Alaska Highway Natural Gas Policy Council

Report to the Governor

Table of Contents
Volume II

I. Subcommittee meetings
   a) Alaska Hire/Buy/Build
      1. April 5, 2001*
      2. August 2, 2001, Agenda & Summary - page 6
   
   b) State Pipeline Ownership and Tax Structure
      1. April 5, 2001, Summary - page 14
      2. May 24, 2001, Agenda & Summary - page 16
      5. September 21, 2001, Agenda & Summary - page 34
      6. October 3, 2001, Agenda & Summary - page 40
      7. Selected handouts to the subcommittee
         a. Presentation from Jerry Hass, Cornell Business School - page 46
         b. SOA Division of Oil and Gas Pipeline Capacity chart - page 48
   
   c) Federal/International Action
      1. May 24, 2001, Summary - page 50
      2. August 2, 2001, Agenda & Summary - page 52
      4. September 25, 2001*
      5. Selected handouts to the subcommittee
         a. Memorandum from John Katz and Bob Loeffler - page 62
   
   d) Access for In-State Gas Use and Future Opportunities
      1. April 5, 2001, Summary - page 66
      2. May 24, 2001, Summary - page 67
      3. August 2, 2001, Agenda & Summary - page 69
      4. September 25, 2001, Agenda & Summary - page 73
      5. October 16, 2001, Agenda* - page 76
      6. Selected handouts to the subcommittee
         a. SOA Div. of Oil and Gas In-State Demand Study RFP - page 78
         b. SOA Div. of Oil and Gas Value Study RFP - page 82

* Due to technical difficulties with recording equipment, some meeting summaries are not available.
c. SOA Div. of Oil and Gas RIK handout - page 86
d. Regulatory Commission of Alaska memorandum - page 88
e) Environmental Considerations
   1. April 5, 2001, Summary - page 94
   2. August 2, 2001, Agenda & Summary - page 96
   3. September 25, 2001, Agenda* - page 100
   4. Selected handouts to the subcommittee
      a. SOA Dept. of Fish and Game presentation - page 102
      b. SOA Dept. of Environmental Conservation presentation - page 106

II. Select presentations given at meetings of the Alaska Highway Natural Gas Policy Council
   a) March 1, 2001, Anchorage
      1. Presentation from Pat Pourchot, Commissioner, Dept. of Natural Resources - page 113 (this presentation was given at all subsequent public hearings)
   b) March 23, 2001, Anchorage
      1. North American Natural Gas Pipeline Group presentation - page 123
      2. Morrison and Foerster presentation - page 130
      3. SOA Joint Pipeline Office presentation - page 145
      4. SOA Division of Oil and Gas presentation - page 151
   c) April 5, 2001, Anchorage
      1. Foothills Pipe Lines Ltd. presentation - page 172
      2. Alaska North Slope LNG Project presentation - page 177
      3. Yukon Pacific Corporation presentation - page 193
   d) April 18, 2001, Fairbanks
      1. Ken Thompson presentation on “the Hub” concept - page 222
   e) May 17, 2001, Kenai
      1. Cook Inlet Pipeline Terminus Group presentation - page 230
   f) May 24, 2001, Anchorage
      1. Williams Pipelines presentation - page 242
   g) August 23, 2001, Valdez
      1. Alaska GTL Group presentation - page 254
      2. BP GTL presentation - page 259
      3. Alaska Gasline Port Authority presentation - page 267
   h) September 25, 2001, Anchorage
      1. Alaska Natural Gas Producers Pipeline Team presentation - page 274
      2. Texas General Land Office presentation - page 282
      3. Williams Pipelines presentation - page 285

III. Public Testimony

Note to Readers: This is Volume II of the Alaska Highway Natural Gas Policy Council Report to the Governor. Volume I includes council background materials, subcommittee reports, and summaries of the council's public hearings. For copies of Volume I, please contact the Governor's Office at (907) 269-7450.
Section I:

Subcommittee Meetings
Alaska Hire/Buy/Build Subcommittee

Meeting Summaries
Alaska Highway Natural Gas Policy Council
Alaska Hire/Buy/Build Subcommittee

AGENDA
August 2, 2001, 10:15 a.m. to 12:15 p.m.
Baranof Hotel, Juneau

I. Introduction by Mike Navarre, Subcommittee Chair

II. BP/ARCO Charter Commitments, Larry Ostrovsky, Department of Law

III. Update on RFP for Socio-economic Study, Rudy Tsukada, Department of Community and Economic Development

IV. Questions and Discussion
Chairman Mike Navarre convened the meeting.

Navarre asked the Department of Law to explain concepts in the BP-ARCO charter agreement. Larry Ostrovsky, from the department, said that some historical background on Alaska-hire efforts would be helpful in putting the charter in context.

In 1986 the Legislature enacted a law giving preference to local residents on public works projects in “economically distressed zones.” The Commissioner of Labor was required to make a finding that a distressed zone had less than 90 percent of the average U.S. per capita income. A lawsuit arose when a contractor on the Red Dog port and road project (funded by Alaska Industrial Development and Export Authority, a State agency) was required, under the law, to hire 50 percent of craft workers from local communities. The State Supreme Court found for the contractor, invalidating the State law, on the grounds that rights of individuals (Anchorage workers, for example, seeking jobs on the project) outweighed the benefit of preferences given to local workers in distressed areas.

The case was one of a series of setbacks the State has suffered in its attempts to enact Alaska-hire legislation, Ostrovsky explained. The first of these was Hicklin v. Orbeck, a U.S. Supreme Court case invalidating a law enacted in the early 1970s giving Alaska workers preference as a condition of a State pipeline right-of-way lease.

The BP-ARCO charter, on the other hand, was a voluntary agreement to use its best efforts to hire Alaskans and to build facilities in the state. It was built on similar language in the Northstar legislation. Similar language also appears in the State Stranded Gas Act, which allows negotiation of special fiscal terms for developers of a liquefied natural gas project.

The most significant part of the agreement is the accountability section. BP is required to submit a quarterly report and an annual report, detailing its efforts and efforts by its contractors to hire and train Alaska workers. These reports are required and give the Legislature and the public information to monitor the company's efforts, Ostrovsky said.

Navarre asked if Phillips Alaska Inc., which acquired ARCO's Alaska assets, had also signed the agreement, and if there was enforceability.

Ostrovsky said the State could probably enforce the reporting requirement and local advertising, but he said the “best efforts” concept would be difficult to enforce. Phillips has also signed the charter.

Rudy Tsukada briefed the committee on efforts by the Department of Community and Economic Development to develop a socio-economic study of possible impacts of gas pipeline construction on local communities. The $50,000 appropriated is insufficient for the full study, Tsukada said, so the department's efforts have been to identify the issues that should be considered in a socio-economic study.
Peg Tileston, a committee member, suggested that the department talk with people who were involved in assessing socio-economic impacts of TAPS construction. Many are still around, she said. Also, the effect on municipal governments should be considered. Many local government workers were lured away by high wages on the pipeline, and it was difficult for municipalities to compete.

Tsukada said that would be considered, although there are major differences in the projects and the types of impacts, and the state of community infrastructure from the 1970s compared with the present. The study should also address the indirect effects, such as effects of taking workers out of communities.

Tileston commented that the Joint Pipeline Office is already affected by recruiting difficulties.

Mike O'Connor, a Council member, commented that employment statistics indicate the workforce is already tight.

Tsukada agreed that unemployment in Alaska is the lowest it has been in years. Also, for the first 400 miles the pipeline would not come near any communities of size. Only two or three communities are likely to be affected.

Tileston asked if consideration is being given for training of specialized skills.

Tsukada commented that we may be training our best workers for jobs that will not be there in the future. There are differences in these kind of direct and indirect impacts.

Tileston said that with limited funds, perhaps the most important thing is to ensure the right questions get asked.

Bill Corbus, a Council member, recalled when the TAPS construction project caused a 25 percent increase in the hourly wage of workers in the electrical field, and shortages appeared all over the state. For the electric utility industry, this resulted in rate increases. This is an example of an indirect adverse effect that has to be considered.

Tsukada commented that the same thing happened during the Exxon Valdez oilspill cleanup. Dishwashers commanded high wages, and if the price of pizza went from $10 to $20, who cared? If costs go up, wages go up, but it's difficult for governments who can't quickly get the funds to pay wage increases.

Mike O'Connor commented that the price of labor has gone up in the last six to 12 months.

A comment was made that some contractors and suppliers in the TAPS era experienced long delays in getting paid and were experiencing sharp wage increases at the same time. How widespread the problem was isn't known, but it was worth noting.

Mike O'Connor said there is more infrastructure generally now than in 1975. Most oil service companies get paid in 30 days if they do their paperwork properly, he said. The producers are now pretty good at paying on time. For a contractor, meeting payroll on time is important. "If you don't pay on Friday, some of your people may not show up on Monday," he said.
Alaska Highway Natural Gas Policy Council
Alaska Hire/Buy/Build Subcommittee

AGENDA
September 25, 2001, 9:00 a.m. to 12:00 noon
Anchorage Hilton Hotel, Cook Inlet Boardroom

I. Call to Order and Introduction, Mike Navarre, Chair

II. History of Alaska Hire Policy, Toby Steinberger, Department of Law

III. Update on Socio-Economic Study, Rudy Tsukada, Department of Community and Economic Development

IV. Alaska Human Resources Investment Council, Jim Sanders, Executive Director

V. Discussion
Chairman Mike Navarre convened the meeting.

Toby Steinberger, of the Department of Law, briefed the committee on the history of local-hire cases in the state, beginning with the U.S. Supreme Court 1978 decision in Hicklin v. Orbeck and ending with the case involving the Red Dog Mine. The state lost every time.

Navarre commented that the courts wouldn’t tell the state how to craft an acceptable law, but just struck down the laws. He commented to Commissioner Flanagan, who was participating by teleconference, that it would be important to get the producers to agree to the same language that is in the BP-ARCO charter agreement.

Flanagan agreed that this should be a minimum.

Rudy Tsukada, of the State Department of Community and Economic Development, updated the committee on the planned socio-economic study.

The impact of the gas pipeline will be considerably smaller than TAPS construction in the 1970s. Most construction will be during the winter, and will involve about 3,500 workers at peak. Even with this there are questions as to whether Alaska has the labor supply to handle the project. There’s also talk of an Alaska-Canada cross-border labor agreement. The State is also getting socio-economic data from construction of the Alliance Pipeline, a large diameter gas pipeline built in recent years. A socio-economic study must also consider the “gravity effect” of the immigration caused by the project.

Tsukada presented the producers’ labor projections in graph form. Discussion and questions followed, comparing the impacts of the northern and southern routes shown on the graphs. The indirect job effects were about the same for both the northern and southern route. In both cases the project causes more indirect rather than direct jobs.

One of the biggest problems the TAPS project created, he said, was the wage spike caused through the economy. The Fairbanks Police Department, for example, experienced massive turnover and wage increases. This was a more serious problem than an escalation in living costs. Statistics also showed that property crimes in Fairbanks shot up.

A question was raised over the maturing of the state’s economy since the 1970s, and whether there will still be wage spikes.

Tsukada said the department does not expect the same kind of wage spikes in the economy this time around. Aside from Fairbanks and the North Star Borough, there will be very little local property tax benefit from the project. Tok, for example, is not enthused about incorporating a municipality or pushing for property taxes.
A series of charts were presented to the committee depicting community impacts on Fairbanks from TAPS construction. One spike that was noted was an increase in juvenile problems, caused partly by so many parents working, leaving children with more unsupervised time. However, the expected impacts on Fairbanks schools never materialized. Most TAPS workers were temporary and didn’t bring their families. That may or may not be the case now, however. It’s an uncertainty that can’t be modeled. Also, the school situation is now better. Delta has spare school capacity because of the closing of Fort Greely. Tok also has some spare capacity.

Costs of living are only calculated officially in Anchorage, and 1974 and 1975 did show a spike. That may not recur in Anchorage now because the local economy is larger. It may be a different case in Fairbanks, however. For local utilities, the communities are larger now. The impacts can be absorbed easier.

Surveys of Fairbanks residents during TAPS construction showed a general sense of loss of quality of living, because of increased crowding and higher living costs. Even with more and better-paying jobs people felt they were “worse off,” partly because with living costs up, they had to work more.

Considerations in the socio-economic issue include whether we would just train Alaskans who would, when the project is complete, leave Alaska to seek jobs in their new fields elsewhere. Perhaps it would be better to let the pipeline builders come from out-of-state and leave when the project is finished.

Tsukada showed a population growth chart which illustrated that each rise in the economic cycle brought in population, but the corresponding dip did not result in a loss of population of the same magnitude. The net effect is a gradual permanent increase in population.

He said that once the department gets information on other pipeline projects, it will be included with an analysis of data submitted by the producers.

Chairman Navarre commented that the producers’ analysis does not include indirect effects, such as employment related to processing or manufacturing with gas in the state.

A comment was made that the State should not “trade away” its property tax capacity, as is contemplated in the State Stranded Gas Act.

Navarre commented that the State must take care in asking what a community “needs” to prepare for impacts. “I can tell you what every community will say, that we need this (or that).”

Jim Sanders, of the Alaska Human Resources Investment Council (AHRIC), described AHRIC’s mission as overseeing policy development in workforce training. It is a private/public advisory body, mostly private, that advises on policy but doesn’t administer.

AHRIC sees a developing crisis in the state’s workforce, shortages due to retirements and lack of replacements not only in the skilled crafts but many professions as well, such as teachers. The problem is serious in the skilled trades, such as oil and construction workers, where there is a big “bulge” of the working population about to retire with not enough younger workers coming in behind them.
The training need will be felt in other areas as well. In some rural communities fishing is no longer seen as a viable opportunity for a family's major income. People are looking for alternate employment.

Sanders said AHRIC has prepared a white paper on the workforce issue, which he presented to the committee. It includes a number of recommendations. (Note: The white paper is included in Volume I of this report.)

Vocational training is seen as a key, and this past summer AHRIC solicited proposals for regional training centers and received 13 responses. Two are now before the state's congressional delegation and are likely to get some support.

Jim Sampson, co-chair of the Gas Policy Council, commented that there is a terrible shortage of skilled labor both in the U.S. and Canada. He commented, however, that the University of Alaska will never train a pipeline welder, an operating engineer or a four-year journeyman electrician. The university is just not capable of training such skills, and the same might be said of regional training centers. Union apprenticeship programs should be part of this mix because the unions know the standards to which they must train.

Sanders went on to say that to develop a trained workforce ready to start pipeline construction in 2006 or 2007, people have to be moved into training now. There is also no guarantee that Alaska pipeline companies (which understand local labor) will get the construction jobs, either.
State Pipeline Ownership and Tax Structure Subcommittee
Meeting Summaries
Alaska Highway Natural Gas Policy Council  
State Pipeline Ownership and Tax Structure Subcommittee  

April 5, 2001 Meeting Summary, Sheraton Hotel, Anchorage

The subcommittee will explore the following topics in coming months so as to reach a consensus on the final recommendations this autumn:

* Costs and benefits of the State taking delivery of its royalty gas share vs. taking royalty payments from producers.

* State promotion and facilitation of project financing - State ownership.

* Review other states’ policies for best practices of taking royalty share and ownership.

* Evaluation of State tax structure.

On April 5 the committee discussed its initial work program. Some topics were later transferred to other committees.

1. The best uses for the State's royalty share of gas. Among these are taking the royalty share in cash paid by the producers for use in the State General Fund or the Permanent Fund. The subcommittee will also examine the history of various royalty ideas.

Use by communities for fuel and funding a spur pipeline to Valdez or a Cook Inlet LNG plant were topics turned over to the In-State Gas Use and Future Opportunities Subcommittee.

2. The best way to establish the value of the State’s royalty share on a netback basis prior to construction and measure a fair return to the State.

3. Cost and benefits of the State taking delivery of the royalty share in-kind.

4. Pluses and minuses of State ownership of a natural gas pipeline. On the “plus” side there is the issue that partial State ownership might encourage construction of a pipeline; also the State is able to provide a portion of tax exempt financing, thus lowering transportation costs and increasing price at the wellhead.

The “minus” side is that State ownership could mean the State would be less likely to seek lower transportation tariffs before the Regulatory Commission of Alaska; State ownership also means no state or local property tax or income tax revenue.

5. Before any State ownership is discussed several issues will have to be resolved. These include: whether or not the State guarantees the pipeline debt; if the State can force gas owners to guarantee debt or enter into binding “take or pay” contracts; encouraging a third party such as Foothills to construct the pipeline and looking at the role of a port authority.
6. A review of other State policies for disposing of royalty gas.

7. Evaluation of the State's oil and gas tax structure that includes looking at the current structure and considering if it is equitable and how much it maximizes the well being of the state's citizens over the long run and whether it is a simple structure.

The staff also requested that the subcommittee look at the economics of taking royalty gas in-kind or in-value, and its option of switching between taking it either in-kind or in-value with proper notice.

The subcommittee decided that tax and royalty policy is a sizeable item that needs more scrutiny with the help of the Departments of Natural Resources and Revenue. The subcommittee wants experts to provide more information about this topic and explain what is good about the current structure and if it needs any changes.

The subcommittee will proceed on the assumption that current State statutes are adequate to assure a fair return to the State. The group wants staff to look into what other states have done and arrive at a document that outlines the best practices of other states.

There was some discussion about comparing fixed royalty and net profits participation from a gas pipeline project. Cambridge Energy Associates, a consulting group under contract to the State, has done work on this issue and might be able to help with a best practices paper.

Another question that needs further study is how the State would finance possible State ownership of a pipeline. The topic is important given Senate Bill 158 (approved by the Legislature in May) which asks the Department of Revenue to look into this matter. However, the department's study won't be complete until January 2002, and the Gas Policy Council must finish its work by November 2001.

The subcommittee also asked the Department of Natural Resources for a presentation on how much of the royalty shares are committed and for how long, and to tell the group about the royalty system that is in place now.
Alaska Highway Natural Gas Policy Council
State Pipeline Ownership and Tax Structure Subcommittee

AGENDA
May 24, 2001, 12:30 p.m. to 4:00 p.m.

I. Presentation on Issues related to State Ownership of Gas Pipeline, Roger Marks, Economist, Alaska Department of Revenue

II. Discussion of other topics on Work Plan to be addressed by State Ownership Subcommittee

III. Other

IV. Adjourn
Bill Corbus chaired a meeting of the State Ownership Subcommittee of the Governor's Gas Policy Council on May 24, 2001. This subcommittee was formerly named the Royalty Share Subcommittee but now its focus has shifted from consideration of issues related to the State’s royalty share of gas to looking at issues related to the State’s ownership of any future gas pipeline. The major item on the May 24 agenda was a presentation by Roger Marks, an economist with the Alaska Department of Revenue. Members of the subcommittee present at this meeting were: Mike Navarre, Mike O’Connor, Ron Duncan, Frank Brown, Ed Rasmuson and Bill Corbus.

Subcommittee chairman Bill Corbus noted that some issues are not under this group’s domain anymore, and those included disposing of the State’s royalty gas. However, this subcommittee has to evaluate the State’s oil and gas structure and thus it needs to be better educated on some of these issues. Corbus suggested more conference calls with experts and subcommittee members to discuss some of these issues.

Roger Marks apprised the committee about HB 158 recently passed by the Legislature, that authorizes the Department of Revenue (DOR) to conduct a study about possible State ownership of a gas pipeline. That study has a completion deadline of January 31, 2002. The study mandated by HB 158 will look at possible sources of financing for a State-owned pipeline, which include the general fund, the Permanent Fund and the earnings reserve fund of the Permanent Fund. It will also look at the mechanism of financing of ownership or guaranteeing debt, and will also consider how much the State should finance, such as just 10 percent of the cost or more.

Another aspect that the DOR study will consider is how the gas pipeline would be currently regulated in Alaska, as a contract carrier rather than a common carrier. It is possible that the State can finance extra capacity and then charge a higher rate at peak demand.

Also to be considered are the effects of the State’s ownership on cash flow and its relationship to the financing mechanism that is chosen. If an entity such as a port authority issues debt there has to be a determination about the authority’s capacity to issue that debt. There is also the issue of the State’s credit worthiness, the effect on the State budget and the Permanent Fund, and especially the effect on the dividend program. Another issue is that of portfolio diversification of the Permanent Fund, especially since the State is already into oil and gas and might be “underdiversifying” if it invests in a pipeline.

Marks noted that one positive aspect of a political subdivision owning the pipeline is that it may receive some relief from federal taxes on that portion in which it has an equity interest. However the downside is a higher interest rate with 100 percent of the debt of that portion financed. And even with part ownership of the pipeline, private firms might see the public role as one that causes inefficiencies.

The DOR study for the Legislature will also look into issues such as stringent environmental regula-
tion and how the State as owner will deal with an environmental problem with a pipeline, and whether as an owner it might be inclined to have less oversight. The study will also address the issue of high tariffs to get more money versus low tariffs (to encourage a higher wellhead price); and it will also consider the Regulatory Commission of Alaska's role in regulating the in-state tariff and the possibility of a misalignment of State interests in getting a proper tariff structure established.

Several subcommittee members expressed their concern that the State's study will not be complete until January 2002, and that the Council has to get its work product complete by November. Bill Corbus said the subcommittee might have contractors on the DOR study available for briefing. There was also discussion about the legal right of the State to own a pipeline. According to Marks the State has no legal right to ownership. There was also discussion about what other states who have equity interest in similar projects do about conflicting interest, with environmental oversight as an owner and how they might deal with regulatory issues. The subcommittee also wants to look at complete ownership of the pipeline compared with a minority share.

Roger Marks mentioned that the gas pipeline will be regulated in different ways. The part that might deliver gas in-state would be under the purview of the Regulatory Commission of Alaska (RCA). Gas transmitted through Alaska, and through sections of the pipeline in the lower 48, are regulated by the Federal Energy Regulatory Commission. Sections of the pipeline that go through Canada would be regulated by Canadian agencies.

The main regulation will be on the tariff side on the gas moved and sold. The subcommittee expressed an interest in having staff from the RCA present an overview of TAPS regulation and any complication a new line might encounter with a structure of oversight by FERC, Canadian agencies and the State's RCA.

The other portion of Mark's presentation concerned the fiscal system and its relationship to State ownership of a pipeline. The current fiscal system for gas was adapted from the fiscal system established for oil and is not a good one because gas is a lower value resource.

Marks discussed two qualities for an ideal system:

1) Progressivity, meaning the State share of revenues goes up as the industry's profits go up, and vice versa
2) "Back-end loaded," that is the State taking its revenues later rather than earlier, and thus helping the project in its early years when major capital investments must be made.

In discussing the State's oil and gas fiscal system, Marks outlined the different types of tax structures in the State that include property tax, corporate income tax, severance tax and royalty. He noted that most of these taxes are regressive and that the State has encountered problems in the past. Marks also discussed the economic limit factor for current oil development in the state and how that might pose a problem for a gas project.

He also talked about the view that there is instability in the State's fiscal system, in that the Legislature can change taxes at any time, and he cited the passage of the Stranded Gas Act in 1998, which provided a way of putting the fiscal system for a gas project on a contractual basis rather than a statutory one. However, the act expired in June and the current Legislature did not pass a new bill.
extending the act.

As for royalty, the State ownership share is 12.5 percent, that is the producers give the State 12.5 percent (or 1/8) of what they produce, based on the “wellhead” value of the oil and gas at the producing field.

Some possible modifications to the current fiscal system that can be considered to make it more stable include looking at accelerated federal depreciation, investment tax credit (state or federal), a tax holiday or a deferral on state property tax.
Alaska Highway Natural Gas Policy Council
State Pipeline Ownership and Tax Structure Subcommittee

AGENDA
July 11, 2001, 10:00 a.m. to 12:00 noon
Governor's Office Anchorage Conference Room

I. Welcome and brief overview of meeting purpose, Bill Corbus, Chair

II. Presentation by Bob Storer, Executive Director of the Permanent Fund

III. Presentation by Wil Condon, Commissioner of Revenue

IV. Presentation by Bob Poe, Executive Director of AIDEA

V. Questions and Discussion

VI. Public Comments and Questions

VII. Agenda items for next meeting

VIII. Other, Adjourn

* The Department of Law will also be on hand to answer questions.
Bill Corbus, chairman, called the committee to order. Committee members present included Ed Rasmuson, Ron Duncan and Mike O’Connor. Council member Jack Roderick attended. Cabinet members present included Commissioner Wil Condon and Commissioner Debbie Sedwick. Others present, invited to participate, included Bob Storer, Permanent Fund executive director; Bob Poe, director of the Alaska Industrial Development and Export Authority (AIDEA); Dave Germer, Director of Development for AIDEA, and Dan Fauske, director of Alaska Housing Finance Corp.

Bob Storer, speaking first, gave a short dissertation on how the Permanent Fund is managed, and the ‘prudent man’ rule used in fund management. Storer explained the statutory guidelines for the trustees and consideration of risk, that the Fund is not allowed to invest over 55 percent of its corpus in equities, and that it is also limited to investment grade debt. The trustees are allowed to invest 5 percent outside some of these guidelines, but the ‘prudent man’ rule still applies.

Storer responded to several questions presented earlier by the committee. He said that if the Fund invested in a gas project, an appropriation would be required, and legislative direction.

One alternative would be appropriation of the Earnings Reserve, now estimated to have a worth of $4 billion after the dividend payout. An authorization would still be needed.

The Fund is always looking for investment possibilities in Alaska. So far these have been in real estate, as well as in providing funds to Alaska banks through purchases of Certificates of Deposit.

The answer in investing in Alaska is always a matrix. In a gas project, it would depend on how the investment and equity is structured. “If you can tell me how debt and equity will be structured, I can provide answers. We must look at rate of return, liquidity (i.e. can the investment easily be liquidated), risk and how the investment fits the policy of diversification of the Fund. Ten percent of the Fund is now in relatively illiquid real estate and 55 percent in equities. Of the equity, part is in the U.S., part international, a small portion in non-U.S. dollar securities, and the rest of the debt in fixed-income.

Different levels of investment, and the split between equity and debt, would fit the Fund’s guidelines in different ways. A consideration also is that if the investment produced significant income (earnings from transmission of gas), it would affect the dividend, which is based on cash income by the Fund.

A question was asked about the Fund’s policy on board representation.

Storer replied that since the present guidelines restrict ownership to no more than 5 percent of a entity with publicly traded stock, representation on the board isn’t an issue. In a privately-held equity (real estate, for example) the potential of board representation does exist. A trustee or senior staff could serve on a board, but the question is what expertise we could bring. Another issue is that serving on a board of a large gas project in Alaska could “cross the line” into involvement in state policy, which the trustees have been careful to avoid.
In response to a question, Storer said the Fund’s largest percentage holding in a publicly-traded equity is 3 percent of the domestic equity of General Electric.

Another alternative is for the Legislature to appropriate the Earnings Reserve to another State entity, which would then make the investment. Different guidelines would apply.

Revenue Commissioner Wil Condon, asked to speak following Storer, said that if the gas project investment were brought before the Fund’s trustees today, under present statutes and legislative policy declaration, it is not something the board would likely invest in.

If the Fund was to invest in a gas project, legislative direction would clearly be needed, Condon said. It could be done in two ways: First, the Legislature could change the policies under which the Fund is operated. Second, the Legislature could appropriate the Earnings Reserve to another corporation. The Earnings Reserve is separate from the principle of the fund, which under the constitution cannot be appropriated. Either of these approaches would require legislative action.

Jack Roderick, a committee member, observed that if the State must take action in the next six months, there would be no time for legislative action since the Legislature convenes in January.

Condon answered questions addressed to the Department of Revenue by the committee, dealing with whether other State funds could be used to finance an equity investment in a gas project. He replied there are no funds in the General Fund available for the investment, as these must be used to support State programs. The Constitutional Budget Reserve (CBR), which now has about $3 billion, could be used, but it would require a super-majority vote of the Legislature to make the appropriation.

The CBR is now used as a cash reserve to offset volatility in oil prices. The department projects long-term average oil prices in a range of $16 to $18 per barrel, but there are times when prices dip, such as in 1999. A price decline like occurred in 1999 can negatively affect State revenues by as much as $500 million to $600 million.

If the investment is debt-financed, an assumption is that the State would make the investment through an independent authority. A special gas pipeline authority was created in the late 1970s for the gas pipeline previously proposed, but it is no longer on the books.

Condon said the department’s conclusion is that under current federal law the bonds issued by such an authority would not be tax-exempt. IRS rules do allow tax-exempt industrial development type financing, but the State is limited to a set amount every year. A large issuance of tax-exempt debt for a gas project could consume this capacity, affecting other state entities like AIDEA and AHFC which rely on tax-exempt financing for some projects.

There is always the possibility that congressional action could expand the pool of tax-exempt debt available to Alaska. Twenty two years ago, when the ANGTS project was active, Congress was hostile to this kind of liberalization even with an “energy crises.” It is possible that congressional sentiment may have softened, to the point that use of tax-exempt financing to expedite delivery of Arctic gas might be considered more favorably.
There is also the question of a State guarantee of debt, Condon said. The present avenue for state-guaranteed debt is through general obligation bonds, which have not been issued in Alaska for some time. The department estimates that about $600 million to $800 million in tax-exempt general obligation debt could be issued without negatively affecting the State's credit rating, assuming the Legislature approved. However, Condon said this would require a real "sales job" with the rating agencies, which will include assurances that Alaska will eventually restructure its finances in a responsible way (i.e. deal with the fiscal gap).

The question of State ownership of a portion of a gas project also raises the impact on municipalities, since State property is exempt from local tax. The issue of an in-lieu tax payment to local governments is a policy question, because there is no legal obligation.

Dan Fauske commented that only the portion of the project owned by the State is exempt from local tax, not the entire project.

Ed Rasmuson asked if the debt needed a guarantee.

Condon replied that when the City of Valdez issued tax-exempt bonds to finance part of the TAPS marine terminal, the bonds were guaranteed by the TAPS owners involved. Through the early 1980s, pipelines were financed on the "balance sheet" of the owner companies (i.e. the debt was guaranteed) but since then some large undertakings have been project financed (i.e. no guarantee; only project revenues are available to retire debt).

Ed Rasmuson commented that 40 percent equity, 60 percent debt seems a good approach for a State investment, and that large underwriters might be attracted to such a venture. The interest rate might be higher if it were project financed (i.e. no guarantee), but these costs can be put into the rate base (i.e. the throughput tariff).

Rasmuson said he would like to have information on the customary practices for large project financing over the last 20 years.

Wil Condon commented that investors have been willing to buy bonds for project-financed undertakings. One of the recent large LNG projects in Qatar was project-financed, although one owner, Mobil, wound up having to make a guarantee for its part of the project.

Dan Fauske commented that the "sales job" to rating agencies will be sizeable. There could be problems in getting a bond rating if the State itself isn't seen to be balancing its books.

Wil Condon said that if revenue bonds are used, the investors will look to the project itself.

Ed Rasmuson said revenue bonds appeared to be the way to go. The costs would be factored into the rate structure.

Ron Duncan said that Williams Pipelines had talked to the Council about its interest in putting together a syndicate consisting of companies other than the producers.

Boe Poe, AIDEA's executive director, was next to address the committee. Poe said different State
financing organizations have different purposes. The Permanent Fund Corp.'s goal is to grow the Fund. AIDEA's is economic development.

If the State is to influence the producers, such as in a route decision, the State must be a player in the decision. If the State doesn't have "a seat at the table" there are only limited ways to get information about the producers' plans, such as through the Alaska Oil and Gas Conservation Commission (AOGCC).

An investment by the State in the project could align the interests of the State with those of the producers, provide additional revenues and might put the State in a better position to affect decisions on the project. There is a wide range of risks, and opportunities, in such an investment, that would have to be considered.

There are also potentials for conflicts of interest. The State, for example, might want to encourage a gas-to-liquids plant in Fairbanks. How can a deal be structured to be best for Alaska? Another issue is that as an equity owner the State would share liability, just as owners of the trans-Alaska pipeline assume liability for TAPS.

AIDEA could help, but such a large project could soak up the authority's ability to do other economic development projects. Poe suggested an AIDEA-like authority just for the gas project. AIDEA could still manage such a separate authority, just as it does the Alaska Energy Authority. Many of these same kinds of issues, on a smaller scale, were dealt with in the recent project involving acquisition of the Snettisham hydro facility in Southeast Alaska.

Ed Rasmuson commented that ventures like this always involve conflicts. "The more I hear about this, the more I would like to see an analysis of normal accepted practices (in financing large energy projects) over the last 20 years. Foothills, Enron and other companies have all been involved in projects," he said.

Dan Fauske, director of Alaska Housing Finance Corp. (AHFC), was next to address the committee. Fauske described how AHFC, with legislative authorization, established a special corporation operating as an AHFC subsidiary, to finance non-housing projects with bonds secured by payments from tobacco litigation settlements. The bonds were not secured by the State. The risks were transferred to the investors.

He warned, however, that an undertaking like this would take a major sales effort with the investment community and rating agencies. He has often experienced, for example, the "Alaska penalty" imposed on Alaska financings by the financial community for purely subjective reasons, i.e. because of the state's remoteness.

Fauske said he would push for more equity involvement in a project because it will increase the State's bargaining power with the other owners. "I would like to see a breakout of the advantages and disadvantages of equity vs. debt," he said.

Members of the public present at the hearing commented. One person urged the Council to see to it that a third party, independent of the producers, owns and operates a gas pipeline. Another person commented that the pipeline presents tremendous opportunities for Alaska, but he urged the State to
remain "footloose and fancy free," in terms of commitments. He urged the State to impose a "right of first refusal" concept in terms of investment. "Make them come to you," was the comment.

Ed Rasmuson and Ron Duncan, members of the Council, both expressed interest in a "retrospective" look at the oil pipeline, as to how good an investment it was for the TAPS owner companies.

At the end of the meeting it was agreed that at the next committee meeting the following items would be addressed: (a) invite an investment banker to describe how gas pipelines are financed; (b) look into the historical profitability of the Alyeska Pipeline (i.e. rate of return on equity); (c) presentations by Department of Revenue, outside consultants, and the producers on tax policy as it would apply to a gas pipeline.
Alaska Highway Natural Gas Policy Council
State Pipeline Ownership and Tax Structure Subcommittee

AGENDA
August 13, 2001, 9:00 am to 5:00 pm
Governor’s Office Anchorage Conference Room

I. Introduction and overview of agenda, Bill Corbus, Subcommittee Chair

II. Investment and financing issues, Bill Garner, Petrie Parkman and Company

III. Discussion

IV. Break

V. Current gas tax structure, Commissioner Wil Condon, Department of Revenue

VI. Pedro Van Meurs (by teleconference) available for questions

VII. Lunch

VIII. TAPS and tariffs: TAPS profitability, Jerry Hass, Professor of Finance, Cornell Business School

IX. Producers’ Group perspective on tax structure, Michael Hurley, Alaska Gas Producers Pipeline Team

X. Break

XI. Questions and Discussion

XII. Next Steps and Adjournment
Chairman Bill Corbus called the meeting to order. In attendance were members Mike Navarre, Ed Rasmuson, and Dave Rose. Ron Duncan joined the meeting later.

State Department of Revenue Commissioner Wilson Condon presented an update on the Administration’s work to implement Senate Bill 158, a bill passed by the Legislature in 2001 authorizing a study of state investment in a natural gas pipeline.

Condon told the committee two contractors had been engaged to do the study, CH2M Hill and Petrie Parkman.

Bill Garner, of Petrie Parkman, gave the committee a briefing on the firm’s background and some of its recent projects. The company was started in 1980 by individuals from the energy section of First Boston after that bank merged with Credit Suisse. The company has two offices, in Denver and Houston. The Denver office specializes in research, while the Houston office does work on mergers and acquisitions. There is a “wall” maintained between the two offices, so the activities of both are carefully separated.

One recent project the company worked on was the government’s successful privatization of the Elk Hills petroleum field in California, which Occidental acquired. The company has also been hired to advise Saudi Arabia’s government on its effort to attract investment into natural gas development.

Garner discussed the concept of “project financing” with the committee at some length, as this is one way an Alaska gas pipeline might be financed. The Alliance and Maritime pipelines in Canada are recent examples of large projects financed with project financing, he said. Companies may choose to finance a pipeline project themselves, but project financing is a method increasingly used today.

The principle difference is that lenders rely only on the project for guarantees and not the owner companies. Because of this, there are efforts with these projects made to get shippers (customers) lined up early. The environmental issues, political risks and financial condition of the sponsors are all weighed.

A question was asked about debt coverage ratios.

Garner replied that a typical coverage ratio is 1.3 to 1.4 (coverage means the ratio of revenues expected over required debt payments). A debt-to-equity ratio might be in the order of 70-30 (70% debt financed; 30% equity financed). The Alliance Pipeline was 75-25 debt to equity. Financial markets typically don’t like to see debt greater than 80%.

Questions were asked about contingencies for cost-overruns on construction.

Garner replied that contingency set-asides vary, but they are typically 20 percent. He described the
Alliance pipeline financing. The project involved $1.8 billion in capitalization, and about $500 million in equity investment from the partners, which are public companies like Williams, WestCoast Transmission, and El Paso. The project was fully subscribed by shippers, with five-year “take or pay” contracts (i.e. gas must be shipped or the capacity paid for anyway). Alliance has 35 shippers lined up at this time. Garner described various financings used, a “bridging” loan to 2008 which is now being refinanced with notes due in 2015, 2019 and 2025. Overall financing for the Canadian portion of the pipeline is $2.7 billion.

There are other major project-financing initiatives in the works, too. Saudi Arabia’s $20 billion gas development project will be done in this manner. There are questions over the capacity of the market to absorb more than one of these projects at the same time, but an Alaska project is located all in North America and is therefore more secure. That should “play better” in the market.

This isn’t to say there aren’t challenges with an Alaska project. There are the distances involved, the sheer scale of the project, and environmental issues, as well as the discussions underway of the different routes, the LNG export option, and so on.

Department of Revenue Commissioner Condon gave a presentation on state oil and gas tax policies, as they might affect a North Slope gas project.

One of the most important state taxes affecting a gas project is the state 20-mill property or ad valorem tax on oil and gas production and transportation (pipeline) facilities. Municipalities along the pipeline route are also permitted to tax these facilities, but the state controls the valuation, assessment and appeals process. The petroleum taxpayers are allowed to credit the taxes they pay to municipalities against what they owe the state government. Because of the credit, about 80 percent of the total collections of the tax winds up with the municipalities, and 20 percent with the State.

There are some problems with the ad valorem tax as it relates to a gas project. The tax is regressive because it is proportional to cost. If there are cost overruns, it adds to the tax. It is also front-end loaded, meaning it begins as soon as a project is sanctioned and hardware is moved in. It must be paid for several years before the project is completed and begins making money.

There are some public policy questions around any discussion of suspending or delaying the tax, Condon said, mainly that municipalities and the State must provide services during construction and there must be a way to pay for them. On the other hand, the property tax is one element of the fiscal system that impacts the project most heavily. It may be that public services during construction can be paid for some other way, the commissioner said. However, municipalities might distrust the “wisdom” of the State in meeting those local needs, Condon said.

Large facilities related to the gasline would also be built in Alaska, and would be subject to the tax. The gas treatment plant is estimated at $2 billion in cost, for example. It is possible that a gas liquids extraction plant would be built outside Alaska, however.

Condon turned to the corporate income tax. Alaska currently levies an income tax on the worldwide corporate earnings of petroleum companies, apportioned to Alaska through a series of formulas. The Alaska tax rate of 9.4 percent is applied to the portion of income apportioned to Alaska.
There are some aspects of this tax that are undesirable, Condon said. It is difficult for a company to predict what effect an investment in Alaska will have on its overall corporate income tax bill, or how an investment in Alaska will increase or decrease the marginal tax it pays.

It also has the potential to be regressive in certain respects. For a company with property in Alaska but no income, such as a project in construction, a tax will still have to be paid. In that respect it will look regressive to a company.

A question was asked about reports that oil and gas companies were paying an effective 3 percent rate of corporate income tax, instead of 9.4 percent.

Condon said there has been considerable debate over what the rate of the tax actually is. This method of tax, called “modified apportionment,” was enacted in 1981 when the Legislature shifted away from an income tax method adopted in 1978 known as “separate accounting.” Following 1981 there was a significant decrease in corporate income taxes paid.

The assertion was that corporate tax collections dropped to about one third of what they would have been under separate accounting, so an argument was made that the effective rate of tax was about 3 percent instead of 9 percent.

Condon said he didn’t know whether one-third is the right number but we do know that, in the 1980s, revenues were about one half of what they would have been under separate accounting. Today it’s about the same under either method. In fact we are now collecting more under modified apportionment than we would have under separate accounting.

On severance taxes, the state levies a 10 percent tax on gas. As with oil, the tax is modified by the Economic Limit Factor. Also, the first 3,000 cubic feet per day of gas production per well is tax-free. The 10 percent tax is applied on all production beyond 3,000 cubic feet per day.

The point of taxation for gas is “upstream” of the central gas facility, which is different than with oil, where the point of tax is “downstream” of the major processing facilities. The decision to treat gas in this manner was made in 1977.

There is also a minimum cents-per-mcf (thousand cubic feet) tax for gas, just like there is a minimum cents-per-barrel for crude oil. This is 65 cents per mcf. It is a floor price, or the minimum the State will receive.

It should be noted that not all upstream costs are deducted, so the severance tax has regressive elements in it. The regressivity is a trade-off because the system returns a higher percentage of dollars to the State when market prices are low. The royalty has these features, too. Most leases producing today have a one-eighth royalty, and the State has the option of taking some of its royalty in-kind.

Suggestions have been made that the State should modify its royalty system, Condon said. Some have argued that the State's “whole take” would be greater if the system were less front-end loaded and less regressive, but under such a system the State would assume more risk. There would be more benefits under periods of high prices, but less benefits (revenues) under low price periods.
Questions were asked if the State would sell royalty gas for less than market value, such as for local distribution.

Condon replied that in the 1980s there was a citizen group advocating “Alaska’s oil for Alaskans,” in which royalty in-kind would have been distributed free. The terms for royalty in-kind sales are now set by administrative regulation.

A question was asked whether it was easy to “trace” Alaska oil or gas for purposes of establishing downstream value.

Condon replied that crude oil was easier to trace, but gas might be extremely difficult. Once gas enters the lower 48 pipeline grid, it is mixed with other gas and it is difficult to establish end-use values.

Condon introduced Pedro Van Meurs, a consultant based in Calgary, Alberta who has done work for the Department of Revenue on comparison of fiscal systems. Van Meurs did an analysis of fiscal systems in connection with evaluation of the competitiveness of an Alaska liquefied natural gas (LNG) project.

Van Meurs said that one of his conclusions from the LNG study was that Alaska’s current fiscal system, which is regressive, is not “suitable” with respect to large, high-risk capital projects like an LNG project. “Regressive” means the less profit a project makes the higher the level of tax, and the more profitable a project, the lower the level of tax. Higher cost projects are burdened disproportionately, and with an economically marginal project the government tax burden is important.

Questions were asked if there were “model” tax systems Alaska could consider.

Van Meurs replied that Alaska is not alone in having a regressive fiscal system. All states in the lower 48, Alberta and some Latin American countries have regressive systems. Some countries are shifting to progressive systems to attract investment, however. These include Norway and Brazil, and Alberta in the case of its tar sands development.

Questions were asked if taxes on profits were more difficult to administer.

Van Meurs acknowledged that profits-based revenue systems are more costly to administer. They do require more verifications, and the potential for conflicts with industry is greater.

Van Meurs was asked if he had suggestions for an Alaska fiscal system that would encourage gas development.

He replied that the State’s Stranded Gas Development Act developed for an LNG project (since lapsed) might be a place to start. It was designed for LNG but the principles would apply equally to a gas pipeline. Modifications to the severance and property tax could make the system more progressive and help reduce the risk on a pipeline. There are some similarities between the gas pipeline and an LNG project.

One problem is the 20-mill ad valorem tax levied during construction, a period when the developer has no revenues. On the other hand, municipalities must have some money to deal with construction.
impacts.

A question was asked if State ownership would influence the effect of the tax structure.

Van Meurs replied that a number of nations do participate in ownership of large energy projects, particularly LNG. There may be benefits of partial government ownership, but it doesn’t change the overall equation, or the effects, of a fiscal system very much.

Commissioner Condon introduced Jerry Haas, professor of finance at Cornell University, who has been doing consulting work for the State of Alaska for a number of years.

The committee was interested in the early disputes over pipeline tariffs filed for the trans-Alaska oil pipeline, and how these were resolved. There are similar issues at stake in tariffs on a natural gas pipeline.

Haas described the evolution of pipeline oil and gas tariff methodology and regulation in the U.S. prior to World War II. Pipelines were mostly owned by producers, who also shipped for others who were not owners, he explained.

The Justice Department, concerned about the possibility of unfairly high tariffs, reached an agreement with major pipeline owners known as the Consent Decree of 1941. This allowed a pipeline owner to base the tariff on costs, accrued interest and a 7 percent return on both.

This led to pipelines being financed 80 percent and 90 percent by debt. The “consent decree” theory of tariff methodology was allowed by government regulatory bodies through the 1970s and 1980s. There were indications that the owners of the trans-Alaska pipeline assumed they would be allowed to base tariffs on the consent decree when they financed and built TAPS in the mid-1970s.

In those years, pipelines were regulated by the Interstate Commerce Commission (ICC).

In those days, tariffs were a relatively small part of the overall cost structure of oil production and transportation, so disputes over tariffs were not tremendously significant in the economics of the industry. If oil was selling for $3 per barrel and the tariff for a pipeline was 30 cents, no one really argued whether it should be 31 or 32 cents.

However, in 1974 a shipper who was not a pipeline owner decided to test the methodology issue. A lawsuit was filed, and while this case was making its way through the courts — it was known as the “Williams” case after one of the litigants — Congress also moved responsibility for pipeline regulation to the new Federal Energy Regulatory Commission (FERC) when the old Federal Power Commission and the ICC were merged into FERC.

The new FERC regulated pipelines on a different basis, more similar to the former FPA’s method for natural gas regulation. It was more conservative, based on costs, but not allowing the rolling in of interest into the cost base. This occurred at the same time the TAPS pipeline was being completed.

There was considerable uncertainty on which method the FERC would allow.

The State of Alaska was unhappy with the tariffs being filed for TAPS when production started and
filed suit. The pipeline tariff has a direct impact on state royalty and severance tax revenues, because those are based on the “wellhead” value of crude oil on the North Slope after transportation costs, including the pipeline tariff, are deducted.

Negotiations continued on a settlement for many years after production started in 1977. The resulting settlement finally arrived at provided a tariff method that was unique to TAPS. The State had several goals, one being to reach a fair agreement for the years since production started and the settlement would go into effect.

Another goal was to set up a predictable basis for future tariffs. Another was to “front-load” the tariff, so that tariffs in future years, when oil throughput is lower, will be lower than would be the case without “front-loading.” This was a major concern, because the State wanted to ensure that tariffs would be reasonable to encourage new oil exploration.

The State also wanted a partial cap on tariffs in future years, in case there wasn’t a lot of new oil discovered. Finally, the State wanted cash refunds in compensation for low royalty and tax values experienced during the years of high tariffs. (Between 1977 and 1981 tariffs as high as $6 were charged.) The State also wanted to recover approximately $100 million spent litigating the tariff case.

