

RE-APPLICATION OF  
THE ALASKA GASLINE PORT AUTHORITY TO  
THE STATE OF ALASKA,  
FOR APPROVAL UNDER A.S. 43.82  
THE ALASKA STRANDED GAS DEVELOPMENT ACT

March 30, 2005



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**Application of the Alaska Gasline Port Authority to  
the State of Alaska, Department of Revenue  
Under the Alaska Stranded Gas Development Act**

The Alaska Gasline Port Authority (Port Authority) submits this application pursuant to the Alaska Stranded Gas Development Act, AS 43.82.010. By submitting this application, the Port Authority expresses its intent to secure Alaska North Slope natural gas supplies, enter into contracts with natural gas, LNG and LPG purchasers for intrastate, interstate and export use, obtain financing for and contract to construct and operate a gas pipeline for the transportation of North Slope natural gas to market.

This pipeline will consist of an overland gas pipeline from Prudhoe Bay, Alaska to tidewater at Valdez that will run parallel to the existing Trans-Alaska Oil Pipeline. The Port Authority is willing to oversize the pipeline to Delta Junction (550 miles) to allow for a future line from Delta Junction along the Alcan Highway for gas into the Mid West (“Prebuild Option”). Additionally, a line will be built from Glennallen, Alaska into the Matanuska-Susitna Valley, (approximately 125 miles) to connect with the existing South Central natural gas grid to provide gas to the Matanuska-Susitna Valley, Anchorage and the Kenai Peninsula (“Project”).<sup>1</sup>

As required under AS 43.82.130, the Port Authority submits for consideration and approval to the Department of Revenue, along with this application, the required project plan. The ultimate plan will depend on whether the State and producers select the Prebuild Option. For the purpose of this application the Port Authority has assumed that the Prebuild Option will be

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<sup>1</sup> Exhibit 1 - AGPA Project Presentation Book

selected. The Port Authority requests a determination by the Commissioner of the Department of Revenue that the proposed project plan is a qualified project plan within the requirements of AS 43.82.130. While the Port Authority itself does not require concessions from the State with respect to the tax regime, etc.; the Port Authority recognizes that producers, who wish to sell gas to it and may operate and or build parts of the project, will want some measure of certainty and stability with respect to royalty, severance taxes, etc. for such activities. This reapplication is to ensure a forum for such determinations for the sellers of gas to this project as opposed to the other projects under consideration.

## **I. Introduction**

The Alaska Gasline Port Authority is a municipal port authority established on October 5, 1999, in accordance with the Alaska Municipal Port Authority Act (AS 29.35.600), et. seq. (Port Authority).<sup>2</sup> The Port Authority was formed by the municipalities of the North Slope Borough, Fairbanks North Star Borough and the City of Valdez.<sup>3</sup> An election was held in each of those municipalities and the percentage of voter approval for the formation of Port Authority averaged approximately 80%. Shortly following its formation, the Port Authority submitted to the IRS an application for a private letter ruling establishing that all income to the Port Authority would be tax exempt. On January 24, 2000, the IRS issued the requested private letter ruling declaring that income to the Port Authority would be exempt from federal income taxes.<sup>4</sup> According to petroleum economist and consultant Dr. Pedro Van Meurs, this IRS ruling provides \$10-20 billion in additional benefits to the Port Authority Project,<sup>5</sup> Further, the amount of this benefit exceeds any State and Municipal tax breaks that could conscionably be negotiated to improve the economics of an otherwise taxable gas pipeline project.

