

**ALASKA STATE LEGISLATURE
HOUSE RESOURCES STANDING COMMITTEE**

March 27, 2014

4:38 p.m.

MEMBERS PRESENT

Representative Eric Feige, Co-Chair
Representative Dan Saddler, Co-Chair
Representative Peggy Wilson, Vice Chair
Representative Mike Hawker
Representative Kurt Olson
Representative Paul Seaton
Representative Scott Kawasaki
Representative Geran Tarr

MEMBERS ABSENT

Representative Craig Johnson

OTHER LEGISLATORS PRESENT

Representative Doug Isaacson

COMMITTEE CALENDAR

COMMITTEE SUBSTITUTE FOR SENATE BILL NO. 138(FIN) AM

"An Act relating to the purposes, powers, and duties of the Alaska Gasline Development Corporation; relating to an in-state natural gas pipeline, an Alaska liquefied natural gas project, and associated funds; requiring state agencies and other entities to expedite reviews and actions related to natural gas pipelines and projects; relating to the authorities and duties of the commissioner of natural resources relating to a North Slope natural gas project, oil and gas and gas only leases, and royalty gas and other gas received by the state including gas received as payment for the production tax on gas; relating to the tax on oil and gas production, on oil production, and on gas production; relating to the duties of the commissioner of revenue relating to a North Slope natural gas project and gas received as payment for tax; relating to confidential information and public record status of information provided to or in the custody of the Department of Natural Resources and the Department of Revenue; relating to apportionment factors of the Alaska Net Income Tax Act; amending the definition of gross value at the 'point of production' for gas for purposes of the oil and gas production tax; clarifying that the exploration

incentive credit, the oil or gas producer education credit, and the film production tax credit may not be taken against the gas production tax paid in gas; relating to the oil or gas producer education credit; requesting the governor to establish an interim advisory board to advise the governor on municipal involvement in a North Slope natural gas project; relating to the development of a plan by the Alaska Energy Authority for developing infrastructure to deliver affordable energy to areas of the state that will not have direct access to a North Slope natural gas pipeline and a recommendation of a funding source for energy infrastructure development; establishing the Alaska affordable energy fund; requiring the commissioner of revenue to develop a plan and suggest legislation for municipalities, regional corporations, and residents of the state to acquire ownership interests in a North Slope natural gas pipeline project; making conforming amendments; and providing for an effective date."

- HEARD & HELD

PREVIOUS COMMITTEE ACTION

BILL: SB 138

SHORT TITLE: GAS PIPELINE; AGDC; OIL & GAS PROD. TAX

SPONSOR(s): RULES BY REQUEST OF THE GOVERNOR

01/24/14	(S)	READ THE FIRST TIME - REFERRALS
01/24/14	(S)	RES, FIN
02/07/14	(S)	RES AT 3:30 PM BUTROVICH 205
02/07/14	(S)	Heard & Held
02/07/14	(S)	MINUTE(RES)
02/10/14	(S)	RES AT 3:30 PM BUTROVICH 205
02/10/14	(S)	Heard & Held
02/10/14	(S)	MINUTE(RES)
02/12/14	(S)	RES WAIVED PUBLIC HEARING NOTICE, RULE 23
02/12/14	(S)	RES AT 3:30 PM BUTROVICH 205
02/12/14	(S)	Heard & Held
02/12/14	(S)	MINUTE(RES)
02/13/14	(S)	RES AT 8:00 AM BUTROVICH 205
02/13/14	(S)	Heard & Held
02/13/14	(S)	MINUTE(RES)
02/14/14	(S)	RES AT 3:30 PM BUTROVICH 205
02/14/14	(S)	Heard & Held
02/14/14	(S)	MINUTE(RES)
02/19/14	(S)	RES AT 3:30 PM BUTROVICH 205
02/19/14	(S)	Heard & Held

02/19/14 (S) MINUTE(RES)
02/20/14 (S) RES AT 8:00 AM BUTROVICH 205
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02/20/14 (S) MINUTE(RES)
02/21/14 (S) RES AT 8:00 AM BUTROVICH 205
02/21/14 (S) Heard & Held
02/21/14 (S) MINUTE(RES)
02/21/14 (S) RES AT 3:30 PM BUTROVICH 205
02/21/14 (S) Heard & Held
02/21/14 (S) MINUTE(RES)
02/24/14 (S) RES RPT CS 2DP 4NR 1AM NEW TITLE
02/24/14 (S) DP: GIESSEL, MCGUIRE
02/24/14 (S) NR: FRENCH, MICCICHE, BISHOP,
FAIRCLOUGH
02/24/14 (S) AM: DYSON
02/24/14 (S) RES AT 8:00 AM BUTROVICH 205
02/24/14 (S) -- MEETING CANCELED --
02/24/14 (S) RES AT 3:30 PM BUTROVICH 205
02/24/14 (S) Moved CSSB 138(RES) Out of Committee
02/24/14 (S) MINUTE(RES)
02/25/14 (S) FIN AT 9:00 AM SENATE FINANCE 532
02/25/14 (S) Heard & Held
02/25/14 (S) MINUTE(FIN)
02/25/14 (S) FIN AT 5:00 PM SENATE FINANCE 532
02/25/14 (S) Heard & Held
02/25/14 (S) MINUTE(FIN)
02/26/14 (S) FIN AT 9:00 AM SENATE FINANCE 532
02/26/14 (S) Heard & Held
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02/27/14 (S) FIN AT 9:00 AM SENATE FINANCE 532
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02/28/14 (S) FIN AT 9:00 AM SENATE FINANCE 532
02/28/14 (S) Heard & Held
02/28/14 (S) MINUTE(FIN)
03/03/14 (S) FIN AT 9:00 AM SENATE FINANCE 532
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03/04/14 (S) FIN AT 9:00 AM SENATE FINANCE 532
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03/05/14 (S) FIN AT 5:00 PM SENATE FINANCE 532
03/05/14 (S) Scheduled But Not Heard
03/06/14 (S) FIN AT 9:00 AM SENATE FINANCE 532

