

ALASKA STATE LEGISLATURE  
**SENATE RESOURCES COMMITTEE**

February 5, 2001  
3:35 p.m.

**MEMBERS PRESENT**

Senator John Torgerson, Chair  
Senator Drue Pearce, Vice Chair  
Senator Rick Halford  
Senator Pete Kelly  
Senator Robin Taylor  
Senator Kim Elton  
Senator Georgianna Lincoln

**MEMBERS ABSENT**

All Members Present

**COMMITTEE CALENDAR**

Foothills Pipe Lines Ltd. Briefing by:

Mr. John Ellwood, Vice President, Engineering &  
Operations  
Mr. Curt Moffatt, Van Ness & Feldman - United States  
Counsel  
Mr. Robert Cohen, General Counsel

**ACTION NARRATIVE**

**TAPE 01-7, SIDE A**

Number 001

**CHAIRMAN JOHN TORGERSON** called the Senate Resources Committee meeting to order at 3:35 p.m. and announced a briefing by Foothills Pipe Lines Ltd.

MR. JOHN ELLWOOD, Vice President, Engineering and Operations, Foothills Pipe Lines Ltd. introduced Mr. Moffatt and Mr. Cohen and said he would explore with the committee the current status of their pipe line project with a focus on the permits and gave the following briefing:

Our company is jointly owned by Westcoast Energy Ltd.  
(Westcoast) and TransCanada Pipe Lines Ltd.

(TransCanada), the two major players in the Canadian gas pipeline business. Our corporate mission is very specific: to build and operate the Alaska Highway Pipeline Project. We are leaders in the project that was conceived twenty-five years ago and we are just as committed today.

Between Westcoast and TransCanada, we have nearly 100 years of experience in developing, building and operating gas pipeline projects. We have been involved with every major Canadian gas pipeline project built in the last fifteen years and several U.S. based projects, as well.

Our existing pipeline systems provide access to five of North America's largest natural gas markets. Together, these systems have the capability to move fifteen billion cubic feet per day of gas from western Canada to the consuming markets. Canadian gas accounts for almost 20 percent of all gas consumed in the United States and all of that gas currently moved through pipelines owned in whole or in part by TransCanada and Westcoast. The map [an attachment to the presentation] shows the existing and planned pipeline network of Westcoast and TransCanada.

TransCanada, Westcoast and Foothills have developed leading edge gas pipeline design, construction and operating technology, including expertise in dense phase designs. We are also well known for our development of environmentally sound design, construction and operation practices. We believe that our expertise in northern, remote and difficult terrain gas pipeline construction and operations is second to none. Building and operating pipelines is our core business.

The Alaska Highway Project is the Alaskan gas pipeline project approved in accordance with the Alaska Natural Gas Transportation Act of 1976 (ANGTA) in the U.S., the 1978 Northern Pipeline Act in Canada, and the 1977 Agreement Applicable to a Northern Natural Gas Pipeline between the two countries (U.S./Canada Agreement). The project is shown in black and green on this map. The southern portion of the project is in full operation. I don't show it all on this map. Those legs extend to California and to the Midwest near Chicago. As approved, the Alaska Highway Project is a 4,800-mile international pipeline project commencing at Prudhoe Bay and

terminating in the Midwest and California market areas. It is important to note that the southern part of this pipeline has been constructed and is in full operation. The route for this system parallels the Trans Alaska Pipeline System (TAPS) to Fairbanks, where it angles southeast, following the Alcan Highway to the Alaska-Yukon border with Canada, down through the Yukon Territory and northern British Columbia, and into Alberta. In Alberta, the pipeline splits into two legs. The Eastern Leg proceeds southwest, crossing the U.S.-Canada border at Monchy, Saskatchewan and terminating near Chicago. The Western Leg proceeds southwest, crossing the U.S.-Canada border near Kingsgate, British Columbia and terminating at a point near San Francisco, California.

Foothills and TransCanada are the two remaining partners of the Alaska Northwest Natural Gas Transportation Company (Alaska Northwest Company), a partnership formed to construct and operate the Alaska portion of the Alaska Highway Project. In addition, Foothills is the Canadian sponsor of the Alaska Highway Project, and the majority owner and operator of all the Canadian portions of the Eastern and Western Legs of the Alaska Highway Project. Foothills has continuously championed the Alaska Highway Pipeline Project from the very beginning.

The Project is back on the list of possible solutions to the current North American concerns about high energy prices and the adequacy of natural gas supplies.

There are some basic points I would like to delineate:

- It is important to remember that this pipeline crosses the territory of two countries with different regulatory and political regimes.
- The Project has a long history, which adds unique attributes. The permits which have been issued are a product of this history and to understand the former requires an appreciation of the latter. Significantly, ANGTA in the U.S. and the Northern Pipeline Act in Canada create expedited procedures for completing the chosen system, the Alaska Highway Project.
- The pipeline permitting process can be very time consuming. In addition to the substantial work already

completed on both the Alaskan and Canadian portions of the Alaska Highway Project, the special legislative and regulatory procedures in place in the U.S. and Canada will assist in expediting the construction and initial operation of the Project and keeping unnecessary delays to a minimum.

