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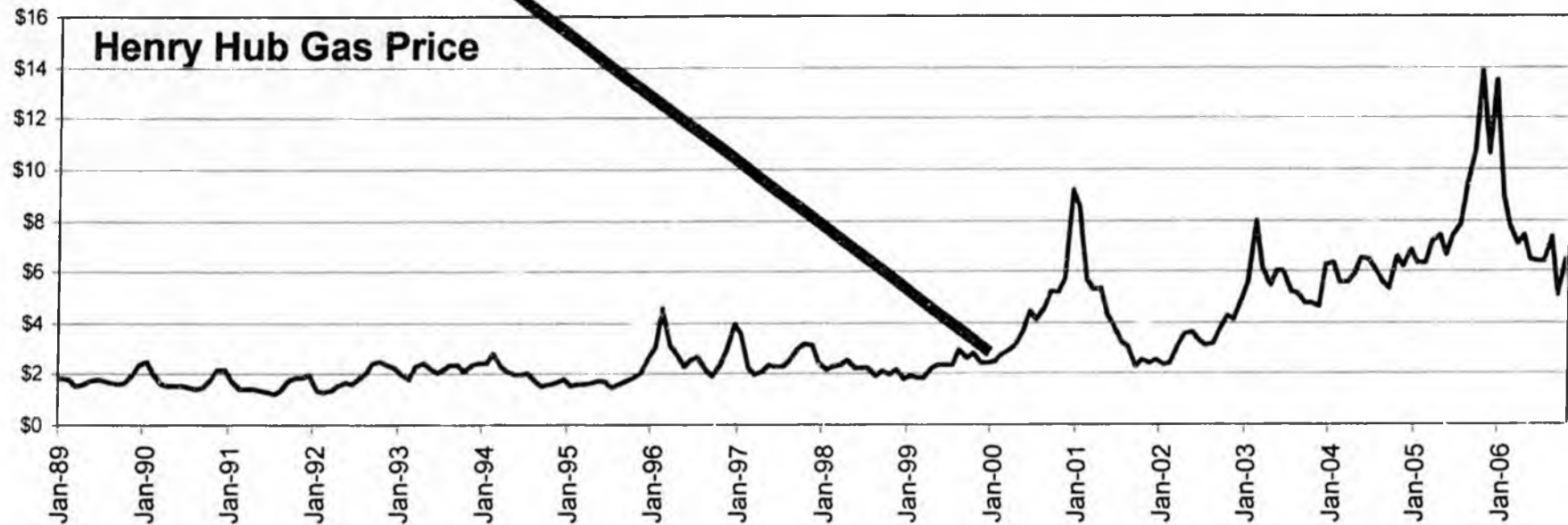
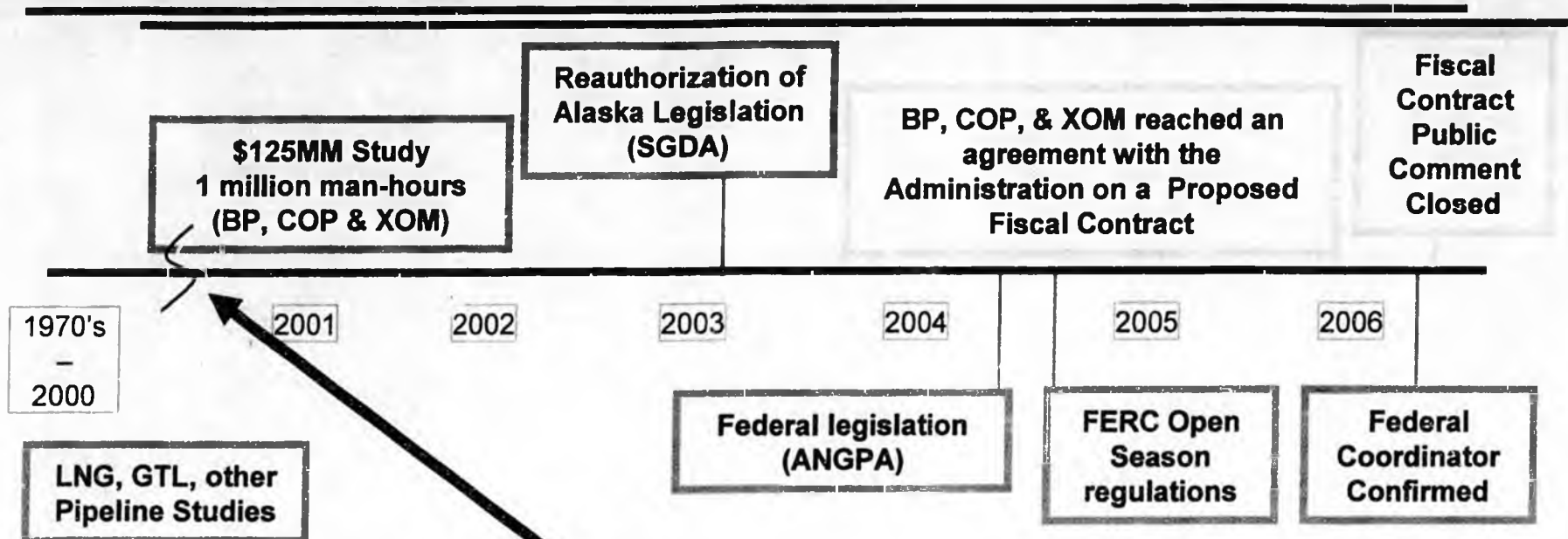
