

**ALASKA STATE LEGISLATURE
SENATE RESOURCES STANDING COMMITTEE**

February 6, 2008

3:42 p.m.

MEMBERS PRESENT

Senator Charlie Huggins, Chair
Senator Bert Stedman, Vice Chair
Senator Lyda Green
Senator Lesil McGuire
Senator Gary Stevens
Senator Bill Wielechowski
Senator Thomas Wagoner

MEMBERS ABSENT

All members present

OTHER LEGISLATORS PRESENT

Senator Joe Thomas
Senator Gene Therriault

COMMITTEE CALENDAR

Presentation: TransCanada AGIA Application - Tony Palmer

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

TONY PALMER, Vice President
Alaska Business Development
TransCanada
Calgary, Alberta, Canada

POSITION STATEMENT: Gave presentation on TransCanada's application under the Alaska Gasline Inducement Act (AGIA).

ACTION NARRATIVE

CHAIR CHARLIE HUGGINS called the Senate Resources Standing Committee meeting to order at 3:42:00 PM. Present at the call to order were Senators McGuire, Stedman, Wielechowski, Wagoner, and Chair Huggins. Senators Green and Stevens joined the

meeting shortly thereafter. Also in attendance were Senators Joe Thomas and Gene Therriault.

Presentation: TransCanada AGIA Application - Tony Palmer

CHAIR HUGGINS announced the committee would hear a presentation from TransCanada, which has the only application deemed conforming to date under the Alaska Gasline Inducement Act (AGIA) guidelines. Tony Palmer would speak via teleconference, and Patty Bielawski of Jade North LLC would run the PowerPoint slide show; a hardcopy version was provided. Chair Huggins welcomed Alaskans listening via Gavel to Gavel and noted the AGIA applications could be seen on the state's website.

SENATOR GREEN joined the meeting.

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TONY PALMER, Vice President, Alaska Business Development, TransCanada, introduced himself.

SENATOR STEVENS joined the meeting.

MR. PALMER began with slide 2, showing TransCanada's credentials, with a table and a map illustrating its existing system across Canada and the U.S. He said TransCanada's business primarily is natural gas transmission pipelines. It owns 36,500 miles of pipe. The proposed project is 1,700 miles, about 5 percent of its existing mileage. TransCanada is a large Canadian pipeline company, but it also has one of the largest U.S. interstate pipelines, some 12,000 miles of pipe; 750 miles is proposed for this project. Compression held currently totals some 3.2 million horsepower; initial compression on the proposed pipeline would be about 100,000 horsepower, a small component.

MR. PALMER drew attention to throughput volumes moved daily across North America to market, 15 billion cubic feet a day (Bcfd). Occasionally, the same gas is moved twice, so it actually is about 30 Bcfd, but Mr. Palmer said he'd removed any double counting. The proposed project is hoped to be 4.5 Bcfd, one-third the existing volume; the final volume will be determined in an open season.

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MR. PALMER highlighted projects TransCanada has completed. The company was initiated 50 years ago to build a pipeline from Alberta to Ontario and Quebec across challenging terrain, some 2,300 miles. In the 1990s it completed 7,000 miles of pipeline,

expanding its existing system in Canada and the U.S., completing it on schedule and within 0.6 percent of budget. It is now proceeding with the Keystone oil pipeline, going east from Alberta to about Winnipeg and then south to Illinois and Oklahoma; about 2,150 miles, it will have 1,380 miles of new pipe in the U.S. and a Canadian component that is a conversion of one of TransCanada's original gas pipelines.

MR. PALMER emphasized that TransCanada doesn't own any of the gas it moves across North America. It doesn't propose to own any of the Alaskan gas. It is an independent pipeline company in the business of providing service to its customers that want to transport their gas. This arrangement is used for transporting natural gas across Canada and the U.S. by other pipeline companies as well.

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MR. PALMER turned to slide 3, an example of TransCanada's record of developing a basin, a series of maps of Alberta from 1958 to 2005. Whereas there were 3 customers in 1958 and a couple hundred miles of pipe, now there are more than 300 customers and 15,000 miles of pipe. Gas can be transported into or out of TransCanada's system from most of Alberta, the exceptions being the far northeast corner, which isn't a particularly gas-prone area, and the national parks. He expressed hope that Alaskans want similar growth, to transport the potential 135-235 trillion cubic feet (Tcf) of gas.

MR. PALMER told members TransCanada's growth occurred under an independent pipeline model, with rolled-in tolls. The initial customers in 1958 have grown, and TransCanada now has the original customers plus new ones, both large and small, including customers that reside in Alberta as well as marketers, local distribution companies, and other corporations that want to transport gas across North America.

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MR. PALMER addressed TransCanada's financial capability, slide 4. He said estimated capital expenditures (CAPEX) for this project in 2007 dollars total \$26 billion. Adding an allowance for funds used during construction (AFUDC), along with cost escalation for when the money needs to actually be spent over the next decade, the final cost is \$33 billion.

MR. PALMER noted that during construction TransCanada proposes using the 30 percent equity ratio that the state has allowed as a maximum; that is about \$10 billion. To be competitive, it

will reduce the equity ratio to 25 percent once the line goes into service, which he would discuss later. But the overall equity requirement is about \$10 billion, including AFUDC and cost escalation.

MR. PALMER turned to TransCanada's current net cash flow; he indicate this is shown in 2007 dollars, based on the assumption that its business won't continue to grow over the next 7-10 years, though that isn't hoped to be the case. He compared the current annual cash flow of \$2.3 billion with the actual expenditures of equity expected over the construction period for the project and logistics. He pointed out that only in 2017, as this project goes into service, does it approach the net cash flow of TransCanada.

MR. PALMER noted this assumes TransCanada owns the gas treatment plant (GTP). But it prefers not to. TransCanada believes other parties in Alaska - either the three existing North Slope producers or others - may wish to own that facility. The graphs on slide 4 show how the equity requirement is reduced if a third party owns the GTP. TransCanada has also offered shippers participation in the project equity if they commit threshold volumes in the initial open season; that would reduce TransCanada's equity commitment as well.

