peak Workforce: 3,500 - 5,000 people
- Required Steel: 600,000 - 1,200,000 tons
- State off-take: ~5 points, 300-350 million cubic feet per day, based on demand

![Image of pipeline]

**Estimated Total Cost:** $45 – $65+ Billion

**Peak Construction Workforce:** 9,000 – 15,000 jobs

**Operations Workforce:** ~1000 jobs in Alaska

Descriptions and costs are preliminary in nature and subject to change. Cost range excludes inflation.
Southcentral Alaska LNG – Work Plans / Key Decision Points

Requirements to Take Next Step:

- Viable Technical Option(s) Identified
- Viable Technical option
- Government Support
- Government Support
- Permits / Land Use Achievable
- Permits / Land Use Underway
- Potential Commercial Viability
- Potential Commercial Viability
- Secure Permits / Land Use / Financing / Key Commercial Agreements
- Confirm Commercial Viability
- Execute EPC contracts

PTU Settlement, Joint Work Agreements

Concept Selection

Decision

Pre-FEED

FEED

(Front-End Engineering & Design)

Decision to Build the Project

EPC

(Engineering, Procurement & Construction)

Peak Staffing:

- ~200
- 400 - 500
- 500 - 1,500
- 9,000 - 15,000

Cost ($):

- Tens of Millions
- Hundreds of Millions
- Billions
- Tens of Billions

Est. Engineering / Technical Duration*:

- 12 - 18 Months
- 2 - 3 Years
- 5 - 6 Years

Evaluate:
- Range of technically viable options for major project components
- Business Structure
- In-state gas / export LNG demand

Progress:
- Preliminary engineering to refine concept
- Business structure
- Financing plan

Complete:
- Front-end engineering & design
- Major contract preparation
- Business structure
- Financing arrangements

Execute:
- Final engineering
- Financing
- Procurement
- Fabricate / Logistics / Construct
- Prepare for Operations

Solicit Interest of Others

Establish Government Support and Advance Regulatory Issues:
- Competitive oil tax environment; predictable / durable LNG project fiscal terms; AGIA Issues
- Assure ability to secure regulatory approvals / permits / land use
- Environmental activities / Technical data collection
- Stakeholder engagement
- File DOE Export License

Advance Gov’t / Reg. Issues:
- Key permit / land use approvals
- Stakeholder engagement
- Secure DOE Export License

Complete Gov’t / Reg. Issues:
- Secure remaining construction / operating permits
- Stakeholder engagement

Start Individual gas / LNG sales / shipping efforts

Execute individual gas / LNG sales / shipping agreements

Implement business structure & agreements

Screen commercial viability

Assess commercial viability

Confirm commercial viability

Commission / start-up

* NOTE: Duration of various phases may be extended by protracted resolution of fiscal terms, permitting and regulatory delays, legal challenges, changes in commodity market outlook, time to secure long-term LNG contracts, labor shortages, material & equipment availability, weather, etc.
## Table I.I Oil and Gas Reserves, North Slope

<table>
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<th>Unit or Area</th>
<th>Oil Reserves (MMBO)$^1$</th>
<th>Gas Reserves (Bcf)$^1$</th>
<th>Royalty Percent$^*$</th>
<th>Royalty Oil (MMBO)</th>
<th>Royalty Gas (Bcf)</th>
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</tr>
<tr>
<td>Oooguruk</td>
<td>73.0</td>
<td>-</td>
<td>5.00%</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>Nikaitchuk</td>
<td>166.7</td>
<td>-</td>
<td>12.50%</td>
<td>23.3</td>
<td></td>
</tr>
<tr>
<td>Liberty$^*$</td>
<td>113.6</td>
<td>-</td>
<td>3.38%</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>Point Thomson$^{10}$</td>
<td>416.6</td>
<td>8,000.0</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPRA$^{11}$</td>
<td>140.3</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total North Slope</strong></td>
<td>5,165.6</td>
<td>34,793.0</td>
<td>569.3</td>
<td>3,435.0</td>
<td></td>
</tr>
</tbody>
</table>