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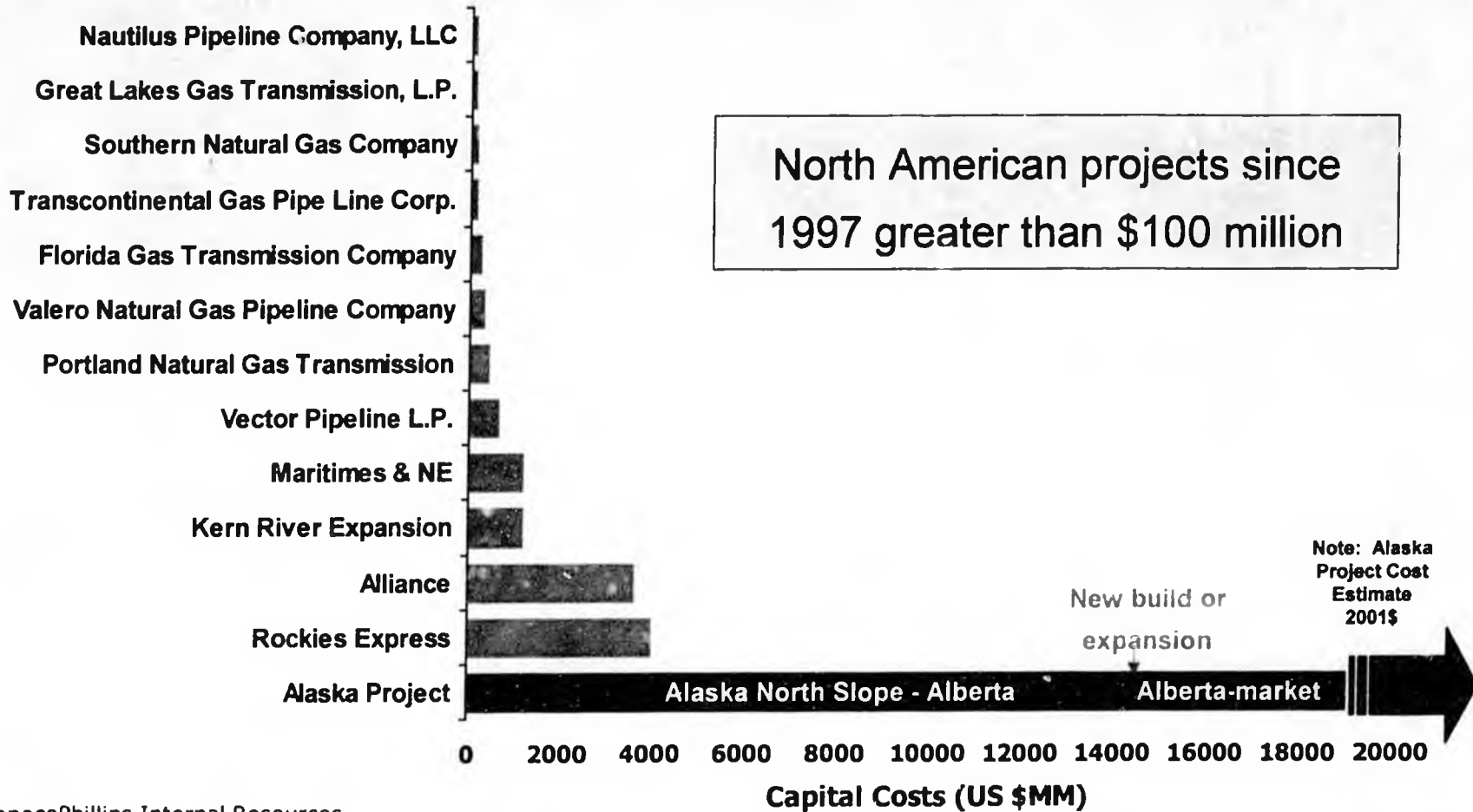
House Resources Committee
April 16, 2007