The agreement was not made retroactive to 1977, but from 1981 on the new TAPS methodology was used.
Alaska Highway Natural Gas Policy Council
State Pipeline Ownership and Tax Structure Subcommittee

AGENDA
September 21, 2001, 9:00 a.m. to 4:00 p.m.
Governor’s Office Anchorage Conference Room

I. Welcome and brief overview of meeting purpose, Bill Corbus, Chair

II. Update on State Investigations of Financing Gas Pipeline Ownership (SB 158) – Bill Garner, Petrie Parkman (by conference telephone)

III. Financing State Share of Gas Pipeline with Revenue Bonds – Bob Poe, AIDEA
   a. Equity portion only
   b. Debt and equity portion

IV. Break

V. Pluses and Minuses of State Gas Pipeline Ownership
   a. Pluses – TBA
   b. Minuses – Roger Marks, Dept. of Revenue

VI. Contract vs. Common Carrier – RCA Staff

VII. Stranded capacity issues – Ken Thompson

VIII. Lunch

IX. State/Federal Tax Policy for an Alaska Gas Project – Producer Representatives

X. Preliminary Committee Discussion

XI. Set date for Final Committee Meeting (discussion and to formulate recommendations)

XII. Other

XIII. Public Testimony

XIV. Adjourn
Alaska Highway Natural Gas Policy Council
State Pipeline Ownership and Tax Structure Subcommittee

September 21, 2001 Meeting Summary, Governor's Office Conference Room, Anchorage

Chairman Bill Corbus brought the meeting to order. Committee members Dave Rose, Mike Navarre and Ken Thompson were present, along with staff and members of the public. Council member Bob Penney was on teleconference.

Chairman Corbus asked Bill Garner, of Petrie Parkman, to bring the committee up to date on his company's work. Petrie Parkman has been retained by the Department of Revenue to do an assessment of State of Alaska pipeline ownership options, under provisions of Senate Bill 158 passed by the Alaska Legislature in 2001.

Garner said he would like to advise the committee on three things: an update of his company's work; the perspective his company has on effects of the recent terrorist attacks on energy policy; and a new development that will affect the Alaska pipeline situation.

First, in the last 30 days Petrie Parkman has been interviewing industry on their view of possible State equity participation. The companies interviewed include the three gas producers involved in current studies and a number of other potential partners in the project. A preliminary assessment is that no company interviewed has objections to State participation, although there have been some expressions of puzzlement as to why the State would want to have part ownership. State equity participation in projects is unprecedented in the U.S.; it is more common in developing countries where, for reasons of national security or to promote the project, the government takes a stake. There was also some concern that the State could find itself in a potential conflict between its ownership interest and its responsibility as a regulator.

If the State desires to participate, views expressed were that investment should be looked on as purely a financial investment. It was felt that State involvement will have no effect on the risk profile of the project (in terms of boosting its viability). The most appropriate percentage would be that equal to the State’s royalty share.

Committee member Dave Rose asked if there was any discussion of anticipated rate of return on investments.

Garner replied there was none.

Garner said a new development, announced the morning of September 21, was that Duke Energy has acquired Westcoast Energy, one of the owners of Foothills Pipelines. Westcoast has substantial holdings in the Alliance gas pipeline and Martimes pipeline, but the possible Alaska project is clearly part of Duke's strategic thinking in the acquisition, Garner said. This development will bring a great deal of financial strength to the ownership of Foothills, and will strengthen the southern route and bring a major U.S. company into a consortium that was formerly owned by two Canadian companies.

Finally, Garner told the committee that Tom Petrie, the firm's leading energy analyst, has been doing
extensive briefings with clients on effects of the terrorist attacks on the U.S. energy situation. Basically, Petrie's view is that it will strengthen the resolve to increase reliance on domestic energy sources, particularly the Alaska gas pipeline. The liquefied natural gas import projects (which are a competitive threat to the Alaska pipeline) rely on foreign sources of gas supply, he said. The only major source of large new gas supplies for the country is in Alaska, he said.

Dave Rose asked if the political environment might be right to ask for tax-exempt status of the pipeline.

Garner replied that it might.

Chairman Corbus asked if the firm had changed its views, expressed previously, that “project financing” will be the most appropriate way to finance the gas pipeline.

Garner said nothing fundamentally has happened that will change that view. By the time a gas pipeline group goes out for financing, markets will have settled down.

Bob Poe, executive director of the Alaska Industrial Development and Export Authority (AIDEA), told the committee his agency has been working with its bond advisors on ways State participation might be financed. Basically, there are three ways the overall project might be financed:

First, a State gas authority (other than AIDEA) might issue “conduit” revenue bonds (i.e. financially backed by participants) to finance the entire project. The equity investment by participants would be held in reserve to back the bonds.

Second, the project might be financed by some split of debt and equity, such as 60 percent debt and 40 percent equity, with the equity in this case actually spent on the project. Poe observed that the bond market would like to see as much equity as possible in the project. “The more equity the better,” he said.

Third, there could be multiple financings by the participants, with each equity participant (including the State) doing its own financing, its own mix of debt and equity.

Poe said there are a number of negatives with this approach, mainly in the extra underwriting costs of multiple debt financings compared with the efficiency of one large financing. The extra costs of multiple financings would add to the costs of the overall project. Another advantage of single debt financing is that it maintains a consistent “story” in the market, avoiding confusion. “When the market gets confused, costs go up,” Poe said.

Poe said an analysis by AIDEA’s bond counsel does not indicate any significant advantages in tax-exempt financing. Under current tax laws only a very few facilities and parts of the project would be eligible. On the other hand, an initiative to get Congress to declare the entire project tax-exempt would be a substantial benefit, “worth as much as 200 basis points. That’s not a small amount on a $15 billion project.”

There are a number of positives and negatives to State financial involvement, Poe said:
One positive is that if project financing is selected as the best method, a State role in issuing conduit bonds could save money and help the State influence the selection of the southern, Alaska Highway route.

A negative is that the project will involve significant risk, and the potential return on the State's investment may not be the best use of public funds.

If the Permanent Fund's Earnings Reserve is used as a source of funds for a State investment, there are political considerations, Poe said (i.e. public sensitivity to use of the Permanent Fund). Also, the State could, as a part-owner, be placed in a conflict with its role as a regulator.

Dave Rose commented that the Permanent Fund's trustees have the authority to invest 5 percent of the Fund in an unusual equity opportunity and have not yet exercised this option. If this route were chosen for an investment, it need not affect the Earnings Reserve.

Ken Thompson, a committee member, commented that if a pipeline consortium chose contract carriage as a way of organizing and financing the project, it would be sized and constructed based on contractual commitments of gas volumes. That reduces risk, he indicated.

Bill Corbus asked if dedication of future State royalties might also be a financing option.

Poe replied that it might and that Petrie Parkman might include this among options for financing mechanisms.

Mark Myers, director of the Division of Oil and Gas, told the committee there might be considerable risk in relying on a dedication of royalties for financing because volatility in gas prices will affect royalty revenues. Also, it would limit the State's ability to take royalty-in-kind for in-state fuel use and economic development.

Roger Marks, of the Department of Revenues, discussed several reasons why an investment by the State in a gas pipeline might not be a good idea.

First, there is no shortage of capital for a project like this, if it is economically viable. An investment by the State will not be necessary to make the project happen if its economics appear sound. Second, it will not be a "windfall" of an investment for the State. There are more attractive, alternate investment opportunities for public funds, if the decision is being considered purely on a financial basis. Third, owning a part of the pipeline will not give the State any more information it could not get by other means, such as requirements on a State right-of-way lease. Fourth, a State investment will not influence a route decision or other development decision in ways that could not also be achieved by other means, such as through permitting or State fiscal structure.

A source of funds for a State investment could also pose a problem. The State's Constitutional Budget Reserve is needed to help fund the State budget, and the Earnings Reserve of the Permanent Fund helps sustain dividend payments. While the Fund's trustees have authority to invest 5 percent of the Fund in an unusual equity venture, concentrating so much of the Fund in one risky project might violate the prudent investment rule which is an investment principle followed by the trustees, Marks said. An investment could be structured through an independent authority like AIDEA, but it could
also affect other debt financing by State entities like AIDEA and AHFC that are important to the economy.

If the State owns part of the pipeline, there are also potential conflicts between its ownership interests and the responsibility to regulate the pipeline fairly and to collect taxes and other revenues. Finally, is investing in the project really a proper role for government? Normally, governments do things the private sector doesn’t do (schools, transportation infrastructure, public safety, etc.).

Ken Thompson briefed the committee on issues related to possible “stranded” gas. While pipelines organized as common carriers (like the trans-Alaska oil pipeline) are required to accept all offers, this is not the case with pipelines organized as “contract” carriers. These pipelines do not have to accept gas from new discoveries. Thompson has seen this in the Gulf of Mexico, where new gas discoveries will experience delays in development because capacity is not available in nearby pipelines.

Because contract carriage may be the only way to finance a large project like the North Slope gasline, some mechanism should be crafted to ensure that there will be a way for gas from new discoveries to have access to the pipeline.

Producing companies usually do not build pipelines with excess capacity whereas some pipeline transmission companies will invest in spare capacity, betting that new production will develop to take that capacity. Thus, there may be advantages if pipeline companies are involved in a consortium to build a gas pipeline, not just producing companies, he observed.

Michael Hurley, representing the producers’ group working on pipeline planning, gave the committee a preview of some of the interim results of the group’s feasibility studies.

(Note: This information, as well as views on the information from the Division of Oil and Gas and substantial discussion by committee members, were presented in detail in the full Council meeting of Sept. 25, and are summarized in that report.)

Hurley also told the committee that representatives of companies in the producers’ group have been engaged in discussions with the Departments of Revenue and Natural Resources over several issues the industry group hopes to see resolved before a project is begun. These deal mainly with “commonality” in administration of State severance taxes and royalty payments (i.e. both are based on “netback” to the wellhead, but there is potential they could be administered in different ways, creating confusion), as well as “transparency,” (clear terms that are understood, so tax and royalty payers know what basis payments must be made).

As an example of why this is needed, Hurley pointed out that the uncertainty of tax and royalty obligations when the oil fields were developed resulted in $6 billion in additional assessments on the producers, and $2 billion in additional payments. “The gas project doesn’t have the robust economics to be able to afford that kind of uncertainty,” he said.

Hurley said what the producers desire is not a change in tax rates, but rather clarity and simplification in the way taxes and royalties are administered. Meanwhile, talks between the producers and the State are “going well,” he said, and while a way to accomplish such certainty in fiscal terms isn’t yet clear, there have been discussions about some form of “fiscal contract” along the line of that contemplated
in House Bill 393 regarding an LNG project.

Ken Thompson observed that it is important to clarify whether the netback is from a regional gas trading “hub” or from the actual customer, who signs a contract. Prices in trading hubs can be influenced by many other factors and it is better to have the netback based on the actual contract, from a customer.

Hurley said it is just this kind of clarity that the producers seek. He said the industry group is asking the Council, and the governor, to support initiatives in Congress for new legislation, and to encourage the ongoing discussions between DOR and DNR and the producers on tax and royalty terms.

Under public discussion, Harold Heinze, a retired senior ARCO manager and DNR Commissioner, suggested that the committee look at the question of State involvement starting with a question of why the State should be involved in the first place, and under what circumstances State participation might be helpful.

It's important to answer the basic question of whether and how the State should be involved to begin with in order for the committee’s report to have credibility with the public, Heinze suggested.

Richard Odsather, a retired state employee who was Deputy State Pipeline Coordinator when the Alaska Natural Gas Transmission System was being proposed and planned, urged the committee to recommend a way of valuing gas liquids along with the methane transmitted through the pipeline, so that tax and royalty payments would reflect full value of the State’s resources. The State shouldn't allow payment to be made strictly on a basis of Btu content because this may not reflect the value of gas liquids sold for petrochemical manufacturing, he suggested.

Ken Thompson commented that one recommendation likely from his committee (Access for In-State Gas Use and Future Opportunities) is that Alaska adopt a requirement for disclosure of downstream sales that is practiced in the European Union. This “disclosure” requirement is just informational, however, and does not require downstream uses to be reported in tax and royalty payments, he acknowledged.
Alaska Highway Natural Gas Policy Council
State Pipeline Ownership and Tax Structure Subcommittee

AGENDA
October 3, 2001, 9:00 a.m. to 3:30 p.m.
Anchorage Sheraton Hotel, Yukon Room

I. Welcome and brief overview of meeting purpose, Bill Corbus, Chair

II. Alaska Gas Port Authority – why no equity contribution?
   a. Rigdon Boykin, O'Melveny & Myers
   b. Commissioner Wilson Condon, Larry Persily, Roger Marks, Department of Revenue

III. Pipeline access rights under contract carrier vs. equity ownership, Bonnie Robson,
      Division of Oil and Gas

IV. Break

V. Potential State of Alaska financial commitment for access to pipeline as a contract carrier
   a. Bonnie Robson, Division of Oil and Gas
   b. Commissioner Wilson Condon, Larry Persily, Roger Marks, Department of Revenue

VI. Presentation on State Ownership – Representative Eric Croft

VII. Public Testimony

VIII. Lunch

IX. Committee Deliberations & Recommendations on State Ownership/Tax Policy

X. Public Testimony

XI. Other

XII. Adjourn
Committee chairman Bill Corbus convened the meeting.

Rigdon Boykin, of O'Melveny and Myers, financial advisors to the Alaska Gasline Port Authority, was available to the committee by teleconference.

Corbus recalled that Bob Poe, director of the Alaska Industrial Development and Export Authority, had said that even if the State were to sell bonds to acquire a percentage of ownership of a gas pipeline, some equity contribution would likely be required. He asked Boykin to comment.

Boykin agreed that the financial market would wait to see if the State does make a contribution of equity. But he said it is also common now for public authorities to finance 100 percent of large projects with debt. He mentioned a Long Island power authority, which financed a $9 billion expansion with debt. The Port Authority has done its financial plan to provide for a three-times debt coverage ratio (revenues over debt service); Merrill Lynch, who advised the Authority on this point, said that 1.7 debt service coverage was adequate, Boykin said. Still, financing a project of this magnitude will require all contracts be in place, such as gas purchase, gas sales, etc.

An important part of the Port Authority's proposal is for a "turnkey" construction contract for a fixed bid, where the contractor assumes the risk of cost overrun. The contractor would reserve $1.8 billion as a contingency. The pipeline owners would reserve another $900 million. The contract would include a provision that if the system did not perform as expected, the contractor would "buy down" some of the debt, to the point that performance meets the business plan.

Boykin said the Authority recognizes that a stand-alone LNG project isn't viable, but that it would work as part of a system that also shipped gas to the lower 48 (a spur line would be built to connect Valdez to an Alaska Highway pipeline at Delta). The plan is to sell three billion cubic feet (bcf) daily to the lower 48 down the highway pipeline and 3 bcf/day to export markets through LNG shipments out of Valdez. A key advantage of the LNG export market is that contracts are for long-term, which offers security on price. In contrast, very few sales contracts to the lower 48 can be long-term - five years might be a maximum - which introduces a risk on price.

Market studies show there are potential customers in Asia who will lock in on long-term contracts, particularly if a reduced price for LNG were offered. El Paso Natural Gas is looking for 1 million tons/year for a new power plant in Korea; Enron is looking for gas for new power plants in Japan.

The concept is that if lower 48 prices do dip, as they will periodically, the earnings under the long-term LNG sales will make up for temporary lower earnings on lower 48 sales.

Committee member Ron Duncan asked questions about the supply of gas from the North Slope.

Boykin said the plan is to take about 8.7 billion cubic feet (bcf) daily (approximately the amount now being producing and recycled), of which 6 billion cubic feet would be shipped through the pipeline, after CO2, local fuel gas and some liquids for EOR are removed.
Duncan asked whether there were sufficient known reserves to guarantee a gas production rate of almost 9 bcf/day for 30 years.

Boykin said 35 trillion cubic feet (tcf) is now proven on the North Slope and estimates are that there will eventually be 100 tcf developed. The producers’ pipeline group itself plans to start with a volume of 4.5 bcf/day and build to 6 bcf/day. Executives at BP told the Port Authority there will be ample gas found on the slope, although only 35 tcf in reserves are proven now. No one has looked for gas because there has been no incentive, no transportation system.

The Port Authority can offer the producers 75 cents/thousand cubic feet for their gas. If this offer is made and the producers fail to respond, the State should use its influence to “encourage” the producers to sell their gas, Boykin said. No one knows now whether the producers would accept this price because no bona fide offer by a credit-worthy developer has ever been made, Boykin said.

Boykin said his biggest concern is that Alaska may lose its “market window” if the gas project is delayed. Cambridge Energy Research Associates (CERA) has said that if Alaska gas is delayed entering the market, other suppliers will step forward. CERA says another opportunity for Alaska’s 4 bcf/day of gas might not be for another 15 years, Boykin pointed out.

Mayor Rhonda Boyles, a member of the committee, asked Boykin what the financial benefit of tax exemption amounts to. She pointed out that the producers’ economic model shows $24 billion being paid to the federal government in taxes.

Boykin replied that the Port Authority’s plan benefits $750 million a year by being exempt from federal taxes. This allows the Authority to pay a 75 cents/mcf price for gas to the producers, and to pay the State and Alaska municipalities $370 million a year.

Larry Persily, deputy commissioner of the Department of Revenue, and Roger Marks, a staff economist to the department, presented the department’s views on issues raised by the Port Authority.

Persily said the department is skeptical a project as large as the proposed gasline can be financed with 100 percent debt, particularly with insufficient proven reserves on the slope to support debt issued for 30 years, and that attractive long-term gas contracts in Asia can be negotiated. Asia is moving away from long-term and toward shorter-term LNG contracts, according to department research.

The apparent “window of opportunity” for Alaska gas is also changing. The slowdown in the U.S. economy has already reduced the window.

Boykin replied that large projects are being financed 100 percent with debt and that by the time the project is completed, more gas reserves will have been developed on the slope. “All we know is what the producers have told us,” he said.

Persily said that bond buyers will probably demand that 90 tcf of gas be proven (the amount needed to produce 9 bcf/day for 30 years). Also, the assumed interest rate in the Authority’s financial plan is probably too low, given the risks of the project. Finally, the department disagrees that the entire project would be exempt from Federal Energy Regulatory Commission (FERC) jurisdiction. The Authority is basing its opinion that the project will be exempt from FERC on a very narrow reading of current law. With a project this important to U.S. energy supplies, FERC will assert jurisdiction.

Boykin disagreed. He said companies like El Paso told the Authority the exemption from FERC is a “tremendous asset.” On the question of interest rates, the Authority used a rate estimated by Merrill Lynch and then added one-half percentage in its financial plan.

Persily pointed out that if a $1.25/mcf tariff to the lower 48 is assumed along with 75 cents/mcf paid to producers, a $2/mcf market price will be needed to break even.

Boykin replied the Authority’s estimates show the lower 48 segment of the system would be losing money if gas prices fell to $1.80. However, the long-term LNG sales revenues at $3.10/million Btus (note: 1 million Btus roughly equals 1 mcf of gas) will offset this. He also pointed out revenues from sales of natural gas liquids would help offset a temporary decrease in revenues from lower 48 sales.

Committee member Ken Thompson pointed out that while the economic slowdown has caused a recent decline in lower 48 gas prices, the U.S. Energy Information Agency is still using a $3.10/mcf long-term estimate for future gas prices. No major decision on a project is made on today’s gas prices. The project decision will be based on what people think the price will be in 2008.

Thompson added that the best time to build a large industrial project is during an economic slowdown because then very competitive prices can be obtained for fabrication, material and equipment. Also, we are now enjoying one of the lowest rates of inflation in years.

That said, Thompson said he was still skeptical that the Port Authority concept would work for the entire gas project. He asked Boykin whether it would work for part of it.

Boykin said the concept can be applied to any part of a gas pipeline project, but the financial returns work best with a larger project.

Division of Oil and Gas Deputy Director Bonnie Robson briefed the committee with more details on pipeline access for independent gas producers and the possible “open season” call by a pipeline group.

Open seasons for gas volume nominations are typically 30 days but could be 45 days. Contracts are signed for shipments for 15 to 20 years. The division foresees a possibility where there could be an open season declared in the first quarter of 2002. The producers have said that relatively small volumes required for local use in Fairbanks will not require an open season, however.

Robson described several scenarios for the committee. If the State wished to ship all of its royalty gas to an Alaska off-take point (such as for local use) it would have to be in a position to nominate this capacity, and there would be a cost.

Committee member Ron Duncan identified three options the State has: (1) take the in-value royalty payments from producers, and let the producers ship the gas using their capacity; (2) take the royalty in-kind, and have the State reserve (and pay for) the capacity; (3) sell the royalty-in-kind gas to a third party, and let the third party pay for the capacity to ship the gas.

Mayor Rhonda Boyles, a committee member, said that if an open season were declared next spring, presumably we would know who the pipeline owner is.
Robson said there could be more than one group proposing to build a pipeline, and more than one group issuing calls for open seasons.

State Representative Eric Croft addressed the committee. Since no one has really stepped forward to advocate for State ownership of a part of the pipeline, he agreed to do so. Alaska has historically shipped its resources out of state and struggled to break out of the “colonial” resource-extraction economic mode. Alaska now possesses one of the most valuable resources on the planet, a large supply of a clean-burning fuel.

Croft would never advocate a State investment in a venture that is not economic. But the investment shouldn’t be made based on the anticipated profit alone. It should be made for policy reasons. The State of Alaska has a trust responsibility to maximize the value of its resources, but owning the resource without also owning a part of the transportation system could allow others to shift costs to the transportation system, as might be the case with the TAPS pipeline. If the State owns a part of the pipeline, the interests and incentives of all resource owners, the State (which owns a one-eighth royalty) and the producers are in alignment.

Another reason why State ownership might be worthwhile is to seek market diversification. The producers might be content to aim at just one market, the lower 48. It is in the State’s longer-term interests to have more than one market for its gas, however, and partial State ownership of the transportation system might facilitate this.

Revenue Deputy Commissioner Larry Persily offered some final comments. Whether the State invested in the pipeline or sought to buy capacity, a vote of the Legislature will be required. The State has two pools of cash available as a source of investment funds: (1) the Constitutional Budget Reserve, which had $2.6 billion as of last June 30. The State may need these funds to finance its budget deficit, and it could be depleted in three to four years; (2) the Permanent Fund Earnings Reserve Account, which can be appropriated by the Legislature, unlike the principal of the Fund. This has about $2.3 billion now, but $1.3 billion will be needed to pay 2002 dividends and to pay the required “inflation-proofing” of the principal of the Fund.

Committee member Jack Roderick observed that if a gas pipeline is financed 30 percent equity and 70 percent debt, the State’s share of one-eighth of the equity (a share proportionate to the State royalty interest) works out to about $500 million.

During the committee’s public comment period, Harold Heinze said that the State can achieve many of its policy goals through negotiations of its right-of-way agreements across state lands. For example, pipeline access issues can be addressed through stipulations to the right-of-way.

Jerry McCutcheon expressed concern that a rapid drawdown rate of gas in the Prudhoe Bay reservoir will decrease future oil production. This should be considered by the committee. He questioned the merits of State ownership, pointing out that the State doesn’t have a good track record in using public funds to foster economic development. He used the Healy Clean-Coal Project (now shut down because of equipment problems) and the Alaska Seafood International plant (a large seafood manufacturing plant facing financial challenges) as examples.

(The balance of the meeting was taken up in discussion of the committee’s recommendation to the full Council.)
Select handouts and presentations given to the State Pipeline Ownership and Tax Structure Subcommittee
I. HISTORY OF OIL PIPELINE TARIFF REGULATION: FROM BENEIGN NEGLECT TO STRICT COST OF SERVICE

A. 1941 CONSENT DECREE
   7% after-tax on valuation rate base plus interest. Designed to curb abuse on shipper-owned common carrier pipelines. [Vacated in 1982]

B. ICC METHODOLOGY
   8% (10%) after-tax on enhanced valuation rate base for crude (product) pipelines—plus interest expense. Results in producers loading debt into pipeline subsidiaries.

C. ICC METHOD CHALLENGED IN WILLIAM (1974)
   ICC approves Williams tariffs but promises overall tariff-setting review

D. FERC TAKES OVER PIPELINE REGULATION IN 1977
   APPEALS COURT REMANDS WILLIAMS TO FERC

E. FERC JUDGE KANE PRODUCES INITIAL DECISION ON PHASE I OF TAPS—TARIFF METHODOLOGY (FEBRUARY 1980)
   Original cost rate base with 11.5% after-tax return overall. Tax allowance on equity returns only—using actual interest.

F. FERC PRODUCES "WILLIAMS I" IN LATE 1982
   Arguing most tariffs are de minimus relative to oil prices and most carriers are constrained by competitive market forces, set cap to avoid "egregious exploitation and gross abuse" and not to provide the "lowest reasonable rates." Cap similar to ICC valuation method but also included debt guarantee premium. Remanded TAPS to Kane to be reconciled.

G. APPEALS COURT REMANDS WILLIAMS TO FERC (3/84)


I. STATE AND ARCO REACH SETTLEMENT (12/84)
   Uses TAPS Settlement Methodology

J. FERC PRODUCES "WILLIAMS II" (6/85)
II. TAPS SETTLEMENT METHODOLOGY
A. TOC RATIONALE
1. Objectives of the State & DOJ
   a. Resolve Outstanding Tariff Issues
   b. Set Predictable, Cost-Based Tariffs for Long Term
   c. Tariff profile—Front Load to Max via Depreciation Exp
   d. Partial Cap on Out-Year Tariffs
   e. TOC—Automatic adjustment for inflation
   f. Obtain Refunds and Recovery of AK Outlays ($35 million)

B. SPECIAL FEATURES OF TSM
   1. Rate of Return
      a. 6.4% Real Rate of Return
         Debt 60% at 13.1% 3.85%
         Equity 40% @ 20.2% 8.08
         Inflation 05.5
         Real Return 06.4%
      b. Inversion Effect—5.6%
   2. DR&R Treatment
   3. Depreciation Method—Weighted Unit of Throughput
   4. Per Barrel Allowance—Enhance Return, Create Incentive and
      Partial Cap on Rates
   5. Annual True-Up

III. TAPS PROFITABILITY
A. Actual Volumes vs. Projected Volumes
B. Earned Return
      a. Base (Average Petroleum Pipeline): 12.5%
      b. TAPS Construction and Operations Risk Premium: 2-5%
      c. TAPS Overall Return: 14.5-17.5%
         Embedded Cost of Debt for TAPS Owners: 6.38%
         Capital Structure for TAPS Owners:
         Debt/Equity = 24.7/75.3
Potential Liability Incident To Nominating Pipeline Capacity
In Volume Estimated To Equal State’s Royalty Share

<table>
<thead>
<tr>
<th></th>
<th>1 Day</th>
<th>1 Year</th>
<th>15 Years</th>
<th>20 Years</th>
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<td></td>
<td>Per Mcf</td>
<td>(500,000 Mcf)</td>
<td></td>
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<tr>
<td><strong>Gas Treatment Plant (GTP)</strong></td>
<td>$0.30</td>
<td>$150,000</td>
<td>$54,750,000</td>
<td>$821,250,000</td>
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<td>$59,768,750</td>
<td>$896,531,250</td>
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<tr>
<td><strong>Pipeline – North Slope to Alberta</strong></td>
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<td>$655,000</td>
<td>$239,075,000</td>
<td>$3,586,125,000</td>
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<td><strong>Pipeline – North Slope to Chicago</strong></td>
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<td>$1,045,000</td>
<td>$381,425,000</td>
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<td><strong>GTP + Pipeline To Chicago</strong></td>
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<td>$1,195,000</td>
<td>$436,175,000</td>
<td>$6,542,625,000</td>
</tr>
</tbody>
</table>

Assumed Pipeline Capacity: 4 billion cubic feet per day
Approximate Royalty Share: 12 ⅝ %, or .5 billion cubic feet per day
Estimated Length of Open Season Commitment: 15 or 20 years
Open Season Commitment is to Ship or Pay
Calculations Use Producers’ Estimate of Pipeline Tariffs to Alberta and Chicago
Tariffs to Fairbanks and Delta Junction are Based on Distance Relative to Alberta
Calculations are in Money of the Day

Created by the Alaska Department of Natural Resources Division of Oil and Gas
October, 2001
Federal/International Action Subcommittee

Meeting Summaries
Charlie Cole, chairman, called the committee to order. John Katz, director of the state of Alaska's Washington, D.C. office, was on a conference call from Washington.

Chairman Cole asked Katz about the significance of the recent change in Senate organization. Katz said there wouldn't be much effect on the natural gas pipeline, because there was strong bipartisan support in Congress for gas from the Arctic.

Cole said there are a number of unresolved issues that could affect the gas project, such as the Alaska-Canada Treaty, any rights Foothills Pipe Lines might have, and possible bearing of earlier legislation passed by Congress.

Esther Wunnicke commented it's the committee's goal to identify regulatory barriers.

Cole said it might be enough for the committee to recognize a possible impediment without weighing in and taking a position on the Foothills permits. Foothills has enough invested in the project that it will assert a view, which could create a legal uncertainty and impediment.

Katz commented a major area of concern is the relationship of the Alaska National Gas Transportation Act of 1976 (ANGTA) and the Natural Gas Act, which is the traditional way of applying for a Certificate of Public Convenience and Necessity to build a pipeline. There are a lot of legal issues. There are claims of $3.5 billion to $4 billion in prior work on this project, which Foothills feels must be compensated for. There are also issues of line abandonment. Has the right-of-way been abandoned?

A report on ANGTA status by the Federal Energy Regulatory Commission provided a fairly good analysis of the issues without making an attempt to resolve them. These are now prominent issues in the negotiations between the producers and Foothills.

Cole asked committee members if the issues are recognized, does the committee want to take a position? Would any amendments to ANGTA be appropriate? One big advantage of ANGTA is that an Environmental Impact Statement was done. If ANGTA is abandoned, does an EIS have to be done all over again?

Mayor George Wuerch, a committee member, commented one approach could be for the administration to help find pathways to broker a deal and avoid litigation and legislation.

Katz commented the mayor is correct. "ANGTA will have to be updated, but we project a shorter time for that than if the companies proceed under the Natural Gas Act, which means they start from scratch, without the benefits of expedited review that ANGTA provides."

President Bush’s proposed energy legislation in Congress includes a request for “relevant federal officials” to do a review pursuant to ANGTA to determine if modifications or waivers are necessary.
“My conclusion is that the administration may have already concluded that ANGTA is the right route, but others conclude that this still leaves options open.”

A member asked Katz if amendments to the Natural Gas Act might also be possible. He replied they might be. The only substantial discussion of these issues — such as whether ANGTA is outdated — was in the FERC staff report. There hasn’t been much else.

Katz said this is one of several major areas in which Congress may try to legislate. However, even if Congress tries to legislate away the ambiguities, if parties hold property rights and feel aggrieved, they will likely sue.

Chairman Cole asked if YPC also claims rights. Committee member Peg Tileston commented that YPC’s state right-of-way is less strong than their federal right-of-way.

Bob Penney, a committee member, asked if the right-of-way for the highway route were in place, how much time would be needed for this project compared with a new right-of-way.

Katz said a key question is whether the right-of-way (granted under ANGTA) is exclusive. “We believe the regime established by ANGTA saves several years, but Foothills argues that the grant is exclusive. The issue is there whether it was intended to be an exclusive grant.”

Chairman Cole said he couldn’t imagine the producers will agree, for now, that Foothills has exclusive rights, “and we can’t build it without them.”

Wuerch commented that if the right-of-way lease were not exclusive, there is nothing to stop a new venture from filing for a lease along the same right-of-way.

Katz said the producers do not feel it is exclusive, and that this is one of the main points of contention between the producers and Foothills. There have been assertions that as much as $4 billion has been spent in the past on ANGTS.

Wuerch replied, “At the time the project shut down, in 1982, the best number we could come up with is that about $300 million was spent in Alaska.”

Esther Wunnicke asked if FERC was able to do anything except work through the Natural Gas Act. Katz replied this issue is unresolved. One FERC commissioner made comments favoring the ANGTA approach, while another favored the Natural Gas Act approach.

Katz discussed other relevant parts of pending energy legislation, including fiscal issues such as accelerated depreciation, and a possible investment tax credit. There are also administrative issues to be dealt with, such as who the federal lead agency is. Pending bills don’t deal with this. Congress may conclude it is within the president’s authority to establish the federal lead agency.

Harold Heinze, from the audience, urged the committee to consider a “project zone” concept that would allow free movement of people and equipment along the pipeline between Alaska and Yukon Territory. This would eliminate division of a pipeline “spread” at the border, increasing efficient use of machines and people.
Alaska Highway Natural Gas Policy Council
Federal/International Action Subcommittee

AGENDA
August 2, 2001, 10:15 a.m. to 12:15 p.m.
Baranof Hotel, Juneau

I. Introduction by Charlie Cole, Subcommittee Chair

II. Discussion with John Katz, Bob Loeffler and Bill Britt

1) Proposed federal legislation

2) Canadian federal government position regarding arctic gas development

3) Canadian First Nations' position regarding the development of the Mackenzie Delta line
Chairman Charlie Cole opened the meeting. Questions were directed to John Katz, the governor’s office representative in Washington, D.C., who was speaking by teleconference.

Katz said there are several consequences of the producers’ enabling legislation. One is that it could be seen as an alternative to the Alaska Natural Gas Transportation Act (ANGTA) of 1976, which stipulates a southern route. It provides, like ANGTA, an expedited permit process. It would also give an applicant that controls the gas an advantage in the FERC application process.

Under the proposed legislation, FERC looks at three criteria, one is if the applicant controls gas. If the application meets that and two additional criteria (passing muster environmentally and having reasonable rates) FERC is bound to approve the application.

Bob Loeffler, a senior partner with Morrison and Foerster in Washington, D.C., reinforced Katz’ comments that the language makes it mandatory that FERC issue a certificate of public convenience.

Katz went on to add that in the absence of the enabling legislation, if an application was made outside the ANGTA law it would proceed under the normal provisions of the federal Natural Gas Act. What the producers’ amendments do essentially is give the northern route the same kind of expedited procedure that the southern route now enjoys through ANGTA. If this option were available and the southern route were chosen, the producers would probably proceed under the new provisions because they might perceive that ANGTA favors the pipeline company (Foothills Pipelines and partners, which own rights granted by ANGTA).

Chairman Cole asked how Foothills would view this, per their rights under ANGTA.

Katz responded that Foothills would see the new process as allowing a competing alternative for a southern route. Also, Foothills might argue that ANGTA and the subsequent U.S.-Canada agreements grant them an exclusive franchise.

Cole asked if the new amendments would make it easier for the producers to propose a northern route.

Katz said that they appear to do so. Also, if the producers had to proceed under the Natural Gas Act as it is now written, they would have no expedited appeal process and no elevated rights through control of gas.

Cole asked if the producers had said anything recently indicating they favor a northern route. Recent comments by BP managers in the project indicated the northern route might be less costly, which could be interpreted as sending a “signal.”

Katz said no such preferences have been communicated to the Administration. “The producers have
said nothing in private they haven’t said in public.”

Ken Thompson, a committee member, asked if the legislation could be seen as an “end run” around the State.

Katz replied he didn’t think so. The Alaska delegation and the State were given the proposed amendments, still in draft form, simultaneously. The producers said they hoped to have input from interested parties and then discuss the amendments with staff of the Senate Energy Committee, which plans September hearings.

Frank Brown, co-chair of the Policy Council, commented that producers’ representatives were at this meeting and that they had said privately that they were not close to favoring any specific route.

Esther Wunnicke, a committee member, asked if there have been any movements by the Canadian government.

Katz noted that the producers have said they don’t need similar expedited processes within Canada. The State has been trying to fathom what Prime Minister Chretien’s “open mike” comments might mean for Canadian policy (an incident at a trade meeting in Genoa where the Prime Minister privately told U.S. President Bush that a northern route appeared more economic, and the comments were picked up on a open microphone).

Katz went on to say that inquiries indicate that the Prime Minister’s comments to the president indicated his personal preference for a northern route, not the position of his party or the government. The government prefers to remain route “neutral” and for the parties involved to come to some agreement on an application.

Chairman Cole asked if the U.S.-Canada Treaty is affected by the producers’ proposed amendments.

Bob Loeffler said this hasn’t been looked at closely, but the treaty appears to require non-discriminatory treatment of any transit pipeline, so the proposed legislation wouldn’t affect it, it would appear.

Ken McKinnon, chancellor of Yukon College in Whitehorse and former administrator of the Northern Pipeline Agency in the 1970s, was in attendance at the meeting and offered to contribute information. At the time the treaty was negotiated it was intended to be binding in naming Foothills as the builder of the Alaska Highway pipeline, for a period of 35 years (the designation ends in 2012). The Prime Minister, who is very astute, has said at times that he favors an Alaska Highway route, and that he also favors a Mackenzie Valley pipeline (to the delta) if a proposal is forthcoming. The G’wichin people of Old Crow would fight a Beaufort Sea pipeline, along with the government of Yukon. The delays in building the pipeline on the northern route would cause the project to miss its market window.

Chairman Cole observed that the treaty might be something like the Anti-Ballistic Missile Treaty, whose time has come and gone.

McKinnon replied the U.S.-Canada Treaty is to be in effect for 35 years. Foothills feels quite strongly that they have valid rights under the treaty.
Ken Thompson observed that the producers have made statements that “the approach of having the government pick a winner has been unsuccessful.” That could indicate a view that the treaty is obsolete.

McKinnon replied that Foothills believes the treaty is still valid. The producers would like to forget the treaty.

Jim Sampson, co-chair of the Gas Policy Council, asked John Katz if the U.S. and Canadian governments could just set aside the treaty. Is it seen as a significant impediment?

Katz replied that a constitutional issue could be at stake. If Congress enacts a law (the producers’ legislation) that is seen to modify an existing treaty, is the law supreme or is the treaty supreme? (The treaty was ratified by the U.S. Senate.)

Bob Loeffler added that the treaty and agreements related to it are very much in force, and there have been cases where the U.S. has reneged on treaty obligations (the League of Nations). The issue would have to be closely examined.

Chairman Cole asked which companies control gas in the Mackenzie Delta.

Ken Thompson said Imperial Oil, 70 percent owned by Exxon, controls most reserves. BP, through its acquisition of Amoco, owns exploration acreage.

Jack Roderick, a Council member, recalled statements by Exxon and Imperial Oil that Mackenzie gas can “stand on its own.”

McKinnon replied that there are varying estimates of gas on the Mackenzie Delta. The Yukon Territory believes there are 6 tcf of gas there. The Northwest Territories believes there are 12 tcf of gas. Still, it’s one third or less of the amount of gas needed to justify a stand-alone pipeline. McKinnon predicted that 10 years from now there will be a debate over whether to build a spur pipeline down the Dempster Highway to link with the Alaska Highway pipeline, or to build a stand-alone pipeline from the Delta. McKinnon said he thought the Dempster spur idea would prevail.

Chairman Cole asked John Katz and Bob Loeffler if the provision from the 1970s prohibiting producers from owning part of the ANGTS (Alaska Highway) pipeline was still in effect.

Loeffler replied the prohibition was placed in President Carter’s decision in 1977 but it was removed by President Reagan, who signed a waiver. But approval of the U.S. Justice Department is still required, for antitrust purposes.

Brian Davies, a Council member, asked if the waiver indirectly changed the U.S.-Canada treaty, by allowing the producers to own a pipeline.

Discussion followed, but Bob Loeffler made the point that the treaty designated the ANGTS group, led by Northwest Energy of Salt Lake City. It was assumed Northwest would have partners. Foothills is now the operator of the surviving consortium. The prohibition against producer participation applied only to the U.S. side, not in Canada.
Chairman Cole asked for an explanation of the different routes within Canada, the Dempster vs. Mackenzie Valley.

Ken McKinnon explained the Dempster route would follow the existing Dempster Highway. Both that and a route south along the Mackenzie River are being studied.

Brian Davies observed that the Dempster is a longer route for the gas than the Mackenzie Valley.

Rep. Ethan Berkowitz, a Council member, asked if an all-Alaska route would conflict with the treaty.

Bob Loeffler said it would apparently not. President Reagan signed the export permit for Yukon Pacific over the objections of Foothills, who said it did.

Chairman Cole asked John Katz to discuss Canadian First Nations’ attitudes toward Mackenzie development.

Katz relied that with respect to the Mackenzie Valley pipeline route, land claims have been resolved, as far as title. Questions remain as to how much ownership or compensation would be awarded. In the south, the State has been advised that there is one claimant as opposed to several in the north, and that the issue has not been resolved. However, the sense is that this issue will be resolved.

McKinnon offered that all of the First Nation groups along the Mackenzie but one are in favor of the pipeline.

Chairman Cole asked Katz what position the committee should take on the producers’ legislation.

Katz replied that discussion so far has been on the producers’ enabling legislation, the expedited appeal process. Phillips, one of the three companies involved, is also interested in tax changes. Exxon and BP are focused on the enabling legislation. The State should approach the issue earlier than later.

Bob Loeffler said the committee could consider broader issues, subjects not now covered which could be added.

Chairman Cole said the committee should voice an opinion before the full Council report is made in November, or else it would be too late.

Discussion followed as to the State’s interest in influencing the legislation, to provide access for future gas off the slope. Ken Thompson made the point that the State has a huge amount of unleased acreage requiring exploration and has a big stake in the issue.

Bill Britt, head of the State Gas Pipeline Office (GPO), said the U.S. Department of Interior has an interest also, because of unexplored acreage in the National Petroleum Reserve.

Ken Thompson said many access issues can be resolved through pipeline right-of-way leases, and Texas is quite active in this area. Fair access to pipelines is a big issue in Texas. The right-of-way lease is backed up with mandates from the state regulatory agency, he added.
Bill Britt briefed the committee on developments with State and federal regulatory agencies. The Department of the Interior has named a liaison to work with the GPO. Also, it had been learned that FERC and the Interior Department have started discussions on coordination, in anticipation of an application for a pipeline certificate.

Britt also said funds were released to his agency from the Legislature’s Budget and Audit Committee to allow completion of reimbursement agreements with the producers and Foothills. Those agreements are now in place. The GPO is now recruiting staff.

Mayor Rhonda Boyles, a Council member, asked about the “withdrawn partners” issue in the ANGTS group.

Katz replied that there are potential liabilities hanging over the ANGTS consortium because of rights of former partners who made investments. Claims as high as $4 billion have been discussed. The matter is of serious concern to the producers, who see it as a liability hanging over the ANGTS group.

Discussion followed among committee members. Ken Thompson suggested that the State should move very quickly to develop proposals for the Senate Energy Committee, in light of the producers’ proposals.


Esther Wunnicke said the committee should address areas of general concern, because it is not equipped with the needed staff to do otherwise.

Chairman Cole said action should be taken promptly, in view of the speed of the events in Washington.

Discussion followed as to how the committee members should proceed to advise the governor on issues that should be included in a State response to the producers’ legislation in Washington.

Chairman Cole noted a consensus in the group that an informal subgroup of four to six people work on the issue of an appropriate State response.
Alaska Highway Natural Gas Policy Council
Federal/International Action Subcommittee

AGENDA
September 7, 2001, 9:00 a.m. to 11:00 a.m.
Anchorage Sheraton Hotel

I. Introductory Remarks, Charlie Cole, Chair

II. Curt Moffatt, Van Ness Feldman, representing Foothills Pipelines

III. John Katz and Bob Loeffler

IV. Committee Member Comments
Charlie Cole, chairman of the committee, convened the meeting. Curt Moffatt, an attorney representing Foothills Pipelines, presented background materials to the committee on the Alaska Natural Gas Policy Act and briefly described the history of the ANGTS consortium and Foothills' involvement.

Cole asked Moffatt to describe the current structure of the ANGTS consortium. Moffatt said Foothills is owned 50 percent by Foothills Pipelines and 50 percent by TransCanada Pipelines, both based in Calgary. Foothills Pipelines itself is owned 50 percent by TransCanada Pipelines and 50 percent by Westcoast Energy, of Vancouver.

Cole commented that this effectively gives TransCanada 75 percent ownership of the consortium. Moffatt replied the two interests are operated as separate companies.

Cole asked about reports that Williams Energy has some remaining interest in the project. Moffatt said it was important for the committee to understand how two Canadian companies came to own a consortium originally owned by U.S. companies. In the early 1980s the U.S. owner companies felt it was important to broaden the equity base of the project. TransCanada, a major Canadian pipeline firm that was involved in the Canadian portions of the project, was invited to join the Alaska consortium.

Foothills, which was also involved in Canadian parts of the project, became involved when United Gas Pipeline, one of the partners, faced bankruptcy. Foothills had contracts with United Gas in the U.S. and to help United avoid bankruptcy, Foothills took on the company's obligations in the ANGTS group.

Williams became involved when it acquired Northwest Energy, of Utah, and was the operator of the consortium. When Williams withdrew from the project, Foothills became the operator.

Moffatt said that the legal regime established by ANGTA has had broad bipartisan support in Congress, and the support of several presidents and Canadian governments. Foothills is urging Congress, and Alaska, to "do no harm" to the regime established by ANGTA, through amendment.

Foothills believes no further legislation is needed to build the ANGTS, and no new Environmental Impact Statement is required, Moffatt said. Steps to "clarify" ANGTA might be appropriate but not major revision or establishment of a parallel permitting procedure. A new permitting procedure would confuse things before the Federal Energy Regulatory Commission and add delays, Moffatt said.

Cole asked Moffatt the status of the Mackenzie Delta pipeline project. Moffatt said Foothills has participated in discussions with groups proposing a Mackenzie pipeline but pointed out that the gas reserves on the North Slope are developed and ready to produce, while those on the Mackenzie Delta must still be developed. The Alaska project is much more mature, he said.

Carl Marrs asked about the liability posed by withdrawn partners' claim for repayment of previous investments. Moffatt replied the tariff likely to be used on the project is a "negotiated" tariff, now
commonly used on pipeline projects. There’s flexibility in negotiating these tariffs, and they can include provisions for risk-sharing. How any sunk costs are recouped is ultimately determined by the market, in what shippers are willing to pay. Payment for any sunk costs is up to the present partners.

Cole asked about reports that there could be claims for as much as $4 billion. Moffatt said the ANGTS partnership agreement allows current partners to repay investments of withdrawn partners, but at the discretion of the current partners. The overriding consideration is that any repayment not unduly harm the project. There is no requirement to repay the investment, he said.

Carl Marrs, a committee member, observed that if $2 billion to $4 billion in liabilities were added to the gas pipeline project, it could seriously impair it.

Moffatt said the market would not support an added cost like this. He told the committee negotiations are underway to resolve the issue, and said he couldn’t say much more.

Ken Thompson remarked costs like this can be recovered in a variety of ways. They can be recovered through the tariff, or they can be recovered through payments between the partners without affecting the tariff. However, if there is any possibility the tariff could be affected, this is a major issue.

Cole said he was uncomfortable letting Foothills and TransCanada work this issue out with the successor companies to the withdrawn partners — Williams, Enron, El Paso, etc. — “down the road.” He said he believes that “we should have this resolved now, before the State is asked to support the Foothills application,” to build the project. “I’m never comfortable when someone says ‘trust me,’” he said.

Moffatt said he can’t talk much more about this, but that the issue will be resolved and the partners are working diligently on it. He added that the actual cash investment by the withdrawn partners (in the Alaskan segment) is $280 million. Cole expressed amazement at how a $280 million investment is now carried on the books of the withdrawn partners as possibly $4 billion. Moffatt replied that the calculation of the cost is a result of the ratemaking practices and accounting procedures allowed in the early 1980s, when the investments were made.

