

**OBSERVATIONS ON THE MEMORANDUM
OF UNDERSTANDING, THE HEADS OF
AGREEMENT AND THE ALIGNMENT
OF THE STATE'S INTEREST**

IN

**THE PROPOSED ALASKA GAS
PIPELINE AND LNG PROJECT**

A Report Prepared for

THE LEGISLATURE OF THE STATE OF ALASKA

**RICK HARPER
Energy of Business
Consulting Associates**

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I have been requested by the Legislative Budget and Audit Committee to undertake a review of Legislation and implementing Contracts, along with various reports and economic analyses all related to Governor Parnell's proposal to advance the production, transmission and marketing of the State of Alaska's vast resources of natural gas.

In summary, I find the Administration's proposal, interim agreements and the supporting analytical analyses to be sophisticated, deliberative and reflective of a rapidly growing and evolving market for natural gas and LNG both domestically and internationally.

In its totality, however, the proposal will result in a radical departure from the State's historical position and role as a Sovereign, as a Royalty Owner, as a Taxation Authority and as a Regulator which raises a number of issues and presents substantial risks.

It is understood that the authority being sought is interim in nature and that comprehensive agreements will be developed and negotiated with industry in the coming months, which will be subject to further legislative involvement and action.

This report will highlight significant concerns and issues that the Legislature may wish to weigh and consider in the exercise of its authority and

responsibilities in advice and consent. It is not intended as an alternative to the Administration's proposal in any dimension.

Further, this report may be supplemented or modified based upon request of the Legislature and/or as a result of additional information.

ALIGNMENT OF INTEREST

The proposal as manifested in the legislation and various Agreements (i.e. MOU, HOA, etc.) provides for the State to take its royalty share and tax share of production in kind ("RIK" and "TIK"). While it is possible that overall the State will receive a higher economic benefit, this arrangement will result in a greater misalignment of interests with the North Slope Producers than exists under the current regimen. The State will become a direct competitor with the Producers in the transportation, shipping and marketing of natural gas and/or LNG. In addition, as a non-working interest owner of production the State will not be similarly situated with the Producers in terms of decision making, data, technical analysis, etc.

The State will have a minority stake in every regard including gas ownership, pipeline ownership, shipping rights, etc., and will be substantially denied the leverage that it has currently. The explicit covenants and implied

covenants associated with the State's leases are at risk of being eliminated or modified in non-quantifiable ways.

The State's agreement to take its gas in kind under the set of parameters provided for under the Agreements represents a major departure from the precedent, procedures and protections afforded by State statutes, regulations, lease provisions and other agreements.

The requirement for the State to take all of its royalty gas in kind for the duration of the Agreement also marks a major departure from several policies that have guided previous in-kind sales by the DNR, which are designed to protect the State's fiscal and legal interests. Those policies were: 1) to retain a percentage of the available royalty share in value to assure that, in taking some of its royalty gas in kind, it would receive no less from its sale than it would have received had it taken the same volume in-value and 2) to never take actual physical custody of the State's in-kind share, and thus, to avoid the legal and fiscal risks inherent in the very complicated transportation, marketing and downstream sales arrangements that doing so would entail. (LB&A Consultants, 2006).

It may be desirable to make a stipulation that the State's current percentage share of royalties and taxes may not be diluted through negotiations or the adoption of in-kind taxes.

CAPACITY MANAGEMENT AND PIPELINE OWNERSHIP

The Agreements provide that the State will take its in-kind share of production effectively in or near the field. This requires that the State take on the risks associated with capacity management which are profound and difficult to quantify. Previously, the Lukens Group provided analysis to the State to ascertain the magnitude of the risks associated with taking on the obligations of capacity management. Lukens estimated that the range of uncertainty is quite broad and may result in a reduction to the State's net present value in excess of 10 percent. (Lukens Study, 2006).

State ownership of an interest in the pipeline and related facilities is a different issue than subscribing to and managing capacity on the system. The State could own a substantial interest in the pipeline and not hold firm capacity on the system as a shipper for instance. In that example, the State would take delivery of its share of in-kind production at the various terminus' of the pipeline, the outlet of the LNG plant or upon delivery by ship to a final destination.

The State will be competing with the Producer participants in both the natural gas commodity markets and in the pipeline capacity markets by taking delivery as specified in the Agreements. This creates a distinct diversity of interest among the parties which magnifies the risks of a minority interest holder who has control over production vis-a-vis the joint operating and other

agreements and will be at an inherent disadvantage in obtaining timely development, production and operations information.