MR. PALMER suggested third parties may wish to become equity partners with TransCanada at some point. Also, the slide doesn't identify that the company could always go to the capital market to raise equity, which it did last year when it bought a 10,000-mile U.S. pipeline; TransCanada financed that initially using its internal cash flow and two months later went to the market for capital funding, a normal process in any business.

MR. PALMER summarized that TransCanada is capable of financing the equity for this project; the debt would be third-party funding. The loan guarantee offered by the U.S. government will help in obtaining debt financing and improve the interest rate.

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MR. PALMER discussed slide 5, noting it came straight from TransCanada's AGIA application. It highlights the proposed pipeline route from Prudhoe Bay to the British Columbia border and then continuing on to interconnect with the prebuilt portion in the center of Alberta. About 11 Bcfd of gas moves through TransCanada's Alberta system.

MR. PALMER explained that when parties speak of the Alberta Hub, that is TransCanada's 15,000-mile pipeline system shown a couple of slides ago. "Once you're on that system, you can trade gas for free," he noted. The system's 11 Bcfd is traded five or six times a day, so 60-70 Bcfd is traded financially at the Alberta Hub each day, making it the most liquid hub in North America.

MR. PALMER pointed out that from the Alberta Hub there is access to North American markets coast to coast on TransCanada's existing pipelines. Gas can be moved as far east as Boston and New York, through the Midwest, and to the Pacific Northwest and California. That will be available to Alaskan gas, as it is available to Western Canadian gas today.

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MR. PALMER continued with slide 5, saying TransCanada forecasts that by 2017, when Alaskan gas flows, there'll be spare takeaway capacity on those systems sufficient for the full Alaskan volumes. The current capacity of pipelines leaving Alberta is about 15 Bcfd. In ten years, as a result of relatively flat to declining Western Canadian production, and also because of rising demand in Western Canada, there'll be spare capacity on that system, about a third of the existing capacity.

MR. PALMER told members Canadian exports today are around 9 Bcfd; TransCanada expects that to be reduced by the time Alaskan gas flows, but Canadian exports into the U.S. will continue. Clearly, Alaskan gas is targeted to go to the U.S. Once it enters the Alberta Hub it will be commingled, as happens with all gas in existing Alberta pipelines. There won't be a new market for 4.5 Bcfd of Alaskan gas in Alberta; the growth in Alberta demand will be served by Alberta production.

MR. PALMER said Alaskan gas instead will flow on through to U.S. Lower 48 markets, as always contemplated. TransCanada believes it will move on existing infrastructure, the lowest-cost alternative. A third-party study by the Canadian Energy Research Institute (CERI), recently published, concludes that Alaskan gas will benefit from higher netbacks and lower costs by integrating into the Western Canadian infrastructure, rather than building a new pipeline directly to Chicago or "incrementing" the Alliance Pipeline. He opined that CERI's analysis is publicly available for a fee, saying its conclusion is similar to TransCanada's analysis over the last few years.

MR. PALMER informed members that one-third of the proposed pipeline is in service as prebuild. Constructed to move Western

Canadian gas in advance of the northern section of the project and completed in 1981-1982 under Canada's Northern Pipeline Act, it currently moves about 3 Bcfd.

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SENATOR WAGONER asked about the compressor stations required for 4.3 Bcfd and 5.9 Bcfd.

MR. PALMER replied he didn't have those numbers with him, but they're in TransCanada's application. He recalled there'd be 6 in Canada and said he'd look for the number within Alaska and relay it. There would be a very modest amount of compression, 100,000 horsepower, to move the initial 4.5 Bcfd. The fuel ratio at that level is somewhere in the 2.1-2.3 percent range, very modest. As TransCanada continues to build up the facilities with expansions through 5.9 Bcfd, it would merely be adding compression. There would be no pipeline looping until it got beyond 5.9 Bcfd. He offered to provide the exact number of compressors if requested to do so.

SENATOR WAGONER said the numbers were 6 and 7. He recalled prior testimony suggesting it would take 71 compressor stations.

MR. PALMER assured Senator Wagoner it would take nowhere near 71 compressors to move this much gas through the pipeline TransCanada has designed. He recalled it would be 6 in Canada and perhaps 9-10 in Alaska, maybe 15-20 initially for 4.5 Bcfd. TransCanada has had this design several years, and he'd seen press reports about testimony projecting fuel ratios somewhere in the 8 percent range on the pipeline itself. Mr. Palmer said that clearly is wrong. There is significant fuel at the GTP. For just the pipeline from Prudhoe Bay to Alberta that he'd described, however, it is approximately 2.3 percent fuel for 4.5 Bcfd, a very modest fuel ratio.

CHAIR HUGGINS welcomed Senators Joe Thomas and Gene Therriault, noting they'd been present for some time.

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MR. PALMER turned to the current project schedule, slide 6, which had the following dates: April 2008, AGIA license issued; September 2009, open season complete; June 2010, Federal Energy Regulatory Commission (FERC) pre-filing request; December 2011, FERC filing; August 2013, FERC CPCN; January 2014, project sanction; June 2015, on-site construction; and November 2017, project in service. Mr. Palmer explained that although the date

for obtaining the AGIA license wasn't known, an April date was used; all other dates are triggered by that.

MR. PALMER said there is some flexibility to move it back, day by day, from April. However, this summer's field season is needed to hold to this aggressive schedule. If the AGIA license isn't granted until well into the summer, this field season might be lost. That is significant. Certain things need to be done in summertime in northern climates, and he'd advised parties of this privately as well. It is in the state's hands as to when an application may be recommended and approved for a license; that timing will drive the remainder of the schedule.

MR. PALMER noted if the AGIA license is granted in April, TransCanada has indicated an open season can be completed by September 2009, 18 months later. This is significantly better than AGIA's required 36 months to conclude an open season. Discounting speculation he'd seen in the press that TransCanada is shortcutting that process, he said that isn't the case.

