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ALASKA STATE LEGISLATURE

Senator Charlie Huggins, Chair
Senate Special Committee on Energy
State Capitol, Room 119
Juneau, AK 99801
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Representative John Harris, Chair
House Rules Subcommittee on AGIA
State Capitol, Room 208
Juneau, AK 99801
Phone: 465-4859
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Third Special Session
Twenty-Fifth Legislature

Gymnasium
Terry Miller Building, Juneau Alaska

Wednesday July 9, 2008
1:30-8:00 p.m.

Joint Meeting AGENDA

- SB 3001/HB 3001 Approving AGIA License for Natural Gas Pipeline Project as proposed by TransCanada Alaska Company, LLC and Foothills Pipelines Ltd. (TC Alaska) to the State of Alaska.

- 1:30 – 4:30 Round Table Discussion of In-State Gas

No opening statements
- Powpoint

ANGDA – Harold Heinze, CEO
AGPA – Bill Walker, Project Director
Radoslav Shipkoff, Financial Advisor, Greengate LLC

TransCanada – Tony Palmer, VP AK Busisness Development
Enstar – Colleen Starring, Regional VP
Gene Dubay, Sr. VP, SEMCO

LB&A – Steve Porter
Dan Dickinson

Administration – Pat Galvin, Commissioner of Revenue

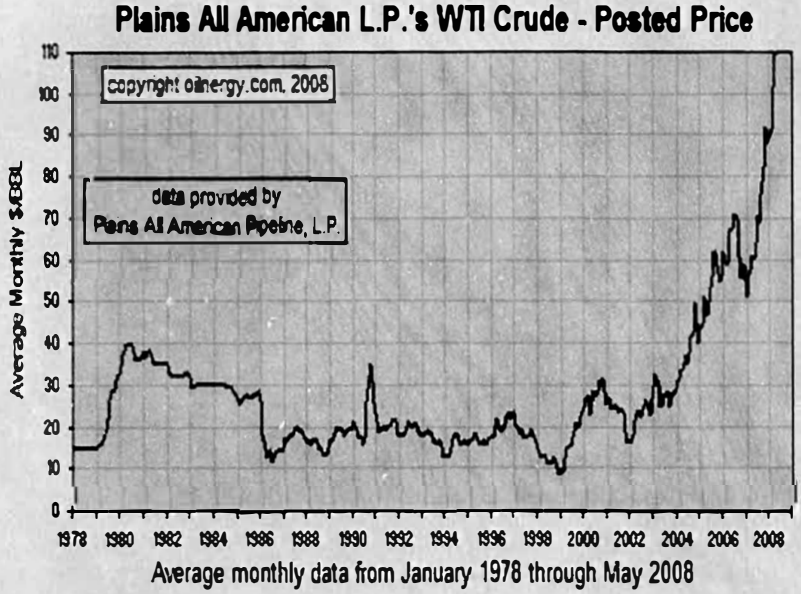
- 6:00 – 8:00 Presentation – Point Thompson
Steve Porter – LB&A Consultant

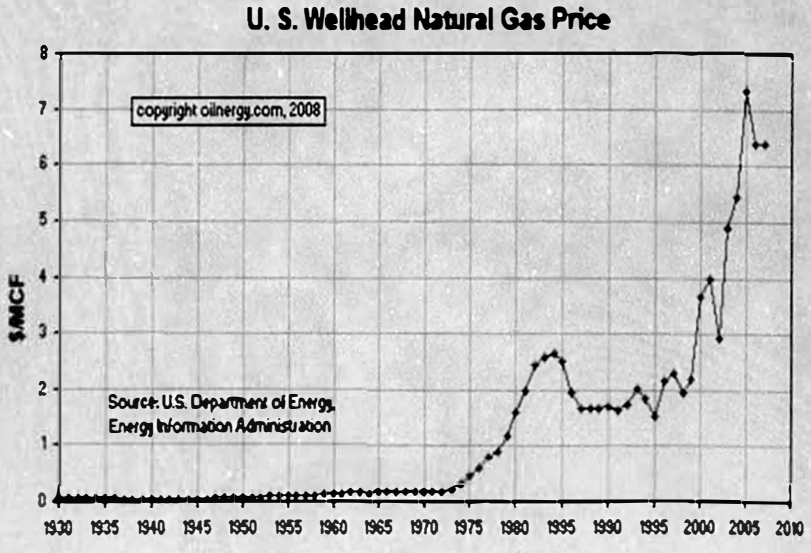
Testimony: By Invitation

Steve Porter
6-8 PM 7-9-2008

The Point Thomson Dilemma

A problem to be solved
or
A war to be won





Point Thomson Unit Status prior to Director's Decision

- 21 Plans of Development
- State's continuing desire to move to production
- Point Thomson owners unwillingness to move to production

Director's Decision

- 22nd POD disapproved because it does not provide for the reasonable delineation and timely development of the unit.
- Failure to submit an acceptable POD is grounds for termination of the Unit
- Individual leases with certified wells must commence production by October 1, 2009

Commissioner's Decision

- Rejects Plan of Development because it does not commit to put the unit into production
- Terminates the Point Thomson Unit
- Revokes the certifications of the PTU wells.

May 1 Decision

- Will allow the process to move forward
- "the undisputed fact remains that the Department certified these wells pursuant to 11 AAC 83.361, and that as a result of these certifications, the wells "will be considered capable of producing hydrocarbons in paying quantities" for purposes of 11 AAC 83.374"
- DNR failed to follow its own statutes and regulations when it decertified the wells

Dec 26 Court Decision

- Plan of Deveiopment
  - DNR has broad authority to accept or reject POD
- Unit Termination
  - DNR has the authority to terminate the Unit but not without a hearing to determine the appropriate remedy for rejection of the POD
- Consider appropriate remedy for rejection of POD
  - Termination of unit is only one possible remedy
    - "consider the import of Section 21 of the PTUA, as amended in 1985, in determining the appropriate remedy."
- Certified wells
  - See our May 1 comments

Point Thomson Unit Agreement

- Section 21
  - See handout Section 21 detail
    - "and shall not be exercised in a manner that would (i) require any increase in the rate of prospecting, development, or production in excess of that required under good faith and diligent oil and gas engineering and production practices; . . . or (iii) prevent this agreement from serving its purpose of adequately protecting all parties in interest hereunder, subject to the applicable conservation laws and regulations."

23rd POD

- Phased development proposal
  - Met or exceeded DNR prior request and positions to the court.
  - Did not propose penalties as an alternative to compliance with obligation

Commissioner's Decision on Remand

- Rejected Point Thomson 23rd POD
  - Proposal was either unpersuasive or incredible
  - "credibility is most persuasively established by actions, not words."
  - "promise to commit gas from this unit to the first open season of a gas pipeline is of no value."
  - Most importantly, the public's interest would not be protected if I approve the 23rd POD because I do not believe, based on this record, that the Appellants will perform as promised this time."
- Terminated the Unit

Probable Outcome

- Unit termination and certified wells
  - State Success on both points (low probability)
    - Timing of new development – 10 year delay
  - State partial success (equally as probable as next possible outcome)
    - Timing of new development – 10 year delay
      - Point Thomson retains leases with certified wells.
  - Court overturn of state decision (equally as probable as previous outcome)
    - Point Thomson proceeds ahead on schedule
      - Gas condensate and oil production
      - Earlier participation in gas pipeline (gain of 10 years)

State's Obligation under Contract

- Principles of Prevention in Contract Law
  - Actions of one party prevents another party from complying with contractual obligations
    - Cannot benefit from own wrongful acts
  - Failure to act prevents another party from complying with the contract
    - act in "good faith" and cooperation toward other contracting party
    - Cannot benefit from the omission to act

State's Obligation under Point Thomson Contract

- Good faith participation to resolve the problem
- Contractual Relationship when you don't trust the other party
  - Make the damage provision match the potential breach
- Point Thomson obligation
  - Propose alternative that would meet the state's concerns
  - Comply with the intent of 11 AAC 83.343(b)

DNR's responsibility under regs.

- 11 AAC 83.343(b) The commissioner will approve the unit plan of development if it complies with the provisions of 11 AAC 83.303. If the proposed unit plan of development is disapproved, the commissioner will, in his discretion, propose modifications which, if accepted by the unit operator, would qualify the plan for approval.

Point Thomson Unit Agreement

Section 21

21. RATE OF PROSPECTING, DEVELOPMENT AND PRODUCTION. The Director is hereby vested with authority to alter or modify from time to time in his discretion the quantity and rate of production under this agreement when such quantity and rate is not fixed pursuant to state law or does not conform to any statewide voluntary conservation or allocation program which is established, recognized and generally adhered to by the majority of operators in such state, such authority being hereby limited to alternation [sic] or modification in the public interest, the purpose thereof and the public interest to be served thereby to be stated in the order of alternation or modification. Without regard to the foregoing, the Director is also hereby vested with authority to alter or modify from time to time at his discretion the rate of prospecting and development and the quantity and rate of production under this agreement when such alternation or modification is in the interest of attaining the conservation objectives stated in this agreement and is not in violation of any applicable state law.

Powers in this section vested in the Director shall only be exercised after notice to Unit Operator and opportunity for hearing to be held not less than ~~fifteen (15)~~ *thirty (30)* days from notice, *and shall not be exercised in a manner that would (i) require any increase in the rate of prospecting, development or production in excess of that required under good faith and diligent oil and gas engineering and production practices; or (ii) alter or modify the rates of production from the rates provided in the approved plan of development and operations then in effect or, in any case, curtail rates of production to an unreasonable extent, considering unit productive capacity, transportation facilities available, and conservation objectives; or (iii) prevent this agreement from serving its purpose of adequately protecting all parties in interest hereunder, subject to applicable conservation laws and regulations.*

The language that is struck out in Section 21 above was deleted, and the italicized language in Section 21 was added in 1985 amendments to the Point Thomson Unit Agreement.

Before the
Alaska State 25th Legislature Third Special Session

Regarding the

TransCanada Application Pursuant to the Alaska Gasline Inducement Act

Statement of

Prof. Joseph P. Kalt

John F. Kennedy School of Government
Harvard University
and
Compass Lexecon Economic Consulting

July 10, 2008

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July 10, 2008

Introduction

My name is Joseph P. Kalt. I am the Ford Foundation Professor of International Political Economy at the John F. Kennedy School of Government, Harvard University, and a Visiting Professor at the Eller College of Management at the University of Arizona. The Kennedy School is Harvard's graduate school for the study of public policy and public administration. I also work as a senior economist in the Cambridge, Massachusetts, and Tucson, Arizona, offices of Compass Lexecon, an economics consulting firm. I have attached my biography as Attachment I.

I hold B.A., M.A., and Ph.D. degrees in economics and am a specialist in the economics of competition, antitrust, and regulation, with particular emphasis on the transportation, energy, communications, and financial sectors. Throughout my professional career I have conducted research, published, taught, and testified extensively on the economics of market structure, competition, antitrust policy, regulation, pricing, and strategic

performance in the energy industries (including natural gas transportation and marketing) and various other segments of the economy.

Of particular relevance, I have extensively studied the production and pipeline transportation of oil and gas resources throughout North America and, specifically, in Alaska. I have testified as an expert in various state and federal proceedings concerning the valuation of Alaskan North Slope crude oil and natural gas for purposes of royalty and taxation, and I have studied and testified as an expert regarding the regulation of the Trans Alaska Pipeline System.

I have now been asked by ExxonMobil Corporation to analyze key elements of the AGIA license application filed by TransCanada Alaska Company, LLC, and Foothills Pipe Lines Ltd. (together "TransCanada") to build and operate a natural gas pipeline. In particular, I have been asked to assess the economics of TransCanada's AGIA application from the perspective of the State's and producers' interests as direct or indirect shippers on the proposed TransCanada pipeline.

Key Findings

Based on my analysis of the economics of TransCanada's proposal to build and operate the critical pipeline infrastructure upon which North Slope gas development now depends, I find that four key aspects of the proposal bear particular attention:

- **The State's Interests:** Certainly, at least at this stage of project development, the State's interests are aligned with those of a North Slope gas producer. Alaska has abiding interests in (1) maximizing the ultimate magnitude and value of North Slope gas production; (2) expeditious completion of the major pipeline system upon which such development depends; and (3) minimization of dispute and litigation with the pipeline owner/operator over the life of the system.

- **TransCanada's Shifting of Risk:** The TransCanada proposal shifts substantial risk away from TransCanada and to producer-shippers and, in turn, to the State of Alaska. Unless subjected to appropriate, negotiated contractual risk-reward protections, this is markedly contrary to each of the State's interests noted above.
- **Threats to Producers' Economics:** In light of TransCanada's aggressive shifting of risks to producers (and the State) via the significant long-term, non-cancelable obligations of producers anticipated in the TransCanada proposal, claims of "robust" producer returns are dangerously overstated in the analysis of the State's consultant (Black and Veatch).
- **Need for Contract Negotiations and Conditioning:** In the presence of the very large risks that producers and the State are being asked to assume under TransCanada's proposal, it is in the producer-shippers' and State's best interests that contracting with TransCanada for long-term transportation be approached in a standard, businesslike manner. This means negotiating contracts and conditioning "open seasons" on pipeline capacity so as to strike sustainable agreements that reflect balanced allocations of risk.

Let us examine these findings in detail.

The State's Interests: What Should It Care About?

The question of whether the TransCanada proposal sufficiently protects and maximizes the benefits to Alaskans is one that will have significant ramifications for the State's ability to fully realize its return from the development of the State's resource. The State's direct monetary interests, derived from the payment of royalties and severance and income taxes, are very much the same as those of a prospective producer-shipper on the pipeline. Gas will not flow and revenues will not be earned if pipeline development is delayed by inflexibility in project contracting or by the shifting of so much risk to producers, without offsetting protections and rewards, as to threaten the economics of producers' investments. The cost, delay, and disruption that can plague such an expensive and long-lived project will not be held at bay over the project's life if initial contracting does

not undertake best efforts to arrive at fair and balanced allocations of risks and rewards. With the only certainties about the future decades in world energy markets being that they are uncertain and will be volatile, contractual *imbalance* as risk converts itself to reality is a recipe for maximizing conflict among the stakeholders.

Project Risks Cannot Be Eliminated:
Where Does TransCanada Put Them?

With daily reports of world crude oil prices hitting ever-higher peaks and pulling up natural gas prices in the process, it is easy to believe that there is and will continue to be an endless supply of investment dollars ready and willing to flow into development of North Slope gas. But, as Figure 1 should remind us, we have been here before – and billions of dollars were lost betting that the price run-ups of the 1970s and early 1980s would not turn into two decades of prices substantially below their peak.

In fact, North Slope gas development, itself, was a victim of these risks. As everyone here is likely aware, during the early development of the State's crude oil resources, the expectation was that natural gas resource development would soon follow. However, dramatically declining worldwide energy prices subsequently rendered such natural gas projects uneconomic in light of the very high costs associated with providing transportation from such a remote area. The extremely high costs of TransCanada's proposed pipeline – estimated at $31.5 billion by the State's consultant, Black and Veatch ("B&V") – are no less a source of potential risk and impediment to North Slope development today. In fact, the cost of the proposed pipeline would far exceed the cost of any recent majority privately financed infrastructure development anywhere in the world (see Figure 2). TransCanada's proposal is approximately three times more expensive than the next largest "mega" project. Furthermore, the risk burden these figures

imply is only magnified by the remarkable size and length of TransCanada's proposed pipeline, the remoteness of the resource base, the arctic environment, and the existence of multiple state, provincial, national, and Native governmental jurisdictions along its path.

In light of the risks, it is readily understandable that TransCanada has assiduously sought to protect its economic interests by minimizing the risks it bears. In the process, however, TransCanada has shifted the lion's share of the project's risks to producer-shippers and those (like the State) with a producer's interests. This risk shifting is most starkly seen in TransCanada's proposal that producer-shippers be expected to sign long-term non-cancelable commitments to provide the pipeline developer with a steady stream of cash flows over the project life span. The mechanisms by which this would be achieved include:

- 25-year, firm ship-or-pay contracts for pipeline capacity;
- The absence of a project completion guarantee from TransCanada (leaving risks on producers and taxpayers);
- Cost recovery guarantees that leave TransCanada with a minimal cost at risk of about $125 million out of $31 billion.

Risk, Risk Shifting, and Producer Economics

The costs to the producer-shipper of risk-shifting elements of the TransCanada proposal can be easily illustrated by the fact that TransCanada is looking for 25-year producer ship-or-pay contracts for essentially the entire capacity of the pipeline. Such 25-year, firm ship-or-pay contracts create fixed obligations that are payable to TransCanada over the next 25 years whether or not the producers ship gas on the system and whether or not producing and selling Alaska North Slope gas is actually profitable. For all intents and purposes, producer-shippers are being asked to take on the economic equivalent of a long-term stream of mortgage or lease payments that would

effectively finance and pay for the pipeline. In the process, producer-shippers would be taking on the risks of the system, but without acquiring any ownership and control. It's like putting up the financing to pay for a new house or a new condominium, but then letting the builder remain as perpetual landlord.

The fundamental economic character of producer-shippers' financial obligations have not been accurately characterized in B&V's analysis of the economics that *producers* face in developing and selling Alaskan gas. Since the producer-shippers would have to pay TransCanada the stream of mortgage-like payments over the next 25 years regardless of other market and/or project changes, these obligations shift gas price, cost, and geologic risk to producer-shippers. The pipeline developer, meanwhile, would receive a stream of payments that are effectively guaranteed by the financial capability of the producer-shippers signing the long-term ship-or-pay contracts.

Critically, TransCanada's ability to raise the financing in this case is not dependant on TransCanada's financial capabilities. Rather, it is based almost exclusively on the financial capabilities of the parties signing the ship-or-pay contracts. TransCanada is essentially a pass-through middleman in the financing chain. For these reasons, it is the producers' balance sheets and debt-carrying capacity, not TransCanada's, that are the keys to the financial markets' willingness to finance the pipeline.