If the State agrees to take its royalty and tax share in kind, it is recommended that the receipt point be as far downstream from the production area as possible.

Further, it is urged that an ownership in the pipeline and related facilities be considered as separate concepts in the negotiating and approval processes. Pipeline ownership under the Proposal is far more desirable than taking on the risks and responsibilities of capacity management.

PRODUCER SUPPLY OBLIGATIONS

There is no obligation in the Agreements to commit reserves; develop fields; deliver volumes; maintain deliverability; etc. on the part of the Producer participants to the Contract or to the project. Committing to make reservation payments (demand charges) under FERC rates is not an obligation to produce. The contractual obligation to support the pipeline is separate and distinct from field operations. The economics, timing and strategy for production carry a distinct set of economic and commercial drivers apart from the pipeline. Once committed to, the Producer participants will view the pipeline and related investments as sunk costs and will make production decisions that maximize

their positions accordingly just as they would if a third party pipeline were put into service in lieu of the project discussed in the Agreements.

There is no prohibition from the Producer participants to seeking further fiscal or other concessions as a condition of producing (all or in part) after project sanction and/or pipeline construction.

There is no provision for a prudent operator standard in the Agreements and it may be argued that the express and implied obligations contained in the existing underlying leases have been eliminated by virtue of this transaction, or at least materially modified.

LIABILITY AND LIMITATION ON DAMAGES

The economic stakes in the oil and gas business are extraordinary and the industry is litigious in the normal course of affairs. The Agreements have been constructed on the basis of the State effectively becoming a quasi-business partner in lieu of its traditional position as a royalty owner (take in value lessor). The Contract is unique and purposely varies from industry custom and practice in many key areas. In my estimation, the business risk of litigation is very high and must be factored in as a significant probability.

In the oil and gas industry, the risk of being assessed special, punitive, consequential and lost profit type damages over and above specific performance and actual damages by a court or arbitrator represents a significant deterrent toward self serving and negligent behavior that injures another stake holder. Awards in cases like Pennzoil vs. Texaco, the EXXON Valdez incident, the State of Alabama vs. EXXON, and most recently, the State of Alaska vs. BP, are vivid reminders to oil and gas operators of the potential scope of adverse awards. It is not surprising that they would want to limit or eliminate such elements of exposure where possible.

To the extent that the Agreements specifically preclude liability for loss associated with consequential or incidental damages, including lost profits; or any special or punitive damages; this would represent a significant shift in risk in favor of the Producers.

Utilization of arbitration in lieu of State or Federal courts would introduce another element of risk should that be the course of action that is required under the Agreements through negotiations.

BASIN CONTROL

It remains my professional opinion that basin control is a significant concern given the structure that is being proposed here. The Producers control

the majority of the existing proved reserves necessary to support the firm transportation (“FT”) commitments associated construction of a natural gas pipeline project from the North Slope. To that extent, they have basin control in their position as majority owners and operators of the key fields (Prudhoe Bay, Point Thompson and Kuparuk most particularly). The primary issue is to insure an environment is created where other independents will have timely and economic access to the gas line to support additional exploration in these and other basins across Alaska. Unlike the oil and products industries, the natural gas industry in North America has not traditionally been vertically integrated where major Producers have owned or controlled interstate pipelines. Historically, there were legal prohibitions to this. Today, these Producers are fully entitled to own natural gas pipelines and FT shipping rights associated with those systems. The point is that industry custom and practice, along with both State and Federal regulatory regimens, arose over a long period of time under a different presumption of industry ownership and structure.

Consequently, it is my opinion that extraordinary care should be taken to protect the interests of independent Producers through the Agreements and legislation. Further, the State should err on the side of caution and include to the fullest extent possible explicit contract language in the Agreements on gas line expansion; remedies and penalties; regulatory oversight and access to State and Federal courts. I recommend not presuming that existing FERC regulations and

policies will protect the State's interest and prevent basin control, either overtly or through subtle device.

A critical element in minimizing the risks of basin control is for the gas line to be expansion friendly both explicitly and implicitly. Further, rolled-in rates are a fundamental premise in structure in minimizing the risk of basin control and are the approach that was taken in AGIA. The Agreements should be no less restrictive than FERC policy in establishing and administering expansions.