1 Remaining recoverable oil reserves based on the sum of Alaska Department Revenue forecasted production from 2010 through 2050. Gas reserves estimates from DNR. MMBO = Million Barrels of Oil; Bcf = Billion Cubic Feet.
2 The Badami field was put in warm shut-in in September, 2007.
3 Includes Alpine, Fjord-Kuparuk, Fjord Nechelik, Nmaq-Kuparuk, Nmaq-Nanug, Qamuk, Alpine West - State, Fjord West
4 Includes West Sec - Current, Future North-East West Sec, Turn, Melotwater, Tobasco
5 Includes Kuparuk, Schrader, and Sag River PAs
6 Prudhoe Bay Initial Participating Area includes Prudhoe Oil Pool oil, gas and gas liquids and Put River
7 Includes Aurora, Borealis, Midnight Sun, Orion and Polaris.
8 Includes Lisburne, Mikluk, Ramen, and West Beach
9 State’s share is 27% of the 12.5% royalty of MMS leases
10 Includes Point Thomson Satellites. Royalty reserves excluded for Point Thomson
11 Includes NPRA (non-State) Alpine West
§ 853. Implied Covenant to Market the Product: Introduction

Few reported cases concern breach of the covenant to market oil; most decisions are concerned with failure to market gas. The reasons for this are not hard to find. Oil may be stored above ground in tanks or other receptacles and may be moved to the market by any means of transportation. Gas, unless it is liquefied, must be stored below ground and be moved to the market only by pipeline. A gas gathering system to bring the gas to a trunk line and the trunk line itself requires a large capital investment and a guaranteed market. Before World War II, in many gas producing areas of the country, there was no nearby market and no gathering or transmission system for sending the gas to distant markets. Discovery of gas was often only slightly less disastrous than drilling a dry hole.

Although the demand for gas has greatly increased in recent years, it is still true in some areas that much time must elapse before gas wells can be connected with a pipeline and the gas marketed. Disagreements between landowners and

§ 853

1 The Louisiana authority on the marketing covenant is discussed in the Comment to Article 122 of the Louisiana Mineral Code (R.S. 31:122).

See also the following:

David Hardymon, Adrift on the Implied Covenant to Market: Regulation by Implication, 24 Energy & Min. L. Inst. 8-1 (2003);

Scott Landown, The Implied Marketing Covenant in Oil and Gas Leases: The Producer's Perspective, 31 St. Mary's L.J. 297 (2000);

Jacqueline L. Weaver, When Express Clauses Bar Implied Covenants, Especially in Natural Gas Marketing Scenarios, 37 Nat. Resources J. 491 (1997);

Williams, Lessee Duties and Lessor Rights in Gas Contracting Under the Implied Marketing Covenant of Oil, Gas, and Mineral Leases, 26 Tulsa L.J. 547 (1991);

Snyder, The Effect of FERC Order 451 on the Marketing Covenant Implied in Oil and Gas Leases, 67 Tex. L. Rev. 1099 (1989);

Kramer & Pearson, The Implied Marketing Covenant in Oil and Gas Leases: Some Needed Changes for the 90's, 46 La. L. Rev. 897 (1986);

Graff, Implied Covenants to Market Natural Gas in a Changing Economy, 6 Eastern Min. L. Inst. 17-1 (1985);

Burford, The Operator's Rights and Responsibilities in Marketing Production, Rocky Mt. Min. L. Inst. on Oil and Gas Agreements Paper 10 (1983);


The effect of complexity and the high cost of compliance with the marketing covenant caused by federal pricing regulations is discussed in Weaver, Implied Covenants in Oil and Gas Law Under Federal Energy Price Regulation, 54 Vand. L. Rev. 1473, 1510 (1981).
operators have naturally arisen over the diligence exercised by the lessee in marketing gas under these circumstances, whereas litigation over the relatively simple task of marketing oil is less common.

