

Stranded Gas Hearings

(0406161045 Minutes)

Estimated Costs of and Tariff for a Gas Pipeline –

On behalf of producers BP, ConocoPhillips, and ExxonMobil:

William Benham, Vice President, Regulatory Affairs, BP

Dave McDowell, Director, External Affairs – Gas, BP, June 16, 2004.

WILLIAM BENHAM, Vice President, Regulatory Affairs, BP Energy Company, informed the committees that BP Energy Company is BP's North American gas and power marketing and trading business. He explained that in his role at BP he has periodically provided testimony to the FERC and on occasion before state legislatures on the subject of gas pipeline tariffs. Therefore, he is presenting testimony on behalf of BP, ExxonMobil Corporation, and ConocoPhillips Alaska, Inc., per their request. He specified that he would refer to the aforementioned three companies as the Sponsor Group. He said that he would offer a brief overview of the Sponsor Group's preliminary cost and toll estimates, the process for establishing a toll and the allocation of risks, a discussion of the differences between contract carriage and common carriage, the approval of tariffs, and a closing summary. He informed the committees that his primary background is in interstate pipeline ratemaking procedures, tariffs, and the role of the FERC. However, he noted that he has limited knowledge with regard to "the Alaska gas project specifically, and therefore his comments are designed to provide general insights into accepted tariff methodology and the role of FERC in establishing gas pipeline tariffs, as will be required for the Alaska gas pipeline." He noted that the committees should have a written summary of the key generic points covering the topics of building, owning, operating, and transporting gas on a typical gas pipeline regulated by FERC. The written summary will also review the key risk factors faced by pipelines, shippers, and producers in connection with a typical new pipeline project.

MR. BRENHAM paraphrased from the following written testimony [original punctuation provided]:

Preliminary Cost and Toll Estimates

As has been previously communicated in other forums by the Sponsor Group, we estimate the total capital cost of the Alaska Gas Pipeline at approximately \$20 billion, in 2001 dollars. This figure would be somewhat higher in today's dollars, accounting for inflation since 2001. The figures I'll be sharing with you will be quoted in 2001 dollars because they refer back to the joint \$125 million feasibility study that was completed by the Sponsor Group in the 2001-2002 timeframe. That study evaluated the feasibility of constructing a pipeline from Alaska's North Slope to Lower-48 US markets by way of either a Northern Route or a Southern Route, with the conclusion that the project was technically feasible, but that the commercial risks outweighed the potential rewards. As you and we are very well aware, current State law has prohibited the State from issuing a Right of Way for a Northern Route until a Southern Route is built. My testimony will focus on the Southern Route.

The Southern Route project was estimated to cost approximately \$19.4 billion, with an accuracy of +/- 20%. The components of this cost estimate were as follows:

North Slope gas treatment plant	\$2.6 billion
Gas pipeline and compressor stations from the North Slope to the Alaska/Canada Border	\$4.4 billion
Gas pipeline and compressor stations from the Alaska/Canada border to Alberta, Canada	\$7.2 billion
Gas pipeline and compressor stations from Alberta to US market	\$4.6 billion
<u>NGL extraction facilities</u>	<u>\$0.6 billion</u>

Total capital cost

\$19.4
billion

The capital cost estimate resulted in an estimated toll to the market of \$2.39/mcf. This toll is merely a preliminary estimate of a toll that might ultimately be approved by FERC and the NEB [National Energy Board of Canada] for an Alaska gas pipeline. The ultimate toll will not be known for some considerable time, and better estimates will require more work as the project is developed.

The Process for Establishing a Toll and the Allocation of Risks

The process of developing and gaining regulatory approval of this toll (tariff rate) and having it approved by the necessary regulatory authorities is well-established in both the US and Canada. Pipeline tariff rates are a direct result of the cost of constructing and operating the pipeline. The actual formulation of the toll, indeed the entire tariff structure, (of which the toll is one component) is subject to well-established regulatory standards, with oversight provided by the FERC in the US, and the NEB in Canada.

The rate that gas pipelines will charge for transporting gas is based on what is referred to as the "cost of service". The cost of service includes components such as operating cost, maintenance, taxes, depreciation and a fair and reasonable return on capital investment that is consistent with the specific risks of the project. The return to pipeline investors, consisting of both return on the equity and the cost of debt, is determined by the risk undertaken by those pipeline investors. For example, if a pipeline investor undertakes a capital cost overrun risk, that investor might reasonably expect to be compensated for taking this risk by receiving a higher return on the equity investment that is made. Conversely, if a pipeline investor takes no such risks, the return on equity might be reasonably expected to be lower.