The financial implications of this risk shifting for the producer-shippers are not properly recognized by the net present value ("NPV") and rate of return calculations of the State's consultant, Black & Veatch. In its analysis, B&V treats the ship-or-pay contracts as an operating expense ("OPEX") of the producer-shippers, rather than as a fixed commitment that

must be paid regardless of other market developments. This is economically incorrect: The ship-or-pay contracts are actually capital commitments whose basic payment obligation does not vary with operations (throughput). Financial markets (and economics) properly treat such commitments as upfront debt *of the producer-shippers*[1] – especially under the huge costs and unique risks of an Alaskan gas pipeline. TransCanada ends up bearing the relatively low risk that very large and financially sound producer-shippers like ExxonMobil, BP, and ConocoPhillips will not be able to pay their debts. The producer-shippers, meanwhile, end up bearing the very substantial risks of volatility in world energy markets, the uncertainties of geologic unknowns in the arctic, and the vagaries of domestic and international politics and regulation affecting development costs and pricing. Failure to account for this leads B&V to overstate the risk borne by TransCanada and understate the risk borne by producers.

The Threat to Producers' Economics

Under proper treatment of ship-or-pay commitments, B&V's characterization of producers' economics of investing in and developing North Slope gas as "robust" evaporates. With project risk shifted overwhelmingly to producer-shippers under TransCanada's proposal, it is inappropriate to discount the costs of the pipeline tariff at the overall project risk rate since that payment stream is guaranteed by the producer's debt-bearing capability. Using a 6% discount rate (as a measure of the producer's weighted average cost of debt) for the projected stream of tariff costs, B&V's claim of an NPV project worth of $13.5 billion collapses to worse than breakeven (see Figure 3). That is, the overall project does not generate enough risk-adjusted revenue to cover producers' costs of capital. The State cannot have security

[1] See, e.g., Standard & Poor's, *Operating Lease Analytics, Corporate Ratings Criteria 2006*; and Brealey, Richard A., Stewart C. Myers, and Franklin Allen, *Principles of Corporate Finance*, 9th edition, McGraw-Hill Irwin, 2008, at 706.

that the TransCanada proposal will enable the development of the State's gas resources.

But is there really much risk being borne by producers, in light of the very high prices and go-go investment environment we now see in energy markets around the world? History says there is. While describing the producer returns as "robust," even the B&V sensitivity analysis acknowledges that positive producer returns evaporate if prices fall 40-60% from the B&V base case of steadily rising prices.[2] While world energy prices are likely to be on an upward trend over the very long term, history tells us that such trends can be upended for sustained periods of time.

Consider the actual case of the 1980s and 1990s shown in Figure 1. World oil prices peaked in 1982, and then embarked on a long period in which prices were far below the peak. It was not until 2004 that prices once again exceeded the 1982 level. At the peak in the early 1980s, "consensus forecasts" (see Figure 4) of rapidly rising prices implied "robust," positive economics for a multitude of potential projects (including a natural gas pipeline from the North Slope). Given the subsequent decline in world energy prices, however, investors in many of those projects, if they had moved forward, would have regretted their decision. Billions of dollars were lost as expectations were dashed. Accounting for the possibility that price forecasts may turn out to be significantly overly optimistic is clearly relevant to the discussion of the "robustness" of producer economics. If history repeated itself, based on the pattern of percentage declines shown in Figure 1 – which it could – B&V's framework indicates that the Alaskan producers' NPV would be reduced to approximately *negative* $1.5 billion.

[2] Black & Veatch, AGIA NPV Analysis Report Prepared for the State of Alaska, May 22, 2008, at 222.

Producers bear risks not only of price decline. Mega projects can also experience significant cost overruns, especially in new and untested environments. For example, the cost of the TAPS crude oil pipeline was originally estimated at $900 million, but eventually ballooned to over $8 billion in the 1970s.[3] That represents a ninefold increase in project cost and subsequent tariffs. Such cost escalation on large energy projects is not unique to the TAPS project. More recently, even smaller, faster-to-market projects have exhibited significant increases in costs. For example, press reports indicate that the Nabucco Gas Pipeline (serving Europe) is over budget by 60% due to increasing materials cost and the Sakhalin-2 project has exceeded early cost estimates by over 100%.[4]

Other important factors that can affect producer profitability include the fiscal regimes under which they operate. While the B&V analysis assumes a certain set of governmental fiscal policies over the life of the pipeline, the chance that these policies may change over time creates an additional layer of uncertainty that must be considered in the context of existing price and cost risks faced by the producers. As so many countries around the world have learned, uncertainty regarding fiscal regimes raises producer risk and deters investment and development in otherwise well-functioning marketplaces.

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[3] Testimony of Monte Canfield, Jr., Director, Energy and Minerals Division, GAO, before the Senate Committee on Energy and Natural Resources, *Planning and Construction of the Trans-Alaska Pipeline,* September 26, 1977.

[4] "Sakhalin Energy Projects Face Reality Check", *Eurasia Daily Monitor*, July 27, 2005, http://www.jamestown.org/edm/article.php?article_id=2370064; and "Nabucco natural gas pipeline over budget as steel prices soar", *International Herald Tribune*, June 3, 2008, http://www.iht.com/articles/2008/06/03/business/pipe.php.

Protecting the State and Producer-Shippers through Negotiation and Conditioning

As I have discussed above, the risk-shifting contained in the TransCanada proposal is understandable from TransCanada's perspective. At the same time, however, it is eminently rational for the producers and the State to work to protect their interests. It is not in producers' or the State's interests to treat the TransCanada proposal as "take it or leave it." As in any case of a business proposal involving substantial risk and huge cost, producer and State interests here should be protected by allowing parties to negotiate over key terms and conditions that define the project's risk-sharing relationships.

It is standard practice for prospective shippers to "condition" their bids in a new pipeline's "open season" for capacity contracting on contractual provisions and terms that protect their interests. Similarly, it is standard practice that prospective shippers engage in extensive negotiations and discussions with the pipeline developer. This often leads to extensive changes in what the developer might originally propose – changes that ultimately result in a sustainable, viable project that all parties can enter into and live with over the long term. In this context, North Slope producer-shippers should be expected to condition "open season" offers to TransCanada and to negotiate with TransCanada. Doing so is consistent with their interests and ultimately serves to protect the State's interests.

While it is up to the parties to define the key elements of their negotiations, there are several aspects of the TransCanada proposal that are reasonable candidates for possible negotiation and conditioning as part of the pipeline capacity contracting and development process. These include measures to provide:

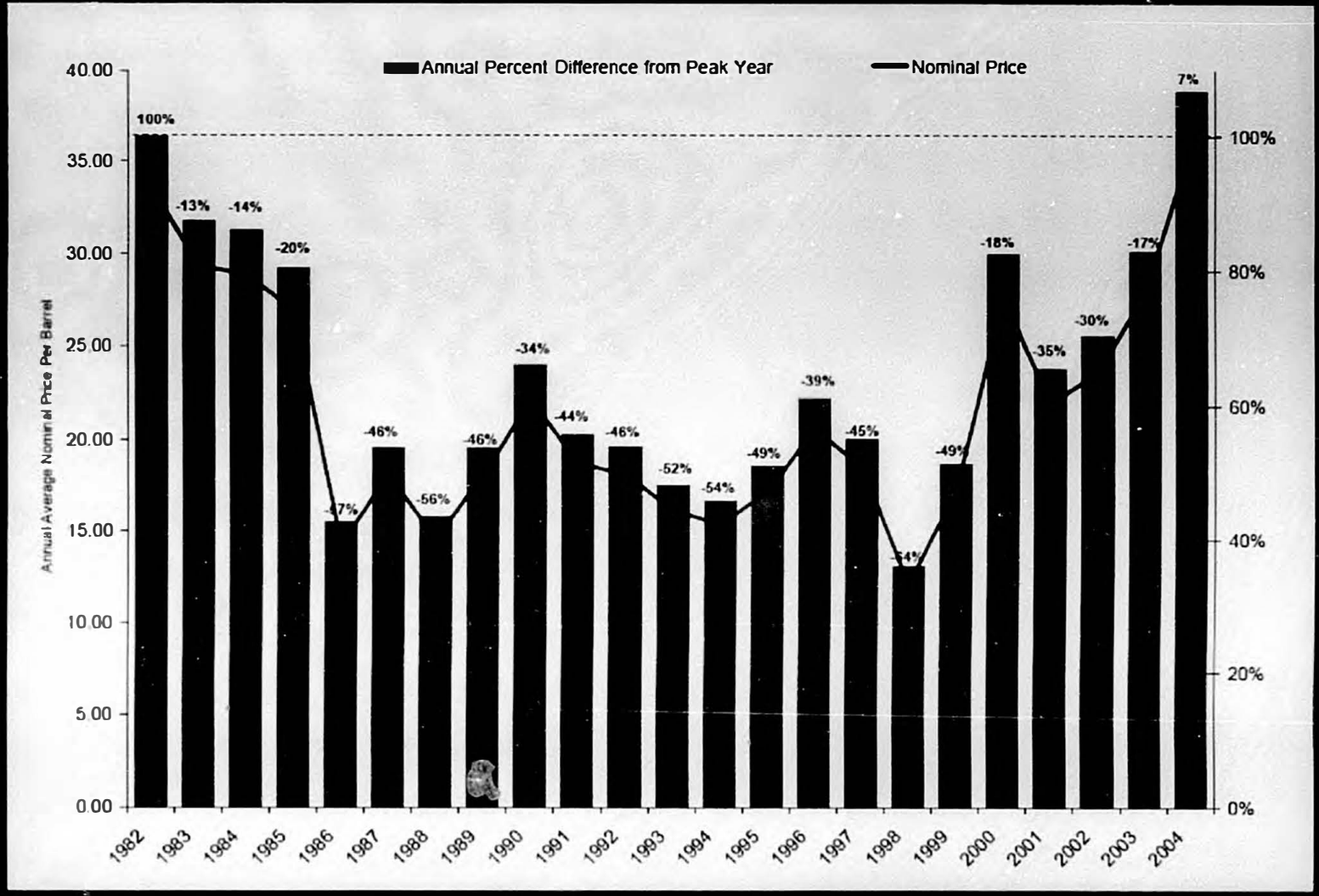
- Tariffs commensurate with risk allocation between TransCanada v. the State and producer-shippers;
- Matching of risk and control via producer-shippers holding ownership interest in accord with expected throughput[5];
- Conditioning and/or modifying such provisions as downstream TransCanada exclusivity, withdrawn partner liability, and cost overrun responsibility (all of which now are tilted strongly in TransCanada's favor).

Finally, conditioning and negotiation over these kinds of matters should not be viewed as setbacks to the process of establishing a pipeline project in a reasonable timeframe. Given the possibility that the lack of flexibility around key risk and control provisions could create a "one size fits none" outcome, the ability to condition bids and engage in negotiations of key terms and conditions can enhance the chances for the State's resources to be developed sooner rather than later. And, developing a pipeline with a balanced sharing of risk and reward will promote a pipeline system that is sustainable and subject to fewer disputes and disruptions over its life. This is clearly in the State's interest.

[5] With access by future expansions and producer-shippers now being protected by new FERC access rules pursuant to recent federal legislation.

Figure 1

DESPITE FORESCAST MADE AT A PEAK, WORLD ENERGY PRICES CAN KILL PRODUCER ECONOMICS



Source: EIA

Figure 2

THE TRANSCANADA PIPELINE IS EXTREMELY COSTLY

Project Name	Amt. ($B)	Country	Sector	Year
TCPL Alaska Gas Pipeline Proposal	31.5*	United States	Natural Gas Pipeline	N/A
Saudi Kayan Petrochemical Complex	10.00	Saudi Arabia	Petrochemical/Chemical Plant	2008
Rabigh Petrochemical Expansion Project	9.90	Saudi Arabia	Petrochemical/Chemical Plant	2006
Abu Dhabi Aluminium Smelter	7.05	United Arab Emirates	Processing Plant	2007
Liaoning Nuclear Power Plant Project	6.94	China	Power	2008
Jamnagar Petrochemicals Refinery Complex	6.00	India	Petrochemical/Chemical Plant	2006
Qatargas 4	5.71	Qatar	Oil Refinery/LNG and LNG Plants	2007
Fujian Refining and Ethylene Joint Venture Project	5.60	China	Petrochemical/Chemical Plant	2007
YanSab Petrochemical Complex	5.00	Saudi Arabia	Petrochemical/Chemical Plant	2006
Indiana Toll Road	4.83	United States	Road	2006
Qatar Aluminum Trust	4.74	Qatar	Processing Plant	2007
QCTC Nakilat LNG Vessels	4.74	Qatar	LNG	2006
FARAC Toll Road PPP	4.28	Mexico	Road	2007
Ambatovy Nickel Project	3.70	Madagascar	Mining	2007

Note: * In 2008 dollars according to Black Veatch NPV_{10} analysis at 9.
Source: Project Finance and Infrastructure Finance, Issues 288 and 277., Dealogic

Figure 3

PURPORTEDLY "ROBUST" PRODUCER ECONOMICS v. REALITY OF RISK SHIFTING

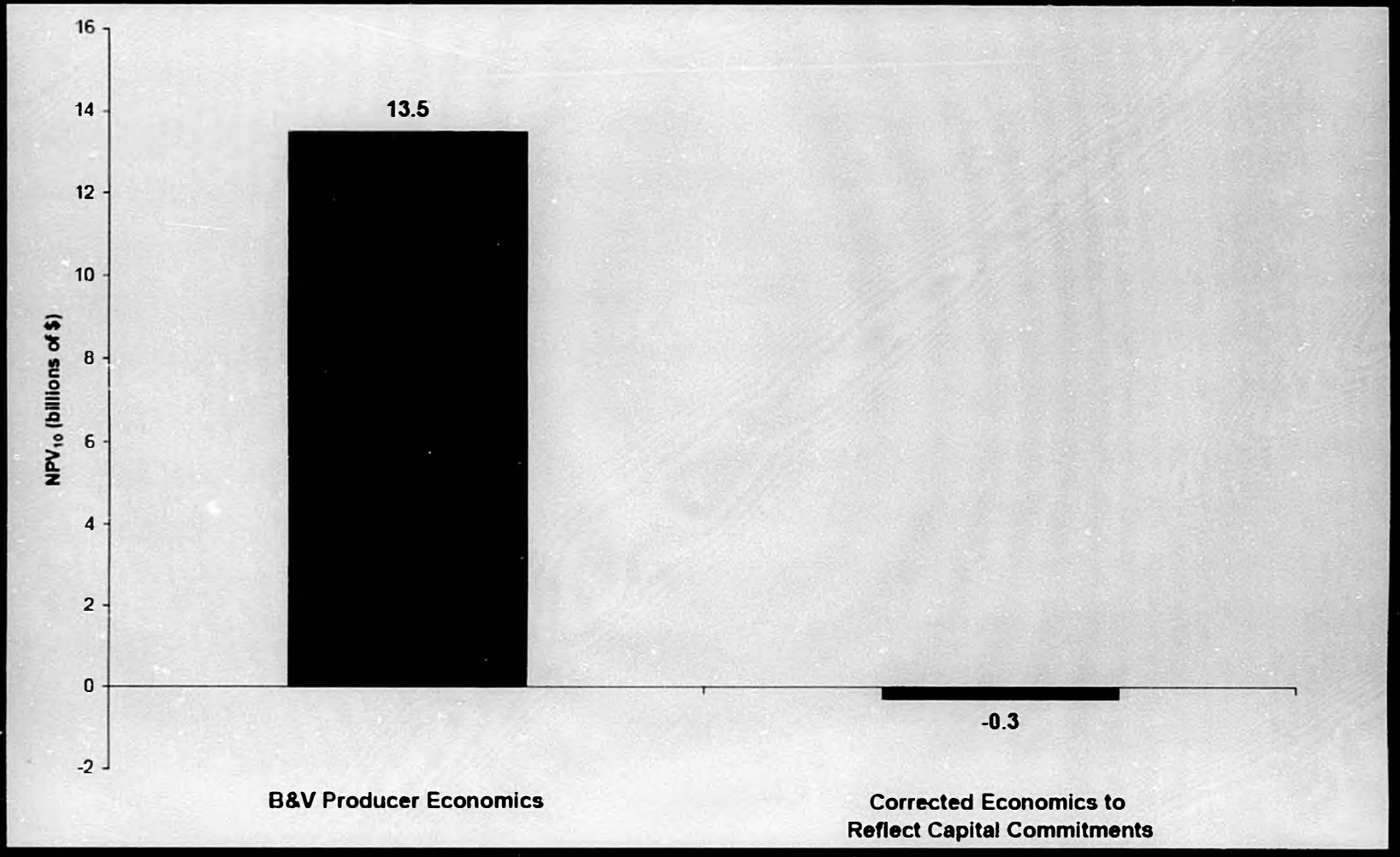
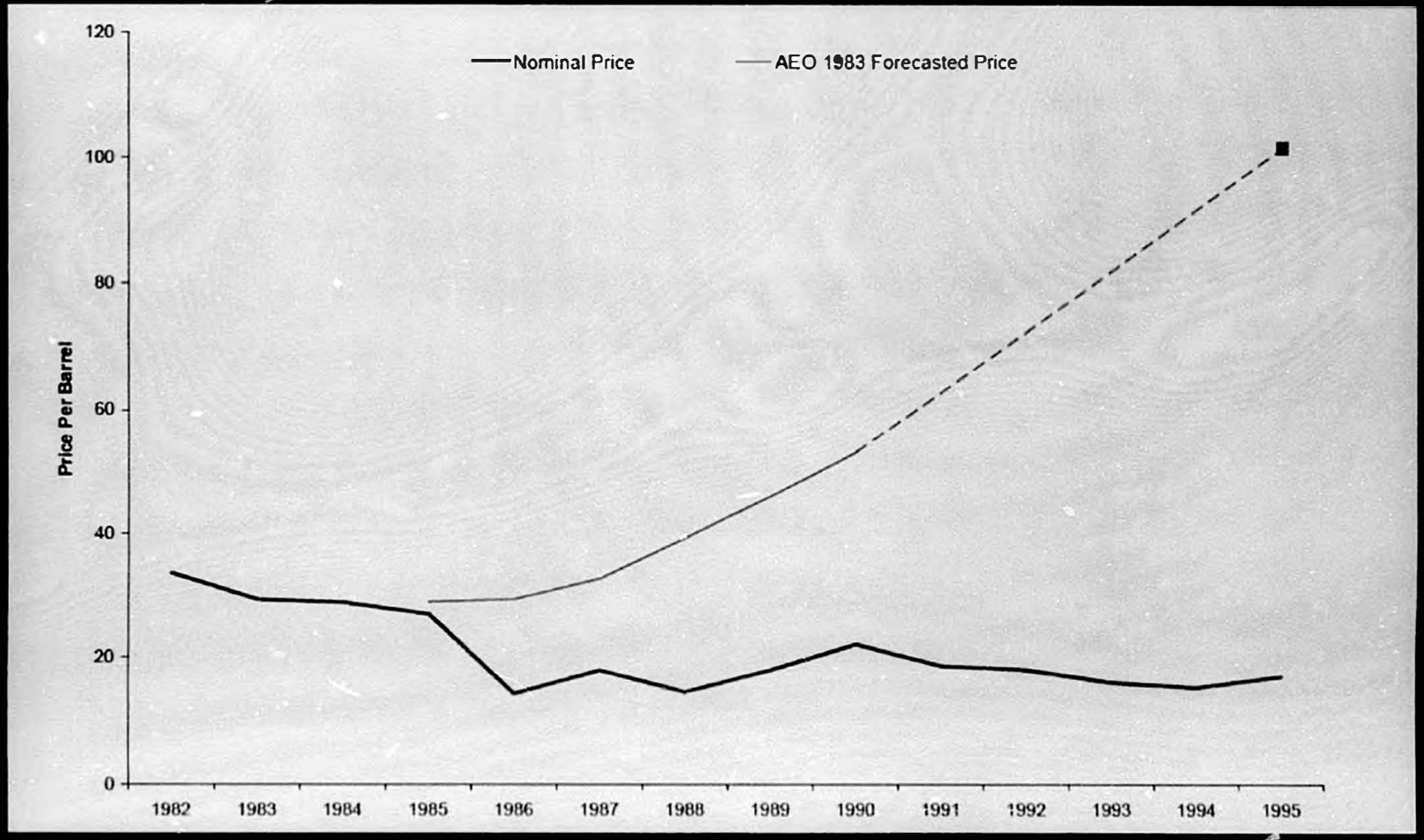