**[General statement of the marketing duty]**

Upon discovery of minerals on a leasehold, the lessee is ordinarily under an implied duty to use due diligence to market the product.\(^2\)

(Text continued on page 391)

\(^2\) Wolfe v. Texas Co., 83 F.2d 425 (10th Cir. 1936);
Harding v. Cameron, 220 F. Supp. 466, 19 O.G.R. 352 (W.D. Okla. 1963);
Howerton v. Kansas Natural Gas Co., 81 Kan. 553, 106 P. 47, on motion for rehearing, 82 Kan. 367, 108 P. 813 (1910);
Darby v. Eldridge, 66 N.M. 260, 346 P.2d 1041, 77 A.L.R.2d 1052 (1959) (mineral water well);
Libby v. DeBaca, 51 N.M. 95, 179 P.2d 263 (1947) (marketing of carbon dioxide).
See Molter v. Lewis, 156 Kan. 544, 134 P.2d 404 at 406 (1943) (prudent operator standard);
Southeastern Gas Co. v. Estep, 269 Ky. 147, 106 S.W.2d 142 (1937);
Swamp Branch Oil & Gas Co. v. Rice, 253 Ky. 733, 70 S.W.2d 3 (1934);
Bartelbort v. Ley Oil Co., 95 Mont. 434 at 450, 28 P.2d 187 (1933) (prudent operator standard);
Coles Petroleum Co. v. United States Gas & Oil Co., 121 Tex. 59, 41 S.W.2d 414, 86 A.L.R. 719 (1931);
Transco Exploration Co. v. TXP Operating Co., 110 IBLA 282, GFS(OCS) 144 (Sept. 13, 1989) (indicating that under some circumstances a lessee may be liable to a royalty owner for failure timely to invoke an escalator clause in a gas purchase and sale contract:

"We noted above that an oil and gas lessee has an obligation of fair dealing with its lessor. By abandoning the favorable terms of their gas purchase contract with Transcontinental and seeking to pay the royalties owed to the United States on the reduced amounts which they received, appellants violated this duty."

The marketing obligation of the lessee is described in fiduciary terms in Craig v. Champlin Petroleum Co., 300 F. Supp. 119, 34 O.G.R. 580 (W.D. Okla. 1969). In an appeal on a procedural issue, the court of appeals rejected a contention of lack of jurisdiction of the district court. 421 F.2d 236, 34 O.G.R. 603 (10th Cir. 1970). The judgment of the district court was reversed on the ground that there was no breach of duty by the lessee. 435 F.2d 933, 37 O.G.R. 457 (10th Cir. 1971).

The Fifth Circuit in Sturman v. Exxon Corp., 280 F.3d 554, 564, 154 O.G.R. 107 (5th Cir. 2002), listed the following states as recognizing, in one form or another, a generalized implied covenant to market:

- **Arkansas**—Seeco, Inc. v. Hales, 341 Ark. 673, 22 S.W.3d 157, 180–81, 148 O.G.R. 155 (2000);
- **Colorado**—Davis v. Cramer, 808 P.2d 358, 361, 113 O.G.R. 201 (Colo. 1991) (en banc);
- **Kansas**—Smith v. Amoco Production Co., 31 F.3d 255, 257, 156 O.G.R. 1 (Kan. 2001);
- **Louisiana**—Texaco Inc. v. Duhé, 274 F.3d 911, 920, 153 O.G.R. 296 (5th Cir. 2001); Caskey v. Kelly Oil Co., 737 So. 2d 1257, 143 O.G.R. 32 (La. 1999);
- **Montana**—Severson v. Barstow, 103 Mont. 526, 63 P.2d 1022, 1024 (1936);
- **New Mexico**—Libby v. DeBaca, 51 N.M. 95, 179 P.2d 263, 265 (1947).