The specific capitalization structure, which is the measure of the relative amount of equity and debt financing, will vary by project, depending on the project risk and how this risk is allocated between the pipeline company and those that will be shipping gas on the pipeline. The capitalization structure must ultimately be within the guidelines established by the FERC and the NEB and be acceptable to any involved financial institutions. The factors which impact the relative risk of gas pipeline projects would include such items as:

- the economically recoverable reserves and deliverability;
- credit risk of customers, (the pipeline shippers);
- nature of pipeline investment (e.g. arctic, remote, etc.);
- capital cost and schedule risk allocation between shippers and pipeline owners, with the degree of risk depending on how the parties agree to share these risks, a matter which is first negotiated by the parties and ultimately approved by the FERC and the NEB.

For the feasibility study work performed by the Sponsor Group, which I referenced earlier, the Sponsor Group determined a toll using assumptions similar to those that were actually implemented on the Alliance Gas pipeline, the most recent major US-Canadian gas pipeline project. This was simply a placeholder, as it was recognized rates for this line could be different due to its specific risks. However, for the Alaska gas pipeline project, the pipeline company may choose to offer negotiated rates. In this event, shippers and pipeline owners may negotiate rates and choose to allocate risks in a different way for this specific project, with such negotiated rates of course being subject to regulatory oversight.

I would point out here that a "negotiated rate" is a term used by the FERC to describe any toll that is not tied to the maximum toll derived through the cost of service. "Negotiations" between the

parties, in the traditional sense of the term, are not always necessary to establish such a rate.

I would further point out that even if the pipeline chooses to offer negotiated rates, shippers would still have the option to pay what are called "recourse" rates, these rates being based on the approved cost of service.

Both FERC and the NEB have well-established regulatory processes that balance and protect the interest of all parties, including consumers. The FERC ensures that "just and reasonable rates" are implemented, based on almost 70 years of Natural Gas Act precedent, policy and case law. However, Natural Gas Act regulation of interstate gas pipelines differs from FERC's regulation of crude oil and liquids transportation established under the Interstate Commerce Act in several important respects.

Contract vs Common Carriage

Let me briefly explain the difference between the systems of carriage on gas pipelines versus crude oil and liquids pipelines, such as the Trans-Alaska Pipeline System. U.S. liquids pipelines that provide interstate service are regulated as "common carriers" pursuant to regulations derived from the Interstate Commerce Act. Under the common carrier regulations, shippers are not allowed to contract for specific quantities of capacity and, therefore, do not pay related monthly demand/reservation charges - payment is only for capacity utilization based on actual throughput volumes. The advantage for common carrier shippers is that they "pay as they go" on actual delivered volumes. The disadvantage is that no shipper is assured of a specific level of capacity availability. When new oil supplies are tendered for transportation on a full oil pipeline, available capacity may be prorated or curtailed among existing shippers.

In contrast, because much gas usage is closely related to critical end uses such as industrial feedstock, home heating and electricity generation, and thus needs the assurance of defined, stable capacity availability, natural gas pipelines under FERC or NEB authority operate as "contract carriers". Under contract carriage, shippers have the opportunity to contract for a reservation of available capacity on a firm, non-discriminatory, basis for a specified period of time. What we call "open seasons" are often used to ensure capacity is awarded without undo discrimination to all parties that meet the open season requirements.

In the context of gas pipelines, the term "open access" is used to refer to the opportunity to contract pipeline capacity at specific points of time under open season processes. Parties who hold firm, contracted capacity are not subject to proration at the behest of other shippers, thus guaranteeing that their production will flow. As additional capacity is needed to serve new shippers, open seasons are held to determine the interest and economic feasibility of adding new capacity.

Pipeline owners and financial lenders desire these long-term contracts for firm capacity to ensure repayment of the capital cost of building the pipeline. Without these commitments, gas pipeline projects, which by their nature involve a longer payout than oil projects, could not be financed. Shippers need the contract quantity commitment to ensure capacity is available to support their needs. A shipper's economics are founded on the availability of the contracted capacity. In exchange for the pipeline's commitment to reserve a specified quantity of capacity for a shipper, the shipper agrees to pay a monthly reservation charge which is due regardless of whether gas is actually shipped.

The Approval of Tariffs

The FERC and NEB processes offer an opportunity to all interested and affected parties, such as the State of Alaska, to actively participate in the establishment of just and reasonable rates on pipelines in which they have an interest. FERC staff is charged with representing consumer interests to ensure that these rates are established on a just and reasonable basis. The FERC has outstanding resources and expertise and is permitted to audit the records of regulated

pipelines.