As I indicated, there are important historical dimensions associated with this project. We might focus on the time frame 1976-1982. Originally there were three competing Alaskan natural gas pipelines proposed. As shown on this map two of the projects were overland pipelines through Alaska and Canada. The third project would have transported gas by pipeline to tidewater, following the route of the TAPS pipeline, where the gas would be liquefied and transported to California by LNG tankers.

The U.S. Congress enacted the Alaska Natural Gas Transportation Act of 1976 with a purpose to provide an expedited process with respect to the selection of a single transportation system for the delivery of Alaska natural gas to the lower forty-eight states and to expedite construction and initial operation of the chosen transportation system.

With respect to the transportation of Alaska North Slope gas to markets in the lower 48 states, ANGTA superseded the usual Natural Gas Act process for granting federal regulatory authorization to construct and operate a pipeline. ANGTA assigned the responsibility for the overall Alaska pipeline agenda to the President and Congress. Much the same approach was followed in Canada, where the government took an active role in the decision regarding the Alaska natural gas pipeline. The reason for the creation of this extraordinary authority was that the governments wanted to expedite a cumbersome regulatory approval process in order to move more quickly to a solution.

Prior to 1978, a Canadian Board of Inquiry (The Berger Inquiry) examined a proposal to move Alaska gas across the North Slope and along the Mackenzie Valley. At the same time the National Energy Board (NEB) held a hearing to determine which of the two overland pipeline routes was acceptable to Canada. Both processes rejected the North Slope route (primarily for environmental reasons) and the NEB recommended the Alaska Highway Project

option, being promoted by Foothills. The Berger Inquiry recommended that no pipeline should be built along the Mackenzie River section for at least a decade and that a pipeline across the northern Yukon should never be built.

During this same period of time the Federal Power Commission (later to become the Federal Energy Regulatory Commission (FERC) came to a split decision on the question of which route should be selected. Following the enactment of the ANGT, the President selected the Alaska Highway route and the Alaska Highway Project with his Decision and Report to Congress on the Alaska Natural Gas Transportation System (President's Decision or Decision).

In 1977 just prior to the President issuing his Decision, the U.S. and Canada signed the U.S./Canada Agreement. This agreement or treaty, established the route, chose the companies who would build and operate the system, established tolling principles, and set the terms and principles to be followed in facilitating the construction and operation of the Alaska Highway Project pipeline. The President's Decision reflected the U.S./Canada Agreement. The Decision and the Agreement were subsequently approved by the U.S. Congress. In 1978 Canadian Parliament enacted the Northern Pipeline Act which:

- 1) incorporated all of the terms of the U.S./Canada Agreement,
- 2) issued **statutory certificates** of public convenience and necessity to the respective subsidiaries of Foothills Pipe Lines Ltd.,
- 3) created the Northern Pipeline Agency to facilitate the efficient and expeditious planning and construction of the pipeline,
- 4) established the methodology and rules for setting the Canadian tolls and tariffs for the pipeline,
- 5) selected the route for the pipeline across Canada and
- 6) established Terms and Conditions respecting the socio-economic, environmental, construction and operations matters.

The complete Alaska Highway Project is shown on the attached map.

The President's Decision designated Alcan Pipeline, a subsidiary of Northwest Pipeline Company (Northwest), as the party who would construct and operate the Alaska pipeline segment of the Alaska Highway Project. This authority was later assigned to Alaska Northwest, a partnership assembled by Northwest. At one time Alaska Northwest consisted of 11 partners, all subsidiaries of U.S. or Canadian pipeline companies.

Given the magnitude of the pipeline undertaking Alaska, Northwest sought to recruit the North Slope Producers to join the project and assist the financing of the pipeline. The Producers expressed a willingness to join, but were restricted by the President's Decision that disallowed the producers from taking an equity position in the pipeline. In 1981, President Reagan submitted and Congress approved a Waiver of Law package allowing producer participation and including in the project the North Slope gas conditioning facility.

In 1980, before the Waiver of Law was passed, Alaska Northwest and the Alaska Producers entered into a Cooperation Agreement providing for joint funding of the design and engineering of the Alaska Highway Project and the gas conditioning facility. Following the approval of the Waiver of Law, the scope of the Cooperation Agreement was expanded to encompass efforts to achieve the remaining regulatory approvals and to jointly pursue financing arrangements. The two sides anticipated that affiliates of the Producers would join the Alaska Northwest Partnership at some point. Design, engineering, environmental, financing and regulatory work proceeded along parallel tracks in Alaska and in Canada during this period of time.