Figure 4

THE PRICE PER BARREL OF OIL v. THE AEO 1983 FORECASTED PRICE PER BARREL OF OIL



Source: EIA

Attachment I

JOSEPH P. KALT
FORD FOUNDATION PROFESSOR OF
INTERNATIONAL POLITICAL ECONOMY
JOHN F. KENNEDY SCHOOL OF GOVERNMENT
HARVARD UNIVERSITY

Joseph P. Kalt is the Ford Foundation Professor of International Political Economy at the John F. Kennedy School of Government at Harvard University. He joined the faculty at Harvard in 1978 and is a specialist in the economics of development, political economy, industrial organization, antitrust, and regulation. The Kennedy School of Government is Harvard's graduate school for public policy and administration, and Prof. Kalt has served as the School's Academic Dean for Research, chair of degree programs, chair of Ph.D. programs, and chair of the economics and quantitative methods section. Since 2005, Prof. Kalt also has served as a visiting professor at The University of Arizona's Eller College of Management. He received his Ph.D. (1980) and M.A. (1977) in Economics from the University of California at Los Angeles, and his B.A. (1973) in Economics from Stanford University.

Prof. Kalt's publications include *The Economics and Politics of Oil Price Regulation*, *Drawing the Line on Natural Gas Regulation* (with Frank C. Schuler), *Petroleum Price Regulation: Should We Decontrol?* (with Kenneth Arrow), and *New Horizons in Natural Gas Deregulation* (with Jerome Ellig). He is a Senior Economist with Compass Lexecon, an FTI Consulting company specializing in the economics of competition and regulation. He previously founded The Economics Resource Group, an economics consulting firm acquired by Lexecon in 1999. Prof. Kalt has appeared frequently as an expert before the U.S. Congress and various state, federal and international tribunals, and he has served as mediator and arbitrator in various private and intergovernmental disputes. Prof. Kalt has also served as an adviser to various national and international governments, including the U.S., Thailand, China, Canada, and numerous American Indian tribes.

Prof. Kalt is widely recognized for his work in economic development on American Indian reservations and among First Nations in Canada. In 1987, he founded (with Stephen Cornell) the Harvard Project on American Indian Economic Development. He continues to serve as the Project's co-director. He is a principal author of *The State of the Native Nations: Conditions under U.S. Policies of Self-Determination* (with the Harvard Project), co-editor and a primary author of *What Can Tribes Do? Strategies and Institutions in the Economic Development of American Indian Reservations* (with Stephen Cornell), and a principal author of *Rebuilding Native Nations: Strategies for Governance and Development.* In 2005, Professor Kalt received the National Center for American Indian Enterprise Development's First American Leadership Award for his contributions to research in public policy affecting Native peoples.

Prof. Kalt is a member of the Board of Trustees of The Communications Institute, the National Advisory Board of The Big Sky Institute, and the Board of Directors of The Sonoran Institute. He served on the President's Commission on Aviation Safety and on the Steering Committee of the National Park Service's *National Parks for the 21st Century.*

Prof. Kalt is a native of Tucson, Arizona. He and his wife, Judy Gans, have two children. The family owns Arrow Mountain Ranch, with horse breeding and training operations in Montana and Arizona.

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ALASKA STATE LEGISLATURE

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Fourth Special Session
Twenty-Fifth Legislature

Gymnasium
Terry Miller Building, Juneau Alaska

Thursday July 10, 2008
8:00-8:00 p.m.

Joint Meeting AGENDA

- SB 3001/HB 3001 Approving AGIA License for Natural Gas Pipeline Project as proposed by TransCanada Alaska Company, LLC and Foothills Pipelines Ltd. (TC Alaska) to the State of Alaska.

Presentations

- 8:00-10:00 Denali Project
Bud E. Fackrell, President

- 10:30–12:00 TransCanada Workforce Issues
Mel A. Johnson, Dir., Alaska Pipeline Project, Major Projects

- 1:45-2:45 TransCanada Application
Tony Palmer, VP AK Busisness Development

-3:00-5:00 ExxonMobil
Marty Massey, US Joint Interest Manager

-6:30-8:00 CBI Mediation Group
Francis McGovern, Board Member CBI; Prof. of Law, Duke Univ.
Joshua Gordon, Sr. Associate

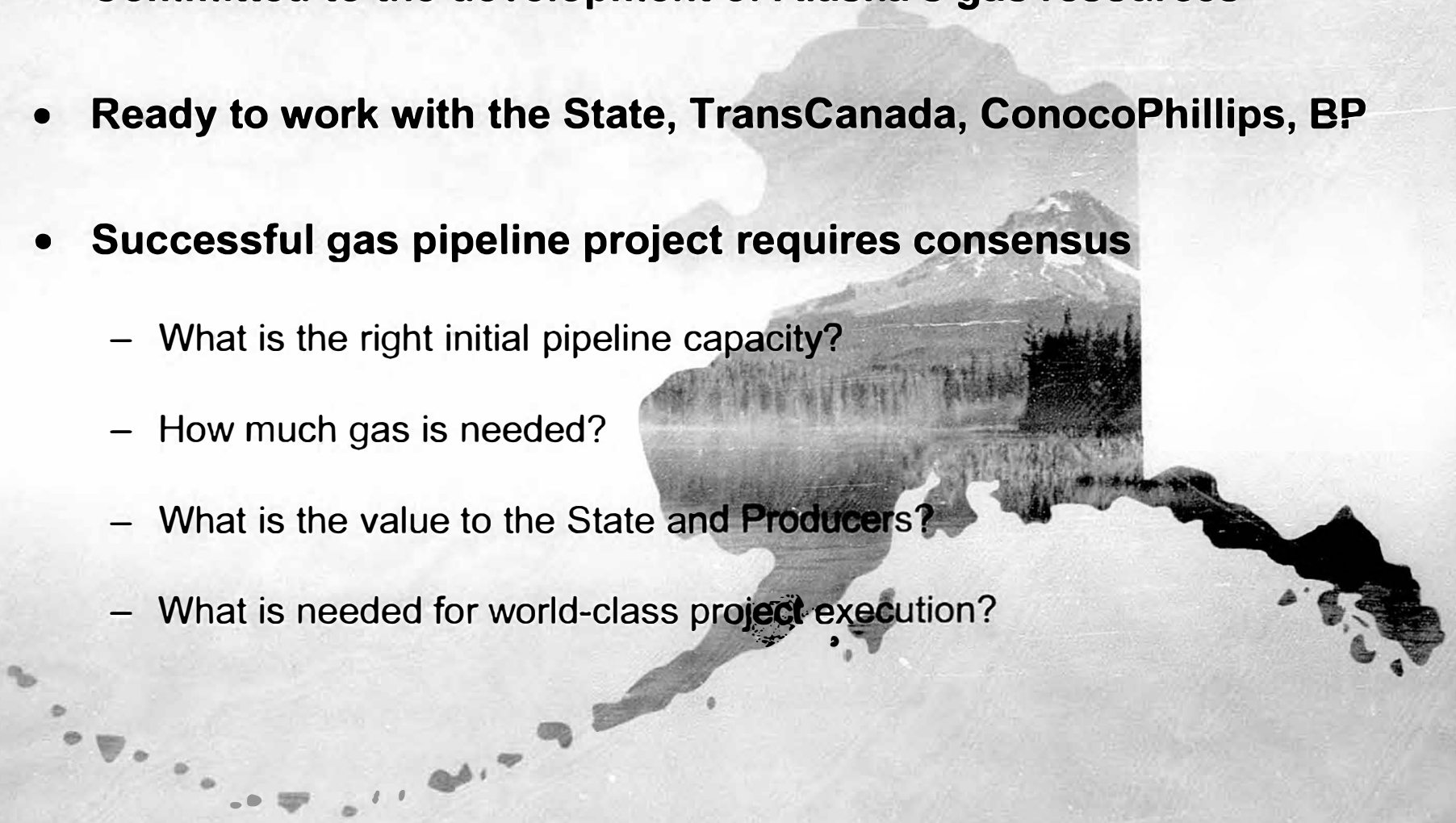
Testimony: By Invitation

2nd day 4 Spec Session
July 10, 2008 Juneau
3:15 PM

presented by
Marty Massey, U.S. Joint Venture Mngr.

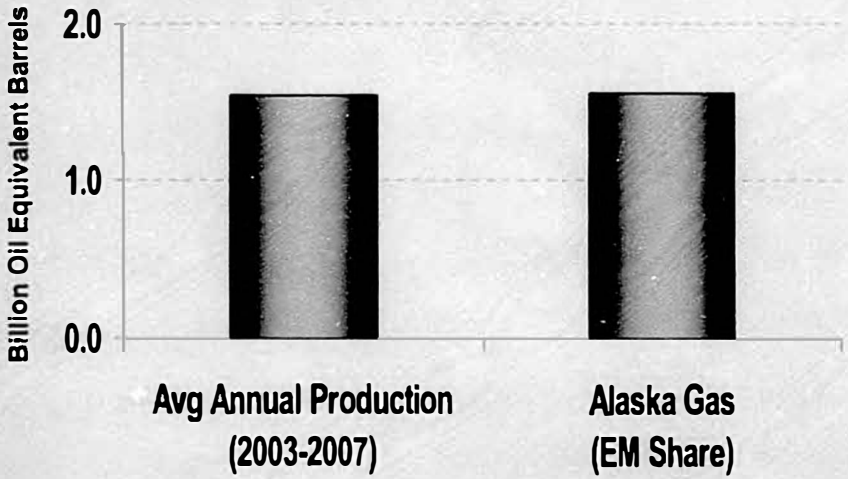
ExxonMobil Committed and Ready to Work

- **Committed to the development of Alaska's gas resources**
- **Ready to work with the State, TransCanada, ConocoPhillips, BP**
- **Successful gas pipeline project requires consensus**
  - What is the right initial pipeline capacity?
  - How much gas is needed?
  - What is the value to the State and Producers?
  - What is needed for world-class project execution?



Motivated to Develop Alaska Gas

ALASKA GAS RESERVES ADDITION



ACTIVITIES

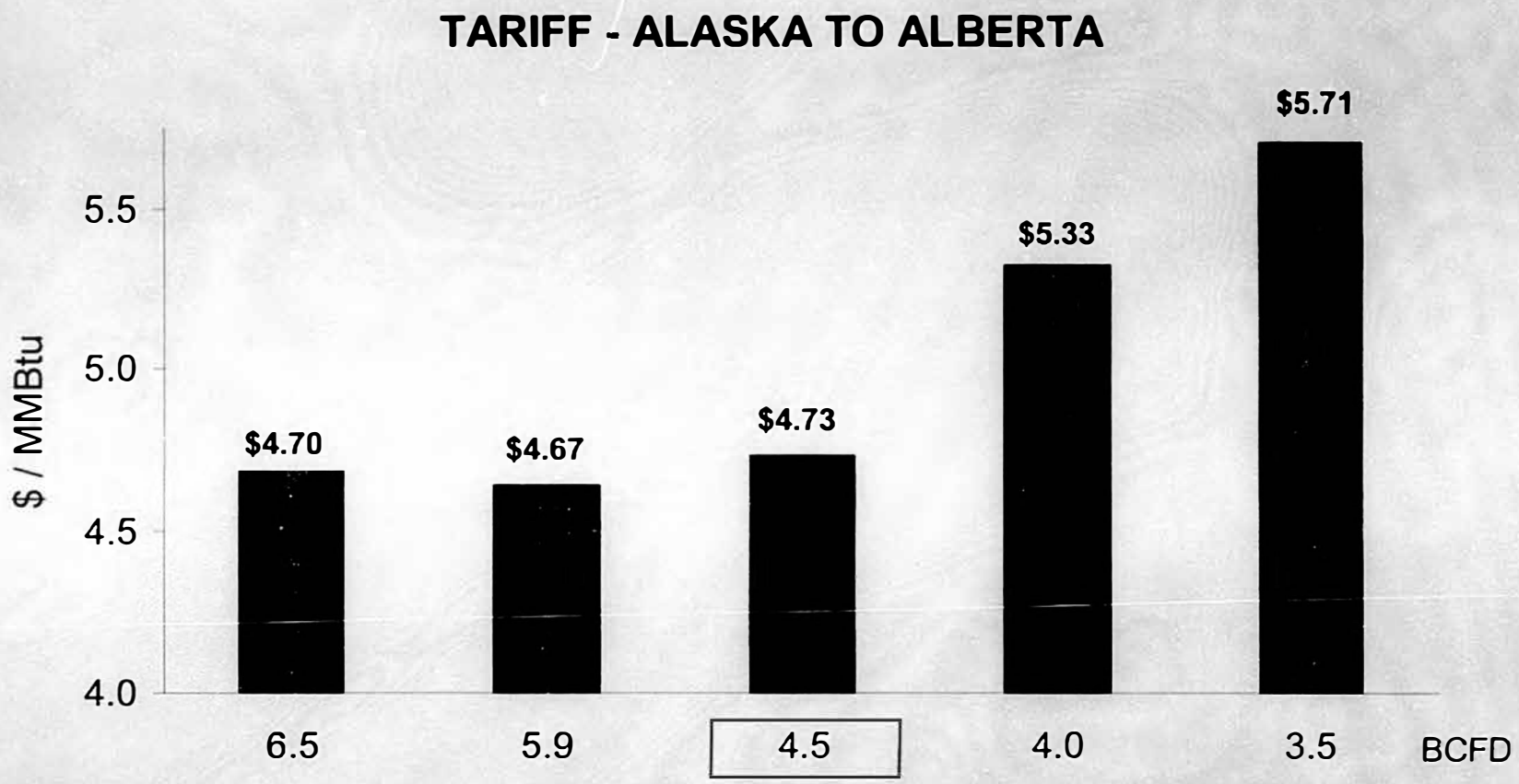
- 2001-02: Producer Pipeline Study
- 2003-06: SGDA Application / Contract
- 2007-08: AGIA Engagement
- 2008: Commitment to Develop PTU; Fairbanks Natural Gas Sale

IMPACTS

- ***Proved reserves – Replaces a full year of our worldwide production***
- ***Production – Doubles our U.S. gas production***