MR. PALMER explained that TransCanada has what is described in engineering terms as a class 5 cost estimate, the norm at this stage. By the time it goes to an open season, it will have a standard class 4 engineering estimate. He emphasized that this is TransCanada's business and that the company has been looking at the Canadian side of this project for 30 years, has significant and valuable information to use, and understands how to do this. Once it gets through the FERC certification process, TransCanada will have a class 3 cost estimate and will be proceeding with the project, assuming it has customers.

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MR. PALMER pointed out that AGIA requires committing to an open season timeframe, which TransCanada has done on an aggressive basis. It also requires committing to a FERC pre-filing date, which TransCanada has set for June 2010, triggered from the aforementioned April date, with the FERC filing by December 2011. From preliminary discussions with FERC staff, he gave the understanding that FERC may wish the June 2010 date to be advanced for pre-filing or that there'd be initial discussions before then, which TransCanada is prepared to consider.

MR. PALMER said beyond that timeframe it is in FERC's hands. If FERC decides TransCanada has met the conditions on a timely basis, it will grant the license. Assuming TransCanada has customers and has achieved the regulatory approvals required,

the project would be in service in less than 10 years, by November 2017.

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MR. PALMER turned to AGIA "must haves" and TransCanada's response in its application, slides 7-8. He said TransCanada tried to file on a basis that would be deemed complete by the State of Alaska. He reminded members that last year TransCanada had opposed a provision requiring a company that had a failed open season to continue through the FERC certification process, but the legislature had passed that as a requirement. To apply, therefore, TransCanada had to compromise on that issue and agree to move forward in the event of a failed open season.

MR. PALMER provided highlights. He said the design is best suited for 4.5 Bcfd of initial capacity, but final volumes will be determined in the open season. If TransCanada is successful in attracting that much gas, it will be an inexpensive pipeline to expand by one-third of the volume, using compression only; he alluded to wording on slide 7 that says the initial design is expandable to 5.9 Bcfd with compression only.

MR. PALMER said the Canadian norm is rolled-in tolls, averaging the original cost plus expansion. TransCanada is familiar with that system and as the pipeline sponsor would put forward to FERC the AGIA requirement, 115 percent of the initial tolls within the Alaskan section of the project. And although TransCanada prefers to have a third party build the GTP, TransCanada is prepared to build it if necessary.

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SENATOR WIELECHOWSKI observed that TransCanada proposes a 48-inch pipeline through Alaska and Canada. He asked: If Alaskan consumers want to take out 0.5 Bcfd at Delta Junction, how would that be addressed?

MR. PALMER replied if TransCanada knows in advance - around the time of the initial open season - that Alaskans want to take 0.5 Bcfd at Delta Junction and knows the volumes to Canada, then it would be taken into account in the initial design. If it is 4.5 Bcfd to Alberta plus 0.5 Bcfd taken out at Delta Junction, TransCanada would still build the same system, but would add compressors north of Delta Junction.

SENATOR WIELECHOWSKI surmised that 0.5 Bcfd wouldn't count towards the 115 percent with respect to rolled-in rates.

MR. PALMER responded that TransCanada has proposed a separate Alaskan rate - a weighted average, if acceptable to FERC and Alaskans - of only the Alaskan component of the pipeline for the average distance moved within Alaska. For example, if Alaskan gas on average moved 70 percent of the distance through Alaska, then Alaskan customers would pay for the gas treatment plant, which they'd be using, plus 70 percent of the initial cost of the Alaskan component of the pipeline; a party taking service at the Yukon-Alaska border would pay 100 percent of the toll.

MR. PALMER said if the weighted average isn't acceptable, the actual distance for each individual customer will be used. The aforementioned are the two methodologies used in the pipeline business to move gas within a certain zone or region. While the weighted average is simpler and many believe it is fairer, some prefer using the actual distance for each customer.

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SENATOR WIELECHOWSKI asked what would happen if Alaskans want 1 Bcfd or 1.5 Bcfd for in-state use, including natural gas for an Agrium type of industry, heating, and so on. He noted that would be one-quarter of the throughput.

MR. PALMER replied TransCanada would look to provide service to customers where they request it. But TransCanada believes the project works best economically at about 4.5 Bcfd moving to Canada, with the tolls he'd provided; if additional incremental volumes go to Alaskans, which TransCanada expects, that won't change the tolls much for any party.

MR. PALMER said if 1.5 Bcfd is moved to an Alaskan location and only 3 Bcfd goes to Alberta, however, then the tolls he'd provided to Alberta clearly are too low. The project would have lost significant economies of scale. TransCanada would have to look at whether a 48-inch pipe is the correct size downstream of the Alaskan delivery point, and whether customers are prepared to pay that much. TransCanada doesn't propose to restrict customers as to where they go, in any way. Rather, the company proposes to design a system that moves the gas to locations customers have requested.

SENATOR STEDMAN referred to rolled-in rates and asked how Canadian and U.S. regulators look at the return on equity that is allocated. He also asked Mr. Palmer's opinion as to why the U.S. doesn't do fully rolled-in rates like Canada does.

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MR. PALMER addressed the second question. He explained that for decades, Canadian regulators have used rolled-in rates as the norm for any expansion. The costs before the expansion are rolled in or averaged with the costs of an expansion; that is true whether the tolls go up or down, which depends on the type of facilities put in place and the vintage of the facilities they're being incremented to. That has been successful for Canada, which has a basin that is farthest from the North American market.

MR. PALMER said in the U.S., by contrast, the norm for many years has been to roll in the tolls and average the costs if the costs have gone down because of an expansion. If the tolls have gone up, sometimes there has been a test of 105 percent, but not always. If tolls rise, they usually aren't rolled in. Instead, incremental tolls are applied for the new customer. He declined to go through the rationales, saying there'd be differences of opinion as to why FERC has chosen to do that.

MR. PALMER pointed out that when the open season regulations were established for this particular Alaskan project about three years ago, however, FERC decided to use a rebuttable presumption of rolled-in tolls. It will consider what the pipeline sponsor and customers put forward.