03/06/14 (S) Heard & Held
03/06/14 (S) MINUTE(FIN)
03/07/14 (S) FIN AT 9:00 AM SENATE FINANCE 532
03/07/14 (S) -- MEETING CANCELED --
03/10/14 (S) FIN AT 9:00 AM SENATE FINANCE 532
03/10/14 (S) Heard & Held
03/10/14 (S) MINUTE(FIN)
03/10/14 (S) FIN AT 5:00 PM SENATE FINANCE 532
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03/11/14 (S) FIN AT 5:00 PM SENATE FINANCE 532
03/11/14 (S) Heard & Held
03/11/14 (S) MINUTE(FIN)
03/12/14 (H) RES AT 1:00 PM BARNES 124
03/12/14 (H) -- MEETING CANCELED --
03/14/14 (S) FIN RPT CS 6DP 1AM NEW TITLE
03/14/14 (S) LETTER OF INTENT WITH FINANCE REPORT
03/14/14 (S) DP: KELLY, MEYER, DUNLEAVY, FAIRCLOUGH,
BISHOP, HOFFMAN
03/14/14 (S) AM: OLSON
03/14/14 (S) FIN AT 9:00 AM SENATE FINANCE 532
03/14/14 (S) Moved CSSB 138(FIN) Out of Committee
03/14/14 (S) MINUTE(FIN)
03/14/14 (H) RES AT 1:00 PM BARNES 124
03/14/14 (H) <Pending Referral>
03/17/14 (H) RES AT 1:00 PM BARNES 124
03/17/14 (H) <Pending Referral>
03/18/14 (S) TRANSMITTED TO (H)
03/18/14 (S) VERSION: CSSB 138(FIN) AM
03/19/14 (H) READ THE FIRST TIME - REFERRALS
03/19/14 (H) RES, L&C, FIN
03/19/14 (H) RES AT 1:00 PM BARNES 124
03/19/14 (H) Heard & Held
03/19/14 (H) MINUTE(RES)
03/21/14 (H) RES AT 1:00 PM BARNES 124
03/21/14 (H) Heard & Held
03/21/14 (H) MINUTE(RES)
03/24/14 (H) RES AT 1:00 PM BARNES 124
03/24/14 (H) Heard & Held
03/24/14 (H) MINUTE(RES)
03/25/14 (H) RES AT 4:30 PM BARNES 124
03/25/14 (H) Heard & Held
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03/26/14 (H) RES AT 1:00 PM BARNES 124
03/26/14 (H) Heard & Held
03/26/14 (H) MINUTE(RES)
03/27/14 (H) RES AT 4:30 PM BARNES 124

WITNESS REGISTER

ROGER MARKS

Petroleum Economist

Contract Consultant to Legislative Budget and Audit Committee

Anchorage, Alaska

POSITION STATEMENT: Provided a PowerPoint presentation during the hearing on CSSB 138(FIN) am.

ACTION NARRATIVE

[4:38:43 PM](#)

CO-CHAIR ERIC FEIGE called the House Resources Standing Committee meeting to order at 4:38 p.m. Representatives Seaton, Kawasaki, Olson, Saddler, and Feige were present at the call to order. Representatives P. Wilson, Tarr, and Hawker arrived as the meeting was in progress. Representative Isaacson was also present.

SB 138-GAS PIPELINE; AGDC; OIL & GAS PROD. TAX

[4:39:19 PM](#)

CO-CHAIR FEIGE announced that the only order of business is CS FOR SENATE BILL NO. 138(FIN) am, "An Act relating to the purposes, powers, and duties of the Alaska Gasline Development Corporation; relating to an in-state natural gas pipeline, an Alaska liquefied natural gas project, and associated funds; requiring state agencies and other entities to expedite reviews and actions related to natural gas pipelines and projects; relating to the authorities and duties of the commissioner of natural resources relating to a North Slope natural gas project, oil and gas and gas only leases, and royalty gas and other gas received by the state including gas received as payment for the production tax on gas; relating to the tax on oil and gas production, on oil production, and on gas production; relating to the duties of the commissioner of revenue relating to a North Slope natural gas project and gas received as payment for tax; relating to confidential information and public record status of information provided to or in the custody of the Department of Natural Resources and the Department of Revenue; relating to apportionment factors of the Alaska Net Income Tax Act; amending the definition of gross value at the 'point of production' for gas for purposes of the oil and gas production tax; clarifying

that the exploration incentive credit, the oil or gas producer education credit, and the film production tax credit may not be taken against the gas production tax paid in gas; relating to the oil or gas producer education credit; requesting the governor to establish an interim advisory board to advise the governor on municipal involvement in a North Slope natural gas project; relating to the development of a plan by the Alaska Energy Authority for developing infrastructure to deliver affordable energy to areas of the state that will not have direct access to a North Slope natural gas pipeline and a recommendation of a funding source for energy infrastructure development; establishing the Alaska affordable energy fund; requiring the commissioner of revenue to develop a plan and suggest legislation for municipalities, regional corporations, and residents of the state to acquire ownership interests in a North Slope natural gas pipeline project; making conforming amendments; and providing for an effective date."

[4:39:36 PM](#)

ROGER MARKS, Petroleum Economist, Contract Consultant to Legislative Budget and Audit Committee, provided a PowerPoint presentation titled "Evaluation of SB 138 & Associated Proposed North Slope Natural Gas Commercialization Proposals." He offered a brief personal background, slide 2, reporting that he has been in private consulting practice specializing in petroleum economics and taxation in Anchorage since 2008. Prior to that, he was as a senior petroleum economist with Department of Revenue, Tax Division, monitoring the feasibility of commercializing North Slope gas, and was a petroleum economist with the U. S. Geological Survey. Currently, he is continually assessing the feasibility of the North Slope gas project. As consultant to the Legislative Budget and Audit Committee, he has submitted a report to the committee similar to today's presentation, which includes the latest "lay of the land."

MR. MARKS said the administration has put together a thoughtful plan that could lead to a successful project, and he will be offering some observations, questions, and options to be considered. He introduced slide 3, "Outline," and discussed the pieces of his presentation: introduction, high-level decisions, role of Alaska Gasline Inducement Act (AGIA), and taxation provisions of CSSB 138(FIN) am.

MR. MARKS offered slide 4, "1. Introduction: Market Challenges," saying he believes the proposed project is far from certain, and three big challenges will be the competition, the pricing of

natural gas in Asia, and the burden of the size of the project. He pointed out that about 24 countries in the world are either exporting, or preparing to export, liquefied natural gas (LNG) with an eye on the Asian market. Also, Iranian gas, which is currently embargoed, is a potential competitor in the market. He reported that 30 percent of the nuclear electricity supply in Japan has been moved to gas after the nuclear plant disaster, although the Japanese government has expressed interest in moving back to nuclear power given the concern in Japan about increasing greenhouse gas emissions. China, he continued, is a "big wild card."