As worldwide energy supply and demand came back into balance and the energy crisis eased, the focus of the pipeline shifted to the pre-building of the southern portions of the Alaska Highway Project. There was a disagreement between Canada and the United States over this issue, primarily as it related to the export of Canadian natural gas to the U.S. market.

The Canadian Government was unwilling to authorize the Pre-build or the gas exports without further assurance from the United States that the entire Alaska Highway Project, including the Alaska segment, would eventually be completed. This assurance was forthcoming in a letter from President Carter to Prime Minister Trudeau, along with a Congressional resolution. As a result, the southern Pre-build pipeline section was completed by 1982. This involved constructing 650 miles of 36 and 42-inch pipeline from Caroline, Alberta to Monchy and Kingsgate on the US border. The Pre-build and subsequent expansions were constructed pursuant to the Northern Pipeline Act and its regulatory regime managed by the Northern Pipeline Agency.

When the Pre-build construction began, it was widely anticipated that North American natural gas demand would quickly resume its upward trend. However, the market did not recover as anticipated and demobilization of the Alaska Highway Project soon began. In order to remobilize, we will be required to make modifications and enhancements to various elements of the Alaska Highway Project regime. Pipeline designs will have to be modified so that the Project can respond to capacity and gas quality requirements of the shippers. We will have to incorporate the latest technology and techniques necessary to ensure that the maximum environmental protection measures are in place. We do not expect any difficulty in introducing these revisions, which are so obviously of benefit to all parties.

Recently other parties have raised issues related to payments that might be due to withdrawn partners pursuant to the Alaska Northwest Partnership Agreement. We are confident that if any return of the withdrawn partners' original investment is required, it can be resolved within the context of an economically viable project.

Clearly, there is a lot of work still to be done. It is very important to understand that the advantages that come with the unique ANGTA and NPA regulatory regimes far outweigh the alternative of starting from scratch. Using the existing statutes and treaty we can assist in having Alaska natural gas into the U.S. market sooner, with competitive transportation costs and at the same time reducing project risks for all stakeholders.

In our capacity as the managing partner of Alaska Northwest, we have maintained the Alaska Highway Project in good standing. We have kept the project alive to ensure that the advantages and benefits of the Project could be used in remobilization plans to expedite construction of the pipeline. We particularly wished to preserve what we see as the "special and unique fast track" regulatory regime.

Foothills and its shareholders have expended time and effort to keep the permits current and to optimize the project design. We do not intend to quit the field now that success is within sight.

A substantial amount of work has been completed by the Alaska Highway Project sponsors to date. Before discussing the specific permits held by Alaska Northwest it is important to better understand the unique regulatory and legislative framework under which these permits were issued, namely ANGTA.

ANGTA and the President's Decision remain in effect and can be terminated only by another act of Congress. ANGTA does not create a perpetual priority for the Alaska Highway Project. Rather, it establishes a priority designed to ensure that the Alaska Highway Project will be completed and begin initial operation in accordance with the decision of the President and Congress. Once the Alaska Highway Project is in operation additional projects may be considered under the Natural Gas Act.

In implementing this priority, ANGTA requires that Federal agencies and officers expedite and issue at the earliest practicable date all permits and authorizations required by the Alaska Highway Project. In addition, ANGTA provides that applications and requests with respect to permits and authorizations required by the approved system shall take precedence over any similar applications and requests. Furthermore, ANGTA limits the discretion of Federal agencies and officers to include in certificates and permits for the Alaska Highway Project any conditions that would obstruct the system's expeditious construction and initial operation.

As required by ANGTA, the FERC in 1977 expeditiously issued a conditional certificate of public convenience and necessity for the Alaska Highway Project. That

certificate contains no expiration date and is still in effect today. In addition, Alaska Northwest holds a federal right-of-way grant issued in 1980 by the Department of Interior's Bureau of Land Management. That grant does not expire until December 2010, and may be renewed at the request of Alaska Northwest.

Furthermore, Alaska Northwest holds two recently extended Clean Water Act wetlands permits issued by the Army Corps of Engineers in coordination with many other agencies. Those permits were extended through September of 2007.

While these various federal permits were issued some time ago, they all are valid today. Indeed, nothing in ANGTA or in the certificates and authorizations issued for the Alaska Highway Project thereunder provides for the expiration of the chosen system's priority because completion of the Alaska segment was postponed until the U.S. domestic market could support it. Rather, the Alaska portion of the Alaska Highway Project has been held in reserve until the need for additional natural gas arises in the Lower 48 states is such that this section can be completed.

As sponsors, we have actively protected the preserved Alaska segment by maintaining all necessary certificates and permits and actively overseeing the rights-of-way. We recognize that these certificates and permits need to be updated to capture changes in technology, markets and environmental requirements. We will do such updating, and it can be done within the ANGTA framework. To that end, a couple of additional points need to be emphasized before I move on to the State permits.