Cole said it is best to get this on the table. “This issue is troubling us,” he said. Committee member Jeff Feldman observed there is no incentive to get the issue resolved early unless pressure is applied.

Audience member Harold Heinze said he was disturbed at prospects of government interference in a commercial negotiation.

Ken Thompson felt that if the tariff is affected by the liability, it should be resolved through legislation. “How it is resolved is their [the partners’] business, as long as it doesn’t affect the tariff.”

Moffatt commented that Foothills does not support developing a “parallel” expedited permitting process to ANGTA, and has heard reports that the gas producers have floated such a proposal.

Katz made several points to the committee: The State is concerned with the potential $4 billion liability, and it is one reason “we have slowed the process of developing legislation,” to ratify the highway route; development of a parallel permitting process could confuse things. Solving the liability issue by legislation doesn’t make it go away, he said. It could lead to a claim in the U.S. Court of Claims. Therefore, Congress may be unwilling to insert language dealing with the issue.
Select handouts and presentations given to the Federal/International Action Subcommittee
MEMORANDUM

TO: The Alaska Gas Pipeline Council

FROM: Bob Loeffler and John Katz

DATE: May 23, 2001

FILE: 08083/93


Senator Murkowski, as Chair of the Senate Energy and Natural Resources Committee, has introduced the Energy Security Act of 2001 (S. 389), a comprehensive bill to protect and enhance energy security and supply. The Democratic version, introduced by Senator Bingaman of New Mexico, is titled the Comprehensive and Balanced Energy Policy Act of 2001 (S596 & S597). On Thursday, May 16, Vice President Cheney submitted the Report of the National Energy Policy Development Group (Cheney Report) to the President. It aims to present a comprehensive strategy and a set of recommendations. It is not a legislative proposal as such, and, at this time, the Administration intends to work with the existing bills and not submit its own comprehensive bill. The memorandum will identify the issues the bills and Cheney Report present for an Alaska Gas pipeline as a basis for future discussion.

I. Fiscal Impact of Bills

Accelerated Depreciation for oil and natural gas pipelines. (ACRS) (M Sec. 921; B Sec. 304). Natural gas pipelines would be eligible for quick 7 year life depreciation. This is a positive incentive for development of all new natural gas pipelines, including ANGTS. The impact on tariffs is beneficial for State revenues because ACRS lowers the early year tariffs of a new pipeline due to the creation of a deferred tax charge against the rate base. In the later years of a pipeline, the effect is reversed and tariffs are boosted somewhat when the taxes have to be paid out.

Tax credits. The bill would create a tax credit of $.25 per mcf for North Slope natural gas wells placed in service before January 1, 2008. (B Sec. 5609). There is also a countercyclical tax credit for domestic development drilling and enhanced recovery work for natural gas and oil during periods of very low oil prices. (B Sec. 5606). The $.25 tax credit is a boost towards early recovery of North Slope gas. The countercyclical tax credit would not seem to have much impact on a gas pipeline.

Thus, the array of federal fiscal proposals that would provide a stimulus for development of a gas pipeline includes accelerated depreciation, production tax credits and, perhaps, an investment tax credit. An investment tax credit on new pipeline investment could very well provide the strongest stimulus but also would have the greatest impact on the federal treasury. Such a credit has not yet been proposed by any party.
II. Procedures for Expediting Pipelines

Sec. 109 of Senator Murkowski's bill requires a report to Congress by FERC within six months on how to improve the process for certification of gas pipelines including recommendations for legislative changes. Sections 305 and 597 of the Bingaman bill requires the FERC to conduct an interagency review of the policies, procedures and regulations to improve the process for approving natural gas pipeline capacity. CEQ is directed to negotiate a Memorandum of Understanding among agencies with EIS responsibilities for new gas pipelines. Both bills require evaluations of using existing rights of way to support new or additional capacity/facilities. M Sec. 104; B Sec. 304.

The sections of the bills that address gas pipeline development would not, as such, assist the permitting and construction of an Alaska Gas Pipeline. They call for reports and interagency reviews but no substantive actions. They do nothing to address the issue of what federal agency should be the lead federal agency on Alaska Gas Pipeline. They do nothing per se to address the uncertainty over the continuing effects and consequences of ANGTA and President Carter's Decision.

Report of the National Energy Policy Development Group

The report does address briefly the Alaska Gas Pipeline. It recommends:

"The NEPD Group recommends that the President direct the Secretaries of Energy and State, coordinating with the Secretary of the Interior and the Federal Energy Regulatory Commission, to work closely with Canada, the State of Alaska, and all other interested parties to expedite the construction of a pipeline to deliver natural gas to the lower 48 states. This should include proposing to Congress any changes or waivers of law pursuant to the Alaska Natural Gas Transportation Act of 1976 that may be required."

(Report at 7-11)

The relevant pages from the Report will be submitted separately.

A major set of questions exist because, with minor exceptions, Congress has not repealed the Alaska Natural Gas Transportation Act of 1976. That statute set up a process for a President's Decision on a route and a person to build an Alaska Natural Gas Transportation System (ANGTS). It also provided for expedited processing of various permits and authorizations necessary for the ANGTS and limited and expedited judicial review. The basic question is what is the continuing effect of the statute and decisions, permits and authorizations thereunder. On January 18, 2001, the Commission released a Staff Report on the Alaska Natural Gas Transportation Act. The Report addresses many of the open questions but concludes that "there are no simple answers to many of the legal questions posed herein." An example of the questions it addresses is its tentative conclusion that the 1976 Act would not
adversely affect consideration by the Commission of a proposal to transport natural gas made solely" under the Natural Gas Act. Former Attorney General Cole will distribute the full report to aid the council’s dialogue.

III. The Lead Agency

The legislative proposals do not address which agency would be the lead agency for the permitting and right of way issues for an Alaska Gas pipeline. In the Alaska Natural Gas Transportation Act, this issue was addressed by creating a new interagency structure under the direction of a Federal Inspector. This position has been abolished. The Department of Energy has the residual authority of this position.

The choices for lead agency are 1. the Department of Energy 2. the Department of the Interior, and 3. the Federal Energy Regulatory Commission. The pros and cons of each are:

1. FERC — an independent agency, not a cabinet department. It must make the decisions on tariffs and certificates of public convenience and necessity or modifications thereto. It has its hands full with the electricity crisis and has been two Commissioners short. It is not noted for its speed and, by its very nature, it would be unnatural for it to coordinate or lead a government-wide gas pipeline effort.

2. The Department of Energy. Historically, this has not been a strong Department but it has a different profile in the new administration. It has some residual claim to the ANGTA responsibilities and it is charged with energy policy. Next to the Vice President, Secretary Abraham has been the leading voice of the Administration on Energy Policy.

3. The Department of the Interior. In contrast to Energy, historically Interior has been a strong force on federal land, energy and environmental issues. Its Bureau of Land Management has great knowledge of Alaska land issues. It will issue the right of way for an Alaska Gas Pipeline. The new Secretary has not spoken out as much on energy issues as has the Secretary of Energy.
Access for In-State Gas Use and Future Opportunities Subcommittee

Meeting Summaries
Most of the committee meeting was devoted to discussion of objectives and strategies. Ken Thomp­son, who chaired the meeting, volunteered to modify a draft vision and strategies statement following the meeting. These are topics the committee will consider:

* Supply/demand for in-state natural gas.

* Best practices valuation/net-back pricing methodology to facilitate in-state gas use.

* Ensuring fair and transparent access rules to natural gas for Alaska customers.

* Benefits of natural gas development to rural Alaska and to communities along the pipeline route.

* Future options for 50 years for projects utilizing: gas-to-liquids (GTL); liquefied natural gas (LNG); natural gas liquids (NGL); petrochemical feedstock, for in-state use or for exports to markets in Asia or the west coast.

* Promotion or attraction of investment for in-state distribution and value-added processing.

There was discussion over duplication in some areas with other subcommittees, particularly in use of natural gas liquids and future petrochemicals development based on gas. A solution proposed, might be sorting out topics that were primarily export-related opportunities from topics involving use of gas or gas liquids within the state. It would be practical to hold joint meetings in some cases, given the overlap of topics.

A member of the committee observed that the two committees could make a major contribution by helping sort out confusion between the conflicting views of the emerging Asia liquefied natural gas (LNG) market presented by Yukon Pacific Corp. and the Alaska North Slope LNG Project, a group consisting of, among others, two of the three major North Slope gas producers. Another member suggested the committees might work to identify barriers to the different options being discussed.

A member of the public present suggested the committees’ work products include the “skeptic” base. Much of the focus will be on “benefits” but at the other range questions should be the critical “skeptic’s” inquiries. For example, the public will think mainly about jobs and access to gas. The Legislature, however, will have to deal with revenue impacts of different options being considered.

A committee member observed that availability of gas does not lead quickly to gas-related industrial development. For example, large reserves of gas have been available in Java, in Indonesia, for 20 years and only in the last five years have fertilizer plants been built to take advantage of the gas.
Ken Thompson chaired the meeting and reported on a number of developments in recent weeks.

At a meeting two weeks previously with Commissioners Condon and Pourchot and their staffs, work programs and staff resources were identified in support of the Council’s activities.

The In-State Gas Use and Future Opportunities committees have merged, and finalized their statements of purpose and vision statements.

Two major issues are being addressed:
1. To look at transparent and fair policies for access to gas
2. To consider future opportunities for the natural gas business in Alaska.

Another issue that could be addressed is access to the pipeline by independent producers.

In terms of estimates for future in-state demand, it was recognized that private companies as well as the State are working in this area. Ken Thompson and Brian Davies volunteered to make contacts with private firms to see if some of their information could be shared. Jack Roderick, a committee member, said that Unocal, Phillips and Marathon have as good a handle on Cook Inlet gas reserves as anyone.

Lee Gorsuch, a committee member, commented that Mark Myers, Director of the Division of Oil and Gas, said that Anadarko Petroleum is very bullish on gas prospects on the slope. The entry of new companies, like PetroCanada, into North Slope exploration is significant.

Bill Van Dyke, petroleum manager in the Division of Oil and Gas, told the committee the most difficult part of a prediction of new demand is the possible industrial and commercial use.

Brian Davies remarked that if new industrial uses were established near major population centers, it would help bring down the cost of transporting gas for other uses, such as residential.

Harold Heinze, a citizen speaking from the audience, commented that power generation at regional hubs is another option. Heinze said that a rule of thumb often used is that within a 100-mile area, energy is more efficiently distributed through electrical generation. Beyond 100 miles “it starts to break the other way” i.e. it is more efficient to build a small spur line for gas.

Bill Van Dyke, of the Division of Oil and Gas, said that the Department of Natural Resources was preparing to issue Requests For Proposals (RFPs) for studies on royalty gas, including a valuation study. He distributed copies of the draft RFPs to the committee for comment.

Van Dyke also mentioned House Bill 290, passed by the Legislature last year, which set out procedures for the Regulatory Commission of Alaska (RCA) in considering in-state uses of gas and gas offtake from a pipeline.
Ken Thompson commented that conversations he has had with some of the producers indicate they are leaning toward a “contracted volume structure” of organization out of a feeling that financing will be unobtainable if the pipeline is a common carrier. It would be good for the committee to meet with the RCA, he said.

John Shively, a representative of Foothills Pipe Line, said from the audience that his company uses a procedure of an “open season” in which potential users can nominate gas for transmission through a pipeline. The pipeline is then sized to meet that need. Unlike the oil pipeline (a common carrier) where new entrants can submit oil at any time, gas for a contract gas pipeline carrier can be nominated only at the start.

Harold Heinze commented that under contract carriage, gas can be nominated by anyone, not just an owner of the pipeline.

Heinze went on to say that one of the arguments for the State taking a share of ownership in a gas pipeline is to have the ability to “see what’s going on.” He questioned whether it was necessary to have an ownership position to see what is going on in the system. “My experience has been that it is no problem,” for the State to get information about pipeline operation and costs, through auditing procedures.

Lee Gorsuch, a member of the committee, commented that if lower-cost financing instruments were available to the State as a partial-owner, it would be an important advantage for everyone: the State, potential in-state users and consumers.

Ken Thompson said it was important for the committee to become more familiar with the whole regulatory issue, to get information from the RCA and the Federal Energy Regulatory Commission. It would be good to see if someone from FERC will be visiting Alaska soon.

Also, two places where gas industries have grown offer examples for Alaska, Alberta and Texas. In Texas 60 percent of gas produced from state-owned lands is sold in-kind, and the transaction prices for state gas must also be paid by producers taking the remaining 40 percent of state gas. In Alaska it is unclear whether the producers would pay for in-value gas at the price gas taken in-kind is sold for.

Brian Davies, a committee member, commented that the most complicated part of valuing “in-value” gas are exchanges. This was a serious complication in the disputes between the State and industry over royalty oil valuations.

John Shively said that the problem of building excess capacity into a pipeline is who carries the burden of the added debt for the capacity.

Lee Gorsuch commented that the tradeoff between pipe size and compression seemed complex. He had been told that, as a rule of thumb, it was more efficient to build at a larger pipe size and then add compression as throughput increases.
Alaska Highway Natural Gas Policy Council
Access for In-State Gas Use and Future Opportunities Subcommittee

AGENDA
August 2, 2001, 1:45 p.m. to 3:45 p.m.
Baranof Hotel, Juneau

I. Introduction by Ken Thompson, Subcommittee Chair

II. Update on RFPs for demand/supply studies and valuation studies, Kevin Banks, Division of Oil and Gas

III. Natural Gas Liquids: Current and Future Valuation, Wil Condon, Commissioner of Revenue

IV. Current Netback pricing methodology for oil and how it differs from netback pricing for gas under the leases, Wil Condon, Commissioner of Revenue, and Bonnie Robson, Deputy Director, Division of Oil and Gas

V. Questions and Discussion
Chairman Ken Thompson opened the meeting.

Kevin Banks, commercial analyst with the Division of Oil and Gas, briefed the committee on requests for proposals issued by the division in June on royalty issues. Proposals have been received and the division is now evaluating them, Banks said.

The smaller of the two contracts deals with how royalty gas should be valued. This will be important in helping the State analyze proposals to buy royalty gas. It will also look at royalty-in-kind practices in other states, and suggest practices that might be appropriate in Alaska. The final report is expected in November.

The second contract deals with potential in-state gas demand and what it might cost to deliver North Slope gas to several regions of the state. If gas can be delivered to Fairbanks competitive with diesel fuel, some local conversion to gas can be expected. The study will help the State consider how much gas might penetrate local markets, and thus estimate the local gas demand.

Ken Thompson asked if the study will include other fuels delivered, such as gas liquids (propane, butane).

Banks replied the division tried to keep the request for proposals general in scope, but that natural gas liquids would be included in both studies.

Brian Davies, a committee member, commented that if an enriched gas stream (containing liquids) moves through the pipeline, extracting the gas and handling the liquids will involve more cost, and an ongoing operating cost. Has this been considered? Also, have local distribution costs been included?

Banks said the division expects the liquids to create more costs. This may limit the places gas can be taken off the pipeline. He said that local distribution costs will have to be included to estimate costs to consumers, which is needed in order to estimate the likely level of conversion to gas from fuel oil.

Ken Thompson commented that Enstar Natural Gas Co. in Anchorage has substantial experience in building local distribution systems, and the company might be willing to share information.

Banks said Enstar is the expert in Alaska in this field. Building distribution lines in Alaska might actually be less expensive than in many states because obtaining rights-of-way could be less complex and expensive.

Wil Condon, Commissioner of the Department of Revenue, addressed the committee. Because State severance taxes are different for oil and gas (15 percent nominal rate for oil; 10 percent for gas) a key issue for the Department of Revenue in valuing gas and gas liquids produced along with crude oil (associated gas) is determining which hydrocarbons derive from oil and which from gas.
Dan Dickinson, director of the State tax division, explained that current law makes the determination by looking at how liquids are recovered. "Gas liquids and oil contain the same stuff, but the cocktails are different," meaning the chemistry is similar but the makeup is different. State law stipulates that hydrocarbons recovered in normal production operations, which involve a drop in pressure, constitute oil. Hydrocarbons recovered through a mechanical or chemical process are gas-derived. The nominal tax rate for both oil and gas are modified by the economic limit factor in the severance tax. Oil or gas used as fuel in the field are not taxed, he said.

Valuation procedures used today, including the principles involved, are set out in a "commissioner's decision" document developed five or six years ago when the regulations were modified. This document explains the decision and the policies, and applies to today's operations. It will likely have to be modified to deal with commercial gas sales.

A question was asked when the State's basic severance tax was adopted.

Condon replied it was adopted in 1955, during territorial days, but amended several times in the 1960s, 1970s and 1980s.

Dickinson said the crude oil that flows from the North Slope now contains about 95 percent oil and 5 percent gas (natural gas liquids). The State values it that way. The producers account for differences in value through the quality bank, a procedure for adjusting and accounting for differences in values of crude oils of different qualities flowing into the TAPS system.

Ken Thompson pointed out that a big difference in a gas pipeline is that the gas liquids will be pulled out and sold separately, not sold blended, as with the crude oil in TAPS.

Several questions were asked, and discussion followed, regarding the decision not to tax oil and gas used as fuel by producers.

Condon and Dickinson said there is a small amount of gas now sold to commercial users, such as contractors on the slope and gas liquids are sold to other producing areas. These are taxed. The decision not to tax reflects a policy choice to encourage more oil production.

On the larger valuation issues, Ken Thompson raised the point that Texas requires sales contracts to be submitted to verify reported sales values.

Dickinson said the division constantly monitors sales transactions and by regulation can require contracts to be submitted with the monthly tax returns filed by the producers.

Thompson said gas liquids moved through an Alaska pipeline will be shipped and sold in markets in Calgary, the Rocky Mountains and perhaps Chicago. Does the State have regulations in place to track these kinds of sales?

Dickinson said regulations will have to be written.

Thompson added that in Texas if a producer has a stake in a firm to which oil or gas is sold, the State
must be informed of that ownership. This can be a complex issue because in some areas, such as Asia, if a producer also owns part of a power company, LNG can be sold at a lower “cost” to, for example, the power plant. The profits can then be taken at the power plant and its sales. Texas and the European Union have regulations in place that deal with this “forward chain” issue.

Frank Brown, co-chair of the Gas Policy Council, said this is true even in Cook Inlet. Gas is sold essentially in three different markets (local heating and electrical generation; Japan, as LNG; and fertilizer and ammonia).

The discussions which followed on the problems in valuation of natural gas liquids showed it to be one of the issues that will be of major concern to the Council.

Bonnie Robson, Deputy Director of the Division of Oil and Gas, briefed the Council on the lease form used on current state oil and gas leases, and its provisions that relate to royalty.

Most of the gas that will be produced on the North Slope in the near future are on lease forms that were developed in 1959 and in use until 1979. The leases provide for several ways in which value can be measured, including prices received in the market, a “posted price” for the field, a “prevailing price” paid by other producers, and other methods.

There are provisions for use of alternative measures, just as on the tax side, including the use of “higher” prices.

Ken Thompson commented on the “higher of” provisions (where the producer must pay the royalty based on the highest price paid by customers or received by another producer in the same field), although there are questions of the appropriateness if only small volumes are involved in a sale.

In Alaska the producers have chosen not to market their oil until it reaches the west coast so that transportation can be controlled. In times of volatile oil markets, the “higher of” issue becomes very complex. “It’s important to get the measures right, and it will require skillful administration,” he said.

Texas administers royalty payments on thousands of leases and requires the information to be posted on the internet. Texas has offered to make its software available to Alaska, Thompson said.

More discussion followed with the committee and with State officials regarding the complexities of the valuation issue. Ken Thompson pointed out that when gas prices were “normal” (in current ranges) the State could lose substantially if the values were measured in Btus (British Thermal Units, a standard measure of energy content) because the true value of the liquids sold separately for petrochemical feedstock or other uses will not be reflected.

Bonnie Robson, of the Division of Oil and Gas, said most producers now file their royalty information electronically, although some supporting documents are still submitted on paper.
Alaska Highway Natural Gas Policy Council
Access for In-State Gas Use & Future Opportunities Subcommittee

AGENDA
September 25, 2001, 8:30 a.m. to 12:00 noon
Anchorage Hilton Hotel, Lupine Room

I. Call meeting to order, review agenda

II. David Hall, Deputy Land Director, Texas General Land Office

III. Bonnie Robson, Deputy Director, Division of Oil and Gas

IV. Michael Kotowski, Petroleum Reservoir Engineer, Division of Oil and Gas

V. Nan Thompson, Chair, Regulatory Commission of Alaska

VI. Break

VII. Cavan Carlton, Project Director, Arctic Project Team, Williams

VIII. Committee discussion on recommendations, conclusions
Chairman Ken Thompson introduced David Hall, from the Texas land office, to describe Texas’ system of administering in-kind royalty oil and gas.

Hall said Texas has been taking royalty oil and gas in-kind since 1983 and that half of its royalty is now taken in-kind, accomplishing three goals: (1) enhancing the royalty value by selling for higher prices; (2) establishing a reference market price for auditing producers’ payments for in-value royalty; (3) lowering the price of electricity to state facilities by selling royalty gas to utilities.

Texas has other requirements in law, such as requiring pipeline companies to sell spare capacity to the State to carry royalty oil and gas, and requirements that leaseholders submit copies of sales contracts, for auditing purposes. All royalties are paid on actual market transactions, which are audited with the contracts in hand. Texas’ land office has 74 employees in its royalty section, most working in auditing. Four are employed in royalty in-kind sales. Texas also uses its authority to grant right-of-way leases across state lands and includes “fair access” provisions in leases to require pipeline owners to allow others fair access to their pipelines.

In discussions following, Ken Thompson observed that requiring a “netback” pricing methodology for sales of gas in Alaska, compared with an alternative practice of pricing gas on the basis of an alternative fuel, such as diesel, is very important.

Bonnie Robson, Deputy Director of the Alaska Division of Oil and Gas, briefed the committee on how the State now handles royalty in-kind sales.

Typically, the in-value price paid by producers is considered a base price in negotiations with potential buyers, and a premium is negotiated above the in-value base price. The amount of the premium is typically the bid variable in the royalty sale. The State is not allowed to sell royalty oil or gas below the in-value price, which would constitute a subsidy, she said.

Robson told the committee that the State’s ability to take royalty share in-kind gives it other advantages. For example, companies that bid recently for North Slope leases and who are now exploring, mainly for gas, are not expected to be among the owners of a gas pipeline. They have approached the State with a proposal to purchase an option on State royalty gas to assure they have supply, so they can bid for capacity in a pipeline if an “open season” for volume nominations is declared. If these companies discover gas, they can ship gas using their own capacity. If they are unlucky and do not discover gas, they have the option of shipping State royalty gas.

Committee member Jack Roderick asked if owning a share of the pipeline was a benefit to the State, in reserving capacity to ship royalty gas.

Robson said it really isn’t. Nominations to ship gas are open to anyone, and no advantage is given to a pipeline owner over a shipper who is not an owner.

Committee member Rhonda Boyles asked if federal legislation will address the issue of capacity.
Robson said some bills in Congress contain provisions related to access, and some don’t.

She also told the committee that despite the requirement that the State receive as much or more for in-kind royalty as would be paid in-value, in actuality the State has been paid less than the in-value payment for its royalty sales. This has occurred mainly because of the royalty audits of producers which occurred in years following production, and which resulted, after extensive litigation (the “Amerada-Hess” case) in settlements which, in effect, raised the in-value payments, which were paid as settlements to the State. In theory this should have adjusted upward, retroactively, the base price on which the royalty in-kind sales were made. But the purchasers of royalty oil, mostly in-state refiners, were unwilling or unable to make these added payments. Thus, in actuality the State has so far lost money on its royalty oil sales.

Having learned from this experience, the State should include provisions in future royalty contracts that allow for these kind of adjustments, including “hammers” such as a requirement that a purchaser pay the State’s legal fees if the post-sale adjustment is contested in court.

Committee Chair Ken Thompson observed that one of the advantages of a royalty gas sale is that if a premium is paid, it will set a floor for in-value payments. It’s quite possible that large out-of-state utilities will pay a premium to get access to a long-term, stable supply of gas, he said.

Mike Kotowski, Division of Oil and Gas staff, discussed the potential volume of natural gas liquids that will be available to a pipeline.

From a practical point of view, there should not be a physical limit as to the amount of liquids that can be carried in a high-density, high-pressure gas pipeline. The tradeoff is really economic, based on alternative uses of liquids such as in making fluids for use in enhanced oil recovery projects, he said. The amount of gas liquids that ultimately move through the pipeline will be determined on the basis of the best use among competing uses.

Committee chair Ken Thompson said the liquids issue illustrates how potentially big the business of selling gas liquids can be. The State should receive proceeds on sales of liquids as well as sales of methane gas as fuel. Often, when gas prices (for fuel) are low, prices of gas liquids as feedstock to the petrochemical industry are high. Higher revenues from liquids sales can offset lower revenues from gas (fuel) sales, he said.

Mark Myers, director of the Division of Oil and Gas, pointed out that achieving this will require a royalty mechanism that is not entirely based on the energy (Btu) value of the gas.

Ken Thompson agreed and added that it is important that the values reported for royalty sales be based on volumes, not Btus.

Committee member Brian Davies asked if existing State laws and regulations allow for adequate tracking of sales of liquids.

Kevin Banks, economist with the Division of Oil and Gas, said the answer is “yes.” The State’s oil and gas leases contemplate payment based on market values, although a formula is currently used for crude oil under the royalty settlement agreements. Currently, some gas liquids are blended into crude oil and shipped through the TAPS. These NGLs are treated differently in the “quality bank” value calculations that are used to determine the values of blended crude oil shipped through the pipeline.
Alaska Highway Natural Gas Policy Council
Access for In-State Gas Use and Future Opportunities Subcommittee

AGENDA
October 16, 2001, 9:30 a.m. to 12:30 p.m.
Governor’s Anchorage Conference Room

I. Conclusions and Recommendations

II. Break

III. Public Testimony
Select handouts and presentations given to the In-State Gas Use and Future Opportunities Subcommittee
STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES

REQUEST FOR PROPOSALS
For
Natural Gas In-State Demand Study
ASP 2001-1000-2650

IMPORTANT NOTICE:

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For this solicitation please notify Christopher Rutz by e-mail at (chrisr@dnr.state.ak.us), by phone at 907-269-8666, or by fax at 907-269-8909 with your company name, address, phone number, fax number, and e-mail address if available.

RFP ISSUE DATE: June 19, 2001
SECTION 4. BACKGROUND INFORMATION

The Department of Natural Resources, Division of Oil and Gas ("State") is soliciting proposals from qualified firms with recent gas pipeline experience to research and report to Alaskans the potential in-state demand for Alaska North Slope ("ANS") natural gas. Several projects to commercialize ANS natural gas are in various stages of planning at this time. The state anticipates that the sponsors of one or more of these projects may soon begin the process that will lead to construction of a pipeline from the North Slope to markets in the Lower 48 and/or Asia.

This research and report will examine the future demand of Alaska communities and businesses for ANS gas and help the state to factor local demand in the regulation of an ANS gas pipeline project.

If development of ANS natural gas is commercially feasible, it also could compete with other local energy sources such as Cook Inlet natural gas, Healy coal, and North Slope and Cook Inlet crude in filling Alaska's energy requirements. The future quantities of natural gas demanded by various in-state users will depend in part on its price and the availability of substitutes. A low cost and substantial natural gas supply could stimulate development of new industries that rely on inexpensive sources of energy or inexpensive sources of natural gas as a feedstock.

The division requires, at minimum, an economic model of the demand and supply of natural gas in various regions of the state. The contractor should provide sufficient information and tools to allow the division to apply the results of the study to a myriad of decisions that it may be called upon to participate in—including rights-of-way, pipeline access, ANS gas resource development, fiscal systems, and ANS natural gas royalty dispositions.
SECTION 5. SCOPE OF WORK

Summary
The contractor's primary tasks will include: 1) developing quantitative economic models of the natural gas market in Alaska; and 2) interpreting the model results to test the impact of an ANS natural gas pipeline project on the in-state market and, conversely, test the impact of the in-state market on the scale and regulation of the pipeline project. Additionally, the contractor must provide a bibliography of existing research on demand and supply conditions of natural gas markets both in Alaska and elsewhere in North America.

Task 1: Alaska Natural Gas Demand and Supply Modeling

The contractor will gather the necessary data and develop estimates of in-state demand and supply of natural gas in Alaska. Five regions will be examined: the Fairbanks-North Star Borough; other communities along the pipeline (both a Valdez and an Alaska Highway route should be considered); rural communities that might be served by an unconventional natural gas transportation system (e.g., LNG, CNG, or propane delivered by barge to interior river communities); the Cook Inlet, defined as the area now served or that might be reasonably expected to be served by the Enstar pipeline system; and commercial uses of natural gas on the North Slope. The contractor will prepare long-term forecasts of demand and supply and natural gas prices in these regions.

In developing the supply side of the analysis, the contractor must make engineering estimates of the capital and operating costs to deliver ANS natural gas into these regions and estimate the delivered price of ANS natural gas into these regions at a range of netback prices (the value of ANS natural gas at the inlet of the ANS natural gas pipeline). With regard to Cook Inlet, the supply of natural gas must also include an evaluation of the marginal cost of incremental production from within the region. The contractor will examine the potential for new additions to Cook Inlet natural gas reserves and at what cost these reserves may be brought into production.

The quantity of demand for ANS natural gas in these regions depends on the delivered price of the gas and the users' willingness to pay for it, determined by the price of competing and complementary sources of energy and aggregate income. The contractor will estimate the household and commercial price and income elasticities of natural gas demand. The contractor will explore the conditions that yield the derived demand for gas in the power generation and industrial sectors. The contractor will have to determine the price of competing fuels and the capability of natural gas to displace current fuel usage.

The contractor also will have to extend the analysis of industrial demand for natural gas to include more than the existing industrial users. Some effort must be expended to portray the potential for a large, discrete expansion of industrial uses of natural gas as a feedstock and as an energy input. The contractor will estimate the prices at which such industrial uses of ANS natural gas becomes feasible and what quantities ANS natural gas will be required to supply these uses.

The contractor will provide assessments of various pipeline project development scenarios and their impact on in-state uses of ANS natural gas. The contractor will examine the need, if any, for added pipeline capacity to accommodate in-state requirements and assess the impact of added pipeline capacity on delivered and netback...
prices for ANS natural gas. The contractor will also provide a description of the possible affects to each study region if ANS natural gas is not available.

The industrial organization of the natural gas producers and pipeline owners may be a factor in the determination of the supply of ANS and Cook Inlet natural gas. The contractor will describe the impact on supply and prices by changing model assumptions to account for these factors.

Task 2. Bibliography

The contractor will list literature on relevant demand and supply studies of natural gas markets in the U.S. and Canada; studies that show how major natural gas developments have contributed to the growth of the local and regional demand for natural gas; sectoral studies of gas demand for residential, commercial, industrial, and power generation; studies that forecasts supply and demand for natural gas over the long-term; studies that measure market penetration, fuel switching and other factors that affect demand and supply relationships when new sources of natural gas become available; studies that compare demand and supply price elasticities in various markets that may be applicable to the Alaska natural gas market; and studies that reveal the influence of competing and complimentary energy supplies, personal incomes, and derived demand for gas as a feedstock.

The contractor also should list the existing research conducted in Alaska by the State and natural gas producers, gas and electric utilities, and current and potential industrial users of natural gas. If necessary, the contractor may have to interview representatives of these research sources to acquire information.

Task 3: Presentations to Public, Policy Council, and Legislature (contingent on FY 02 funding)

The contractor may be required to present the study findings to the Legislature and the Governor's Alaska Highway Natural Gas Policy Council. The contractor should be available through May 2002 to make these presentations.

Schedule:
The contract is anticipated to be awarded by July 23, 2001. On or before October 31, 2001, the contractor will submit a draft report to the division. The division will provide a review of the draft report 14 days after receipt of the draft. The final report, incorporating the division's review and comments, will be due 14 days after the division submits its review to the contractor. From the date of contract award through the date of submission of the final report, the contractor is to conference with the division weekly on its progress and tentative conclusions. All dates and time periods are subject to alteration at the election of the division.

The contractor will provide to the State via teleconference bi-weekly progress reports to make sure the research is on track. The State and the contractor will also will discuss the State's written comments provided after each draft deliverable via teleconference.
State of Alaska
Department of Natural Resources

REQUEST FOR PROPOSALS
For
Natural Gas Value Study
ASP 2001-1000-2649

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RFP ISSUE DATE: June 19, 2001
SECTION 4. BACKGROUND INFORMATION

The State is soliciting proposals from qualified firms to research and report to Alaskans how Alaska North Slope (ANS) natural gas may be valued. Several projects to commercialize ANS natural gas are in various stages of planning at this time. The State anticipates that the sponsors of one or more of these many projects may soon begin the process that will lead to construction of a pipeline from the North Slope to markets in the Lower 48 and/or Asia.

The calculation of ANS natural gas value is straightforward: a price is set at a destination and the cost to transport gas to the destination is deducted from this price to establish a “netback” value of natural gas at the inlet of the pipeline. Institutional factors, government regulations, gas and pipeline ownership, and a variety of other factors will impact components of this calculation. The division seeks a review of these factors from pipelines in the Lower 48 and Canada as they may be applicable to an ANS natural gas pipeline project. On the basis of this review, the contractor will identify relevant natural gas pricing policies and practices used elsewhere and determine which practices may to be used to market and value ANS natural gas, given the special circumstances (geographic, reservoir management, commercial and regulatory) that will accompany ANS natural gas development.

A companion study to this research, titled “Alaska North Slope Natural Gas In-State Demand Study,” will examine the specific demand and supply relationships for ANS natural gas within the state of Alaska. Both studies will be considered by the State, including:

- What access provisions should be contained in a pipeline right-of-way (ROW) lease to maintain or enhance the value of ANS natural gas;
- Whether to take ANS gas royalty in-kind ("RIK") or in-value ("RIV") or both;
- Whether the State should commit to RIV or RIK before a pipeline is built or closer to the time of gas deliveries;
- Whether a price of valuation methodology agreed to before a pipeline is built may fail to capture market value at the time of gas deliveries;
- If the State decides to take some or all of its ANS natural gas as RIK:
  - The mechanism for selling that gas (auction, agent, in-house management, or other);
  - The term of commitment for ANS natural gas sales.
SECTION 5. SCOPE OF WORK

Task 1. Review and Description of Natural Gas Pipeline Projects
The contractor will conduct a thorough investigation of natural gas pricing and marketing practices in key locations in the Lower 48 and Canada.

This investigation will include a review of relevant industry studies, regulatory decisions, RIK programs in other states, relevant academic literature and trade press reports, and other information that will provide a backdrop to the questions: How is gas pricing determined elsewhere? What specific RIK policies and practices are used elsewhere and how do they influence gas value?

The contractor will examine and compare natural gas trading in the U.S. and Canada as well as other regions of the world if appropriate to evaluate the conditions that are necessary to establish markets ("trading points") where natural gas prices and the prices of transportation services are transparent and credible.

In this review the contractor will provide insights into the issue of how pipeline ownership, ownership of trans-shipment facilities, trading contracts, and government regulation affect these conditions and influence trading practices and outcomes.

The contractor will also examine how pipeline capacity and the rules governing access impact value.

The contractor shall provide the results of Task 1 in a draft report supplied to the division within 60 days of the award date. The division will provide to the contractor a review and comment of the draft at a progress meeting scheduled within 14 days of receipt of the Task 1 draft report. The contractor will include the Task 1 draft report in the Final Report incorporating the division's review and comments.

Task 2. The Value of ANS Natural Gas
The groundwork laid in Task 1 will be used in conjunction with the specific attributes of the ANS natural gas pipeline project to explain how ANS natural gas value may be determined in the future and which RIK/RIV practices are appropriate from the standpoint of royalty policy, netback value transparency, fairness, and in-state business creation and expansion.

The contractor will predict how value is likely to be determined based on the conditions revealed in Task 1 that apply to an ANS natural gas pipeline project. For example, each of various proposals to commercialize ANS natural gas may result in different valuation methods. The contractor will consider a variety of gas marketing mechanisms, including a pipeline spur and/or gas trading hub near the Fairbanks/Delta junction area.

The contractor will determine methodologies to achieve transparency in netback valuation and transportation pricing and to assure fair and favorable pricing for in-state gas business creation and expansion, as well as for royalty revenue generation.

In its predictions, the contractor will examine the likelihood that an in-state market characterized by transparent and credible pricing will arise for ANS natural gas.
At the completion of Task 2, the contractor will submit a draft final report to the division approximately 140 days from contract award.

The contractor will also present its findings to the division (and possibly others) in a meeting scheduled shortly after the report is submitted to the division. The division will provide a review of the draft final 14 days after receipt of the draft final. The final report, incorporating the division's review and comments and including the final literature review report from Task 1 will be due 14 days after the division submits its review to the contractor.

**Task 3: Presentations to Public, Policy Council, and Legislature**

The contractor may be required to present the study findings to the public, Legislature, and the Governor's Alaska Highway Natural Gas Policy Council. The contractor should be available through May 2002 to make these presentations.

**Task 4: Follow-up**

The contractor may be required to be available to provide follow-up on this report and valuation issues that arise during the process of developing

**Schedule**

The following schedule is a timeline of events for the project. The dates are subject to change, but the final report date will remain the same. The contractor will provide to the State via teleconference bi-weekly progress reports to make sure the research is on track. The State and the contractor will also discuss the State's written comments provided after each draft deliverable via teleconference.

- **July 23, 2001** (Approximately) Contract Award
- **August 23, 2001** (30 days after contract award.) Complete Task 1. Draft interim report submitted to the division.
- **August 27, 2001** One week after the State receives the Draft interim report, the State will provide its review and written comments to the contractor.
- **October 19, 2001** (60 days after completion of Task 1.) Complete Task 2. Draft report submitted to the division. Contractor presentation of study results to the State.
- **October 26, 2001** One week after the State receives the Draft Final Report, the State will provide its review and written comments to contractor.
- **November 16, 2001** Final Report due.
- **November through May 31, 2002** Presentations.
TAKing ROYALTY GAS IN KIND

The State’s Royalty Share of Production, Typically 12½ %, May Be:

- Taken in value (RIV), meaning the producer markets 100% of the gas and pays the State 12½ % of the proceeds or market value
- Taken in kind (RIK), meaning the State physically takes its gas on the North Slope and sells it there

Advantages of In-State Access to Alaska Oil and Gas (Whether from State or Producers)

- In-state investment (e.g. refineries, petrochemical plant, LDC for natural gas)
- In-state jobs
- Increased State revenues (e.g. property tax, corporate income tax, and possibly incremental royalties and severance taxes)
- Possibly less expensive energy
- If an RIK purchaser nominates capacity on a pipeline owned by the producers, the RIK purchaser and the State will be aligned in pursuing a lower pipeline tariff

Advantages of RIK

- If RIV payments seem low, the State can switch to RIK to test market or command higher price
- If producers choose not to sell to in-state users, State can sell its gas to those users
- If producers offer to sell to in-state users at a price higher than RIV, the State can supply in-state users for lower price
- Option for RIK purchases could foster in-state exploration and development of additional reserves

Disadvantages of RIK

- Historically, the State has received less for RIK than RIV, despite mandate to receive as much or more
  - Financially distressed buyers
  - Buyers sue or threaten to sue rather than pay price adjustments
- RIK price is tied to RIV, so prices for oil or gas previously delivered are adjusted upward when producers are audited
- The administrative process to sell oil and gas is lengthy
- The State is a less experienced marketer than the producers
- Open season for gasline capacity will precede gas deliveries by ~ 6 years, meaning gas sales contracts may have to be entered ~ 6 years before first gas deliveries
- The State may have to pay field costs for RIK but not RIV from Pt. Thomson DL-1 leases
1. How can the state ensure (partial) jurisdiction of a gas pipeline?

The only sure way for the State to gain jurisdiction to regulate intrastate gas movements on an interstate line is through new federal legislation. Under existing law, the RCA’s authority to regulate intrastate shipments is unclear. Uncertainty in the law invites litigation, which means delay. Litigation is also effectively delegation of the important policy question of how much control Alaskans will have over the shipment of their gas within the state to the courts.

FERC generally has jurisdiction to regulate gas pipelines. Its regulatory authority includes permitting, rates and connection policies. There is adequate protection in the existing law for consideration of the state’s interests in the permitting process. To assure adequate protection of the state’s interests, the RCA could concurrently regulate the rates charged to in-state shippers, and the access points in Alaska.

The ratesetting process for the pipeline needs be viewed from the perspective of the entire line. Alaska’s interest is in the rates for transportation within the state. Similarly, there will be interconnection and access issues all along the line, but as a state we are interested exclusively in interconnection and access within the state of Alaska. The state could exercise concurrent jurisdiction over these issue with the FERC through a joint board. The joint board process is one that had been used by other federal agencies and historically by FERC to formalize state participation in the decision making process.

Section 209 of the Natural Gas Act describes a procedure for state participation in a FERC decision. The best model is found under the Telecommunications Act (47 USC

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1 Alaska Natural Gas Transportation Act of 1976 (ANGTA) requires the FERC to allow the state to have access to its gas, but does not clearly give the state authority to set intrastate rates. Section 13(b) states:

The State of Alaska is authorized to ship its royalty gas on the approved transportation system for use within Alaska, and, to the extent its contracts for the sale of royalty gas so provide, to withdraw such gas from the interstate market for use within Alaska; the Federal Power Commission shall issue all authorizations necessary to effectuate such shipment and withdrawal subject to review by the Commission only of the justness and reasonableness of the rate charged for such transportation.

Depending on how ANGTA Section 13 (b) is read, it could allow the state to set rates for intrastate transportation subject to FERC review, or require the FPC (now FERC) to set those rates.

If a pipeline permit were issued under the Natural Gas Act (NGA) then ratesetting jurisdiction would reside with the FERC. The comingling doctrine suggests that if one molecule of gas transported on the line goes into interstate commerce, the entire pipeline is federally regulated.
Section 412), where the FCC is required to establish a joint board with state commissioners to get input on universal service issues. The FCC refers questions to the joint board, which includes appointed state and federal commissioners. The joint board’s recommendations go back to the full panel of the FCC for approval. This process allows the development of a complete record for decision. The state joint board commissioners are part of the decision-making process, another party offering comments. The joint board’s recommendations become part of the record, so that if the full commission does not follow the recommendation they must adequately explain why or risk reversal by an appellate court.

Absent new federal legislation, the RCA can work with the FERC and try to ensure that state concerns are adequately addressed. My discussions with the FERC indicate that they understand the state’s policy interests and would consult with us in their decision making process. However, in the interests of a long-term solution to the problem that will survive the individuals now working at the respective state and federal agencies, a formal joint board should be created by statute to look at specific issues of intrastate rates and access.

A final alternative that merits mention is an effort to design a pipeline that would be partially “intrastate” under federal law. If the line from the North Slope to Fairbanks was a “gathering” line, or Fairbanks was treated as a “hub” a major segment of the line would be exclusively regulated by the state. The physical characteristics of the pipeline, and the volume of gas used in Alaska relative to the volume shipped outside are the greatest impediments to this option. There is not likely to be more that one line going from the North Slope to Fairbanks, and the majority of the gas transported through the line will be processed and used outside of Alaska.

2. Discuss the possibility of a joint contract/common carriage pipeline. Would such an arrangement be beneficial to the state?

There are no interstate gas pipelines regulated as common carriers. The Alaska legislature approved a regulatory scheme for a gas export pipeline that reserved a portion of the pipeline for in-state use as a common carrier. (HB 271). This type of arrangement on an interstate gas pipeline would require federal legislation.

To analyze the benefit to the state, the state’s goals first need to be defined. The state wants: 1) to insure access to the pipeline for future producers who may not be able to sign a contract for capacity now, 2) to insure that its royalty gas gets to market, 3) to insure that Alaska users have adequate access to the line through interconnection points, and 4) to insure reasonable intrastate transportation rates.

The question of whether or not the state is able to achieve these goals is more dependent on who owns the pipeline than whether the pipeline is regulated under a contract or common carriage regime. An independent pipeline company not controlled
by producers would share the four interests outlined for the state above. An independent pipeline company makes money by transporting more gas and keeping rates low enough to encourage maximum use of the line. An independent pipeline company would encourage access at all points where it could recover the costs of allowing interconnection.

Under common carrier regulation anyone who tenders product to the pipeline is entitled to have it shipped at tariffed rates. If the demand exceeds the pipeline's capacity, that capacity is pro-rated, or the Commission can order expansion of the pipeline to accommodate the increased demand and avoid construction of a duplicate facility. Interconnection to common carrier pipelines is regulated by the RCA in Alaska. AS 42.06.340. The RCA also sets rates on all common carrier pipelines. AS 42.06.370. Common carrier regulation of a gas pipeline would require adoption of these or similar standards in federal legislation.

Regulation as a common carrier may have a significant impact on the cost of construction of the pipeline. The pipeline owners may be able to obtain more favorable financing rates if they have firm commitments to use the proposed pipeline's full capacity.

3. How can the state best use its ROW authority to ensure appropriate access to a gas pipeline?

This is a question that can be better answered by Bill Britt, Gas Pipeline Coordinator for the Alaska Department of Natural Resources' at the Joint Pipeline Office. The Joint Pipeline Office will be responsible for issuing a ROW permit.

4. What areas of state and/or federal law need to be clarified?

First, the relationship between ANGTA and the NGA needs to be clarified to avoid litigation that might significantly delay the first phase of the project. From the RCA's perspective there are two basic policy concerns that need to be clarified in federal law: Alaskan access and Alaskan rates.

First, the ability to resolve contested Alaskan interconnection requests should be given to a joint board that includes state and federal regulators. This would insure that the needs of all prospective in-state users would be met, and the costs of that interconnection fairly allocated.

Second, the question of rates for transportation to Alaskan interconnection points should be assigned to a joint board. In order to make use of this gas affordable to Alaskans, there needs to be a distance-sensitive tariff methodology. In-state users of the
pipeline should have to pay for only the portion of the pipeline that they use, as opposed to having to pay for the full costs of transportation to the end of the line.²

The other question that may need clarification is expansion. Even if an independent pipeline company owns the pipeline, there may not be adequate pressures from potential competitive pipelines to insure that needed expansion occur. FERC’s current regulatory scheme relies on the market and the pipeline companies’ profit motives to insure that expansions occur. Federal law could clarify that any expansions necessary to avoid stranding gas for which there was a market would be made.

5. In your opinion, should a pipeline company (or consortium of pipeline companies) have partial/full ownership and/or operate a gas pipeline? If so how can the state encourage this?

The state’s interests are more aligned with those of an independent pipeline company than a producer owned pipeline company. For example, a producer owned pipeline would not be interested in expanding its capacity to transport a competitor’s gas to market. In contrast, a pipeline company would want to transport as much gas as possible because they earn revenues by transporting gas. Second, a producer owned pipeline company would have less incentive to minimize construction costs. Construction costs are included in a tariff. A producer owned pipeline pays tariffs to an affiliate rather than an independent third party. The state’s interest is in the lowest tariff

² FERC currently regulates gas pipelines under both distance-sensitive (26 pipelines) and postage stamp (43 pipelines) tariff schemes. The decision in Northwest Pipeline Corporation, Docket No. RP94-220-012, 82 F.E.R.C. (CCH) 61,158 (1998) provides a summary of the factors that the FERC considers in deciding which regime should apply. Factors include:

- **Physical.** Does the pipeline have multiple supply sources throughout the system, or are sources concentrated in one portion? Does the pipeline rely on displacement capability in designing expansion of its facilities?
- **Operational.** Does the pipeline rely on displacements to meet its firm service obligations? Does it have multidirectional flows and/or frequent null points?
- **Economic.** Does the prevailing rate design materially hinder competition in gas markets on the system and would the alternative design facilitate greater competition?