The Agreements should contain specific design parameters that are consistent with low cost expansions. Short of that, specific design criteria could be specified to insure that both the initial design and expansion methodologies support ease of timely access at the lowest reasonable cost. Reasonable engineering increments and credit demands (and alternative financial mechanisms; i.e., aid in construction) are important elements to moving towards an expansion friendly protocol.

PARTIES BOUND

The Agreements are not underwritten financially by BP, ConocoPhillips or ExxonMobil. Only the stipulated subsidiaries stand behind performance. There are no restrictions in the Agreements to the capital structures of these or any other subsidiaries; to the sale of assets or shares; maintenance of credit ratings

or debt/equity ratios; etc. Due diligence on the financial underpinnings or wherewithal of these entities is essential absent parent guarantees. The State of Alaska is not similarly situated.

QUANTITATIVE ANALYSES

The presentations and work performed by Black and Veatch along with analytica, in regards to market assessment and economic returns, are undoubtedly sophisticated and useful tools.

In my estimation, they should not be used as a predictor of outcomes on an expected case basis or otherwise. The most important thing is to establish what the range of uncertainty is and then to test economic and financial scenarios within that range in order to gauge the relative strength of the endeavor and a likelihood of success. Essentially, they are for “informing your intuition” to the highest degree possible. It is my professional opinion that the economic range of uncertainty is asymmetrical and that the far downside risk exceeds the far upside opportunity.

Given the extraordinarily large number of potential permutations (i.e. commodity prices, costs, timing, capital requirements, etc.), settling on a single expected outcome is next to impossible in this instance. Unlike the projects envisioned in AGIA and the SGDA, this project introduces sovereign risks in the

transportation of LNG and the marketing/contracting of re-gasified natural gas in foreign countries. Issues related to LNG tanker ownership, tanker tariffs, re-gasification facilities and so forth remain largely undefined.

NATURAL GAS PIPELINE OPERATORSHIP

Identification of the natural gas pipeline operator at the earliest possible juncture is highly desirable. The relative orientation, expertise and motivations of potential operators should be identified. For instance, a Producer/operator may find the expected returns on a regulated pipeline to be significantly below that of production and upstream operations. A pipeline operator (as in AGIA) may have a separate set of motivations in optimizing overall corporate returns and so forth.

TransCanada's continued ownership and participation is driven by a number of factors, some of which relate to commitments and issues under AGIA. Black and Veatch has pointed out that TransCanada's participation will allow the State of Alaska "to retain 20%-25% of gas share while being responsible for only 13%-18% of the upfront costs". That being the case, the State may also benefit qualitatively by the inclusion of TC as an equity owner and Board member given TC's history in Alaska and overall expertise and acumen in large scale pipeline construction projects and expansions. In that regard, they are favorably viewed in the industry. Further, TC lacks the inherent conflicts associated with also being a dominant player in production.

FACILITIES EXPANSION AND COST OF SERVICE

Historically, the FERC has established a rebuttable presumption in favor of rolled-in pricing for voluntary expansions of the Alaska pipeline – an important departure from their policy in the Lower 48. FERC now generally requires that pipeline expansions and extensions be priced incrementally whenever rolled-in pricing materially increases the rates to existing shippers. This policy, however, is based on concerns surrounding pipelines competing for new markets and is designed to ensure that incumbent pipelines competing with other pipeline companies do not have an inherent competitive advantage by being able to roll-in the cost of new facilities and thus mask the true cost of providing the new service. The Alaska line, however, will be a monopoly and the FERC has concluded in the past that its Lower 48 policy had no applicability on this pipeline.

Under the Proposal, the State will be competing with the Producer participants in both the natural gas commodity markets and in the pipeline capacity markets by taking delivery as specified in the Agreements. This creates a distinct diversity of interest among the parties, which magnifies the risks of a minority interest holder who has no control over production, and will be at an inherent disadvantage in obtaining timely development, production and operations information.

The State and the Producers may be aligned on the desirability of getting a pipeline and LNG. On the issue of expansion, though, the State and Producers may not be aligned. The State will clearly favor expansions of the line over time to promote access for all explorer Producers. However, these explorer Producers are the direct competitors of the Producers who will be majority owners of the line. Consequently on expansion issues, the State in furtherance of its policies of encouraging development of resources and maintaining a level competitive playing field for all stakeholders, will clearly favor early expansion of the line and its eventual build-out to its ultimate capacity. The Producers' needs are to move their gas to market and they have no particular interest in having the line expanded, especially if such expansion will serve their competitors and/or may put downward pressure on gas prices in destination markets by increasing overall gas supply.