KEY MEASURES OF COMPANY SUCCESS AND SHAREHOLDER VALUE

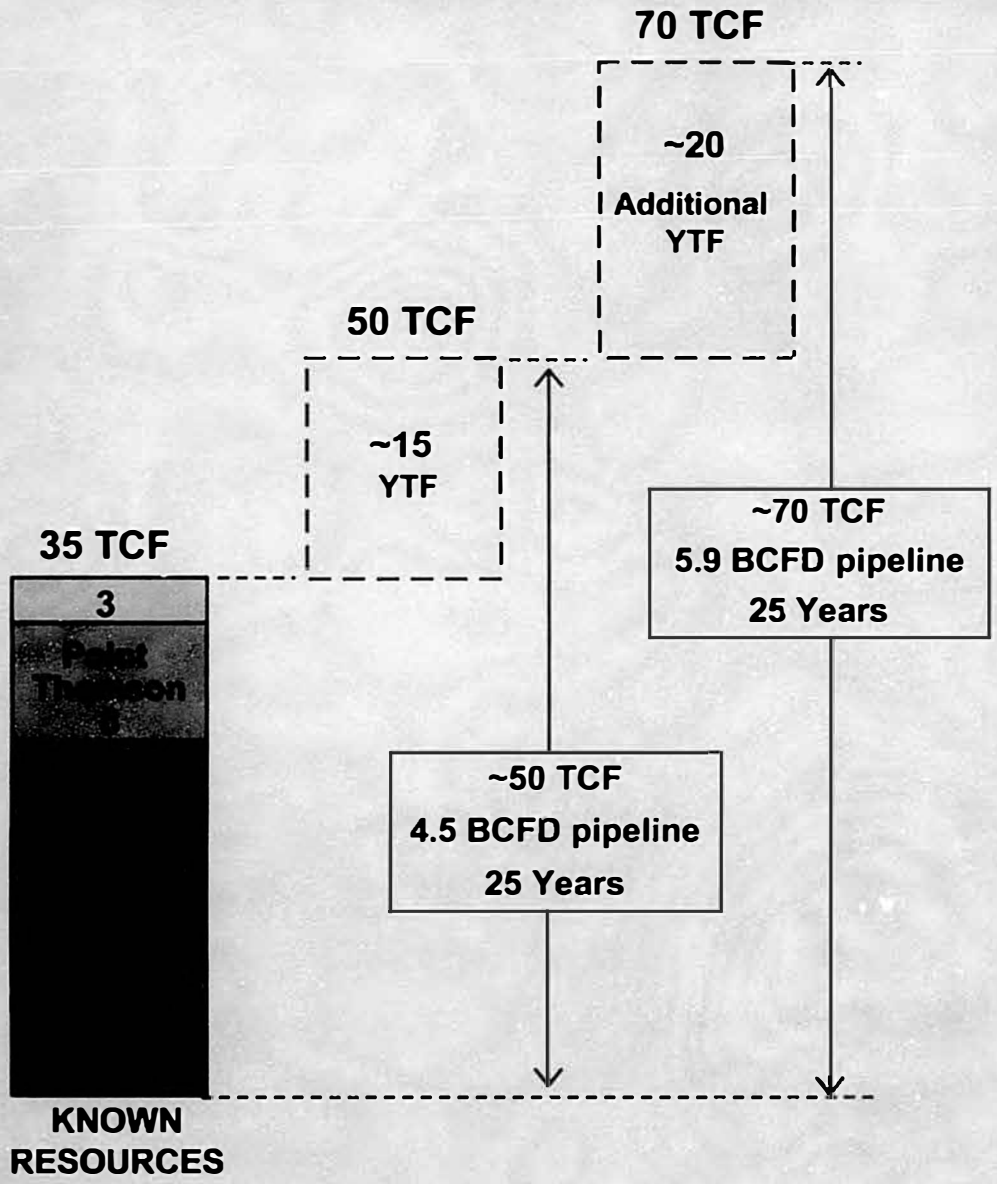
4.5 BCFD Balances Tariff, Revenue and Resources



Impact to State		**$66.1**	**$60.7**	**$51.6**
(NPV_5 – Billions)			**-$5.4**	**-$14.5**

Source: Black and Veatch

Critical Elements – Point Thomson / Open Access

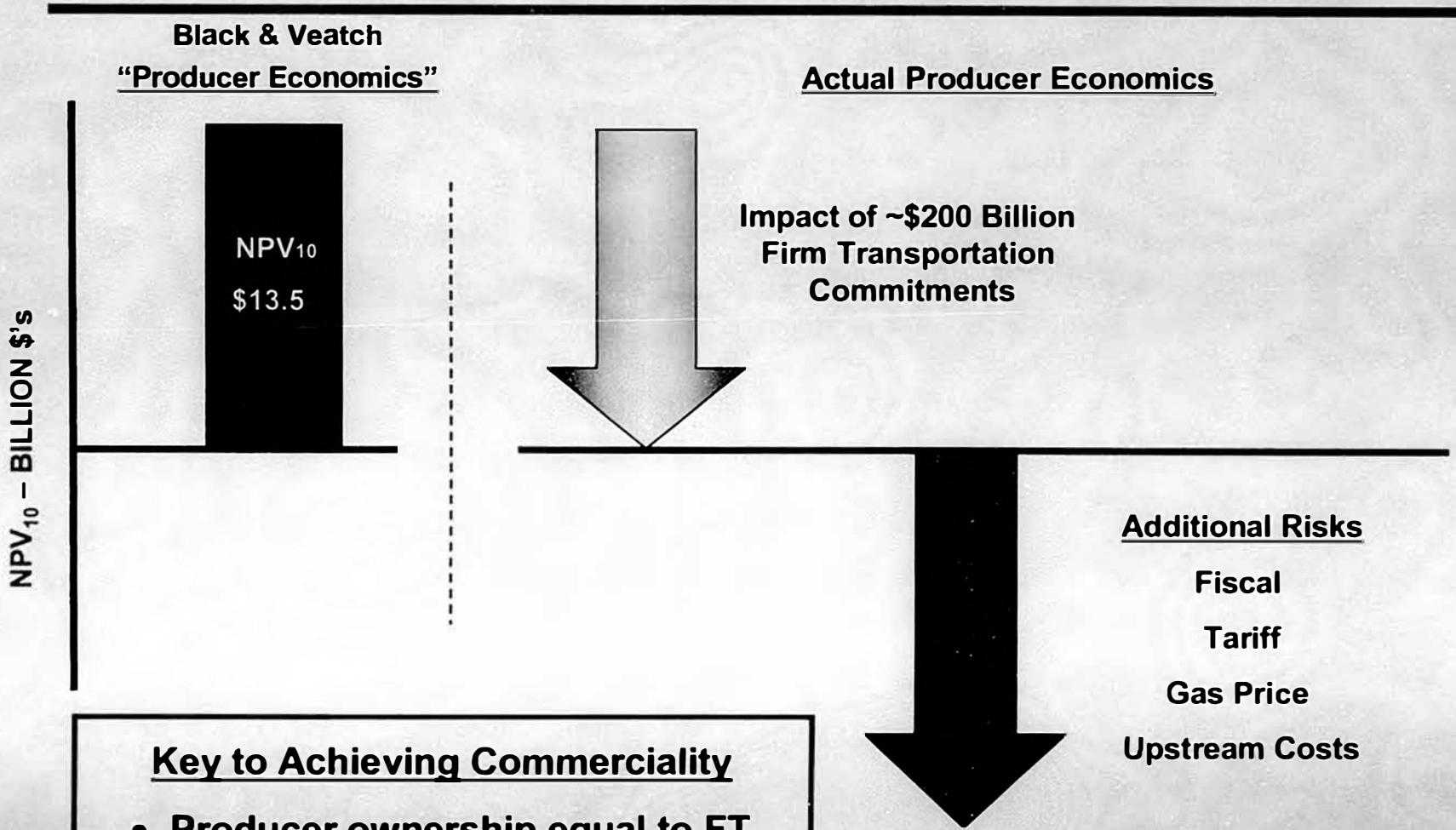


- If PTU not available:
  - Increases tariff
  - Threatens FT / financing
  - Increases reliance on YTF
- Open access
  - Significant capacity for YTF gas
  - Additional capacity available to explorers through low cost expansions
  - U.S. and Canadian regulations ensure open access
  - Open to discuss further assurances with State

YTF – Yet-to-Find

TCF – Trillion Cubic Feet

FT Commitments – Real Risk and Cost to Producers

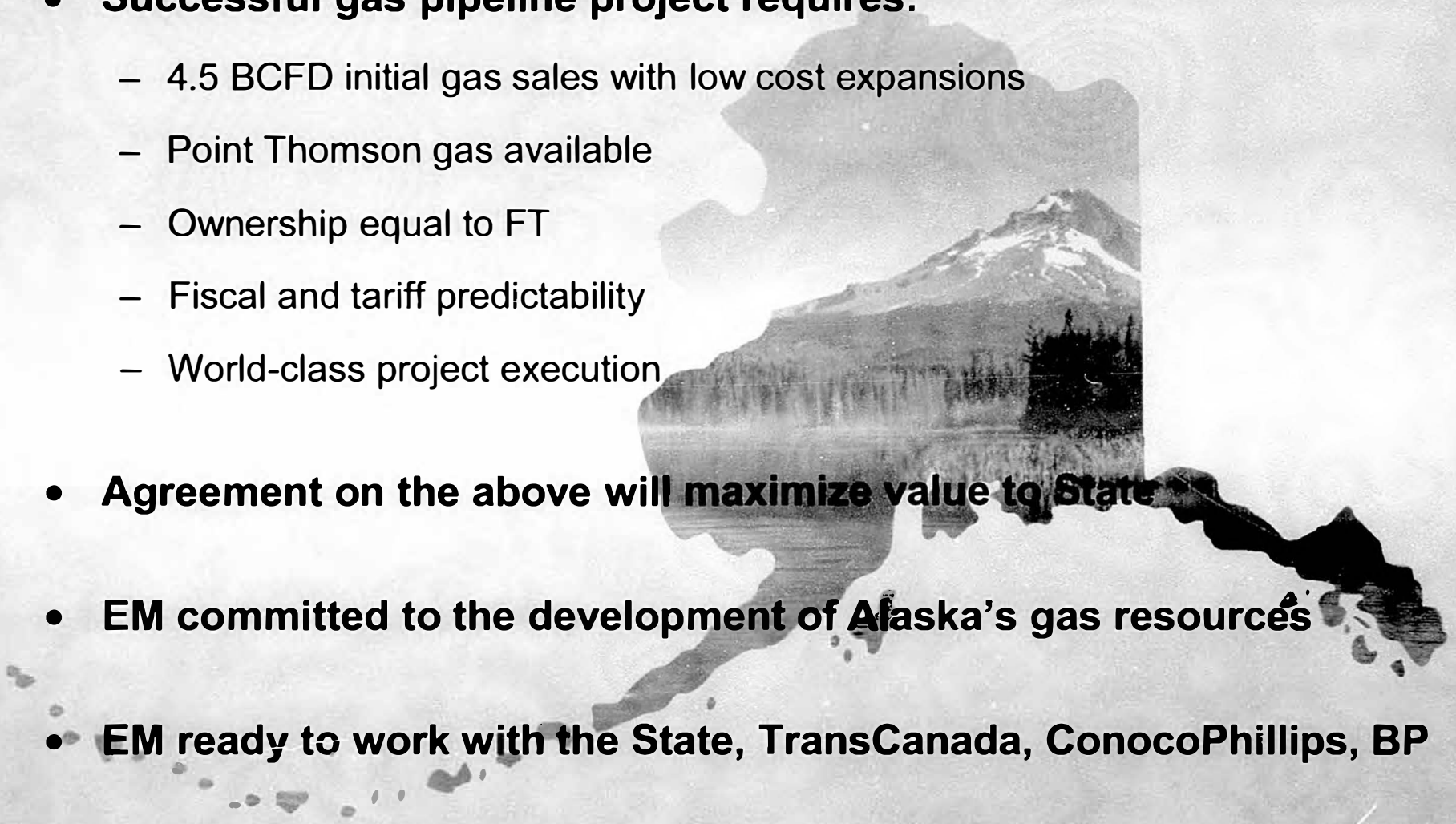


Key to Achieving Commerciality

- Producer ownership equal to FT
- Fiscal and tariff predictability
- World-class project execution

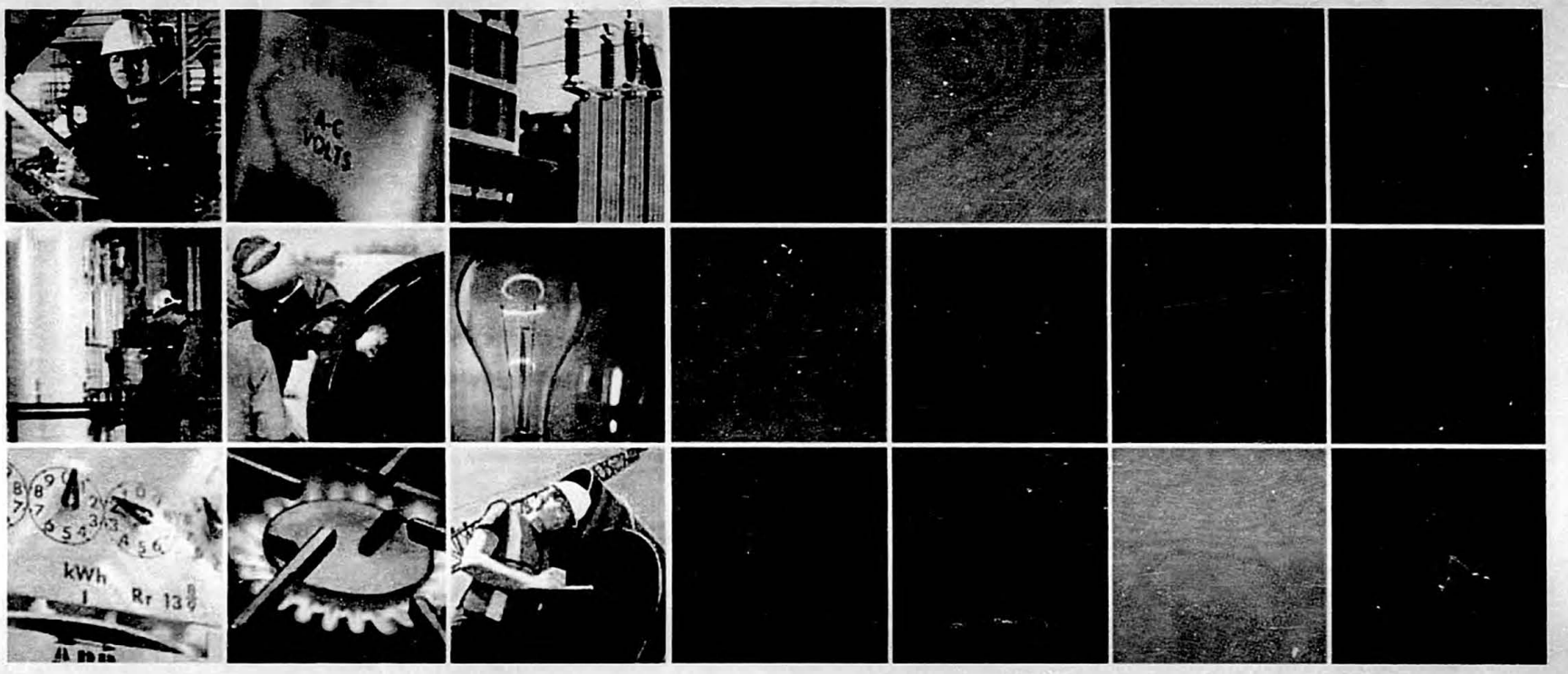
Key Take-Aways

- **Successful gas pipeline project requires:**
  - 4.5 BCFD initial gas sales with low cost expansions
  - Point Thomson gas available
  - Ownership equal to FT
  - Fiscal and tariff predictability
  - World-class project execution
- **Agreement on the above will maximize value to State**
- **EM committed to the development of Alaska's gas resources**
- **EM ready to work with the State, TransCanada, ConocoPhillips, BP**



2nd day 4th Spec. Session
July 10, 2008 Juneau
1:05 pm

presented by:
Mr. Mel A. Johnson, Dir.
AK Pipeline Pjct, Major Pjcts



Alaska Pipeline Project

Workforce Plan in Alaska

TransCanada
In business to deliver

Presentation Overview

1. AGIA Commitments
2. Alaska Pipeline Project Phases
3. Alaska Section Workforce Requirements
4. Alaska Workforce Strategy
5. Workforce Risks / Opportunities
6. Workforce Preparation / Training

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AGIA Commitments

- AS 43.90.130 (15) – **hire qualified residents** from throughout the state for management, engineering, construction, operations, maintenance, and other positions on the proposed project;
- **Contract with businesses** located in the state;
- Establish **hiring facilities** or use existing hiring facilities in the state;
- Use, as far as is practicable, the **job centers** and associated services operated by the Department of Labor and Workforce Development and the Internet-based labor exchange system operated by the state;
- AS 43.90.130 (17) commit to negotiate, before construction, a **project labor agreement** to the maximum extent permitted by law….