- First, ANGTA clearly envisions and provides for the ability to condition and to amend these permits. These powers are subject only to the limitation prohibiting changes in the "basic nature and general route" and actions that will "otherwise" prevent or impair in any significant respect the expeditious construction and initial operation of the Alaska Highway Project.

- Second, the Alaska Highway Project sponsors' requests for both new permits and amendments to existing permits must be given priority under ANGTA. This priority translates into a timing advantage for the Alaska Highway Project.

- Third, the authority of the Office of Federal Inspector, as transferred to the Secretary of Energy, also continues in effect today to expedite and coordinate federal permitting, enforcement of permit conditions, and facilitation and oversight of the construction and initial operation of the U.S. portion of the Alaska Highway Project.

- Fourth, ANGTA also provides for expedited and limited judicial review of actions taken by Federal agencies and officers.

- Finally, the Alaska Northwest Partnership is well along in permitting the Alaska Highway Project.

On the state side, Alaska Northwest has a pending State of Alaska right-of-way lease application. Recently, we have initiated discussions with the State officials regarding perfecting and processing the pending application. Also at the state level, Alaska Northwest holds certificates of reasonable assurances issued pursuant to Section 401 of the Clean Water Act and a determination of consistency with the Coastal Zone Management Act.

While Foothills (Alaska Northwest) already holds the major permits necessary to construct the remainder of the Alaska Highway Project, there are additional permits and authorizations that will need to be obtained. For example, the Alaska Highway Project sponsors will need to acquire a permit under the Clean Air Act. However, these additional permits will be procured as the Project proceeds, and such procurement will not cause a delay in the expeditious construction of the Alaska Highway Project.

On the Canadian side, Foothills holds two unique certificates or permits:

- Certificate of public convenience and necessity.
- Yukon right-of-way.

The certificate of public convenience and necessity is the Order issued following a successful hearing before the National Energy Board (NEB) of a pipeline application. The information that is required to be filed

for hearing purposes is delineated in regulation and includes details about supply and markets, environmental impact assessment, engineering, construction and operations plans and details about connecting pipeline facilities.

The preparation of the required hearing information generally takes one to two years to complete and the length of the hearing will be proportional to the level of controversy surrounding the issues.

Foothills has completed this phase of the process. We have the certificates that entitle us to build a pipeline, subject only to terms and conditions set out in the Alaska Highway Project regime. The certificates are statutory. They were issued by the Parliament of Canada when it enacted the Northern Pipeline Act and are in keeping with the principles and intent of the U.S./Canada Agreement.

We acknowledge that the certificates were legislated 20 years ago and that some have raised questions about their scope and validity. Others suggest that the certificates are dated and accordingly must be reissued. The certificates are valid. We are on solid legal ground in this regard.

Changes to the pipeline design to accommodate new technical issues and improvements have previously have been granted by the Northern Pipeline Agency both at the time of the construction of the original Pre-build facilities and later during the facility expansion.

However, fundamental changes to the Canadian certificates would require changes to both the legislation and the treaty. For example, another project could not be approved under the Alaska Highway Project regime. Further, the Northern Pipeline Act (incorporating the U.S./Canada Agreement) provides that the route for Alaska natural gas will be along the route set forth in Annex 1 to the U.S./Canada Agreement, i.e. the Alaska Highway route. In the face of the provision of the Northern Pipeline Act and the U.S./Canada Agreement, a treaty with the force of law, it is difficult to see how the National Energy Board could entertain applications either for alternative pipeline routes for delivery of Alaska gas through Canada or applications by companies other than

Foothills following the Foothills highway route for delivery of Alaska gas through Canada.

Given the above, we may well ask what remains to be done before the project can proceed?

First of all, we do not have a commercial arrangement negotiated with the Alaska North Slope producers or other shippers. Achieving this commercial arrangement is our number one priority. We are confident that the mutual interests of all sides will ultimately lead to satisfactory arrangements.

Following the successful completion of such a commercial agreement, there are a number of terms and conditions that must be satisfied. These are set out in the Northern Pipeline Socio-economic and Environmental Terms and Conditions. It is our view that the terms and conditions are broad enough to accommodate modern environmental, engineering and construction practices. In fact, we addressed this issue when we pre-built the southern portion of the Alaska Highway Project pipeline.

Detailed design and engineering work also must be completed and approvals must be obtained from the Northern Pipeline Agency. It is this mechanism that I referred to when I indicated that we had a "fast track" regulatory process.

I will take a few minutes to describe the status of our right-of-way through the Yukon. Foothills has been granted an easement (by the federal government) in the Yukon. The current term of the easement is September 2012 and provisions are in place to renew the easement for a further term of 24 years. It is important to note that the easement is protected under the Encumbering Rights provisions of the Umbrella Final Agreement which has been signed by the Government of Canada, the Government of the Yukon and the Yukon First Nations. The Final Settlement Agreements that have been negotiated with the Yukon First Nations contain specific provisions relating to the easement. In addition, the compressor station locations and permanent access to the proposed stations are protected.