Wendy D. King
ANS Gas Development Team

Alaska Gas Pipeline Project



What makes the Alaska Project Different?



North American projects since 1997 greater than \$100 million

Alaska Gas Pipeline will be much larger / more difficult than other US/CAN pipelines. Size brings additional risk.

Source: ConocoPhillips Internal Resources

Alaska Gas Pipeline Project Risks

- **Cost**

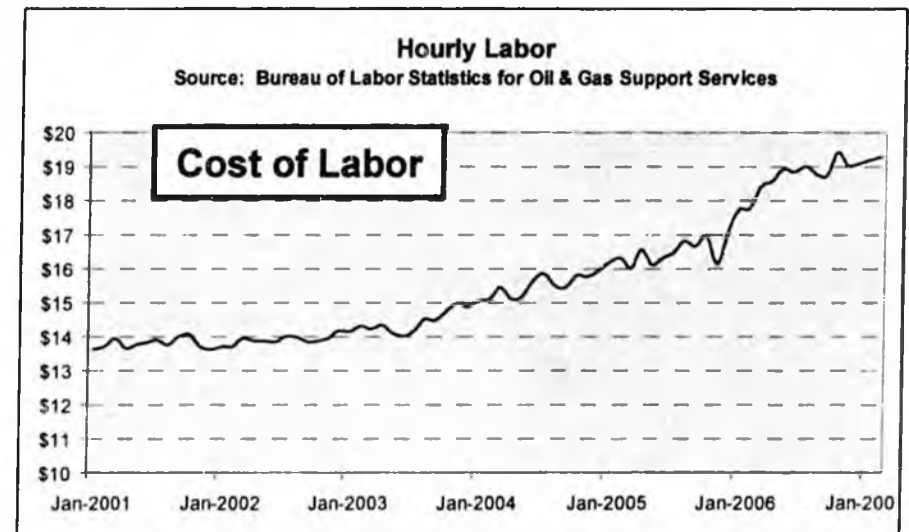
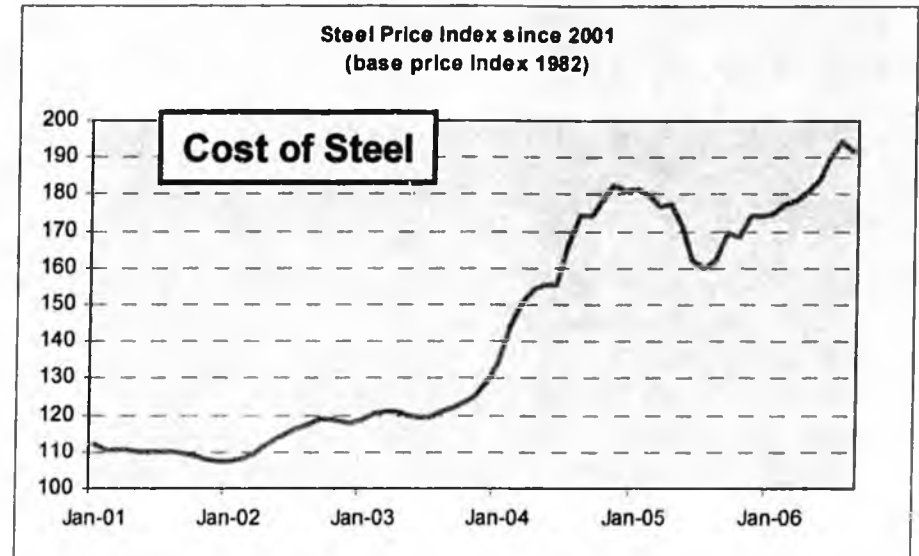
- Since 2001, steel prices have nearly doubled
- Labor costs continue to rise
- Previous \$20 billion cost estimate would be significantly higher today