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APP Project Phases

Development Phase

Proposal (< 2 years)

- Define Project scope, cost and schedule (Initial Front End Engineering Design [FEED])
- Conduct initial binding Open Season

Definition (4 years) completing application work POST Open Season

- FERC and NPA approvals / certificates
  - Technical, environmental and regulatory effort (complete FEED)

Execution (<4 years)

- Build the project

Operations

- Operate and maintain the facilities

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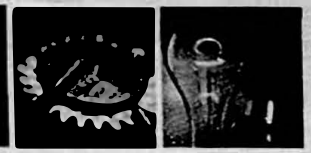
Alaska Section Workforce Requirements (Averages – Full Time Equivalents)



PHASE	***RESOURCES REQUIRED***
Proposal 2008 - 2010	100 - 150
Definition 2010 - 2014	275 - 400
Execution 2014 - 2018	7000 - 9000
Operations Excludes GTP 2018 -	50 – 80

Estimates only – subject to revision through Front End Engineering work

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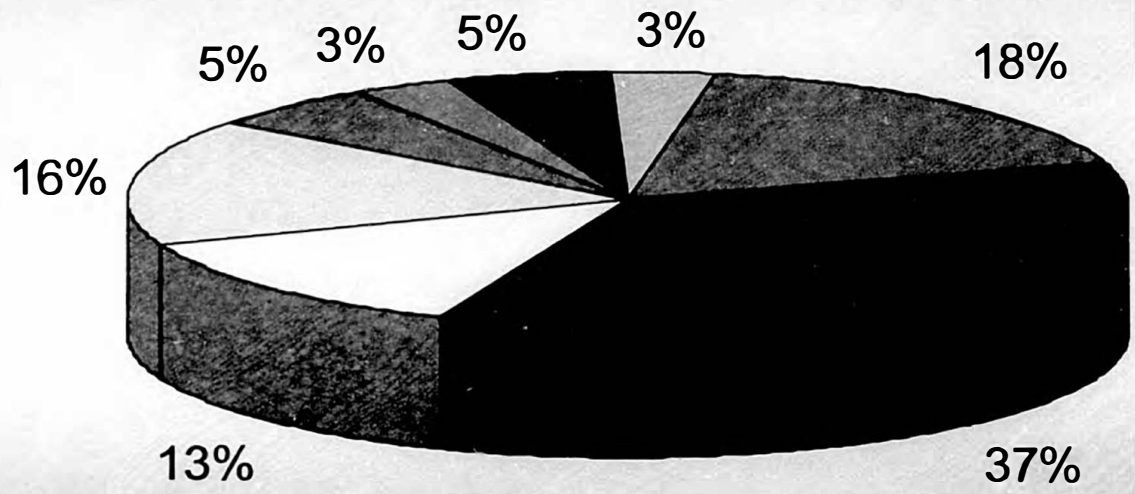
Execution Phase Workforce Requirements

APP Construction Spread Workforce Breakdown



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Development Phase

Proposal Phase

- Internal team managing few contracts
  - Hire Alaska residents for some key internal roles
  - Utilization of owner's engineer contract and existing environmental Master Services Agreements, both of which incorporate Alaska based firms
  - Supplement with additional Alaska based sub-contracts for services
  - Web based instrument for goods and service providers to supply information on offerings – information will be shared with contractors for consideration throughout project

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Alaska Workforce Strategy (continued)

Definition Phase

- Larger internal team managing new contracts with service providers
  - Requests For Proposals would be issued during previous phase for major engineering, environmental and socio-economic work packages for the Definition Phase. This would provide great opportunity for Alaska service providers, including Alaska Native Regional Corporations.
  - Opportunities for internal team will be open for Alaska residents
  - Work will be supplemented with Alaska based sub-contracts for services

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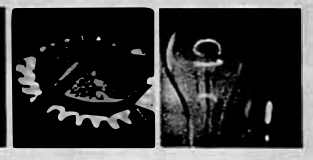
Alaska Workforce Strategy (continued)



Execution Phase

- Project Labor Agreements will be negotiated
- Internal team will manage large EPCM contractors
- Requests For Proposals will be issued and evaluated during previous phase
- TransCanada commitments will be reflected in resultant contracts regarding Project Labor Agreements, Alaska hire and Alaska business opportunities
- Opportunities for internal team will be open for Alaska residents – job centers and associated services operated by the Department of Labor and Workforce Development will be utilized

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Alaska Workforce Strategy (continued)

Operations Phase

- Efficient team will provide operations and maintenance services for facilities in Alaska, including the GTP if required
- Support services will be contracted to local service providers
- Maintenance activities will be contracted to local service providers to the fullest extent possible

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Workforce Risks / Opportunities

Opportunities:

- High profile, anticipated project
- Good potential for multi-year, year round construction effort
- Strategies have been largely developed
- Time available to act on strategic initiatives
- TransCanada support and involvement with AGIA Training Strategic Plan

Risks

- 'Heated' labor market factors
- Demographic profile of workforce
- Potential for significant in-migration

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Workforce Preparation and Training
AGIA Training Strategic Plan

- Broad-based, inclusive, strategic and action oriented framework

Industry

Trade Associations

Trade Unions

State Agencies

Educational Institutions

Federal Agencies

TransCanada roles:

- Direct participation with strategic planning process
- Provision of timely project labor demand information
- Dialogue with all stakeholders
- Coordination of training implementation
- On-going effectiveness evaluation

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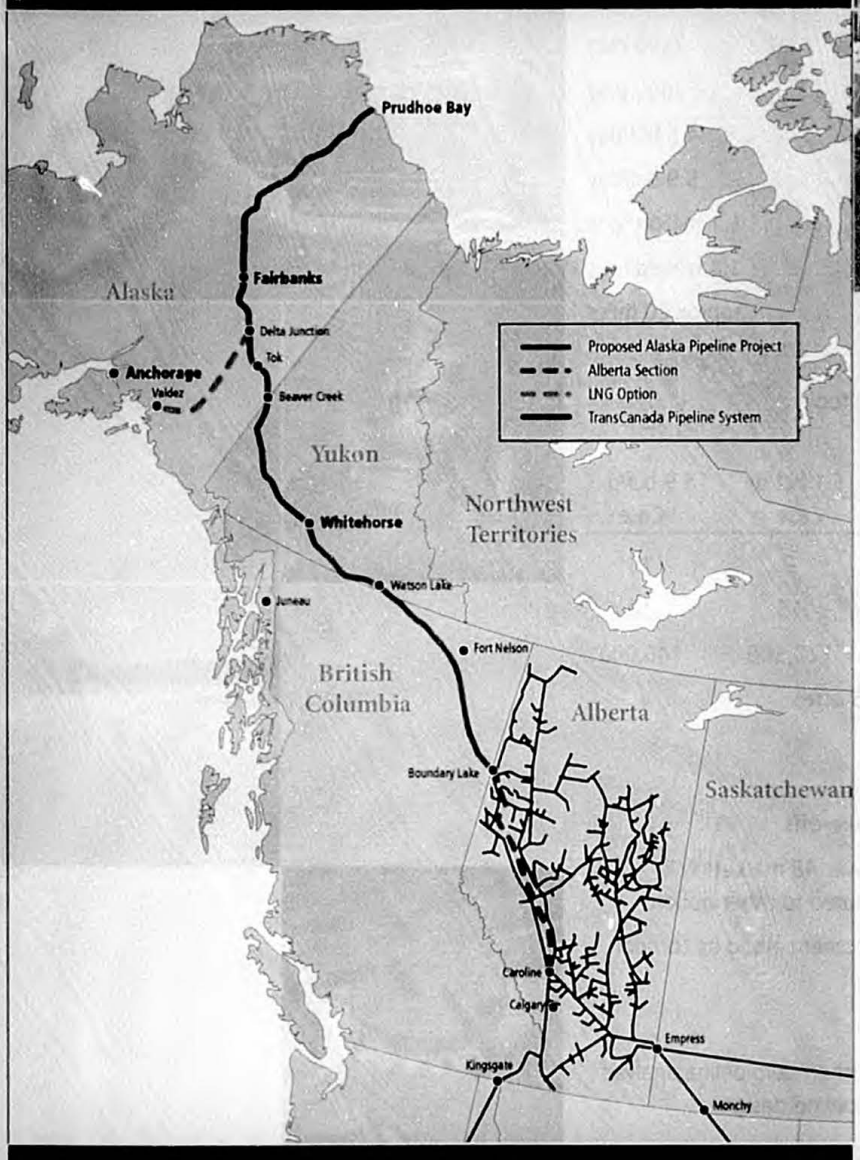
TransCanada's
Alaska Pipeline Project



The Alaska Pipeline Project as proposed by TransCanada would connect natural gas from the North Slope of Alaska to all major markets in North America via the existing Alberta Hub.

The project would include the following general components:

- a Gas Treatment Plant (GTP), to be built by TransCanada or others, that will process ~5 bcf/d of residue gas from the existing Central Gas Facility at Prudhoe Bay;
- a new Pipeline System that would extend from the GTP near Prudhoe Bay to Boundary Lake on the British Columbia / Alberta border; a new build and existing infrastructure within Alberta, extending from Boundary Lake to the Alberta Hub providing connection to the existing Pre-Build; pipeline, compression, measurement and other related facilities; and
- an LNG option (if insufficient gas is committed through Canada).

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The Pipeline

- Total pipeline length (Prudhoe Bay to Boundary Lake): . . . . . 1715 miles
- Length in Alaska: . . . . . 750 miles
- Length in Yukon: . . . . . 517 miles
- Length in British Columbia: . . . . . 448 miles
- Pipeline diameter and grade: . . . . . 48 inches X80
- Maximum operating pressure (Alaska): . . . . . 2500 psig
- Maximum operating pressure (Canada): . . . . . 2600 psig
- Pipeline capacity (base design case): . . . . . 4.5 bcf/day
- Pipeline capacity (with maximum compression): . . . . . 5.9 bcf/day
- Total pipe requirement (Alaska): . . . . . 1.1 million tons
- Total pipe requirement (Canada): . . . . . 1.4 million tons
- Mainline valve spacing: . . . . . approx 20 miles
- Mainline will be buried
- Includes launchers and receivers for in-line inspection tools

Compression

	4.5 bcf/d Base Case	5.1 bcf/d Case	5.9 bcf/d Case
• Total compressor stations (Alaska)	6	9	13
• Total compressor stations (Canada)	10	15	19
• Total chiller requirements (tons)	79,600	120,500	146,000

- Each compressor station site will be approximately 25 acres

Gas Deliveries

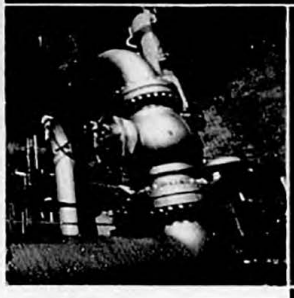
- Delivery points will be provided for community gas take-offs
- Integration with TransCanada's Alberta System to Lower 48 markets will provide higher netbacks to Alaskan shippers as compared to other options
- The pipeline will promote additional industrial development along its corridor

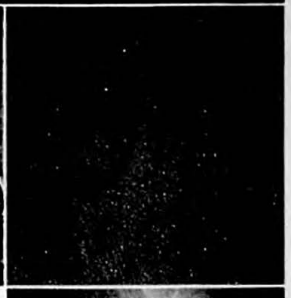
Design Methodology

- TransCanada's proprietary, integrated hydraulics/geothermal/pipeline analysis modeling software will be utilized for system and pipeline design
- Industry leading technology, proven by TransCanada, will be specified for design, materials and construction to support safe, reliable and cost-effective operation

Primary Project Regulators

- Alaskan pipeline portion: Federal Energy Regulatory Commission (FERC)
- Canadian pipeline portion: Northern Pipeline Agency





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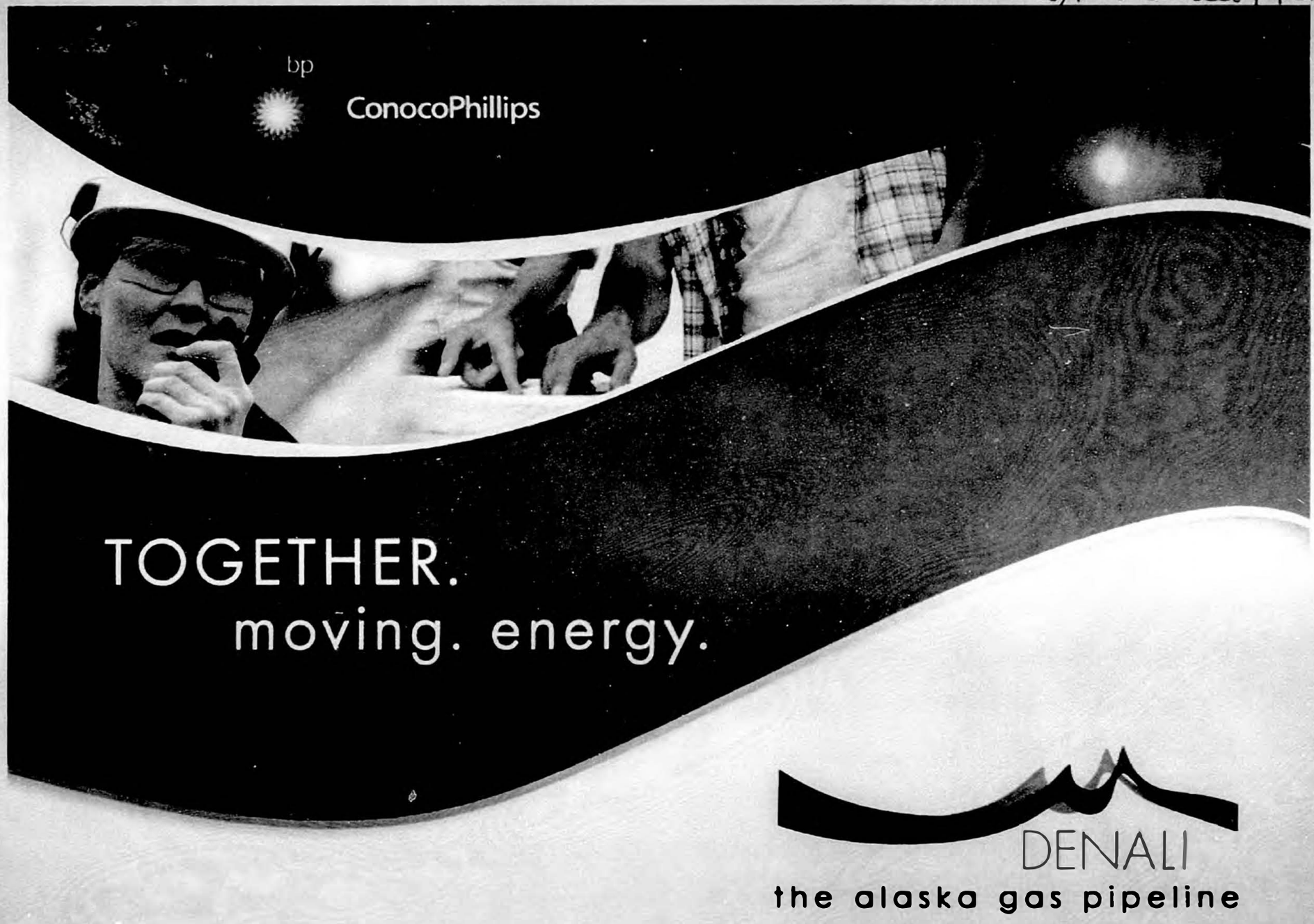
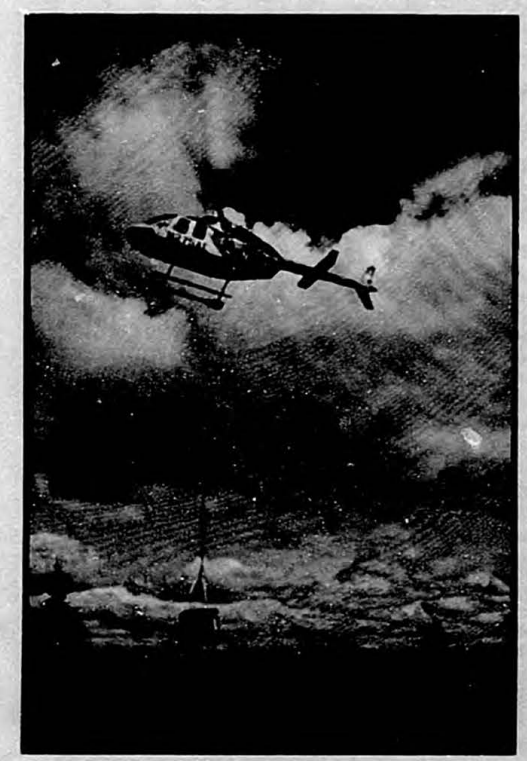
morning 4th Sp. Session day 2
Juneau

8-12 passed out/presented by
Bud Fackrell, Pres. Denali pipeline



Denali – The Alaska Gas Pipeline

- BP and ConocoPhillips have ***joined to start*** "Denali – The Alaska Gas Pipeline"
- Project headquarters in ***Anchorage*** where?
- ***New company*** formed to manage the project in Alaska; joint venture being formed in Canada
- Plan to ***start open season*** before year-end 2010
- Plan to ***spend $600 million*** over 36 months
- Joint project ***team mobilized***
- Field work ***program underway***



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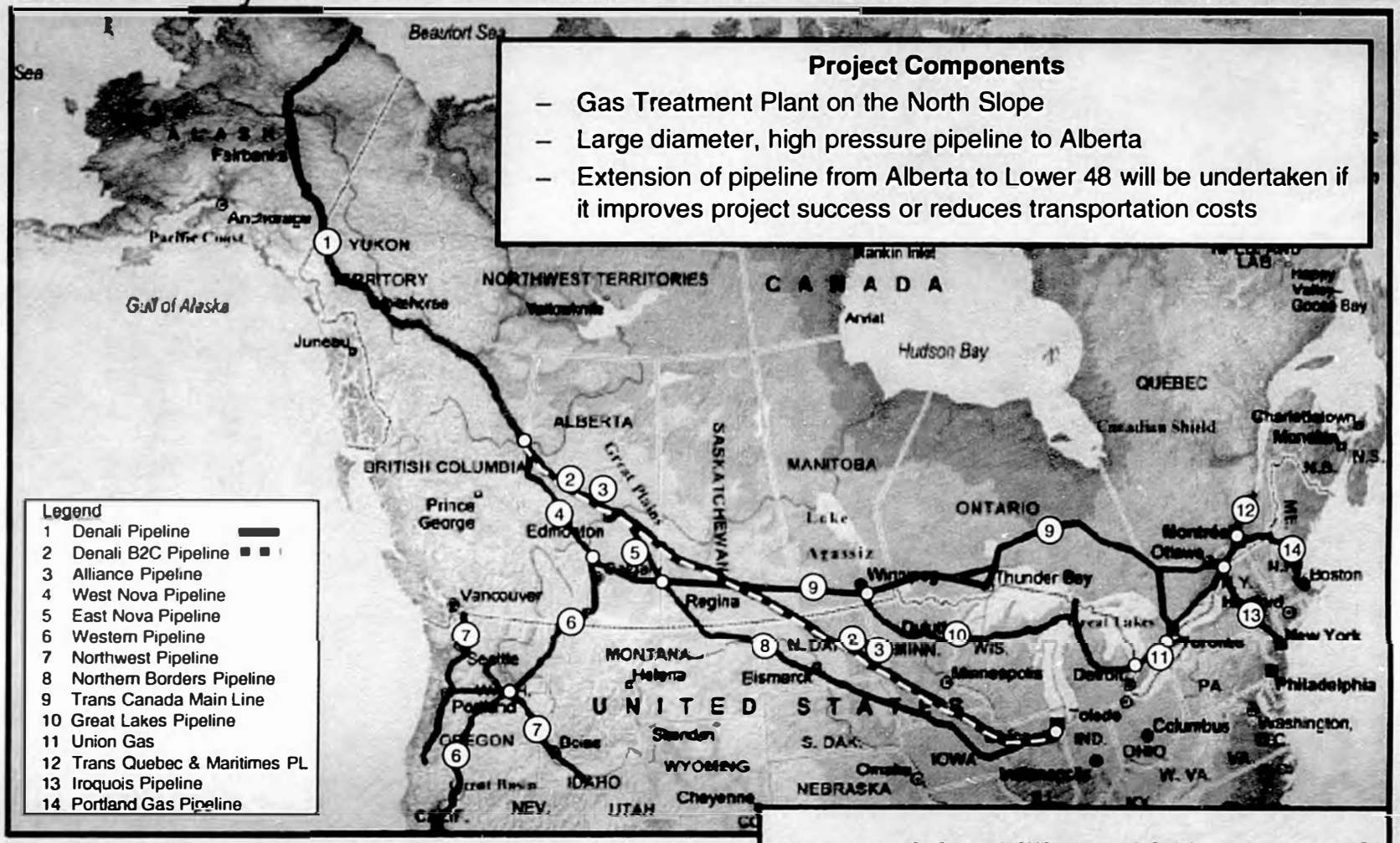
Denali Project

