

## Stranded Gas Hearings (0409011400 Minutes)

### **Alaska Gas Pipeline – A Window of Opportunity?**

*Tony Palmer, Vice President, Alaska Business Development, TransCanada, September 1, 2004.*

TONY PALMER, Vice President, Alaska Business Development, TransCanada Corporation, began by reviewing gas prices. He informed the committee that the long-term forecasts of NYMEX for natural gas is in the \$3.00-\$6.00 range and most forecasts converge near \$4.00 after the current price spike subsides. He then turned attention to a graph on page 3 of his presentation, which is entitled "Comparison of Recent NYMEX Gas Price Forecasts." The graph provides forecasts from the NPC Balanced Future, the NPC Reactive Path, TransCanada, DOE AOE 2004, and six consultants. Although he didn't believe any party would say that the prices can never go outside the \$3.00-\$6.00 range, he said he would agree that the price would generally converge within that band. As the graph illustrates, the majority of the forecasts are in the \$4.00 range in 2002 dollars.

MR. PALMER said that gas demand continues to grow, although current high prices are causing some demand loss, primarily in the industrial market. The expectation for long-term net growth continues to be more than 1 percent, and this is significantly influenced by power demand. He noted that the US and Canada demand growth from 2003-2015 is in the 15 bcf a day range. The graph on page 5 of the presentation provides a visual indication of various forecasts. The graph illustrates that demand has historically been in the 70 bcf a day range for the last five or so years, and a common forecast projects growth to 80-85 bcf a day in 2015.

MR. PALMER focused on the Western Canada gas demand, which is illustrated in a chart on page 6 of the presentation. In 2003, the Western Canada demand was at 4.4 bcf a day. Over the next decade, the primary sources of new demand growth will be electric generation, mineable oil sands, and in situ heavy oil. There are modest increases for residential, commercial, and other industrial demands. Mr. Palmer turned to oil sands gas demand, which is a source of large demand growth. From the graph on page 7 of his presentation, he remarked, one can see that [TransCanada] has modified its gas demand in the oil sands. With the use of existing technology, current growth would range from volumes in 2003 of just above .5 bcf a day to 2.5 bcf a day without technological improvements. He noted that there are initiatives by a number of oil sands proponents to use the actual bitumen as a fuel source by upgrading it. The graph also illustrates TransCanada's change in forecast from 2003, which is significantly moderated from a year ago although it's still growth.

MR. PALMER moved on to the North American gas supply, and pointed out that the supply/demand is precariously balanced. Furthermore, new supply sources are required, but the only growth basin TransCanada sees are in the Rockies, although there is some modest growth on the East Coast. Moreover, existing LNG terminals are operational again and are planning expansions. In fact, there is either a plan or approval for expansion for about 2.3 bcf a day at the existing terminals, which have capacity of about 2.5 bcf a day. He noted that the MacKenzie gas is on track for 2009 in-service. Mr. Palmer directed attention to the Lower 48 dry production forecast comparison. Over the last decade, the Lower 48 supply has been in the 50 bcf a day range. Going forward, the US Department of Energy EIA forecast is very optimistic in its forecast of growth toward 57 bcf a day. The aforementioned forecast is very different from most every other forecast.

MR. PALMER directed attention to page 10 of his presentation, entitled "WCSB [Western Canada Sedimentary Basin] Production Forecast." The graph illustrates TransCanada's predicted decline from 16.9 bcf a day down to 16.3 bcf a day over the next decade. Basically, the production would experience a modest decline, with some replacement of conventional gas with unconventional gas - coal bed methane. Page 11 of the presentation illustrates why the Western Canadian supply may be flattening over the past decade in the 250-275 tcf range for most every forecaster. Page 12 of the presentation specifies TransCanada's view of the supply change. The green section of the graph illustrates that if one takes the WCSB, the Lower 48, East Coast, and existing LNG terminals plus expansions, it is fairly steady in terms

of overall supply to the market. The aforementioned combination will be able to supply in the 70 bcf a day range and modestly decline beyond the year 2015. The aforementioned leaves an opportunity for new LNG and northern gas.

MR. PALMER continued with page 13 of his presentation, which reviews global LNG. Global LNG could fulfill 100 percent of the supply gap. Clearly, MacKenzie and Alaska gas are competitors for that market opportunity as is other domestic gas that was mentioned earlier. The existing [LNG] terminals have about 2.5 bcf a day of existing capacity and expansions in the 2.0 bcf a day range have been announced. Furthermore, there are proposed or approved projects for more than 30 bcf a day. TransCanada believes that those projects have a fixed cost structure comparable to Alaska gas, but they have scale advantages in that these [LNG projects] can be built in smaller modules than the Alaska project. The modules for these [LNG projects] can be 0.5-1.0 bcf a day whereas an economic increment for Alaska gas is nearer 4-4.5 bcf a day. Mr. Palmer informed the committees that today, those facilities need liquefaction facilities in the producing country, [as well as] ships and re-gasification.

MR. PALMER continued:

Those issues are being resolved, slowly - some people would say - but in our view, as more and more projects get approved, project four, five, and six will be easier than [projects] one, two, [and] three. The large stranded gas reserves available worldwide: you've heard representations from others as to ... [the] magnitudes of those volumes available to the market, and they have strong support of their home or host governments. To show you a forecast - on page 14 - [is] a representation of a number of forecasters as to the actual magnitude of LNG into the marketplace.

I would point [out] to you that the black line here is the [U.S.] Department of Energy - they have just over 8 bcf a day of new LNG, and I believe they have only 8 bcf a day ... because they have a very optimistic Lower 48 market. They have balanced the market, with the remainder being LNG. You can see that the balance future for the NPC [National Petroleum Council] also has both "Mackenzie" and Alaska in this timeframe, and they have in the order of 9 bcf a day. Other parties have in the order of 10 to 12 bcf a day of LNG in their forecast.