4:45:08 PM

MR. MARKS explained that most of the consensus forecast for Asia between now and 2030 is for twice as much supply as demand in Asia, so there is a lot of competition. He said the pricing of LNG linked to oil is falling as Asian buyers realize that producers are making a windfall profit, and there is now greater competition. Although the average prices are still high, they reflect old contracts which have been in place for a long time under old provisions. Newer prices are much lower and because new prices are going to be based on cost, Alaska will be at a disadvantage. He reported that recent projections by Rice University are for LNG in Asia to be about \$10 per million British Thermal Units (BTUs), which is "not that good." He suggested that the cost estimates for the Alaska pipeline have probably increased, and that other projects around the world do not face the same challenges as an 800 mile pipeline through the Arctic. A lot of gas must go through the pipeline to keep the costs down, and this creates a marketing burden for capturing a large incremental share of the Asian market in a short amount of time. A partially empty pipeline has bad effects on the rate of return. A full pipeline will capture about 30 percent of the annual incremental Asian market, which is "a pretty ambitious task." Alaska has a much higher break-even price than much of the competition.

MR. MARKS discussed slide 5, "New LNG Projects are Expensive," by PFC Energy, which shows the break-even prices for gas projects around the world as ranging from \$8-\$13 [per million BTUs], whereas his estimate for Alaska is \$11-\$17.

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REPRESENTATIVE KAWASAKI, referencing slide 5, asked whether the break-even rate is calculated on the size of the project.

MR. MARKS replied it is based on the current project cost range of \$45-\$65 billion, and a range of hurdle rates between \$8-\$12 all based on the current tax proposal for the state taking its gas in-kind.

REPRESENTATIVE KAWASAKI, referencing slide 4, asked about the prices falling to about \$6.

MR. MARKS replied Russia has sold LNG for as low as \$6 to Korea.

CO-CHAIR SADDLER requested clarification regarding the high range of break-even in Alaska.

MR. MARKS explained it depends on whether it is "\$45 or \$65" and whether the hurdle rate is 8 percent or 12 percent; however, he said, he does not know what hurdle rates were used by other folks.

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MR. MARKS turned attention to slide 6, "Timing Landscape." He said the State of Alaska needs the project as soon as possible, and it has been received with a certain amount of "momentum" according to the administration. He related the administration is emphasizing the momentum with a present value of \$800 million for every year the project is delayed. He reflected on present value and whether there is relevant context for the discussion. Present value means the time value of money and its current worth compared to that worth in the future. Moving to slide 7, "How Present Value is Calculated," he referred to the chart which depicts the nominal flow of \$1 million annually with a discount factor of 7 percent, and the loss of value for each subsequent year, for a present value in 2048 of \$13,854,009. He said the discount factors get lower and lower with each subsequent year and nothing that happens after 10-15 years matters very much, so he is unsure that this is the best way to look at this project in terms of looking at its timing.

MR. MARKS returned attention to slide 6, noting the proposed gas project is for the benefit of the next generations of Alaskans. The concern Alaskans will have in 20 years will be about how much gas revenue the state is receiving and its use in the homes and businesses of Alaskans. He pointed to current gas billings which include the price of the gas, the price of the pipeline, and its capital terms. He suggested that better capital terms could annually save Alaskans money: in 20 years Alaskans will

be less concerned whether the present value in 2014 was maximized and more concerned with the gas revenue and its cost to Alaskans. He suggested that an option for a modified deal starting a little later could create more long-term benefits to the state for higher revenues and lower priced gas to Alaskans. He allowed that it is important to find cheaper heating fuel for Fairbanks and rural Alaska, but that present value may not be the way to look at this. He said there is not any short-term window of opportunity, as the demand in Asia will continue to grow. Some aspects could proceed while different arrangements are made, some legislation could be passed to give producers direction, and producers could begin the process without the state; the process could continue even while the state reviews some options that take time.

[4:57:50 PM](#)

MR. MARKS drew attention to slide 8, "2. High Level Decisions under Proposal." He said that the three high level decisions for the state are to take its production taxes and royalties in-kind; not to regulate tariffs and expansions; and for TransCanada, and perhaps the State of Alaska, to have partnership for the pipeline and gas treatment plant (GTP) and for Alaska to own the LNG facilities. He opined that the administration has designed the project "to amicably transition out of AGIA."

MR. MARKS, referencing slide 9, "A. In-Kind Gas," said there is a very compelling reason for the state to take its taxes and royalties in-kind, as this considerably helps the economics of the project for the producers and sponsors. Moving to slide 10, he explained that the producers would pay the state its taxes and royalties in-value an amount of money equal to that percentage of the gas. Under this system, the producers pay for the capacity in the pipeline and slowly get it back over time with the tariff deduction. Once the pipeline is constructed it cannot be cancelled, he said, and this is the owner of the pipeline's problem. Under the current proposal, when the state takes its taxes as in-kind gas, the state takes on the long-term firm transportation liability, as well as other risks. The state will pay to ship the gas, no matter where, and this includes the capital charges: depreciation, return on debt and equity, and income taxes. The state will also incur a long-term liability for the firm transportation capacity, and then this liability becomes an asset to the owner of the pipeline, as it is a 25 percent reduction in the capital cost of the pipeline for the project sponsors. Mr. Marks said he calculates this 25

percent reduction to be worth about \$1-\$2 in reducing the break-even price, and about 1-2 percent for increasing the rate of return. The state does not need to own the pipeline to take the gas in-kind, as it is much more important to the producers' economics. He noted that, should the state take its gas in-kind, it must market the gas; whereas under the current system of receiving gas in-value, the state has the marketing support of the producers. In-kind could create a competition between the state and the producers for marketing of the gas. He pointed out that the Heads of Agreement has an option for negotiation of agreement to purchase and dispose of the state's gas. He suggested that the proposed bill "beef that up." In exchange for the state taking the gas in-kind, the producers could agree to market the state's gas along with their gas for the same price. He reported that the in-value system offers the state a better opportunity to understand the market. He reminded the committee that anything in statute has more clout than any negotiations.