### **Project Cost Estimate**

The Port Authority engaged the services of Bechtel Corporation to provide an engineering, procurement, and construction study for the Project. The initial

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<sup>2</sup> Exhibit 2 – Alaska Municipal Port Authority Act

<sup>3</sup> Exhibit 3 – Establishing Ordinances

<sup>4</sup> Exhibit 4 – IRS Ruling

<sup>5</sup> Exhibit 5 – Pedro Van Meurs Letter

Project consisted of a gas pipeline from Prudhoe Bay to run parallel to the Trans-Alaska oil pipeline, to an LNG liquefaction terminal in Valdez, utilizing existing permits. The Project has since been modified to be able to prebuild a larger line to Delta Junction and enable the addition of a line through Canada. The Project also includes a line from Glennallen to approximately Sutton to connect with the existing Southcentral natural gas grid in an addendum to the project cost estimate.<sup>6</sup> Bechtel is currently updating its cost estimate to reflect the recent increases in steel and other material costs as of March 2005.

### **Economic Model**

In conjunction with work done by Bechtel Corporation, the Port Authority engaged the services of Taylor-DeJongh to develop an economic model incorporating the work performed by Bechtel Corporation. Taylor-DeJongh is an organization of internationally acclaimed energy financial advisors headquartered in Washington, D.C., with offices worldwide, and has, in some capacity, been involved in most of the international LNG projects financed around the world over the past 10 years.<sup>7</sup> See [www.taylor-dejongh.com](http://www.taylor-dejongh.com). The economic model will be updated by Greengate Capital LLC to reflect the new Bechtel numbers and the new data will be submitted in the next couple of weeks.

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<sup>6</sup> Exhibit 1, pg. 6-10 - Bechtel Project Cost Estimate

<sup>7</sup> Exhibit 1, pg. 5 - Taylor DeJongh Economic Model

## Financing

Financing for the Port Authority gas pipeline would be through the Federal loan guarantee for up to 80% of the project costs.

As a result of the over 55,000 work hours by Bechtel developing a hard-dollar estimates for the Project, which includes substantial contingencies and the AGPA's economic models, the Port Authority is confident that the LNG All-Alaska line plus an oversize line to Delta Junction for gas to the Mid West and a line into the existing Southcentral Alaska natural gas grid, is the most financially beneficial project to Alaska.<sup>8</sup>

In addition to obtaining a ruling of federal income tax exempt status from the IRS, a turn- key price estimate from Bechtel Corporation and an economic model from Taylor-DeJongh that confirms the Project financing feasibility, the Port Authority has entered into an MOU with a company that has applied for permits to construct and operate an LNG receiving terminal off the coast of California. The Port Authority has also entered into a Development Agreement with Sempra Alaska who will contract with the Port Authority to perform a number of services and will buy and market gas from the Port Authority. The Port Authority's Project infrastructure and the inclusion of propane and butane, returns the greatest well-head price for the gas and the greatest financial benefit to all Alaskans from Alaska's natural gas reserves.

A basic element of the Port Authority Project is the inclusion of a Project revenue distribution to all municipalities in Alaska providing a stable community

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<sup>8</sup> Exhibit 6 – Alaska State Constitution Article VIII, sec. 1&2

dividend that may be used for funding of capital projects, basic services and improved quality of life.

Allowing for maximum competition in the development of Alaska North Slope natural gas is in the best interest of Alaska. The Port Authority is committed to assuring no undue restrictions of access to gas pipeline capacity for producers of ANS gas.

The Port Authority welcomes an opportunity to fully discuss this application with the Commissioner of the Department of Revenue or appointed designees.

Additional information about this application and inquiries about the Alaska Gasline Port Authority should be directed to:

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## Alaska Stranded Gas Development Act

### Legislative Intent

It is the intent of the legislature that

- (1) in awarding contracts under the Alaska Stranded Gas Development Act, a qualified sponsor or qualified sponsor group and contractors of the qualified sponsor group may develop and enter into project labor agreements with appropriate collective bargaining organizations for each project for which a contract is entered into; and***

In accordance with the legislative intent as stated in the amended reauthorization of the Alaska Stranded Gas Development Act, the Port Authority recognizes the benefit of negotiated project labor agreements in its goal to maximize Alaskan participation in a stranded gas pipeline project.