Any gas pipeline project, including the Alaska gas pipeline project, can only happen if the expected tariff rate is acceptable to shippers, pipeline owners and regulators. Only reasonable, prudently incurred, pipeline capital and operating costs will be allowed to be included in the tariff. FERC and NEB procedures are designed to ensure this happens. In fact, lower pipeline costs are in the best interest of the State of Alaska, gas producers and the pipeline company, provided risks are properly allocated between the pipeline and the gas producer/shipper. This is because lower pipeline costs translate into lower rates that attract shippers to transport gas on the pipeline, and thus higher wellhead netback prices are realized, which in turn benefits both the producers and the State of Alaska. Both producers of gas, and the pipeline on which that gas is transported, need the lowest possible costs to create a financially viable project and a healthy natural gas business in Alaska, supporting a full pipeline for decades to come.

Let me just make some final comments about tariff rates. The tariff rate will be a function of many factors. Each of these factors has a certain impact on the actual rate. The chief factor, though, in determining the rate is the amount of capital cost. Obviously, the actual capital cost will not be known until the pipeline is constructed. Those capital costs are recovered over time as depreciation. It is too early in the process for the Sponsor Group to determine how the various factors that recover the capital cost and provide a return on investment will be calculated. For example, the debt-equity ratio may be affected by the existence of Federal loan guarantees. The depreciation schedule is affected by its overall impact on the toll over time. The longer the depreciation period, the lower the toll will be over time, all other factors being equal. The allocation of the risk for cost overruns will be the result of negotiations between the potential shippers and the pipeline. However, the FERC, following US Supreme Court precedent, must allow the recovery of prudently incurred costs even if those costs are in excess of the estimated costs.

To put it simply, it is still too early in the process to provide a definitive outline of the method that the Sponsor Group, or the pipeline entity, will use to establish a tariff rate.

Summary

And so to summarize, I'd like to offer these closing comments. First, gas pipeline tolls and tariffs are established as a direct result of the associated costs of constructing and operating the gas pipeline. The Sponsor Group has come up with a preliminary estimate of what these costs might be. However, if the project progresses to detailed engineering and project planning, an effort we estimate would take something like two years, this cost estimate would be refined and a more precise basis for the toll defined.

Second, any gas pipeline project can only happen when the expected tolls are acceptable to all parties: shippers, pipeline owners and the regulators. These tolls will reflect appropriate risk sharing between shippers and pipeline owners. The known resource availability, proven deliverability, and excellent shipper credit rating all serve to reduce the risks for prospective Alaska gas pipeline owners. Project risks such as cost overruns and schedule delays must still be better estimated and appropriately allocated between the parties. How these risks are allocated will be a key factor in determining the ultimate pipeline toll.

And third, both the State of Alaska and pipeline shippers will benefit if the lowest cost pipeline is the one that actually is built. FERC's and NEB's procedures are designed to ensure that only prudently incurred costs are included in a pipeline tariff, thereby protecting consumers. As I mentioned earlier, pipeline tolls and other tariff terms and conditions are established under well established principles that allow recovery of just and reasonable costs, by both the FERC in the US and the NEB in Canada. Whichever group or entity ultimately builds an Alaska natural gas pipeline, they will have to pursue the same regulatory process and be subjected to the same scrutiny.

MR. BENHAM turned attention to the document entitled "U.S. Gas Pipelines - Key Points", which he provided to the committees. He specified that the aforementioned document provides generic points that aren't specific to the Alaska pipeline. He suggested that the committees might want to focus on Part E, entitled "Key Risk Factors for New Pipeline Projects;". He noted that these factors can vary with the project and may be more or less important depending upon the project. Mr. Benham highlighted the risk for the pipeline, the shippers, and the producers, which is delineated in the above-mentioned document.

CHAIR SAMUELS asked if one could contract half of the volume and the other half would be the common carriage.

MR. BENHAM replied no. He explained that under the U.S. system there will be a series of parties that will have firm capacity in a pipeline. He posed a scenario in which the parties have firm capacity in the pipeline and the entire capacity is contracted out to the firm shippers. In the aforementioned situation, the firm shippers have a right to utilize all the capacity for which it has contracted and no subsequent shipper can enter and take that capacity. However, there may be situations in which not all of the capacity is contracted or all of the contracted capacity isn't being used. In such situations there will be opportunities for other shippers to make firm contracts for unsubscribed capacity or to come in and transport on an interruptible basis. Mr. Benham clarified that in US pipelines there isn't a hybrid design, that is there isn't a situation in which someone can reduce the capacity rights an existing shipper has on a line.

SENATOR BUNDE asked if Mr. Benham has any experience with state or any other governmental equity in pipelines.

MR. BENHAM replied no.

REPRESENTATIVE GARA returned to page 2 of Mr. Benham's written testimony, which specifies that the commercial risks outweigh the potential rewards of constructing a pipeline. How would passage of the House's version of the loan guarantee impact [the Sponsor Group's] view of the feasibility of a pipeline. Furthermore, if the state sought a 10 percent equity interest, would the project be viewed as more feasible from [the Sponsor Group].