- **Prices**

- Natural Gas Supply & Demand
- Volatility

- **Other Risks and Uncertainties**

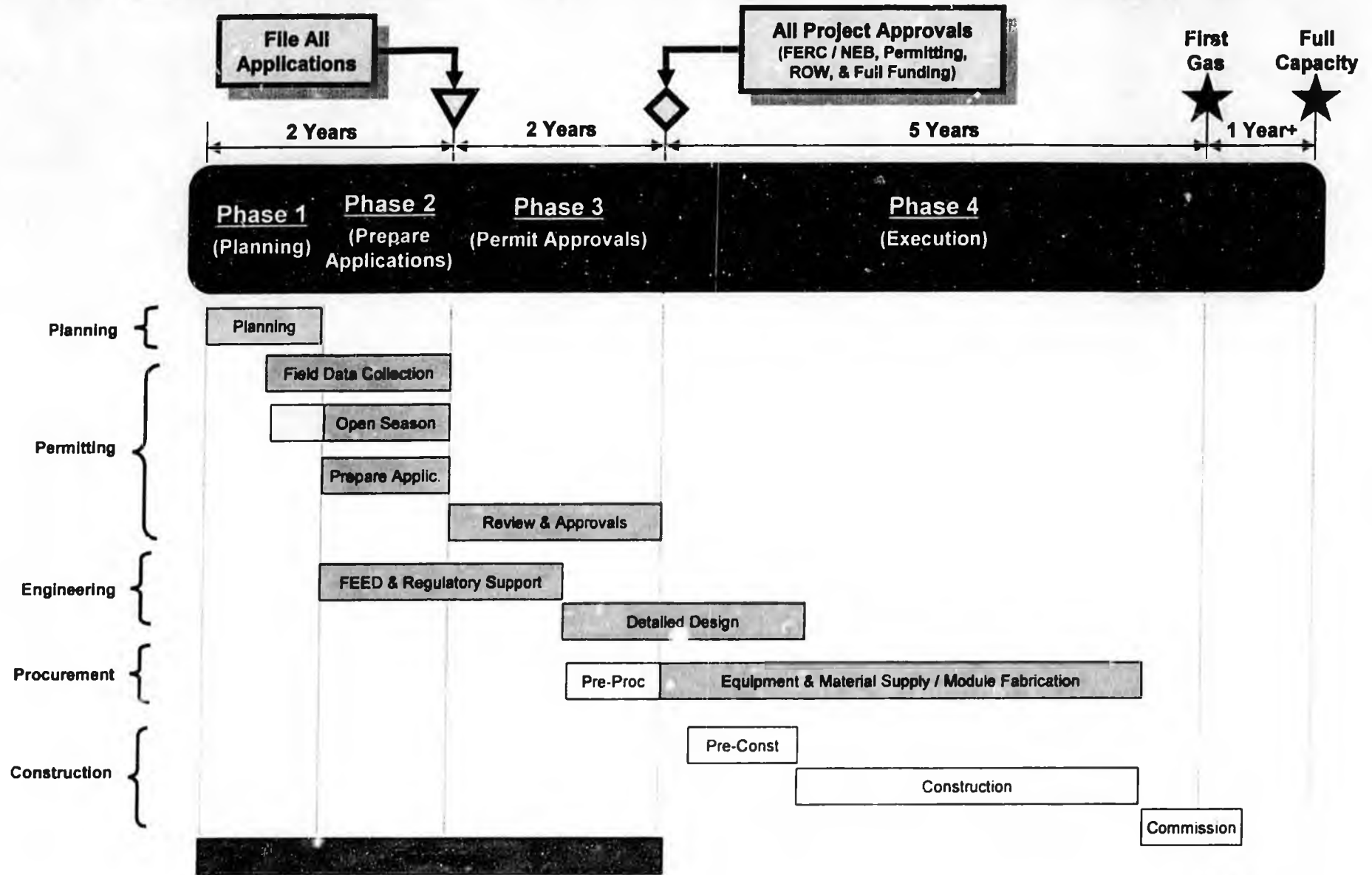
- World-scale logistics
- World-scale material procurement
- Labor availability
- Weather
- Reserves and Deliverability



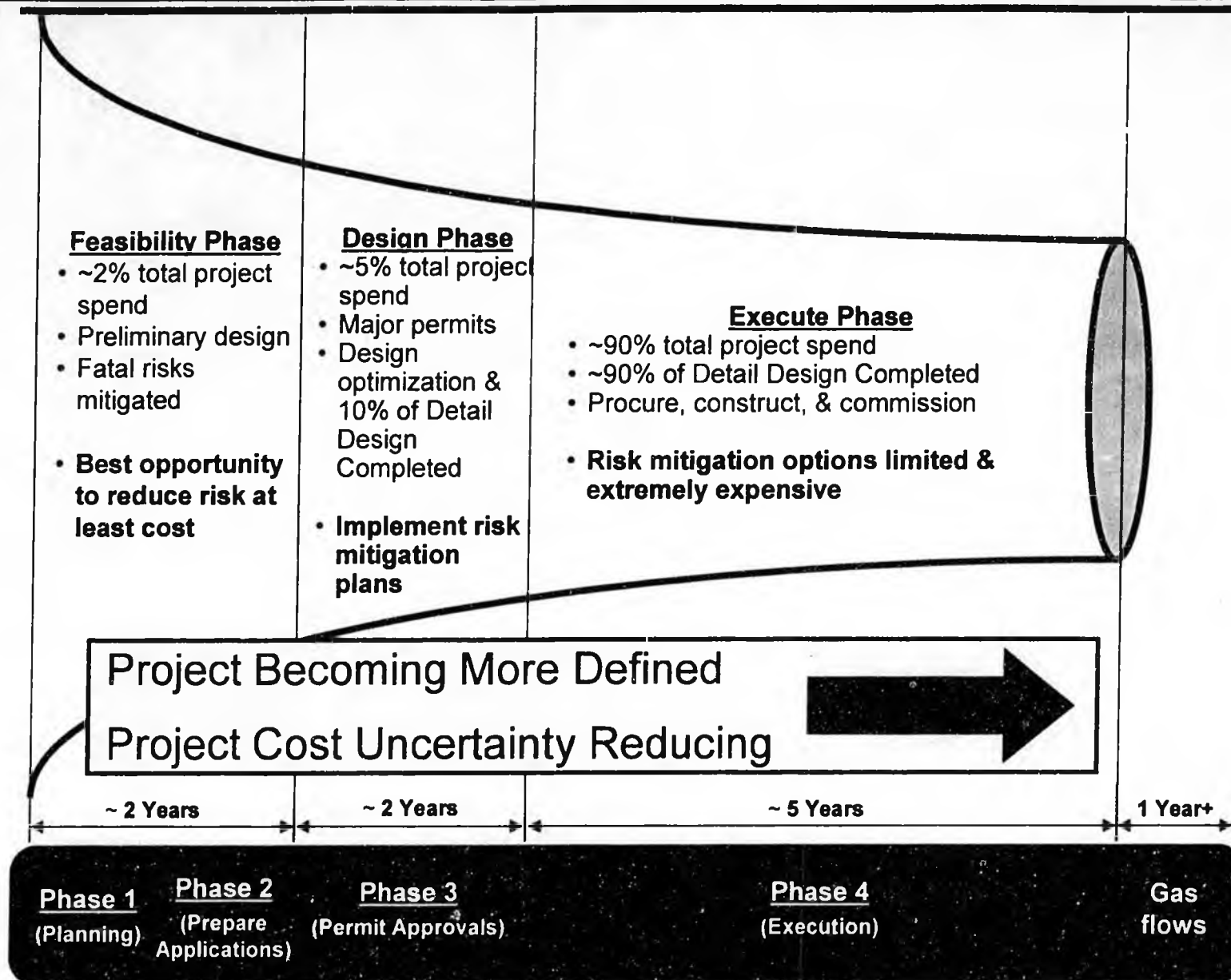
Why an Open Season?