MR. MARKS turned to slide 11, "B. Regulation," saying that the proposal under the Heads of Agreement is for the Federal Energy Regulatory Commission (FERC) to regulate the pipeline under Section 3 of the Natural Gas Act. This section is mainly designed for licensing the siting, construction, expansion, and operation of the LNG import and export terminals, which would also include the pipeline and the treatment plant because it includes facilities used to transport and process gas.

[5:04:38 PM](#)

CO-CHAIR SADDLER requested clarification in regard to the FERC regulation regulating the entire pipeline.

MR. MARKS replied that the definition for terminals in Section 3 includes facilities to transport or process gas, which would include the pipeline and the treatment plant.

CO-CHAIR SADDLER asked whether there are any other similar FERC-regulated pipelines.

MR. MARKS answered that Oregon LNG had applied for an interstate FERC permit to take gas out of Washington and export it out of Oregon. He said he did not know of any active LNG terminals under these parameters. He suggested it would be useful to consult with FERC as this is a lynchpin to much of the plan. He noted that the pipeline, the terminal, and the treatment plant would not be a common or contract carrier, but would instead be

four separate industrial feed lines for the three companies from the North Slope to Japan. Hence, there would not be any regulation of tariff or expansion, although state ownership of the pipeline would be necessary.

5:08:12 PM

MR. MARKS offered an example for the expansion of in-state needs, slide 12, "Example." He posed a scenario in which the pipeline has an initial disposition of 2.4 billion cubic feet per day, with the state receiving 25 percent, or 0.6 billion cubic feet per day. He suggested that a need for in-state gas that is not being received could be considered with a provision to the producers to include any necessary increase for in-state gas. He discussed another regulatory issue for the producer gas getting to the consumers. There is an issue for maintaining a transparency for the netback price to the value of the gas on the North Slope, which would be covered with regulation. He suggested a provision in the statute which says that gas bought by the state from the producers would be reasonably priced.

MR. MARKS referred back to regulations on slide 11, and offered an alternative for the Regulatory Commission of Alaska (RCA) to regulate in-state and export pipeline gas treatment under AS 42.08. He recognized that regulation is burdensome to the producers, but said it is the trade-off for a natural monopoly with the pipeline right of way. The public gives away the right of way in exchange for regulation. He said treatment plants and LNG facilities are not regulated in the same way, as there could be multiple facilities. He suggested that market efficiencies could be enhanced with a transparent pipeline cost. He said a very efficient market system is currently in place to deal with oil sales on the North Slope, as most of the small producers sell their oil to the producers that own the pipeline. The Trans-Alaska Pipeline System (TAPS) tariff is available to determine a reasonable wellhead price. In this situation, if a small producer finds gas, but does not want to build an LNG facility, it could make sense to sell to the producers, especially as the throughput starts to decline. It would be necessary to have transparency to avoid any monopoly controls.

MR. MARKS moved to slide 13, "Ownership and Partnership," pointing out that the state would own a part of the facilities commensurate with its share of the gas, currently about 25 percent. It is proposed for TransCanada to own the treatment plant, with the state having an option to purchase 40 percent of this. The state ownership allows for no regulation on tariffs

and expansion, and there would be lower tariffs through lower cost of capital. He offered two reasons for the state's need of partnership: help with cash flow and expertise. He suggested the state does not need a partner for expertise because the producers would be guiding the project and the Alaska Gasline Development Corporation (AGDC) could offer expertise as it would own 100 percent of the state's share and could hire technical expertise. He pointed to the earlier stand-alone pipeline, which had been planned to move forward without partners.

[5:17:28 PM](#)

CO-CHAIR SADDLER asked whether the state money paid to TransCanada was to develop expertise or necessary information.

MR. MARKS clarified the state has paid \$400 million to AGDC.

MR. MARKS questioned TransCanada's expertise for gas treatment, and suggested asking them. He noted that in the original AGIA agreement, TransCanada had declined to do gas treatment, although the state had encouraged TransCanada to hire an expert.

REPRESENTATIVE HAWKER, regarding TransCanada and the sequence of transactions as proposed to the legislature, inquired whether Mr. Marks is talking about upstream gas treatment or the LNG.

MR. MARKS replied the upstream gas treatment.

[5:19:11 PM](#)

MR. MARKS continued his discussion of slide 13, noting the state does not need a partner for expertise, but may need a cash partner. Thus, he said, the state does not necessarily need a pipeline company for a partnership, but rather a general investment partner, of which there is no shortage as far as large investment banks or private equity firms that could serve that function.

MR. MARKS moved to slide 14 to address the question of whether the state needs a cash partner. He suggested "possibly not." When AGDC was preparing its financing plan in 2011, it hired Citigroup, the third largest commercial bank in the U.S., to advise them. Citigroup discussed the possibility of 100 percent debt financing through a combination of revenue bonds and state backing. He offered his belief that the currently proposed [Alaska LNG Project] is less risky than AGDC's \$8 billion stand-alone bullet project that is without a partner. He pointed out

that the three large oil producers are participating in the [Alaska LNG Project] and there are much larger gas revenues involved than in the stand-alone line. He said 100 percent debt financing would offer the possibility for deferral of most cash flow until gas starts flowing, given that the payment of interest during construction is something that is negotiable. This could have a short-term impact on the state's credit rating during the five-year construction period, but that would be reversed once gas revenue starts coming in.

[5:21:54 PM](#)

MR. MARKS returned to slide 10 to continue discussing the issue of whether the state needs a cash partner and the issue of limits on the state debt capacity. He reiterated that under the [Alaska LNG Project] proposal "when the state takes its taxes and royalties as in-kind gas, the state will take on a long-term firm transportation liability to TransCanada for the state's share of the pipeline and gas treatment plant." Moving to slide 15, he said "it has been suggested that there are limits on how much the state can finance to own the whole 25 percent because of limits on its debt capacity." Continuing, he said "if the state is taking its taxes and royalties in-kind, for any part of the project the state does not own it will have to make a firm transportation commitment on that capacity, and this commitment is a long-term liability, it is a debt." He detailed that the firm transportation commitment is ship or pay, so no matter what the cost of the line, or what happens to the market or reserves, the state "is on the hook for the ship or pay commitment." These firm transportation commitments are used by the pipeline company as collateral for financing, and the pipeline company has priority claims on the project cash flows. He pointed out that this debt will have no different impact on the state debt capacity than debt used to finance ownership. So, put succinctly, there are two ways to borrow money with identical obligations to repay and therefore the same loss of debt capacity: the traditional note for cash or signing an agreement whereby the cash is given to the creditor. Debt is debt, and it cannot be avoided by having someone else assume it on the state's behalf. He said he does not know what the limit is on the state's debt capacity, but if it is similar to what has been described as why the state cannot do ownership on its own, this would also preclude the state from taking its taxes and royalties in-kind.