In general, these factors would tend to favor a postage stamp rate rather than distance-sensitive rate design for the Alaskan portion of a gas pipeline. However, FERC promulgated a regulation that provides that all pipelines’ rates “must reasonably reflect any material variation in the cost of providing the service due to ... [t]he distance over which transportation is provided”. 18 C.F.R. Sec. 284.10(c)(3)(ii) (2000). Ideally, if Federal legislation were pursued, it would be desirable if there were language that clarified the need for distance-based tariffs for in-state shipments of gas on an interstate line.
rates possible because low tariffs increase the amount from which the royalty share is calculated.

The question of how to encourage an independent pipeline company is tough. The state may be able to encourage pipeline company ownership by agreeing to sell its gas to one of them. None of the pipeline companies have a project without gas to ship, and the producers can refuse to sell to them, offering their pipeline as an alternative. The state can also offer comments to FERC on any NGA applications filed by the producers.

6. If the state had partial ownership in a pipeline, how would that enhance the RCA’s regulatory authority, if at all?

The Natural Gas Act gives regulatory authority to the FERC for individuals or corporations that transport gas in interstate commerce (15 USCS §717(a)). The FERC has decided that municipalities are not “corporations” or “individuals” for this purpose (Panhandle Eastern Pipeline Co. (1961) 26 FPC 736). The 5th Circuit Court of Appeals acknowledged that states are not “natural gas companies” under the NGA, but also held that under certain circumstances a state was nevertheless subject to the abandonment provisions of §7(b) of the Act. (Public Service Co. v. Federal Energy Regulatory Commission (1979, 5th Circuit) 587 F2d 716, cert. denied 444 U.S. 879, 100 S. Ct. 166, 62 L. Ed. 2d 108. 494 F. Supp. at pp. 656-657.). In that decision the court was careful to assert that:

Although the Commission stated in its Order that a state agency or state might be subject to the Natural Gas Act "where the context so requires," we expressly limit our holding to cover only the facts before us today. We do not decide what consequences would flow from the transmission of a state's gas without Commission authorization or without the state's acquiescence. Nor do we decide what results would obtain where the state itself initially sells directly in interstate commerce.

On balance, a good case might thus be made that the NGA cannot apply to a fully state-owned pipeline.

It is much less clear how a pipeline could be made non-jurisdictional simply through state ownership of only a portion of the line, however. We are aware of no examples of partial state ownership of an interstate gas pipeline, and so cannot suggest how the FERC and the courts might view such an entity.
Environmental Considerations Subcommittee

Meeting Summaries
Alaska Highway Natural Gas Policy Council
Environmental Considerations Subcommittee

April 5, 2001 Meeting Summary, Sheraton Hotel, Anchorage

Peg Tileston chaired the meeting.

The Environmental Consideration committee will consider:

* Environmental impacts and necessary protection measures
* "Doing it right"

As in other committee meetings, most discussion centered on the committee's work program. One suggestion was that the committee include an oversight function to ensure funding for agencies. A committee member indicated that it would be useful for the committee to receive an "executive briefing" of relevant issues and laws, a kind of "primer."

A state agency manager observed that major environmental studies by the producers' group will conclude later this fall, just after the Policy Council concluded its work. He suggested asking the proponents of different projects, including the producers, Foothills and Yukon Pacific, for a briefing on their field activities for this year.

A question was asked about the committee's end product. Should it be a "gap" analysis? (i.e. issues not covered by existing laws). Another member observed that a goal should be maximum environmental protection without jeopardizing commerciality of the project.

A member suggested a "big picture" look. Existing laws and regulations are in place to deal with most issues, but perhaps the Council could consider what's different about this project. The size is one thing that makes it different. The last major project (trans-Alaska oil pipeline, constructed in 1974-1977) had a huge socio-economic impact.

Existing agencies will be strained to deal with the workload that is coming, another member pointed out. There will be a whole new 'southern route' permitted (perhaps different than the Foothills application); the producers' group will be looking at the 'northern route' option; Yukon Pacific may also be updating its permits.

The state Joint Pipeline Office briefed the committee on some of its activities. The agency is now in pre-application discussions with project developers, who want to know what the agency needs before applications are filed, in order to minimize post-application requests for information.

The JPO acts as a "coordinator" on applications, but state agencies (ADF&G, DEC) do not give up any authority. They are still the lead state agencies in their fields. Once construction begins, the JPO is in an oversight role.

The Department of Natural Resources functions to protect lands in a land-ownership role; the Department of Fish and Game works to minimize impacts on fish and game, and habitat; the Department of
Environmental Conservation is concerned with air quality, solid waste, etc. The Division of Governmental Coordination coordinates the review of a project's consistency with state and local (North Slope Borough) coastal management plans.
AGENDA
August 2, 2001, 1:45 p.m. to 3:45 p.m.
Baranof Hotel, Juneau

I. Introduction by Peg Tileston, Committee Chair

II. Briefing from JPO about the structure and coordination of the permit process
   Bill Britt, Director

III. DGC staff: DGC permits and involvement in project, Kerry Howard

IV. F&G staff: F&G permits and involvement in project, Jonne Slemons

V. DEC staff: DEC permits and involvement in project, Jeff Mach

VI. Questions, discussion, summary and next steps
Committee chair Peg Tileston convened the meeting.

Bill Britt, head of the State's Joint Pipeline Office (JPO), presented an overview of pipeline route options and status of permits on each. This was drawn mostly from his presentation at the Legislative Joint Committee on Gas Pipelines meeting in July, which was chaired by Senator Torgerson. This laid out the route options and proponents, and summarized the permits needed. Basically, Yukon Pacific Corp. has a conditional State right-of-way for the trans-Alaska gas pipeline. Foothills Pipelines, representing the ANGTS group, has a federal right-of-way lease and has asked the State to proceed with processing a right-of-way application.

Lee Gorsuch, a committee member, asked if the State would work jointly with Canada on pipeline permits.

Britt said that was the aspiration. An analogy is the model of state-federal coordination in the TAPS right-of-way renewal.

The governor's Administrative Order 187 issued early this year sets out the structure for State consideration of permits and designates the responsible agencies. One of the moves was to form a separate State group distinct from the JPO, to concentrate on gas matters. This group, the Gas Pipeline Office (GPO) is now physically located on the 15th floor of the Atwood Building (State office building) in downtown Anchorage.

Britt mentioned that the State right-of-way lease statute is one of the most powerful laws the State has on its books. It relies on contract law, and through it the State can negotiate almost anything. Senator Torgerson relied on the right-of-way lease law in his bill to shut off the northern pipeline route option, as an example.

Kerry Howard of the Division of Governmental Coordination (DGC) presented an overview of the State's coastal management program and the consistency process. DGC doesn't issue permits but coordinates State agency review and issues the State's required consistency determination, that a project is "consistent" with the State Coastal Zone Management program.

Jeff Mach, Department of Environmental Conservation (DEC) liaison to the gas group, described his agency's role in permitting. DEC will have a fairly limited role in a gas pipeline. The agency will issue air quality permits for the gas conditioning plant, compressor stations and construction camps, which will create the biggest workload. The agency will also deal with wastewater permits at camps, do food sanitation inspections, etc.

Jerry Brossia, chief federal officer in the Joint Pipeline Office, briefed the committee on the history of the JPO and introduced Colleen McCarthy, appointed by the Bureau of Land Management to be its liaison with the JPO. Brossia said it hasn't yet been sorted out which agency will be lead on the federal side. The
1976 ANGTA created an Office of Federal Inspector, but this position has been dissolved and its function transferred, on paper, to the Department of Energy (DOE). It is not clear yet whether DOE will take over as lead agency of a renewed pipeline permitting effort, or whether the Department of Interior will fill this role.

The JPO, however, grew out of a “lessons learned” retrospective of the experience federal and State agencies had with TAPS in the 1970s. Many agencies were involved in oversight of that project with as many as 700 “Notices to Proceed” issued by agencies, and a significant conclusion of a post-pipeline conference held at the University of Alaska Fairbanks was that someone had to be “in charge,” or be designated lead agency, on both the federal and state side. From the recommendations of that conference, President Carter created the Federal Inspector position to be in charge of federal review of the ANGTS project in the 1970s.

While there was no similar move at the time on the state side, the experience of state agencies during the 1989 Exxon Valdez oil spill pointed to a similar need. In late 1989 the Joint Pipeline Office was created with a core staff of state and federal agencies involved in TAPS oversight housed in the same office. This provided an effective way to coordinate work on TAPS operational issues, such as corrosion and code compliance.

Looking at broad issues on the proposed gas project, Brossia said that as many as 5,000 to 10,000 permits will be needed for a gas project, and any major federal decision will likely trigger a requirement for at least a Supplemental Environmental Impact Statement. The primary purpose of ANGTA in 1976 was to lay out an organizational structure for the agencies and set the stage for the required Presidential Decision selecting the developer. The same law applies to the Trans-Alaska Gas System (TAGS). While the ANGTS group was active, the consortium and the agencies worked out plans for dealing with 25 major engineering and environmental issues, and about half of these plans were approved by the federal agencies, Brossia said.

On both the ANGTS and TAGS projects, presidential decisions and EIS documents are in place. ANGTS has a federal right-of-way on 140 miles of federal lands out of a total 740 miles of the project within Alaska.

Colleen McCarthy, BLM liaison to the JPO and the State’s gas group, said that among “lessons learned” from TAPS is how decisions made during construction with insufficient time given to long-term operational consequences can create difficulties later.

She cited two examples. One was in the area of corrosion. There is a belief that some of the coating to protect pipe from corrosion was applied too quickly and at the wrong temperature, and that padding (during pipe installation) was insufficient. That, combined with the fact that some of the gravel used was angular, with sharp edges, led to scratched coating and “points of entry” for corrosion on the external side of the pipe.

The agencies’ task with the gas project will be to ensure that consideration is given to the “life-cycle” operational issues, McCarthy said.

Brossia added that the steel pipe used in TAPS was manufactured in Japan and shipped by barge, stored in
Alaska for some period, and wasn't cleaned properly during construction. The federal codes on pipelines are very specific because of the safety issues involved. When a leak or rupture occurs in an oil line, a spill occurs. When a gas pipeline leaks or ruptures, "people can get killed," he said.

Peg Tileston asked if a Supplemental Environmental Impact Statement will be required.

Brossia replied that in his opinion, one would be required.
Alaska Highway Natural Gas Policy Council
Environmental Considerations Subcommittee

AGENDA
September 25, 2001, 9 a.m. to 11:30 a.m.
Anchorage Hilton Hotel, Prince William Boardroom

I.  Fran Cherry, Regional Director, Bureau of Land Management

II. Discussion of Report Format and Content
Select handouts and presentations given to the Environmental Considerations Subcommittee
ADF&G's Role in an Alaskan Gas Pipeline Project

Presented to:
Alaska Highway Natural Gas Policy Council
Environmental Considerations Subcommittee
August 2, 2001

Jonne Slemons
Pipeline Liaison & Surveillance Supervisor
Alaska Department of Fish & Game

Alaska Department of Fish & Game
Gas Pipeline Office

- Permits
- Alaska Coastal Management Program
- Enforcement
- General NG Pipeline Support Activities
- FY-02 Work Plan: Natural Gas Pipeline
Permitting

Fish Habitat Permits
- AS 16.05.840 – Fishway Act
  - Fish passage: activities in/across fish streams
- AS 16.05.870 – Anadromous Fish Act
  - All activities within/across an anadromous water body

Special Areas Permits
- AS 16.20 – Conservation & Protection of Alaskan Wildlife
  - Any habitat-altering activity in a state refuge, critical habitat area, or sanctuary

Alaska Coastal Management Program

- Guides all federal, state and local land use and regulatory activities in the coastal zone
- ADF&G participates in all aspects of the ACMP
  - Review of coastal district plans
  - Review/development of statutory, regulatory, policy changes
  - Resolution of issues, e.g. appeals of consistency determinations which affect fish & wildlife populations, habitat or harvests
## Enforcement

- All permits may contain timing restrictions, specific stipulations or conditions.
- Unauthorized activities or failure to comply with the conditions of a permit may result in criminal charges.
  - AS 16.05.870: "Failure to Notify" - Class A Misdemeanor
  - AS 16.05.880: "Construction without Approval" is a Class A Misdemeanor
  - AS 16.05.895: "Penalty for Causing Material Damage" is a Misdemeanor

## Enforcement

- GPO Staff are Peace Officers of the State of Alaska
  - Attend Troopers Academy (Dept. of Public Safety) in Sitka
  - Authorized to investigate, gather evidence for use in a court of law
  - Issue warnings, citations, initiate court action, provide testimony for legal prosecution
General Pipeline Support

- Contingency Planning
  - Identify environmentally sensitive areas
  - Develop wildlife protection & response guidelines
  - Participate in release/spill exercises and events
  - Maintain records of release/spill impacts
  - Participate in the Alaska Regional Response Team (ARRT) Wildlife Protection Working Group
  - Participate in the Natural Resources Damage Assessment (NRDA) Working Group
- Review & Comment: Potential Leases
- Consultation to Industry: Technical Expertise

FY-02 Work Plan

- Early Participation in Project Planning
  - Field Protocols, Fish Stream Database
  - Wildlife Uses Information
  - Subsistence Considerations
- Unique considerations of a chilled, buried pipeline
  - Previous Studies, Testing Required
- Develop Design Criteria
- Permitting
- Participate in establishing the Gas Pipeline Office
ADEC's Role in an Alaskan Gas Pipeline Project

Presented to:
Alaska Highway Natural Gas Policy Council
Environmental Considerations Subcommittee
August 2, 2001

Presented by:
Jeff Mach
Alaska Department of Environmental Conservation

Agency Mission and Authorities

Goals
- Protect Alaskans' health from environment-related factors
- Prevent and control air, land, and water pollution

Authorities
- Alaska Statutes, Titles 17, 44, and 46
- Alaska Administrative Code, Title 18
ADEC Permits & Approvals

- Air quality permits
- Food service plan approvals
- Food service permits
- Wastewater treatment plan approvals
- Wastewater discharge permits

ADEC Permits & Approvals

- Solid waste disposal permits
- Drinking water system plan approvals
- Pesticide use permits
- Certify Federal Clean Water Act permits
ADEC Permits & Approvals

- Contaminated sites workplan approvals
- Surface oiling permits

ADEC Involvement in a Gas Pipeline Project

- Designated liaison to Gas Pipeline Coordinator’s Office
- Expect to hire up to 14 project staff:
  - Four program-related coordinators
  - Program permitting staff
- Field monitoring staff
ADEC Gas Pipeline Activities

- Pre-application project planning with sponsor
- Assist developing State ROW lease provisions
- Assist State coordination with Federal agencies
- Review/approve plans and issue permits
- Monitor compliance with ADEC permit and regulatory requirements
Section II:

Select Presentations Given at Meetings of the Alaska Highway Natural Gas Policy Council
Mission

Develop and move Alaska's North Slope natural gas along the Alaska Highway route to North American markets and enable creation of gas industries in Alaska.

- Gas to North America
- Jobs for Alaska
- Energy for Alaska
- Other use of North Slope gas
- Increased revenues to Alaska
35 tcf known reserves
100 tcf estimated resources

Natural Gas is the world's most efficient fossil fuel for generating electricity.
Other uses are for:
- residential and
- commercial heating and cooling
- energy to manufacturers
  feedstock for petrochemical products
Clean air emissions
Safe
Low environmental impact

US Supply and Demand
Demand is up  
Price is up

Why the Alaska Highway Route?
Building a gas pipeline along the Alaska Highway best meets the criteria of providing:

- Gas for America
- Jobs for Alaskans
- Energy for Alaska
- Future opportunities for use of North Slope gas
- Increased revenues to Alaska
- Doing it right

Jobs for Alaskans

Thousands of jobs
Training for Alaskans
New energy for Alaska

Home heating
Electricity

Opportunities for North Slope Gas
The Alaska Highway route complements other future in-state value added commercial uses of North Slope Gas.
- LNG – Liquefied
- Natural Gas
- Industrial Development
- GTL – Gas to Liquids
Increased Revenues for Alaska
Total State revenue is estimated at $200-400 million per year.

Doing it Right
- Sound Science
- Responsible Stewardship
- Open Public Process
Getting the best information possible

Expert analysis by oil and gas and economic consultants including
- Cambridge Energy Research Associates
- Van Meurs and Associates, Ltd.

Knowles
Administrative Action
- Gas Pipeline Cabinet
- Gas Pipeline Office
- Natural Gas Policy Council
What happens now?
- Prepare for permitting
- Listen to Alaskans
- Coordinate with federal agencies
- Advance the project

Where can you find out more about an Alaska Highway gasline?

Contact Ken Freeman:
Juneau (907) 465-3500
Anchorage (907) 269-7450

Internet: www.gov.state.ak.us/gasline/
Email: gasline@gov.state.ak.us
Fax: (907) 465-3532
Alaska north slope natural gas... the time is now

http://www.gov.state.ak.us/gasline/
Joint Team Objectives

- Create an economic project (competitive cost of supply)
- Develop sufficient technical information to support FERC/NEB applications as soon as possible (target - year end 2001)
- Prepare for next phase of activity

Safe and Environmentally Responsible

Alaska Gas Resources & Major Producers

- North Slope known resource ~ 35 Tcf
- Prudhoe Bay - 8 Bcf/d of production currently
- Reinjected into reservoir
- Ultimate resource estimates ~ 100 Tcf

Alaska Gas Owners

<table>
<thead>
<tr>
<th>Others</th>
<th>BP</th>
<th>Phillips</th>
<th>ExxonMobil</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
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</tbody>
</table>

North American Gas Supplies/Markets

Joint Team Organizational Chart
Potential Southern Pipeline Route

<table>
<thead>
<tr>
<th>Land Status for Pipeline Route (in Red)</th>
<th>Alaska</th>
<th>Miles</th>
<th>Kilometers</th>
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<tbody>
<tr>
<td>Federal</td>
<td>249</td>
<td>401</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>305</td>
<td>607</td>
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<tr>
<td>Municipalities</td>
<td>20</td>
<td>32</td>
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</tr>
<tr>
<td>Native Corp.</td>
<td>80</td>
<td>97</td>
<td></td>
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<tr>
<td>Private</td>
<td>95</td>
<td>151</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>783</td>
<td>1275</td>
<td></td>
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| Total Route                            | 1982   | 3204  |

Potential Northern Pipeline Route

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<thead>
<tr>
<th>Land Status for Pipeline Route (in Red)</th>
<th>Alaska</th>
<th>Miles</th>
<th>Kilometers</th>
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<tbody>
<tr>
<td>Federal</td>
<td>45</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>192</td>
<td>303</td>
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<tr>
<td>Total</td>
<td>237</td>
<td>380</td>
<td></td>
</tr>
</tbody>
</table>

| Total Route                            | 1619   | 2607  |

Major Scopes of Work (RFPs)

- Gas Treatment Facility (Providence Bay):
  - Removal of Acid Gases - CO2, H2S
  - Complex / Chill gas to Y/L entry conditions

- NGL Extraction Facility:
  - Removal of C3+

- Environmental / Regulatory - Canada
  - Field studies

- Land - Canada (2)
  - Lower 48
  - US Alaska

- Environmental / Regulatory - US
  - Field studies

Conceptual Pipeline System Components

Pipeline system is comprised of four main facilities:

- Buried pipeline (~48", ~2500psi, high strength steel)
- Intermediate compression facilities
- Block valve stations
- Intermediate pigging facilities
Applying 21st Century Technology

Attributes
- Advanced materials & design
- High Pressure operation
- Buried line with thermal control
- Fewer, more powerful compressor stations
- Advanced construction (trenching, welding, river crossings)
- Advanced communication & control systems
- Advanced monitoring and maintenance systems

Benefits
- Lower fuel consumption
- Reduced emissions
- Smaller footprint
- Reduced environmental impact
- Expansion capacity
- Lower cost of supply
- High reliability

Conceptual Pipeline Construction Plan

- Multiple construction spreads working over 3 year period.
- Onshore
  - Principally winter construction – especially in permafrost.
  - Pipeline buried except for few specific crossings.
  - Grade-only construction where soils allow.
  - Primarily snow pads where soil/vegetation require protection.
  - Gravel construction pads required where protection is required and slopes are excessive for snow pads.
- Offshore
  - Summer construction from lay vessels.
  - Primarily offshore supply from existing infrastructure.
The "Seven Lenses" of Evaluation

- Economics
- Revenues
- Jobs
- Gas Access
- Safety
- Timing
- Environment
Materials from a presentation by Bob Loeffler, Senior Partner, Morrison and Foerster given at the March 23, 2001 meeting of the Alaska Highway Natural Gas Policy Council

UNITED STATES SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES

ALASKA NATURAL GAS TRANSPORTATION ACT

Staff Report of the Federal Energy Regulatory Commission

January 18, 2001

www.ferc.fed.us
Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>1</td>
</tr>
<tr>
<td>I. BACKGROUND</td>
<td>3</td>
</tr>
<tr>
<td>II. POTENTIAL LEGAL ISSUES ARISING UNDER ANGTA</td>
<td>6</td>
</tr>
<tr>
<td>A. The Current Applicability of ANGTA</td>
<td>7</td>
</tr>
<tr>
<td>B. Vitality of the Commission's 1977 Findings</td>
<td>8</td>
</tr>
<tr>
<td>C. Authority to Deviate from the President's Decision</td>
<td>9</td>
</tr>
<tr>
<td>D. Commission Flexibility with Respect to Alternative Proposals</td>
<td>11</td>
</tr>
<tr>
<td>E. Environmental Issues</td>
<td>12</td>
</tr>
<tr>
<td>F. Enforcement Authority under ANGTA</td>
<td>13</td>
</tr>
<tr>
<td>G. Transportation within the United States</td>
<td>14</td>
</tr>
<tr>
<td>H. Issuance of a Final Certificate</td>
<td>14</td>
</tr>
<tr>
<td>1. International Considerations</td>
<td>15</td>
</tr>
<tr>
<td>APPENDIX: LEGAL AND HISTORICAL BACKGROUND</td>
<td>16</td>
</tr>
<tr>
<td>A. ANGTA</td>
<td></td>
</tr>
<tr>
<td>E. Congressional Approval</td>
<td>24</td>
</tr>
<tr>
<td>F. Subsequent Commission Actions</td>
<td>24</td>
</tr>
<tr>
<td>G. Presidential Waivers</td>
<td>26</td>
</tr>
<tr>
<td>H. Office of the Federal Inspector</td>
<td>27</td>
</tr>
<tr>
<td>1. Judicial Review</td>
<td>29</td>
</tr>
</tbody>
</table>
The Partners in the Alaskan Northwest Partnership

<table>
<thead>
<tr>
<th>Parent Company</th>
<th>Partnership Company</th>
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<tr>
<td>American Natural Resources Co.</td>
<td>American Natural Alaskan Co.</td>
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<tr>
<td>InterNorth, Inc.</td>
<td>Northern Arctic Gas Co.</td>
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<td>Northwest Energy Co.</td>
<td>Northwest Alaskan Pipeline Co.</td>
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<tr>
<td>Pacific Lighting Corp.</td>
<td>Pacific Interstate Trans. Co. (Arctic)</td>
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<td>Panhandle Eastern Pipe Line Co.</td>
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<td>Texas Eastern Corp.</td>
<td>Tetco Four Inc.</td>
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<td>Texas Gas Trans. Corp.</td>
<td>Texas Gas Alaska Corp.</td>
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<tr>
<td>TransCanada Pipelines Ltd.</td>
<td>Trans Canada Pipeline Alaska Ltd.</td>
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<tr>
<td>United Energy Resources Inc.</td>
<td>United Alaska Fuels Corp.</td>
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### Press Statements about Write-Offs and Withdrawals

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<tr>
<th>Parent Company</th>
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<th>Amount (U.S.$/millions)</th>
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<td>The Columbia Gas System Inc.</td>
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<td>Texas Gas Trans. Corp.</td>
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<td>United Energy Resources Inc.</td>
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<td>$25.4</td>
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Section 4 of the Natural Gas Act

§ 717c. Rates and Changes

(a) Just and reasonable rates and charges

All rates and charges made, demanded, or received by any natural-gas company for or in connection with the transportation or sale of natural gas subject to the jurisdiction of the Commission, and all rules and regulations affecting or pertaining to such rates or charges, shall be just and reasonable, and any such rate or charge that is not just and reasonable is declared to be unlawful.

(b) Undue preferences and unreasonable rates and charges prohibited

No natural-gas company shall, with respect to any transportation or sale of natural gas subject to the jurisdiction of the Commission, (1) make or grant any undue preference or advantage to any person or subject any person to any undue prejudice or disadvantage, or (2) maintain any unreasonable difference in rates, charges, service, facilities, or in any other respect, either as between localities or as between classes of service.

(c) Filing of rates and charges with Commission; public inspection of schedules

Under such rules and regulations as the Commission may prescribe, every natural-gas company shall file with the Commission, within such time (not less than sixty days from June 21, 1938) and in such form as the Commission may designate, and shall keep open in convenient form and place for public inspection, schedules showing all rates and charges for any transportation or sale subject to the jurisdiction of the Commission, and the classifications, practices, and regulations affecting such rates and charges, together with all contracts which in any manner affect or relate to such rates, charges, classifications, and services.

(d) Changes in rates and charges; notice to Commission

Unless the Commission otherwise orders, no change shall be made by any natural-gas company in any such rate, charge, classification,
or service, or in any rule, regulation, or contract relating thereto, except after thirty days' notice to the Commission and to the public. Such notice shall be given by filing with the Commission and keeping open for public inspection new schedules stating plainly the change or changes to be made in the schedule or schedules then in force and the time when the change or changes will go into effect. The Commission, for good cause shown, may allow changes to take effect without requiring the thirty days’ notice herein provided for by an order specifying the changes so to be made and the time when they shall take effect and the manner in which they shall be filed and published.

(e) Authority of Commission to hold hearings concerning new schedule of rates

Whenever any such new schedule is filed the Commission shall have authority, either upon complaint of any State, municipality, State commission, or gas distributing company, or upon its own initiative without complaint, at once, and if it so orders, without answer or formal pleading by the natural-gas company, but upon reasonable notice, to enter upon a hearing concerning the lawfulness of such rate, charge, classification, or service; and, pending such hearing and the decision thereon, the Commission, upon filing with such schedules and delivering to the natural-gas company affected thereby a statement in writing of its reasons for such suspension, may suspend the operation of such schedule and defer the use of such rate, charge, classification, or service, but not for a longer period than five months beyond the time when it would otherwise go into effect; and after full hearings, either completed before or after service goes into effect, the Commission may make such orders with reference thereto as would be proper in a proceeding initiated after it had become effective. If the proceeding has not been concluded and an order made at the expiration of the suspension period, on motion of the natural-gas company making the filing, the proposed change of rate, charge, classification, or service shall go into effect. Where increased rates or charges are thus made effective, the Commission may, by order, require the natural-gas company to furnish a bond, to be approved by the Commission, to refund any amounts ordered by the Commission, to keep accurate accounts in detail of all amounts received by reason of such
increase, specifying by whom and in whose behalf such amounts were paid, and, upon completion of the hearing and decision, to order such natural-gas company to refund, with interest, the portion of such increased rates or charges by its decision found not justified. At any hearing involving a rate or charge sought to be increased, the burden of proof to show that the increased rate or charge is just and reasonable shall be upon the natural-gas company, and the Commission shall give to the hearing and decision of such questions preference over other questions pending before it and decide the same as speedily as possible. (June 21, 1938, c. 556, § 4, 52 Stat. 822; May 21, 1962, Pub.L. 87-454, 76 Stat. 72.)
Section 5 of the Natural Gas Act

§717d. Fixing rates and charges; determination of cost of production or transportation

(a) Decreases in rates
Whenever the Commission, after a hearing had upon its own motion or upon complaint of any State, municipality, State commission, or gas distributing company, shall find that any rate, charge, or classification demanded, observed, charged, or collected by any natural-gas company in connection with any transportation or sale of natural gas, subject to the jurisdiction of the Commission, or that any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory, or preferential, the Commission shall determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order: Provided, however, That the Commission shall have no power to order any increase in any rate contained in the currently effective schedule of such natural gas company on file with the Commission, unless such increase is in accordance with a new schedule filed by such natural gas company; but the Commission may order a decrease where existing rates are unjust, unduly discriminatory, preferential, otherwise unlawful, or are not the lowest reasonable rates.

(b) Costs of production and transportation

The Commission upon its own motion, or upon the request of any State commission, whenever it can do so without prejudice to the efficient and proper conduct of its affairs, may investigate and determine the cost of the production or transportation of natural gas by a natural-gas company in cases where the Commission has no authority to establish a rate governing the transportation or sale of such natural gas.

(June 21, 1938, c. 556, § 5, 52 Stat. 823.)

HISTORICAL AND STATUTORY NOTES

Transfer of Functions
The functions of the Federal Power Commission and of the members, officers, and components thereof were transferred to, and vested in,
either the Secretary of Energy or, with regard to certain functions relating to hydroelectric licenses and permits, natural gas electricity rates and charges, natural gas rates and charges, certificates of public convenience and necessity for natural gas, natural gas curtailments, and mergers and securities acquisitions under the Federal Power Act and the Natural Gas Act, to the Federal Energy Regulatory Commission within the Department of Energy, as part of the creation of the Department of Energy by Pub.L. 95-91, Aug. 4, 1977, 91 Stat. 565. See sections 7151, 7172 and 7293 of Title 42, The Public Health and Welfare.

All executive and administrative functions of the Federal Power Commission were, with certain reservations, transferred to the Chairman of such Commission, with authority vested in him to authorize their performance by any officer, employee, or administrative unit under his jurisdiction, by 1950 Reorg. plan No. 9, §§ 1, 2, eff. May 24, 1950, 15 F-IL 3175, 64 Stat. 1265, set out in the Appendix to Title 5, Government Organization and Employees.

**LIBRARY REFERENCES**

**Administrative Law**

Forms, reports and statements, use of, see 18 CFR § 260.1 et seq.
General statements of policy and interpretation, see 18 CFR § 2.1 et seq.
Natural gas pipeline companies, calculation of taxes, see 18 CFR § 2.67. Rate schedules and tariffs, see 18 CFR § 154.1 et seq.
Utilization and conservation of natural resources, see 18 CFR § 2.78.

**American Digest System**

Gas 4=14.3(2).

**Encyclopedias**

C.J. S. Gas § 31 et seq.

**Law Review and Journal Commentaries**

Prospective remedies under Section 5 of the Natural Gas Act: *Office Of Consumers’ Counsel v. FERC*. Note, 23 Tulsa L.J. 613 (1988).
Alaska Natural Gas Transportation Act of 1976

PUBLIC LAW 94-586-OCT. 22, 1976

PRESIDENTIAL DECISION AND REPORT

SEC. 7. (a) (1) As soon as practicable after July 1, 1977, but not later than September 1, 1977, the President shall issue a decision as to whether a transportation system for delivery of Alaska natural gas should be approved under this Act. If he determines such a system should be so approved, his decision shall designate such a system for approval pursuant to section 8 and shall be consistent with section 5(b) (1) (C) to assure delivery of Alaska natural gas to points both east and west of the Rocky Mountains in the continental United States. The President in making his decision shall take into consideration the Commission’s recommendation pursuant to section 5, the report under section 5 (c), and any comments submitted under section 6; and his decision to designate a system for approval shall be based on his determination as to which system, if any, best serves the national interest.

(2) The President, for a period of up to 90 additional calendar days after September 1, 1977, may delay the issuance of his decision and transmittal thereof to the House of Representatives and the Senate, if he determines (A) that there exists no environmental impact statement prepared relative to a system he wishes to consider or that any prepared environmental impact statement relative to a system he wishes to consider is legally or factually insufficient, or (B) that the additional time is otherwise necessary to enable him to make a sound decision on an Alaska natural gas transportation System. The President shall promptly, but in no case any later than September 1, 1977, notify the House of Representatives and the Senate if he so delays his decision and submit a full explanation of the basis of any such delay.

(3) If, on or before May 1, 1977, the President determines to delay issuance and transmittal of his decision to the House of Representatives and the Senate pursuant to paragraph (2) of this subsection, he may authorize a delay of not more than 90 days in the date of taking of any action specified in sections 5 and 6. The President shall promptly notify the House of Representatives and the Senate of any such authorization of delay and submit a full explanation of the basis of any such authorization.

(4) If the President determines to designate for approval a transportation system for delivery of Alaska natural gas to the contiguous States, he shall in such decision-

(A) describe the nature and route of the system designated for approval;

(B) designate a person to construct and operate such a system, which person shall be the applicant, if any, which filed for a certificate of public convenience and necessity to construct and operate such system;

(C) identify those facilities, the construction of which, and those operations, the conduct of which, shall be encompassed within the term “construction and initial operation” for purposes of defining the scope of the directions contained in section 9 of this Act, taking into
consideration any recommendation of the Commission with respect thereto; and

(D) identify those provisions of law, relating to any determination of a Federal officer or agency as to whether a certificate, permit, right-of-way, lease or other authorization shall be issued or be granted, which provisions the President finds (i) involve determinations which are subsumed in his decision and (ii) require waiver pursuant to section 8 (g) in order to permit the expeditious construction and initial operation of the transportation system.

(5) After a decision of the President designating an Alaska natural gas transportation system takes effect under section 8, the President shall appoint an officer of the United States, with the advice and consent of the Senate, or designate a board (consisting of such an officer, so appointed with the advice and consent of the Senate, as chairman and such other individuals as the President determines appropriate to serve on such board by reason of background, experience, or position) to serve as Federal inspector of construction of such transportation system, except that no such individual or officer may have a financial interest in the approved transportation system. Upon enactment of a joint resolution pursuant to section 8 approving such a system the Federal inspectors shall-

(A) establish a joint surveillance and monitoring agreement, approved by the President, with the State of Alaska similar to that in effect during construction of the trans-Alaska oil pipeline to monitor the construction of the approved transportation system within the State of Alaska;

(B) monitor compliance with applicable laws and the terms and conditions of any applicable certificate, rights-of-way, permit, lease, or other authorization issued or granted under section 9;

(C) monitor actions taken to assure construction schedules and the achievement of quality of construction, cost control, safety, and environmental protection objectives and the results obtained therefrom;

(D) have the power to compel, by subpoena if necessary, submission of such information as he deems necessary to carry out his responsibilities; and

(E) keep the President and the Congress currently informed on any significant departures from compliance and issue quarterly reports to the President and the Congress concerning existing or potential failures to meet construction schedules or other factors which may delay the construction and initial operation of the system and the extent to which quality of construction, cost control, safety and environmental protection objectives have been achieved.

(6) If the President determines to designate for approval a transportation system for delivery of Alaska natural gas to the contiguous States, he may identify in such decision such terms and conditions permissible under existing law as he determines appropriate for inclusion with respect to any issuance or authorization directed to be made pursuant to section 9.

(b) The decision of the President made pursuant to subsection (a) of this section shall be transmitted to both Houses of Congress and shall be considered received by such Houses for the purposes of this section on the first day on which both are in session occurring after such decision is transmitted. Such decision shall be accompanied by a report explaining in detail the basis for his decision with specific reference to the factors set forth in sections 5 (c) and 6 (a), and the reasons for any revision, modification of, or substitution for, the Commission recommendation.

(c) The report of the President pursuant to subsection (b) of this section shall contain a
financial analysis for the transportation system designated for approval. Unless the President finds and states in his report submitted pursuant to this section that he reasonably anticipates that the system designated by him can be privately financed, constructed, and operated, his report shall also be accompanied by his recommendation concerning the use of existing Federal financing authority or the need for new Federal financing authority.

(d) In making his decision under subsection (a) the President shall inform himself, through appropriate consultation, of the views and objectives of the States, the Government of Canada, and other governments with respect to those aspects of such a decision that may involve intergovernmental and international cooperation among the Government of the United States, the States, the Government of Canada, and any other government.

(e) If the President determines to designate a transportation system for approval, the decision of the President shall take effect as provided in section 8, except that the approval of a decision of the President shall not be construed as amending or otherwise affecting the laws of the United States so as to grant any new financing authority as may have been identified by the President pursuant to subsection (c).
Section 7c of the Natural Gas Act

§ 717f. Construction, extension, or abandonment of facilities

(c) Certificate of public convenience and necessity

(1)(A) No natural-gas company or person which will be a natural-gas company upon completion of any proposed construction or extension shall engage in the transportation or sale of natural gas, subject to the jurisdiction of the Commission, or undertake the construction or extension of any facilities therefor, or acquire or operate any such facilities or extensions thereof, unless there is in force with respect to such natural-gas company a certificate of public convenience and necessity issued by the Commission authorizing such acts or operations: Provided, however, That if any such natural-gas company or predecessor in interest was bona fide engaged in transportation or sale of natural gas, subject to the jurisdiction of the Commission, on February 7, 1942, over the route or routes or within the area for which application is made and has so operated since that time, the Commission shall issue such certificate without requiring further proof that public convenience and necessity will be served by such operation, and without further proceedings, if application for such certificate is made to the Commission within ninety days after February 7, 1942. Pending the determination of any such application, the continuance of such operation shall be lawful.
Alaska Natural Gas Transportation Act of 1976

PUBLIC LAW 94-586-OCT. 22, 1976

AUTHORIZATIONS

SEC. 9. (a) To the extent that the taking of any action which is necessary or related to the construction and initial operation of the approved transportation system requires a certificate, right-of-way, permit, lease, or other authorization to be issued or granted by a Federal officer or agency, such Federal officer or agency shall-

(1) to the fullest extent permitted by the provisions of law administered by such officer or agency, but

(2) without regard to any provision of law which is waived pursuant to section 8(g) issue or grant such certificates, permits, rights-of-way, leases, and other authorizations at the earliest practicable date.

(b) All actions of a Federal officer or agency with respect to consideration of applications or requests for the issuance or grant of a certificate, right-of-way, permit, lease, or other authorization to which subsection (a) applies shall be expedited and any such application or request shall take precedence over any similar applications or requests of the Federal officer or agency.

(c) Any certificate, right-of-way, permit, lease, or other authorization issued or granted pursuant to the direction under subsection (a) shall include the terms and conditions required by law unless waived pursuant to a resolution under section 8(g), and may include terms and conditions permitted by law, except that with respect to terms and conditions permitted but not required, the Federal officer or agency, notwithstanding any such other provision of law, shall have no authority to include terms and conditions as would compel a change in the basic nature and general route of the approved transportation system or those the inclusion of which would otherwise prevent or impair in any significant respect the expeditious construction and initial operation of such transportation system.

(d) Any Federal officer or agency, with respect to any certificate, permit, right-of-way, lease, or other authorization issued or granted by such officer or agency, may, to the extent permitted under laws administered by such officer or agency add to, amend or abrogate any term or condition included in such certificate, permit, right-of-way, lease, or other authorization except that with respect to any such action which is permitted but not required by law, such Federal officer or agency, notwithstanding any such other provision of law, shall have no authority to include terms and conditions as would compel a change in the basic nature and general route of the approved transportation system or would otherwise prevent or impair in any significant respect the expeditious construction and initial operation of such transportation system.

(e) Any Federal officer or agency to which subsection (a) applies, to the extent permitted under laws administered by such officer or agency, shall include in any certificate, permit, right-
of-way, lease, or authorization issued or granted those terms and conditions identified in the
President’s decision as appropriate for inclusion except that the requirement to include such
terms and conditions shall not limit the Federal officer or agency’s authority under subsection
(d) of this section.
Alaska Highway Natural Gas Policy Council

Overview of the Regulatory Environment

William G. Britt, Jr.
State Pipeline Coordinator
Department of Natural Resources
## Right-of-Way Leasing Act

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.</td>
<td>Legislative declaration of policy</td>
</tr>
<tr>
<td>15.</td>
<td>Powers of the commissioner</td>
</tr>
<tr>
<td>20.</td>
<td>Grant of right-of-way lease</td>
</tr>
<tr>
<td>30.</td>
<td>Abandonment, reduction, or impairment of service of pipeline</td>
</tr>
<tr>
<td>40.</td>
<td>Temporary or emergency service or temporary abandonment, reduction, or impairment of service by lessee</td>
</tr>
<tr>
<td>50.</td>
<td>Application for right-of-way leases</td>
</tr>
<tr>
<td>70.</td>
<td>Notice of application</td>
</tr>
<tr>
<td>80.</td>
<td>Analysis and public hearing</td>
</tr>
<tr>
<td>90.</td>
<td>Multiple applications for same lease</td>
</tr>
<tr>
<td>100.</td>
<td>Decision on application</td>
</tr>
<tr>
<td>110.</td>
<td>Term of lease</td>
</tr>
<tr>
<td>120.</td>
<td>Covenants required to be included in lease</td>
</tr>
<tr>
<td>122.</td>
<td>Products pipeline leases</td>
</tr>
<tr>
<td>130.</td>
<td>Right-of-way easements or leases acquired from others</td>
</tr>
<tr>
<td>140.</td>
<td>Payment of rental and costs</td>
</tr>
<tr>
<td>170.</td>
<td>Forfeiture of lease</td>
</tr>
<tr>
<td>180.</td>
<td>Suits to enjoin or recover damages for defaults</td>
</tr>
<tr>
<td>190.</td>
<td>Application of the Administrative Procedure Act</td>
</tr>
<tr>
<td>200.</td>
<td>Judicial review of decisions of commissioner on application</td>
</tr>
<tr>
<td>205.</td>
<td>Lease savings clause</td>
</tr>
<tr>
<td>210.</td>
<td>Delegation of commissioner’s authority</td>
</tr>
<tr>
<td>220.</td>
<td>Continued operation of certain carriers</td>
</tr>
<tr>
<td>225.</td>
<td>Binding effect of covenants</td>
</tr>
<tr>
<td>230.</td>
<td>Definitions</td>
</tr>
<tr>
<td>260.</td>
<td>Short title</td>
</tr>
</tbody>
</table>

## Examples of Federal Authorizations for an Alaskan Gas Pipeline

<table>
<thead>
<tr>
<th>Authorization</th>
<th>Lead Agency TBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Environmental Policy Act</td>
<td>FERC (interstate)</td>
</tr>
<tr>
<td>Certificate of Public Convenience and Necessity</td>
<td>COE</td>
</tr>
<tr>
<td>Dredge and Fill Permits</td>
<td>COE</td>
</tr>
<tr>
<td>Section 10 Permits</td>
<td>EPA/ADEC</td>
</tr>
<tr>
<td>Wastewater (NPDES) Permits</td>
<td>EPA</td>
</tr>
<tr>
<td>SPCC Plans</td>
<td>EPA</td>
</tr>
<tr>
<td>Permit to handle Hazardous Waste</td>
<td>FCC</td>
</tr>
<tr>
<td>Radio/Wireless Communication Permits and Licenses</td>
<td>FAA</td>
</tr>
<tr>
<td>Airport Leases</td>
<td>BLM</td>
</tr>
<tr>
<td>Notices to Proceed</td>
<td>BLM</td>
</tr>
<tr>
<td>Material Sales</td>
<td>DOD, BIA, others</td>
</tr>
<tr>
<td>Land Use Authorizations</td>
<td>CG</td>
</tr>
<tr>
<td>Bridge Permits</td>
<td></td>
</tr>
</tbody>
</table>

*2001 Natural Gas Policy Council Report: Volume II - Page 146*
### Examples of State Authorizations for an Alaskan Gas Pipeline

<table>
<thead>
<tr>
<th>Authorization Type</th>
<th>Responsible Agency(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate of Public Convenience and Necessity</td>
<td>RCA (intrastate)</td>
</tr>
<tr>
<td>Right-of-Way Lease</td>
<td>ADNR</td>
</tr>
<tr>
<td>Land Use Authorizations</td>
<td>ADNR, UA, MHT</td>
</tr>
<tr>
<td>Water Appropriations</td>
<td>ADNR</td>
</tr>
<tr>
<td>Material Sales</td>
<td>ADNR</td>
</tr>
<tr>
<td>Burning Permits</td>
<td>ADNR and ADEC</td>
</tr>
<tr>
<td>Oil Discharge Contingency Plans</td>
<td>ADEC</td>
</tr>
<tr>
<td>Food Service Permits</td>
<td>ADEC</td>
</tr>
<tr>
<td>Solid Waste Disposal Permits</td>
<td>ADEC</td>
</tr>
<tr>
<td>PSD (Air Quality) Permits</td>
<td>ADEC</td>
</tr>
<tr>
<td>Water and Sewage Plan Approvals</td>
<td>ADEC</td>
</tr>
<tr>
<td>Habitat Protection Permits</td>
<td>ADFG</td>
</tr>
<tr>
<td>Utility Permits for Encroachment</td>
<td>ADOT</td>
</tr>
<tr>
<td>ACMP Consistency</td>
<td>DGC</td>
</tr>
</tbody>
</table>

### Examples of Local and Private Authorizations for an Alaskan Gas Pipeline

<table>
<thead>
<tr>
<th>Authorization Type</th>
<th>Responsible Agency(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoning Requirements and Land Use Permits</td>
<td>North Slope Borough</td>
</tr>
<tr>
<td>Development Permits</td>
<td>North Slope Borough</td>
</tr>
<tr>
<td>Road Plans</td>
<td>North Slope Borough</td>
</tr>
<tr>
<td>Zoning and Land Use Approval</td>
<td>Delta Junction</td>
</tr>
<tr>
<td>Leases, Rights-of-Way, Land Use Authorizations</td>
<td>Chugach, Ahtna, others</td>
</tr>
</tbody>
</table>
Technical Notes, Calculation Notes, Plans and Programs Likely to Be Required for an Alaskan Gas Pipeline

Access roads
Cathodic protection
Construction plan
Crack arresting burst test & analysis
Design basis
Earthquake design
Erosion & sedimentation control
Fire control
Full-scale bend test & analysis
Hazardous substance control & cleanup
Limit strain criteria
Mineral exploration & extraction
Overburden & excess material disposal
Pigging, valve & leak detection
Soils analysis/summary
Pressure design
Restoration
Siting of compressor stations
Solid waste management
Stress corrosion cracking evaluation
Trench & pipe stability evaluation
Welding procedure & BCA evaluation
Winter test trench summary

Construction camps
Communications
Corrosion control
Cultural resource preservation
Design summary
Environmental briefings
Expansion stress analysis
Flow analysis
Geologic hazards
Human-carnivore interaction
Material selection
NDE approach & summary
Permafrost design & operational analysis
Pipeline commissioning & start-up
Pipeline tie-ins
Quality assurance/quality control
River training structures
Snow & ice work pads & access roads
Stream, river & floodplain crossings
Surveillance & maintenance
Visual resources
Wetland construction
Yukon river crossing

Administrative Order 187

☐ Single point of contact for permitting, authorizations, and oversight

☐ Coordinated process for permitting, authorizations, and oversight

☐ Similar terms and conditions in permits and authorizations

☐ Unified voice in dealing with federal and Canadian governments, pipeline companies, and gas owners

☐ Use existing structures to address these issues
Administrative Order 187

Gas Pipeline Cabinet

Commissioners of:
- Alaska Department of Natural Resources (Chair)
- Alaska Department of Environmental Conservation
- Alaska Department of Fish and Game
- Alaska Department of Revenue
- Alaska Department of Transportation and Public Facilities
- Alaska Department of Labor and Workforce Development
- Alaska Department of Community and Economic Development

Directors of:
- Division of Governmental Coordination
- Governor’s Washington D.C. Office

Attorney General

Administrative Order 187

State Pipeline Coordinator is the:

Lead for coordinating state permitting, authorizations, and oversight for gas pipelines
- Work planning
- Scheduling
- Budgeting
- Staffing

Lead for communication and coordination with federal and Canadian agencies related to
- Routing
- Design
- Permitting
- Authorizations
- Construction oversight

FY02 Scope of Work

- Prepare to receive an application
- Work with proponents
- Help create and implement State policy
- Process an application
The State Revenue Pie

Petroleum Revenue Sources, (FY 2000):

- Royalties, Bonuses & Rents\(^1\):
  $731.9 Million
- Royalties to Permanent Fund & School Fund\(^2\):
  $306.5 Million
- Settlements to CBRF\(^4\):
  $448.3 Million  
  (Includes Royalties & Taxes)
- Taxes:
  $910.4 Million\(^2\)
  (Oil & Gas Property Tax + Income Tax + Severance Tax)

FY 2000 Restricted Revenue

\(^1\) Includes Federally shared rentals
\(^2\) Source: pg. 25, DOR Fall 2000 Revenue Sources Book
\(^3\) Source: pg. 26, DOR Fall 2000 Revenue Sources Book
\(^4\) Source: pg. 23, DOR Fall 2000 Revenue Sources Book
Recent Dynamic Changes in Alaska's Oil and Gas Business

- Radical Advancements In Technology
- Major Upstream Ownership Realignments
- Major Downstream Ownership Realignments
- Key Expertise In High Demand
- More Unit & Participating Area Issues
- New Programs Are In Place & Active
- Improved Economics For Commercialization Of Natural Gas
- New Environmental & Permitting Challenges
- Increased Exploration For & Development Of Smaller And Lower Quality Oil and Gas Fields
- New & Reengaged Industry Participants in Alaska

Alaska Reserves and Production

- 29% of total U.S. oil reserves.
- 6.4 billion barrels of oil.
- 20% of total U.S. gas reserves.
- 35 trillion cubic feet of gas.
- 19% of total U.S. oil production.
- 1.02 million barrels of oil per day.