- Why shipping commitments?
 - Shippers agree to ship gas, or pay demand charges for fixed term
 - Allows pipeline company to repay its debt and obtain a return on its equity contribution
 - Commitments allow pipeline company to obtain financing – the commitments serve as collateral for the financing
- Why is Open Season critical?
 - Allows open access to pipeline
 - Demonstrates no discrimination
 - Required by ANTPA – Sec. 103(e)
 - Establishes the demand for capacity, which impacts size, design, and cost of the pipeline
 - Also supports determination of whether project is viable commercially and can get financing

Success Case Project Timeline



Front End Loading and Cost Estimates



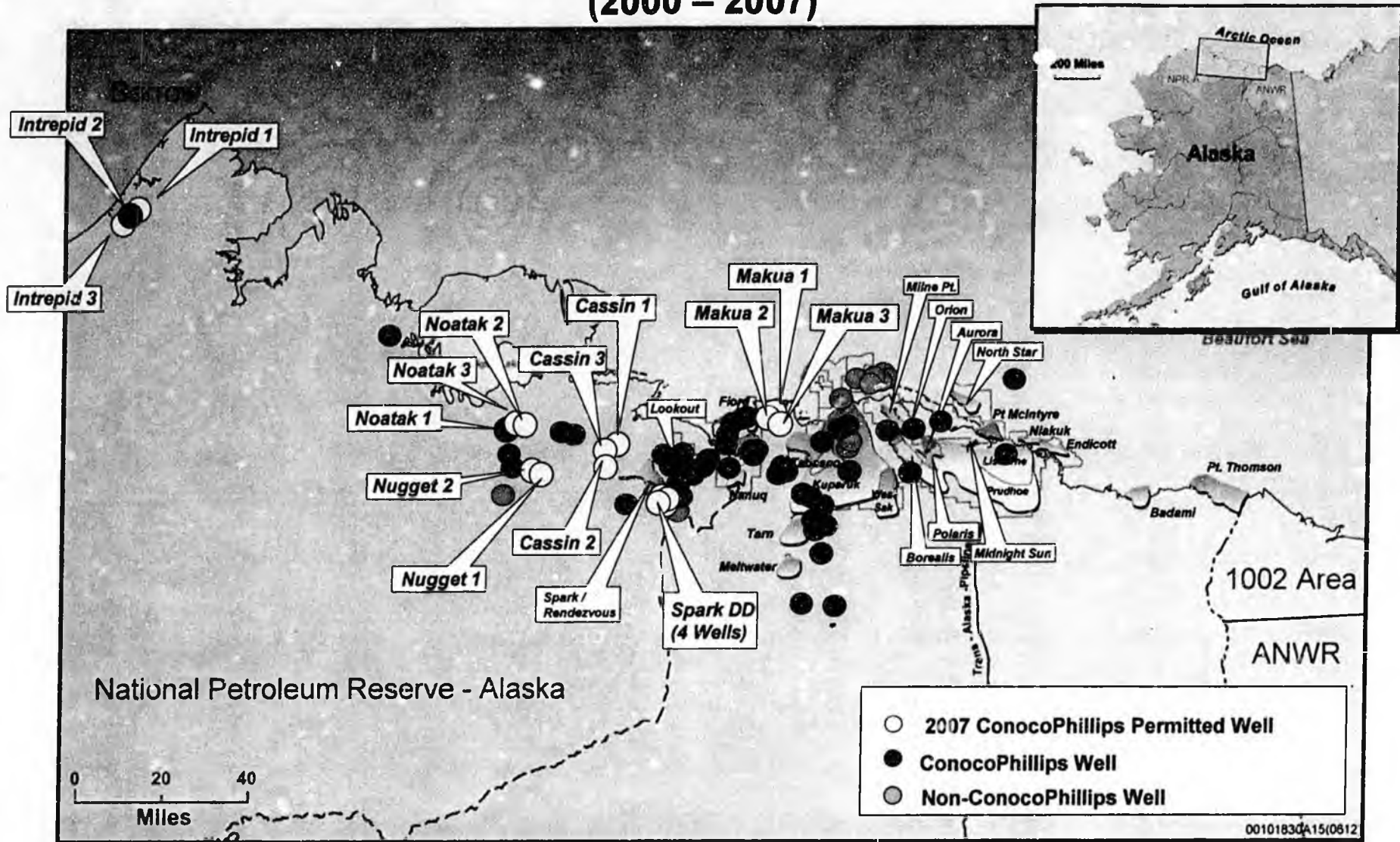
Proposed AGIA

Initial Concerns:

