

## **Stranded Gas Hearings**

(0409011000 Minutes)

### **Financing An Ownership Interest in a Gas Pipeline: Options Available to the State**

*Jeff Brown, Managing Director, Merrill Lynch, September 1, 2004.*

JEFF BROWN, Managing Director, Merrill Lynch, turned attention to his written remarks that were included in the committee packet. He paraphrased from the following written testimony [original punctuation provided]:

- Alaska is a Petro-State with stranded gas. Forget comparisons to other U.S. states. Look at "Petro-States" like Qatar or Indonesia.
- Government stranded gas owners sometimes take a measured amount of risk to jump start desirable projects.
- Buying 100% of the gas at a fixed price and either (i) committing to ship-or-pay contracts for 100% (on someone else's pipeline) or (ii) financing 100% of pipeline would be one option—but it involves a lot of risk that would have to be carefully managed.
- Committing to financing an amount of pipeline capacity that corresponds to the State's working interest in the gas seems manageable from a credit and economic perspective.
- There are lots of different ownership structures and different kinds of bonds that can be used. Big differences revolve around tax-exemption and ability to shield the State from risk.
- There are many ways to limit worst possible losses from such an investment, while preserving the fiscal upside.

MR. BROWN said that he would go through the risks and rewards from the option of the state owning all of the pipeline to owning a portion of the pipeline as well as the various structures by which the aforementioned could occur. He noted that he isn't going to provide any legal conclusions, but rather would address [financing] and manageability of economic risks. He then turned to the topic of what other state's have done and paraphrased from the following written testimony [original punctuation provided]:

- No State in the Lower 48 has sold billions of dollars of debt to buy/build an international gas pipeline
- But U.S. States have not shied away from big infrastructure projects when necessary:
- Wyoming Natural Gas Pipeline Authority--\$1 billion bond authorization to increase gas transmission out of the Rockies (ML is lead manager for this program, and its Executive Director will testify next)
- New York State started Long Island Power Authority to run electric operations in Long Island when LILCO was going bankrupt (about \$8 billion of debt)
- California Department of Water Resources has spent \$5 billion to transmit water from the wet north to the desert south
- At the end of the day no other state remotely resembles Alaska

MR. BROWN addressed the difference between oil and stranded gas by paraphrasing from the following written testimony [original punctuation provided]:

- Every nation or province that has oil and gas extracts taxes and royalties. Typically a producer pays for 100% of the capital to extract the resource and the Petro-State puts in zero capital.
- Other than in the U.S. and other countries with big domestic pipeline systems, gas becomes stranded because of the enormous fixed, inflexible cost of building an international pipeline or LNG facilities. Producers are reluctant to take all of the risk when they only own part of the gas (i.e., gross production less royalty and tax).
- Petro-States end up investing capital in the pipeline or LNG because otherwise they get zero

value for their resource.

MR. BROWN turned to the West Natuna Pipeline and paraphrased from the following written testimony [original punctuation provided]:

- Pertamina (Indonesia's oil company) leased blocks of West Natuna to Conoco, Gulf Indonesia and Premier.
- The three production-sharing contractors, acting as the West Natuna Group, partnered with Pertamina (Indonesian state oil company) to build [the] 656 km West Natuna Transportation System, with ultimate capacity of 1 BCFD
- The total pipeline cost was reported to be \$1.2-\$1.5 billion. Reportedly, the Government of Indonesia's investment was \$400 million relating to PGN (state gas company) construction of pipeline infrastructure from Gresik to Singapore.

MR. BROWN highlighted that as a consequence of obtaining the [West Natuna Pipeline], the gas is shipped directly into Singapore, which uses the gas to fuel industry needs and power generation in Singapore. Therefore, the gas was near valueless, except [Indonesia] created a long-term pipeline that enabled [Indonesia] to enter into long-term, fixed-volume contracts with Singapore. However, Indonesia put up the money to "unstrand" its gas. A similar situation exists in the Middle East with Qatar, which has a large field. The production in Qatar was handed off to the Ras Laffan company. The Qatar General Petroleum Corporation (QGPC) put up approximately 66.5 percent of the equity, and ExxonMobil Corporation put up the bulk of the remaining equity. Together that entity borrowed money to build a couple of LNG [liquefied natural gas] trains to "squish the gas down into a product." That entity entered into long-term contracts for volume with the Japanese and the Koreans.