[5:24:13 PM](#)

MR. MARKS, in response to Representative Seaton, explained that in previous testimony the administration provided three reasons for why the state needs a partner: for expertise; for cash because of the state's cash flow; and because, if the state wants to own 25 percent of the pipeline under any kind of debt/equity ratio, the state cannot afford it above a certainty point because there is a limit on the state's debt capacity.

CO-CHAIR FEIGE inquired whether Mr. Marks is referring to testimony before the committee by Commissioner Rodell [of the Department of Revenue (DOR)]. He recalled Commissioner Rodell testifying it was not necessarily a firm ceiling, but the state is somewhat limited by a rule of thumb to keep the debt service down to 8 percent or less of the operating budget.

MR. MARKS confirmed this is what he is referring to.

MR. MARKS, continuing his response to Representative Seaton, related the administration made the representation that, because of this limit on the state's debt ceiling, the state needs a partner. He pointed out that a firm transportation commitment to TransCanada is an equal amount of debt as owning the whole line and, given that debt is debt, it will have the exact same impact as a debt limit. It would also mean the state cannot take the gas in-kind because the liability incurred would be exactly the same as the state owning 25 percent of the pipeline. He recalled his and former [DOR] Commissioner Wilson Condon's conversations several years ago with Moody's Investors Service in which Moody's said there is no question that the firm transportation commitment is debt with the same effect on debt capacity as any other debt.

[5:27:09 PM](#)

MR. MARKS, in response to Co-Chair Saddler, confirmed he is saying that firm transportation commitment is the same thing as debt and is accounted as such by credit rating agencies. To explain further he presented a scenario where the state did not have a partner and financed 100 percent debt for a 25 percent ownership. He referred to the earlier testimony that this much debt exceeded creditors comfort in terms of the state's credit rating. He offered a second scenario with state ownership of 10 percent and TransCanada ownership of 15 percent of the same proposed project. He relayed that a state firm transportation commitment to TransCanada for the 15 percent would carry the same amount of debt as ownership for the entire 25 percent.

MR. MARKS, in response to Representative Seaton, confirmed that should the state take the royalty and tax in-kind, the long-term shipping commitment would be considered a debt for the amount of gas taken in-kind, as it would have to be shipped.

[5:29:48 PM](#)

MR. MARKS returned attention to slide 14, noting the possibility for tax exempt bonds through the Alaska Railroad Corporation. He said legislation in 1983 had given the Alaska Railroad Corporation the ability to incur tax exempt debt for industrial development projects, and it has been suggested that this privilege could be used to finance the gas pipeline. Goldman Sachs, Merrill Lynch, and U.S. Senator Ted Stevens had believed that this was the case. He explained it requires a private letter ruling from the IRS, and necessitates legal arguments. Doing that could cost about \$100,000 and, while no one has done it, the benefits would include tax exempt debt which is about 25 percent lower than taxable debt.

CO-CHAIR SADDLER asked whether there is any required nexus between the Alaska Railroad Corporation industrial bonding capacity and the natural gas pipeline, and whether there are any limits to this lending capacity.

MR. MARKS offered his belief that there are no limits to this lending capacity and that there is no need for any nexus. He suggested a possible need for railroad expansion in order to facilitate the pipeline, which would then also allow non-railroad expenditures. He said "you don't know if you don't ask," and cited the Citigroup concurrence of the possibility.

[5:33:02 PM](#)

REPRESENTATIVE SEATON asked whether there was Citigroup analysis on tax exempt for 100 percent debt of the AGDC stand-alone pipeline.

MR. MARKS replied that Citigroup had looked at 100 percent debt through a combination of revenue bonds and general obligation debt. In addition to this, some or all of that debt could be tax exempt through the Alaska Railroad Corporation, and, although it was not specifically mentioned in the financing plan, it was not mutually exclusive and all could be applied.

CO-CHAIR FEIGE asked whether it is possible for AGDC to issue the bonds, as it is a public corporation.

MR. MARKS offered his belief that the authority was given to AGDC in HB 4, although he is not well versed on it. He said there would be no need for a cash partner because 100 percent debt financing and tax exempt bonds would require little or no cash before gas starts flowing. The state's credit rating and tax exempt debt could offer a lower cost of capital with lower tariffs. He suggested a discussion with Citigroup for further information.

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MR. MARKS addressed slide 16, "Ownership: Risk of Failure to Sanction," explaining that this is the other concern associated with ownership. He noted that sponsors could spend \$2 billion to get to the financial investment decision (FID) point only to have the project not materialize. He pointed out that, under this proposal, the state would be liable for about 25 percent, \$500-\$600 million regardless of whether it exercises its ownership option with TransCanada. Although the project could be stopped if it did not appear to be working out, more than \$2 billion could be spent trying to narrow the cost uncertainties. He related that similar projects had cost estimates of plus or minus 10 percent when the sanction point was reached, so it is necessary to spend 3-5 percent of the total project cost, hence the \$2 billion cost. He reported that it is necessary to know the costs before being able to develop the detailed gas marketing plan. He advised that other projects in Asia could step in front or prices could crash, so this money could be spent for naught. He said it is an issue for whether the state should take on this risk or whether the producers are better equipped to handle that risk. He suggested that the producers, through diversification, could be better equipped as they are reviewing other international projects; whereas the state only has this project. He said this project is competing against the producers' other oil projects, so it is not a level playing field. The producers can make active decisions, whereas the state is the passive recipient of those decisions. He pointed out that the three North Slope producers have a market cap of almost \$750 billion. He questioned whether this money would make a material difference to the viability of the project. He suggested that there is a tipping point, but it is difficult to know it. The greater the interest by the producers, he opined, the less they need the state money. He suggested a balance of four things: how near the state is to the tipping point; the probability of the project; the size of the prize; and how material it would be for the state to lose \$600 million. He

proposed as an alternative to offer an arrangement for the state to buy into the project once it is sanctioned, and repay to the producers the feasibility costs with interest, which would allow the state more time to determine how it wants to proceed.