4 billion ft³/day to North American Consumers



Project Components

- Gas Treatment Plant on the North Slope
- Large diameter, high pressure pipeline to Alberta
- Extension of pipeline from Alberta to Lower 48 will be undertaken if it improves project success or reduces transportation costs

Legend

1. Denali Pipeline
2. Denali B2C Pipeline
3. Alliance Pipeline
4. West Nova Pipeline
5. East Nova Pipeline
6. Western Pipeline
7. Northwest Pipeline
8. Northern Borders Pipeline
9. Trans Canada Main Line
10. Great Lakes Pipeline
11. Union Gas
12. Trans Quebec & Maritimes PL
13. Iroquois Pipeline
14. Portland Gas Pipeline

How much is 4 billion cubic feet per day?
6-8% of US daily consumption

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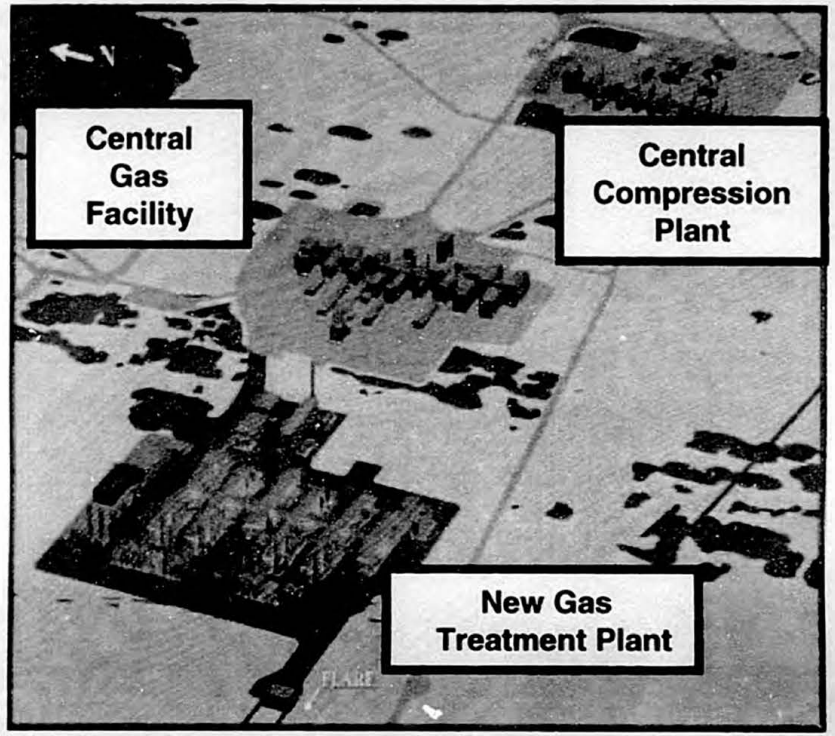
Gas Treatment Plant

- ***What*** will it do?
  - Remove CO_2 and other impurities
    - CO_2 to be reinjected, reducing greenhouse gases
  - Dehydrate gas
    - Remove water
  - Compress gas
    - For pipeline pressure
  - Chill gas
    - Maintain permafrost

- ***Where*** will it be?
  - Located near the Prudhoe Bay facilities



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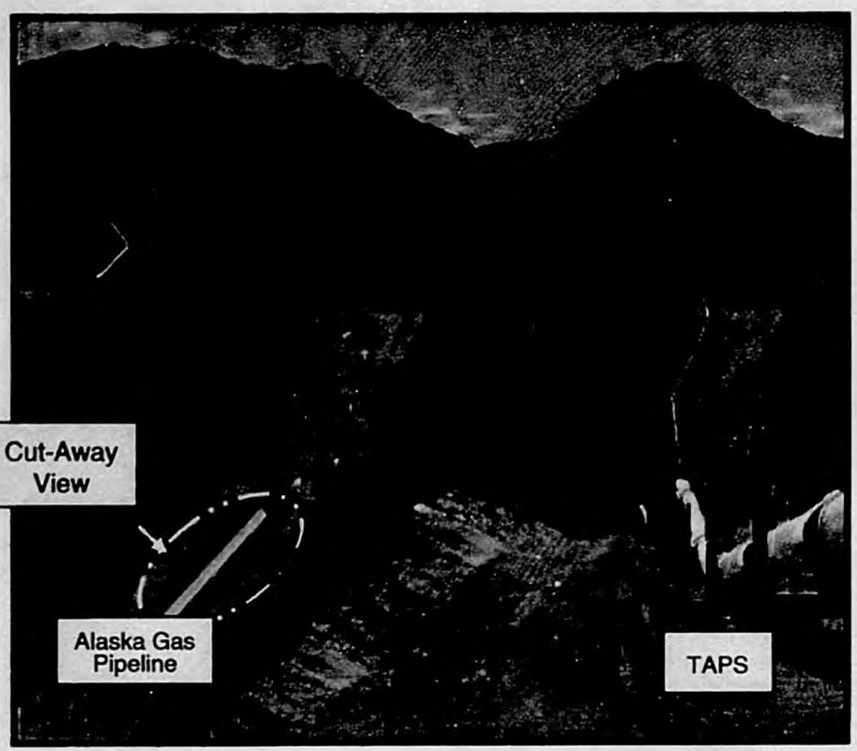
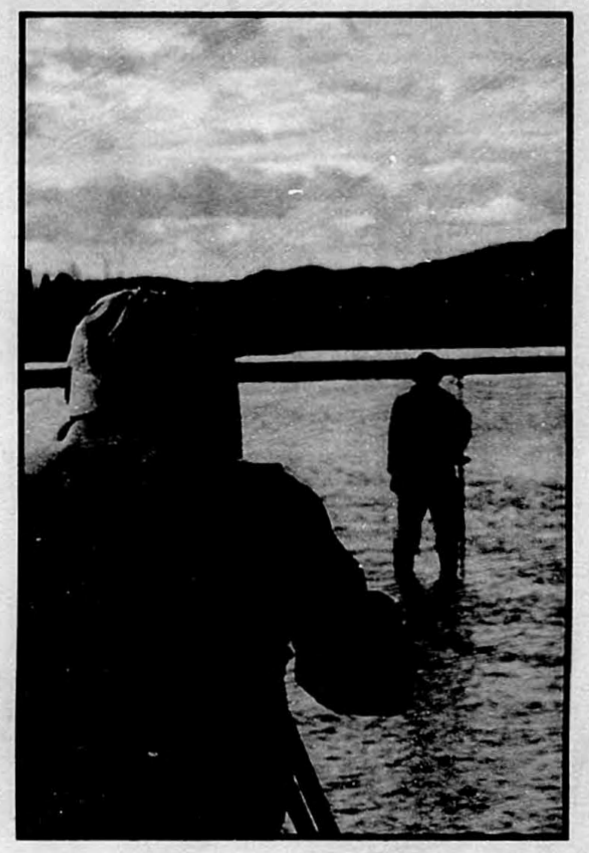
Pipeline



- ***What*** is it?
  - Buried large diameter pipeline
  - Operates at ~ 2,500 psi
  - Compressor stations every 100 to 200 miles at >40,000 hp each
- ***How big*** is it?
  - About 2,000 miles to Alberta
    - ~2-3 million tons of steel
  - Possibly another 1,500 miles to US markets
    - ~2 million tons of steel

Near Term Alaskan Programs

- Make available ***$30 million*** to fund
  - Job Training Programs
  - In-State Gas Feasibility
  - Infrastructure Upgrade Studies



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Job Training

- ***Our goal*** is having a trained workforce for this project
- Owner companies support many ***technical training*** programs
- Committed to ***train local residents*** for this project

Denali's owner companies have demonstrated a long history of local hire, buy, and build. Denali will share that commitment.

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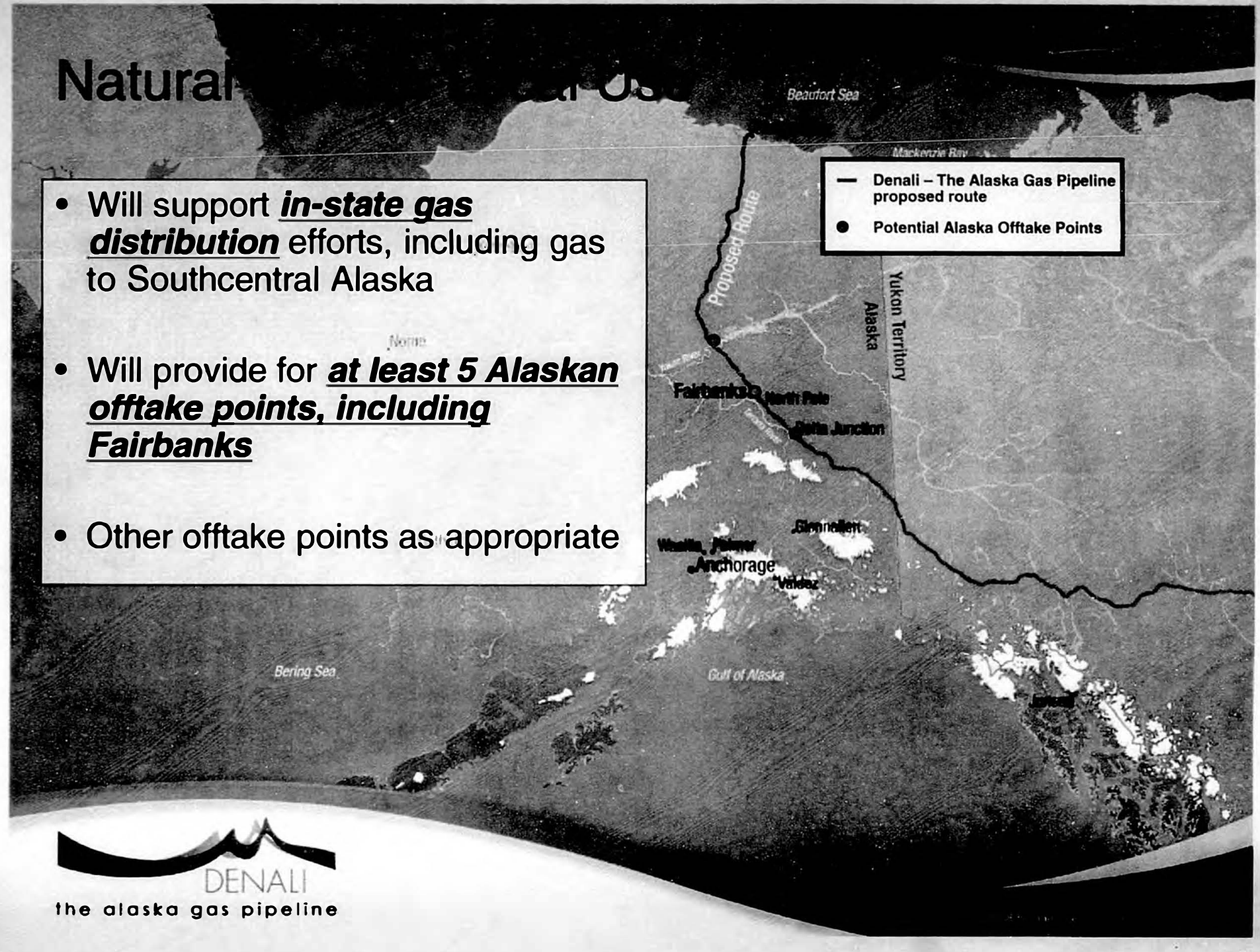
Natural [illegible] Use

- Will support ***in-state gas distribution*** efforts, including gas to Southcentral Alaska
- Will provide for ***at least 5 Alaskan offtake points, including Fairbanks***
- Other offtake points as appropriate



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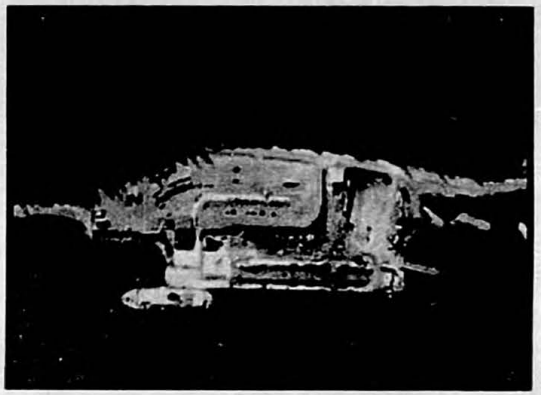
Infrastructure Upgrade Studies

- Roads
  - e.g. Richardson, Dalton, Haines, Elliot, & Alaska Highways
- Bridges
  - e.g. Steese, Glenn, Parks, Haines Highways
- Ports
  - e.g. Port of Haines



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Denali Terms of Service

- Denali will be an open access pipeline
- Rates will be distance-sensitive for local use
- Project design will provide for efficient expandability
- Denali ~~plans to~~ "will" solicit customers for interest in expansion every two years
- Flexibility to use existing or new infrastructure out of Alberta

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2008 Work

Additional Work

- Perform route optimizations
- Conduct technical studies
- Make environmental assessments
- Prepare cost estimates & schedules
- Plan project execution

Summer Field Work

"75 people in the field this summer."

- Wetland delineation
- Investigate archeological sites
- Identify previously impacted sites
- Investigate physical characteristics of stream crossing locations
- Collect technical data (geotechnical, hydrology, etc.)
- Perform route reconnaissance
- Shoot ortho-photography for alternative routes & logistics planning

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Who's Working with Denali right now?

$40 million to be spent on Summer Field Work.

P | N | D
ENGINEERS, INC.

Era
HELICOPTERS LLC
a SEACOR company

Northern Land Use Research, Inc.

Air Logistics
A Bristow Company

ABR environmental research & services

DOYON UNIVERSAL SERVICES

SECURITY AVIATION

CH2MHILL

Tanana Chiefs Conference

NATURAL RESOURCE GROUP

Resource Data, Inc.

Baker

Hawk
CONSULTANTS LLC

JCTI
James C. Towers, Inc.

"from Barra to Barrow"
Chumis Cultural Resources

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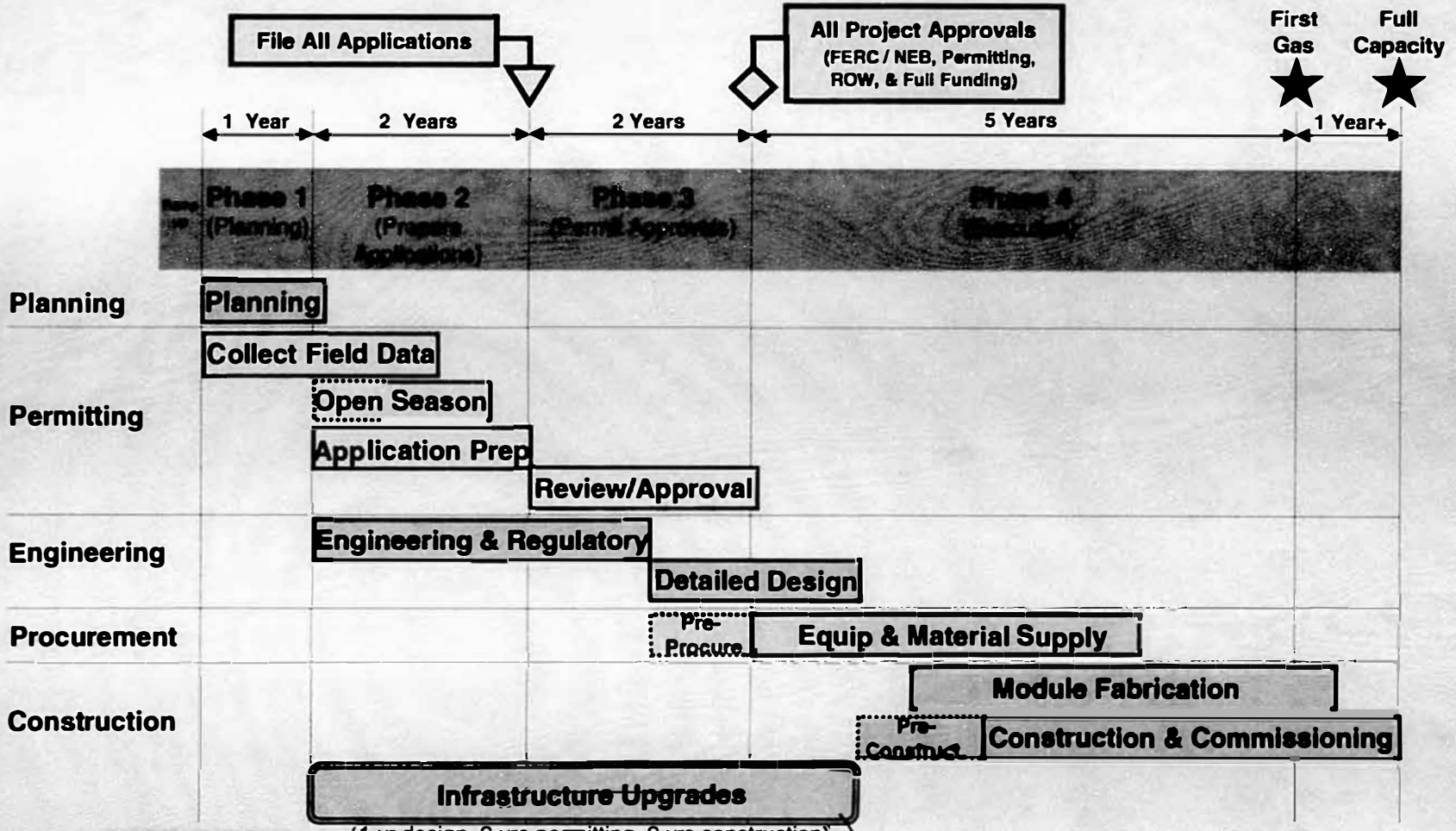
Success Case Project Timeline