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MR. PALMER turned to Senator Stedman's first question, saying the return on equity in the U.S. versus Canada on most pipelines has been different for the last several years. In many cases, Canadian pipelines haven't been at risk if they lose volumes; dollars to be collected generally, but not always, are recovered from the remaining customers on the system. That is partly why Canada has had a lower rate of return on its pipeline system.

MR. PALMER said, in addition, for many years Canada's National Energy Board (NEB) required pipelines to come back annually for a review of their rates of return. As interest rates have generically fallen during periods of high inflation, those annual reviews have generally resulted in lower rates of return.

MR. PALMER reported in the U.S. the general case is this: If a pipeline loses a customer, in the short term - until there is another rate case - it cannot pass that on to existing customers. If many customers withdraw, usually the pipeline applies to FERC for different tolls. The U.S.-based rate of return on equity has usually been higher than for Canadian pipelines for several years. In many cases, U.S. pipelines

aren't required to come back for a review of their rate of return on the same regular basis as for Canadian pipelines.

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SENATOR WIELECHOWSKI asked what the company's experience has been regarding cost overruns.

MR. PALMER replied in the 1990s, TransCanada built 7,000 miles of pipeline involving some \$14 billion of capital, doing it on schedule and within 0.6 percent of budget. He opined that the company has a formidable record in constructing natural gas transmission lines in North America. TransCanada also has built a number of pipelines elsewhere in the world. It doesn't have a perfect record, but Mr. Palmer said no company does. For example, there have been cost increases in the estimates as the oil and gas business has heated up in the last few years.

MR. PALMER said TransCanada is proud of its construction record and results. In terms of controlling costs on pipelines, he believes its record has been superior in North America. But he recognizes concern that TransCanada needs to be highly motivated to manage costs. Thus during today's presentation he would highlight incentives or disincentives that provide motivation to hit the cost target.

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SENATOR WIELECHOWSKI alluded to recent testimony from Little Susitna Construction Company and Sinopec, noting it indicated China is in a better position to get 800 miles' worth of the required steel and that it might take 10 years to get heavier-grade steel for 1,700 miles of line. He asked: Do you see problems in getting the steel to build this pipeline?

MR. PALMER said he hadn't heard that testimony, but had read a press report; to his understanding, it related to X70 steel. He explained that TransCanada proposes using X80 steel, meaning its ultimate strength is up to 80,000 pounds per square inch. This is the standard pipe used in TransCanada's system since the mid-1990s. With 1,700 or 1,800 miles of X80 pipe in operation today, TransCanada is familiar with it and with large-diameter pipe, having 1,500 to 2,000 miles of 48-inch pipe in the ground.

MR. PALMER expressed confidence that there will be a steel supply for X80 pipe in the timeframe projected. In preparing the bid, TransCanada specifically talked to a number of steel suppliers. Because the pipe won't be ordered for several years,

there is no specific pricing or commitments. But the interest is there to supply it.

CHAIR HUGGINS asked if TransCanada has the steel source yet for the Keystone pipeline.

MR. PALMER answered affirmatively, noting because it's an oil pipeline it runs at a much lower pressure. Parties are experiencing challenges in obtaining pipe because of the massive expansion of natural gas pipelines in the Lower 48 and the oil pipelines coming out Canada. It is difficult today to source steel for large projects, but TransCanada has a steel supply for Keystone. Returning to AGIA "must haves," he said TransCanada has agreed to local-hire provisions and all those components.

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MR. PALMER addressed TransCanada's competitive response to AGIA, slide 9, which showed the following points:

- TransCanada bid to win - competitive enhancements
- Initial system design with inexpensive expandability
- Gas treatment plant ownership, if no 3rd party willing to build
- Equity opportunity for shippers committing gas in initial open season
- 75% debt vs. 70% minimum limit in AGIA
 - Toll reduction of \$0.09/mmbtu
- TransCanada's return reduction in event of capital cost overruns
- Fort Nelson Option upside
 - Toll reduction of \$0.13-\$0.18/mmbtu
- LNG alternative if insufficient gas commitments through Canada
- Creative roles for US Govt. - "bridge shipper" and allocation of portion of \$18 billion loan guarantee to any capital cost overruns

MR. PALMER told members he'd expected comprehensive competition, and TransCanada had bid to win, putting forward incentives intended to attract Alaskan customers and improve the likelihood of success as well as the proposal's net present value. The company stretched in several areas to do this.

MR. PALMER addressed the above points. He said this high-pressure design uses X80 pipe, providing significant efficiency with respect to fuel and steel; the fuel ratio is very low for a 1,700 mile pipeline. TransCanada's willingness to build the GTP

if no third party is willing is a step out for the company. Also, TransCanada has heard from a number of shippers that want the opportunity to own part of this pipeline. Thus in the initial open season parties that commit a threshold volume will have that opportunity, another stretch that he hopes will encourage shippers to commit their gas to the project.

MR. PALMER noted another incentive is that TransCanada will apply the 70 percent debt ratio during construction, but upon completion of the project will refinance 5 percent. This means a toll reduction of 9 cents per mmbtu, just under 3 percent, a significant reduction for a customer. Although TransCanada and its shareholders will have less equity in this project - which pipelines generally are reluctant to do - TransCanada is doing this to be competitive.

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MR. PALMER returned attention to cost control. He reiterated that TransCanada is proud of its record. Since TransCanada wants to not only move the initial 35 Tcf of proven North Slope gas, but also expand the system, there is a strong incentive to have low costs. High costs make it much more difficult to attract new customers. However, potential customers and others have said they'd like TransCanada to have direct financial incentives or disincentives if there is a cost overrun; they want interests to be aligned in this regard.

MR. PALMER said TransCanada therefore proposed in its application the following: If there is a cost overrun, it will take up to a 2 percent reduction in its rate of return for the first five years of operation, a significant hit on TransCanada's bottom line. The rate of return would be triggered off a 10-year treasury note, which in November would have yielded about 14 percent, though now it's about 13.25 percent. TransCanada will be highly motivated to control costs. The final item TransCanada has proposed in order to provide alignment on costs involves the U.S. loan guarantee.