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MR. MARKS, in response to Co-Chair Saddler, explained material difference defines how bad it would be for the state to walk away from the project at FID. It is necessary to keep an eye on the prize and decide if it is worth the risk.

REPRESENTATIVE SEATON asked whether "sanctioned" is a term typically used in projects which are being analyzed.

MR. MARKS replied that it is not used explicitly, but often implicitly when governments take on a share of the development costs. He said most other places with oil first perform feasibility studies and then develop. He allowed it is not unusual for producers to take an ownership share and that feasibility studies are not always shared.

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MR. MARKS addressed slide 17, "3. Role of AGIA in Proposal," saying public comments made by the administration when the project was first introduced included: an aggressive time frame to get the gas to market; a desire to avoid a potential lengthy and costly legal fight over ending the AGIA license; and a proposal designed to end the AGIA license amicably. He pointed to the agreement for treble damages the state would be liable to pay to TransCanada should the state give any preferential tax treatment or grant of money to any competing project. He raised the questions of how much expert partnership the state needs and how much cash partnership the state needs. He opined that the proposed plan has been developed to give TransCanada a material role to avoid potential AGIA liabilities. He said the questions should be asked as to whether better terms could be available if the state was not so constrained by AGIA and whether these terms could be renegotiated with TransCanada.

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MR. MARKS introduced slide 18, "Areas Where State Could Possibly Have Better Terms If It Had No Partner or a Different Partner." He said if the state was not compelled to have a partner for the 60-100 percent of the gas treatment plant and the pipeline, and

had the opportunity to own 100 percent of the 25 percent, and could get good terms with tax exempt debt, with a lower cost of capital, then the state would receive higher gas revenues and a lower cost of gas to consumers. The 60 percent difference of ownership with lower cost of capital would save consumers several hundred dollars a year for the cost of gas. He said there is also a misalignment of interests between shippers and non-shipper partners. He pointed to cost overruns and expensive expansions as some of the biggest costs to the program, therefore a non-shipper partner would make money on these cost overruns, whereas the state would lose money. He said that non-shippers are not motivated to keep costs down and motivation is important. A different partnership for the state, he opined, or renegotiation of the Memorandum of Understanding (MOU) with TransCanada, could offer more preferable terms to the proposal. He suggested it would have been better for the state to share the failure to sanction risk, whereas under the MOU termination rights, if the project does not sanction, the state must repay TransCanada everything it has spent since January 1, 2014. This could cost the state up to \$270 million, regardless of whether the state exercised its ownership option. He maintained that TransCanada's placement of all the risk for a failed project back on the state translates to a lack of partnership during this period. He said there are instances in which pipeline companies have assumed development costs and incurred the risk of development expenses that did not result in a project. He offered an example of open season with precedent conditions that were not met, and said this is a risk of doing business as a pipeline. He argued that this non-assumption of risk should result in a lower cost of capital and suggested that a different partner might assume more of the risk. He said another term that could be improved in the current proposal is to share in the benefit of lower interest rates. Currently, TransCanada's proposed cost of debt is 5 percent plus whatever happens to 20-year treasury bills between now and FID. So, for example, if treasury bills increase 3 percent between now and FID, that will lock into an 8 percent cost of debt; whereas, if interest rates go down, there are often callable features on corporate bonds that would allow TransCanada to refinance a lower interest rate, while the state would still be paying 8 percent.

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MR. MARKS moved to slide 19, "Role of Financing Terms in Tariffs," explaining that much of the cost in a tariff is the financing cost, similar to interest payments on a home mortgage that result in a total payment of three times the price of the

house. He pointed to the weighted cost of capital, which is the percent debt times cost of debt, plus percentage equity times cost of equity. Equity costs more than debt because it is more risky given that creditors have access to debt before equity gets paid. Another reason more equity creates a higher tariff is that return on equity is taxable income that is passed off into the tariff. These provisions effect on each other: the more debt accrued, the riskier the other debt becomes which, in turn, increases the cost of debt, making the equity more risky and increasing the cost of equity. He stated that, in general, it is optimal to have less equity, resulting in a lower cost of debt and equity, and lower tariffs. The cost of capital terms can have a wide effect on the tariff, similar to a mortgage. Responding to Co-Chair Feige, he confirmed this is what is commonly referred to as the weighted average cost of capital. Continuing, Mr. Marks noted that these financing terms determine the tariff, the gas revenues, and the price of gas to consumers, because the costs of the pipeline and the interest are passed on to the consumer. TransCanada has proposed a tariff term of 5 percent debt, 12 percent equity, 75/30 debt/equity, which, he pointed out is probably better than what the producers could offer and is better than what most FERC regulated lines in the Lower 48 would offer. He reported that the TAPS tariff is 12 percent/5 percent with 50/50 debt/equity. He stated that FERC offers much higher returns on equity than does the Canadian National Energy Board as different formulas are used. He said the TransCanada proposal is similar to that of many other Canadian pipelines, and he offered some examples. However, he continued, with the option of 100 percent tax exempt debt, it is plausible that the capital provisions could be lower than the TransCanada proposal.

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MR. MARKS reviewed slide 20, "Are Better Cost of Capital Terms Possible." He said that terms on existing pipelines may not be relevant because if the state only needs a partner for cash then what it needs is a co-investor rather than a pipeline company. A co-investor that is an investment bank or private equity firm could have much lower capital requirements than a regulated pipeline. Additionally, the other 75 percent of the pipeline is being built be well financed, well capitalized, experienced, major international oil corporations, which could plausibly make the project less risky and induce a bidder for lower returns. He said bidders could offer a trade-off and be willing to absorb some of the failure-to-sanction risk in exchange for a higher rate of return.