The FERC has gone to great lengths to limit market power and prevent discrimination in the provision of service on natural gas pipelines—particularly when a pipeline is owned by an entity or entities that are affiliated with the shippers that use the pipeline. Concerns such as these led to efforts at the FERC to restructure the natural gas transportation industry in the mid-1980s and early 1990s. Orders 436, 636 and 2004 took incremental steps towards minimizing the effects of market power and monopoly practices. All of these orders, though, relate to service on operating facilities. The problem with these regulations is:

they have *nothing* to do with whether a pipeline company will agree to expand its system.

While expansion is vital from the State's standpoint, it may not be a high priority for the Producers and they may even view expansions to be antithetical to their best business interests.

Without question, FERC will be the entity that determines in the final instance whether to approve an expansion and, if approved, what rate structure will apply to that expansion capacity. Prior to the FERC making a decision, the pipeline sponsor (in this case the Mainline Entity) determines what to ask the FERC to approve and will have to make the case for the public convenience and necessity of its project and the justness and reasonableness of its proposed rates. Parties who intervene in the proceeding will be free to challenge any and all aspects of the applicants' proposal. In the end, FERC can approve something different than what the applicant proposed and can impose conditions on its certificate authority, and in such event the pipeline company is free to reject the certificate if it does not like the terms imposed. However, it is up to the operator to propose expansions and expansion terms to the FERC.

There are several aspects of voluntary expansion that should be considered as part of this Proposal. It is reasonable for the State to establish as part of the Agreements the terms and conditions under which the pipeline

operator will: 1) hold periodic open seasons (even non-binding open seasons) to assess the market for new capacity; 2) agree to expand the pipeline; 3) file to certificate such an expansion; and 4) propose to price the expansion capacity. As to these activities, the FERC will not act as surrogate for the State and it's desirable for the State to require parties to address in advance the terms and conditions upon which the pipeline will undertake the expansion applications.

The State's Producer-partners may be disinclined to aggressively advocate and defend rolled-in pricing if it might increase their affiliates' shipping rates. Clearly, the final decision on the rate structure for voluntary expansions will be made by FERC notwithstanding a provision in the Contract requiring rolled-in pricing. However, a commitment by the Producers to propose and defend rolled-in pricing sets the stage for what FERC will ultimately require. It may not guarantee that FERC will approve rolled-in pricing in any given set of expansion circumstances, but it is an important first step in maintaining the "victory" that the State won on this issue several years ago when FERC established its presumption in favor of rolled-in pricing in its open season rulemaking. (LB&A Consultants, 2006).

REGULATORY COMMISSION OF ALASKA JURISDICTION

All interstate natural gas pipelines in the United States, like electric transmission lines operating in interstate commerce, are subject to federal

economic regulations because of the Congressional determination that they are natural monopolies. Since 1938, the Natural Gas Act has provided the primary statutory authority to assure that rates and charges are just and reasonable and the services are provided on a not unduly discriminatory basis. Congress continues to believe that appropriate regulation is necessary to address market power concerns

However, it is unknown at this time, whether FERC will have or assert jurisdiction over all aspects of the project(s) provided for in the Agreements. It may be highly desirable to consider what State regulatory oversight should be employed in the event that FERC jurisdiction/oversight is inadequate.

PROFESSIONAL BACKGROUND RICK HARPER

Rick Harper has been involved in Alaska on oil and gas production, pipeline and related issues since 1972. He has been actively involved in LNG and pipeline related projects in the United States, Canada and Equatorial Guinea along with other related energy projects in Bulgaria, New Zealand, etc.

Among other things he has served as President, ARCO Gas; President and Chief Executive Officer of CANOR Energy Ltd. (oil and gas exploration company); Assistant to the President, United Gas Pipeline Company; Senior Vice President of Northwest Natural Gas Company (NYSE gas distribution, LNG, pipeline and storage company); and General Manager, B&A Pipeline Company.

He is currently Principal of an international oil and gas consulting business operation based in Houston, Texas with offices in Portland, Oregon. Clients include participants in the oil and gas, electric, utility, high tech and manufacturing industries. The firm has been in operation for over 12 years.

He has served as an Advisor to the Administration of Governor's Murkowski and Palin along with both the House and Senate in Alaska on oil and gas production, royalty, gas pipeline and related issues. He has testified on numerous occasions before the Federal Energy Regulatory Commission, the National Energy Board of Canada, various State Public Utility Commissions along with State and Federal Courts in a number of venues.