Sources: Alaska data are from Department of Natural Resources, Division of Oil and Gas, 2000 Annual Report. U.S. data are from U.S. Crude Oil, Natural Gas and NGL Reserves, 1999 Annual Report, U.S. D.O.E.-E.I.A.
## Proved Gas Reserves

### Gas Reserves (BCF)

<table>
<thead>
<tr>
<th>Name</th>
<th>Reserve (BCF)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>North Slope</strong></td>
<td></td>
</tr>
<tr>
<td>Badami Unit</td>
<td>39</td>
</tr>
<tr>
<td>Barrow</td>
<td>34</td>
</tr>
<tr>
<td>Colville River Unit</td>
<td>60</td>
</tr>
<tr>
<td>Duck Island Unit</td>
<td>843</td>
</tr>
<tr>
<td>Kuparuk River Unit</td>
<td>611</td>
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<tr>
<td>Milne Point Unit</td>
<td>14</td>
</tr>
<tr>
<td>North Star</td>
<td>450</td>
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<tr>
<td>Prudhoe Bay Unit</td>
<td>23,879</td>
</tr>
<tr>
<td>Other Undeveloped</td>
<td>5,000</td>
</tr>
<tr>
<td><strong>TOTAL North Slope</strong></td>
<td>30,930</td>
</tr>
<tr>
<td><strong>Cook Inlet</strong></td>
<td>2,564</td>
</tr>
<tr>
<td><strong>TOTAL STATE</strong></td>
<td>33,494</td>
</tr>
</tbody>
</table>
North Slope Gas Resources
Prudhoe Bay Field is the Primary North Slope Gas Resource
Proposed
- Division of Oil and Gas Studies
  - Public Consultant Studies
  - Address Four Key Issues:
    - In-State Demand
    - Royalty Gas Valuation
    - Prudhoe Bay – Pt. Thomson Reservoirs
  - Potential Undiscovered Resources
Prudhoe Bay Field
Top Ivishak Structure

LEGEND
- FAULTS
- CONTOURS
- GAS-OIL CONTACT
- OIL-WATER CONTACT
- WEST END/MAIN AREA BOUNDARY
- EARLY DISCOVERY AND DELINEATION WELLS
- CONTOUR INTERVAL 200'
- ALL DEPTHS ARE TVDSS

SCALE (MILES)
0 1 2 3 4 5

Modified from ARCO Exhibit A-4 to PDU MSP Expansion Application Testimony, DNR/ADGCO Hearing November 1991.
Generalized North Slope stratigraphic column displaying oil and gas reservoirs and associated accumulations.
Alaska Oil & Gas Leasing Program

North Slope Sales
- North Slope Area 2000
- Area 2001
- Area 2002
- Area 2003
- Area 2004
- Area 2005

Beaufort Sea Sales
- Area 2000
- Area 2001
- Area 2002
- Area 2003
- Area 2004
- Area 2005

Cook Inlet Sales
- Area 1991
- Area 2001
- Area 2002
- Area 2003
- Area 2004
- Area 2005

The map shows the leasing areas in Alaska with different areas indicated by shading and dates.
North Slope 3-D Seismic Survey Areas
Oil and Gas Trapping Mechanisms

Anticline

Normal Fault

Stratigraphic

Thrust Fault

Cap Rock
Reservoir Rock
Source Rock
Cap Rock
Reservoir Rock
Source Rock
Cap Rock
Reservoir Rock
Source Rock
Cap Rock
Reservoir Rock
Source Rock
Cap Rock
Reservoir Rock
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Reservoir Rock
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Reservoir Rock
Source Rock
Cap Rock
Reservoir Rock
Source Rock
Cap Rock
Reservoir Rock
Source Rock
North Slope Foothills
Cretaceous Depositional System Study
Coalbed Methane Potential in Alaska

COAL BASINS and OCCURRENCES

After Merritt and Hawley, 1986
AK CBM-1 Well rig
Shallow Gas Exploration
Shallow Natural Gas Lease Applications
Exploration Licensing

Issued -- Copper River Basin
- State's first license: Issued October 1, 2000
- Anschutz Exploration Corp
- 318,756 Acres
- Exploration commitment: $1.42 million
- Term of license: 5 years

Proposed -- Susitna Valley
- Forest Oil Corp (Forcenergy Inc.) submitted two proposals
- 474,240 Acres each, located west of the Susitna River
- Exploration commitment for each: $3 million
- DNR will determine terms of licenses & final configurations
- Preliminary Best Interest Finding (BIF) to be issued in April
- Final BIF and Decision to be issued in October
Interior Basin Studies
Nelchina Limestone, Copper River Basin
Presentation from Foothills Pipe Lines Ltd.
given at the April 5, 2001 meeting of the Alaska Highway Natural Gas Policy Council

Governor's
Alaska Highway Natural Gas Policy Council

ALASKA HIGHWAY PIPELINE PROJECT

April 5, 2001

Presentation by

John Ellwood
Vice President, Engineering & Operations

Foothills Pipe Lines Ltd.
Presentation from the Alaska North Slope LNG Project
given at the April 5, 2001 meeting of the Alaska Highway Natural Gas Policy Council
LNG buyers may also make substantial investment to handle and utilize the LNG. The LNG is loaded onto ships (much like large Thermos® bottles) for transport to East Asian Markets.

Gas from the North Slope is to be purchased and routed to a nearby gas conditioning facility where impurities and carbon dioxide are removed.

The purified gas is then to be transported by pipeline system to an ice-free port in South Central Alaska.

Sites at both Anderson Bay – at the Port of Valdez, and Nikiski – in the Cook Inlet, are viable options.

In the LNG Plant, gas from the pipeline is chilled to -259°F (-160°C) so that it forms a safe, clean, liquefied natural gas (LNG).
MARKET UNDERSTANDING
Sponsor Group Expertise

MARKET UPDATES AND INPUTS ARE PERPETUAL
- From well established, experienced and knowledgeable sources

Marubeni
- Japanese trading company, doing business throughout East Asia and the world
- Continuous feedback through ANS LNG Market Liaison office
  - Providing significant input and updating to our market analysis

Phillips
- 30 years marketing to Asia (from Alaska)
  - Continual LNG market negotiations
    - Coordinated through international LNG group
- Offices in Asia including: Tokyo, Taiwan and China (ongoing feedback)

BP
- Ongoing worldwide LNG marketing experience
- Offices in Asia (ongoing feedback)
### LNG Market View -- Fiercely Competitive

**Potential Asian LNG Projects**

<table>
<thead>
<tr>
<th>Country</th>
<th>Earliest Date of 1st Delivery</th>
<th>Customers</th>
<th>Nominal Capacity MTPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia NWS</td>
<td>~2003+</td>
<td>Asian Markets</td>
<td>7.5</td>
</tr>
<tr>
<td>Malaysia Tiga (III)</td>
<td>~2003+</td>
<td>Asian Markets</td>
<td>7.6</td>
</tr>
<tr>
<td>Tangguh (Irian Jaya)</td>
<td>~2003+</td>
<td>Asian Markets</td>
<td>6</td>
</tr>
<tr>
<td>Qatargas/Rasgas</td>
<td>~2002+</td>
<td>Asian Markets</td>
<td>7.5</td>
</tr>
<tr>
<td>Bayu</td>
<td>~2003+</td>
<td>Asian Markets</td>
<td>3</td>
</tr>
<tr>
<td>Indonesia &quot;I&quot;</td>
<td>~2004+</td>
<td>Asian Markets</td>
<td>3</td>
</tr>
<tr>
<td>Yemen</td>
<td>~2004+</td>
<td>Asian Markets</td>
<td>5</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td></td>
<td></td>
<td><strong>39.6</strong></td>
</tr>
</tbody>
</table>

**Total Asia-Pacific Supply/Demand Outlook**

Includes Emerging Markets (India, China, etc.)

**Market Competition**

<table>
<thead>
<tr>
<th>Country</th>
<th>Earliest Date of 1st Delivery</th>
<th>Customers</th>
<th>Nominal Capacity MTPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gorgon</td>
<td>2004/5</td>
<td>Asian Markets</td>
<td>7.6</td>
</tr>
<tr>
<td>Sakhalin II</td>
<td>2005/6</td>
<td>Asian Markets</td>
<td>6</td>
</tr>
<tr>
<td>Alaska NS</td>
<td>2007+</td>
<td>Asian Markets</td>
<td>8 - 14.7</td>
</tr>
<tr>
<td>Indonesia Natuna</td>
<td>NA</td>
<td>Asian Markets</td>
<td>0</td>
</tr>
<tr>
<td>Sakhalin I</td>
<td>2007+</td>
<td>Japan/Asia</td>
<td>7</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td></td>
<td></td>
<td><strong>28.6 - 35.3</strong></td>
</tr>
</tbody>
</table>

**Total**

- ~68 - 75

**Key Points:**

- **60-80 MTPA of potential projects**
  - Pursuing 20 - 40 MTPA of 2010 growth

- **Problematic trends**
  - Downward price pressure
  - Shorter contracts & spot deliveries
ANS LNG MUST ALSO COMPETE WITH U.S. GAS DEMAND

2010 New Source Needs

Approx. Bcf/d

E. Asia 1 U.S. 2

Demand Area

Expected demand minus known sources delivered

1 - High case LNG demand forecast of Tokyo Gas presented to 2001 HOAG
   Year 2010 high demand of 135+ MTA (~19 Bcf/d) minus ~80 Mta (11 Bcf/d)
2 - National Petroleum Council, 12/99
   2010 demand of 76 Bcfd minus 24 Bcf of existing production
STAGE 1 WORK
Major Advance

- MARKET ENTRY PROJECT
  - 7-8 MM ton/year, projected $6.8 billion project
    - Redesigned to
      - defer cost to as-needed
        - minimize pre-investment
      - Improves market entry probability
      - Significantly reduces capital cost (and risk)
      - Expandable to 14 MTA as market develops
  - Mandate: to become economically sufficient at 7-8 MTPA even if future expansion never occurs

On-site Asian LNG market discussions confirm:
Smaller market entry project preferred
KEY AREAS OF REDESIGN

- **Pre-Sponsor Group 14.7 MTPA**
  - 2.1 BCFD
  - 4 compressor stations
  - Considers instate sales accommodated as needed
  - 36" p/l
    - 2,400 psig
  - 14 Ships
  - 2 births
  - 3 LNG Trains
    - @ 4.7 each
  - Seawater cooling
  - 3 - 167,000 m³ Storage Tanks

- **Sponsors smaller, market entry, 7 MTA expandable to 14 MTPA**
  - 1.1 BCFD
    - expandable to 2.3 BCFD
  - ZERO compressor stations initially - expand up to 4 @ 7MTPA
  - Provides for instate sales demand growth in Nikiski case
  - 28/30" p/l
    - 2,800 psig
  - 2 LNG Trains @ 3.6 each
    - EXPANDABLE TO 7 MTPA each!
  - Air cooling
  - 2 - 125,000 m³ Storage Tanks
    - (pre-expansion)
  - 7 ships
  - 1 birth
  - (pre expansion)

Valdez only

Nikiski OR Valdez

STAGE 1 WORK

- Stage 1 Documented Activities
  - 30+ Studies
  - 10+ Cost & construction estimates
  - 15+ Analysis & assessments
  - 30+ Reports
  - 25+ Workshops

- 26 Outside contractors/consultants (~60% AK content)
  - 15+ Engineering design & cost
  - 3 Permitting
  - 2 Regulatory
  - 2 Federal
  - 1 State
  - 1 Governmental entity

$12 Million - 18 months

STAGE 1 WORK COMPLETED:
ON TIME
WITHIN BUDGET
EXCEEDING ENGINEERING DESIGN EXPECTATIONS
Pacing item is a cost competitive project - at either location

*Neither* site works if overall project isn’t doable

Stage 1 engineering and construction design for BOTH

**NIKISKI**

- INSTATE GAS SALES POTENTIAL
  - Existing markets
  - Growth opportunity & existing infrastructure
    - Including Kenai LNG Plant
  - Potential lower cost instate gas
    - without need for long spur line to Cl

**ANDERSON BAY**

- POTENTIAL FOR REDUCING PERMITTING TIME
  - Existing TAPS P/L corridor
    - Possibly less resistance
      - environmental
      - landowner, etc.
STAGE 1 - PERMITTING WORK

- In depth analysis on route/site options
  - Internal expert studies/review
    - Alaskan, Canadian, worldwide & world class experience and expertise
  - External, Alaska content consultant - extensive analysis

- CONCLUSION: Both Anderson Bay and Nikiski can be permitted
  - Any permitting time differences doable within current market timing needs
  - Opinion: Any existing Anderson Bay route permits will also require extensive work and cost to perfect

*Note: Nikiski route does NOT go through Denali National Park*
**Stage 2**

**Key Areas of Focus**

- Ongoing design/cost optimization
- **Synergy of shared cost** with a lower 48 pipeline project
- **Value of public entity** or port authority concept to our project
- **Key risks**, their impact and potential **mitigation strategies** (including financing)
- **Alternate LNG markets** evaluation
  - Including U.S. and Mexico West Coast
- Further understanding and valuation of competing **LNG projects**
- Further **permitting analysis** and execution strategy
  - Blue print for moving crisply forward - with the regulators and agencies

**Timing:** 12-15 months (underway)  
**COST:** ~$3 million
Key Stage 2 Highlights

To Date

- Additional capex optimization of ~$400 Million
  - Market entry 7-8 MTPA capex now at
    - $6.5 B - including ships
    - $4.9 B - without ships
    - Identification of further savings ongoing
      - also exploring shared facilities with a lower 48 gas pipeline

- Public entity valuation -- current view indicates no compelling advantage to a joint public/private project
  - Generally:
    - Benefits passed to private enterprise will be taxable
    - Public borrowing rates unlikely to offset
      - private entity deduction of interest and depreciation

- Other Stage 2 activity in progress and on schedule
**ECONOMICS**

- Key: cost competitive with other E. Asian LNG projects
  - at a sufficient economic return

- ANS LNG Project
  - is not yet cost competitive
  - is not yet economic on a cost of capital basis
    - for the expected risk

- Considerable, additional efforts required
  - To reduce cost
  - To share cost or find other synergy
  - Reduce risk
  - To achieve meaningful fiscal modification (particularly federal)

- **Axiom:**
  - Project economic assumptions must be salable
    - Internally - to the investment community - to the suppliers and markets
ANS LNG Project
Current CAPEX Estimate

Working to improve economics
> Not yet determined cost competitive with other new projects
> Other new LNG projects are already at tide water

Now exploring shared cost with a L48 pipeline

Current
Estimated
Nikiski Capex
≈ $6.5 Billion

** Anderson Bay Capex does not include any cost for a spur line to the Anchorage Bowl (or permitting for that spur line)
## Example LNG Project Cost Comparisons
From Public Sources
Ex-Production Development Costs* and Ex-Shipping

<table>
<thead>
<tr>
<th>Potential ANS LNG Projects</th>
<th>Estimated CAPEX (US$Billion)</th>
<th>MTA</th>
<th>$ Million per MTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANS LNG Nikiski</td>
<td>$4.9</td>
<td>8.0</td>
<td>$610</td>
</tr>
<tr>
<td>Backbone (ANS)</td>
<td>$7.3</td>
<td>9.2</td>
<td>$790</td>
</tr>
</tbody>
</table>

### Example other LNG Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Estimated CAPEX (US$Billion)</th>
<th>MTA</th>
<th>$ Million per MTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qatar Ras Laffan</td>
<td>$1.7</td>
<td>5.2</td>
<td>$330</td>
</tr>
<tr>
<td>Trinidad (grass roots)</td>
<td>$0.95</td>
<td>3.2</td>
<td>$300</td>
</tr>
<tr>
<td>Oman (grass roots)</td>
<td>$2.0</td>
<td>6.6</td>
<td>$300</td>
</tr>
<tr>
<td>E. Timor (grass roots)</td>
<td>$1.25**</td>
<td>4.8</td>
<td>$260</td>
</tr>
<tr>
<td>Tangguh (grass roots)</td>
<td>$1.5</td>
<td>6.0</td>
<td>$250</td>
</tr>
<tr>
<td>Malaysia III (expansion)</td>
<td>$1.5</td>
<td>7.6</td>
<td>$200</td>
</tr>
</tbody>
</table>

*Public information on development costs is limited but is more significantly related to oil production

** Article quotes LNG Plant estimate at $2.5 billion in Australian dollars (~US$0.50)

ANS PROJECTS INCLUDES A DEDICATED - 800 MILE PIPELINE that OTHER PROJECTS DON'T HAVE ($2.4 B / 8 = $300)

**Public information on development costs is limited but is more significantly related to oil production

MTA = Million metric tons per annum
ALASKA NORTH SLOPE LNG PROJECT

- Continuing effort
  - to develop a cost competitive project
  - to be prepared when the market is ready
  - but pragmatic about market timing
I Want To Cut To The Chase About Alaska Gas

- Development of Alaska gas has been and will be challenging
- The myth that there's no market for Alaska LNG
- The myth that Alaskan LNG is not an option
- The risk if we gamble that the overland route is the only option
- Your role

First:

Developing Alaska Gas Is A Challenge
Key Facts Regarding Alaska Gas

- Alaskan north slope gas is located in one of the most remote areas of the world.
- There is worldwide competition in both Asian and Lower 48 markets.
- Any project from Alaska must be big to meet economies of scale.
- Big projects require long term contracts to obtain financing.
Any Alaskan project must be big in order to compete

- Economies of scale are required to compete with gas closer to market
- A gas pipeline is required that adds to cost
- In Alaska there are multiple gas producers who must agree to a SINGLE project (vs projects elsewhere where they have individual)
- Investors will not invest $billions without confidence that they receive return on their investment

Unfortunately, the State and Producers have not been in a position to sell gas until June of 2000

But luckily now they want commercialization by 2007.
There is No Market For Alaska LNG?

Second:
Worldwide demand for gas is increasing dramatically

Standard & Poors
LNG Demand Outlook (MMT)
LNG Demand Outlook - JAPAN

- Moderate Energy Demand Growth: 1.1%
- Slow Development of Nuclear Power
- Increased Concern on GHG Emission

LNG Demand Outlook - INDIA
- Start of LNG Import: 2001 by Dabhol Power
- Potential Projects in Gujarat, Maharashtra, Tamil Nadu

LNG Demand Outlook - CHINA
- First LNG Import Project: Guangdong, 3 mtpa, 2005
- Potential LNG Imports in Yangtze Delta, Fujian
I Want To Cut To The Chase About Alaska Gas

- Development of Alaska gas has been and will be challenging
- The myth that there's no market for Alaska LNG
- The myth that Alaskan LNG is not an option
- The risk if we gamble that the overland route is the only option
- Your role

First:

Developing Alaska Gas Is A Challenge
1970 - 2001

Arctic Gas
El Paso
Northwest/Foothills
ACETS
MACPORC
Kivalina/Wainwright
?? GTL
ARC
LNG Sponsor Group
YPC/TAGS

Key Facts Regarding Alaska Gas

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- There is worldwide competition in both Asian and Lower 48 markets
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LNG Demand Outlook - CHINA
- First LNG Import Project: Guangdong, 3 mtpa, 2005
- Potential LNG Imports in Yantsu Delta, Fujian
Asia is Alaska’s largest trading partner

- Seafood
- Timber
- Coal
- LNG
- Why not more LNG?

**FACT** Pedro Van Muers stated that an Alaskan LNG project may be nibbled to death by other LNG projects around the world

- 1982: “only total of 7 MTPA new demand by 2000” - New demand in 2000 was over 40 MTPA
- “No market” in 1997 - Qatar projects at 6.5 MTA
- “No market” in 2000 - Oman project at 4+ MTA
- “No market” in 2007 - 8.3 MTPA to West Coast (Phillips, Chevron)
  25 – 50 MTPA (Tokyo Gas)
  50+ MTPA (Standard & Poors)
(What if: Alaskan LNG was put first)

- Assume BP/Phillips/Foothills/Marubeni (Sponsor Group) "market viable" rate to Japan (6 MTA)
- Add Phillips' Australian project to Lower 48 (4.8 MTA)
- Add Chevron's Australian project to Lower 48 (3.5 MTA)
- Equates to a 16.3 MTA project from Alaska (TAGS at almost full build out including proposed expansions)
- Economies of scale would be met and Alaska gas would be the most economic in all of Asia

Alaska's Direct Competition:
Other LNG Projects Sponsored and Promoted by North Slope Producers
Third:

LNG is Not An Option For Alaska?

LNG Positives

- It is portable and can serve multiple markets
- Offers diversity of supply from stable supplier
- Projects are backed by a long term sale contracts
- TAGS LNG project has a smaller gas off take rate than the proposed overland project at 4 BCF so fewer gas producers must agree to dedicate gas to it
Alaska LNG is a stable supply

- Market price and proximity to market are not the only factors
- Arun plant recently shut down (10 MTA to Korea and Japan)
- Stable supplies get market preference
  
  example
  Why are two Australian LNG projects bumping Tangguh which is closer to the Lower 48 markets?
  PARTIAL ANSWER: stable government

Trans-Alaska Gas System – Year 2000 Project Update
Capital Costs ($US year 2000)

<table>
<thead>
<tr>
<th></th>
<th>START-UP</th>
<th>EXPANSION</th>
<th>EXPANSION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td>LNG Delivered</td>
<td>MTA</td>
<td>9.2</td>
<td>13.8</td>
</tr>
<tr>
<td>Pipeline Flow</td>
<td>BCFD</td>
<td>1.2</td>
<td>1.8</td>
</tr>
<tr>
<td>LNG Trains</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Pipeline and Stations (1)</td>
<td>$1 billion</td>
<td>3.7</td>
<td>0.2</td>
</tr>
<tr>
<td>LNG Plant &amp; Terminal (2)</td>
<td>$1 billion</td>
<td>2.3</td>
<td>0.9</td>
</tr>
<tr>
<td>Incremental Capital Cost</td>
<td>$1 billion</td>
<td>6.0</td>
<td>1.1</td>
</tr>
<tr>
<td>Cumulative Capital Cost</td>
<td>$1 billion</td>
<td>6.0</td>
<td>7.1</td>
</tr>
</tbody>
</table>

Source: Willbros Engineering and Michael Baker Jr.
Source: Kellogg Brown & Root and Air Products and Chemicals, Inc.
TAGS Cost of Service Shows Alaska Gas is Competitive

TAGS estimated cost of service to Japan, excluding fuel - $/mmBtu delivered, 13.8 MTA

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alaskan facilities</td>
<td>1.99</td>
<td>2.21</td>
</tr>
<tr>
<td>LNG tankers</td>
<td>0.70</td>
<td>0.70</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2.69</strong></td>
<td><strong>2.91</strong></td>
</tr>
</tbody>
</table>

Fuel at 11.8%

Asian LNG Prices

<table>
<thead>
<tr>
<th>Buyer</th>
<th>Seller</th>
<th>Jan. '01 $/mmBtu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>Abu Dhabi</td>
<td>4.81</td>
</tr>
<tr>
<td></td>
<td>Alaska</td>
<td>4.54</td>
</tr>
<tr>
<td></td>
<td>Australia</td>
<td>4.89</td>
</tr>
<tr>
<td></td>
<td>Brunei</td>
<td>4.65</td>
</tr>
<tr>
<td></td>
<td>Indonesia</td>
<td>4.98</td>
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<td></td>
<td>Malaysia</td>
<td>4.80</td>
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<tr>
<td></td>
<td>Oman</td>
<td>5.17</td>
</tr>
<tr>
<td></td>
<td>Qatar</td>
<td>5.05</td>
</tr>
<tr>
<td></td>
<td>AVERAGE</td>
<td>4.88</td>
</tr>
</tbody>
</table>

WGI March 8, 2001

- Prices are high in the Lower 48 and are also high in Asia
- Let's be consistent!
Remoteness is "taken care of" by reaching economies of scale

TAGS ~ 2.0 BCF
Foothills ~ 4.0 BCF
which is the great equalizer

Cost of Service to Supply Gas to Cook Inlet via Spur Line from TAGS at Glenallen

Basis: TAGS 3 train case at 1.8 BSCFD

<table>
<thead>
<tr>
<th>Volume to Cook Inlet</th>
<th>COS ($/mmbtu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 mmscfd</td>
<td>~ 2.00</td>
</tr>
<tr>
<td>400 mmscfd</td>
<td>~ 1.50</td>
</tr>
</tbody>
</table>
The Overland Project

(Second) Honeymoon is clouding thinking

FACT Other gas supplies in North America nibble at the Lower 48 demand

- McKenzie Delta
- Western Canadian Basin (BC and Alberta)
- U.S. Rocky Mountains
- U.S. Gulf Coast
- Scotian Shelf

Or is it “Gobble up the Lower 48 Demand”
Other countries’ LNG projects are also nibbling away at the overland pipeline project

- LNG imports to Lower 48
  - East coast 2000: 0.6 bscfd
  - East coast expansion capacity: 1.6 bscfd
  - Phillips to west coast: 0.7 bscfd (4.8 MTA)
  - Chevron to west coast: 0.5 bscfd (~3.5 MTA)

- Two new west coast LNG projects plus east coast LNG expansion will consume 2.8 bscfd of Lower 48 demand

- Represents 70% of the 4 bscfd overland project

Alaskan LNG alone bears criticism for “uneconomic Alaskan gas project”

- An LNG project to Asia was originally proposed because overland pipeline project could not compete in Lower 48

- The economic viability of other gas projects from Alaska have not been demonstrated

- TAGS is a well defined project using proven technology – cannot speculate to upside potential as with other projects with less definition
When comparing projects from Alaska remember

- Worldwide LNG competes with Alaskan gas to both Asian LNG and Lower 48 markets
- Neither the LNG nor the overland pipeline projects have firm market commitments
- Hold conclusions until the honeymoon is over for overland project and firm costs and economics are developed

Path Forward

- Set realistic goals (e.g. State ownership, hubs)
- Do what is right for Alaska – Identify and separate corporate interests from State interests and then develop a balance
- Find out how much wellhead the producers really deserve and need
- Figure out PBU and PT unit requirements that control producer actions and require changes if necessary
- Compare apples to apples
- Keep ALL options open
Vision:

Natural Gas Business And Gas Trading Hub/Principles For ANS Gas

Presentation to: Alaska Highway Natural Gas Policy Council
Fairbanks - April 18, 2001
Anchorage – May 24, 2001

Ken Thompson, President

Gas Business Vision: Introduction

- Producers completing studies to create their gas “vision”
- State should proactively complete its separate studies to create a “vision” that’s best for Alaskans long-term
- State could make big mistakes by waiting for the producers to finish their “vision”, then State reacts
- Producers’ and State’s perspectives will differ
  - Producers must focus on discounted present value, rates-of-return
  - State must focus on 50 years of socio-economic benefit to the state
- What proactive “vision” for the State should be examined?
- Find win-win with producers
Gas Business Vision: Recommendations

- Gas pipeline traversing Alaska
- "Natural gas hub" near Fairbanks or Delta Junction: physical facilities and contractual system
- State retain 12.5% royalty share of gas "in kind"
- State (or Alaskan companies) invest at least 12.5% share in the gas pipeline from Slope to hub and hub facilities
- State formulate policies/regulations for clear and transparent valuation/pricing of gas at the hub

Trading Hub and Natural Gas Business Vision With Future Multiple Markets Access

North Slope Gas

Gas To Fairbanks, Anchorage
Kenai For Power Generation,
Home Use, Expansion Of
LNG, Petrochemicals,
GTL, NGL, etc.
(Gas supply entrepreneurs, gas
distribution companies, etc.)

Fairbanks/Delta Junction
Gas Trading Hub

Pipeline Gas To
Lower 48
(48 project participants,
e.g., major producers)

Gas Converted
To GTL Down
TAPS (major producers)

Gas To Valdez For
LNG (Yukon Pacific)
Gas Business Vision: Next Steps

- **2001-02**: Resolution supporting principles of natural gas business in Alaska in conjunction with L48 gas line
- **2002-03**:  
  1) Regulations for clear, transparent netback pricing  
  2) Rules for clear, transparent access for in-state use  
  3) Rules for clear, transparent access for overseas markets  
  4) State finalize decision of investment in line, gas "in kind"
- **2004-2006+**: State attract investors for hub and/or spur lines, in-state distribution, city infrastructure, value added processing
- **2007**: “GAS TO CASH” for Alaska, Alaskan companies, Alaskans!!

Alaska Natural Gas Business Coupled With Lower 48 Gas Line

Justification
Gas Pipeline Traversing Alaska

- Lower 48 market appears best currently, but cyclical
- Northern route holds Alaska gas "hostage" to one cyclical market long term
- Southern route along TAPS route and Alaska highway provides access to future multiple markets
  - Alaska internal markets
  - Asia, West Coast U.S.
- State and Producers will see different calculations for northern vs. southern routes
  - Producers must focus on discounted present value, rates-of-return
  - State must focus on 50 years of socio-economic benefit to the state
- Find win-win solution for route traversing Alaska

Natural Gas Trading Hub/Contracts

- Physical system and contractual system
  
  **Physical system**
  - Valves, manifolds that allow future pipelines to "plug in"
  - Secure in-state markets, construct hub near Fairbanks or Delta Junction to facilitate market access
  - Alternative: spur lines to select Alaska locations

  **Contractual system** (must happen even if physical hub does not)
  - Trading hubs fundamental to physical gas distribution but also for clear, transparent trading and price valuation
  - Numerous trading hubs in the Lower 48, Canada, UK, Europe, progressing in Asia
Natural Gas Trading Hub (continued)

- Assess regulations, guidelines, policies at such hubs for trading and netback pricing; institute at Alaska hub
- U.S., EU’s Gas Directive, UK’s Natural Gas Trading Arrangements are examples of regulations
- Formulate rules up front for access to in-state markets
- Access negotiations tougher later, when gas is flowing
- Precedence of NS facility access issues are negative

"Plug Into The Hub"

State Retain 12.5% Share "In Kind"

- Lease agreements allow royalty payment or taking gas “in kind”
- Allows state to market its own gas to validate best market pricing being obtained
- State could choose to contract to third party gas marketing firm (e.g., Williams Energy, Enron)
- State’s 12.5% share of gas is substantial at 250-500 MMCFD if total production is 2-4 BCFD
- State’s volumes could facilitate in-state use and new business creation for economic impact
State Invest 12.5% Share In Line/Hub

- State investment/transport in line from Slope to hub
- State contract with pipeline or Alaskan company for operational management of its investment share
- Best mechanism to accurately know and have input on transportation costs and operations
- Clear, transparent operating costs for valuation at hub
- State hold investment long term or divest to Alaska companies, Native corporations with in-state uses
- Alternative: if state does not invest, select Alaskan companies to invest 12.5% to transport State’s gas
- Keeps more profits in state!

State Mandate Valuation/Pricing Policies

- Precedents in Lower 48, UK NG Trading Agreements, EU Gas Directive
- For taxation, netback pricing must be clear, transparent
- Avoid controversies, hearing, lawsuits of past oil pricing disagreements
- Direct involvement by State in its own share of gas allows clear, transparent market pricing at hub
- Valuation/pricing mechanisms, methodologies known up front rather than after gas flowing
- Win-win when known up front
Example Resolution Principles for Alaska - European Union Gas Directive

- Gas transmission, distribution interconnected, no barriers
- State(s) regulates gas business: nondiscriminatory, clear
- Fair and open access to the natural gas system
- Access to pipelines allowed under set of transparent rules
- Participants in the market will not abuse their dominant position nor engage in predatory behavior
- Participants have open, nondiscriminatory storage access
- Gas suppliers will compete freely for “eligible customers”

Gas Business Vision: Conclusions

- Gas pipeline traversing Alaska
- “Natural gas hub” facilities: Fairbanks or Delta Junction: physical facilities and contractual system
- State retain 12.5% royalty share of gas “in kind”
- State (or Alaskan companies) invest at least 12.5% share in the gas pipeline from Slope to hub and hub facilities
- State formulate policies/regulations for clear and transparent valuation/pricing of gas at the hub
Gas Business Vision: Next Steps

- **2001-02**: Resolution supporting principles of natural gas business in Alaska in conjunction with L48 gas line

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  4) State finalize decision of investment in line, gas "in kind"

- **2004-2006+**: State attract investors for hub and/or spur lines, in-state distribution, city infrastructure, value added processing

- **2007**: "GAS TO CASH" for Alaska, Alaskan companies, Alaskans!!!
We Have Met Across the State

- Anchorage
- Denali
- Eagle River
- Houston
- Juneau
- Kenai
- Palmer
- Seward
- Soldotna
- Talkeetna
- Wasilla
- Willow
Supported by Chambers Across the State:
- Anchorage Star of the North
- Eagle River Chugiak
- Seward
- Greater Wasilla
- Kenai
- Soldotna

Supported By:
- Kenai Peninsula Borough
- Homer Electric Association
- Economic Development District
- Mat-su Borough

North Slope Reserves Are Huge!

35 Trillion cubic feet of Natural Gas has been Discovered on the North Slope

Enough Natural Gas To:

- Provide for Alaska's needs
- Serve the U.S. with a natural gas pipeline through Canada
- Ship LNG to the West Coast
- Provide LNG to Fuel Electrical Production for Californian & Western Markets
- Export LNG
Why Alaska’s Cook Inlet?

Natural Gas Reserves in Cook Inlet are Declining
70% Of Alaskans Live Along the Cook Inlet Route

The Economy Needs Room to Grow!

- Space in Nikiski
- Space in Mat-Su
- Space is available along the Railbelt
A Cook Inlet Route Protects Jobs

Cook Inlet Is Wide & Safe

Cook Inlet 12 to 14 Mile Wide
Cook Inlet Enjoys

A close relationship with the Natural Gas Industry

America Needs Alaska's Plentiful Natural Gas
Alaska’s Gas to Meet U.S. Needs

Alaska’s Natural Gas
- Environmentally Friendly
- Efficient and Reliable
- Clean burning with low emissions
- Low sulfur
Natural Gas
Is Used To Make Fertilizer

Natural Gas Pipelines
The Safest Method of Transporting Energy
Why Now?

Energy Fuels Our Economy
Exporting LNG

Importing Economic Benefits

A Cook Inlet Route:
- Will Serve Alaskans
- Will Protect Existing Industries and Jobs
- Has the Space for New Industry
- Provides Market Diversity
Presentation by Cuba Wadlington, President, Williams Pipelines
given at the May 24, 2001 meeting of the Alaska Highway Natural Gas Policy Council

One of North America’s largest energy companies
Operations span energy value chain
Total assets exceeding $32 billion
$10+ billion in annual revenues
90+ years of experience
14,000 employees worldwide
Williams’ Energy Assets

- 200,000 bpd North Pole refinery
- Anchorage Terminal storage capacity of 730,000 bbls
- Minority interest in TAPS
- Currently purchase Alaska’s royalty oil
- 500+ employees with annual payroll exceeding $21 million
- $340 million in fixed assets
- $12+ million in annual taxes paid
Marketing Capabilities
State-of-the-Art Trading Facility

81,500-square-foot trading facility
722 energy professionals
- 20+ PhDs; 150+ Master's degrees
Offer wide array of energy commodities, financial instruments and complex structured arrangements
$250 billion in transactions annually

EM&T Facts & Figures

Innovation
Introduced industry to power tolling
One of first to structure full requirements deal
Introduced first real-time energy news network, EnergyNewsLive.com
Partnered with five other industry leaders in creating TradeSpark™

Strength*
- Power - 141,300 GW/h; Top 10
- Natural gas - 4.3 Bcf/d; Top 15
- NGLs - 281,000 bbl/d; #2 in North America
- Crude and refined products - 728,000 bbl/d
- Industry leader in earnings quality ($1.133 EBIT/Bbllue)

Growth
- Record 2000 net revenues of $1.6B and EBIT of $1B
- $2.2MM in net revenues per employee in 2000
- 97% annual operating profit growth from 1996-2000
- 105% annual asset growth from 1996-2000

* 2000 volumes and rankings
What We Believe

- Change
- Integrity
- Investors
- Autonomy of Operating Units
- Tolerance for Risk
- Employees
- Efficiency
- Entrepreneurial Gene
- Customers
- Communities

Our View on This Project

Arctic gas is necessary to meet North American demand growth
Opportunities within Alaska must be analyzed
The Alaska Highway Route is the best way to move North Slope gas to market
The project would benefit greatly from participation by one or more strong pipeline companies
Arctic Gas Necessary to Meet N.A. Demand

19 Bcf/d of demand growth by 2010
- Current demand of 73 Bcf/d
- Projected to reach 92 Bcf/d by 2010
- 10 - 15 Bcf/d of conventional supply growth projected during same time period
- Includes traditional L-48 and WCSB

Arctic Gas is needed to fill this hole

Opportunities Within Alaska

- Williams initiating study of petrochemical opportunities within the State
- Dedicated staff
- Results within 9 - 12 months

Williams' petrochemical experience and existing assets will allow us to uniquely add value to this project
We will share results with you
Our Petrochemical Experience

- Major supplier of NGL feedstock to chemical companies in the U.S. (~80,000 BPD) and Canada (110,000+ BPD)
- 42% ownership of ethylene cracker in Louisiana
- Refinery grade propylene in Memphis
- Gulf Coast Off Gas project in Louisiana producing ethylene and propylene
- Off Gas project with polymer grade propylene in Alberta

Alaska Highway Route is Preferred

- Most of the work has been done
- Can be in-service earlier than any other route
- Will save several years of work
- Mackenzie Delta line can be built when supply is ready
Pipeline Participation is Important

- Experience counts
  - Managing long lead-time, capital intensive pipeline projects
  - Regulatory process is extremely lengthy and complex - we manage this process daily
  - Healthy working relationships must be formed with key stakeholders along the pipeline right-of-way

Williams
13

Pipeline Participation is Important

- Nearly all gas pipelines in North America are owned & operated by pipeline companies
  - This is a proven formula
  - This project would be our highest priority
  - Designing a pipeline that's built to last

Williams
14
Differentiation
Alaska North Slope Gas Development

- Involvement since 1970s
- Solid "hands-on" experience
  - Project Director of Alaska portion of ANGTS - over 750 employees of and contractors managed by Williams at its peak
  - Selected Alaska Highway route & secured permits
  - Maintain key experience in the company

Why Williams?

- Industry leader in pipeline development and construction
- Front-runner in technology implementation
- Unparalleled operational expertise
- One of North America's largest and most strategically located natural gas and NGL infrastructures
900-mile large diameter pipeline delivering Rockies gas to S. California

7 years from inception to in-service
- Successfully worked with numerous stakeholders to get it permitted & built

Currently transports over 700 mmcf/d
- Will expand by nearly 160% by 2003

Demonstrates Williams' proven commitment and experience
...and are Doing with Cove Point...

We understand the time commitment and requisite partnership mentality
Successful knowledge transfer and employee retention
Flexibility afforded by vast infrastructure, resources and capabilities
Sensitive to stakeholder desires and regulatory/political guidelines
What Williams is Doing

- Establishing a dedicated team to pursue Arctic development
- Will work with key stakeholders to determine optimal solutions for Arctic gas & liquids
- Initiating a feasibility study on petrochemical development in Alaska

Leading Energy Solutions

The financial strength and risk management skills of Williams, combined with our physical strength and operational expertise, are powerful resources.
August 23, 2001

Governor's Alaska Highway Natural Gas Policy Council

For the record, I am Richard Peterson, President of the Alaska Natural Gas To Liquids Company (ANGTL) based in Anchorage, Alaska.

Thank you for the opportunity to comment on the gas pipeline potential for Alaska. First of all let me say that ANGTL is not opposed to a gas pipeline to the lower 48. We believe that if a gas pipeline project is economic, it should be designed, built and operated by the gas owners. We do believe that a GTL project is viable today and can improve the economics of a gas pipeline project while keeping more assets, more product value and jobs here in Alaska for the people of Alaska. Really, isn’t that what this process is suppose to be about.

ANGTL has long recognized the tremendous importance GTL’s from Alaska can play in our national security and the environmental issues facing the lower 48. ANGTL’s goal is to insure that Alaska leads the U.S. and perhaps the world in supplying environmentally superior fuels to the U.S. market. Successful accomplishment of this goal will result in thousands of jobs for Alaskan’s, creation of value-added industries, additional development of Alaska’s resources, reduced U.S. dependence on foreign crude and a cleaner environment for our children.

Let me briefly recap the ANGTL proposal: ANGTL proposes to use existing gas to liquids (GTL) technology to build a 50,000 barrel/day pilot plant and products terminal, convert natural gas on Alaska’s North Slope into virtually sulfur-free diesel and naphtha, batch the environmentally superior diesel and naphtha down the existing crude oil pipeline, provide takeoff locations along the pipeline right-of-way to supply clean fuel to local communities and then transport the remaining products to the US West Coast for ultimate marketing. The infrastructure built for the "pilot" plant will support the building of 10 to 15 additional GTL plants that ultimately could provide up to 1/3 of the total current US demand for motor fuel diesel, dramatically reducing the sulfur based emissions from diesel engines and US dependence on foreign crude. This same infrastructure will also allow for 100% of the NGL’s to be removed from the gas in Prudhoe Bay and transported to Valdez for further processing and/or marketing. GTL’s will extend the economic life of the oil pipeline resulting in perhaps billions of additional barrels of oil being produced from Alaska.
I have been asked on several occasions to comment on the July 16 CERA report to Commissioner Condon, specifically their answer to Question 9; however I think it important to also address their response to question 3 since NGL’s and GTL’s can coexist together utilizing the same batching infrastructure.

The CERA report is a thought-provoking, in depth-study that provides a good basis from which to generate discussion on how to maximize the benefits to Alaskan’s from a gas pipeline / LNG and GTL project. It does miss the point in several areas; however, I am not sure if it is because they are responding to a specific question or they just did not think outside of the norm.

**QUESTION 3: What is the most economic use of Alaska’s natural gas liquids?**

I think CERA was correct in assuming that Alberta wanted the liquids to stay in the pipeline. The most obvious reason is that it will be an economic windfall for them. Captive Alaskan NLG’s will be priced on a net-back basis with the State of Alaska having neither say nor control of the pricing and operating costs. CERA misses the point that all existing gas in Alberta is processed for dew point control, thus there is a very large supply of existing Canadian NLG’s in the market place that Alaskan NLG’s will have to compete with. I think it naïve to believe that Canadian producers, who have no other options, will not protest a processing plant that dumps additional liquids into their already over-supplied market. Waiting until Chicago eliminates many potential gas marketing opportunities.

Whether NLG’s are produced in Alaska or Canada, the revenue from the sale will serve to offset the costs of a gas pipeline project so CERA’s comment that removal in Alaska will have a detrimental effect is off-base. Done in Canada, all of the capital and jobs are Canadian. Done in Alaska, all of the capital and operating jobs are Alaskan. What CERA missed was that if you have a GTL program, batching is available to bring these NLG’s to a much larger world market, not a limited Canadian market, not to mention utilizing capacity in an under-utilized oil pipeline increases the net-back for Alaskan North Slope oil. We believe that NGL’s will net back a higher price when sold at Valdez than they will in the captive Canadian market. In fact CERA recognizes this point when they state that “Alberta … has the dual advantage of lower gas prices … and a lower Canadian dollar” when competing in the petrochemical market. Lets not forget that Alaskan gas will be sold on a net-back basis, every penny spent outside its border will be a penny less that Alaskan’s will receive for their natural gas with no offsetting compensation.

Finally, a combination CO2 extraction/NGL processing facility would be more economic than two separate facilities. Lower Capex/operating costs will result in higher net-backs.
QUESTION 9: What are the possibilities of a GTL project in conjunction with an Alaskan Highway gas pipeline or with the current TAPS line?

CERA has outlined what the world knows of GTL's, 300,000 bbl/d from existing GTL plants; 600,000 bbl/d announced or under design and rumors of a million bbl/d GTL complex in the Mid-East; but misses the point of why GTL's can play such a pivotal role in developing Alaskan North Slope gas. CERA does a good job summarizing the advances in GTL technology and the economics. However, CERA like so many other oil companies fails to see the point about F-T diesel in the US and a GTL program in Alaska. As a result, they undervalue F-T diesel by $10 to $13 per barrel at a minimum. A second point that favors the start of a GTL program is that it can begin with a much smaller capital investment and thus much less financial risk than a $15 billion gas pipeline.

When we talk of Fischer-Tropsch (F-T) diesel people focus on the word “diesel” and not on the “F-T”. Because people do not focus on natural gas based F-T, they lose sight of what F-T diesel really is. As you know F-T products are NATURAL Gas based, not petroleum based. Why is this distinction important?

In the US we generally tax motor fuels on two different bases. Gasoline and conventional diesel are two petroleum based examples. LNG and CNG are two natural gas based examples. The difference in petroleum based motor fuels tax for diesel and CNG, an “alternative fuel” in diesel engines, is approximately 31¢/gallon or $13/bbl. (This number includes both state and federal taxes.)

Through the efforts of Senator Stevens and Congressman Young, Forest Oil and ANGTL were able to have “domestic” GTL’s declared an “alternative fuel” under the 1992 EPACT. Thus, domestic F-T fuels can sell for the same price at the pump as conventional diesel and the value to the gas owner will be some $10 to $13 / barrel higher due to a lower motor fuels tax. If we preserve this distinction for “domestically” produced natural gas based F-T diesel, Alaskan GTL's can overcome the economic disadvantages CERA claims when compared to third world produced GTL’s.