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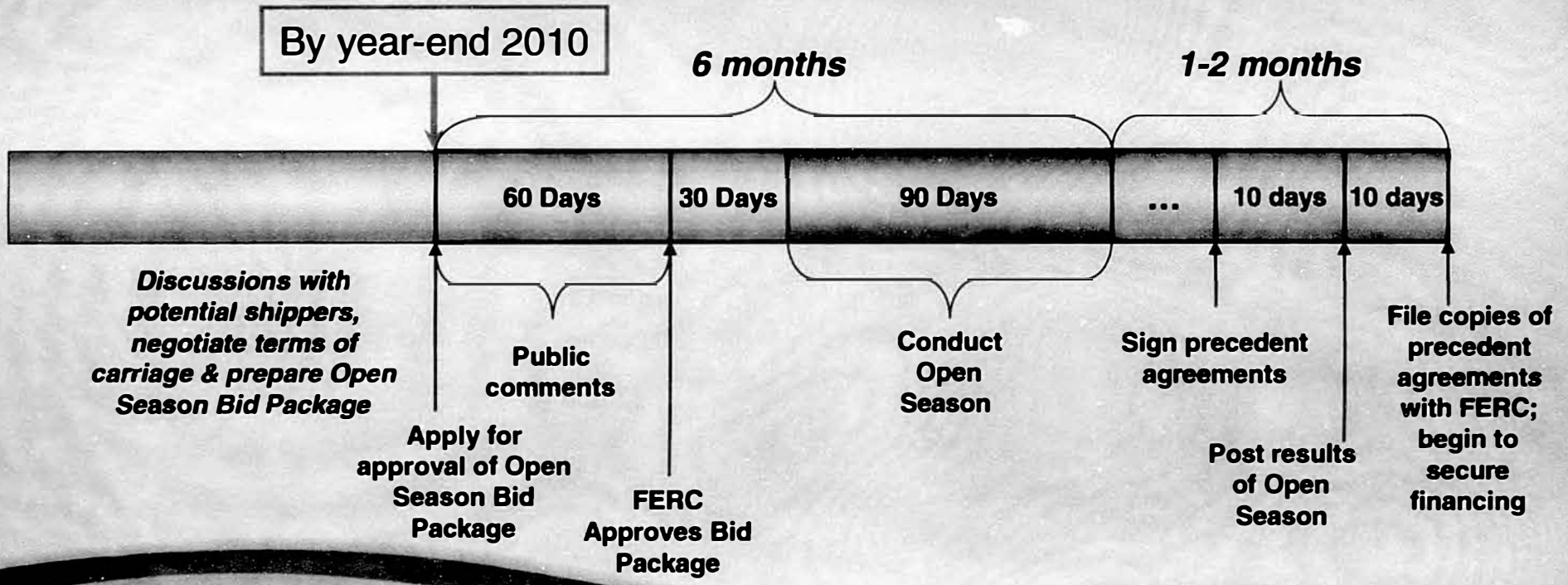
Open Season

- Formal process regulated by the FERC in the US (NEB in Canada)
- Pipeline company seeks customers to make long-term firm transportation commitments to the project
- These contracts obligate customer to pay costs whether or not they ship or even own gas
- These contracts give banks the necessary confidence to lend money to the pipeline company



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BP & ConocoPhillips:
Technical and Financial Strength

- Combined Pipeline experience
  - More than ***50,000 miles*** of oil & gas pipelines
- Solid technical capabilities
  - ***Proven leaders*** in pipeline technology development
  - Proven track record in the ***arctic***
  - Proven ability to deliver challenging ***world-class projects***
- Strong balance sheets
  - ***More than $300 billion*** of combined market capitalization
  - Provide ***financial strength*** to support construction

Denali Progress Continues . . .

- April 8 – Denali announced
- May 1 – Alaska summer field work permit applications filed
- May 27 – Alaska field crews mobilized
- May 31 – More than 20,000 person-hours worked
- June 12 – Denali president announced
- June 16 – FERC pre-filing request submitted
- June 19 - Tok field office opening
- June 25 – FERC approves pre-filing request

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passed out 4th Sp. Sess

July 10, 2008 Day 2

Thursday » July 10 » 2008

(referenced by Chair Huggins asking Rep Hawker to provide article for members)

canada.com
WHERE PERSPECTIVES CONNECT

Mackenzie Pipeline or Pipe Dream?

Grand plan for Alaskan gas mired in uncertainty

Ed Struzik
Edmonton Journal

Sunday, July 06, 2008

In the summer of 2001, Northwest Territories Finance Minister Joe Handley was sitting on the banks of the Mackenzie River betting $50 that a multibillion-dollar pipeline transporting Arctic gas up the 1,200-kilometre-long valley would be built before Alaska could figure a way of piping gas from its fields in Prudhoe Bay.

Like executives from Imperial Oil Ltd., which had a vision for the all-Canadian project, Handley was so confident of the prospects of success, he suggested 2007 was not an unrealistic date for completing the project, estimated at $4 billion.

That was then. This is now.

Now, after a term as the N.W.T. premier, Handley is taking time at his cabin outside Yellowknife to ponder a more lucrative future outside

of politics.

The way things have been going lately, he will not be collecting on his bet any time soon.

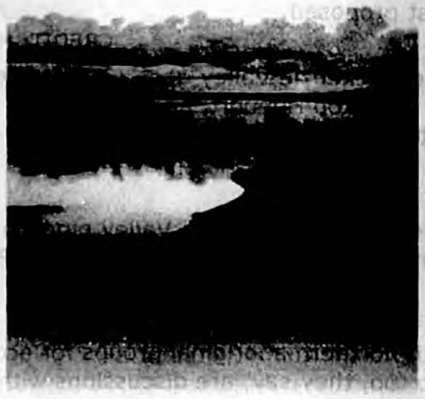
The Mackenzie Valley project is no longer projected to cost $4 billion, or the $7 billion it was pegged at when Imperial and the pipeline consortium made the first regulatory applications in 2004.

The price is now $16.2 billion and rising.

Today, no one is placing bets on when the gas will start flowing up the valley. The odds are on whether gas will ever flow along a Mackenzie Valley route, at all.

Long dismissed as too expensive, the rival plan to bring huge reserves of natural gas from Prudhoe Bay through the Yukon and northern British Columbia is gaining momentum.

If an Alaska Highway pipeline goes ahead anytime soon, it will delay or possibly kill the



CREDIT: Ed Struzik, Canwest News Service

Plans to build a pipeline along the MacKenzie Valley have been hit by rising costs, land claim disputes, court challenges and regulatory delays.

CREDIT: Leah Hennel, Calgary Herald

Inuvik, N.W.T., developed in the 1950s, lies in the heart of the Mackenzie Delta and would see an economic and population boom if the proposed pipeline is built.

Mackenzie Valley proposal.

If that happens, most of the more than $100 million invested so far in research, training, socio-economic agreements, negotiations and the regulatory review process will have been wasted.

CREDIT: Herald Archive, Reuters

Joe Handley, Former N.W.T. Premier

"This is a mess," said University of Alberta energy expert Andre Plourde.

"A nightmare," according to Doug Matthews, a Calgary-based energy consultant who was director of minerals, oil and gas for the N.W.T. when the pipeline was first proposed.

"Worst-case scenario? The Mackenzie Valley gas pipeline will not be built," said Rob Huebert, an Arctic expert and associate director of the Centre for Military and Strategic Studies at the University of Calgary.

Publicly, the companies behind the Mackenzie Valley pipeline consortium -- Imperial, Shell Canada, ConocoPhillips and the Aboriginal Pipeline Group (APG) -- are trying to be optimistic.

They say negotiations with northern aboriginal groups for access and benefits agreements are progressing nicely. So too, they say, are discussions with the federal government to get a fiscal framework for the project in place.

But the latest in a long series of setbacks is clearly testing their patience and, perhaps, their resolve.

Told last fall that the Joint Review Panel report looking into the environmental and socio-economic impacts of pipeline development would be ready sometime around now, the pipeline consortium recently learned, through unofficial channels, it won't be out until sometime in 2009. If that's the case, the earliest date gas would start flowing south is 2015.

"All I can say is this is not a welcome development," said Pius Rolheiser, spokesman for Imperial Oil.

Rolhelser, of course, is just doing his job being so polite. The reaction in Imperial's boardroom was undoubtedly a lot more salty.

In the eight years since the idea of a Mackenzie Valley pipeline was revived, virtually everything that could go wrong has gone wrong. Land claims disputes, aboriginal ownership issues, court challenges, rising costs, competing proposals and regulatory delays have slowed the process to a glacial pace.

So, too, has the failure of three different federal governments to take the bull by the horns and lay out in clear and certain terms where Ottawa stands on royalties, taxes, and infrastructure support for the project.

The fact that no government has resolved a long list of environmental and socio-economic issues hasn't made it easy for the Joint Review Panel either.

If built, the Mackenzie Valley Gas Project would carry about 1.9 billion cubic feet of gas per day. That's enough to satisfy most of the additional energy demands required by Alberta's booming oilsands operations in ten years.

Things were actually looking pretty positive for the project back in 2002 when Handley and others were suggesting the 2007 target date.

As promising as the start was, it would be another two years before the pipeline consortium made its application to the National Energy Board.

Doug Matthews says the first mistake was made by Imperial Oil when it failed to recognize the value the Aboriginal Pipeline Group would bring to the table if it were given an ownership stake in the project. Representing aboriginal groups from across the N.W.T., 30 northern aboriginal leaders formed APG in the hopes of maximizing ownership and benefits from the pipeline and to support greater independence and self-reliance among Mackenzie Valley residents.

"Given the fact that Imperial had been in the North since the 1920s, one would have thought they'd find a way of arranging for aboriginal equity in the project very quickly," Matthews said. "But that didn't happen. They insisted on the APG coming up with all the money required to give them a stake. It was a lot of money they didn't have. That really slowed things down."

In the meantime, continued uncertainty about the regulatory regime hampered the consortium's ability to get hundreds of permits needed to collect field data.

Overwhelmed and unable to resolve issues that were outside its control, the consortium threw in the towel in 2005, taking a six-month breather. As it turned out, it was time it couldn't afford.

Given the torrid pace of energy developments in northern Alberta, the cost of manpower, equipment and steel was quickly going through the roof. Forced to revise its cost estimates, the consortium had to go back to the National Energy Board in early 2007 with the new, eye-popping $16.2-billion price tag.

If all this weren't bad enough, Alaskan producers ConocoPhillips and BP PLC added a nightmarish subplot to the story last month by unveiling a $25-billion proposal to rival TransCanada Corp.'s plan to build a pipeline from the North Slope of the state to the lower 48 states.

Worse still for the Mackenzie pipeline interests, the announcement came on the heels of a report that suggested the Horn River area of northern British Columbia could hold up to 50 trillion cubic feet of natural gas. That's more gas than is now recoverable from the entire North Slope. It's also gas an Alaska pipeline could tap into.

If an Alaska Highway pipeline were built any time soon, most experts believe it would delay or kill the Mackenzie project. There simply isn't enough labour, steel and equipment to build two pipelines at the same time.

Joe Handley admits he's sorely disappointed with all that has transpired over the last seven years, putting much of the blame squarely on the federal government for not being more forthright on royalties, taxes and infrastructure.

"The fact is no government in Ottawa, especially a minority government like this one, wants to be seen giving any kind of break to Imperial or Exxon or any other energy company," he said.

CLOSE WINDOW

passed out @ 4th Spec. Session day 2
July 10 2008
— as back up for Sen. Therriault's questioning

Greenberg Traurig

Memorandum

TO: Don Shepler

FROM: Phillip C. Gildan

DATE: May 22, 2006

RE: Alaska Natural Gas Pipeline: Form of Ownership Entity
Limited Liability Company/Choice of Laws

The choice of utilizing a Limited Liability Company (LLC) as the form of ownership entity for the Alaska Natural Gas Pipeline appears to have been agreed to among the Producers and the State negotiating team. This memorandum does not discuss the conclusion to use the indirect ownership structure of an LLC, vis-à-vis a direct ownership structure of an undivided joint interest (UJI) form of project ownership. Instead, this memorandum addresses only the question of choice of law as to formation of the LLC, and implications to the State from such choice. (Note: this memorandum does not address tax implications from choice of formation law).

From the Gas Pipeline Contract Presentations by the State negotiating team, it has been represented that the Producers and the State negotiating team have agreed upon use of the Delaware Limited Liability Company Act, Delaware Code, Title 6, Subtitle II, Chapter 18 ("Delaware Act") in lieu of the Alaska Revised Limited Liability Company Act, AS Chapter 10.50 ("Alaska Act").

Why choose the Delaware Act to form an Alaska Pipeline LLC instead of using the Alaska Act? In broad general terms, the business community maintains the perception that Delaware Courts provide a more developed body of case law affecting business entities than other states, and accordingly provide greater certainty of prediction of outcome in the event of business disputes. The corollary of this perception holds that Delaware Chancery Court Judges have a greater expertise in resolution of business disputes than judges in other states, again leading to greater certainty of prediction of outcome. An undercurrent of the perception of Delaware superiority, from both a body of law and judiciary, is that decisions by Delaware courts on business entity issues more often favor management/majority owners over minority owners. These perceptions may or may not prove out on a case by case analysis, but help explain the prevalent practice in the corporate world to establish business entities in Delaware.

Significant Differences Between Acts/Implications to Alaska

The Delaware Act represents one end of the spectrum of LLC enabling acts. It provides less mandatory entity terms, rights and obligations in favor of flexibility of the parties to freely set their own terms, rights and obligations by contract. The Alaska Act falls in the middle of the

spectrum. It provides significant freedom for the parties to set their own terms, rights and obligations, but imposes certain minimum member protections that cannot be contracted away. These minimum member protections afforded by the Alaska Act can be incorporated into a Delaware Act LLC by negotiation between/among the member parties, but absent such negotiation, those member protections will not exist. Two of these protections will be discussed below.

1. Duty of Managing Members to Entity:

The Delaware Act imposes no duty on managing members to either the company or to the other members of the company. It permits the members to contractually eliminate or create duties for managing members, with the exception that the general contract law which implies a duty of good faith and fair dealing, which can not be eliminated. The statute states:

§ 18-1101. Construction and application of chapter and limited liability company agreement.

> (a) The rule that statutes in derogation of the common law are to be strictly construed shall have no application to this chapter.
> (b) It is the policy of this chapter to give the maximum effect to the principle of freedom of contract and to the enforceability of limited liability company agreements.
> (c) To the extent that, at law or in equity, a member or manager or other person has duties (including fiduciary duties) to a limited liability company or to another member or manager or to another person that is a party to or is otherwise bound by a limited liability company agreement, the member's or manager's or other person's duties may be expanded or restricted or eliminated by provisions in the limited liability company agreement; provided, that the limited liability company agreement may not eliminate the implied contractual covenant of good faith and fair dealing.

The Alaska Act, however imposes an express duty on managing members to act in the best interest of the company and adopts an ordinary prudent person standard of care. This duty is imposed as statutory protection of minority members (and other managing members) rights from a manager or managing member acting in its own self-interest which may be contrary to the business of the entity and the investment backed interests of the other members. It states:

AS 10.50.135. Duty of care.

> (a) A person who is a manager or a managing member of a limited liability company shall perform the duties of management in good faith, in a manner the person reasonably believes to be in the best interests of the company, and with the care, including reasonable inquiry, that an ordinarily prudent person in a like position would use under similar circumstances.

Without the duty of care that the Alaska Act provides, a manager or managing members controlling an entity could act in their own self interest and contrary to the interest of the entity's business, with only the implied covenant of good faith, which is a significantly lower standard of care and more difficult to apply if the parties have contractually elected not to impose a duty to the entity.

2. Indemnity of Managing Members.

The Delaware Act grants broad discretion to the members to indemnify and hold harmless any member from and against any claims and demands without limitation. It states:

§ 18-108. Indemnification.

> Subject to such standards and restrictions, if any, as are set forth in its limited liability company agreement, a limited liability company may, and shall have the power to, indemnify and hold harmless any member or manager or other person from and against any and all claims and demands whatsoever.

The Alaska Act also provides the right to indemnify members, but imposes specific limitations on the ability to indemnify members, with material procedural terms enumerated. It states (with emphasis added):

AS 10.50.148. Indemnification of managers, managing members, employees, and agents; insurance.

> (a) A limited liability company may indemnify a person who was, is, or is threatened to be made a party to a completed, pending, or threatened action or proceeding, whether civil, criminal, administrative, or investigative, other than an action by or in the right of the company, by reason of the fact that the person is or was a manager, managing member, employee, or agent of the company, or is or was serving at the request of the company as a manager, managing member, employee, or agent of another limited liability company, partnership, joint venture, trust, or other enterprise. Indemnification may include reimbursement of expenses, attorney fees, judgments, fines, and amounts paid in settlement actually and reasonably incurred by the person in connection with the action or proceeding ***if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the company, and, with respect to a criminal action or proceeding, the person had no reasonable cause to believe the conduct was unlawful.*** The termination of an action or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, does not create a presumption that the person did not act in good faith and in a manner which the person reasonably believed to be in or not

opposed to the best interests of the company, and, with respect to a criminal action or proceeding, the person had reasonable cause to believe that the conduct was unlawful.