MR. BROWN drew attention to page 7 of his written testimony and referred to the box specifying "KOREA & JAPAN". Japan and Korea committed to volumes rather than price, he reiterated. In this arrangement, the price, commonly referred to as the "Japan crude cocktail," is [approximately] the price of oil divided by six per thousand cubic feet (mcf). Therefore, the price in this arrangement bounces around. If oil prices go below \$12, approximately \$2 [per] mcf, the transportation and manufacturing process is below the breakeven point. Mr. Brown clarified: "Not only did the government step up and put in money, but ... put money up as equity in this project where they took commodity risk; in other words, their investment would be valueless if the price of oil stayed at \$9 a barrel for five years."

MR. BROWN pointed out that both the Indonesia and Qatar example raise the following questions: How deep are your pockets and how big is the risk? In discussing the aforementioned issues he paraphrased from the following written testimony [original punctuation provided]:

- How deep are your pockets?
- The total State unrestricted revenues are about \$2 billion per year
- Rating agencies project "total available for appropriation" of \$3.5 billion in 2010
- Alaska's pockets get deeper if gas successfully commercialized

MR. BROWN explained that the Department of Revenue's bond book discusses state debt service and capacity being related to a percentage of unrestricted revenues. The bond book says that it has typically bounced around 5-7 percent. Therefore, if the revenues are doubled from a successful gas commercialization, the state's pockets get deeper. He then turned to the issue regarding the size of the risk and paraphrased from the following written testimony [original punctuation provided]:

- How big is the risk? That depends on how big of a share you take of the whole enterprise and for any particular share:
- How much financing risk you lay off on other participants through non-recourse debt
- How much construction risk is laid off through pre-engineering, fixed price contracts, insurance, completion guarantees, etc.

- How much commodity price risk you lay off on other participants through hedging, fixed price sales contracts, variable gas purchase contracts, etc.

MR. BROWN specified that the total risk of something that looked really large and risky could be tempered through the financing, construction, and commodity price. He then posed an example in which the state takes all of the risk in a situation in which there is a really large amount of risk. He clarified that the following is merely an analysis to give the committees an idea, not a proposal. He reviewed the following from his written testimony [original punctuation provided]:

- Pretend producers would sell gas to State for \$1 (fixed price) at North Slope. You sign a 20 year Gas Purchase Agreement with them
- Pretend a well-reputed pipeline company will build a pipeline, with \$2 tariff. You sign a 20 year Ship-or-Pay Contract
- Pretend you know for sure that over the next two decades there will be: 15 years when the price in Chicago will be \$6, 5 years when the price will be \$1.50. You just don't know in advance which years are going to be the ugly years. You don't hedge and all your contracts are for spot Chicago prices
- Two bad years in a row (i.e., at \$1.50 per MCF) loses you \$4.4 billion.

MR. BROWN concluded that either the state would have to be more careful with regard to all the business deals along the line or the state would need to consider doing something smaller. With regard to doing something smaller, he explained that the state could put up capital corresponding to the amount of the state's present royalty interest in the North Slope gas. He provided the specifics of a smaller scale investment as follows [original punctuation provided with some formatting changes]:

- State Royalty Interest in gas produced on North Slope is now approximately 1/8th. Equitable argument for putting up 1/8th of the capital, if deal won't happen otherwise. If the project costs \$24 billion, 1/8th is \$3 billion.
- You could take your royalty as Royalty-in-Value or Royalty-in Kind. We'll discuss later that RIK makes issuing tax-exempt bonds easier.
- If you put up \$3 billion (which gains you market access for 500 million cf/d of State gas):
- a lot (maybe 80%) could be in Revenue Bonds (of a new State Agency or AKRR), where the State is not on the hook
- 20% remaining (\$600 million) as State-supported reimbursable debt (this means experts forecast that project revenues will almost always carry the debt, but the State is directly on the hook, in some fashion if things go awry for a long period)

MR. BROWN turned to the question of how large the \$600 million would be in the context of the overall picture. [The following information can be viewed in a chart on page 11 of Mr. Brown's written testimony.] Currently, there is about \$359 [million] of general obligation (GO) that is directly supported by the state, excluding things such as GARVEE [Grant Anticipation Revenue Vehicles] bonds. Additionally, the costs for school reimbursement and state leases brings the total to about \$1 billion. The state is contingently on the hook for bonds issued by the bond bank or the Alaska Energy Authority (AEA) or the Student Loan Authority, and the total debt reaches about \$2 billion. Therefore, adding the \$600 million would amount to approximately a 30 percent increase, which, he opined, isn't a ridiculously large increase in the total amount of securities for which the state is directly on the hook.