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MR. PALMER opined that gas entering the existing infrastructure at the Alberta Hub is the most beneficial for Alaskans, Alaskan shippers, and Western Canadians. But TransCanada wants additional motivation to have this project proceed and also go through Canada and into the Alberta system. If 4.5 Bcfd of Alaskan gas goes into the Alberta system, that lowers tolls for all Western Canadian producers. Canada's toll structure would pass that benefit through to customers. While Alaskans would

benefit by having a significantly cheaper system compared with a line to Chicago, he indicated Alberta and Western Canadian producers would benefit by \$10 billion in the first 15 years.

MR. PALMER said TransCanada hasn't known whether the project would proceed, go through Canada, or integrate the gas into Alberta's system. To achieve those, perhaps Western Canadian producers should be prepared to share some of that \$10 billion of value with Alaskans, which the so-called Fort Nelson upside would do. If that is a successful structure, some \$3 billion in the first 15 years, of the \$10 billion he'd described, would shift to Alaskan producers and shippers, away from Alberta shippers. He said this is another competitive response TransCanada is prepared to sponsor with Canadian regulators. If it's successful, the tolls mentioned earlier would be reduced by an additional 13-18 cents.

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MR. PALMER continued with slide 9, turning to the liquefied natural gas (LNG) alternative. He emphasized that TransCanada has been a proponent of the Alaskan project through Canada and on to the Lower 48 for many years; it is believed to be the superior project for Alaskans, Canadians, and the company. TransCanada wants the investment opportunity, wants the gas into its system, and believes this aligns with Alaskans who want this project soon, want it to go through this system, and want it ultimately to expand.

MR. PALMER noted, however, that TransCanada additionally wanted to be competitive with any AGIA applicants proposing an LNG alternative. TransCanada also had heard concern that there might not be sufficient gas committed to Canada. Thus the company's LNG alternative is this: If insufficient gas is committed to Canada to make the project economic but sufficient gas is committed to Valdez - which TransCanada used as a proxy for an LNG project - then TransCanada would be prepared to build a pipeline to that point and build the gas treatment plant as well, if necessary. TransCanada hadn't done the economics on liquefaction, ships, regasification facilities, or markets. If customers want that service, they'd be in a position to do that.

MR. PALMER addressed the final point on slide 9, saying TransCanada was asked under AGIA to look at ways to improve the probability of success. These aren't conditions to the application, but are creative concepts to assist the project and improve the likelihood of success. If TransCanada is granted an AGIA license, it is possible that parties won't commit their gas

in an open season, despite the aforementioned initiatives. Thus the company has tried to determine how to meet customers' needs.

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MR. PALMER spoke to the notion that a cost overrun results in more money for the company. He said TransCanada looks to make a rate of return, not just more dollars, and it would see a penalty in that instance. The U.S. government approved a significant support proposal for the project through an \$18 billion loan guarantee 3.5 years ago. TransCanada suggests if part of that could be allocated to cover any potential cost overrun, that would mean a number of things.

MR. PALMER said, first, debt financing for overruns is the cheapest form of financing, cheaper than debt and equity, and certainly cheaper than equity alone. Second, it would mean TransCanada isn't investing or receiving another dollar for any cost overrun; in fact, there'd be a penalty from the hit on the rate of return just described. Third, if the U.S. government were prepared to recover its moneys from any cost overrun only in the event of a surcharge in the toll, when gas prices at a hub - say, the Alberta Hub, but it could be downstream in the Lower 48 - are above a certain threshold level, then potential customers could see what the toll would be.

MR. PALMER surmised this would be highly attractive for customers looking at committing gas and credit to this project. He said TransCanada hopes this will be looked at creatively by the U.S. government and supported by the State of Alaska in terms of going with TransCanada to Washington, D.C., to propose this if an AGIA license is granted. But it wasn't a condition.

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MR. PALMER turned to the concept of a "bridge shipper." He said the question is this: If the parties that currently control the gas and other potential shippers don't commit their gas in an open season, despite the best efforts of TransCanada and others, is there another way to advance the project? He referred to his previous testimony that this project needs customers and/or credit in order to actually construct a pipeline.

MR. PALMER said TransCanada believes this project would break open the largest stranded domestic storehouse of gas in the U.S. The thought is this: Perhaps the U.S. government would be prepared to step up in the event of a failed open season, committing to sign an agreement to ensure the project goes forward and meets the 2017 in-service date.

MR. PALMER explained that this would mean a significantly longer timeframe for existing leaseholders to consider whether to commit gas; it also would incentivize parties that aren't actively looking for natural gas today. He said if it's believed that this project will be in the money, the gas doesn't need to be found on the North Slope today. There is 8.5 Bcfd produced every day, which is very different from having a basin with no gas production.

MR. PALMER said the U.S. government has been supportive of public infrastructure such as highways, railways, and airports, and is supportive of domestic gas production, having provided Section 29 tax credits for coalbed methane and shale gas, \$1 per mmbtu for 15 years; it is expected that those two sources of gas - generally termed unconventional gas - will be about 50 percent of domestic production by 2010. Although those tax credits were controversial in the past, they seem to have supported development of those domestic sources.

MR. PALMER suggested that what is missing for Alaskan gas isn't a tax credit for the actual gas, but support for the pipeline. If the initiatives already put forward aren't sufficient to make the project proceed, TransCanada wants to put this proposal before the U.S. government for consideration. Although there have been very preliminary discussions with staffers, TransCanada doesn't believe it is in a position to inquire in Washington, D.C., until it has the AGIA license; it also acknowledges this would be under consideration for some time. He emphasized this wasn't a condition of its AGIA application.

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MR. PALMER pointed out that the project economics, slide 10, are based on economic assumptions provided by the state and other assumptions TransCanada made; if those change, different conclusions will be reached. The state had advised TransCanada to use the U.S. Energy Information Administration (EIA) gas price forecasts for the project; the slide references dollars per mmbtu.

MR. PALMER explained that TransCanada had to bring that back to an Alberta price; in 2018, in nominal dollars, that is shown on the slide as \$6.53, which coincidentally is about what gas prices are this winter in Alberta. The assumption is for no inflation in gas prices over the next decade. The annual average for 25 years, \$9.92 on the slide, shows gas prices escalating from there.