What does this mean? From our perspective, this translates into certainty of tenure and a significant

timing advantage. Foothills has developed an excellent working relationship with the Yukon First Nations over the years and we are building on that relationship. Like the Canadian certificates, the easements also constitute an important asset not easily replicated.

Let me summarize and focus on some of the key points. Foothills is a company with real pipelines and real customers. When combined with our shareholders, TransCanada and West coast, we transport 20 percent of all the natural gas consumed in the United States. We have the know-how and the where-with-all to build the Alaska Highway Pipeline. We and our former partners have invested heavily to achieve the permits, certificates, rights-of-way and much of the engineering on the Alaska Highway pipeline.

A basic message that I want to leave with you is this, we have a very unique and solid regulatory framework, it is a very valuable framework in terms of saving money and avoiding costly delays when building a pipeline. It is more than a collection of permits. It is a package, designed specifically to expedite building the Alaska Highway pipeline. This framework can neither be duplicated nor terminated easily. It is a one-of-a-kind regime. I urge all Alaskans to take full advantage of it.

Finally, let me raise one other issue and that is the matter of the pipeline route decision. Before we can move from discussion to action this must be resolved. Anything this committee can do to bring clarity to the routing debate will be a positive development. So where do we go from here?

A commercial agreement between pipelines and producers is the next major milestone for the Project. Once a satisfactory commercial arrangement is achieved ... the flag drops; from that point on we believe that our regulatory framework will allow "shovels to be in the ground" within 24 months.

This is a very large project. It will involve many companies. It will cost a lot of money and there will be lots of issues to address and benefits to share.

Foothills and its shareholders intend to be major players in the development and operation of this important

pipeline and we believe that we bring value to the Project and value to Alaska.

Number 1600

SENATOR PEARCE asked him to explain how they got their commercial agreements for the Prebuild system.

MR. ELLWOOD replied that they negotiated an arrangement with PanAlberta Gas Corp., which was the original shipper of gas to markets. They had an agreement in place with various U.S. companies to purchase gas that it had contracted for in Alberta. PanAlberta Gas contracted with [Foothills] to ship the gas. It's not a negotiated arrangement as they understand today, because in those days the terms of the tariff were set by regulation as a cost of service measure. Today, he would expect a toll would be a negotiated arrangement between the pipeline and its shippers and have the regulator approve that.

SENATOR PEARCE asked how many Alaskan lease holders would have to be involved in negotiated agreements with Foothills for there to be enough gas to be supplied to them to move forward in building a pipeline.

MR. ELLWOOD answered that to make a project like this financable, they would need contracts for 15 - 20 years worth of gas supply for the lenders to have confidence that the gas would be there. It's a question of the volume of gas being sufficient to cover the anticipated design flows for as long as it takes to repay the lenders. The Act envisions a flow of 2 - 2.5 bcfd to start and to increase maybe to 4 bcfd as time went on. This is a matter that still needs to be resolved with the producers.

CHAIRMAN TORGERSON asked if 1.5 bcfd was going to originally come out of the Mackenzie down the Dempster Highway.

MR. ELLWOOD answered that he thought it was 1.2 bcfd that would have gone to Whitehorse where it would be commingled.

CHAIRMAN TORGERSON asked if that would have been a total of 4 bcfd from Whitehorse and our segment was 2.5 bcfd.

MR. ELLWOOD responded that in the original design, they didn't contemplate that the Alaska section would be limited to 2.5, but that it would grow from there and so would the southern section accordingly.

SENATOR PEARCE referred to the last paragraph on page 6 saying that the original president's decision disallowed the producers taking an equity position in the pipeline and asked if he was familiar with the political or the economic reasons for that decision.

MR. CURT MOFFATT, General Counsel, responded that at the time there was concern about the equity participation of the producers in the transportation system and overall concern of access to the pipeline by non-equity owner producers, particularly if and when additional resources around and beyond Prudhoe Bay were identified. There were also representations made by Alaska Northwest, as a sponsor at that time. They believed it could be financed without equity participation by the producers. This was ultimately modified, he added.

SENATOR ELTON asked what the capacity was of the southern route below Caroline [Alberta].

Mr. ELLWOOD replied that the present capacity of the eastern leg crossing the border at Monchy down to Chicago is 2.2 bcf/d and the capacity of the western leg crossing the border at Kingsgate is 1 bcf/d. Total capacity is 3.2 bcf/d.

What would happen when Alaska gas comes on line will depend on a couple of things, MR. ELLWOOD said. First, the contract for moving gas on these systems are of various terms. Some will expire before Alaska gas comes and some will not. Depending on the amount of Canadian gas that might be renewed, there might be more or less unused capacity in the pipe at the time Alaska gas floats. If that is not sufficient capacity, they would contemplate expanding the system as they have in the past. Counting both legs, they have expanded it five times since it was originally constructed. That can be done again.