(Footnote continued on page 301)
In McDowell v. PG & E Resources Co., the court discussed the merits of the lessors' claim that the lessee had breached the marketing covenant. Prior to March 1990, the lessee combined wet gas produced by the plaintiffs' well with dry gas from another well located on lands not covered by the plaintiffs' leases. This mixture met the quality standards necessary for transmission of the plaintiffs' gas through a pipeline operated by United Gas Pipeline Company for ultimate sale. In early 1990, however, when the dry gas well stopped producing, United Gas refused to accept the unmixed wet gas from the plaintiffs' wet gas well. The lessee shut in the well and paid shut-in royalty while attempting to obtain another source of dry gas or to make other arrangements for the sale of plaintiffs' gas. Finding that the lessee had not breached the marketing covenant, the court said that a "lessee's conduct will be evaluated by what is expected of ordinary persons of ordinary prudence under similar circumstances and conditions, having due regard for the interest of both contracting parties." The most that can be required of a lessee is an effort to market gas within a reasonable time. Citing this section of this Treatyse, the court stated that "where the interests of the lessor and the lessee are aligned, as here, the greatest possible leeway should be extended to the lessee in his decisions about marketing gas."

What constitutes a reasonable time for obtaining a market, of necessity, will be measured by the operator's exercise of due diligence under the circumstances. Following the shut-in situation that developed in March 1990, the lessee instituted continuous and simultaneous efforts to reestablish a market. Evaluating the lessee's actions in light of the existing circumstances, the court could not conclude that the operator did not act for the mutual benefit of both the lessor and the lessee.

Texas Oil & Gas Corp. v. Hagen discussed the marketing duty of a lessee as follows:

"An oil and gas lessee owes its lessors a higher than ordinary duty to market the production from the leases in a manner which will obtain the best and highest

It did not find any support for the proposition that Alabama, California, Florida, Mississippi or North Dakota had reached any decision, one way or the other, on adopting the implied covenant to market or how the covenant, if adopted, was to be defined. 280 F. 3d at 564-65.


2.2 658 So. 2d at 784.

2.3 658 So. 2d at 784. The court also relied on Bruce M. Kramer and Chris Pearson, "The Implied Marketing Covenant in Oil and Gas Leases: Some Needed Changes for the 80's," 46 La. L. Rev. 787 (1986).

price reasonably obtainable. The standard required in such cases has been stated to be that of the highest good faith or the best of good faith . . . . This duty of highest good faith places the lessee in a position of trust and confidence toward its lessors.”

The court of appeals judgment in this case was affirmed in part and reversed in part by a Texas Supreme Court opinion that declared:

“"The court of appeals affirmed [the trial court judgment] and held that an oil and gas lease imposes upon a lessee a duty of ‘highest good faith’ and ‘places the lessee in a position of trust and confidence’ toward lessors in marketing gas for the benefit of itself and its lessors. 683 S.W.2d at 29. We disagree.

"Texas has long recognized an implied duty on the part of lessees to market production . . . . The standard of care which this duty carries has traditionally been termed the ‘prudent operator standard.’

"This court has never adopted a fiduciary or ‘highest good faith’ or ‘utmost fair dealing’ standard in any oil and gas implied covenant case. To the contrary, we have specifically held that unless the lease document itself creates in law a trust, or unless a relationship of trust and confidence necessarily results from the lessor-lessee relationship, the standard of conduct of the lessee cannot be appropriately categorized as fiduciary . . . . This conclusion is consistent with decisions of other Texas courts which have also rejected the establishment of a fiduciary duty resting solely on the basis of a lessor-lessee relationship . . . . The appropriate standard of care in this case is that of a reasonably prudent operator.”

The Supreme Court opinion then proceeded to hold that there was evidence that the lessee had failed to act as a reasonably prudent operator would have acted under the same or similar circumstances. However, it reversed the award of exemplary damages which had been affirmed below on the basis of the court of appeals’ conclusion that the lessee had “breached a relationship of trust and confidence existing between it and the plaintiffs.”

"In Texas exemplary damages are not allowed for breach of contract, including breach of an implied covenant, unless there is proof of an independent tort . . . . In this case there is no independent tort.

"As for recovery on the breach of fiduciary duty theory, we have held that no fiduciary or special relationship exists between the lessee and lessors. Therefore, no remedy in tort can arise when the duties underlying the lessor-lessee relationship are breached . . . . Since no other independent or distinct tort is present, the award of exemplary damages must be stricken.”

Thereafter, the parties reached a joint settlement agreement that was approved by the trial court. Subsequently, the judgment and opinion of the Supreme Court