MR. PALMER noted slide 10 also shows the pipeline plus the GTP tolls; in dollars per mmbtu, this is seen in TransCanada's application. The first year, including fuel, it would be \$2.76, and the annual average would be \$3.03 because fuel prices are driven off the U.S. EIA gas price forecast. The pipeline toll is flat in nominal dollars, at \$2.41, but the fuel component rises as gas prices rise.

MR. PALMER pointed out that the first year of service, 2018, taking \$6.53 and deducting \$2.76 - if the gas price forecast is correct and the costs are accurate - the producers would get a \$3.75 netback for gas they're currently producing at Prudhoe Bay and other gas that might come into the pipeline. From that \$3.75, they'd pay their own production costs, take their profits, and share with the state and other tax-collecting bodies in order to come up with a net amount.

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MR. PALMER turned to stakeholders' value, noting this uses formulas and methodologies the state described for TransCanada; in certain cases, the company made assumptions. After taxes, the producers would get \$183 billion over 25 years, \$4.7 billion in 2018, and an annual average of \$7.3 billion. The State of Alaska would get \$115 billion over 25 years, \$2.5 billion in 2018, and an annual average of \$4.6 billion.

MR. PALMER indicated these are direct dollars from the gas production and the pipeline such as royalties, production tax, income tax, property tax, and any other revenues. It would amount to \$4,000 the first year for each Alaskan, and for the annual average it would be \$7,000.

MR. PALMER drew attention to benefits for the U.S. government: \$46 billion over 25 years, \$1.2 billion in 2018, and an annual average of \$1.8 billion. Numbers shown for TransCanada are \$16 billion over 25 years, \$1.3 billion in 2018, and an annual average of \$0.6 billion. He pointed out that the pipeline depreciates over time, and thus TransCanada would receive more money in the first year than on average; by the last year, the pipeline would be fully depreciated.

MR. PALMER told members these numbers assume an initial 4.5 Bcfd and no expansion of the pipeline, although TransCanada's application provides some numbers for expansions. These aren't indirect numbers for the value of employment, exploration, and

so on, but are strictly for moving the existing volumes, 4.5 Bcfd if that is committed to the pipe, and also for taxes.

4:59:48 PM

MR. PALMER offered clarifications on recent questions, reading the following from slide 11:

- Relative Timing of Alaska/Mackenzie Projects?
- Is TransCanada's AGIA application conditional on US Govt. support for "bridge shipper" and loan guarantee concepts?
- Is the AGIA project subject to ANNGTC's historical liabilities?
- What is TransCanada's position regarding upstream fiscal terms?

MR. PALMER noted there were separate slides for each topic. He said ANNGTC was the original partnership. He addressed Alaska/Mackenzie timing, slide 12, which showed the following:

- Mackenzie Valley pipeline scheduled to be in-service by 2014
 - TransCanada currently plays a modest role in that project
- TransCanada's proposed schedule for the Alaska pipeline has project in-service by 2017
- If both target dates can be achieved, there is significant opportunity for equipment/labor synergies and cost-savings on the Mackenzie, and the Canadian section of the Alaska Pipeline

MR. PALMER elaborated, saying the Mackenzie Valley pipeline is to move Northern Canadian gas; TransCanada has the right to own about 5 percent. There are three years between the target dates for that and the Alaskan project. If they stay on schedule, at least on the Canadian side, there is a significant opportunity to use the same equipment and much of the same labor, lowering the cost. Labor on the Alaskan project will be much higher, since Alaskan labor will be required for that component, as always contemplated.

5:02:09 PM

MR. PALMER highlighted how the U.S. government could support the project, slide 13, which specified that these are ideas to improve the probability of success, not conditions to TransCanada's AGIA application. The points on slide 13 were:

- \$18 billion Loan Guarantee Approved in 2004
 - Allocate a portion to fund any capital cost overruns
 - Least cost option for customers
 - Ensure TransCanada will not earn extra return if costs increase
 - Debt servicing through toll surcharge, to be paid only when gas prices exceed a pre-determined threshold price

- "Bridge Shipper"
 - US Govt. could ensure a successful initial Open Season for the project by acting as a bridge shipper (i.e, by executing a firm transportation agreement)
 - Once the full initial capacity of the pipeline is contracted by 3rd party shippers, the US Govt.'s obligations would be terminated
 - US Govt. role would significantly reduce the risk and lead time of the project by permitting access to private capital markets and a firm in-service date

MR. PALMER emphasized that the U.S. government could decide not to pursue these ideas or may want to pursue others. TransCanada believes these ideas should be considered. If not, TransCanada will continue to move forward and meet the requirements of its AGIA application. He noted details were provided earlier.

[5:03:25 PM](#)

MR. PALMER turned to TransCanada's AGIA applicants, slide 14, which had the following points:

- Foothills Pipe Lines Ltd. in Canada
- TransCanada Alaska Company, LLC in Alaska
 - Separate legal entity from ANNGTC
 - No liability to ANNGTC or Withdrawn Partners
 - New start in Alaska - no utilization of any ANNGTC assets (certificate, Right-of-Way, permits, engineering, geotechnical, etc.)
 - TransCanada's AGIA application commits to never including any potential ANNGTC liability in AGIA project tolls

MR. PALMER explained that Foothills Pipe Lines Ltd. is the traditional applicant for the project that owns the Canadian assets. Saying there are no significant issues there, he added,

"In fact, there are benefits to the project proceeding under that Act because we have a single-window regulatory agency." He said the entity put forward in Alaska is TransCanada Alaska Company, LLC, separate from the original partnership.

MR. PALMER highlighted the other points, adding that the cost estimates and schedule start from scratch, in effect taking a very conservative view. He expressed hope that these would allay any concerns.