CERA does not provide a total “extra cost” for a GTL program in Alaska; however, we have heard estimates from the majors that they believe another $5 to $8 a barrel is needed to make GTL’s economic on the North Slope. ANGTL has long realized that neither the majors nor apparently CERA has recognized this existing motor fuels tax distinction that favors natural gas based motor fuels such as CNG and F-T by 31¢/gallon or $13/bbl.

CERA does allude to the financial risk of an all or nothing gas pipeline or LNG project. They fail to give credit to the GTL option in that you can begin today with a smaller project. A ½ to 1 bcf/d - $2.7 to $3.7 billion initial GTL project is possible,
and as the market for F-T products grows, a continuous building program in Alaska over the next 15 to 20 years can create enormous growth for the State. As each producer develops its gas reserves, additional GTL plant modules can be added to handle the new gas. As gas reserves deplete, these same modules can be retired and potentially moved elsewhere in the world. If the gas market in the lower 48 stabilizes so that a gas pipeline can be economically justified, the NGL's can be batched down the TAPS line to Valdez providing more value added jobs and revenue for Alaskan's. Again the assertion that NGL's must flow in a gas line to help cover costs is bogus. NGL's, CO2, waste heat to generate electricity, Hydrogen, process water from the gas processing and GTL process will all serve to offset new and existing costs and will add additional revenue streams for the producers to offset gas pipeline costs.

CERA talks about 50¢/mcf natural gas for feed stocks in GTL programs. While I am sure that you can purchase gas at this low value around the world, we believe Alaskan's gas should receive more. The ANGTL program as proposed would net back natural gas prices to the plant inlet in the $1.75 to $2.00 / mcf range based upon 85¢/gallon diesel in the market place. Is a GTL project net-back comparable with $10 gas in Chicago, no certainly not at 85¢/gallon diesel. But if you believe $10 gas in Chicago is sustainable, then the book "Men are from Mars" must have been penned about you.

ANGTL believes that there are many more economic and environmental advantages that Alaskan GTL's will have over conventional (petroleum based) diesel and foreign produced GTL's. Despite what some say, the American public does care about the environment and given the choice of purchasing a biodegradable, non-toxic, zero sulfur, zero aromatic synthetic natural gas based F-T diesel that burns as clean as CNG vs. conventional 15 ppm sulfur diesel, will opt for the cleaner fuel, especially if it is selling for the same price at the pump. I believe what the major refiners fear is that F-T fuels will set new lower diesel standards that will require them to invest billions more with no hope of ever being as clean burning as F-T. Why else would they as an industry file suit to roll back the new EPA 15 PPM diesel standards. I should point out that I am told that BP does not support this industry position.

4 years ago Exxon impressed upon Governor Knowles the importance of the ANGTL program and Governor Knowles invited us to Alaska. Scripture tells us that profits have a limited life span. We applaud the Governor and his Policy Council for having the courage to invite us back again 4 years later to talk about such a critical issue to the people of Alaska. We have no bias against any gas development project in Alaska because we feel ultimately several will be needed. But if your intention is to maximize high quality jobs for a growing State economy, maximize the tax base for education and improved living standards for the people of Alaska, produce the highest quality motor fuels and petrochemical feed stocks in the world today for the U.S.; listen to what we have been saying to you for the last 4 years.
Alaska stands at a crossroads. It can lead the U.S. in supplying new super clean fuels or it can follow its history and export NGL's and natural gas to others. It's hard to lead, easy to follow. I believe that the People Of Alaska want leaders who can change Alaska from an exporter of raw materials to a supplier of value added products - opportunities like this don't occur every year.

One final point. If the fishing vessel Windy Bay that recently sank in Prince Williams Sound had been using F-T diesel, the spill would have been a non event and certainly would not have cost the people of Alaska $ millions to clean up.

Thank you and the Governor for the opportunity to provide comments on development of Alaska’s North Slope natural gas for the people of Alaska.

Richard Peterson

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Presentation from Shane O'Leary, GTL Program Manager, BP given at the August 23, 2001 meeting of the Alaska Highway Natural Gas Policy Council

ALASKA GAS
GTL Process

Process Chemistry

Plant Feed → Syngas → Paraffin Waxes → Syncrude Product

- Methane (Natural Gas)
- Water (Steam)
- Hydrogen
- Coke
- Carbon Monoxide
- Fischer-Tropsch Converter
- Hydrocracker

GTL Background

- BP has been working to advance GTL technology since mid-1980s.
- BP's primary focus reduces reformer cost via Compact Reformer design (60% of total GTL cost).
- Next step: Complete demonstration of new technology at GTL Facility.
**Gas Commercialization**

GAS (CH₄) → LNG, Re-Injection, Power, Pipeline

**Environmental Benefits of GTL Products**

- **Diesel**
  - No sulfur
  - No Nox
  - No aromatics – reduces soot

- **Naphtha**
  - Almost purely paraffinic, low aromatics
  - Excellent chemical feedstock

- **Jet Fuel**
  - No aromatics
  - No sulphur
  - Energy density lower than conventional jet fuel, need further testing
**GTL Test Facility**

**Objective**
- To demonstrate BP/Kvaerner new technologies (Compact Reformer & F-T Catalyst) to provide confidence for building commercial scale GTL facilities.

**Project Scope**
- Converts ~3 mmscfd of natural gas to 300 bpd of syncrude.
- Process consists of:
  - Compact Reformer (proprietary BP/Kvaerner design produces syngas).
  - Fischer-Tropsch Converter (proprietary BP catalyst produces paraffin wax).
  - Hydro-cracker (commercially available technology produces syncrude).

**GTL Reformer Size**

**Comparison with Conventional Steam Reformer**

Blue: World-scale reformer
Red: Equivalent Compact Reformer
ALASKA GAS

GTL Industry Cost Curve

ALASKA GAS

GTL Test Facility
ALASKA GAS
Convertor

ALASKA GAS
Compact Reformer
ALASKA GAS

GTL Test Facility

Cost

☐ Total Project Cost of $86 million with about $64 million spent through July 2001.

Schedule

☐ Started process unit work in Feb. 2001 (permits received).
☐ Plant start-up planned for 1Q / 2Q 2002.
☐ 5 Year Plant Life Estimated – maybe longer to test new technologies
ALASKA GAS

GTL Test Facility

Benefits to Local Economy

- About $40 million of expenditures are expected to be spent in Alaska:
  - Permanent plant equipment and materials
  - Facility construction (Labor, Materials, Construction Equipment, etc.)
  - Additional BP/Kvaerner Staff

- At peak construction, anticipate creating between 150 to 200 jobs.

- During Operations Phase, approximately 20 Operations and Testing Team Staff, Maintenance and Trucking personnel.

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ALASKA GAS

Siemens Westinghouse

Alaska 250 kWe SOFC-GNP System Demonstration Project

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Beyond GTL-TF

SOFC Status

- Agreement signed with Siemens Westinghouse to purchase 250kw natural gas fuel cell.
- $6.5 MM project
- Located at GTL-TF / Power Administration and Warehouse Buildings
- 100kw to Homer Grid
- $2 MM DOE grant

Gas To Liquids Test Facility

August 23, 2001
Mission

The mission of the Alaska Gasline Port Authority ("Port Authority") is to enable the development of Alaska's North Slope gas to the maximum benefit of all Alaskans. Ownership of the pipeline by this type of organization will substantially lower the effective cost of transporting gas from the North Slope to market and improve the economics of such a venture to a degree necessary to make the development of the North Slope gas resources financially viable.

Evolution

Pursuant to the Port Authority Act as set forth in Alaska statutes, the formation of the Alaska Gasline Port Authority by the City of Valdez, Fairbanks North Star Borough and the North Slope Borough was ratified by the electorate on October 5, 1999 by an 80% approval rate. Even prior to the official creation of the Port Authority, the founding entities began developing the concept and Project in March 1999. The first step was to form a team which would be responsible for conceptualizing and developing a financially viable project. The project initially envisioned was a natural gas conditioning plant on Alaska's North Slope, and an 800 mile pipeline to an LNG tidewater facility at Valdez. The goal was to facilitate the maximum use of Alaska's natural gas both within Alaska and exported to other markets including the continental United States.

In March 1999 the Port Authority retained Bill Walker of Walker Walker and Associates, LLC as General Counsel and Rigdon Boykin of O'Melveny & Myers, LLP, an international law firm with substantial experience with tax exempt entities, project financing and the oil industry, as Special Project Counsel.

In September of 1999, the Port Authority entered into a Memorandum of Understanding with the Bechtel Corporation. As part of that MOU, Bechtel undertook to develop cost estimates for the conditioning plant, pipeline and LNG facilities. In addition, the Port Authority retained the services of Taylor-DeJongh and Merrill Lynch to perform the financial modeling and act as financial advisors to the Port Authority.

Project Scope

The original premise of the Port Authority was to support the construction of a project that would take natural gas from the North Slope of Alaska to Valdez, make LNG and sell it to Asia. The Port Authority decided to make a very comprehensive model which
sell it to Asia. The Port Authority decided to make a very comprehensive model, which would include conservative estimates for all aspects of the project including construction, financing and operations. The costs include development costs, permitting costs, the various financing fees, and interest during construction, working capital, six months debt service reserve, insurance, etc. In a similar fashion the construction costs estimates were to be all inclusive i.e., all equipment, capital spares, construction, freight, catalysts and chemicals for initial fill, commissioning and start up costs, engineering services, escalation of 8 to 10% depending on the facility, contingency (approximately 10%), insurance, licensing fees and contractor risk, overhead and fee.

At the beginning of May, 2000 Bechtel completed its EPC study based on the above premises and Taylor-DeJongh completed modeling the results of that study. This initial base case study was very valuable for the Port Authority because it gave them a ground up "new look" construction cost estimate (based on 55,000 man hours of Bechtel time) for the gas processing facility, pipeline and LNG facility construction elements which could serve as a basis for modeling other alternatives. In addition, it gave the Port Authority a realistic and conservative financial model for looking at alternative solutions to improving the project economics.

Out of this base case and other modeling of alternatives, the Port Authority in June 2000 reached two basic conclusions: First, the economics of the project are clearly affected by the amount of liquids both in the form of NGL's separated out on the Slope and inserted into the oil pipeline and the amount of propane separated out as liquid propane gas ("LPG") in Valdez. The value of these liquids as demonstrated in the financial runs is substantial. Second, this project needs to be combined with other potential projects in order to share the huge cost of the pipeline and gas conditioning facilities.

Since June 2000, gas economics have changed substantially in the Lower 48, Mexico and Asia. Today several approaches to commercialization of Alaskan North Slope gas appear to be economically viable.

Based on the cost information developed by Bechtel, the financial modeling and the changing world market for gas and LNG, the Port Authority now believes the most economic and beneficial project to both Alaska and the producers is a two-project "Y" line with one branch going to the Lower 48 along the Alaskan highway route and the other branch going to Valdez along the Alyeska pipeline route. In addition, there would be a spur line from Glennallen to Anchorage.

The Port Authority believes that using one or both of these routes substantially reduces the potential for environmental issues, which could cause significant delays and increased costs. In addition, the project realizes huge economies of scale by combining a Lower 48 project with an LNG project. The Port Authority believes the Y line combination project effectively reduces the pipeline cost for each project from $7.0 Billion to $4.85 Billion – a savings of $2.15 Billion in construction costs for each project or a total savings of $4.30 Billion.
The Two-Project Line

The concept of the Two Project Line contains the following components:

- A Conditioning Plant on the North Slope which would have the capacity to condition sufficient gas to insert 6 billion cubic feet per day (bcfd) into a pipeline
- A 550 mile 56" diameter pipeline operating at 2220 maximum pounds per square inch from the North Slope to Delta Junction
- A 150 mile 44" diameter branch line carrying 3 bcfd to the Canadian Border along the Alcan highway (The Foothills Route)
- A fractionation plant in Calgary (or in the U.S.) to extract the liquid propane gas from the Lower 48 branch of the line
- A 256 mile 46" diameter branch line carrying 3 bcfd to Valdez
- A spur line to Anchorage from Glennallen
- A fractionation plant to extract the liquid propane gas in Valdez
- A 15 Million Ton per year LNG Plant (at full ramp up) and port facilities in Valdez

Cost Of Two-Project Line

Construction Cost

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditioning Plant (assuming no efficiencies from existing plant)</td>
<td>$4.2 Billion</td>
</tr>
<tr>
<td>Pipeline (including the two branches)</td>
<td>$9.7 Billion</td>
</tr>
<tr>
<td>LPG Fractionation Plant</td>
<td>$18.0 Billion</td>
</tr>
<tr>
<td>LNG Plant and Port Facilities</td>
<td>$3.65 Billion</td>
</tr>
<tr>
<td>Construction Cost Total</td>
<td>Total Financing required</td>
</tr>
<tr>
<td></td>
<td>$22.6 Billion</td>
</tr>
<tr>
<td></td>
<td>(includes escalation and $1.8 Billion contingency)</td>
</tr>
</tbody>
</table>

Soft costs

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest during construction</td>
<td>$4.9 Billion</td>
</tr>
<tr>
<td>Owners contingency</td>
<td>900 Million</td>
</tr>
<tr>
<td>Debt service reserve</td>
<td>$1.0 Billion</td>
</tr>
<tr>
<td>Financing fees, working capital, etc.</td>
<td>$1.0 Billion</td>
</tr>
<tr>
<td></td>
<td>$7.8 Billion</td>
</tr>
</tbody>
</table>

Minus pre-completion revenue              | $3.2 Billion |
Total Financing required                   | $22.6 Billion |

The Port Authority is not claiming that this represents the best or only project that should be developed. It will make its research and numbers available to any qualified
user and hopes further optimization of the design and costs will yield better results. **But**, the financial modeling performed by the Port Authority has demonstrated that this design and cost structure (as conservative as it may be) is financially viable and should be economically attractive to the Producers, Alaskans and the State of Alaska.

It is very important to note that while the Port Authority believes that a two-project line is of the greatest economic benefit to Alaska and the producers, the Port Authority will support any gas pipeline route that follows the existing pipeline corridor to Fairbanks and then along the Alaskan highway to the Lower 48 or to south central Alaska for conversion to LNG or gas to liquids (GTL) or other marketable petroleum projects.

**Financial Results of Two-Project Line**

Obviously the financial returns of any project depends on cost assumptions, interest rates and the projected sales price of gas, LNG and LPG. Outlined below are an estimate of the range of returns for the various parties involved based on the Bechtel numbers and the Taylor-DeJongh modeling using conservative historical numbers for the price of gas, LNG and LPG for the bottom of the range and a percentage of today's prices as the upper part of the range. These benefits also include the revenues from the Propane, which is transported down the line in a gaseous form and extracted as a liquid at the end of the line.

| Producers | $2 Billion to $3 Billion per year |
| State (royalties, severance tax, corporate income tax and share of $370 Million) | $750 Million to $980 Million |
| Payment in lieu of property taxes | $114 Million per year |
| All communities in Alaska divided by population with the smallest receiving a minimum of $50,000 | $111 million per year |
| For the construction of infrastructure to deliver gas to non-pipeline corridor communities – LNG tank trucks and barges - or to lower the cost of alternate fuels | $37 million per year |

**Benefits of Port Authority Ownership Concept**

The Port Authority believes that its ownership of the Project will result in eight primary benefits:

1. Income from the venture will be tax-exempt as a result of an IRS ruling received by the Port Authority in January, 2000. Substantial cash – Billions of Dollars- which would otherwise be used to pay income taxes in this project would be available to pay debt.
Dr. Pedro Van Meurs, energy consultant to the State of Alaska, has stated that the benefit of the tax exemption may range in the order of magnitude of $10 to $20 Billion on an undiscounted current dollar basis.

2. Financing structure:
   a. The Port Authority believes it can finance this facility with virtually 100% debt;
   b. The Port Authority will have a substantially lower hurdle rate for capital employed than a private organization would require;
   c. Some of the debt would be financed with tax-exempt bonds.
   d. The project’s debt would be non-recourse to the State, the founding municipalities and the producers.

3. The Port Authority has substantial political advantages both within and outside Alaska.

4. A pipeline owned by the Port Authority would not be subject to FERC regulation.

5. Income to the state and communities - The enabling ordinances establishing the Alaska Gasline Port Authority sets forth that income of the Port Authority shall be distributed as follows:
   a) 60% to State of Alaska;
   b) 30% to all Alaska municipalities on a per capita basis. The goal of the Port Authority is that under normal operating conditions, this would produce a minimum of $148 million to be split each year among the municipalities.
   c) 10% to be retained by the Port Authority which will be used for infrastructure to provide gas to non-pipeline corridor communities or to lower the cost of alternate fuels for remote communities.

6. There will be more certainty of gas for in-state usage.
   a) The Port Authority will insure that a spur line will be built to allow the Cook Inlet / Anchorage area, etc. access to North Slope Gas.
   b) The Port Authority can use retained revenues to develop LNG transport to other communities accessible by road or water.
7. More control over price to consumer of in-state gas usage.

For example, gas to Anchorage or Fairbanks could be in the $1.80 per mmbtu range.

$3.00 Chicago price
-$1.20 Tariff from Canadian Border to Chicago
$1.80

8. No need to give up tax revenue, royalties, etc. to subsidize the project.

The Port Authority agrees with CERA that there is a window of opportunity now, but the Port Authority also believes it may be extremely difficult or a very long time before the window reopens for the size of project that is required by the economics of an eight hundred mile line through Alaska. Announcements to build lines, drilling discoveries in the Gulf of Mexico and off the Coast of Canada, LNG terminals in Mexico, the Bahamas and the west coast of the United States are not going to wait for Alaska to get its act together. All of these facilities require contracts for the sale of gas or LNG to get their financing. Many of these negotiations are taking place today. An example is the El Paso announcement of the letter of intent to buy LNG for delivery on the west coast of Mexico from Phillips – from a yet to be constructed facility in Australia. If this contract is realized, it takes away an opportunity to sell 5 million tons of LNG at a location where Alaskan LNG will have a substantial transportation cost advantage.

The bottom line is that there are two projects that are at least partially permitted. Endorsement of both of these projects by the Alaskan government may be the only way North Slope gas can meet this window. It would be nice to have perfect projects, prefect legislation and perfect protection of Alaskan interest. If we wait for all of this, Alaska will miss the current window.

The Port Authority does not believe the Producers will decide to build a gas line through Alaska. Perhaps they will seek to build a line over the top to the Mackenzie Delta. But even this is questionable. Consequently, the Port Authority believes if a line is going to be built, it must begin with gas buyer/marketer consortium which will build the line and offer to buy the gas at the well head in a price range of $.75 per million btu's.

There are a number of companies that are significant operators of gas pipelines and are integrated into trading and consuming gas for their own account in power plants. Many of these companies are projecting gas shortages over the 2005-2010 timeframe. Consequently, the Port Authority believes some of these companies might have a potential interest in using North Slope gas to meet their future needs. Examples of companies that may fall into this category include Enron, Duke, El Paso, and Williams. Over the last few months, the Port Authority has met with some of these companies and has begun the process of briefing them on the potential benefits of the Port Authority structure and giving them presentations regarding the Bechtel study and the Taylor-DeJongh modeling.

The State can help by telling these companies it would support such an offer and help expedite the remaining permits in an environmentally sound manner.
We believe it is essential that the State be proactive – do not wait for the phone to ring or an announcement that the line needs more study or the producers do not feel it is sufficiently economically attractive or the only line will be an over the top route. Alternatives need to be vigorously encouraged and supported **NOW**.

For more information, please contact Dave Dengel, interim executive director at 907-835-4313 or any of the Board Members below:

**Board Members**

<table>
<thead>
<tr>
<th>George Ahmaogak, Sr. (Chairman) (907) 852-2611</th>
<th>Charlie Cole, Esq. (Vice Chairman) (907) 452-1124</th>
<th>Dave Cobb (Secretary) (907) 835-4874</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhonda Boyles (Treasurer) (907) 459-1304</td>
<td>Richard Glenn (907) 852-2611</td>
<td>Bert Cottle (907) 835-4313</td>
</tr>
<tr>
<td>Senator Al Adams (907) 561-5144</td>
<td>Barbara Schuhmann, Esq. (907) 452-1855</td>
<td>John Kelsey (907) 277-2505</td>
</tr>
</tbody>
</table>
Overview & Status for:

Governor's Gas Policy Council

September 25, 2001
Anchorage, Alaska

Outline of Information

- Primarily Alaska to Alberta Project Overview
- Base Case requires Alberta to Lower 48 segment
- Comparison of route attribute elements
- Summary and Next Steps
Team Objectives

- Assess the economic viability of a pipeline project
- Focus on key considerations
  - Technical
  - Environmental
  - Commercial
  - Regulatory
  - Political
- Prepare sufficient information to support potential permit applications

Safe and Environmentally Responsible

Status

- Feasibility study underway – expect engineering to be completed by year-end.
- Sharing interim/preliminary data.
- Many issues are being evaluated, including:
  - Technology and constructability (costs)
  - Beaufort Sea construction
  - Expandability
- Current analysis indicates project is not presently economic
  - Cost uncertainty
  - Market volatility
  - Regulatory/political risks
  - Fiscal risks
Preliminary Comparison of Two Pipeline Routes

<table>
<thead>
<tr>
<th>Route</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern Route</td>
<td>2,139mles</td>
</tr>
<tr>
<td>Northern Route</td>
<td>1,803miles</td>
</tr>
</tbody>
</table>

**Pipeline Design Basis**
- Diameter 62"
- High pressure 2,500 psi
- Buried line
- Throughput 4-6 bcf/d

**Route Attribute Elements**
- Economics
- Revenues
- Gas Access
- Jobs
- Environment
- Safety
- Timing

Note: Mackenzie Valley Pipeline 1,140miles
Element 1: Economics
Neither Route Is Economic

<table>
<thead>
<tr>
<th>Total Project Cost ($bn) (4.0 bcfd from Alaska, 0.8 bcfd from MD)</th>
<th>Price Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>South</td>
<td>North</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Gas Treatment Plant</td>
<td>2.6</td>
</tr>
<tr>
<td>Alaska to Alberta</td>
<td>0.0</td>
</tr>
<tr>
<td>Alberta to Market</td>
<td>5.3</td>
</tr>
<tr>
<td>NGL Extraction Facilities</td>
<td>0.3</td>
</tr>
<tr>
<td>Alaska Project Total</td>
<td>17.2</td>
</tr>
<tr>
<td>Mackenzie Delta Line</td>
<td>2.3</td>
</tr>
<tr>
<td>Pt.Thomson Development</td>
<td>1.3</td>
</tr>
<tr>
<td>National Toll ($/mcm) (Alaska North Slope to US L-48 Market)</td>
<td></td>
</tr>
<tr>
<td>South</td>
<td>North</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Gas Treatment Plant</td>
<td>0.30</td>
</tr>
<tr>
<td>Alaska to Alberta</td>
<td>1.31</td>
</tr>
<tr>
<td>Alberta to Market</td>
<td>0.78</td>
</tr>
<tr>
<td>Total</td>
<td>2.39</td>
</tr>
</tbody>
</table>

All numbers in US dollars

September 2001

Element 2: Revenues
Substantial Government Revenues Regardless of Route

<table>
<thead>
<tr>
<th>Total Undiscounted Revenue</th>
<th>Total Undiscounted Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>South</td>
<td>North</td>
</tr>
<tr>
<td>$88.2bn, MoD</td>
<td>$88.8bn, MoD</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada Federal</td>
<td>$11.3bn</td>
</tr>
<tr>
<td>Canadian Provinces</td>
<td>$8.9bn</td>
</tr>
<tr>
<td>US Federal</td>
<td>$32.7bn</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>

Assumptions:
1. Both routes include MD upstream and midstream revenues.

September 2001
Element 3: Gas Access
Gas to Alaska Is Important to State

- We understand this issue is a priority for the State.
  - Looking for positive solution regardless of route.

- Alaska gas demand is small relative to overall project throughput.
  - Mid-term South Central demand could be met through Cook Inlet.
  - Fairbanks energy demand would require significant investment to convert to gas; initial volumes 10-20mmscf/d.
  - Desire to meet potential future gas demand is understood.

- Alaska demand can be met with either route.
  - Southern route will run through Alaska.
  - A third-party or government funded trunk line to Fairbanks for Northern route could provide similar access to gas in Alaska as a Southern route.

- A lower-cost Northern Route generates sufficient incremental revenue for participating governments to fund building of a trunk line from Pump Station 4 to Fairbanks.

September 2001

Element 4: Jobs
Massive Number of Alaska Jobs for Either Route

<table>
<thead>
<tr>
<th>Direct Jobs</th>
<th>Induced Jobs*</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Jobs directly associated with construction, installation, and operation.</td>
<td>Support industry jobs including activities such as housing, catering, etc.</td>
</tr>
<tr>
<td>Indirect Jobs*</td>
<td>- Jobs created by increased government and household spend.</td>
</tr>
</tbody>
</table>

**Element 5: Environment**

**Footprint and Beaufort Sea Considerations**

<table>
<thead>
<tr>
<th></th>
<th>South</th>
<th>North</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Infrastructure (acres)</td>
<td>19,800</td>
<td>17,200</td>
</tr>
<tr>
<td>Threatened or Endangered Species Along Route (#)</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Important Wildlife Habitat (miles)</td>
<td>340</td>
<td>440</td>
</tr>
<tr>
<td>Environmentally Managed Areas (miles)</td>
<td>300</td>
<td>0</td>
</tr>
<tr>
<td>Previously undisturbed corridor (miles)</td>
<td>200</td>
<td>450 Land, 240 Sub-sea</td>
</tr>
<tr>
<td>Total CO₂ Emissions (million tons/year)</td>
<td>2.5</td>
<td>2.0</td>
</tr>
<tr>
<td>Compressor Stations (#), horsepower (thousands)</td>
<td>11/512</td>
<td>12/532</td>
</tr>
<tr>
<td>Overall Length (miles)</td>
<td>2,139</td>
<td>1,803</td>
</tr>
</tbody>
</table>

- If they occur, gas "spills" vaporize and have significantly less of an environmental challenge than oil spills
- Operation of Beaufort Sea pipeline does not present a known impact to Bowhead whales
  - Possible impact of noise not yet studied
  - Whale migration could be impacted if maintenance or repairs required
- Construction of Beaufort Sea pipeline presents point-source turbidity and noise issues for whale migration
  - May be mitigated by 60-day annual construction window
  - Construction spreads planned to minimize potential interaction with whales (managed same as historic seismic survey activity).
- Northern Route follows same ROW as proposed Mackenzie Delta pipeline.
  - North impacts less than shown if assume MD pipeline built.

---

**Element 6: Safety**

**Both Routes Are Safe**

<table>
<thead>
<tr>
<th></th>
<th>South</th>
<th>North</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Ice Scour</td>
<td>0 miles</td>
<td>240 miles</td>
</tr>
<tr>
<td>Steep Slopes</td>
<td>300 miles</td>
<td>-</td>
</tr>
<tr>
<td>Seismic Zones</td>
<td>780 miles</td>
<td>-</td>
</tr>
<tr>
<td>Water Crossings (#)</td>
<td>650</td>
<td>650</td>
</tr>
<tr>
<td>Continuous Permafrost</td>
<td>250 miles</td>
<td>260 miles</td>
</tr>
<tr>
<td>Discontinuous Permafrost</td>
<td>1,470 miles</td>
<td>1,140 miles</td>
</tr>
</tbody>
</table>

- No show stoppers at present
  - State-of-the-art technology and design, inherently safe and reliable
  - Extensive pre-installment testing
  - Design for permafrost and discontinuous permafrost
  - Aggressive monitoring (smart pigs, etc)

- Seismic activity
  - Design pipeline to tolerate movement in 3 dimensions (ductile design, expansion joints, etc)
  - Bury in soft "bedding"

- Ice gouging and subsea scour
  - Survey to identify depth of historical scours and subsea geotechnical environment
  - Identify where scour is minimized as much as possible and subsea is suitable for trenching; bury below scour depth

---

*September 2001*
### Element 7: Timing

**Challenges for Both Routes, Regulatory Efficiency Key to Success**

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</thead>
<tbody>
<tr>
<td>Engineering</td>
<td></td>
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<tr>
<td>Open Season Decision</td>
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<tr>
<td>Regulatory Review (18 months)</td>
<td></td>
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<tr>
<td>Order Equipment</td>
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<td></td>
<td></td>
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<tr>
<td>Construction (3 seasons)</td>
<td></td>
<td></td>
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<tr>
<td>Start-Up / First Gas</td>
<td></td>
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</tbody>
</table>

#### Legend
- **Success** Case
- **Regulatory Delay**

- **Note:** Construction of stand-alone MacKenna pipeline first could delay Alaska project.

---

### U.S. Regulatory Enabling Legislation

- Creates market-driven, expedited regulatory process for *any viable project(s)*
  - Subject to FERC regulation; fair and reasonable terms and conditions; open access
  - Subject to all environmental laws and regulations; 18 month EIS completion
- Creates Office of Federal Pipeline Director in executive branch to coordinate all related government activity
- Provides timely judicial review
- Mitigates regulatory uncertainty/risk
- Essential for continued joint producer study
- New legislation does not alter ANGTA; ANGTA remains in place
  - Does not preclude Foothills project proceeding under ANGTA
- Creates best possible opportunity for successful Alaska Pipeline Project
Alaska State Fiscal Certainty

- Predictability / certainty are vital. Not possible to commit to project if State can later revise project economics
  - Simplification of Royalty / Severance tax valuation
  - Ad valorem tax
  - Royalty-in-value vs Royalty-in-kind
- Potential vehicle:
  - Fiscal contract endorsed by legislature
  - 3rd Party dispute resolution.

Next Steps

Joint Producer Study
- Complete technical study/route comparison by year-end
  - Develop economic project through cost reduction, risk mitigation, leading-edge technology application
- Pursue U.S. Federal enabling legislation (expedited regulatory process)
- Continue positive interaction with State of Alaska on fiscal certainty
- Continue communication with potential shippers as information is available

Governments
- Pass market-based enabling legislation in U.S.
- Progress fiscal certainty with State of Alaska
- Support intergovernmental cooperation
- Avoid non-competitive mandates

Potential Shippers
- Support market-based enabling legislation in U.S.
- Support Alaska fiscal certainty
- Advocate selection of cost-competitive, efficient pipeline system
Texas General Land Office

Take In-Kind

In-Kind Marketing

- Began in 1983 through the State's appropriation bill which directed state agencies to reduce their utility costs by buying lower priced gas being produced on state lands.
- Contracts went into effect in 1985 with 33 state agencies participating.
In-Kind Marketing

- 1986 - 2,209,600 mcf of gas was sold to state agencies - Over $1,196,000 savings
- 1991 - Legislature expanded the program’s authority and gave the GLO authority to review and approve the acquisition of natural gas by state agencies who use a certain amount of natural gas.
- Program expanded from 33 to 138 customers.

In-Kind Marketing

- Annual in-kind oil & gas sales for fiscal year 2001 exceeded $119 million with a resulting savings of over $4.8 million. The highest revenue in the history of the program.
- In-kind oil, gas, & electricity enhancements to the PSF & ASF exceeded $16 million during FY 2001.
In-Kind Marketing


- Over 788,000 barrels of in-kind oil marketed during FY 2001.

In-Kind Marketing

FY 2001
- 50.44% ($95,537,896.00) of gas taken vs. 49.56% ($93,870,684.00) of monetary royalty (2,437 leases)

- 46.77% ($22,823,806.00) of oil taken vs. 53.23% ($25,981,808.00) of monetary royalty (2,066 leases)
Natural Gas Liquids & Petrochemicals:
Opportunities in Alaska

Cavan Carlton
Director, Williams Arctic Project
September 25, 2001

Our Areas of Interest

☐ Natural Gas Transmission
  - We are North America’s 2nd largest gas pipeline company
  - We have more experience building gas pipelines than any other company

☐ Natural Gas Liquids Processing & NGL Transmission
  - We are North America’s 2nd largest NGL company
  - We own & operate critical NGL assets in Western Canada & the Lower 48

☐ Energy Marketing & Risk Management
  - We are one of North America’s largest energy marketing companies
  - We have built a successful relationship purchasing Alaska’s royalty oil

☐ Opportunities in Alaska
  - We are an Alaskan company, with a broad suite of in-state energy assets
  - These in-state assets & the experience we’ve gained allow Williams to bring even more unique synergies to the table
Our Views on this Project

- Arctic gas is necessary to meet expected North American demand growth
- Opportunities within Alaska must be analyzed
- The Alaska Highway Route is the best way to move ANS gas to market
- A consortium including pipeline companies is the best way to develop this project

Williams’ Arctic Team Approach

Cavan Carlton  
Project Director  
(713) 215-3086  
cavan.c.carlton@williams.com

Peter Thomas  
Gas Pipeline Lead  
(801) 584-6663  
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Mark Gotcher  
NGL / Midstream Lead  
(918) 573-4527  
mark.gotcher@williams.com

Wayne Buck  
RG&C Lead  
(918) 573-3584  
charles.w.buck@williams.com

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Hank Kolesnik  
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Michael Smith  
(713) 215-3014  
michael.smith@williams.com

Vaughn White  
(801) 584-6838  
vaughn.white@williams.com

RG&C = Regulatory, Government, & Community Affairs
In-State Opportunities

- Natural Gas & Natural Gas Liquids (NGL’s)
  - In-state supply & demand
  - Infrastructure requirements

- NGL enhancement opportunities
  - Petrochemicals

General Overview & Description

Diagram showing the flow of natural gas to various products such as raw natural gas, natural gas liquids, ethane, propane, and butane.
The olefin business is in the early stages of restructuring and change

Consolidation and integration through mergers and acquisitions

Excellent market fundamentals - high growth

New market forces influencing customer/supplier relationships
### Changing Market Dynamics

- **2000 U.S. light olefins and polyolefins - $41.4 Billion revenue**

- **Growth rates are projected to be strong**
  - New capacity will be needed by 2004

- **In early 2001, high feedstock prices shocked the industry and curtailed ethylene production**
  - For a time, Naphtha became preferred feed over ethane

- **Companies are looking for ways to manage their risk and stay competitive**
  - Prefer suppliers who don't compete in downstream derivatives
Williams’ Petrochemical Feasibility Study

- Initiated May 24, 2001
  - Originally planned for 9-12 months
  - Accelerated schedule to produce results in 6 months

- Analysis ongoing
  - We do not yet have conclusive results

- CMAI engaged to perform international market evaluation
  - CMAI’s final report due in mid-October

- Overall Williams study completed by November
  - We will share the results with you

- Build gas processing facility near Fairbanks/North Pole
  - Extract methane (lean gas) for local use
  - Extract ethane & possibly propane
  - Reinject unused gas & gas liquids

- Build ethane cracker
  - Convert ethane into ethylene

- Build polyethylene plant
  - Convert ethylene (propylene?) into polyethylene

- Rail polyethylene pellets to Anchorage
  - Ship to global markets
Feasibility Study Components

- Natural gas & NGL price forecasts and basis differentials
- Ethane/Propane extraction costs
- Market identification
- Cost factors for Alaska vs. competing locations
- Polyethylene and ethylene glycol price, supply, and demand forecasts
- Freight costs
- By-product disposition

Alaska-Specific Issues

- Arctic cost factor
  - Relative to the Lower 48, it will cost more to construct NGL and petrochemical facilities in the interior of Alaska
- NGL Access issues
  - Gas & NGL’s will have to be removed from and reinjected into a high pressure, dense phase pipeline
- Potential freight disadvantage compared to Alberta
- Gas composition will heavily impact the project economics
- Feedstock cost (C₂, C₃) will have to be negotiated
Upside to Alaska if Project Moves Ahead

- Similar facilities in the Lower 48 employ ~ 350 full time employees
  - Potential payroll of ~ $18 Million annually

- Rail transport fees around $15 Million annually

- May compliment economics of providing in-state gas access

Summary

- We are testing a hypothesis - a petrochemical business in Alaska can work
  - Preliminary results are encouraging
  - We have engaged one of the world’s leading petrochemical consulting firms (CMAI) to assist in our analysis

- We have not reached any conclusions yet
  - Expect final results by November
  - We will share the results with you

- If a petrochemical complex in Alaska is viable, Williams is the one company that can make it work
  - Synergistic assets & relationships in Alaska
  - Tremendous gas processing & NGL experience
  - North American petrochemical experience
Section III:

Written Public Comment Submitted to the Alaska Highway Natural Gas Policy Council
BRISTOL BAY NATIVE ASSOCIATION  
P.O. BOX 310  
DILLINGHAM, ALASKA 99576  
(907) 842-5257  

Bristol Bay Alternative Energy Task Force  

Resolution 2001 - 01  

ALASKA' PROPOSED NATURAL GAS LINE  

WHEREAS, the Constitution of the State of Alaska states in Article VIII, Section 2., that the legislature shall provide for the utilization, development, and conservation of all natural resources belonging to the State, including land and waters, for the maximum benefit of its people; and  

WHEREAS, despite Alaska having an oil pipeline, home heating and gasoline costs in the Bristol Bay region are extremely high, for example: Dillingham residents are paying $2.29 per gallon for #1 home heating fuel and $2.59 per gallon for gasoline; Aleknagik residents are paying $2.60 and $2.75 respectively; Igigig residents are paying $2.94 and $3.63 respectively; Nondalton residents are paying $3.05 and $3.30 respectively; and  

WHEREAS, the majority of Bristol Bay communities are solely dependent upon diesel generators for electricity and pay among the highest electric rates in the state, as much as 2 to 4 times more than Anchorage, Matanuska, and Kenai residents; and  

WHEREAS, high energy costs in the Bristol Bay region has a direct impact on the cost of living, transportation, maintaining public buildings; and operating water and sewer systems; and  

WHEREAS, one of the cornerstones of economic development is to have access to cheap electrical power, and high energy costs currently hinders the economic development efforts of rural Alaskan communities; and  

WHEREAS, with natural gas being cheaper and cleaner burning than diesel oil, Bristol Bay residents would like to have access to natural gas for the purpose of providing electricity and heating their homes; and  

NOW, THEREFORE, BE IT RESOLVED by the Bristol Bay Native Association’s Bristol Bay Alternative Energy Task Force that Alaska’s State Legislature, the Governor’s Office, and Alaska’s Congressional Delegation, ensure that all Alaskan communities be provided access to natural gas from the proposed North Slope gas line, or the proceeds therefrom be used to inflation proof Alaska’s residents escalating energy costs.
CERTIFICATION:

I, the undersigned Recording Secretary of the Bristol Bay Native Association, do hereby certify that the foregoing resolution was duly passed the majority vote of BBNA’s Bristol Bay Alternative Energy Task Force at a duly called and noticed meeting this 16th day of April, 2001 and that a quorum was present.

Signed:
Recording Secretary
On behalf of the Inupiat Community of the Arctic Slope, Welcome to the Arctic Slope of Alaska, our homeland. We appreciate your coming to Barrow to have this hearing as it impacts us and we too are concerned on the conservation of other pristine environment that may be altered. As you saw this morning a glimpse of our pristine environment, with spectacle eiders nesting around our communities, caribou coming in and to the Arctic shore for insect relief. Gray whales hugging our coast line. Ducks migrating to and fro from the Barrow area.

However, we have contended with the natural gas pipelines even here in Barrow. We have learned much in association with the production and use of the petrochemical. It is cleaner for our air.

It is prudent that a natural gasline pipeline be developed in conjunction with the existing alyeska pipeline. It is prudent for our pristine environment that no other alteration of land be developed for another pipeline other than the existing easement already in place.

We believe that the utilization of the Natural gas resources is a wise investment for the United States, Alaska and Rural Alaska. It is for the same statements just submitted by the NSBV assembly President Molly Pederson and the Alaska Eskimo Whaling Commission that ICAS supports the gas pipeline through the existing pipeline system in Alaska.

We submit this statement of support by the Inupiat Community of the Arctic Slope, IRA a regional Tribal government that provides basic services for its membership in the Arctic. We keenly aware of the wildlife resources in Alaska and the Arctic Slope and still support the gas line proposal. We have managed our renewable resources as well as our non-renewable resources in a consistent manner that supports their welfare and management. It is with critical concern that we submit this statement of support for the pipeline on the existing pipeline system.

Thank you for this opportunity to give this testimony of support for the gasoline project for the State of Alaska.

Arnold Brown Jr.
President
RESOLUTION 2000 - 06
OF THE BOARD OF DIRECTORS
OF CHOGGIUNG LTD

A RESOLUTION ADDRESSING EXCESSIVELY HIGH FUEL COSTS IN BRISTOL BAY AND GASPIPELINE RELATED JOBS

WHEREAS, although a long-term funding plan has been crafted for Alaska’s Power Cost Equalization program, high diesel fuel costs will ultimately result in higher electrical rates and home-heating costs in Bristol Bay this winter that many residents cannot afford without direct assistance; and;

WHEREAS, in Bristol Bay region’s hubs of Dillingham and Naknek, the electric rates are twice higher than Alaska’s rail belt communities. In the surrounding and more remote villages, the electric rates are about four times higher than Alaska’s rail belt communities; and

WHEREAS, current gasoline costs in the region are extremely high with, for example, Dillingham residents currently paying $2.68 per gallon; Portage Creek residents paying $3.15 per gallon; Kokhanok residents paying $4.00 per gallon; New Stuyahok residents paying $2.75 per gallon; and Newhalen residents paying $3.19 per gallon as compared to $1.58 a gallon in Anchorage; and

WHEREAS, commercial fishermen in Bristol Bay suffered disastrous salmon runs and received low herring and salmon prices in recent years, however, their cost of living and fuel expenses continue to rise; and

WHEREAS, Bristol Bay residents who rely heavily on snowmobiles, all-terrain vehicles, and outboard motors to gather and hunt their traditional subsistence foods cannot afford to carry out their subsistence activities because of the high gasoline costs; and,

WHEREAS, current usage of our royalty oil and gas resources are not used to bring down the cost of home heating fuel and gasoline and,

WHEREAS, the basic health and safety of village residents and their children are threatened with loss of electrical power and heat for their homes and school and,

WHEREAS, energy costs and jobs are related and because so many rural Alaskans were left out of the Alyeska Pipeline construction project; and,

WHEREAS, Rural and Remote Alaskans do not want to be left out of the jobs for the proposed gas pipeline;
NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of Choggiung LTD calls upon the Alaska State Legislature, the Governor's Office, Alaska's Congressional Delegation, and the Alaska Department of Community & Economic Development take immediate steps to address the exorbitantly high costs of diesel and gasoline in rural Alaska and begin developing a workforce training program for jobs related to the proposed gas pipeline by taking the following actions:

• Ensure that Bristol Bay villages will have enough fuel for electricity and home-heating this winter.

• Embark on an immediate exploration program to find gas caps for the remote regions of our state.

• Begin immediate identification of the number of jobs that will be needed for construction of the Natural Gas Pipeline and develop a rural, remote and urban Alaskan workforce with the job skills needed to fill all of the jobs that open up.

PASSED AND APPROVED by a duly constitute quorum of the Board of Directors of Choggiung LTD this 1st day of November, 2000.

President.
Alaska Conservation Alliance
Uniting for Alaska's Future

November 12, 2001

SUBMITTED VIA EMAIL TO <gasline@gov.state.ak.us> AND VIA FACSIMILE TO (907) 269-0349

Alaska Highway Natural Gas Policy Council

Jim Sampson and Frank Brown, Co-chairs
Office of the Governor
550 West 7th Avenue, Suite 1700
Anchorage, AK 99501

Dear Mr. Sampson and Mr. Brown:

The Alaska Conservation Alliance, on behalf of its member groups, wishes to comment on the draft subcommittee reports of the Alaska Highway Natural Gas Policy Council. The Alaska Conservation Alliance is a statewide coalition of 46 conservation groups & businesses representing over 35,000 individual members.

While our complete position statement on this complex issue covers a wide and diverse array of issues, our basic position is best summed by the following:

We strongly oppose all proposed natural gas lines from Alaska's North Slope that invade frontier wilderness ecosystems with new routes and infrastructure where it presently does not now exist, including the offshore Arctic National Wildlife Refuge or across the Arctic or Yukon Piles National Wildlife Refuges. We are concerned also about impacts on the Porcupine Caribou Herd prime habitat winter range presented by the Dempster lateral route. Further, we support a full public EIS process to examine the environmental impacts of all proposed plans, routes, siting, and stipulations for such projects within the existing established transportation routes.

With this in mind, we agree with the Council's position that environmental policies and safeguards should be implemented as early as possible during the engineering design and prior to the start of construction.

We also support the Council's recommendation that a "comprehensive citizen's involvement plan" be established; this effort should include the creation and adequate funding of a citizens advisory council with representatives from communities and interest groups throughout the state.

We also support the Council's recommendation that a Dismantling, Removal, and Restoration (DR&R) provision be included in gasline contracts, agreements, and/or settlements, with adequate funding escrowed for that purpose.

Thank you for the opportunity to comment on the Council's reports.

Sincerely,

[Signature]
Ross Coan
ACA Oil & Gas issue Group Co-chair
June 5, 2001

Governor Tony Knowles
P.O. Box 110001
Juneau, AK 99811

Dear Governor Knowles,

The Alaska Conservation Alliance, on behalf of our member groups, wishes to inform you of our position on the development and transportation of Alaska’s North Slope gas. The Alaska Conservation Alliance is a statewide coalition of 46 conservation groups and businesses representing over 35,000 individual members.

While our complete position statement on this complex issue covers a wide and diverse array of issues, our basic position is best summed up by the following:

"We strongly oppose all proposed natural gas lines from Alaska’s North Slope that invade frontier wilderness ecosystems with new routes and infrastructure where it presently does not now exist, including the offshore Arctic National Wildlife Refuge or across the Arctic or Yukon Flats National Wildlife Refuges. We are concerned also about impacts on the Porcupine Caribou Herd prime habitat winter range presented by the Dempster lateral route. Further, we support a full public EIS process to examine the environmental impacts of all proposed plans, routes, siting, and stipulations for such projects within the existing established transportation routes."

You will note that we are strongly opposed to the so-called “over the top” route in the Beaufort Sea off the coast of the Arctic National Wildlife Refuge. This route has the greatest potential for environmental impacts and will be vigorously opposed by the state and national environmental communities.

Also, please note that the Alaska Conservation Alliance is not at this time supporting any specific gas project or pipeline route, though any project must meet all state, federal and Canadian environmental laws as well as implement “best available technology and procedures” in order to minimize environmental,
public health, and safety concerns. We look forward to working with your administration to protect Alaska’s people and environment.