MR. MARKS offered suggestions for possible re-negotiation of terms with TransCanada or a different partner. He discussed a higher ownership share than the 40 percent of the 25 percent for the gas treatment plant and pipeline currently offered to the state by TransCanada. He said lower cost of capital terms could also lower tariffs. He referenced some specific provisions of the MOU, including the right to exercise the ownership option. He cautioned that the Pre-Front-End Engineering and Design (Pre-FEED) might not be over by the date for the ownership option, so the state would have to make the decision with incomplete information. He expressed his lack of understanding for the provision in the termination clause that requires the state to enter into a firm transportation agreement by December 31, 2015, or TransCanada has the right to terminate, suggesting that the administration and TransCanada should be questioned regarding this clause.

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MR. MARKS introduced slide 21, "How Bound is State by AGIA." He said that if the state was to proceed without TransCanada, and modify taxes and take full ownership of the full 25 percent or maybe get a different partner, the state would incur a risk of legal and financial exposure through the license project assurance clause, also known as the triple damages clause. He read the clause from AS 43.90.440: "If ... the state extends to another person preferential royalty or tax treatment or grant of state money for the purpose of facilitating the construction of a competing natural gas pipeline project in this state ... the licensee is entitled to payment from the state of an amount equal to three times the total amount of the expenditures incurred and paid by the licensee ..." He explained this was included in the AGIA agreement so the licensee had the exclusive enjoyment of the \$500 million reimbursement inducement, and would not incur the expenses if the state offered a similar proposal to another group. He pointed out three ambiguities in this: the meanings of "preferential", "grant of state money", and "total amount". Addressing "total amount", he noted TransCanada has been reimbursed about \$350 million of the \$550 million it has spent. What is ambiguous is whether "total amount" means gross or net. If it means gross, the state would owe TransCanada three times \$550 million, about \$1.65 billion; if it means net, the state would owe \$600 million. The problem is that no one knows exactly what the state's exposure is. Addressing "preferential", he explained that when AGIA was rolled out in 2007 or 2008, the administration and Legislative

Legal and Research Services said the intent was not to preclude laws of general applicability. Included in CSSB 138(FIN) am, is something that could apply to a North American pipeline, or to a gas-to-liquids (GTL) project, or to ice-breaking LNG tankers going out of Prudhoe, or to any LNG project; so it is plausible that what is going on in SB 138 would not constitute preferential tax treatment. Most ambiguous, he continued, is the term "grant of state money" because it was not widely addressed during the legislative hearings on AGIA. He related that when asked what "grant of state money" means, the administration said "the outright unfettered financial grant". He questioned what that means and whether it could mean a donation. Arguably, an appropriation to buy equity and pay for an asset may not be a grant, he continued, but on the other hand possibly any appropriation could be considered a grant for financial support for a competing project.

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MR. MARKS directed attention to slide 22, "Options" to address the question of where the aforementioned leaves the state for dealing with the AGIA constraints and potentially preferable options, He said one option is to assess what the state's legal exposure is and consideration could be given to outsourcing legal expertise for assessing the exposure. Another option is to engage TransCanada and ask what it would do if Alaska proceeded without it. A third option is to renegotiate some of these terms to be similar to those that could be received from a competitor. The ambiguities to the state are also ambiguous to TransCanada. Another option is settlement, he said. To keep TransCanada whole, the state would really only have to pay single damages on net, which would be less than \$200 million. The least preferable option, he continued, is litigation because it takes time with an uncertain outcome. Some things could still proceed, and maybe the state would win, but even if it loses it potentially could have a better long-term outcome.

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MR. MARKS turned to slide 23, "4. Taxation: Production Tax," to discuss the state taking its taxes in-kind as proposed. He believed this makes sense because it provides economic benefit for the producers and creates alignment between the state and the producers. He pointed out that for in-kind taxes, it is sensible to assess this on gross at the point of production. Regarding an appropriate tax rate is, he offered his belief that

fair share is what can be gotten in a competitive environment, which is jurisdictions with a similar risk and reward structure.

MR. MARKS directed attention to slide 24, "Government Take - LNG Projects," an assessment produced by Daniel Johnston in the Black & Veatch report. He pointed out the wide variation in take among the projects, and offered his belief that similar jurisdictions are a matter of judgment. He said Alaska is a high cost, high risk region, with a government take around 60 percent. He pointed to the U.S. outer continental shelf (OCS) project, which has a 61 percent government take, advising that the project with TransCanada should not have a higher take than the U.S. OCS project. He estimated the state take should be between 57 and 59 percent, and he believed the analytical estimate was between 60 and 62 percent. Using 58 percent as the state take, he said the federal government would receive 23 percent, the state 35 percent, and the producers the remaining 42 percent. Splitting that 42 percent three ways among the producers, each would receive a 14 percent share, so the state would be receiving 2.5 times more economic rent than any producer. He said he therefore agrees with the definition of fair share that is in CSSB 138(FIN) am.

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MR. MARKS moved to slide 25, "Property Tax," offering his belief that property tax based on value is regressive because the higher the cost, the higher the tax, which adds to the economic risk for a project. An increase in project cost due to cost overruns increases the property tax as well. He pointed out that a property tax of 20 mills on a \$50 billion project results in a property tax of \$1 billion. The highest assessed property tax for TAPS was 1/5 of this, \$200 million, and was for oil, which is a higher valued substance. He pointed to a plethora of litigation over the valuation of tax, which has to do with appraisal for valuation which does not usually work well for a unique asset. He said appraisal for valuation works well for houses in a community, but not with an asset that does not have any similar comparisons. He allowed that social impacts to local municipalities will occur during construction of the pipeline, but questioned whether impacts are directly related to value. He noted that a clause in the Heads of Agreement (HOA) suggests the property tax be based on cents per thousand cubic feet (MCF) plus impact payments, instead of based on value, which he said makes sense in terms of reducing the economic risk of the project.

MR. MARKS concluded his presentation with slide 26, "Fiscal Stability," noting that for the past 20 years the producers have expressed the need continually for fiscal stability. Given the state's history over the past 25 years, he concurred that fiscal stability is important. He offered his belief that SB 138 is not stable, although taking gas in-kind stabilizes things somewhat. He said a future legislature could introduce additional assessments, and suggested there be discussion with the producers as to what would constitute adequate stability. He directed attention to the HOA, Section 9.3.2, which discusses the development of other terms to make contract terms predictable and durable.

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CO-CHAIR SADDLER recalled the earlier statement of Mr. Marks in support of the need for delay. Co-Chair Saddler posited that falling gas prices and supply growing faster than demand instead supports moving the project faster rather than slower to take advantage of the fall of commodity prices and construction expenses rising.