- AGIA structure hinders competition and creative alternatives
 - Licensed Project Assurances clause creates significant barriers to alternatives and competition
 - State could pick the wrong winner and be tied up for over a decade
 - AGIA 'bid requirements' are too narrow, prescriptive, and could result in subsidization that may not even be in the State's interests
- Resource terms not adequately addressed - clearly 'not a negotiation'
 - Long term firm shipping commitments are key to a successful pipeline project

ConocoPhillips Exploration on North Slope

(2000 – 2007)



Order 2005 on Rolled-in Rates

*“In conclusion, to provide guidance to potential shippers in advance of the initial open season that is the subject of this rule, the Commission intends to harmonize both objectives (rate predictability for initial shippers and reductions of barriers to future exploration and production) in designing rates for future expansions of any Alaska natural gas transportation project. It is consistent with our guiding principle that competition favors all of the Commission’s customers, as well as with the objectives of the Act, **to adopt rolled-in treatment up to the point that would cause there to be a subsidy of expansion shippers by initial shippers, if any subsidy were to be found.**”*

– page 44, 18 CFR Part 157, Order No. 2005, 2/9/05

ANS Exploration Potential

	Acres	Range (5 – 95%)	State Royalty?	State Taxes?
State lands* (onshore & offshore)	15 million	24 – 45 TCF unassociated	Yes	Yes
Private lands* (mostly native)		3 – 6 TCF associated		Yes
Federal onshore				
ANWR (1002 Area)	19 million (1.5 million)	0 – 20 TCF	Shared Federal Royalty	Yes
NPRA	23 million	39 – 83 TCF	Shared Federal Royalty	Yes
Federal OCS				
Beaufort Sea		1 – 72 TCF		
Chukchi Sea		10 – 210 TCF		

* Includes Foothills acreage

Source: USGS assessments for State (2005), ANWR (1998), NPRA (2002), Chukchi (2006), Beaufort (2006)

Suggested Changes to AGIA

- Convert AGIA 'bid requirements' to 'bid variables'
 - Allow proposals to include other commitments and inducements
 - Allow resource-owner applicants to propose packages with resource terms
 - Foster greater quantity and quality of proposals
- Amend exclusivity provisions to protect Alaska's options
 - Avoid treble damages which might penalize Alaska for prudent actions
 - AGIA impairs State's ability to agree resource terms in the future
 - State coordinator/streamlined permitting should be available to any project
 - Similar structure to Alaska Natural Gas Pipeline Act (ANGPA)

MEMORANDUM**STATE OF ALASKA****ALASKA OIL AND GAS CONSERVATION COMMISSION**

TO: Chair John K. Norman
Commissioner Daniel Seamount
Commissioner Cathy P. Foerster

DATE: February 28, 2007

FROM: Jane Williamson
Sr. Reservoir Engineer *Jane Williamson*

SUBJECT: Prudhoe Major Gas Sales Study

Blaskovich Services, Inc. (BSI) and Commission staff recently completed a study of the impact of a future Major Gas Sale (MGS) on oil and gas recovery from the Prudhoe Oil Pool. The following is provided as a summary of major findings and conclusions from this study.

Foreward – Historical Review and Study Purpose

In 1977, the Commission set the maximum allowable Prudhoe Oil Pool annual gas offtake rate at 2.7 billion standard cubic feet per day (BSCF/D), which contemplated an annual average gas pipeline delivery sales rate of 2.0 BSCF/D. This allowable, set out in Rule 9 of Conservation Order 341D, was approved without benefit of production history. The Commission recognized that the rates may be changed as production data and additional reservoir data became available.

Over the past five years, there has been significant activity concerning a potential major gas sale. BPXA, Exxon-Mobil, and ConocoPhillips commissioned a \$125 million dollar study to determine the conceptual feasibility of a gas pipeline. The tentative plan resulting from this study was for a 4.3 BSCF/D pipeline, with capacity to expand to 5.6 BSCF/D. The Prudhoe Bay Unit, Prudhoe Oil Pool is the only North Slope developed field with significant gas reserves (estimated at more than 24 trillion cubic feet (TCF)) and is of primary importance for any decision concerning the pipeline. Pt. Thomson, with over 8 TCF of gas and several hundred million barrels of gas condensate and oil, was assumed to also provide a supply of gas for the pipeline. The companies and the State of Alaska have devoted significant resources to negotiate fiscal terms to build the pipeline. Based on these efforts, the Commission became concerned that no application for modification to the Prudhoe gas offtake rule had been submitted.