5:04:47 PM

MR. PALMER turned to ANNGTC, slide 15, which had the following points that he paraphrased:

- Formed in 1970s to construct Alaska Section
 - 11 original partners
- All have withdrawn except two TransCanada subsidiaries
 - Those subsidiaries are not AGIA applicants
 - No duties to Withdrawn Partners - Current or Future
 - Neither the two remaining TransCanada partners, nor any other TransCanada entity, owes any duty to the Withdrawn Partners
 - Withdrawn partners forfeited rights to be treated as a partner
 - Entitled only to contractual right to payment
 - If and when ANNGTC builds the pipeline, and
 - If payment would not pose undue hardship on ANNGTC
 - No duty to pursue the project on behalf of Withdrawn Partners
- No TransCanada entity is prohibited from pursuing a different project

MR. PALMER explained that TransCanada and ANNGTC had decided in the fall of 2007 that the latter wasn't a viable entity for the project; ANNGTC is not going to build the pipeline. He indicated with the enabling U.S. federal legislation passed 3.5 years ago - the Alaska Natural Gas Pipeline Act (ANGPA), under which TransCanada's application is going forward - any party can do that.

5:06:08 PM

MR. PALMER addressed upstream fiscal terms, slide 16, which had the following points:

- TransCanada's AGIA obligations are not conditional on a review of Alaska's upstream fiscal terms.
- TransCanada acknowledges that this issue is between the State and natural gas producers.
 - TransCanada requests that the State resolve upstream fiscal terms for natural gas prior to the initial open season.

MR. PALMER added that TransCanada hopes to hold that open season in the summer-fall of 2009. If the State of Alaska decides it needs to change the natural gas production tax or other upstream regimes, those could be reviewed next year during the regular session or some other time.

[5:07:01 PM](#)

SENATOR WIELECHOWSKI noted TransCanada's calculations show the producers earning \$7.3 billion a year before upstream costs. He asked whether, in Mr. Palmer's experience, Alaska's upstream terms need to be fixed.

MR. PALMER replied he wasn't in a position to comment on that. TransCanada only asks that the State of Alaska has considered what is in place and is either confident it's an appropriate system or has undertaken to review it before the initial open season.

MR. PALMER explained that, for simplification, TransCanada's analysis assumed a flat 25 percent upstream gas production tax; this appears in the application. However, Alaska's current structure includes some progressivity. For upstream gas production costs, about which TransCanada has no knowledge, the assumption used was \$1.50 plus inflation. Mr. Palmer pointed out that Alaska's legislature and administration have a better view of those than TransCanada has.

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SENATOR STEDMAN surmised Mr. Palmer believes the aforementioned is an obstacle.

MR. PALMER replied they've heard debate and press discussion, and those parties most affected - the state and the producers - have expressed themselves. TransCanada isn't providing advice on this matter. Rather, TransCanada is asking that by the time

there is an open season the state will at least have considered whether it has an attractive system.

CHAIR HUGGINS suggested there will be a 15- to 16-month window to address that issue.

MR. PALMER affirmed that, predicting if a license is granted in April, an open season will be held in the summer-fall of 2009.

[5:10:43 PM](#)

MR. PALMER touched on the next steps, slide 17. He said public comment continues to March 6; then the administration will make a recommendation, although the timeframe isn't certain; if there is a positive recommendation, the legislature will review it and decide whether to approve it; and if it is approved, an AGIA license may be granted this year. He then wrapped up with a summary, slide 18, paraphrasing the following points:

- Last year the Administration and Legislature established AGIA as Alaska's transparent process to advance a gas pipeline project
- TransCanada submitted a thorough, creative, competitive and complete AGIA application
- TransCanada has the credentials and capacity to build, own, operate and expand the project
- If selected as the AGIA Licensee, TransCanada's obligations are not conditional on the US Govt. approving TransCanada's "bridge shipper" or loan guarantee concepts, nor on the State renegotiating upstream fiscal terms
- The proposed TransCanada project will not be saddled with a "\$9 billion liability"
 - TransCanada's AGIA applicants have committed that in the unlikely event there ever is any liability, it will not be included in project tolls.

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SENATOR WAGONER recalled testimony a week ago from someone who prefers a later open season, rather than 18 months after licensing by the state. Surmising a time crunch was partly to blame because that party is currently exploring for gas, he said the testimony was that the later the open season is, the more accurate the tariff will be. He asked whether that is correct.

MR. PALMER answered that TransCanada believes Alaska also wants this project to move forward expeditiously. Thus TransCanada

believes moving quickly to an open season is appropriate. The company has committed to hold open seasons every two years after the initial one. So if a party was unable to commit in the initial open season but could commit two years later, TransCanada would look to accommodate that party in the initial pipeline capacity; this would depend on the initial volumes and incremental volumes, however, and it couldn't be guaranteed.

MR. PALMER suggested that waiting a year or two won't give better costs. The same amount of work has to be done, and spreading it over a longer time doesn't accelerate the project. The concern on this project has always been that after a successful open season it will be eight years before it goes into service. Deferring the open season and thus the rest of the schedule just moves the project back a year or two, which he surmised isn't to anyone's benefit.

[5:15:11 PM](#)

SENATOR WAGONER asked why oil and gas producers generally don't like to own or operate pipelines.

MR. PALMER replied that traditionally North American gas pipelines have been built, owned, and operated by independent pipelines; in relatively rare instances, producers decide to commit their equity to own and build a pipeline. Most producers have a higher cost of capital, and their equity shareholders look for a higher rate of return than can be obtained with a pipeline; hence they usually invest in riskier projects, generally exploration and development of gas and/or oil.

MR. PALMER said pipeline companies such as TransCanada, by contrast, are pleased to get a regulated rate of return and relatively low variability. Their shareholders reward them for finding investment opportunities that often take a lower rate of return but have lower variability or volatility than exploration and production provide.

MR. PALMER highlighted a second reason: In most basins, there isn't a controlling producer or group of producers. There usually are tens or hundreds of producers. Bringing such a group together to own a pipeline can be complex. And if two or three producers control the leases or production for a majority of the gas, governments often are motivated to ensure there are rules so other parties can become shippers on the pipeline, beyond those initial shippers, on a fair and open basis.