**ALASKA STRANDED GAS DEVELOPMENT ACT  
AS 43.82.010 – Purpose**

- (1) *encourage new investment to develop the state’s stranded gas resources by authorizing establishment of fiscal terms related to that new investment without significantly altering tax and royalty methodologies and rates on existing oil and gas infrastructure and production;***

As a subdivision of government, the Alaska Gasline Port Authority Project will be exempt from taxation. Therefore, the Port Authority does not seek any changes in the current tax and royalty methodologies and rates. However these may be requested by the North Slope producers in conjunction with a Port Authority Project. The Port Authority project provides for gas pipeline revenue sharing to include all Alaska municipalities.

- (2) *allow the fiscal terms applicable to a qualified sponsor or the members of a qualified sponsor group, with respect to a qualified project, to be tailored to the particular economic conditions of the project and to establish those fiscal terms in advance with as much certainty as the Constitution of the State of Alaska allows;***

As exhibited within this application, the very favorable economic benefits enjoyed through the tax exempt status and project specifics of the Port Authority gas pipeline project require no tailoring of the fiscal terms with regard to the State

tax and royalty rates and methodologies. However, this may be requested by the producers that sell to a Port Authority Project.

**(3) *maximize the benefit to the people of the state of the development of the state's stranded gas resources.***

In every aspect of the development of this Project, the Alaska Gasline Port Authority has held as its singular objective to maximize the benefit of the commercialization of Alaska North Slope natural gas to not only the residents of the member communities but to all Alaskans.

## II. AS 43.82.100 – Qualified Project

AS 43.82.100 sets forth specific requirements for consideration as a qualified project. The Port Authority responds to that criteria as follows:

1. ***AS 43.82.100 (1) requires that in order to be a qualified project, the project principally involves***

***(A) the transportation of a natural gas pipeline to one or more markets, together with any associated processing or treatment;***

The Port Authority Project, which is more fully described in Exhibit 1 of this application, intends to transport natural gas from Alaska's North Slope via pipeline to potential markets in North America through Valdez via LNG and make provisions for gas transportation to the Mid West through Canada along the Alcan Highway.

***(B) the export of liquefied natural gas from the state to one or more other states or countries; or***

The Port Authority Project provides for delivery of 15 million tons per year of LNG and approximately 154,000 bbls/ day of LPG from Valdez to markets along the West Coast of the United States and Pacific.

***(C) any other technology that commercializes the shipment of natural gas within the state or from the state to one or more other states or countries.***

The base case includes a prebuild of a larger line to Delta Junction to facilitate the off-take of 3 to 4 bcfd of gas down a pipeline along the Alcan

Highway to Midwestern United States. The Port Authority project also provides for a gas pipeline from Glennallen to connect with the Southcentral gas grid, providing infrastructure for new and continuing in-state distribution of gas.

2. ***AS 43.82.100 (2) would produce at least 500,000,000,000 cubic feet of stranded gas within 20 years from the commencement of commercial operations***

While the Port Authority's Project model produces potentially six different volume scenarios ranging from a single 2.6 Bcfd line to Valdez to multiple 6 Bcfd Y-line scenarios with lines to Canada and the Matanuska-Susitna Valley, its minimum sized Project would consist of approximately 2.6 Bcfd throughput. With this projected minimum throughput, the Project would cause the production of well over 500 bcf of stranded gas within the 20-year requirement set forth in AS 43.82.100(2).

3. ***AS 43.82.100 (3); is capable, subject to applicable commercial regulations and technical and economic considerations, of making gas available to meet the reasonably foreseeable demand in this state for gas within the economic proximity of the project.***

The Port Authority's mission is to commercialize Alaska North Slope gas to the maximum benefit of all Alaska. In compliance with that mission, the Port Authority's project includes making gas available at commercially reasonable rates to communities along the route from Prudhoe Bay to Valdez and a line from Glennallen into the Matanuska-Susitna Valley to connect with the Southcentral

natural gas grid, thereby making gas available to the residents and business of the Matanuska-Susitna Valley, Anchorage and the Kenai Peninsula.