MR. ELLWOOD said that it's not necessary for all of the Alaska gas to flow through the Prebuild. There may be other markets that the owners, producers, or shippers would like to pursue. The gas could be dropped off along the network of pipelines, for instance.

SENATOR ELTON said that so many things have happened subsequent to the Canada/U.S. agreement, and asked how bullet proof all these arrangements really are. An EIS has a shelf life of three or four years and it seems that permits must have some kind of shelf life also, because of changing circumstances.

MR. ELLWOOD answered that they didn't use the word, "bullet proof." He reiterated that there is a legislative regime in place in both

countries, ANGTA in the U.S. and the northern pipe in Canada, and the treaty between the two countries and they think this has great value. It provides for expedited approval of a way to move Alaska gas to market. It does it in a very flexible arrangement, allowing them to use the very best technology available. They have done that as recently as 1998 in Canada when they expanded the Saskatchewan piece of the Prebuild system. They believe that can be done just as efficiently in Alaska, as well.

SENATOR ELTON asked if they saw it as a breach of existing agreements if another route is selected.

MR. ELLWOOD replied that, "The Canada/U.S. agreement is very specific and lays out a route for the transport of Alaska gas across Canada. It is the law in Canada."

CHAIRMAN TORGERSON asked if it would take another treaty or a decision of the President or Congress to pick a different route.

MR. ELLWOOD answered, "Sure. They are both sovereign countries and if they choose to pass another law, they can pass another law."

CHAIRMAN TORGERSON asked if the agreement giving his route priority didn't preclude them from picking a different route, but would need a decision of the President to do that.

MR. ELLWOOD said it would take an Act of Congress.

CHAIRMAN TORGERSON said the treaty was for only 35 years and asked if he thought they would be back in negotiation with the U.S. State Department to change the treaty or go for a longer period of time.

MR. ELLWOOD answered that he would have to ask the Canadian State Department its plans. He understands the treaty is for 35 years and then would continue year-by-year unless either party gave notice that they wish to cancel it. He didn't know what the governments would do at that time.

Number 2300

SENATOR PEARCE asked where the gas is processed according to the treaty and existing permitting.

MR. ELLWOOD answered that the carbon dioxide (CO<sub>2</sub>) would need to be removed and it would have to be done on the North Slope. Any other processing is a commercial matter with the owners of the gas.

SENATOR PEARCE said that Mr. Oliver, BP, said in a recent Alliance meeting in Anchorage, that the present high prices of gas are a disincentive to bringing Alaskan gas to market, because their company believes these high prices will cause so much gas to come on line that is closer to the markets and our gas will be pushed out of the opportunity. She asked him if he agreed with that.

MR. ELLWOOD replied that if you look at the history of production in the lower 48 over the last 10 years, it's flat to declining. If you look at the more recent production history of the last six months, it's still flat to declining even with record drilling activity. Canada has a small upward rise in production and that is due to bringing on line the Sable off-shore basin on the east coast of Canada within the last year. Production from the west coast sedimentary basin is rising marginally even though they have had a whole year of record pace drilling.

**TAPE 01-7, SIDE B**

MR. ELLWOOD said there is an expectation and all the studies show that over the next decade we, in North America, need to add about 20 bcfd of gas production over what we are now producing. Alaska could produce about four. Even if the estimates are off by half, Alaska still can't produce that much. "With the marginal increases we have seen in growth in existing basins, I think it's very difficult to see how this market is going to be supplied unless we connect both Alaska and the Mackenzie Delta and expand all of the basins that are currently producing in North America.

SENATOR PEARCE asked what he thought the committee could do to bring clarity to the routing debate.

MR. ELLWOOD answered that he didn't know that much about the process to suggest something, but from his perspective they have to get moving forward on a common goal. They can't get there going in different directions. The key players are the producers and the state as owners and Foothills as a pipeline company with permits. T

SENATOR HALFORD said he wanted to have as much processing done in Alaska as possible and was concerned that there would only be initial processing.

MR. ELLWOOD replied that they have significant processing capabilities in Alberta and clearly they bring economic advantages and he understands his feelings.

Number 2100

SENATOR HALFORD asked what was the current status of any negotiations using the state as a producer.

MR. ELLWOOD replied that they had been in contact with the producers and have exchanged some information. The producers at this point have come to some understanding amongst themselves and that is a positive development as it gives them an entity to talk to. They look forward to commencing some serious negotiation. He understands that the state can select to take its gas in kind and if that were the case, then they would be like a producer. Foothills needs entities that will agree to ship their gas on their pipeline.

SENATOR HALFORD asked what he thought the price of natural gas would be two years out.

MR. ELLWOOD replied that his guess as an engineer would be pretty worthless, but that the forward market in 2004 is holding around \$4. If prices get above that competing technologies tend to come to the front, like clean coal.

SENATOR LINCOLN said that other pipeline related people she has talked to have been good salesmen also and is having a hard time deciding which is the better group for Alaska and asked if combining the Foothills pipeline with a marine terminal would be a feasible possibility.