[5:18:12 PM](#)

SENATOR WIELECHOWSKI said TransCanada obviously is a successful company and didn't get that way by building pipelines to areas where gas couldn't be obtained. He asked how confident TransCanada is that it can fill the proposed pipeline with gas and have a successful open season.

MR. PALMER replied TransCanada wrestled with that mightily. It likely will cost over \$600 million to go through an open season and the FERC certification process. The company understands and appreciates that the government is prepared to contribute a significant share of that, but there are significant differences between the upsides for the State of Alaska and TransCanada.

MR. PALMER said macro economic issues were looked at first. In order to advance any project, one must at least believe it is economic. TransCanada looked at gas price forecasts; demand; how much the project likely would cost; and whether Alaskan gas could compete with other supplies, both domestic and international, in moving gas to the Lower 48 and Canada.

MR. PALMER reported that the commitment of governments to advance this project was looked at next. He said no commercial company can advance this project on its own. It's no different from any other long-line, new basin pipeline, which no company can do alone. No company owns the land between Prudhoe Bay and the Lower 48. Cooperation will be needed from governments.

MR. PALMER told members TransCanada also had looked at the commitment of the administration and the legislature last year in passing AGIA, as well as public expressions by a number of parties over the last few years. TransCanada's assessment was that Alaskans want this project to proceed expeditiously. He opined that there is support from the U.S. government and that Canada will be committed to advance the project, since Canada has obligations to the United States in a treaty for this specific project. Those were considerations.

MR. PALMER said micro economic components were then looked at, such as whether TransCanada has the credentials and capability to advance this project and to put forward proposals likely to be acceptable and attractive to producers, other potential shippers, and governments. When his company considered all those, it decided to risk its time, money, and talents to advance the project.

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MR. PALMER, in response to Senator Stedman, said TransCanada has been a pipeline company for some 50 years, and electricity generation is a much younger but growing component, about 33-40 percent of its business.

SENATOR STEDMAN asked how TransCanada would handle the potential risk of getting an AGIA license, going through an open season - even if it fails - and then going to FERC, when another entity may go outside of AGIA to FERC for such a certificate.

MR. PALMER answered that TransCanada's obligation, if it's granted the AGIA license, is to hold an open season; the application describes what that involves. If that is unsuccessful despite the best efforts of the company and the governments, it still would move to FERC pre-filing and certification.

MR. PALMER said TransCanada isn't aware of another party that has put forward a FERC application or intends to, although some parties have indicated they may wish to do so if they have an upstream fiscal arrangement with the State of Alaska. There is always risk. If another party did go forward, he surmised FERC would have to consider a competitive process or whether it was prepared to grant more than one certificate.

[5:25:21 PM](#)

SENATOR STEDMAN returned to the timeline, slide 6. He asked Mr. Palmer to address potential litigation to get access to the gas if there aren't sufficient quantities to make the proposal viable. He also gave his understanding that megaprojects around the world go through decision "gates" before recommitting to go to the next step, to ensure the project won't derail. He inquired about such gates for this proposal.

MR. PALMER replied TransCanada is obliged, pursuant to AGIA, to move forward through the FERC application and filing. There are no gates up to that point. However, AGIA doesn't require that the pipeline be built. If TransCanada has customers and has met those tests, then there are such gates, set forth in its application, for after the AGIA obligations have been met.

MR. PALMER addressed whether the state would pursue other actions to obtain gas if the gas wasn't committed. He said TransCanada will continue through FERC certification, as required. It is up to the state to decide what to do if there is a failed open season; TransCanada wouldn't be a party to that decision, but would continue to seek customers, as described in

its application. TransCanada won't complete the project in 2017 if there are no customers or credit; AGIA doesn't require it and TransCanada's application doesn't contemplate it.

5:28:33 PM

SENATOR STEDMAN said it appears only TransCanada's proposal met the AGIA criteria and thus there aren't competing projects. He asked how the state would do a fiscal comparison to see if that proposal is in the state's best interest.

MR. PALMER replied he'd tried to describe the competitive forces TransCanada felt last fall. This is the norm for any request for proposals (RFP) process; TransCanada has participated in those across the world, and he has competed 20-30 times. The competition usually occurs in advance of the submission by any party, because one company isn't aware of what others will put forward. A company that wants to win must put forward a best and final offer or else risk losing what may be a good project.

MR. PALMER said TransCanada has competed for this project. It put forward its best proposal, a strong one. The state may wish to consider what others submitted; those are publicly available on the state's web site and would at least provide benchmarks. Noting TransCanada's application describes its credentials and record, he added that the state can test the assumptions put forward by either the administration or TransCanada.

SENATOR STEDMAN recalled testimony in prior years about who was able to construct a particular project, with conflicting opinions. He said clearly TransCanada has the ability to handle this project once there is gas committed so there can be financing. He asked: Isn't TransCanada's biggest advantage that the AGIA license puts it in the mix when agreements come together to access gas from the three major producers?

MR. PALMER expressed hope that TransCanada will continue to convince Alaskans about its abilities regarding this project. The company believes it continues to have a strong position for the Canadian portion because of its traditional rights and position. However, Alaskans have chosen the AGIA process as the mechanism. As he'd testified for several years, TransCanada believes there should be a coming together of the three North Slope producers, the state, and TransCanada.

MR. PALMER reiterated that TransCanada's AGIA application proposes that parties that commit their gas in the initial open season will have the opportunity to have equity in the project.

TransCanada believes a mechanism can be used in the initial open season so initial shippers may become equity owners. TransCanada seeks to have the project go forward with base shippers committed to the project.

SENATOR STEDMAN clarified that he was glad TransCanada applied and was trying to look at how holding that AGIA license may protect its interests.

MR. PALMER replied that clearly TransCanada has decided this would be a good investment, even though it would risk significant time, money, and talent. Thus TransCanada is participating in the AGIA process, hoping to win and optimistic that this project will be a success.

CHAIR HUGGINS thanked Mr. Palmer. He recognized Jerry Burnett from the administration and thanked him as well.

There being no further business to come before the committee, Chair Huggins adjourned the Senate Resources Standing Committee meeting at [5:37:18 PM](#).