MR. BROWN referred to page 12 of his written testimony entitled "Drilling Down to Details on a 1/8th Investment Example," and to page 13 which pertained to possible business structures. He posed the following question: "If you only owned part of the pipeline, how would you do it?" Clearly it would be "dumb," he opined, to have two pipelines running in the same trench. In a municipal and private partnership, a typical concept is the undivided interest structure, which has been described metaphorically as a pipe within a pipe. The undivided interest structure is also known as a tenants-in-common structure, under which the state would own 1/8th of every molecule of the entire system. The

undivided interest structure is common and provides a physical asset that can be mortgaged, moved around, and sold. Mr. Brown noted that there is also the option of a limited liability corporation (LLC) in which the state would contribute into the pipeline corporation an amount of money that purchases the state's particular interest. He explained that the aforementioned option is more like being a partner or stockholder, in the entire venture, who raises the money externally.

MR. BROWN turned to tax-exempt bonds. One of the reasons the state may want to be involved is if the state can issue bonds at 5 percent, for example, and the typical Federal Energy Regulatory Commission (FERC) regulated pipeline receives a "weight average cost of capital" of 10 percent. The state's money would be much cheaper, and if the state can finance with cheap debt the portion of the capacity that carries the state's gas, more money would return to the treasury. He specified, "The money you get is price in Chicago minus transportation cost," and so if the transportation costs are cheap due to cheap capital, more money would be "net backed" to the state. He provided the committee with a summary regarding what makes bonds tax-exempt under federal law by paraphrasing from his written remarks [original punctuation provided]:

- At a bare minimum, to issue tax-exempt bonds the Issuer has to be a government entity. A governmental entity would need to own the pipe and use the pipe for gas the State owns (RIK gas). That is, under ordinary circumstances, you couldn't finance 100% of the pipeline tax-exempt and then have the three producers be the sole shippers under long-term ship-or-pay contracts

CHAIR SAMUELS asked if the amount of the tax-exempt bond would only be in the amount of the gas [the state] takes, or in [the state's] ownership in the pipeline.

MR. BROWN explained that the amount of the tax-exempt bond would be the amount that [the state] uses. He highlighted that for utility properties such as gas pipelines, the IRS has many rules with regard to what is permissible and not permissible when a government owns utility property. The basic guidance provided by the IRS is that an entity cannot sign "ship or pay" contracts for the usage of the pipeline the entity owns. Furthermore, when the physical gas arrives in Chicago, the transportation costs are already imbedded in the price and thus the IRS doesn't want an entity to sign a 20-year fixed-price contract with an electric utility in Chicago. The aforementioned is viewed as another way of paying for the pipeline capacity. He clarified that [the state] can't do a long-term "ship or pay" contract for the tax-exempt bond portion; [the state] would also be limited to "sub three years" contracts with nongovernmental entities. He noted that [the state] can do all it wants with governments and, for as long is desired, [the state] can do what it wants with industrial customers.

MR. BROWN emphasized that the state will have to review the contracts for either shipment or purchase to determine whether the state can go tax-exempt. He informed the committee that included in the now-stalled energy bill in Congress is a provision for \$18 billion in federal guaranteed debt. If the state otherwise qualified for municipal debt, but a federal guarantee was placed on top of the bonds, the state couldn't go tax-exempt with those. The aforementioned isn't necessarily a bad problem because there really isn't much difference between where the State of Alaska "tax-exempt AA" finances and where financing occurs with a direct government guarantee from the United States on a tax-free basis. The aforementioned is even truer compared to a tax-exempt revenue bond, which would be fairly expensive because of the risk. However, if a federal guarantee is placed on it, it becomes significantly lower. He pointed out that there is a provision in the tax code that seems to allow the Alaska Railroad Corporation to issue tax-exempt bonds without many of the aforementioned provisions applying.

CHAIR SAMUELS posed a situation in which the royalty in-value (RIV) is taken, and asked if that eliminates the tax-exempt status.

