

Resource Development Council of Alaska, Inc.

April 9, 2007



Alaska Gasline Inducement Act (AGIA) Process

- Open, transparent and competitive
- Identifies clear evaluation criteria
- Inducements to project applicants in exchange for specific commitments
- Empowers selected applicant to build successful consortium, leading to open season
- Return to Stranded Development Gas Act Process?
 - No identified criteria
 - No requirement to justify need for 30-45 years of concessions in excess of \$10 billion
 - State in compromised negotiating position
 - No project commitments other than spending levels due diligence only criteria
 - Oil tax concessions beginning now for 30 years with no commitment to a line

The Alaska Gasline Port Authority ("AGPA")



Formed to ensure:

- gasline is built
- Exact able source of energy to Alaskans not tied to Lower 48 price index (Henry Hub, etc.)
- Il pipeline and liquefaction associated jobs are within the state of Alaska; including <u>construction</u>, <u>operation</u>, and <u>maintenance</u>
- Direct net-project revenue sharing 60% to State 30% to every Alaska municipality – 10% in energy related benefits to rural Alaska
- Earliest opportunity for in-state gas availability
- Source test opportunity to supply gas liquids to in-state markets
- Market optionality for Alaska's gas

Indicative AGPA Project Structure





Industry leaders will be involved in all components of AGPA's project

AGPA Project Description

Gas Conditioning Plant in Prudhoe Bay

- removes impurities
- compresses and chills the gas to pipeline specifications

Pipeline from Prudhoe Bay to Valdez

- parallel to TAPS
- pre-build to Delta Junction for later tie-in for the Alaska/Canada Highway Project
- tie-in at Glennallen for a spur line to Alaska South Central natural gas grid

LNG Facility in Valdez

- integrated LNG liquefaction and LPG extraction facilities
- includes storage and vessel loading facilities



Project Status



Project Route Permitted

he 12 Senior Permits Acquired

- Yukon Pacific Corporation
- \$100 million expended
- Right-of-way
- Project FEIS
- LNG terminal permit

Bechtel Cost Estimates

Complete & Updated

Marine Transportation / Jones Act

 MOU with the largest LNG shipping company in the world – Mitsui OSK Lines **Access to Multiple Markets**

- Only West Coast receiving terminal under construction
- West Coast Alternatives
- Hawaii
- Pacific Rim
- **Anticipated Financing**
 - 80% debt (Federal loan guarantee available)
 - 20% private funding



- Limited recourse project financing
 - well-established financing approach for capital-intensive energy or infrastructure projects around the world
 - Project is sole source of repayment of loans limited or no recourse to sponsors and other Project participants
- The key factors for financeability
 - commercial and contractual structure
 - project economics; ability to generate cash flows sufficient to repay the debt
 - experience and track record of the various project participants, including: engineering and construction contractors, facility operators, offtakers, suppliers, etc.
 - appropriate risk allocation under project and financing agreements
 - credit worthiness of the counterparties under Project agreements



- 800 mile pipeline is 100% adjacent to TAPS, 100% in Alaska
- Infrastructure in place for entire line roads, bridges, camp pads, etc.
- LNG project: lower overall cost overrun risk:
 - liquefaction facilities utilize proven technology and well-tested design, resulting in a relatively low level of uncertainty in cost estimate
 - low level of cost uncertainty for LNG marine transportation and regasification
 - pipeline component has the highest capital cost uncertainty for LNG project the pipeline is only a portion of overall cost to market
- LNG Project with 2/3 less cost = 2/3 less risk



Alaska loses U.S. markets to LNG projects from elsewhere

• Expiration of \$18 billion Federal Loan Guarantee

 Increased cost of construction (steel, etc.) as years of study and negotiation goes by while years, if not decades, of negotiations continue for Canadian portion of the Alcan Highway route



- Robust economics with a forecast of internal rate of return in excess of <u>30%</u> to upstream producers with no tax concession by State
- Greatest benefits to the State of Alaska
- Favorable economics takes into consideration AlCan Highway pre-build to Delta Junction
- Win-Win for Alaska for LNG:
 - Capture West Coast market now <u>plus</u> enable a later AlCan Highway project to proceed when ready

Advantages of LNG from Alaska



- The Alaska LNG project will benefit from an efficient, low-cost liquefaction operation:
 - ambient conditions (low average temperatures) in Valdez result in significant unit cost savings in comparison with liquefaction facilities located in tropical climate
 - efficiency gains estimated in the range of 30 40%
- Most other LNG projects have significantly higher marine transportation costs to market due to longer shipping distances
- Many other LNG projects involve higher upstream costs due to complex, expensive field development
 - Alaska benefits from substantial existing North Slope infrastructure and developed fields (Prudhoe Bay)

Advantage of LNG for Alaska – Right Sized Project



- Gas requirements:
 - Current ANS discovered gas resource: 35 Tcf
 - Alaska LNG project initial phase gas requirements: 15-25 Tcf (1.5-2.5 bcf/d)
 - Proposed AlCan Highway pipeline project through Canada: 50-65 Tcf (4.3-6 bcf/d)
- Maximum current offtake allowed for PBU is 2.7 bcf/d (AOGCC Rule 9)
 - AlCan Highway pipeline proposals require 4.3 6 bcf/d
 - LNG: approximately 2 bcf/d offtake
- The Alaska LNG project will enable Alaska's gas to reach market sooner, while exploration efforts are underway for the larger pipeline projects
- AGPA provides Alaska's vast gas resources the significant benefit of market optionality

AGIA Suggested Amendments



- More detail required from Canadian line applicants
- If offtake amounts exceed AOGCC Rule 9 limitations (2.7 bcf/d less field use), must have already filed an application with AOGCC for increased offtake limits
- Additional gas reserves needed? Budget and timeline for exploration program
- Analysis of anticipated oil loss from PBU if volume exceeds AOGCC Rule 9 limitations
- Analysis of liquids availability in Alaska for value added processing
- Timeline for project start up and completion for present value analysis
- Current project cost estimate required with application

AGIA benefits towards advancing gas pipeline

- Rolled in rates good for Alaska's future
- Allows for independently owned infrastructure
- Follows successful model used in other countries who also use rolled in rates and independently owned pipelines.
- \$500 million skin in the game sends very positive message about Alaska's desire to commercialize Alaska's gas

The All-Alaska Gasline. The future is on the line.





Right Sized – Right Now!