MR. ELLWOOD replied, "Absolutely." He explained that they are a participant in the Alaska North Slope LNG project which is not the same as the project proponents were talking to her about a little while ago. They have a serious interest in building an LNG facility on tide water and are participating with BP, Phillips, and Marubini in a study to advance that. Marketing that LNG in Asia Pacific is a very difficult challenge. He said that moving forward on the Alaska Pipeline would be very easy compared to the market challenge in Asia Pacific.

SENATOR LINCOLN said that previous presenters said that the Prebuilt was already at capacity and there was no way they could expand or get the gas to market in a timely fashion and asked him to respond to that.

MR. ELLWOOD answered, "That's absolutely nonsense!" He spent his whole career expanding pipeline systems and that's how the natural gas business in North America works. "You build a pipeline. As the market grows and as the supply grows, you expand the pipeline

network to transport that gas." Any system in North America can be easily expanded to carry Alaska gas.

CHAIRMAN TORGERSON asked how they do it.

MR. ELLWOOD explained, "You start with a pipeline and it will have a few compressor stations on it, usually. Then, as the market and supply goes, you'll add some more compressor stations. You put more horsepower on it, you can pump more gas down it. You'll eventually get to a place where the amount of fuel gas you use to power the compressors becomes uneconomic. At that point, you start laying some new pipe. You don't have to lay a complete new pipe alongside the old one. You can lay short sections of new pipe - a little bit here, a little bit there, and a little bit farther down. Those short sections are sized for whatever might be the incrementing growth you're looking at that time. You keep doing that until the whole thing is connected and now you have two pipes. Now you start adding compressors on the second pipe. You keep doing this as long as the supply and market grow." He said that a place called Empress has six pipelines crossing it.

SENATOR LINCOLN asked what would Foothills commitment be for Alaska hire and utilizing Alaska businesses.

MR. ELLWOOD answered that they pride themselves on having pioneered local hire and local business use in Canada and, "...would give an absolute commitment that we will utilize to the maximum extent that we can have local hire and local business." Fabrication of pipeline components can be done here and there is a good support industry in Alaska including pipeline construction and techniques.

Number 1700

SENATOR TAYLOR said when we started out we had "seven sisters" and now we've whittled ourselves down to one big sister and one small one. He said legislators do not understand how to somehow motivate these companies to join hands and sign some type of agreement. He asked how they could help and if further motivation is needed, what they need to be discussing.

MR. ELLWOOD said a large decision needs to be made and everyone needs to have confidence that the market price will hold high enough that you won't be buying gas at \$4 and selling it at \$2. The State will have to decide whether it wants to take its royalty gas in kind or market it itself.

SENATOR TAYLOR asked if we should be looking at some tax

incentives.

MR. ELLWOOD said he didn't know if that was an alternative for the state or not. He hoped Foothills' discussions with the producers would turn into serious negotiations fairly soon.

SENATOR HALFORD asked if he had ever seen any successful incentives for or other encouragement that a province, state, or country had been able to use to effectively encourage the producers that's actually worked.

MR. ELLWOOD answered that on the original pipeline across Canada from Alberta to Ontario there was a particularly risky section. Industry was in its infancy and industry didn't know how much it was going to cost to construct the line through there. In the end the federal government built that section. TransCanada managed the construction and the government provided the funding. When they could afford it, TransCanada bought it back from the government.

SENATOR HALFORD said, "So socialize the risk and privatize the profits."

MR. ELLWOOD responded that TransCanada bought that piece of pipeline back at a price the federal government thought was fair.

SENATOR HALFORD asked if there were any other examples.

MR. ELLWOOD said that was all he knew of.

MR. MOFFATT added a historical point to Senator Lincoln's question about the concept of the Y and how that would work with the ANGTA framework and the authorizations that are currently held for the Alaska Highway Project. He asked the committee to look at the report the president submitted to Congress in support of his recommendation in choosing the Alcan project over the El Paso LNG project. He noted from the President's comments that, "...installation of additional pipeline facilities connecting with the Alcan system could provide natural gas to other areas of the state, particularly the Cook Inlet region in southeastern Alaska and thus supply the energy base required for long term economic development." The president and Congress contemplated building facilities off the Alcan forming a Y when they chose the Alcan system over the LNG project El Paso had been proposing.

SENATOR ELTON asked if Foothills anticipated sitting down with the producers at some point and talking about their participation as an equity partner in a pipeline.

MR. ELLWOOD answered that they would be sitting down with them fairly shortly to discuss how they might proceed.

SENATOR HALFORD asked if any of the producers had approached Foothills with the possibility of buying their interest.

MR. ELLWOOD responded that they haven't offered it for sale. Their business is owning and operating pipelines.

SENATOR KELLY asked if discussions about a sale be in his purview.