MR. BROWN explained that at that point, the entity that owns the gas at the wellhead is ExxonMobil Corporation or BP Phillips Alaska, Inc., and they are shipping their gas through the pipes, and therefore there is no good reason to call it a tax-exempt bond. He clarified that the aforementioned is what he has been advised thus far.

MR. BROWN, turning to page 15 of his written testimony, spoke to the types of bonds available under Alaska law. He specified that the GO bonds and a Certificate of Participation (COP) are equivalent to the equity investment that Qatar and Indonesia make in their pipelines. Theoretically, the aforementioned would be accomplished through the proceeds of state GO bonds or appropriation debt, such as the state currently uses to fund the seafood and food safety laboratory. Both the GO bonds and the appropriation debt have different requirements under state law. One of the main requirements for a GO bond is that it must be a capital improvement, which is subject to much interpretation in Alaska. The key is that GO bonds would be the lowest cost at about 4.25 percent tax-exempt.

MR. BROWN then moved on to revenue bonds of the pipeline project for which the state isn't on the hook, which he estimated to be approximately 5.25 percent today. For the project portion, the state could issue revenue bonds with a "moral" obligation, such as the state currently does with the bond bank. Using revenue bonds with a moral obligation means that the bondholder has two sources of money as follows: the source of money from the basic revenues produced by the project, and a promise from the governor that if the reserve funds are depleted, the governor would ask the legislature to fill the reserve fund. Although the aforementioned is a standard mechanism in Alaska, it increases the ratings and lowers the cost.

MR. BROWN reminded the committee of the earlier-mentioned example of the LNG project in Qatar for which, depending on the variable prices for oil, one would either break even or not. The same would apply for this project, he said. He then turned to page 16 of his written testimony, which read [original punctuation provided with some formatting changes]:

- 4.1 BCFD delivered Chicago at 1080 Btu/cf
- Total Project to Chicago = \$24 Billion (inflated plus capitalized interest). To AECO would be less.
- State Share = 1/8th or \$3 billion
- Finance 80% with Revenue Bonds= \$2.4 billion
- Of that \$2.4 billion, \$2.25 billion could be Federal Guaranteed (being our share of \$18 billion max as was provided in last version of Energy Bill)
- So another \$150mm would be non-Guaranteed Tax-Exempt Revenue Bonds
- The balance of 20%=\$600mm might be:
- General Obligation Bonds (subject to various restrictions), or
- Appropriation debt similar to C.O.P.'s

MR. BROWN, turning to page 17 of his written testimony, reviewed the numbers for a bad year. He highlighted that the pie chart exemplifies the debt structure, which is a total of \$3 billion. The flow chart on the right of page 17 begins based on the assumption of a horrid price - \$1.25 for gas in Chicago - in order to create insufficient funds. The DNR would receive \$1.25 in mcf multiplied by the state's share, which produces \$253 million. After paying the operations costs, the revenue debt, and the federal guaranteed revenue debt, only \$18 million is in the treasury. He pointed out that the debt service on appropriation debt would be about \$47 million. Therefore, from a commercial point of view, the state will have to find money from other sources in order to cover the appropriation debt. He acknowledged that technically, the money is all going into the general fund (GF) and commingling with other things.

MR. BROWN moved on to page 18 of his written testimony, which reviews a good year in which excess money from selling gas is large and available for other programs. He noted that these figures use the prevailing gas price of \$5.00. At that price, the state would receive about \$1 billion in revenues and the same tariffs as in the bad years would need to be paid. After paying for transportation expenses [revenue debt and the federal guarantee], \$47 million has to be paid out to cover the appropriation debt. Therefore, \$728 million is free and clear and available to expend on other things. Mr. Brown said, "Another way to say it is you could've actually just gotten rid of all the debt in that year, all that appropriation debt."

MR. BROWN concluded by relating that Alaska is in a position analogous to other countries that have

stranded gas. Furthermore, there is a maximum ceiling with regard to the amount of risk that can be taken that's not laid off in terms of project financing. Moreover, it's clear that there are many alternatives by which the state could reasonably finance an investment such as this. He noted that the central forecast case is somewhere around the \$3.50 price point in Chicago for the time period of 2012. Mr. Brown said, "To me, the good end ... of the distribution of prices looks pretty lovely and the bad end does not look to me like it would sink you in a year. ... So, to me, as a finance guy, I see nothing wrong with continuing to explore this."