### **III. AS 43.82.110 – Qualified Sponsor or Qualified Sponsor Group**

The commissioner may determine that a person or group is a qualified sponsor or qualified sponsor group if the person or a member of the group:

- (1) *intends to own an equity interest in a qualified project, intends to commit gas that it owns to a qualified project, or holds the permits that the department determines are essential to construct and operate a qualified project;***

The Port Authority will own a 100% equity interest in the Project as is required in order to maintain the Port Authority's tax exempt status.

- (2) *meets one or more of the following criteria:***

- (A) *owns a working interest in at least 10 percent of the stranded gas proposed to be developed by a qualified project;***
- (B) *has the right to purchase at least 10 percent of the stranded gas proposed to be developed by a qualified project;***
- (C) *has the right to acquire, control, or market at least 10 percent of the stranded gas proposed to be developed by a qualified project;***
- (D) *has a net worth equal to at least 33 percent of the estimated cost of constructing a qualified project;***
- (E) *has an unused line of credit equal to at least 25 percent of the estimated cost of constructing a qualified project.***

Pursuant to AS 38.05.183, the Port Authority intends to make application to the State of Alaska for the State of Alaska's twelve and one-half percent (12.5%) of royalty gas. The Port Authority intends such an application to be part

and parcel of this application which exceeds the threshold requirement of 10 percent set forth above.

**(C) *has the right to acquire, control, or market at least 10 percent of the stranded gas proposed to be developed by a qualified project***

Because the Port Authority intends to acquire 12.5 percent of the stranded gas on the North Slope under AS 38.05.183, the royalty share of the State of Alaska's gas on the North Slope, it also intends to market that same gas as the owner of the gas and has entered into an MOU for the sale of that gas into the California market.<sup>9</sup> The Port Authority also intends to acquire additional gas supply through commercial negotiations with the producers, and if required will utilize its authority allowed under AS 29.35.620.

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<sup>9</sup> Exhibit 7 - Crystal Energy MOU

#### IV. AS 43.82.130 – Qualified Project Plan

The Port Authority's Project plan provides for a 56-inch line from Prudhoe Bay to Delta Junction (approximately 550 miles) with a 48-inch line from Delta Junction to Valdez (approximately 256 miles). Additionally, the Port Authority Project includes a line from Glennallen into the Matanuska-Susitna Valley (approximately 125 miles) to connect with the existing Southcentral Alaska gas grid. If the prebuild option is not selected, the line will be a 48 inch line from Prudhoe Bay to Valdez initially carrying 3 bcf/d expandable to 4 bcf/d.

Under the Port Authority's prebuild case, the line would transport approximately 3.0 Bcf/d of gas to Valdez and have the ability to transport 3.5 Bcf/d to the Canadian border.

The Port Authority's cost assumptions are extremely conservative, assuming no benefit from existing equipment and facilities present on the North Slope. Outlined below are the assumptions for the prebuild case:

Gas conditioning plant (8.7 Bcf/d capacity) <i>(assumes no benefits from equipment at existing plant on North Slope)</i>	\$4.3 billion
Pipeline:	\$9.9 billion
➤ 6 Bcf/d from Prudhoe Bay to Delta Junction	
➤ 2.678 Bcf/d delivered to Valdez from Delta Junction	
➤ 3.161 Bcf/d delivered to Canada border from Delta Junction	
LNG Plant and Port Facilities:	\$3.7 billion
➤ Three trains – 15 million tons LNG per year	
➤ Train 1 completed in 49 months	
➤ Trains 2 & 3 completed in 6-months intervals	
LPG Extraction Facility:	\$0.5 billion
Total EPC Cost:	<u>\$18.4 billion</u>

We expect these numbers will increase by at least \$3 billion when they are updated in the next two weeks by Bechtel. If the prebuild for a Canadian line is not selected the number will be approximately \$4.5 billion less – see Exhibit 1 p.26.