As a result of a Commission inquiry and several public hearings, the Commission published a report on December 5, 2005 concluding that there was a need to comprehensively revisit the question of the appropriate gas offtake limits in light of several decades of reservoir development and information that has become available since 1977. Because delay in the Commission's decision-making could disrupt the timetable for a potential gas pipeline project, the Commission adopted a proactive approach to ensure there would be an adequate factual basis for its eventual decision on

allowable gas offtake. The Prudhoe Working Interest Owners (WIO) and the Commission therefore agreed to principles allowing the Commission consultants and staff to access their reservoir simulation and other relevant engineering studies for the purpose of analyzing gas offtake rates and gas sales startup timing for the Prudhoe Oil Pool. Blaskovich Services, Inc. (BSI) was commissioned to provide reservoir engineering consultation in this study.

This work-study officially began in late January 2006. A brief summary follows:

Summary of 2006 Commission Audit Results

The Prudhoe WIO full field reservoir simulator was used as the primary tool in this evaluation. In addition to runs made assuming no gas sales, simulation runs were made at various gas sales rates (1.0-5.6 BSCF/D) and gas sales startup dates (2015, 2019, and 2024). Some simulation cases were run to test the impact of other factors such as changes in waterflood operation, fuel usage, CO₂ offtake, and some drilling/workover variations. We also evaluated the effect of varying assumptions for end of the field life (EOFL).

Throughout our analysis, we searched for major factors that would affect the trends in total hydrocarbon recovery as a function of gas offtake rates and timing. We were not searching for "the" optimum development strategy. We did not value one type of energy resource (e.g., liquids or gas) over another, but equated them using their relative energy content in units of barrels of oil equivalent (BOE). Based on our analysis of currently available data, we have reached the following major conclusions.

- A major gas sale at Prudhoe represents approximately an additional 4 billion BOE recovery.
- The latest WIO model needs improvements in its ability to predict future field performance. Model errors are increasing with time. Nevertheless, it is the best tool currently available. It should be suitable for comparing directional trends in energy recovery during a gas sale.
- Increased oil capture prior to gas sales can increase hydrocarbon recovery and result in recovery trends that are less sensitive to either gas offtake rates or gas sales startup dates. This was the only mitigation option evaluated that significantly improved trends in BOE recovery.
- End of field life (EOFL) is a major source of uncertainty in determining the gas sale strategies that will maximize energy recovery.
 - Comparison of model reserves predictions at the same date for EOFL tended to favor an earlier, higher rate gas sale. We found the time limit EOFL approach to be inappropriate because ending energy production rates could be vastly different between the high rate, early startup case and the low rate, delayed startup case.

- o Model results based on equivalent EOFI rate limits consistently show that total energy recovery is substantially decreased with an earlier, higher rate gas sale. We believe that rate limits are more reasonable than time limits for comparison of gas sales model predictions. However, exclusive use of rate limits is flawed because the risks of wells and field infrastructure failures with age are ignored.
- Well, facilities and infrastructure failures can significantly increase the risk of lost hydrocarbons. The longer that gas sale is delayed, the greater the risk of well and facilities failure resulting in premature field shutdown. Furthermore, near term failures will defer production and may result in more reserves loss with early gas sales. Diligent efforts to maintain, repair, and replace aging wells and facilities will help to mitigate risks and maximize recovery under any sales scenario.

Recommendations

The Commission has not received a request for a new gas offtake rule. At this time, we cannot recommend a specific gas offtake rate and sales startup timing. The Prudhoe WIO model evaluations and studies that have been shared with us are not sufficient to justify an allowable above that specified in Rule 9, CO 341D. An early, high rate gas sale could result in the loss of a substantial volume of hydrocarbons. However, even greater volumes may be at risk if gas sales are indefinitely delayed and Prudhoe wells and infrastructure fail before these reserves can be recovered.

We are concerned that Rule 9 does not specifically require a plan for such a major change in the Prudhoe Oil Pool depletion strategy. The ultimate impact of gas sales on hydrocarbon recovery cannot be appraised in the absence of a proposed development plan that identifies the start date, sales rate and liquid loss mitigation efforts. Although the start-up for gas sales is a minimum of 8 years away, many decisions that affect the project will be made earlier. Depletion planning should be required prior to commitments to sell gas so that the Commission is adequately informed and assured that other factors do not exist that would justify or require action by the Commission.

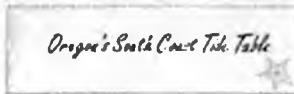
Regardless of the timing of their submittal, the Prudhoe WIOs need to develop near-term strategies to prepare the field for gas sales with focus on methods to increase the capture of oil prior to gas sales and to ensure facility and well downtime is minimized. On a regular basis, the Commission needs to be kept informed of the progress of the depletion planning efforts, including review of study plans, reservoir study results and other relevant information that may impact the Commission's ultimate decisions concerning gas sales offtake. The exchange of information in the past year was very successful and a similar mechanism of exchange should be considered during the depletion planning stage.