SENATOR ELTON related his understanding that the state will incur debt costs prior to operations and the potential of profit. Therefore, he requested that Mr. Brown discuss the aforementioned gap and how much it will take to carry the state until operations begin and profits may or may not materialize.

MR. BROWN answered that's probably a matter that can be negotiated between the state and the producers. Mr. Brown recalled that in the public and private project financings that he has worked on, the private entity often has more access to the early capital.

SENATOR SEEKINS referred to Mr. Brown's scenario in which the state would have actual ownership interest in the physical pipeline. Senator Seekins noted that the FERC will allow up to a 14 percent return on the investment in the tariff and he surmised that the state would share in that return. He asked if that has been "netted out" in these numbers.

MR. BROWN clarified that the numbers he has provided are actual cash operating cost numbers not derived from a FERC model. Therefore, under a FERC model, presumably there will be one tariff that's charged by the entire the pipeline. He noted that his scenario doesn't include a typical FERC 10 percent "weight average cost to capital" return. If it was built into the numbers, the tariff of \$235 million would be significantly larger, possibly \$400 million. Furthermore, the state pipeline agent ... [tape changed mid sentence].

REPRESENTATIVE GARA related that during the legislative session he spoke with one of the company officials, who indicated that a 10 percent state interest in the project would make the project more economic for the company. Representative Gara asked if, since Mr. Brown is assuming a 12 percent state interest, the committees could surmise that there is some analysis that a 10-12 percent state interest will make the project more viable for the private entities owning the remainder of the project. Representative Gara also asked if Mr. Brown had any concerns with regard to engaging this project later in time, keeping in mind the possibility of a rising interest rate environment.

MR. BROWN addressed the latter question, and informed the committees that when he advises the Department of Revenue, various interest rate scenarios are run. The ultimate results are sensitive to interest rates, but the main swing factor is the price of gas and the competition from LNG during the year 2012. "The gas price swing factor, in terms of breakevens, is sort of an 'order of magnitude worse than interest rate' within ... the realm of averages [for] the last 10 years," he explained. In terms of the state's 1/8th interest and whether it would make the project viable when it wouldn't be otherwise, Mr. Brown viewed that as a negotiating province of the state that he shouldn't discuss.

SENATOR HOFFMAN directed attention to page 9 of Mr. Brown's written testimony, and related his understanding that the state will not take all the risk in this project. However, he questioned why there has only been review of one scenario at the low end of the market, \$1.50. He inquired as to why there wasn't review of \$3.50 and \$5.00 in order to obtain a feel of the spread between a "\$4.3 loss" and potential profits. Senator Hoffman then turned to the energy bill [at the congressional level] and the \$18 billion federal guaranteed debt, and asked if there are other, more advantageous avenues the state can request the congressional delegation to consider. With regard to the timing of this in relation to the price of steel and interest rates, Senator Hoffman opined that it seems the near future would be best for this project.

MR. BROWN, with regard to the issue of timing, confirmed that the price of steel, like interest rates, is a large driver of the total capital costs. Therefore, starting the project sooner would be significantly better

than later. However, one doesn't really know what will happen to interest rates and steel prices in the next five years. Before the state signed any agreement, it would want to perform "sensitivities" that incorporated large steel price increases and high interest rates. With regard to the energy bill [at the congressional level], the project guarantee is really helpful. There were hardly any specifics on the \$18 billion debt guarantee; it merely said that the secretary of treasury will write some regulations. Mr. Brown informed the committees that from the work he has done on programs that have involved federal guarantees and federal loans, he has gathered that the more details specified, the less ability a subsequent secretary of treasury would have to "gut" a provision. He agreed that there are many things that Alaska's congressional delegation could do to help the state in this venture.

MR. BROWN, in response to a question of why he used the scenario [with a very large degree of risk], explained that if one is taking really large risks, the issue isn't in regard to how much money can be made in a good year; rather, it's "how long you can stay at the table." He further explained, "It's the absolute amount of money that you're at risk for if you have a couple of bad years, and so that's what I was trying to illustrate."

CHAIR SAMUELS asked whether partnering with producers will result in a conflict of interest.

MR. BROWN related his understanding that the state has two hats, one of which collects royalties from around the state; the state is also in a loose partnership with the entities due to its ownership for the physical capacity and running of the pipeline. However, the aforementioned doesn't seem to be at odds with the goal of extracting all the gas from the land from every other field within a gathering line distance of this particular line. He indicated that he is not concerned about a potential conflict of interest.