Sincerely,

Mary Core
Executive Director

Attachment:
ACA member groups
ALASKA CONSERVATION ALLIANCE MEMBER

ORGANIZATIONS

Alaska Center for the Environment
Alaska Community Action on Toxics
Alaska Forum for Environmental Responsibility
Alaska Wilderness League
Alaska Wildlife Alliance
Alaska Youth for Environmental Action
Anchorage Audubon Society
Arctic Audubon Society
Center For Marine Conservation
Cook Inlet Keeper
Defenders of Wildlife
Denali Citizens Council
Earthjustice Legal Defense Fund
Eastern Kenai Peninsula Environmental Action Association
Friends of Potter Marsh
Greenpeace
Juneau Audubon Society
Kachemak Bay Conservation Society
Kodiak Audubon Society
League of Conservation Voters Education Fund
Lynn Canal Conservation
National Audubon Society
National Parks Conservation Association
National Wildlife Federation-Alaska Natural Resource Center
Northern Alaska Environmental Center
Sierra Club, Alaska Chapter
Sitka Conservation Society
Southeast Alaska Conservation Council

ALASKA CONSERVATION ALLIANCE MEMBER

ORGANIZATIONS (cont'd)

The Wilderness Society
Tongass Conservation Society
Trustees for Alaska
Valley Alaska Center for the Environment
Wildlife Federation of Alaska
Wrangell Mountains Center

*ASSOCIATE MEMBERS
Alaska Discovery
Alaska Rainforest Campaign
Alaska Wilderness Recreation & Tourism Association
Alaska Wildland Adventures
Campaign to Safeguard America’s Water a Project of Earth Island Institute
Chichagof Conservation Council
Denali National Park Wilderness Centers, Ltd
Ecotrust
Natural Resource Defense Council
The Conservation Fund
November 13, 2001

OFFICE OF THE CITY MANAGER

Frank Brown & Jim Sampson,
Co-Chairs
Alaska Highway Natural Gas Policy Council
Office of the Governor, NGPC
550 West 7th Avenue, Suite 1700
Anchorage, Alaska 99501

Dear Chairmen Brown and Sampson:

On behalf of the City of Valdez I would like to thank you for the work that you and members of your committee have accomplished in the past many months. The work you have performed is important to the State of Alaska and its residents. I would also like to thank you for holding one of your public hearings in Valdez.

Your council focused on many different aspects of a gas pipeline and has developed many sound recommendations. My comments will be on a few of these recommendations.

First and foremost the City of Valdez supports the concept and tax exempt structure developed by the Alaska Gasline Port Authority. The Port Authority has developed an extensive economic model that indicates that a gasline to the lower 48 and an LNG facilities located in Valdez is economically viable. The markets are there, both for domestic and international use of LNG, as well as natural gas.

Access for In-State Gas Use and Future Opportunities Committee

The concept expressed by this committee of a “hub” is not unlike what the Port Authority is proposing. With only a gasline running to Canada, there will not be much opportunity for natural gas usage by the majority of the State. A key component of the Alaska Highway gasline must be how is the rest of the state going to benefit from North Slope natural gas. Granted, residents will benefit from royalty and severance taxes of the natural gas and to some degree the increased economic opportunity. However, with only a highway line, many Alaskans will not have direct access to the gas. Including an LNG leg to the project will provide benefits and opportunities to many more Alaskans.
The recommendation from this subcommittee is that the State encourages private investors to initiate an economic study of creating one or more “gas hubs” should be taken a step further. That is, the State should initiate the study. The more the State knows, the more informed their decisions will be. As we have seen in the past, private investors are only going to look at it from their perspective.

The committee did recommend that the State should encourage entities to examine the port authority concept of tax advantaged financing. Valdez believes that the State should also be involved in this examination. The Port Authority has demonstrated the tax advantages it brings to the project. The economic model developed by the Port Authority shows that the tax advantages gained by the Port Authority makes the project economically viable and provides an additional return to the State and all Alaskan municipalities.

Alaska Hire/Buy/Build Committee

This committee recommends that the State undertake a study to determine the socio-economic impacts along the Alaska Highway route. This study should not be limited to the route itself. There will be other parts of the state that are impacted from a project of this magnitude, particularly during construction.

State Pipeline Ownership and Tax Structure Committee

The City of Valdez concurs with the committee’s recommendation against state investment in the project. The Alaska Gasline Port Authority has developed a financial structure that would provide for the financing of the project with private investment. Through the Port Authority ownership of the pipeline, the public interest would be maintained and protected. The Port Authority believes that State investment would prevent 100 percent debt financing of the project.

Valdez also supports the Committee’s suggestion that if a viable proposal for a pipeline project is put forward and the producers do not respond, that the state should use the tools that it has available to facilitate the project moving forward.

Again, thank you for the time that you and your council members put into this important policy issue before the State. If you have any questions concerning the City’s concerns or would like a presentation from the Port Authority please do not hesitate to contact me.

Sincerely,

David Dengel
City Manager
Subject: Gas Pipline
Date: Wed, 03 Oct 2001 08:48:38 -0800
From: cvedc <cvedc@alaska.net>
To: gasoline@gov.state.ak.us

Sir; We here in the Copper Valley believe that anything less than the Port Authority Project would hurt all of Alaska! For once please consider Alaska first and do not bow to the oil companies wishes. With the port Authority project you can build a pipeline to the south 48 and do for all Alaska too. Thank you for your time.
Sincerely, John Downes, CVE DC
Suggested changes to Draft Reports of the Governor's Alaska Highway Natural Gas Policy Council Submitted by Foothills Pipe Lines, Ltd November 1, 2001

(Note: [ ] = delete language, ___ = add language)

Environmental Committee Draft Report

Suggested Change: on page 3, rewrite the third paragraph of Section 2 as follows:

A rigorous environmental review should be required and could be [done either] accomplished by meeting the requirements of Section 5, Subsection III of the President's Decision relating to the Alaska Natural Gas Transportation System which anticipated the development and public review of detailed plans to protect the environment using the best of current science and technology. A lengthier way to accomplish the same outcome could be by a supplemental environmental impact statement (EIS) building on the ANGTS EIS or a full EIS done in an expedited manner using information from the ANGTS EIS. The outcome of [either] any process should spell out for public review the full range of alternatives for protecting the environment, [environmental] the pros and cons associated with them, and mitigation measures that should be taken to avoid or minimize adverse impacts.

Rationale for the change: Foothills has completed significant legal research which has determined that a new or supplemental EIS is not required for ANGTS. That research is being submitted with this document. Avoiding an EIS can save significant time that may be critical in getting Alaska gas to market.

Foothills is not suggesting that ANGTS not be required to use current technology and science so that environmental impact can be minimized. However, Foothills believes that the requirements of Section 5, Subsection 3 mandate that ANGTS meet the rigorous environmental standards anticipated by the committee.
Suggested change: Rewrite the last paragraph on page 3 as follows:

Because the Alaska segment of the project has not been constructed under ANGTA since its enactment 25 years ago, there may be outstanding issues regarding its current application.

Rationale for change: The prebuilt part of ANGTS has been completed and is currently in operation.

Suggested change: On page 7 rewrite the first “bullet” under the Corresponding Legislative Provisions of Key principles #4 as follows:

- FERC should require [each applicant] the project to [make] establish reasonable plans and procedures, including additional open seasons if necessary, for the expansion of the Alaska section of the gasline as new fields of natural gas are developed on the North Slope and throughout Alaska.

Rationale for change: Same as previous change.
Suggested change: On page 8 in the first section entitled Corresponding Legislative Provisions on the page make the following change:

Corresponding Legislative Provisions

- To the extent allowed by law, Alaska residents and contractors should be employed when they are available and qualified. In turn, contractors would be encouraged to employ and train Alaska residents.
- Recruitment should be accomplished primarily by advertising in-state and using Alaska’s job service organizations to notify the Alaskan public.
- The project sponsors must, whenever feasible, enter into construction contracts with Alaska firms and fabricate modules in Alaska.
- The gasline sponsors should be required to enter into an agreement to provide for pre-employment recruitment, on-the-job training, and employment of Alaska Natives.

Delete all bullets and refer the reader to the report of the Alaska Hire/Buy/Build Subcommittee.

Rationale for change: The Alaska Hire/Buy/Build Subcommittee has completed a more exhaustive study of these subjects.
Comments by President Steve Ginnis, Tanana Chiefs Conference
To the Alaska Highway Natural Gas Policy Council
April 18, 2001, Fairbanks, Alaska

Good evening, ladies and gentlemen. My name is Steve Ginnis. I’m pleased to see you here.

Coming together to hear from the people about a proposed industrial project of this size attracts a lot of attention. And it’s no wonder, your membership on the Alaska Highway Natural Gas Policy Council acknowledges that this project will soon be underway.

As Tanana Chiefs Conference president, I represent 43 tribal villages spread across more than 235,000 square miles of Alaska’s interior region. TCC serves a population of more than 17,000 people while managing 220 programs ranging from health and social programs to fisheries and wildlife, education and employment. TCC employs approximately 500 people.

The gas pipeline project is being closely watched by our tribes. There is 35 trillion cubic feet of discovered natural gas on the North Slope. This is the energy equivalent of more than 50 percent of the original recoverable oil reserves in Prudhoe Bay. How we move this resource to market will impact our people for years to come.
Sending Prudhoe Bay natural gas to the Lower 48 has the potential to do a lot of good for a lot of people -- if it’s done right. Natural gas can heat homes and be used to generate electricity. It can be used in transportation; to make fertilizer, plastics and many other things. At the rate fuel is being burned in the Lower 48, this resource is vitally important to Alaska and the whole country.

A project of this scope can also employ a lot of people. Work for men and women; jobs so that people can earn a paycheck; provide for a family and move up in the world.

Economic development opportunities of this scale are few and far between. It’s important to all of us that this one is done right. Careful, thoughtful, planning is vital to its success.

The construction phase is expected to last from 3 to five years. The project has the potential to provide an enormous economic boost to people who live in Alaska and along its route.

A project of this value can help improve community infrastructure. It’s not unrealistic to think that better schools, transportation and health care can be a result of a project like the gas pipeline.
Thirty years ago, when the oil pipeline got underway, there were a lot of promises connected to that project, too. Some proved out, many did not. Nevertheless, Alaska Natives supported the first line and we support this one, following the governor’s route down the Alaska Highway.

The Alaska Highway route crosses Native lands. We have a number of villages along the way. Stevens Village, Minto, Manley Hot Springs, Tok, Tanacross, Mentasta, Mansfield, Healy Lake, Dot Lake, Tetlin and Northway -- the gas pipeline will run for miles through our neighborhoods.

While economic opportunities presented by this project will be welcomed by many people, we want assurances that certain planning and performance criteria will be met. We want planning to be upfront so that the collection and dissemination of information is open and transparent.

Planning at the community level must have mechanisms for local people to become involved. For the success of the project, it’s important that our villages are represented on planning committees.

We want strict environmental and safety protections so that our renewable resources will be treated with care and respect.
Let me remind you that while our communities are small, energy costs are high. Given that our communities are the first the line will pass by, we want the pipeline to serve us and help reduce fuel costs. Our energy needs are no less real than those of people in the Lower 48.

At the Yukon River crossing a facility is needed that will transfer and hold gas for local consumers. Both upstream and downstream villages will benefit from this access. It will not be as convenient as piped delivery, but a natural gas transfer station will mean improved living conditions, reduced costs and increased economic activity.

Prudhoe Bay natural gas is a public resource. It is owned by the people of the state of Alaska. Our people are eager to make this project a reality. We look forward to participating in discussions regarding employment and training opportunities.

While no one denies that markets far from Alaska are the driving force behind this project, let us not forget that the resource delivery system should be planned and designed in ways that serve people who live here, people whose homeland is here.
As you continue to solicit public testimony and build support for the governor's Alaska Highway route, you can be assured that Tanana Chiefs and its members tribes stand ready to offer assistance and consultation.

Thank you, again, for the opportunity to share my concerns with you.
Good afternoon, ladies and gentlemen. My name is Richard Glenn. I am the Chairman of the Board of Trustees for Ilisagvik College. I'm speaking today on behalf of the Board and the College.

Ilisagvik College understands the need for the nation to develop its natural resources. Ever increasing demands for energy continue to require expanded exploration, processing and distribution. However, the College also recognizes the need to protect our fragile environment and natural beauty of our home—the North Slope of Alaska. We believe these are not incompatible goals. Clearly, the large variety of agencies, companies, and other organizations and interest groups examining the options for natural gas transportation at present represent all sides of the issues—from the commercial needs to the environmental and ecosystem considerations.

After looking at the options, the College believes it is in the best interests of the North Slope, Alaska and the nation for all Alaskans to join in supporting the Alaska Highway gas pipeline option. We gladly join the Mayor, the Assembly and many others in lending our support to the Alaska Highway gas pipeline.

Our reasons for this support are many. As you may know, the primary supporter and source of funding for Ilisagvik College is the North Slope Borough. There was no opportunity for higher education on the North Slope until the North Slope Borough took upon itself the duty of initiating an institution of higher education in Barrow. This institution has undergone many changes until it has reached its present form as Ilisagvik College. It is the farthest north institution of higher education in the world. During its creation and continuing operations, the college has not received funding from the University of Alaska system. Ilisagvik College has been largely supported by allotments from the North Slope Borough; which, as you know, has property taxation as the basis of its revenue.
It is well known that higher education is one of the most effective ways to address cultural and social disruption that occurs when intensive economic development comes to a region bringing rapid change. Having Ilisagvik College located on the North Slope—in the remote villages and in Barrow—is of great value to the culture and to the society as a whole. Without the support of the North Slope Borough, the college will not be able to supply the level of service to the North Slope that has come to be expected. We are hopeful that in the future the State of Alaska will be able to help fund the delivery of higher education on the north slope.

A number of other advantages of the highway gas pipeline route have been voiced from a variety of groups. For example, it is said that the Alaska Highway route will allow easier and cheaper dispersion of the gas to more areas of the Lower 48 states and will provide the most security from foreign attack than any other option. But probably the most telling argument for residents of the North Slope and for the college is that the highway route provides both the greatest opportunity for jobs and the least disruption of the ocean and other waterways on which many native peoples rely for economic and cultural well being.

Ilisagvik College was founded as a vocational-technical training college. Our primary mission is to train people for gainful employment in the construction and other infrastructure development occupations through partnerships with a variety of government and business entities. Among other initiatives, Ilisagvik College has led the way in multi-cultural training for scientists and engineers; and this training has developed a high level of awareness and sensitivity to the problems faced by Native people in Alaska. The Alaska Highway gas pipeline will surely provide more jobs for Alaskans in construction and building than any other alternative. We hope to be a part of this training effort and to be instrumental in providing another means for residents of the North Slope to reach economic self-sufficiency.

We are, in the final analysis, all Alaskans. Whatever is decided must be in the best interests of Alaska first. We support the Alaska Highway gas pipeline option because we believe its construction is in the best interests of the North Slope, Alaska, and the nation as a whole.
Richard Glenn, Vice-President Lands
Arctic Slope Regional Corporation

On behalf of our president, Jacob Adams, the North Slope community and the shareholders of Arctic Slope Regional Corporation, I would like to extend a warm welcome to the Governor and the members of the Alaska Highway Natural Gas Policy Council. ASRC is pleased to assist in hosting the council on its visit to Barrow, and also appreciates this opportunity to present our views related to Alaska’s natural gas resources.

Our desires related to North Slope natural gas exploration and development can be summed up in one statement: We desire access – access to capacity, access to opportunity, and access to the process.

Access to Capacity

As you are probably aware ASRC is the largest landowner on the North Slope outside of the federal government, with title to more than four million acres of surface and subsurface estate. ASRC’s lands include more than three million acres in the central Arctic foothills, one of America’s premier natural gas provinces. Together with State-owned lands in the central Arctic there are 11 million acres of land there that may contain more than sixty trillion cubic feet of natural gas, which we strongly believe should have
an avenue to market. Said another way, ASRC believes that any natural gas pipeline leaving the North Slope should provide capacity to accommodate areas of new natural gas production such as in the central Arctic, in addition to the significant identified natural gas reserves around Prudhoe Bay.

*Access to Opportunity*

The construction and eventual operation of a natural gas pipeline presents many opportunities to all Alaskans. Jobs in construction, engineering, operations and the support of natural gas-related processing industries all will be welcomed by all Alaskans along the pipeline route. Our corporation, with established subsidiaries in oilfield construction, surveying and engineering, and pipeline operations, has much to contribute to the construction and operation of a natural gas pipeline. We are already contributing, for example in the “front-end engineering and design” for a portion of the pipeline along its proposed route through Canada. We seek continued participation in the design, construction, and future operations of this major development project. Our companies are competent, they have proven themselves in industry, and most importantly they seek to put our people to work.

*Access to the Process*

In addition, we do not wish to foreclose any opportunities related to an equity position in the Alaska gas pipeline or any of the related systems. To this day, there has been little discussion on who will own the pipeline. The issue is yet unclear, but as it develops ASRC wants to be there.
Finally, ASRC would like to join the North Slope Borough, the whaling captains of our villages, and many others in supporting an overland route for the Alaska natural gas pipeline. In addition to avoiding the placement of a pipeline in the Beaufort Sea, a route from the North Slope paralleling the Trans-Alaska pipeline would provide access to the significant resource base of the central Arctic, opening up a significant hydrocarbon province bringing jobs and revenue to all Alaskans. We are confident that the oil producers will come to the same conclusion after reviewing all of the issues related to gas development in Alaska.

Governor and Council members, ASRC welcomes you to Barrow. We encourage you to get to know this town, one that has virtually grown up on natural gas. Study the issues related to small town energy needs, necessary infrastructure support, and the quality of life improvements that come with the presence of a safe, reliable natural gas supply. Our people and our organizations wish to be a part of the process as the idea of natural gas development matures. When you return to the great debates that surely will ensue regarding Alaska's natural gas, please do not fail to appreciate the regional resources we provide: our people and our land, and the promise that they both hold for all Alaskans.
April 27, 2001

ATTN: Jim Sampson
Office of the Governor
Governor's Alaska Highway Natural Gas Policy Council
P.O. Box 110001
Juneau, AK 99811-0001.

Dear Mr. Sampson:

Thank you for the opportunity to provide comments on the Alaska Natural Gas Pipeline. As Acting President & CEO of the member-owned electric cooperative serving over 90,000 Interior Alaska citizens, I can fully appreciate the value and importance of open public participation. I applaud your commitment to ensuring timely completion of a route that best addresses the needs of both Alaska and the nation.

In conjunction with our Board of Directors, let me assure you that our committed workforce of skilled professionals stand ready to provide the power necessary for any potential future opportunities throughout the construction, operation and maintenance lifecycle of this most important and far-reaching initiative.

I am convinced that this project must be integrated into a State-sponsored fifty year long-range energy plan that creates the vision and goals for addressing the State's energy needs and use of our resources for the next fifty years. Such a plan should, at a minimum:

--Direct free and open access to gas as stipulated in 18 CFR governing US gas transmission infrastructure, depreciation and tariffs (mileage pro-rata basis);
--Create common carrier status under a State certificate of public convenience;
--Ensure access to state gas royalties "in kind provides a real and lasting price point benefit to State residents;
--Develop a price for royalty gas used in-state; and
--Designate royalty gas proceeds for the creation of a state energy fund charter that ensures future development of renewable energy supplies.
Letter to: Jim Sampson  
April 27, 2001  
Page 2

Fairbanks already has the infrastructure and trained and ready workforce needed for such an undertaking and leads to the realization that the pipeline must come through Fairbanks. Such routing, in turn, makes the possible establishment of a Fairbanks-based gas hub a reality.

This hub, with easy and ready access to cost-competitive fuel, can serve as a cornerstone of renewed economic development, creating opportunities for new industrial, commercial and personal value-adding enterprises. This more efficient and cleaner-burning fuel, when added to our current energy mix, will help us demonstrate responsible, responsive leadership in meeting increasingly stringent air-quality standards, while supporting an ongoing responsibility of serving today’s citizenry while meeting the future needs of the Interior.

Your crucial and timely decisions will ensure that all involved are remembered as visionaries and leaders that responded to this moment in history. With business and government working together, we can develop the plan that results in a more robust and diversified economy that ensures current and future generations continue to live and work in our Great Land.

Again, thank you for the opportunity to share my views. If I may be of further assistance, please do not hesitate to contact me.

Sincerely,

Steve Haagenson  
Acting President & CEO
Written Testimony presented to Governor Tony Knowles Alaska Highway Natural Gas Policy Council, November 12, 2001, Scott Heyworth, Chair, Citizens Initiative for the All-Alaska Gasline, respectfully submitted.

Ladies and Gentleman of the Council:

A fair and unbiased report should have studied and investigated all of the options for marketing our North Slope Gas. Where is the study of LNG to Valdez? A best interest finding studying both routes was called for. What should Alaskans have expected?

In the short life-time your Council has been meeting, here are just a few developments that have occurred:

1. The same 3 Oil Companies that have kept our North Slope gas stranded now for some 25 years have announced some 5 other LNG projects, mostly aimed at our own West Coast markets. That is because our State did not sign “use it or lose it” lease policies as these other competing Countries did. But your Council ignores our own LNG potential, with a route that is only 2,000 miles long via tanker to Los Angeles, but is 7,000 miles long from competing projects in Australia, Indonesia or East Timor.

2. Some 50-100 TCF of gas was found off Nova Scotia. Would a 700-mile gas line to Chicago be shorter than the Councils’ recommended 3900-mile line? Especially when there are no gas shortages whatsoever in Chicago or the Mid-West?

3. The Oil Companies announced the Southern Route (your recommended route) as cost prohibitive and they can’t make 15% profits on their investment.

4. The Governor has switched teams and now wants to form a new coalition with big Gas Companies to build the line the big Oil Companies can’t do without special Federal Legislation, subsidies, tax credits, accelerated depreciation, etc., etc., etc.

5. On the day your Council was appointed, the cost of the Southern Route was alleged to be $10 Billion. Three months ago, the truth finally came out that it is $20 Billion to Alberta alone. Even the Governor is on the record admitting that much. Now the Oil Companies have told you it is $17 Billion. But wait, that is not the end of it. Because the Southern Prebuilt is full of Canadian gas, someone will have to build a brand new 1200-mile gas line from Alberta to Chicago at a cost of some $7 Billion minimum. That brings the real cost back to around $24 Billion or almost 300% higher than the cost of the LNG route to Valdez ($8 Billion), or $10 Billion with 9 LNG tankers included. Some facts your report leaves out.
6. The Foothills group has a little hidden "meatball" problem.
7. The Canadian Indian tribes are all fighting over which route they support.
8. ANGTA has a stipulation that the gas line can only be 2.6BCF per day, yet for all your discussions and scenarios, the size of your line is given as 4-6BCF. That is illegal. The Southern Prebuilt is at 2.6BCF per the treaty.
9. There are over 10,000 pieces of land yet to be negotiated in Canada and the Great Lakes region to get this Southern route built.
10. The Oil Companies allegedly spent $100 Million to come to their own conclusion that your route recommendation won't hunt. But you have ignored their findings.

FINDINGS OF FACT:

The Southern route is missing many, many permits that have yet to be obtained.
The Southern route is not engineered.
The Southern route has no Project Labor Agreements.
The Southern route has no spur line to South-central or any defined plan for gas to any Alaskan cities or villages. At least none that has yet been made public.
And if it does exist, then why didn't the Council present it in detail?

The Gas Policy Council has never said how many jobs the Southern route brings to Alaska. That number is about 8,000-9,000. The same with the Valdez route. But the LNG Route to Valdez adds another 4,000 jobs with the construction of the LNG plant, terminal, and piers at Anderson Bay in Valdez. The permanent jobs with your recommendation are about 250 while LNG to Valdez is some 500 plus for Alaskans.

In conclusion, the least your Council might have fairly done was to support equally both the Southern route and the LNG route to Valdez. But since you never even studied it (just as the Oil Companies apparently failed to do in their $100 million study), Alaskan citizens did not get the pleasure of your full responsibility to do exactly that. For their benefit.

The number one thing people like Roger Marks or Cambridge energy fail to mention is that while many LNG Projects from other countries may already be at or closer to tidewater than Prudhoe Bay, their field development costs have not been carried out yet, while this has obviously already been done at Prudhoe Bay. 7.5BCF is produced daily and of that some 6BCF is reinjected and stored daily. Those Foreign projects have not accomplished this field development cost yet nor have they overcome the 7,000 mile journey across the Pacific Ocean to our West Coast markets using approximately 2.5 times as many LNG tankers to accomplish the number of round trips as would be needed from Valdez to California. Did you all consider any of these facts?
The Council should have fairly studied LNG to Valdez as an option. This did not happen. Alaskans are the less for this. Many true facts did not come out. But that does not make them any less untrue.

Finally, the tremendous response to the Citizens Initiative for the All-Alaska Gasline is a reality that the Legislature and the Governor are going to have to deal with very soon if the people of Alaska continue to sign the petitions at the rate they are today.

Numerous statewide polls have shown this over and over.

Alaskans are telling your Council and the Governor and the Legislature loud and clear in many forums that they do not support any Southern Route through Canada.

Your majority Council report has totally ignored this will of the people to date. I look forward to the Minority report because I find it highly unlikely that all of you supported this Councils' findings and recommendations. I can assure you the citizens of Alaska do not support these findings.

Alaskans are smart enough to know, for instance, that the State of Alaska must own some percentage of this project to insure we have access to the books this time around. That is a compelling reason as to why we should own some percentage of any gas pipeline. Aside from the fact that it obviously would bring more revenues to the State.

I wish Alaskans had been represented with a study of their preferred choice. VALDEZ!

A tip of my hat, though, to all of you for your hard work in a most difficult and compromising endeavor.

Sincerely,
Scott Heyworth
Chair.
CIAAG
Dear Co-Chairs, and other prominent Alaskan council members:

The Governor created the Alaska Highway Natural Gas Policy Council to analyze the many issues related to gas development and to make recommendations that can be incorporated into gas line legislation and project development. I wish to express to this group the views and recommendations about an issue that will certainly, and without question, maximize an important benefit for all Alaskans, as the governor has mandated and our state constitution requires.

Several of my colleagues and I in the energy field propose the creation of an Alaska systems benefit program that would eventually fund all statewide energy efficiency programs and renewable energy resource research, development, and procurement programs in the state of Alaska. We named this program the “Alaska Energy Futures Trust.” The goal of the “Alaska Energy Futures Trust” is for Alaska to be totally powered by renewable energy by 2051, and energy efficiency programs are an important component of this transition.

This goal—for Alaska to become 100 percent dependent on renewable energy in 50 years—is, without argument, a conservative, reasonable, attainable and most desirable goal. It dovetails well into the self-sufficiency philosophy of all independent-minded Alaskans. This goal can be achieved through the creation of the “Alaska Energy Futures Trust.” The “Alaska Energy Futures Trust” would grow as a dedicated percent of the income and revenue from the state’s royalty gas, taxes and pipeline tariff charges are deposited into it. Economic efficiency, environmental protection, and ensuring all Alaskan consumers receive a fair share of the natural gas and pipeline benefits are conclusive reasons for supporting the “Alaska Energy Futures Trust” creation.

The “Alaska Energy Futures Trust” will provide a flexible and transparent mechanism for funding energy efficiency programs and renewable energy resource research, development and procurement programs in the state of Alaska. Moreover, it will free up capital from current limited-funding sources, such as the Alaska Housing Finance Corporation. At this time, market transformation is the most common barrier for programs and activities involving renewable energy resource procurement in gaining a foothold in the market. However, renewable energy resources are inevitable, and all Alaskans who do not currently embrace this view will do so eventually.

The “Alaska Energy Futures Trust” can comfortably meet the political, regulatory, economic, and social objectives in a variety of situations to forward this future inevitability. In the early years of the “Alaska Energy Futures Trust,” proceeds could be used to assist in financing traditional power delivery systems such as pipelines, gas turbines, fuel conversion systems, and transmission lines. Combustion technology could continue as the transition to non-combustion technology, such as fuel cells, as they become more economical to purchase and operate. Eventually construction of renewable energy power and delivery systems would be funded by the “Alaska Energy Futures Trust.” Renewable energy resources, as a distributed generation resource, will
provide better utilization of the distribution system and allow generation to be sited closer to loads, thus reducing the losses now associated with a central power plant.

In tandem with this transition, and from its inception, the “Alaska Energy Futures Trust” would also be used to finance all energy efficiency programs including the low-income weatherization program, energy efficiency mortgage program, residential rebate programs and home energy rating services and training and educational activities.

Today the barriers for funding all energy efficiency programs and renewable energy resource programs in the state of Alaska not only include capital limitations, but also information costs, performance uncertainties, access to financing, product availability, and the uncertain and fluctuating prices of oil and gas. Recognizing this, the council should recommend and the lawmakers and regulators should established the “Alaska Energy Futures Trust” for funding energy efficiency and renewable energy programs in the state of Alaska so as to target the market transforming activities and become the leader in the Arctic and sub-arctic region. An important purpose for the creation of the “Alaska Energy Futures Trust” is to reduce total energy service costs for all Alaskans, and this is consistent with the broad public policy goal of economic efficiency. Any cost effectiveness tests that are applied over the projected life of funded programs must also include environmental and health benefits.

Environmental protection is another broadly recognized policy benefit that arises from the “Alaska Energy Futures Trust.” More efficient use of energy resources and the use of renewable energy resources will produce avoided environmental emissions from the site of primary fuel production, fuel transportation and storage, and final consumption. As Alaska uses the “Alaska Energy Futures Trust” to fund the energy efficiency and renewable energy programs, air pollutant emissions and the emissions of greenhouse gases will be reduced. And, as we are well aware, the Arctic and sub-Arctic are particularly vulnerable to the smallest environmental fluctuations. As we increase the fraction of energy demand supplied by renewables, we will, at the same time, preserve our valuable petroleum and natural gas resources to be used as feedstocks for the petrochemical industry.

The levels of funding for the “Alaska Energy Futures Trust” is a detail that will obviously gain more scrutiny as acceptance to this proposal grows and is not within the scope of this testimony. The rational for the “Alaska Energy Futures Trust” is to meet our goal for Alaska to rely on 100 percent renewable energy within 50 years. The “Alaska Energy Futures Trust” program promotes the use of renewable energy and energy efficiency in overcoming the market barriers that all new technologies face and eventually will bring them to a point of cost competitiveness with other supply resources. Moreover, at the same time, it allows for a smooth and cost effective transition period.

Thank you for this opportunity to present this proposal and explore these issues.

Todd Hoener
November 17, 2000

Honorable Tony Knowles
State Of Alaska
Office of the Governor
PO Box 110001
Juneau, AK 99811

Dear Governor Knowles:

I am writing to you regarding a very important turning point for the State of Alaska: the route, the control and the development of the Alaskan Natural Gasline.

Kake Tribal Corporation fully supports the creation and construction of the Alaska Natural Gasline solely with the Alaska Gasline Port Authority. The reasons are obvious and include:

1. Jobs for Alaskans including those from rural and Southeast Alaska. It is essential for all Alaskans that the natural gas that belongs to the citizens of Alaska is developed by and for the citizens of Alaska. The Port Authority is the best mechanism for Alaskan control. That control ensures that a "pro-Alaskan hire" is adhered to, and not only spoken. In addition, the Port Authority is on record for supporting small and large Alaskan construction and trucking companies for the work needed in building the pipeline in the next three years.

2. The use of natural gas in Alaska to create new economic development in all parts of Alaska. A terminal on the Yukon River will allow for the gasification (through barge service) of all Yukon River communities which will not only lessen fuel costs, but will create much needed economic development through fuel savings and therefore the competitiveness of small industrial development. Furthermore, Kake Tribal Corporation would like to see Southeast Alaska receive gas service for all communities in SE Alaska. In this manner, the gas of Alaska is used for the betterment of our citizens.

3. The Alaska Gasline Port Authority stabilized the economic base in Alaska for the foreseeable future. The AGPA proposes to pay 60% to the State of Alaska; 30% to the communities in Alaska (a minimum of $50K per community annually) and only 10% to the Port authority. This would be far more generous and beneficial to the citizenry than a pipeline controlled by a Board of Directors in another country.

The route and control of the ANG pipeline by the Alaska Gasline Pipeline Authority would eliminate the discussion of tapping the permanent fund or re-establishing a state personal income tax. The revenue also eliminates the Republican legislative battle to reduce services to rural Alaska justified with the name of balancing the budget.

I knew that there are tough decisions to make. I request that the decision be based on the benefits to the citizens of all of Alaska. The AGPA would leave the control with Alaskans, will employ Alaskans, and will benefit all Alaskans regardless of race or rural/urban disposition. This is probably one of the most important decisions that will be made in your administration, and one that will have tremendous economic
effects for many generations to come. I have tremendous confidence that you will do what is best for this
wonderful state and the people who deserve the benefits that the pipeline could deliver, especially with the
scenarios that I have outlined in this letter.

Very truly yours,

[Signature]
Sam Jackson
President/CEO

Cc: Alaska Gasline Port Authority
Rep. Albert Kookesh
Rep. Bill Hudson
Rep. Bill Williams
Rep. Beth Kertula
Sen. Alan Austerman
Sen. Kim Elton
Sen. Robin Taylor
Rep. Mary Kapsner
Presentation to the Alaska Highway Natural Gas Policy Council

Barrow, Alaska
July 19, 2001

Good afternoon, ladies and gentlemen. I am Edna Ahgeak MacLean, President of Ilisagvik College. Thank you for coming to Barrow, Alaska to listen to our concerns and suggestions as you prepare to make recommendations to Governor Knowles on the development of an infrastructure to share the gas from the north slope of Alaska.

A primary concern of the North Slope Borough is jobs—both the provision of jobs and the training of people for the jobs that are or will be available.

We expect that the Alaska Highway Pipeline will provide opportunities for a wide variety of jobs in both the construction and operations phases.

When Prudhoe Bay was being established, there was no college north of the Arctic Circle that offered either academic or vocational higher educational programs. There were few programs statewide that delivered education outside the major population centers. There were regional high schools that required students to leave their homes and villages to receive a quality education. In essence, there was not a critical mass of trained residents of the North Slope who were qualified for jobs in the Prudhoe Bay complex nor on the oil pipeline. The result was an influx of qualified people from a variety of places other than the North Slope. Since our inception, we have been dedicated to providing training for North Slope residents, to preserving the Inupiat culture while at the same time, preparing Inupiat young people for the changing world of tomorrow.
We, at Ilisagvik College, are ready now to do new things in new ways to create new results by providing critical training in construction trades, in building maintenance technologies, in heavy equipment operation, in office management and business management, and in information technology to residents of the North Slope. We have creative programs and initiatives that will lead the way in such things as distance delivery of critical education to the remote villages of the North Slope. We are able to train people to operate heavy equipment in the conditions they will actually face as they begin to construct the pipeline and build the other elements of the infrastructure. And we can help provide a wealth of talented individuals who can fill the many other support jobs that are necessary for the success of the project.

We are proud to support the Alaska Highway Gas Pipeline project. We ask that those who create the plans consider their special needs far enough in advance to allow Ilisagvik College an opportunity to become an active partner in training. By doing so, the Pipeline will be a major positive influence on not only the economic but also the cultural integrity of the North Slope and its residents.

The Alaska Highway Gas Pipeline can be of enormous value to the North Slope in terms of economic opportunity and long-term stability. The same can be said of its value to Alaska. Let's work together to make this happen.
May 29, 2001

The Governor's Alcan Highway Gas Policy Council

Dear Council Members:

Thank you for the opportunity to testify. As requested and promised, I'm submitting my questions in writing. Quite obviously, only the Governor can answer some of these questions, the Administration others.

I would like to take this opportunity to clarify some of my answers to questions that some of you posed.

Ken Thompson asked me why I wouldn't support a hub in Interior Alaska and an Alcan project? Obviously, implicit in the concept of a hub is a central, strategic location providing access to multiple markets and/or uses. That's why Nikiski has been so successful. A tidewater location for a hub delivers all of the attributes that Ken so rightly associates with hubs and runs much less of a risk of being a flub.

The main reason I oppose the Alcan project is that it fails to maximize returns for the state as required by the constitution. As I understand it, CERA essentially said that the Alcan probably wouldn't fly because it can't achieve the economies of scale necessary without depressing the $3 price necessary.

But assuming, for a moment that the experts at CERA are wrong and the Alcan could start at $3. and 4.0 bcf/day. This is where it gets us: At $3 per mcf in Chicago, 4.0 bcf/day sells for $4.4 billion per year. Our royalty share alone would sell for over $450 million per year. Yet according to the Department of Revenue Alaska's total will only be $200-$400 million per year. That's essentially giving away an enormously valuable asset—and should be avoided assuming we have a better option which we have in the LNG project.

The Alcan is also too reserves-intensive, as Tom Marshall argued. There are some lessons we can draw from the current gas supply situation in Cook Inlet. We wouldn't be running out of gas here if we weren't exporting so much of it. Therefore, in choosing the best option for Alaska's gas it seems that we would want to ensure that gas is available to Alaskans, and for as long as possible. At 4.0 bcf/day, the Alcan option exhausts proven reserves in 24 years, or sooner if it quickly expands to 6.0 bcf/day. Even if there is a lot more gas waiting to be discovered on the North Slope, why would we want to run through it as fast as
possible when we can probably get a lot more revenue for it as LNG and extend it's lifespan?

The Phillips-Marathon LNG plant at Nikiski is essentially an ATM machine for its owners. For example, until Phillips acquired Arco-Alaska, the Nikiski facility accounted for 50% of Phillips' annual worldwide net profits. A state-owned pipeline and LNG facility at Valdez could do the same for Alaska once its capital costs are recovered.

Ken Thompson talks a lot about his hopes of putting Alaskan LNG in Japan, but he keeps overlooking North America. People refer to the LNG project as huge, but by what measure. For years, it was thought that an LNG project would have to move 14 Million Tons Per Annum (MTPA) to achieve economies of scale. (By comparison, the Alcan would move the equivalent of 28-42 MTPA). So that makes the Alcan, what, gargantuan?

My numbers were a little off in the other night. What I should have said is that the most recent estimates suggest that an LNG export project could get off the ground at somewhere between 6 and 9 MTPA. (There is a general rule of thumb that any new project that can deliver 1MTPA to Tokyo for a $1 Billion of investment is competitive.) Furthermore, if you are competitive and the markets want you, (say for reasons of diversity of supply or security of supply--both of which are likely in Alaska's case) then they bend over-backwards to make the economics work. For example, in 1996 the Japanese financed a project at 4% interest, roughly half of prime at the time.

Now it's easy to get lost in numbers here, but there are two points. First, Alaskan gas is competitive in Japan, which is precisely why BP, Phillips, and Exxon must keep our gas away from tidewater. And Alaska's gas would also be competitive in California, which might be one reason why BP and Phillips are racing to plug California with gas from Australia and Indonesia. The other reason the companies must keep our gas away from tidewater is that the Indonesian and Australian leases lapse back to the host governments if the gas doesn't move to market within a very finite period (BP has only two more years left before they are thrown out of East Timor.)

Secondly, the amount of LNG that will soon be imported to the U.S. would have been enough to support an Alaskan project. The reason Alaska isn't ready to supply that Pacific LNG market stems in part from the leaseholders 1991 agreement to strand Alaska's gas on the North Slope until at least 2005. People claim last summer's realignment at Prudhoe Bay removed these impediments to gas sales. But that is, at best, wishful thinking. Given that Alaska leases don't hold a gun to the producers heads and leases in other parts of the world do, common sense says that the leaseholders have agreed in one form or another to prevent Alaska's gas from moving to tidewater from some period beyond 2005.
The environmental community appears to be in nearly unanimous agreement with Harold Heinze's suggestion that there needs to be formalized citizen oversight of any gasline. However, state-ownership of a pipeline has such huge economic advantages to the state treasury—in terms of avoiding federal corporate income taxes—that it merits serious investigation. It's easy to name failed State endeavors, but the Permanent Fund stands out as a shining success. And even though some decry the private ownership concept as socialism, this is nothing more than privatization, with the added advantage that it doesn't give away all of value.

Thank you for your consideration and for guarding the public interest.

Sincerely,

Mike Macy

Here are a few of the basic questions needing answers:

**Sound Science**

How did the Governor determine "My way is the highway?"

Why has the Governor never had a briefing from the LNG project?

The Administration says the LNG export option "doesn't pencil out." When will the Administration supply its assumptions, methodology, and calculations?

The Administration acknowledges that the Purvin and Gurtz study is flawed. Why haven't they redone the analysis with the correct numbers and assumptions?

Why has the Administration modeled the LNG project on 7 million tons per year—a volume far short of achieving the necessary economies of scale—and then turned around and assumed that the North American market will be able to absorb the equivalent of 28 millions tons?

The Administration claims that the Alcan is the environmentally best option for marketing our gas. Compared to what? Where is the analysis?

**Responsible Stewardship**

Is the gas available today for any viable project and market, or not?
Indonesia's and Australia's leases automatically revert to the host government if the gas hasn't been marketed within a finite period. Alaska lacks similar "move it or lose it" leases. What should Alaska do to level the playing field?

Why are we even talking about a pipeline to a market that we hope levels out at about $3 per mcf, when a cheaper project puts our gas into a market that has paid $5 per mcf for years?

Where does the Alaska Constitution say anything about putting our resources into the U.S. domestic market?

Alaska already has two gas trading hubs, one at Nikiski and the other at Prudhoe Bay. What conclusions can be drawn about the best location for the next trading hub?

Where do state leases confer on the leaseholders any right to transport the oil and gas therein?

If the Alaska Permanent Fund can be insulated from political manipulation, why can't we do the same for a state-owned/privately-operated pipeline?

The producers say for a 2.5 bcf/day project beginning sometime after 2005, the impact of gas withdrawals on ultimate oil recovery at Prudhoe Bay will be "de minimus." Does this change if 4.0-6.0 bcf/day are withdrawn?

We are running out of gas in Cook Inlet because of excessive exports. If gas is so important to Alaska's Future, wouldn't an option that stretches proven North Slope reserves make more sense?

BP and the Governor complain that outlawing the Over the Top route prematurely forecloses the companies' options. Why should we be concerned about their options when they foreclose Alaska's by putting foreign gas into our Asian and North American markets?

What's the Administration's fallback position when falling domestic gas prices or Canadian politics strand the Alcan project?

Recent gas pipeline accidents in the lower '48 have revealed that the Office of Pipeline Safety is the industry's lapdog instead of the public's watchdog. A heated battle is underway in Congress to update federal regulations. How does the Administration intend to protect the public's safety in the event of a gas pipeline?
Comment Sheet for
Draft
Committee Report
State Pipeline Ownership + Tax Structure
Bill Corbus, Chair

I commend the committee for stating in advisories against state ownership of an export natural gas pipeline. Thank you very much for the opportunity to comment.

I disagree that this pipeline is economically feasible for certain investors. The arithmetic is simple. Suppose forward (see attachment A) and I looked reserves minus projected field fuel gas use will fill the proposed pipeline for at least the life of the hardware. That is, in 30 years on the ground (over 30 years), it won’t be economically feasible for any investor.

No committee has considered the absolutely necessary Prudhoe Bay field fuel gas use which diminish the proven reserves available for export.

No committee has considered the well. That North Slope natural gas generated heat would play if the West Sak and Vgu heavy oil deposits were produced. These 30-40 billion barrel deposits need hot water or steam flooding to mobilize the heavy oil and bitumen.
First Energy - Capital Corp forecasts that by 2010 Canada will be using more than 1 TCF to mobilize and process heavy oil deposits at Cold Lake and the Syncrude complex (PNA 10/28/01)

Using 1 TCF for 30 years to mobilize and process the West Sak - Ugnu deposits would require an additional 10 TCF of North Slope gas based on the Canadian estimate.

Since attachment "A" was written on September 4, 01, the proposed export line is rated at 5 BCF/d up from 4 BCF/d.

The booked proven reserves of 30.93 TCF (DOG yr 2000 annual report) diminished by future necessary field fuel gas (10 TCF) and estimated heavy oil recovery and processing fuel (10 TCF) leaves 10.93 TCF available for export. If 5 BCF is shipped 365 days a year, 1.825 TCF will be shipped in one year. The amount available for export 10.93 TCF divided by 1.825 TCF. The annual throughput equals 10.93 years. i.e. the time that proven North Slope available reserves could fill the proposed export line.

These deductions are only rough estimates, but even if they are 50% wrong, they would have a critical effect on the economics and must be considered.
A copy of these comments has been attached to comments on Mr. Ken Thompson's report and visa-versa because of the partly overlapping subject.

Respectfully,

[Signature]

Thos. R. Marshall, Jr.

November 12, 2001

THOMAS R MARSHALL, JR.
1569 BIRCHWOOD ST
ANCHORAGE ALASKA 99308
U.S.A.

Thank you for this opportunity to comment on your very informative and superbly organized report.

Page 3, para 6, your caution is very well advised to place a 50 year time frame on the possible export of coal bed methane to markets outside of this STATE. However, an export gas pipeline may not exist in 50 years. I don’t think one will be built until 54 TCF of available reserves are booked.

Likewise gas hydrates on the North Slope must be released from their lattices with heat which produces liquid water + gas. In effect gas hydrates would have to be strip mined from beneath the tundra or steamed out of shallow wells. I don’t think either idea is practical in Alaska.

Page 12, para 7. While the report mentions the recent application to renew the Trans Alaska Oil Pipeline for 30 years, it does not consider the diminishment
of exportable reserves by fuel gas use over this 30-year period.

A copy of these comments has been attached to comments made on Mr. Bill Corbus's report and visa versa because of the partly overlapping subject.

Respectfully,

Thomas R. Marshall, Jr.

November 12, 2001
Mr. Chairman, members of the Gas Policy Council,

For the record, my name is Christy McGraw, Director of Backbone and author of the report, “Alaska Gas Alaska’s Future.” We prepared this study to evaluate all options for the commercialization of Alaska’s natural gas. Until today Backbone did not endorse any one project, but rather strove to inform Alaskans of all options. Recent events have changed our position.

Since we prepared our report, the following things have happened:

✓ Phillips and El Paso Gas have reached agreement to import 4.8 mta LNG from Australia to the west coast of U.S.,
✓ Chevron is studying a 3.4 mta LNG from Asia to west coast of U.S.,
✓ Shell is studying LNG to west coast of U.S. probably from eastern Russia, and
✓ BP is already supplying the U.S. east coast with LNG and making plans to build an 800-kilometer pipeline over the Andes Mountains from Bolivia to the west coast of South America in order to deliver 12 mta of LNG to Mexico and the west coast of the U.S.

This represents the potential for over 20 MTA of foreign natural gas (as LNG) to be delivered every year to the North American west coast, to what should have been Alaska’s prime market. Even larger amounts of gas imports are possible if pipeline flows are reversed out of California to the rest of the nation. I hope that by now some of you are asking yourselves why Governor Knowles, Phillips Petroleum and Ken Thompson continue to tell us “there is no potential market for Alaska LNG.”
In order to compare apples to apples and evaluate the growing west coast market, the Backbone team scaled up our Alaska Tidewater LNG project model a 4 bcfd capacity. The 4 bcfd volume is equivalent to the minimum gas project being evaluated by the North Slope producers for export to the lower 48 on the Highway Route. The results of the increased economies of scale for the Tidewater LNG project are dramatic. Our evaluation shows that Alaska can deliver LNG to the U.S. West Coast for less than the Governors Highway project can deliver it only to the U.S./Canadian border, not to mention delivery costs from the U.S. border to California and other markets.

With this in mind let me review the advantages of an even larger Alaska Tidewater LNG project serving the North Pacific region:

✓ Similar up front capital investment as the Highway Project,
✓ Less Cost of Service including gas conditioning - $2.01/mmbtu for LNG delivered to the west coast vs. $2.07/mmbtu for Alcan delivery only to the U.S. border,
✓ Higher wellhead values,
✓ Multiple potential markets (U.S. west coast, Mexico, Hawaii, Asia,)
✓ Maximum Alaskan jobs,
✓ Maximum gas for Alaska’s use,
✓ Simpler permitting process,
✓ Higher yearly state revenues (and higher revenues to the producers,)
✓ Lowers dependence on foreign energy sources, 
✓ Potential for State ownership of a significant portion of the transportation system, 
✓ And, the Alaska Tidewater option eliminates problems in construction, ownership, foreign control and delivery, with a significant foreign competitor – Canada.