We wholeheartedly appreciate the cooperation of the Working Interest Owners over the past year, particularly that of the BP technical representatives who worked with us in this endeavor.

This report reflects the evaluation and opinions only of the authors and does not necessarily reflect those of the Prudhoe Owners or other Commission staff.

Monday, April 16, 2007
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NEWS

Another setback for proposed LNG terminal

Friday, April 13, 2007 12:19 PM PDT

SANTA BARBARA, Calif. (AP) - A second state agency has rejected elements of a proposed liquefied natural gas terminal off the coast of Southern California, another significant setback for the \$800 million project.

The California Coastal Commission, which is charged with regulating coastal development, determined Thursday the proposal did not meet existing coastal laws. The unanimous decision followed an earlier one Monday by the State Lands Commission, which refused to grant a lease for pipelines essential to the project.

"It's one of those multi-headed monsters that has to be killed repeatedly," said Mark Massara, an attorney for the Sierra Club, which opposes the project.

Australian-based BHP Billiton LNG International Inc. is seeking to bring chilled gas from overseas to California by tanker. The gas would be heated, piped ashore and then pumped out to customers. BHP officials say the facility would provide a reliable source of low-polluting energy.

Meanwhile, Gov. Arnold Schwarzenegger began examining the proposal as part of a 45-day review period that began last week. The governor, who has veto power over the proposal, said at a news conference Wednesday that he believes natural gas is worth considering.

Patrick Cassidy, a spokesman for BHP, declined to say whether the company would appeal the Coastal Commission decision or file a lawsuit against the State Lands Commission. He said the company will need time to assess their next step.

A host of celebrities who live in Malibu, including Pierce Brosnan and Halle Berry, have protested the facility. Brosnan's wife - environmentalist Keely Shaye Smith - attended the commission hearing and said the project should be stopped.

"I think they have to know when to cut their losses," she said.

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Monday, April 16, 2007

Serving the South Coast of Oregon

At



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Advertisement

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Backbone II
P.O. Box 101700, Anchorage, AK 99510-1700

Comments on the AGIA legislative hearings
and two suggested amendments

April 16, 2007

Representative JOHNSON Fax (907) 465 3872

Dear Representative:

We have been watching the hearings on AGIA closely, and we offer the following thoughts:

First, thank you for the attention you are giving this important matter and the questions you are asking to bring out the true interests of the participants.

It has been fascinating to see the producers answer your questions in an open and transparent process. What we hear them saying is that they are against exclusivity because a licensee will be picked based on specific criteria important to Alaska.

This is the height of hypocrisy, since they strongly supported the exclusivity granted them by the previous administration. Although they are trying to dress it up a little, they are clearly arguing to return to the exclusive arrangement they had under the Stranded Gas Act. That would be a disaster for Alaska.

The producers are also saying that they must have fiscal certainty for 35 to 45 years on oil and gas, or they will not commit their gas to the project. We think that would be highway robbery, and it is also almost certainly unconstitutional. Even Pedro Van Meurs said, "You don't have to be a 'banana republic' to get a gasline project."

Although the producers keep saying that they are the only ones who can build an Alaskan gasline, that is patently untrue. You have already heard testimony from several credible applicants that they can build this project using the federal loan guarantees. All they lack is access to a gas supply. The producers have stated that they can and will sell their gas to a third party, and we think that is a clear path to the best gasline project.

We also question whether allowing the producers to own the gasline is a good idea. Look at the current situation with the trans-Alaska oil line, where the RCA

and the State Superior Court have found the producers overcharging on their tariff by 59%. The federal government also recognized this problem, and in the initial Natural Gas Transportation Act, the producers were prohibited from owning the gasline. However they convinced President Reagan to overturn this requirement.

The bottom line is that Alaska has options, and we support the process laid out in AGIA which will allow competition for providing the maximum benefits to Alaska.

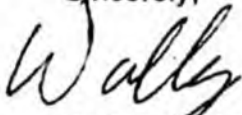
We suggest two amendments that will strengthen AGIA:

1. An evaluation criterion should be added that gives credit to an applicant that has made arrangements for providing gas liquids for value-added processing in Alaska. To have a pipeline without in-state value-added processing and the jobs it will provide would be a major blunder.
2. The state should assess a reserves tax on a North Slope leaseholder that holds existing gas reserves and refuses to make firm transportation commitments or sell the gas it controls to the AGIA licensee.

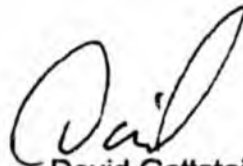
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Thank you for considering our thoughts, and keep up the good work.

Sincerely,



Walter F. Hickel
Co-Chair



David Gottstein
Co-Chair

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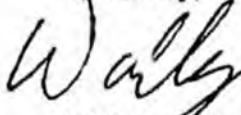
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