MR. BENHAM reiterated that he isn't familiar with the specifics of the Alaska arrangement, and therefore he deferred to Mr. McDowell.

DAVE McDOWELL, Director, External Affairs - Gas, British Petroleum (BP), responded that federal legislation and fiscal incentives would reduce risk for projects such as this. However, federal guarantee loans alone wouldn't be enough to reduce risk and result in moving forward to the next phase. Mr. McDowell indicated that U.S. federal legislation, a State of Alaska fiscal contract, a clear and efficient green field regulatory process in Canada, and cost reduction are all very important. Mr. McDowell, in response to Representative Gara's second question, said that he is ill equipped to speculate on the matter.

SENATOR BUNDE remarked, "I don't mind being pioneers, but somewhere in this world someone's got a equity in a pipeline that we should learn from."

SENATOR DYSON returned to his earlier question regarding the location of the pipeline and recalled that [earlier testimony] has related that the \$11.6 million will build a pipeline from Prudhoe Bay to the Alberta hub rather than to the border.

SENATOR OGAN posed a situation in which an explorer doesn't have gas to offer during an open season, and asked if a producer-owned pipeline could open a season that's advantageous while others might not even have gas to nominate to the pipeline.

MR. BENHAM noted that such situations are faced in the U.S. He explained that generally a pipeline owner in a situation in which there may be an opportunity to increase through-put in the line looks

favorably on that. If a shipper is a latecomer to the process, that shipper can gain access by approaching an existing shipper to determine whether there is any excess capacity. In fact, he recalled that the FERC and the NEB have programs that allow existing shippers the ability to release capacity to a new shipper. However, Mr. Benham highlighted that the FERC doesn't have any inherent authority to require a pipeline to expand. Historically, the economic incentives to expand have been sufficient to ensure that all shippers who want and need capacity have it available to them. The FERC and the NEB would always review whether there is concern with regard to discrimination. Furthermore, there is the Essential Utilities doctrine that would presumably come into play in such a situation. Mr. Benham opined that there are various legal and commercial avenues that would be present to allow recourse to those markets.

SENATOR OGAN characterized the situation in Alaska as unique because he believes that the capacity could be filled with existing supplies for quite a few years, and therefore potentially shut out explorers and smaller independents from exploration in the Foothills and other areas. However, the state has an interest in those areas being developed. He indicated the need to keep exploring even with the capacity that already exists. Senator Ogan noted that he wasn't completely comfortable that FERC will have the same "alignments" the state would and be as concerned.

MR. BENHAM provided the following analogy with the offshore pipelines when the sizing occurs to accommodate the expected gas production. The sizing typically isn't restricted to the shippers who are ready to produce and ship on the line at the time the line is to go into service. With the offshore pipelines, a pipeline owner will generally review the resource capability in the area to be served by that line. Often, the line will be sized to meet the needs of those ready, willing, and able to contract at the time of the initiation of operation as well as the potential for future throughput. Therefore, he suggested that a good model with regard to how [Alaska's gas pipeline] might evolve would be the pipeline network in the Gulf of Mexico.

MR. McDOWELL reminded the committees that as part of the \$125 million joint feasibility study, the large diameter 52 inch line [with capacity of] 4.5 bcf a day is designed to be expandable up to 5.5 bcf a day with the addition of compression. "Certainly the line we're contemplating would be expandable as well, and it really is in everybody's interest; more volumes mean lower unit costs. For expansions it makes sense," he said.

SENATOR OGAN inquired as to who pays for expansion.

MR. BENHAM answered that if the expansion is one that's viewed as beneficial to all the customers in the system, the FERC, in the past, has allowed those costs to be rolled into the existing costs of the system. Therefore, the rate increment for the new shipper is actually somewhat dampened because of the spreading of the costs across the existing system. The FERC has indicated that when the incremental cost of the expansion is less than 5 percent, it's automatically rolled into the existing costs of the system. However, if the incremental cost of the expansion is more than 5 percent, a test reviewing whether the expansion is beneficial to all the customers in the system occurs. If the aforementioned test isn't met, the FERC may determine that incremental pricing is appropriate. Under incremental pricing, the new shippers would be responsible for the incremental costs of the expansion or addition to the system. The FERC's policy on [expansion] is somewhat flexible in that parties are allowed to show whether incremental cost [increases] or a rolled in cost [increase] is better. He explained that under the incremental concept, [FERC] doesn't want the existing shippers to bear the cost of service that benefits only the new shippers. To the extent that the expansion of the system includes benefits that go beyond the services provided to the new shippers, there is the potential for those costs to be rolled into [the existing charges]. The impact on the new shipper will be less than it would be if the new facility was priced on an incremental basis.