The Port Authority has also taken into consideration and included all possible contingencies and soft-costs associated with this Project. Because of past cost overruns with respect to pipelines, the direction to Bechtel Corporation was to provide a hard dollar cost estimate to include all contingencies. While the Port Authority recognizes that this creates a cost estimate which is substantially higher than some cost estimates performed by other entities, the Port Authority also believes these cost estimates can be further refined. At this point however, EPC and the soft-costs of the Project consist of the following:

EPC	\$18.4 billion
Owner's Contingency	\$0.9 billion
Insurance	\$0.2 billion
Development Costs	\$0.1 billion
Working Capital	\$0.5 billion
Owner Costs, Line Pack	\$0.1 billion
Interest During Construction	\$4.4 billion
Financing and Underwriting Fees	\$0.2 billion
Debt Service Reserves Fund	\$1.0 billion
Total Project Cost	<hr/> <b>\$25.8 billion</b>

By combining a gasline to the Lower 48 with a gasline to an LNG project, the cost estimate for gas transportation down each branch of the line is lowered by approximately 30%. The total shared cost savings, consisting of the construction cost savings plus the soft cost savings is approximately \$3 billion for

each branch of the line for a total of \$6 billion for the LNG and gas pipeline portions of the Project.

In further support of the conservative nature of the Port Authority's Project cost estimate, the calculations include an 8-10% escalation built into the components of the EPC costs, \$1.8 billion in contractors' contingency, and a \$928 million owner contingency for cost overruns not covered by the EPC contractor. The Port Authority model also includes a \$1 billion debt service reserve to support 6 months of debt service.

We expect these numbers to increase by at least \$3 billion when they are updated by Bechtel. If the prebuild for a Canadian line is not selected, the numbers will be \$4.5 billion less- see Exhibit 1 p.26.

## **V. NATURE AND SOURCES OF FINANCING**

The financing structure consists of bonds backed by the available Federal loan guarantee for 80% of the project costs. The balance will be subordinated debt, a substantial percentage of which may be tax exempt bonds. Sempra is considering purchasing a portion of this debt.

## VI. Purchase Price of Gas

The gas purchase price in this Offer (the "Purchase Price") is a netback price, obtained by subtracting from an agreed market index price the costs of delivering the gas to the market, as follows:

Purchase Price=	Market Index Price
Less	Initial Market Entry Discount
Less	Project Costs
Plus	An adjustment to credit revenues from LPG sales

## **VII. Base Case Assumptions and Results**

The Port Authority's base case, including all assumptions are set forth in detail in Exhibit 1, pages 15-18. These cases will be updated when the new Bechtel numbers are received in the next two weeks.

### **VIII. Additional Benefits of the Y-Line**

Additional benefit of the shared costs of the Y-line Project is set forth in detail in Exhibit 1, pages 24 and 39 through 45.

The Port Authority summary of the AGPA model sensitivity case results, sets forth the 6 cases consisting of:

- 1) A single 2.6 line to Valdez;
- 2) 4 Bcfd single line through to the Canada border;
- 3) 4.5 Bcfd line to the Canada border;
- 4) 3.1 Bcfd line to the Canada border;
- 5) 6 Bcfd Y-split Y-line to Canada (approximately 3 to Canada and 3 to Valdez);
- 6) 2+4 Y-split with 2 Bcfd to Valdez and 4 Bcfd to Canada

This summary, found in Exhibit 1, page 25 compares in detail all economics of the six scenarios.

## **IX. Timeframe for Project Completion**

The Port Authority vision in the completion of this Project is to deliver gas to both the California market and to South Central Alaska in 2011.

**X. Sources of Supply**

There are proven reserves of 35 trillion cubic feet (tcf) of natural gas in Alaska's North Slope. Additional estimates from various government sources increase that by an additional 150 tcf. These estimates are more than necessary to provide the required gas for this project.

Dated this 30<sup>th</sup> day of March, 2005.

ALASKA GASLINE PORT AUTHORITY

BY:

A handwritten signature in black ink, appearing to be 'J. Whitaker', written over a horizontal line.

Jim Whitaker, Chairman  
Alaska Gasline Port Authority