(b) A limited liability company may indemnify a person who was, is, or is threatened to be made a party to a completed, pending, or threatened action by or in the right of the company to procure a judgment in its favor by reason of the fact that the person is or was a manager, managing member, employee, or agent of the company, or is or was serving at the request of the company as a manager, managing member, employee, or agent of another limited liability company, partnership, joint venture, trust, or other enterprise. Indemnification may include reimbursement for expenses and attorney fees actually and reasonably incurred by the person in connection with the defense or settlement of the action ***if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the company. Indemnification may not be made in respect of any claim, issue, or matter as to which the person has been adjudged to be liable for negligence or misconduct in the performance of the person's duty to the company except to the extent that the court in which the action was brought determines upon application that, despite the adjudication of liability, in view of all the circumstances of the case, the person is fairly and reasonably entitled to indemnity for expenses that the court considers proper.***

(c) To the extent that a manager, managing member, employee, or agent of a limited liability company has been successful on the merits or otherwise in defense of an action or proceeding referred to in (a) or (b) of this section, or in defense of a claim, issue, or matter in the action or proceeding, the manager, managing member, employee, or agent shall be indemnified against expenses and attorney fees actually and reasonably incurred in connection with the defense.

(d) ***Unless otherwise ordered by a court, indemnification under (a) or (b) of this section may only be made by a company upon a determination that indemnification of the manager, managing member, employee, or agent is proper in the circumstances because the manager, managing member, employee, or agent has met the applicable standard of conduct set out in (a) and (b) of this section. The determination shall be made by the members.***

Without these limitations on indemnification, indemnity protection could be contractually provided even in those instances where the indemnified party acted against the interests of the entity, had causal or contributing negligence, or committed a crime.

3. Dispute Resolution/Venue: Neither the Delaware Act nor the Alaska Act dictates any particular form of dispute resolution or the location of venue for any dispute resolution proceeding involving companies organized under their respective acts. Under both of the acts, the parties may seek resort to the courts of each respective state to resolve disputes, but such resort is not mandated.

As presented in the proposed Alaska Stranded Gas Fiscal Contract, the parties are proposing a structurally developed alternative dispute resolution process and procedures. Under the Contract, the substantive law of the State of Alaska applies with the Alaska Superior Court the venue for award judgment of matters arising out of the Contract. This may mitigate towards aligning the dispute resolution processes under the Contract and the LLC into a single integrated process, as disputes that might be anticipated to arise under the LLC or the Contract would likely implicate the other necessitating a global resolution under both.

From the Administration's presentations, however, it appears that the parties may be considering a traditional dispute resolution procedure for LLC related disputes, with venue in the Delaware Chancery Court, under the argument discussed above that Delaware judges would be more proficient in adjudicating claims arising from the Delaware LLC statute. Aside from an inconvenient forum arguments as the project and many of the participants will be located in Alaska, the likelihood of conflicting dispute resolution procedures and forums would likely eliminate any perceived superiority of Delaware Judges over Alaska Judges in interpreting Delaware LLC laws, particularly where the Delaware Act essentially waives statutory protections in lieu of contract agreement – such that no particular expertise in the Delaware Act may be necessary, but only expertise with contract interpretation in the context of pipeline project issues, in which the Alaska courts may have superior experience and proficiency.

passed out @ 4th Spec. Session day 2
July 10, 2008
- as back up for Sen. Therriault's questioning

TO: Senator Gene Therriault, Chair, Legislative Budget and Audit Committee
and
Representative Ralph Samuels, Vice-Chair, Legislative Budget and Audit Committee

FROM: Phillip C. Gildan

DATE: December 18, 2006

RE: Review of Draft Alaska Gas Pipeline Limited Liability Company Agreement

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As a companion to our review of the amendments to the Stranded Gas Fiscal Contract ("Fiscal Contract"), Greenberg Traurig has also been requested to provide a preliminary review of the draft Limited Liability Company Agreement ("LLC Agreement") of Alaska Gas Pipeline Company, LLC ("Pipeline Company"), set forth in Appendix L to the Interim Fiscal Interest Findings as filed by the Alaska Department of Revenue on the Department's website, under folder, The Alaska Gas Pipeline. We have been requested to provide an overview of material concerns, and not a line by line critique, and accordingly this memorandum does not purport to address every concern we may have with the terms or language of the LLC Agreement. We have divided our review into two segments; one addressing structural considerations, and one addressing more specific pipeline project considerations. This memorandum addresses the structural considerations while a companion memo by Donald Shepler addresses specific pipeline access and expansion considerations.

Our review of structural considerations has been further segregated into four general areas of concern with the LLC Agreement. These are:

1. Continuity/Coordination with the Fiscal Contract.
2. Effectiveness to Achieve State Goal of Construction of Gas Pipeline
3. Protection of State's Interest as Investor
4. Reflective of State's Obligations as Government Entity

1. Continuity/Coordination with the Fiscal Contract

The Fiscal Contract places primary responsibility for implementation of the Pipeline Project with the "*Mainline Entity*" or Pipeline Company, with the LLC Agreement intended to set forth the relationship among the Fiscal Contract "*Participants*" who will own the Pipeline Company and to set forth the terms and condition under which the Pipeline Company will be managed and operated. The primacy of the Pipeline Company's role as the vehicle for implementation of the Pipeline Project can be seen in Article 5.3 of the Fiscal Contract, which grants responsibility and control over the "*Qualified Project Plan*" to the Pipeline Company. The pivotal importance of the Pipeline Company under the Fiscal Contract is further

demonstrated by the requirement that the Pipeline Company execute the Fiscal Contract as a *Party*.

Given the considerable role to be played by the Pipeline Company under the terms of the Fiscal Contract, there should be substantial continuity between the terms of the Fiscal Contract and the terms of the LLC Agreement, and significant coordination of the Pipeline Company's activities with the requirements of the Fiscal Contract. Our initial review reveals a lack of the level of continuity and coordination that would be expected in an LLC Agreement.

For instance, the LLC Agreement does not mention the obligation of the Pipeline Company to implement the Project in accordance with the "*Qualified Project Plan*", nor does it mention the Pipeline Company's role in coordinating and updating the "*Qualified Project Plan*". The LLC Agreement Preliminary Statement setting forth the purpose of the Pipeline Company does not mention the Fiscal Contract pursuant to whose terms the Pipeline Company was formed, nor does it recite to the myriad obligations imposed on the Pipeline Company by the Fiscal Contract as the instrument of implementation of the Pipeline Project. Likewise in Section 2.4 of the LLC Agreement, *Purposes and Powers of the Company*, again no mention is made of the Fiscal Contract nor the Pipeline Company's obligations under the Fiscal Contract.

As another example of lack on continuity, and perhaps a minor point, the Fiscal Contract and the LLC Agreement utilize different definitions for the same terms. This may have been due to time constraints and was intended to be later reconciled, but such a lack of continuity can create later conflicts of interpretation and intent if not addressed in advance.

2. Effectiveness to Achieve State Goal of Construction of Gas Pipeline

As stated in the Department of Revenue's Fiscal Interest Finding ("FIF"), the primary goal and purpose of the Stranded Gas Development Act and the Fiscal Contract is to effect the construction of a Gas Pipeline so that Alaska's "vast reserves of natural gas resources" can be brought to the market place. As stated on page FIF-ES-2, "[w]ere the state to have natural gas development and a natural gas pipeline, the long run fiscal outlook would be improved with natural gas production beginning in 2016." Our initial review of the LLC Agreement reveals a decided lack of terms and conditions designed to assure such goal is achieved.

One obviously lacking term of the LLC Agreement is a requirement that the Producers obligate themselves to enter into Gas Transportation Agreements even if the Pipeline Company, which they will effectively control, has (i) obtained and accepted a FERC Certificate, (ii) obtained all Governmental Approvals for the Project, (iii) determined the Project Costs, (iv) approved a Finance Plan, (v) negotiated satisfactory construction agreements, and (vi) secured commitments for the GTP, Canadian Pipeline and Downstream Pipeline.

A second important lacking term is an imposition of an affirmative duty on the Managing Members to develop and promote the Gas Pipeline and to act in the best interests of the Pipeline Company, a standard obligation under most state corporate and limited liability company

statutes. To the contrary, utilizing the Delaware LLC statute which permits parties great freedom in negotiating LLC agreement terms, the LLC Agreement essentially waives these standard fiduciary duties and permits the Members to the Pipeline Company to act in their own interest even if contrary to the Pipeline Company's interest (except for an un-waivable generic implied contract duty to act in good faith).

A third important lack involves a combination of a Project milestone approval process that practically places veto power on moving forward with each of the Producers, an absence of a guiding Project timetable against which to judge progress, and no practical provisions for any Participant that wants to move forward with the Project notwithstanding the exercise of Project veto power by another Participant or a de facto veto through delay. Intended or not, the effect of these three factors provides too great an opportunity for one or more parties to use the LLC Agreement as a vehicle to block or indefinitely delay the construction of a Pipeline and preclude others from building a Pipeline. This reverse incentive structural impediment has a particularly negative impact given that the Pipeline Company will likely own or control Project rights, approvals and plans that would be time prohibitive to replicate if the State had to start from scratch if the Pipeline Company pulled the plug on the Project at any given point before placement in service of a Pipeline.

3. Protection of State's Interest as Investor

There have been very few public/private partnerships ("P3s") in which the public entity has participated in a project by investing with other private entities in a for-profit company that will own and construction the project. More often used P3 structures for project development are joint ventures where the public and private entities hold direct ownership interests in the project, where a private entity owns the project and the public entity contracts for distinct capacity in the project, where the public entity owns the project and the private entity designs, builds and operates the project or where the public entity owns the project and grants a long term concession to a private entity.

There are a number of reasons why the P3 investment model proposed here have not been prevalent elsewhere in the United States. Chief among them is the constitutional prohibition in most states against a government entity acquiring stock in a private for profit entity, a prohibition arising out of turn of the century railroad investment fraud scandals. This prohibition does not exist in Alaska. A second reason is the difficulty in matching the tax and financing attributes unique to non-taxable public entities and taxable private entities. A third reason are differing accounting and financial reporting requirements and differing procurement and public access requirements. As a result of these varying reasons, there are not many examples of the P3 investment model to pattern this project after.

The Pipeline Company LLC Agreement utilizes a standard form of limited liability company project agreement that works well between and among private entity investors. Were the State not to be an investor in the Pipeline Company, there would be few issues as to these standard LLC agreement terms. Since the State will be an investor, two particular areas of

concern arise with respect to standard LLC agreement terms. The LLC Agreement attempts to craft an accommodation for one of these areas; the area of post-initial project funding requests for additional capital contributions. The LLC Agreement does not attempt to accommodate the second area; tax related allocations and distributions.

Additional capital contributions raise unique issues for governmental entities. To protect the public treasury, a matrix of check and balances are imposed on public expenditures that are not imposed on private expenditures. This matrix requiring budgeting and appropriation procedures among other constitutional and statutory restrictions add significant time and uncertainty to the public expenditure process. The State should not be punished or disadvantaged by the terms of the LLC Agreement due to these public expenditure processes. The LLC Agreement provides a mechanism to address this, but that mechanism could be improved to better protect against the erosion of the State's investment.

Regarding tax related allocations and distributions, again this area directly affects the private investors as tax paying entities, but only circumstantially affects the State as a non-tax paying entity. However, company decisions which might maximize the tax benefits and overall investment return to the private investors may not benefit or maximize the overall investment return to the State, and could potentially negatively impact the State's return. The LLC Agreement addresses this issue by effectively excluding the State from participation or any say in Company tax allocation related decisions. To again avoid erosion of the State's investment and investment returns, the State should not be excluded from these Company decisions and a mechanism for balancing benefits should be crafted.

4. Reflective of State's Obligations as Government Entity

As a corollary to the previous discussion, there are other administrative requirements imposed on government entities that should be better accommodated in the LLC Agreement. In particular, the State should be given greater latitude in accessing the books and records of the Pipeline Company, in auditing the expenditures and revenues of the Pipeline Company, and in complying with public information requirements. Currently, the LLC Agreement provides limited rights in this regard, which limitations while relatively standard in private project agreements do not work well with a government co-investor, and impose additional Company compliance costs if the State chooses to exceed the limited access/review rights. At a minimum, the LLC Agreement should accommodate full and open access for the State without additional Company cost reimbursement.

Conclusion

As stated above, our scope was limited to the general overview of the LLC Agreement. We have identified major structural issues of concern, but have not undertaken a line by line review or a mark-up of the LLC Agreement to remedy the concerns raised and other lesser areas of concern. Again, this memorandum regarding structural concerns should be read in concert

with our memorandum addressing more specific Pipeline Project concerns in the LLC Agreement.

APEGGA The Association of Professional Engineers, Geologists and Geophysicists of Alberta

July 4, 2008

John Van der Put, P.Eng.
Vice President, Market Development
TransCanada Pipelines
450 - 1 Street SW
Calgary, Alberta, Canada
T2P 5H1

RE: Licensure of Alaska Professional Engineers in Alberta

Dear Sir:

This letter describes the criteria and process an Alaska licensed Professional Engineer (P.E.) must follow to become licensed to independently practice engineering in Alberta. We can advise as follows:

1) The Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA) is the regulatory body that regulates the practice of engineering and geosciences in Alberta. An individual wishing to become licensed to practice engineering in Alberta must apply to APEGGA.

2) An Alaska licensed P.E. must meet the same five licensure criteria as any other applicant to APEGGA. An Alaska licensed P.E. is not subjected to any different standards than a Canadian trained Engineer.

3) The five licensure criteria all applicants must meet are:

- Satisfactory Academics – an Alaska P.E. with an ABET degree who has passed the FE exam meets the academic requirement
- Experience Requirement – four years of engineering experience, at least one of which is 'equivalent North American' experience – experience in Alaska satisfies this
- Professional Practice Examination - an examination on Canadian and Albertan law, ethics and professionalism that all applicants must pass
- Good character and reputation
- English language competency

.../2

4) There is no requirement that an Alaska P.E. must be living in Alberta, or Canada, to obtain a license to practice engineering in Alberta. If the P.E. meets the five requirements noted above and is a Canadian citizen or Permanent Resident of Canada, he or she will be licensed as a Professional Engineer with APEGGA. If the P.E. meets the five requirements noted above and is not a Canadian citizen or Permanent Resident of Canada, he or she will be licensed as a Foreign Licensee in engineering.

5) The only difference between a Foreign Licensee and a Professional Engineer is that a Foreign Licensee is not eligible to vote or run for office in APEGGA affairs. Otherwise, the rights and obligations of both categories are the same.

6) The application process for an Alaska P.E. is straight forward. We obtain the same documentation from an Alaska P.E. as we do from a Canadian applicant, which includes a completed application form, transcripts, work experience record, and references. We also contact the Alaska State Board of Registration for Architects, Engineers, and Land Surveyors for confirmation of registration. If the P.E. has a NCEES record book, we will accept that in lieu of the work experience record and references.

We trust this provides you with the information required.

Sincerely,

Mark J. Tokarik, LL.B., P.Eng.
Director Registration
Edmonton Office

MJT/bls

APEGGA
The Association of Professional Engineers,
Geologists and Geophysicists of Alberta

July 4, 2008

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We trust this provides you with the information required.

Sincerely,

Mark J. Tokarik, LL.B., P.Eng.
Director Registration
Edmonton Office

MJT/bls

Wednesday, July 9, 2008 1:30 pm - 8:00 pm

Floor Sessions 11 am

ROUND TABLE PRESENTATION

"In-State Gas" 1:30 – 4:30 pm 3 HRS

3 HRS

Participants

- ANGDA
- AGPA
- Enstar
- Steve Porter
- Administration Folks

PRESENTATION

"Point Thomson" 6 – 8 pm

2 HRS

Participant

- Steve Porter

2 HRS

Thursday, July 10, 2008 - 8 AM - 8 PM

PRESENTATIONS

"Denali Project Presentation"	**8 – 10 am**	2 HRS
"TransCanada Presentation"	**10 am – 12:00 pm**	2 HRS
"TransCanada Workforce Issues"	**1:30 pm – 3:00 pm**	1.5 HRS
"ExxonMobil Presentation"	**3:00 – 5 pm**	2 HRS
"CBI MEDIATION GROUP"	**6:30 – 8:00 pm**	1.5 HRS

14 HRS

ROUND TABLE PRESENTATIONS

Friday, July 11, 2008 - Saturday, July 12, 2008

6.5 HRS
5.5 HRS

9 am – 5 pm – Friday
10 am – 5 pm - Saturday (possible to add evening sessions)
$-(1.5 \times 2)_{HRS}$

ECONOMIC ISSUES

"Project Economics and Risk"

"Oil and Gas Offtake"

Participants

- Shippers
    1. ExxonMobil
    2. BP
    3. ConocoPhillips
    4. Chevron
- Steve Porter
- Dan Dickinson
- Cathy Forester, AOGCC
- Administration Folks

Sunday, July 13, 2008 12:30 – 9 pm

5.5 HRS
2. HRS

12:30 – 6 pm
7 - 9 pm

LEGAL ISSUES

"AGIA License Legal Issues: Obligations, Limitations and Expectations"
"Canadian Issues – Including First Nations"

19.5

Participants

- Tam Cook
- Pat Galvin
- Tony Palmer
- Talis Colberg
- Steve Porter
- Dan Dickinson
- Keith Bergner, Lawson Lundell
- Loyola Keough, Bennett Jones

Monday, July 14, 2008 9am - 5pm 6.5 HRS

9 am – 5 pm

"FERC Issues"

Participants

- Bill Mogel
- Jeff Wright, FERC (via teleconference)
- Don Shepler
- Other Administration folks (Minesinger)

Tuesday, July 15, 2008

Committee and Floor Session Day

6.5