MR. ELLWOOD said it could be in his purview as Vice President of Engineering or it could go directly to the shareholders. He would know about it either way.

CHAIRMAN TORGERSON asked if there was any liability for them if the pipeline didn't hook into the Prebuild. Was that portion designed to be a stand-alone?

MR. ELLWOOD answered that it was designed as a stand-alone and has its own tariff. It's not associated with any other company or any other line. He couldn't see how it would be a liability. The question was, "What would be the amount of unused capacity in the line at the time Alaska gas comes on. We'll know that as we get closer to the date. And what will be the amount of gas the shippers want to send to the Chicago and California markets? Then we will design the system that will carry that gas."

CHAIRMAN TORGERSON asked if he knew of any agreement where we would preship gas from Alberta to repay that gas later on from the North Slope.

MR. ELLWOOD answered that it was contemplated that the Canadian market would have access to Alaskan gas in return for having exported the Canadian gas during this period.

CHAIRMAN TORGERSON asked what volume we were dealing with on the North Slope.

MR. ELLWOOD replied that he heard numbers from 26 tcbfd in Prudhoe and he couldn't get a satisfactory answer as to whether that was in the gas cap or the associated gas.

CHAIRMAN TORGERSON remarked that 26 tcbfd was just a little bit short of what they need for 20 years at 400 mbcfd.

MR. ELLWOOD said it would be 365 days x 4 X 20.

CHAIRMAN TORGERSON said he used 360 days because he thought they had down days.

MR. ELLWOOD said their existing pipeline has run at capacity for three years in a row.

CHAIRMAN TORGERSON asked what was the volume of CO2 in our North Slope gas. "Would it be in the reserve number or out?"

MR. ELLWOOD said he had seen a lot of 12 percent estimates.

CHAIRMAN TORGERSON asked if they wanted to take as much as they could at the other end.

MR. ELLWOOD indicated that was right.

SENATOR TAYLOR asked if he saw the State as a producer.

MR. ELLWOOD said there were two different aspects to the commercial arrangement. One is the project structure and ownership. The other one is the transportation contracts for shipping the gas. They haven't had time to talk to the producers about ownership or transportation issues. They expect to start that process soon. He didn't see why the state would not be an owner in these entities, if it is interested in investing in pipelines. They have had arrangements like that in other places. It's not so common in North America because they are commercial enterprises.

CHAIRMAN TORGERSON asked him to point out the aboriginal route and asked if they were involved in it.

MR. ELLWOOD answered that the "Aboriginal Pipeline Group", consisting of the Northwest Territories, was advocating a route that would take the Mackenzie Delta gas down the Mackenzie River and bring it through Northern Alberta. Foothills is not directly involved, but their shareholders, Westcoast and TransCanada, have another separate joint venture which is pursuing that. Foothills is the joint venture entity for the Alaska Highway route and there is a separate joint venture for the Mackenzie Valley route.

CHAIRMAN TORGERSON asked if they owned the right-of-way for the Dempster route.

MR. ELLWOOD replied no and explained when this debate occurred 20 years ago, the Berger Inquiry recommended that no pipeline be built

in the Mackenzie Valley for 10 years. There was concern that the Mackenzie Delta gas would be stranded and the government asked Foothills to look at alternatives which they did. One of them was the Dempster Highway. It's a technical possibility, but it never went further than being looked at on the map.

SENATOR PEARCE asked if he thought there would be either federal or provincial financial assistance for the financing of the building of the pipeline.

MR. ELLWOOD replied no, that this was a commercial enterprise.

Number 409

SENATOR PEARCE asked what he thought Foothills' next public move should be.

MR. ELLWOOD said they do not want to seek higher profiles, but he hoped they could soon move forward with reactivating their application for rights-of-way on state lands.

SENATOR LINCOLN asked how the aboriginal route connects with the over-the-top route.

MR. ELLWOOD explained that the over-the-top route was put forward by a group from Houston and it would go from Prudhoe Bay offshore into the Beaufort Sea, bring it onshore somewhere near the Mackenzie Delta region and then to the Mackenzie Valley.

SENATOR LINCOLN asked where the aboriginal route tapped into the gas reserves.

MR. ELLWOOD pointed out strictly in the Mackenzie Delta. He agreed that they were not looking at the over-the-top route.

SENATOR TAYLOR asked if both of those pipelines were stand alone economically viable. He asked if the Mackenzie Delta gas was stranded.

MR. ELLWOOD said it is stranded except for one tiny exception. There is gas being produced in the Mackenzie Delta servicing the town of Anuvik.

SENATOR TAYLOR said there might be some economics of scale to picking up gas off Alaska's North Slope. He asked how much gas was on the Delta.

MR. ELLWOOD answered that the National Energy Board of Canada estimated reserves to be 6 - 9 tcf. The Chairman has requested an interview with them about the alternative routes in the near future.

CHAIARMAN TORGERSON thanked everyone one for their comments and adjourned the meeting at 5:15 p.m.