The next slide, which is a ... [Federal Energy Regulatory Commission (FERC)] map published in July just indicating to you ... [that] at that time, there were 44 projects proposed or approved in the Lower 48 - that's in addition to the existing terminals with approved expansions. About 5 bcf a day, today, has received approval from either the [U.S.] Coast Guard or the FERC. ... [This is] just a representation of the compensation in effect in the LNG market and for the marketplace.

And to wrap up, ... we believe the U.S. and Canada market opportunities [are] in the 10 to 15 bcf a day range for new gas sources through 2015. You will see [that] some parties may have it slightly below 10 and some parties will have it slightly below 15. And ... if I were to exclude the U.S. Department of Energy, most people would be in the 15 bcf a day range - that's the market opportunity if gas prices are in the \$4 range. Clearly, if you have prices higher or lower, you change that market opportunity. "Mackenzie" gas appears on track for about 1 bcf a day by 2009.

MR. PALMER went on to say:

As I said earlier, the new LNG re-gas sites ... have had approval in the order of 5-plus bcf a day by the FERC and the U.S. Coast Guard, and that leaves, in our view, a competition between the Alaska gas pipeline in the order of [4.5] bcf a day and 25 bcf a day of additional proposed global LNG projects. Those projects, in our view, will compete for the remainder of the supply gap, and if they over or under supply the market in total, they will affect market prices, and that will affect demand overall. ...

That's clearly what will happen. We believe that there will be a "first mover" advantage for those projects able to get a green light in the near term, and once those projects are in service, they are long service projects; they could be expected to supply gas into the market place for 20 or 30 or more years, just as "Alberta gas" has served the market for 50 years and [Lower 48] gas has

served the market, now, in the order of 75 years. These are long service projects with good gas supply behind them. Mr. Chairman, that's my presentation, thank you for this opportunity. SENATOR SEEKINS surmised, then, that unless Alaska gas is visible to the marketplace in the near future, it could never be viable in the marketplace. In other words, the LNG expansion will fill the demand such that Alaska gas is no longer needed.

MR. PALMER expressed reluctance about characterizing the situation in that manner. He added:  
What I'm saying is that if we're seeking to hit the market for this project by 2015, ... I believe there's a competition between this gas and global LNG. And clearly those projects are competing to attract market and to obtain sighting and to complete their projects [just] as Alaska is. And I believe that the parties that are approved first have an advantage. I'm not suggesting to you that they are the only ones that can be constructed, not at all. But clearly they have an advantage if they're approved by their regulators [and] ... project proponents and they're going forward. They, as you've heard other people represent to you, may affect the way other people will play in the marketplace.

REPRESENTATIVE GARA asked:  
At what point in the Stranded Gas Act application process do you have to have an agreement from the producers to actually sell the gas to you so you can decide to build the pipeline? ... At what point can you not go any further in deciding whether or not you're going to build a pipeline? By when do you need to know, in the process, that you'll have gas made available?

MR. PALMER replied:  
TransCanada, at this point in the stranded gas negotiations, is negotiating in effect what level of taxation ... the government of Alaska will apply to a pipeline project. So we can continue with that, and are continuing to do that. But we need to have a customer, we need to have a shipper for this project, to make it proceed. And we'll continue to try to attract the North Slope producers as well as other (indisc.) producers to become our customer, or other parties. And we will reach a point where we will not be able to proceed any further. We are also, as you're aware, proceeding to try to obtain the state right of way; that's also meaningful work that we are going to continue with because we think that that will accelerate the project when the commercial deal is ready to go.

We've also said publicly ... that if there's a commercial deal [that] can come together in 2005, we can have a project in service in 2011-2012. But there's about a seven-year timeframe between reaching a commercial deal, and by that I mean [having] ... a customer, and having a project in service. If we do not complete work like the Stranded Gas Act negotiations and the right-of-way negotiations, that would extend that timeframe. I'm contemplating that we would complete that work by 2005, we hope, and be in a position to move forward on a seven-year basis if there are commercial parties ready to sign transportation contracts with us.

SENATOR ELTON asked whether there are things the state can do to encourage producers to ship gas in a pipeline built by TransCanada.

MR. PALMER replied:  
I would say that the state completing its negotiations on [the] stranded gas Act items like what royalty take will be, what you're production take [will be], is a fair thing to ask - completion of that is something that is appropriate that the state can do. The state defining its overall fiscal issues is an appropriate thing for you to do. And the state, in our view, needs to consider how best you ... can encourage the overall project to proceed, and that's everything from encouraging producers to become a customer on the pipeline to deciding if the state has the appetite for any of the risk components you heard testified to by some other participants this morning.

SENATOR ELTON asked: "Are you avoiding reserves tax on purpose?"

MR. PALMER replied: "I wasn't avoiding it on purpose. Clearly ... I don't profess to be an expert in what taxing authority the state of Alaska has, but clearly the state has a number of tools at hand that it can decide to use. You have everything from carrots to sticks, and I don't profess to give you advice as to how best you should do that."

CHAIR SAMUELS asked what the timeframe is of the competitors for capital dollars on LNG projects.

MR. PALMER offered that it might be a five-year timeframe, though the issue is really one of, "Can you ... get [sighting] with access in the Lower 48?" He relayed that such can take a considerable amount of time - perhaps as long as two years for approvals of 5 bcf a day - and this needs to be factored into the timeframe calculations; this project has, if not the longest, then nearly the longest lead time due to the magnitude of the project.