In closing, recent and newly fielded polls show that the people of Alaska are informed and vocal on the issue of which natural gas project best serves Alaska’s interests. We have only to remember the BP/Arco merger to realize that Governor Knowles does not look out for the best interests of Alaska when it comes to oil and gas development. If the members of this council do not wish to be tarred with that same brush, they must insist that the Council study and report to the people of Alaska on the benefits of all available options for marketing Alaska’s gas. If this council’s process is to substitute for good public process on this issue you must represent all of us at the table or risk being labeled a mouthpiece for big oil.

It is time to carefully consider making Alaska’s clean energy available to Alaskans and to establish our rightful place as an independent, competitive energy source for the growing energy needs of the North Pacific. And it is in the best interest of the people of Alaska to control and maximize the value of our natural gas resource by following the lead of our partners in the oil industry and building a Tidewater LNG project to bring Alaska’s gas finally to market.
November 12, 2001

Alaska Highway Natural Gas Policy Council
Jim Sampson and Frank Brown, Co-chairs
Office of the Governor
550 West 7th Avenue, Suite 1700
Anchorage, AK 99501

Dear Mr. Sampson and Mr. Brown:

On behalf of the Northern Alaska Environmental Center, I submit these comments on the draft reports from the Alaska Highway Natural Gas Policy Council committees.

The Northern Center views natural gas as a transition fuel in the move toward alternative, sustainable energy sources. Thus said, while we do not oppose natural gas development and transportation in Alaska under the conditions described in our policy statement (see attached), we continue to advocate for the concurrent development of community and state-wide plans and programs that facilitate the move to non-fossil fuel-based, sustainable energy sources.

Upon review of the draft reports from the various committees, we find the following areas for comment:

Alaska Hire/Buy/Build Committee

We concur with the committee’s recommendation that the state’s Department of Community and Economic Development undertake a study to determine the socio-economic impacts of the gas pipeline along the Alaska Highway route. The development of the Trans-Alaska Pipeline System (TAPS) brought home the realities of boom and bust to Alaska. It is vital that all Alaskans be aware of and prepared for both the positive and negative aspects of another large-scale development project. In particular, we believe all communities along the pipeline route should undergo community-planning discussions to ensure future development occurs in a planned manner rather than haphazardly as it did during the TAPS development. One area of particular concern to us is limiting development to that possible within existing air and water quality standards.

Federal/International Action Committee

If modifications are made to modernize ANGTA, we recommend removing any limitations to judicial reviews thereby allowing all agency actions to be publicly scrutinized.
We concur with the committee’s recommendation that a long-term clean energy plan and vision needs to be developed for Alaska. However, we believe this energy plan needs to extend beyond the scope of natural gas to include non-fossil fuel-based sustainable energies such as wind and solar. The state of Alaska must recognize that some rural communities would be better served by bypassing natural gas and moving directly to sustainable energy sources. We recommend that the state’s long-term energy plan acknowledge and financially encourage this transition.

The committee also recommends taking a long-term, broad and strategic view of Alaska’s entire natural gas resources. While we agree that an overall understanding of Alaska’s natural gas potential is important, we encourage the state to recognize the necessity of balance between development and wilderness. We recommend acknowledging this balance by permanently placing the Arctic National Wildlife Refuge off limits to oil and gas development.

We are concerned by the committee’s recommendation to assess the potential of utilizing methane gas from coal seams as an energy source. Methane gas is a particularly potent global warming gas. We encourage the state to avoid developing such a harmful resource in favor of pursuing more Earth-friendly, 21st century resources such as solar and wind energy.

The committee also recommends that the State facilitate favorable policies and incentives to encourage development. We recommend revising this statement as follows: “The State should facilitate favorable policies and incentives to encourage development by the private sector of a broad natural gas infrastructure with the State that meets the long-term clean energy demand of Alaskans at reasonable market prices while safeguarding the Alaska environment.”

Environmental Considerations Committee

We concur with the committee’s recommendation that GPO conduct a thorough review of “lessons learned” from TAPS. As mentioned above regarding a socio-ecological study, we believe that Alaskans should learn from past mistakes and be better prepared for both the positive and negative aspects of another large-scale development project. This includes implementing the “lessons learned” in a way that better protects the environment.

We support the committee’s recommendation of requiring a rigorous environmental review. However, we believe this must come in the form of a full Environmental Impact Statement (EIS) rather than a supplemental EIS built on to the outdated ANGTS EIS.

We concur with the committee’s recommendation to establish an open and available data and information process for the public, agencies and industry.

We concur with the committee’s recommendation that the state take a long-term view of the gas pipeline to minimize environmental concerns. An example would be to include potential long-term factors such as global warming into the initial design and placement of the pipeline rather than dealing with these factors as an afterthought.

We concur with the committee’s recommendation that a comprehensive citizen’s involvement plan be established. However, we believe this plan must include the creation of a citizen advisory council with representatives from communities and interest groups throughout the state.
We concur with the committee's recommendation that a Dismantling, Removal, and Restoration (DR&R) provision be included in gasline contracts, agreements, and/or settlements, with adequate funding escrowed for that purpose.

Finally, we concur with the committee's recommendation that environmental safeguards built into the design of the project as well as the recommendation that environmental specialists work on same teams and in same facilities as the engineers.

Thank you for this opportunity to comment.

Sincerely,

Deb Moore
Arctic Coordinator
POLICY ON NATURAL GAS DEVELOPMENT ON THE ALASKAN NORTH SLOPE
Approved by NAEC Board on August 14, 2001

The Northern Alaska Environmental Center believes that the United States, as a member of the world community, must aggressively reduce its dependency on fossil fuels, through energy conservation, transition to cleaner burning fuels, and increased development and use of renewable sources of energy. To prompt this transition, the Northern Center believes the State of Alaska should adopt an aggressive policy of energy conservation standards for new building construction and vehicle purchases, and should launch a new program using state funds to support rural alternative energy development, emphasizing renewable energy.

The Northern Center also recognizes that natural gas is a cleaner-burning fuel than are others used in the Fairbanks area and in many parts of the world. As such, the Northern Center considers natural gas a transitional fuel source in the move toward reduced and more conservative use of fossil fuels in favor of renewable energy resources.

The Northern Center recognizes that energy is a strategic resource, required by all Alaskans and essential to their physical and economic well-being. With this consideration, the Northern Center believes the development of North Slope natural gas reserves to be a reasonable certainty. However, unplanned and poorly conceived development, as abetted by comparatively low energy prices, can cause significant long-term environmental, economic and health damage, particularly for the pollutant-prone Fairbanks bowl and the fragile Interior Alaska environment. Therefore, the Northern Center wishes to remain as involved as possible in the public debate and dialogue on natural gas and its impacts on the Alaskan and Fairbanks North Star Borough environs and seeks to participate and provide assistance throughout the process of permitting and construction.

If Alaska’s proven North Slope natural gas reserves are developed, the Northern Center believes the following conditions must be met:

- Any project must minimize deleterious impacts on local communities and traditional lifestyles and respect the basic human right to a clean, safe, and healthy environment.
- The pipeline should remain as close as possible to present utility corridors (excluding RS 2477 rights-of-way). No pipeline development should traverse wilderness frontier areas including offshore of the Arctic National Wildlife Refuge.
- The State of Alaska should develop a comprehensive energy production and management policy as a precondition to its issuance of a permit for construction of the pipeline.
- The State and federal government should conduct studies that assess all reasonably-anticipated impacts accruing from the gas pipeline, including the degree of pressure on the Arctic Refuge that may be expected from the addition of the pipeline to the North Slope.
- The project must go through a new Environmental Impact Statement process. There must be no regulatory short cuts in the issuance of permits.
- Any project must include Best Available Technology and Best Management Practices including, where environmentally appropriate, Seasonal Construction Techniques. (can we provide a citation of reference for these?)
- There must be a permanent, adequately funded, and independent, formal citizen advisory council for the gas and oil pipelines that includes representation by conservation organizations, as well as local citizens, and that reports directly to the Governor.
- The project must escrow sufficient funds for Dismantling, Removal and Restoration (DR&R) of all project facilities and impacts in a way that regulatory agencies can ensure that the original ecosystem characteristics of the corridor have been restored as facilities are taken out of service. This “return to original condition standard” and the escrow of DR&R funds must be stipulated in all permits and reviewed in the EIS.
STATEMENT
of the
ALASKA ESKIMO WHALING COMMISSION
at the
STATE OF ALASKA HEARING ON ROUTES FOR THE
NATURAL GAS PIPELINE PROPOSED
BY THE ALASKA GAS PIPELINE PRODUCTION TEAM

Barrow, Alaska
July 19, 2001

Thank you, my name is Charlie Neakok. I am the Vice President of the Barrow Whaling Captains’ Association.

I am speaking today on behalf of the Alaska Eskimo Whaling Commission (AEWC), which represents the 10 bowhead subsistence hunting villages located along the coast of northern Alaska from Kaktovik near the Canadian border to Little Diomede and St. Lawrence Island in the Bering Strait.

Subsistence hunting, especially the bowhead hunt, is at the core of our culture. Without it, our culture and social structure would collapse.

Before commenting directly on the two proposed gas pipeline routes, I would like to make a few general comments on the impacts of North Slope oil and gas development on our communities.

We understand that the United States needs North Slope oil and gas, and we are a people who believe in sharing. We also recognize that the development of North Slope oil has enabled us, especially our North Slope communities, to improve the quality of our physical lives.

However, we also are very conscious of the fact that our communities bear 100 percent of the risk and other burdens associated with the environmental, social and cultural impacts of North Slope oil and gas development.

Like I said, there have been some indirect physical benefits to our communities from oil development, and many who support North Slope oil and gas development are very quick to point out those benefits. We gladly acknowledge them and are grateful for them.

However, we must note that in reality, the benefits to our communities from oil and gas development have been to bring the standard of living in our villages only up to the minimum enjoyed by the rest of the population of the United States.

In fact, the overwhelming benefits of North Slope oil and gas development go to the communities of the lower 48 states, to foreign countries who buy the oil and gas, and to
the corporations who gain huge profits from the development of our petroleum resources.

None of these entities share even a tiny portion of the risks and burdens of this development.

This situation is no different in the case of the proposed natural gas pipeline.

The AEWC understands that two possible routes are being considered for the proposed North Slope natural gas pipeline.

One route would go from Prudhoe Bay, along the Alaska Highway to Fairbanks and then south to Alberta, Canada.

The AEWC supports this so called “Alaska Highway Route” for a number of reasons. To mention only a few of those reasons:

- A pipeline running onshore through the North Slope will provide an opportunity for our small communities and communities to the south of us that do not have access to natural gas at this time to bring natural gas into their villages and homes by spur lines.

- The building of a pipeline along the Alaska Highway Route would provide many job opportunities throughout Alaska. We hope that our Native people would have access to some of these job opportunities.

- The onshore pipeline running through North Slope Borough land would provide some additional indirect benefits to our community by providing capital for the North Slope Borough tax base.

- Most importantly, however, the Alaska Highway Route would keep the pipeline onshore.

The AEWC adamantly opposes the proposed alternate, or so called “Northern Route,” for the pipeline.

The Northern Route would call for the gas pipeline to be built across the North Slope through the Beaufort Sea.

The location of this alternate proposed route would go directly through the fall migratory route of the bowhead whale, including the subsistence hunting area used by our fall hunting villages of Nuiqsut and Kaktovik.

This proposed alternate route would go through important feeding areas for the fall migrating whales and through the Kaktovik deferral area which has been set aside to
protect the bowhead feeding grounds in the area of Barter Island.

We have seen no environmental studies evaluating the effects of dredging a pipeline for so many miles through the sea floor, but we know what the impacts will be.

The Beaufort Sea habitat used by the bowheads, belugas, ugaruk, fish, birds, and other sea animals will be disrupted for an indefinite amount of time. With this disruption comes the potential for harm to these stocks, including our endangered bowhead whale.

There is no way to know how long it would take for the eastern Beaufort Sea habitat to return to normal after the extensive dredging operations that would be required.

Furthermore, if a gas pipeline were laid through the Beaufort Sea, our communities would be faced with decades of disruptions due to the need for ongoing surveillance and maintenance of the pipeline. This would further disrupt the habitat and migratory habits of the Beaufort Sea wildlife on which we depend for our subsistence.

Since some of these animals, especially the bowhead, migrate beyond the North Slope, these disruptions would not only affect North Slope communities. They would affect villages all along the coast of Alaska.

They also would disrupt the diet and lifestyle of the many communities and families throughout Alaska that depend on us for barter for their marine food.

At this point in time, many of us here on the North Slope have literally grown up hearing the arguments of outsiders trying to tell us about the animals and the environment of the Arctic.

In the 1970's, the U.S. Government and the environmentalists told us that the bowhead whale was going to extinction. Our elders and whaling captains told them then that the bowhead whales are healthy and that the population was growing.

The outsiders wouldn't believe us, so the North Slope Borough did the research and proved that our elders and whaling captains were right.

In the 1980's, the oil companies told us that seismic noise would not interfere with the bowhead whale migration.

Our elders and whaling captains told them that bowheads are very sensitive to noise. Bowheads will swim away from noise and will change their swimming patterns when they hear unfamiliar noises.

This is why we have been taught to be quiet at our spring ice camps.
But the AEWC and the North Slope Borough had to file a law suit and go to Washington to lobby Congress before the U.S. Government would require the oil and gas companies to do the right kind of research on seismic noise.

When this research was done, again our elders and whaling captains were proven right. The bowhead whales shift their fall migration to the north when there is seismic activity during the open water season.

Not only that, the whales have been observed avoiding active seismic at almost exactly the distance our elders and whaling captains said they would.

Now these natural gas producers want to tell us that they can build a subsea pipeline from Prudhoe Bay to the McKenzie Delta and that it will not disturb the habitat of our marine animals; and that it will not interfere with our subsistence.

Our elders and whaling captains are telling us that this is wrong. There will be tremendous disturbance. And we know that our elders and whaling captains are right.

We also know that these natural gas producers are being driven only by greed. They will say whatever they think will help them get what they want.

The oil and gas companies always want to tell us that whatever actions they propose will be harmless to our environment and to our people.

A generation of listening to these arguments has taught us that they are nothing but strings of empty self-serving words.

The Arctic is a harsh and unforgiving place. Life here is fragile. Man-made machines and other equipment become very fragile when exposed to the temperatures, weather, sea, and ice conditions of the Arctic.

The AEWC and the whaling captains try to work cooperatively with the oil and gas companies when we can. Like I said, our culture is based on sharing.

We did not oppose the gas producers' request for an Incidental Harassment Authorization from the National Marine Fisheries Service this summer so that they can conduct their shallow hazard survey.

Why should we? We don't mind if they want to gather data. As long as they do not interfere with our marine animals and our subsistence.

Not only that, but opposing the IHA request would have been pointless. NMFS would have issued it whether or not we objected.

However, if the gas companies try to go forward and build a pipeline through the
Beaufort, we will oppose that project with all resources available to us. Keep in mind the ten AEWC whaling villages have signed resolutions opposing the Northern Route.

We will share with these oil and gas companies up to the point where they threaten our subsistence resources and our hunting. Then we will not share anymore. We will fight.

If the gas producers want to take gas from the North Slope, let them bring the pipeline onshore, where they can share the gas with Alaskan communities, and where they share the benefits with our people and with the State.

If these producers are not willing to do this, then we will oppose them absolutely.

We will propose that someone else build the pipeline.

In closing, let me be very clear, the Alaska Eskimo Whaling Commission is prepared to work cooperatively with the gas producers if they bring the gas pipeline onshore.

However, the AEWC and the whaling captains of all of our 10 villages will oppose — ABSOLUTELY — any attempt to build a gas pipeline through our Beaufort Sea.

THOMAS NAPAGEAK
Chairman, Alaska Eskimo Whaling Commission

July 19, 2001
"Marshaling the best talent he could find, he mounted a detailed zoning plan for the Arctic Coast and presented to the state and the nation a Coastal Management Program which he felt provided an environmentally safe program for the industrial development of America’s Arctic coastline.” (Eben Hopson)

Good afternoon, Governor Knowles, members of the Governor’s Natural Gas Council, welcome to our beautiful land and our homeland.

My name is Rex A. Okakok, Sr., Director of Planning and Community Services Department, North Slope Borough. My department has a delicate task of balancing cultural and traditional resources with oil and gas development within the North Slope Borough boundaries. I started my comments with a quote from Eben Hopson’s speech in mid-seventies related to oil and gas activities at the start of Prudhoe Bay development. It underscores the importance of our North Slope Borough’s regulatory powers that helps us decide what is in the best interest of the North Slope Borough residents and communities.

The guiding principles of managing our lands, its resources, and its inhabitants is that Inupiat people had always had their own unwritten laws for governing themselves. Under these traditional laws, the Inupiat people managed the natural resources and kept order in their villages and camps. Inupiat people not only survived but also succeeded in the challenges of the Arctic living. Mastering the survival skills required resourceful thinking and tough actions. Mr. Joseph Upicksoun accentuate the leadership skill of an Inupiat leader, when he stated in 1968 comments as Arctic Slope Native Association President, “First of all, I had a strong belief that we had, as Inupiat, and always had, complete dominion over the Arctic in Alaska”.

We are enjoying the fruits of skillful Inupiat leaders today. They have fought tooth and nail, every inch of the way, the right to govern ourselves to protect our way of life, while at the same taking advantage of the socio-economic tools of American dreamers and Alaskan Frontiersmen. Let me simply paint the picture of the success of North Slope Borough. In late 1960’s the Federal Field Committee Report, funded by United States government, revealed that, along with other rural regions of Alaska, the economy of the North Slope was the poorest in the nation. It was not better than that of poverty stricken nations in the Third World”. Look around Barrow and see the positive changes since this statement.
Incorporation of North Slope Borough enabled the first steps to overcome years of neglect and isolation, and to address the overwhelming public needs. The tax base enabled monies to build schools, health clinics, fire stations, housing, roads to protect lives and properties, public safety, search and rescue, elders programs, early childhood education, substance abuse facilities, basic public facilities such as water and sewer, waste disposal, airports, electrical power systems, and high tech communications systems.

The quality of life for the people of North Slope Borough has been greatly improved. However, the costs associated with the creation of the infrastructures are very high. This strains the North Slope Borough budget, which like most local governments in Alaska, are experiencing declining revenues. In addition, high unemployment and under-employment remain features of the North Slope Borough. The 1998 North Slope Borough Economic Profile and Census reveal that under-employment has increased by 5 percent. The Report continues, “This situation is compounded by census projects suggesting that more Inupiat will enter the labor force than will leave through retirement. Among the major problems facing North Slope in the near future are: preparing the workforce for jobs that will not become available during this time and seeking ways to diversify the economies of the North Slope communities.”

The North Slope remains the fastest growing areas in the State, experiencing the annual growth of 2.6 percent, exceeded only by Mat-Su’s rate of 3.8 percent. The average annual growth rate in the State of Alaska, as a whole was only 1.5 percent (1998 NSB Economic Profile).

“Statistics collected for 1998 North Slope Borough Economic Profile and Census Report show that the unemployment rate for the entire North Slope Borough in 1998 was 15.54 percent, an increase of 3.2 percent over the rate for 1993. At the same time, the unemployment rate for the villages outside Barrow was 17.63 percent, up 3.62 percent over 1993.” These statistics reveal the importance of your Council to seriously consider all Alaska route of the gas line. Giving the residents of the North Slope Borough an employment and contractual opportunities. You can get a comprehensive report from our department for small fee to get good picture.

Having briefly painting socio-economic picture, I would like to concentrate rest of my comments on Land Management Regulations, Comprehensive Plans, and Alaska Coastal Management Program that regulates activities within the North Slope Borough boundaries. These three programs insures the North Slope Borough’s rights to alter or even stop development in areas critical to coastal and inland species when that development endangers wildlife populations, or to protect certain activities at certain times. Examples are offshore oil rigs during the whale migration and infrastructures that may impede the wildlife migration routes and subsistence hunting at Meltwater Project.

North Slope Borough Municipal Code Title 19 created a unique set of land management principles and procedures for development in the Borough. The ideas contained in this NSBMC Title 19 was developed by officials and residents of the Borough in many public
meetings held to develop the North Slope Borough's Comprehensive Plan, Coastal Management Program and other studies.

The purposes of the Title are:

(A) To achieve the goals and objectives, and implement the policies, of the North Slope Borough Comprehensive Plan, including its Coastal Management Program;
(B) To ensure that the future growth and development of the Borough is in accord with the values of its residents;
(C) To identify and secure, for present and future residents, the beneficial impacts of development;
(D) To identify and avoid, mitigate or prohibit the negative impacts of developments;
(E) To ensure that future development is of the proper design and location, and is served by a proper range of public services and facilities.

The Land Management Regulations provide guidance to a person or companies that want to develop within North Slope Borough boundaries. The oil and gas development has continued to grow and with this growth problems associated with traffic, density, and land use and activities conflicts arise. We have experienced dramatic acceleration of oil and gas activities closer to our communities than ever before. For instance the Alpine Development and Meltwater Project pipelines are beginning to surround the hunting, fishing, and whaling activities at Nuiqsut. The pipelines surrounding Nuiqsut may impede the migration of the wildlife, especially caribou. We are working with the industry, State, Tribes, and community of Nuiqsut. This should give you an indication how effective our land management operates to protect our way of life and promote careful, environmentally safe land use activities.

Included in the land management regimes is selection of entitled lands. To date, we have received only just under 300 acres of municipal land entitlement from the State.

North Slope Borough is the regional entity responsible for any Alaska Coastal Zone Management Program activities. This program conduct research, field inspections and provides administrative services to determine consistency of land and water use activities with the North Slope Borough Coastal Management Program Plan. We have worked very well with the State to ensure our whaling activities were not threatened by offshore activities through Coastal Management Program. The examples are North Star Project and McCovey Project, offshore exploration projects.

North Slope Borough Comprehensive Plan is a plan that guides the current and future development. It is very unique in that in a community in which Inupiat people and the Inupiat character of life dominate. The Plan was designed for values and circumstances of the people of the North Slope Borough. It is the basic governmental instrument for land use planning and regulation, through texts, data, and maps for the conservation and preservation of the Inupiat character of life, and systematic and orderly development of
the villages and the various natural resources of the Borough. Two of the design criteria are; (1) stimulate systematic development of transportation, water, sewer, school, park, and other public facilities; (2) Encourage efficiency in the use of energy and the substitution of energy from renewable sources for energy from fossil fuels.

The North Slope Borough land and water use regulations encourage economic opportunities for all of residents and our local businesses. I feel that the All Alaska Route can provide greatest possible economic opportunities not only for urban centers, but also for North Slope local and regional businesses. We also feel that oil spill contingency plans within the land are doable.

I encourage the Council to consider developing cumulative impact funds to mitigate negative impacts that may occur from the construction activities of the gas pipeline. If included in the early plans as part of the gas agreement, the communities of the North Slope Borough would be assured of assistance to deal with socio-economic impacts that comes with this kind of activity.

I also encourage to Council also to look at providing certain amount of percentage both from the governmental and company royalties. This will ensure the local governments the ability to fund monitoring programs throughout the life of the pipeline. We have learned from recent activities of deteriorating infrastructures of Prudhoe Bay that are not monitored adequately. I understand gas is different from crude oil, however, activities associated will have impact for long time.

In conclusion, I encourage you to consider the “best available technology” in the pipeline designs, such as pipe-in-pipe systems. You also need to look at the buried pipe system that hides the pipeline and not impede the wildlife migration and wildlife habitat. Look beyond the economic values and think about the impact to the people and wildlife in the North Slope.

Thank you for giving us the opportunity to testify and provide input to the design of the All Alaska Pipeline.
August 15, 2001

Office of the Governor
Attn: Natural Gas Policy Council
PO Box 110001
Juneau, AK 99811-0001

The Juneau Chamber of Commerce’s Board of Directors support the Alaska Highway route for the natural gas pipeline because it has the potential to provide significant economic benefits for the greatest number of Alaskans.

During the construction phase, the highway route would enable Southeast Alaska port communities (Haines, Skagway, Juneau, Ketchikan, Hyder) to serve as staging areas and sources of supplies for the project itself and construction crews.

However, it is critical for the Natural Gas Pipeline Policy Council, in its formal recommendation to Governor Knowles, to specifically include spur lines from the main pipeline to the Railbelt area and at least one port in Southeast.

The primary source of heating and electric energy for the Railbelt area is natural gas from the Kenai Peninsula. Recent estimates indicate natural gas resources for this area could run short as early as 2008. It is imperative for the continued economic health and welfare of the Railbelt area that additional natural gas supplies be made available via a spur line from the proposed Alaskan Highway Natural Gasline.

Haines and Skagway could easily be developed as spur line delivery ports to deep-sea vessels. Haines is the shortest route to tidewater of any port along the Alaska Highway route and the Southeast Conference is on record supporting such a development for Haines. In addition to providing Haines
with year-round jobs for that economically depressed community, location of a pipeline spur to Haines or Skagway would provide another source of energy to Southeast Alaska communities.

Sincerely,

Jamie Parsons
Executive Director
Remarks to the Alaska Highway Natural Gas Policy Council
Public Hearing and Meeting
Thursday, July 19, 2001
1:30 p.m.
North Slope Borough Assembly Room

Good afternoon. My name is Molly Pederson. I am President of the North Slope Borough Assembly, and I am speaking today on behalf of Mayor George Ahmaogak, who cannot be here because he is in London for the International Whaling Commission meetings.

First of all, I want to welcome all of you to Barrow and the North Slope. We appreciate your interest in visiting our part of the state. Many of you have been to our communities over the years, and I hope you are impressed by the progress we continue to make in providing basic services to our residents. I also hope your visit to one of our newer facilities—the Inupiat Heritage Center—has given you a chance to learn more about our culture.

For more than a quarter of a century, the people of the North Slope have played an active role in Alaska’s oil and gas development. Ever since the first oil flowed from Prudhoe Bay, we have worked in partnership with the state and the industry. Our role has been to make sure that development plans include adequate protections for the land and the wildlife that feed our people and provide a spiritual continuity in our indigenous culture.
Ours has not been an easy role to play. I know there have been times when our insistence on specific environmental safeguards has been a thorn in the side of the industry. I mention this, because we are at a moment in our state’s history when the North Slope Borough’s role as environmental steward is very important to the industry and the state as a whole.

As you know, we have been quite active in the effort to open ANWR. We have supported Arctic Power — financially, politically, and through staff support. Residents and leaders from Kaktovik have willingly endured a constant barrage of media attention in order to show the world that the Inupiat who live in ANWR support exploration. North Slope Borough officials have teamed up with villagers to lobby Congress on a weekly basis this spring.

The lobbying effort has demonstrated that our people get a very warm reception from Congress. Why is this? It is because we have an agenda that extends beyond oil income; because we are more dependent on the land for other values than for its oil potential; and because we deliver the most powerful response to the Gwich’in, who are among the environmentalists’ most potent weapons. These are all important factors in the overall presentation of Alaska’s development position.
We bring the same attitude of partnership to the issue of gas
development. We applaud the Governor for his early and firm support
of a highway route in delivering natural gas to market. By using the
existing pipeline corridor instead of the Beaufort Sea, the highway
route makes the most environmental sense. By maximizing the Alaska
portion of the route, we increase the potential for in-state use of gas,
particularly in rural areas where energy costs are persistently high. And
by considering a variety of options for public sector financial
participation, we can have a positive effect on the economics of the
project.

The North Slope Borough took an early interest in the question of
public sector involvement in financing the gas line. As a member of the
Alaska Gasline Port Authority, we have been able to explore a variety
of finance options as mechanisms for lowering the effective cost to
industry. The port authority has sponsored valuable discussion and
brought some consultants with relevant experience to the state.

However, with the advent of your group and Senator Torgerson’s Joint
Committee on Natural Gas Pipelines, the Borough believes it is best to
step back and wait for results from both groups before it is determined
whether or not the port authority concept has a useful role.
We are also interested to see the results of industry efforts through the
Consortium Group and the Sponsor Group. In short, there are a lot of
questions yet to be answered before any of us can arrive at a plan that is
best for all Alaskans.

In the meantime, our interests and concerns remain constant. Natural
gas production and transportation down the existing pipeline corridor
and the Alaska Highway will help to sustain our tax base and that of
other municipalities. It is consistent with our preference for onshore
development, instead of taking unnecessary risks out in the unstable sea
ice of the Beaufort Sea.

In addition, natural gas is a cleaner fuel than oil, and its use in the
Lower 48 may help to reduce some of the global effects of air pollution
that we are already seeing up here. Finally, natural gas development
will occur largely within the existing resource development area, which
helps to confine the impacts on our land and wildlife.

One of our biggest concerns is not directly related to the gas line, but
affects our attitude toward any major North Slope project.
Development and transportation of the North Slope’s huge natural gas
reserves is good for the nation, for the state, and for our region. The
impacts of development, however, fall largely within the region.
Certainly, the environmental risks are concentrated on our lands. Social
impacts tend to be most concentrated here too, particularly since the culture that accompanies resource development is so different from our own.

Impacts are a significant factor that we deal with everyday. The social and cultural costs are very high—just look at the budget for our health department. I mention this because our responses to the social and cultural impacts of development are funded through our local revenues. I suspect you have noticed that those revenues have come under fierce attack in the legislature in recent years. Alaskans in all regions of the state have come to our defense, but these attacks on our revenues and our responsible use of them are not going away—in fact, they seem to be gaining ground.

I want you to know that we consider these assaults a betrayal of the partnership we have enjoyed with the state and the industry for a generation. To rob us of a substantial portion of our tax base—or to deny us the legitimate use of our revenues—sends the message that we are no longer full partners in the development of Alaska’s energy resources.

I do not believe that is the attitude of the people in this room, and we need you to pass the message along to your legislators. Now is not the time to harm the good working relationship we have with one another. Nothing is broken; no fix is required; a lot is at stake.
Mayor Ahmaogak, the North Slope Borough Assembly, and the residents of our villages look forward to a continued partnership with you in the responsible development of the resources we have been blessed with. We are all in this together, and through mutual respect, we can achieve the goals of all Alaskans.

Quyanakpak.
April 18, 2001

Governor’s Alaska Highway Natural Gas Policy council
Office of the Governor, State of Alaska

Dear Members,

I regret that I cannot be present at this evening’s hearing, as I had another obligation. So I am submitting written comments which I hope you will find worthy of consideration.

Other associated and colleagues whom I respect, notably Mr. Paul Woodman, and Mr. Todd Hoener, will be giving you their ideas this evening, and I want to add my endorsement to their concepts. Especially important is the idea of an “Alaska Energy Futures Trust”, modeled on the concept of other states to finance renewable energy, weatherization and related educational public activities and benefits through revenue from the pending gas pipeline production. There are many examples of this concept, and it has worked well in other states. We have an exceptional opportunity to establish this crucial financing mechanism with a major fossil fuel resource stream, and it is important for you to consider this fertile idea for the well-being of all Alaskans.

Also included with his letter are some written discussions evaluating several of the pipeline alternatives before you. These are further elaborated on a web page I maintain privately for just such public discussion and issues:

www.sustainlaska.org

I urge all members to go to that web site and download the file: “Gas Line Futures”
which is an exploration of the options that are before us as Alaskans. I appreciate your consideration of my contributions.

Respectfully submitted,

Richard D. Seifert
Professor

Cooperative Extension Service - University of Alaska Fairbanks and USDA Cooperating
www.uaf.edu/cope-ext/faculty/seifert/energy.html

The Alaska State Chamber of Commerce urges the Administration and the Legislature to be receptive to all viable commercialization technologies to develop North Slope stranded gas resources.

Gas commercialization opportunities need to be adequately reviewed so as to identify the full range of benefits and risks to the state, its citizens and businesses in an effort to encourage and foster the economical development of our natural gas resources in partnership with oil and gas producers, and our Canadian neighbors. This review should specifically include an analysis that encourages producers to move forward with development of a gas line route that has substantial opportunity to benefit Alaskans from the standpoint of jobs, in-state gas use and value-added products.

ADOPTED

December 1, 2000

BY  Pamela La Bolle  
President

BY  Rob Shoaf  
Chairman
Statement of Allen M. Todd

Remarks presented to Alaska Highway Natural Gas Policy Council

Chena River Convention Center; April 18, 2001
Fairbanks, Alaska

My name is Allen Todd; I am the General Counsel for Doyon, Limited. Doyon is one of thirteen regional corporations established as a result of the Alaska Native Claims Settlement Act. Doyon has over 14,000 shareholders most of whom live in the Alaska Interior.

My purpose here today is to provide a few remarks about the proposed Natural Gas pipeline. We believe the proposed highway corridor gas line will be good for the economic well being of Alaskans, including Doyon shareholders.

We at Doyon believe that the construction of a highway corridor gas line will have a positive economic impact on Interior Alaska. Alaska workers and businesses including Alaska Native workers and Alaska Native businesses are better positioned today than they have ever been to take advantage of the economic opportunities that the construction and operation of a gas pipeline would create.

Doyon Drilling, Inc., which started in the early 1980's, has five state-of-the-art drill rigs on the North Slope. Doyon Drilling currently employs 177 Alaskans, many of whom are Alaska Native and Doyon shareholder. Doyon Drilling would benefit from the drilling activity for drilling gas wells on the North Slope now and into the future.

Doyon Universal Services, Joint Venture, formed in the early 1990's provides remote site catering, housekeeping and security services both on the North Slope, the Trans Alaska Pipe Line and throughout the state. Over 700 Alaskans are employed by Doyon Universal Services, many of whom are Doyon shareholder or other Alaska Natives. Doyon Universal Services is well positioned to provide remote site catering, housekeeping and security services for the construction of a new gas pipeline.

Doyon Drilling and Doyon Universal make a substantial contribution to the profitability of Doyon, Limited. Company-wide profits last year were over $10 million. Nearly half of Doyon's profits are distributed to our shareholders in the form of dividends. In addition, substantial contributions are made each year to the Doyon Foundation, which, in turn provides annual educational scholarships to
Statement of Allen M. Todd  
Remarks presented to Alaska Highway Natural Gas Policy Council  
Chena River Convention Center, Fairbanks, Alaska  
April 18, 2001

several hundred Doyon shareholders and funds a number of cultural heritage programs.

We believe that the construction of a highway corridor pipeline is good for Alaska because it will enhance revenues for the State of Alaska and pipeline corridor boroughs. We are all painfully aware of the competing need for additional resources. We anticipate that the revenues that would become available through the construction of a highway corridor pipeline would help to fund a long-term fiscal plan that can support the needs of the State of Alaska, including programs that are so important to the rural villages.

We believe that the construction of a highway corridor pipeline will provide opportunities for economic development as natural gas becomes available to compliment the existing energy supplies in Interior Alaska. The construction of a highway corridor gas pipeline is an important avenue to more fully develop our natural gas resources.

Thank you for the opportunity to address the Alaska Highway Natural Gas Policy Council.
Subject: Ak. Gasline
Date: Fri, 20 Apr 2001 12:12:41 -0700 (PDT)
From: Twig Tordoff <twigt@yahoo.com>
To: gasline@gov.state.ak.us

The Gasline Council,

My Name is Twig Tordoff and I am a lifetime Alaskan. The oil industry on their entry into Alaskan land had promised that we would see lower fuel prices than the lower-48 because we had the product and would be able to refine the product here. We still have not seen lower fuel price than the lower-48. What good are promises if no one makes sure they are kept?!
At the end of each year the oil industry get free of much tax burden from the state because of oil discrepancies of what has been moved. The volume pumped and or shipped should not be a dispute if the metering system is accurate and checked by a reputable third party. There is no reason this should be happening.
If the established oil companies do not want to put in the gas line, it's time to allow the wildcatters of the past to re-enter the oil fields to do the job. This oil product still belongs to the people of the State of Alaska, and is being worked by companies working for the people of the State of Alaska and should be fired if they cannot or will not do the work requested. Money is no object if the oil companies want something bad enough, look at the cost overruns of the last pipeline and the early payoff of that line.
I think that since we have had no inflation according to past administrations and the unions have been drastically reduced in the oilfields, along with oilfield personnel wages and benefits that price controls of the fifties and sixties should be considered since to oil companies cannot control their monetary appetite.
The government is suppose to be by the people for the people, not the corporations.

Do You Yahoo!?
Yahoo! Auctions - buy the things you want at great prices
http://auctions.yahoo.com/
Subject: AK Highway Natural Gas Policy Council
Date: Fri, 16 Nov 2001 16:14:16 -0900
From: GasLine <gasline@gov.state.ak.us>
To: Erika B Mcconnell <erika_mcconnell@gov.state.ak.us>

-------- Original Message --------
Subject: AK Highway Natural Gas Policy Council
Date: Mon, 12 Nov 2001 10:29:35 -0900
From: Bill Watterson <wcc@alaska.net>
Reply-To: wcc@alaska.net
Organization: Watterson Construction Co
To: gasline@gov.state.ak.us
CC: Eden Larson <eden@abcalaska.org>

Mike Navarre, Chair
A review of the Draft Committee Report for Alaska Hire/Buy/Build Committee causes us to comment as follows:

While we agree with the desire for promotion of Alaskan hire and the committee's acknowledgement that legislating local hire will not withstand court challenges, we disagree with the premise that a Project Labor Agreement (PLA) will promote/assure local hire preference.

More than 75% of the construction work force in Alaska chooses to work non-union. By what logic will having a PLA, which effectively discriminates against this 75% of the work force, serve to promote local hire? We agree that training is important and Associated Builders & Contractors of Alaska (ABC-Alaska) with more than 140 members state wide, has Bureau of Apprenticeship Training programs in place, which the 75% of the Open Shop work force has access to.

The scope of the Alaska Highway Natural Gas Line is such that both the union and non-union resources need to be utilized. It is naive to think that even with local recruitment and training in both the union and non-union craft pools that the project can be staffed with local hire. But to assure the maximum local hire usage, both labor pools and training venues must be tapped.

The State should not be writing legislation which restricts the Gas Line owners in their choice of a viable project. By restricting (or suggesting restrictions) such as a Project Labor Agreement, the State will be driving up the cost of the project.

Bill Watterson
President, Watterson Construction Co.
Chairman - ABC-Alaska - Legislative Affairs Committee
cc: Eden Larson - Ex Dir - ABC-Alaska
November 12, 2001

Alaska Highway Natural Gas Policy Council
Office of the Governor
550 W. 7th Ave., Suite 1700
Anchorage, Alaska 99501

Dear Council Members:

Thank you for the opportunity to provide the following testimony on the draft reports of the five subcommittees of the Alaska Highway Natural Gas Policy Council

Recommendations in the draft reports appear to be based on the hypothesis that a stand-alone pipeline project through Canada can be made commercially viable with the aid of governmental action whereas a stand-alone pipeline project to a tidewater LNG facility cannot. YPC believes this hypothesis remains unproven.

Inherent in the name Alaska Highway Natural Gas Policy Council is a directive to recommend policy to promote development of a southern pipeline along the highway route. While we concur with many aspects of the draft reports, we do not agree that a pipeline along the southern route is more preferable or otherwise more in the national or state’s interest than a pipeline to a tidewater LNG project. The status of the highway pipeline and LNG options are similar since both have permits, but neither has project financing in place or firm contracts for the sale of gas or LNG.

The draft reports do not address a stand-alone pipeline to a LNG project of a size similar to the larger highway pipeline projects recently proposed. Economies of scale achieved by the larger highway pipeline projects also apply to the 800-mile pipeline of the LNG project. A large pipeline to tidewater can support LNG sales to the west coast of North America, LNG sales to Asia at a premium price relative to natural gas in the Lower 48, gas sales to a tidewater GTL facility, gas sales within Alaska, transport and sale of large quantities of light NGL components, or combinations of these.

We request that the Alaska Highway Natural Gas Policy Council not recommend to endorse a mandate for the highway option when most all the goals, recommendations, conclusions and key principles identified in the draft reports apply no less favorably to
the LNG option. We see no reason why recommendations in the report cannot support both the highway and LNG options.

Thanks again for the opportunity to comment on the draft reports.

Regards,

Ward Whitmore
Director of Project Development
August 27, 2001

Office of the Governor
Attn: NGPC
P. O. Box 110001
Juneau, Alaska 99811-0001

SUBJECT: Governor’s Gas Line Committee

The purpose of my letter is to write in support of a gas line project that would benefit the maximum number of Alaska residents. I believe that project includes a gas line to Delta with separate lines following the Alaska Highway and to tidewater in Valdez.

CVEA is a non-profit, member-owned electric cooperative. We serve 3,500 customers in the City of Valdez and the Copper River Basin, and our service area, which is geographically the size of West Virginia, includes 156 miles of the pipeline corridor along the Richardson Highway. The region is vast, and providing reliable electric service in some of the most difficult climatic conditions in the world is a challenge to say the least, it is also very expensive.

CVEA is not interconnected electrically to other regions of the state. We produce electricity at four power generating stations within our service territory. The fact that we operate and maintain four generating stations accounts in large part for the high cost of electricity for the region, which today in Valdez is 16.4¢ per kilowatt hour, not quite double that of the Railbelt area.

In the mid-1990s, in an effort to reduce the high cost of electricity to the region, CVEA pursued developing a transmission line project to interconnect our utility with the Railbelt Energy Grid. The purpose of that project was to access less expensive Railbelt energy.

In 1996, CVEA set the proposed intertie project aside in part due to the realization that it did not complement a possible gas line project. In fact, an LNG project has far greater energy potential for the region including the potential to make Valdez or the Copper River Basin an exporter instead of an importer of energy.

CVEA’s Mission: Be the energy supplier of choice.
Goals and Objectives: Reduce power cost to Customers, Increase energy sales, Develop new income producing products and services, and Build member relations through Customer satisfaction and grassroots support.
A LNG facility produces an enormous amount of heat, and according to the Port Authority Consultant, Mr. Boynton, the proposed project produces on the order of 280 megawatts of usable heat. This heat can be harnessed to produce steam, which in turn can drive turbines to produce electricity. Depending upon the capital cost of the project and the cost of the heat, electricity produced at the LNG facility could be very cost effective compared to electricity generated with Cook Inlet gas. That energy could be delivered to the Railbelt region cost effectively via a high voltage transmission line.

The Valdez/Copper Basin regions are poised for economic development as evidenced by construction of the Princess Hotel near Copper Center and the new National Park Service visitor center, both of which are scheduled to open in mid-2002. These projects, coupled with the strategic transportation corridors along the Glenn, Richardson, Alaska and Marine highways, are all indicators the region has tremendous potential for future economic growth.

CVEA is excited about the future of the region and our ability to deliver cost effective energy solutions to fuel future prosperity. A gas project through Glennallen to Valdez, capable of serving west coast and world markets not to mention the 800 miles between the North Slope and tidewater, would be a major cornerstone in developing a sustainable economy for the state of Alaska at a critical time when timber, fishing, and even the oil industry are in decline. In addition, a spur line to Anchorage along the Glenn Highway would augment declining gas reserves in the Cook Inlet region.

I would like to close on a personal note. I am a 42 year resident of the Great Land. When I moved to Anchorage with my family in 1959, Alaska’s largest city had less than 20,000 residents. I remember the bumper sticker “I drove Tudor Road and survived.” Since that time the State has benefited from tremendous growth and prosperity; however, I am uncertain of how bright the future is, particularly if our resources are extracted to benefit others. Alaska’s resources should be developed to benefit Alaskans. Developing a gas project aimed at maximizing corporate profits while ignoring sustainable, long term economic prosperity for Alaskan residents makes little sense to me. As the Council completes its very important work, I urge you to carefully consider what is in the State’s long term best financial interests and the interests of 630,000 Alaskans who are proud to call the Last Frontier home. I urge you to support the Alaska Gas Line Port Authority in developing a gas line project that ensures long term prosperity and a bright economic future for Alaska.

Sincerely,

Robert A. Wilkinson
Chief Executive Officer
Testimony before Governor's gas line committee  
August 23, 2001

- My name is Robert A. Wilkinson and I am CEO of Copper Valley Electric Association
- I am here today to testify in favor of a gas line project which would benefit the maximum number of Alaska residents. I believe that project includes a gas line to Delta with a with separate lines following the Alaska Highway and to tidewater in Valdez.
- CVEA is a non-profit, member owned electric cooperative. We serve 3,500 customers in the City of Valdez and the Copper River Basin and our service area which is geographically the size of West Virginia includes 156 miles of the pipeline corridor along the Richardson highway.
- The region is vast and providing reliable electric service in some of the most difficult climatic conditions in the world is a challenge to say the least, it is also very expensive.
- CVEA is not interconnected electrically to other regions of the State, we produce electricity at 4 power generating stations within our service territory. The fact that we operate and maintain 4 generating stations accounts in large part for the high cost of electricity for the region which today in Valdez is 16.4¢ per kilowatt hour, not quite double that of the Rail belt area.
- In the mid 1990’s in an effort to reduce the high cost of electricity to the region, CVEA pursued developing a transmission line project to interconnect our utility with the Rail belt energy grid. The purpose of that project was to access less expensive Rail belt energy.
- In 1996, CVEA set the proposed intertie project aside in part due to the realization that it did not complement a possible gas line project. In fact, an LNG project has far greater energy potential for the region including the potential to make Valdez or the Copper River Basin an exporter instead of an importer of energy.
- An LNG facility produces an enormous amount of heat and according to Mr. Boynton the proposed project produces on the order of 280 MW of usable heat. This heat can be harnessed to produce steam which in turn can drive turbines to produce electricity. Depending upon the capital cost of the project and the cost of the heat, electricity produced at the LNG facility could be very cost effective compared to electricity generated with Cook Inlet gas. That energy could be delivered to the Rail belt region cost effectively via a high voltage transmission line.
• The Valdez/Copper Basin regions are poised for economic development as evidenced by construction of the Princess Hotel near Copper Center and the new National Park Service visitor center both of which are scheduled to open in mid 2002. These projects, coupled with the strategic transportation corridors along the Glenn, Richardson, Alaska and Marine highways are all indicators the region has tremendous potential for future economic growth.

• Copper Valley Electric Association is excited about the future of the region and our ability to deliver cost effective energy solutions to fuel future prosperity. A gas project through Glennallen to Valdez, capable of serving west coast and world markets, not to mention the 800 miles between the North Slope and tidewater would be a major cornerstone in developing a sustainable economy for the State of Alaska at a critical time when timber, fishing and even the oil industry are in decline. In addition, a spur line to Anchorage along the Glenn Highway would augment declining gas reserves in the Cook Inlet region.

• I’d like to close on a personal note. I am a 42 year resident of the Great Land. When I moved to Anchorage with my family in 1959 Alaska’s largest city had less than 20,000 residents. I remember the bumper sticker “I drove Tudor road and survived.” Since that time the State has benefited from tremendous growth and prosperity however I am uncertain of how bright the future is, particularly if our resources are extracted to benefit others. Alaska’s resources should be developed to benefit Alaskans. Developing a gas project aimed at maximizing corporate profits while ignoring sustainable, long term economic prosperity for Alaskan residents makes little sense to me. As the Council completes its very important work I urge you to carefully consider what is in the State’s long term best financial interests and the interests of 630,000 Alaskans who are proud to call the Last Frontier home. I urge you to support the Alaska Gas Line Port Authority in developing a gas line project which ensures long term prosperity and a bright economic future for Alaska.

• Thank you