MR. MARKS replied competition is what the competition is, and the fastest that the project could reach market is 2024, a very ambitious goal. He said the market will continue to grow. There is no short-term window of opportunity and, arguably, prices could go up over time. The project will be a challenge no matter when it is started.

CO-CHAIR SADDLER requested clarification regarding the suggestion by Mr. Marks to wait and address more issues.

MR. MARKS offered his belief that waiting does not make the project more or less competitive or make it more or less viable, and working out some things could generate long-term benefits to the state.

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REPRESENTATIVE KAWASAKI maintained that the MOU, the HOA, and the bill put the state in the position of caboose, rather than the driver of the train. Although intent language has been added to the proposed bill, it does not have the full effect of law. He requested clarification from Mr. Marks, as the consultant for Legislative Budget and Audit Committee, regarding whether the proposed bill should be passed or should some of the questions be answered before moving forward.

MR. MARKS replied his role is to offer observations, questions to ask, and options to help in the decision making, but whether to pursue these is up to the committee. He said the HOA and the MOU are not contracts, but are long-term policy statements by the parties setting out guidelines for direction. There is no commitment for action in either of these, and they are not legally immutable. He said he has offered some options to consider putting into statute, as anything in statute offers more bargaining power and strength than negotiation.

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REPRESENTATIVE KAWASAKI offered his belief that the expansion provisions discussed earlier for lining up the relationship needed to be added to the proposed bill. He reflected on the suggestions for failed partnership and better cost capturing terms and asked whether these should be put in statute for a stronger bargaining position.

MR. MARKS agreed there is that option if this is judged to be in the state's best interest. He reiterated that anything in statute does not have to be negotiated and would lead to better terms. He suggested listening to the producers and TransCanada, and engaging them for these options and any resulting problems.

CO-CHAIR FEIGE pointed out that a stipulation in the HOA and the MOU is that any enabling legislation that is not accepted will allow the agreements to be terminated.

CO-CHAIR SADDLER reflected that the main message from Mr. Marks is that there are many ways this deal could have been structured. He inquired whether Mr. Marks has a recommended structure or whether Mr. Marks sees his role as poking and asking questions.

MR. MARKS replied he has posed many questions which legislators should ask and the answers to these questions will determine the direction to proceed. For instance, can the state finance this project with 100 percent debt? Can the state get taxes and financing? What is the state's legal exposure from AGIA? He said members have the option to ask those questions and then to proceed from there. At this point, there are a lot of unknowns that, if known, could offer direction, eliminate options, and highlight where legislators might want to go.

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REPRESENTATIVE SEATON drew attention to slide 5, recalling the 8-12 percent hurdle rate mentioned by Mr. Marks. He asked what the hurdle rate would be for the project as current proposed.

MR. MARKS replied that is a difficult question because [the hurdle rate] is a closely guarded secret. He noted that 8-12 percent is based on his experience, although it is dynamic and affects risk. He noted a discount rate, or hurdle rate, reflects the weighted average cost of capital, which is the cost to repay people for the use of money. A lower priced project might be subject to a lower discount rate, as there is not as much risk of the price going down. He allowed that the analyses across the spectrum of prices and discount rates offer a very complicated dynamic.

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REPRESENTATIVE SEATON understood that the hurdle rate is also the weighted cost of capital. He inquired whether this would be added to the cost and would reflect the project break-even point of \$16-\$17.

MR. MARKS agreed the cost and the hurdle rate determine the break-even price.

REPRESENTATIVE SEATON requested clarification that the hurdle rate is not for estimated internal rates of return by the oil and gas companies, but only for the project capital cost.

MR. MARKS responded the hurdle rate is the necessary rate of return for the project to be viable and generating enough money to repay the shareholders and creditors. A weighted average cost of capital of 10 percent necessitates a rate of return greater than 10 percent, and that is the hurdle rate.

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CO-CHAIR FEIGE, reflecting on the AGIA process, asked why TransCanada is "the only real solid company that bid under that AGIA process."

MR. MARKS replied there are two questions: why no one else bid and why did TransCanada bid. He offered his belief that AGIA had some commercial problems, as it was really designed for a third party pipeline ownership with its provisions for rolled-in rates, which created big problems for the producers. He related

that the Palin Administration preferred a third-party owned pipeline over a producer-owned pipeline, whereas the producers were clear that this did not work for them, and it was obvious to many observers throughout the world that the producers would not offer a serious bid during the open season. It did not make sense for companies to offer an AGIA bid, as the project would not work without the producers that wanted to build the pipeline. Some of AGIA's terms did not make commercial sense; it was still necessary for a FERC certificate even with a failed open season, and this had never been done prior. There was no big incentive to spend to get to open season, so what was put out was not developed. Everyone knew this, he said. Besides TransCanada, there were four other bids, two from companies with virtually no assets, and two non-conforming bids. He opined there were three reasons for the TransCanada bid: TransCanada had purchased Foothills Pipe Lines Ltd. and since the pipeline would proceed through Canada, TransCanada was familiar with the territory; the TransCanada pipes were running empty and would benefit from Alaska gas; and TransCanada had strategically figured its benefit from the treble damages clause.

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CO-CHAIR SADDLER asked whether the provision in the HOA for the producers to market Alaska gas alongside their own gas is sufficient to overcome concerns.

MR. MARKS replied the HOA states that the producers are willing to negotiate an agreement to purchase and dispose of oil. Under the current in-value system, the producers sell oil and the state gets a cut of that, and he suggested "this could possibly be beefed up, possibly in the statute."

CO-CHAIR SADDLER asked whether Mr. Marks recommends that the state should negotiate for a better deal.

MR. MARKS expressed his agreement.

REPRESENTATIVE KAWASAKI requested a comparison of this project to the Stranded Gas Development Act (SGDA).

MR. MARKS responded the proposed SGDA was not a perfect deal; it "was the governor's call and he was elected to make those calls." Reflecting on which is the better deal, he said the proposed economic return of 25 percent for this project is better, which trumps any other possible downside issues for having a partner.

REPRESENTATIVE KAWASAKI requested a comparison to the risks under this proposal versus SGDA.

MR. MARKS offered his recollection that the 20 percent ownership of SGDA would also incur 20 percent of the development costs. The SGDA was a much lower cost project so there was a lower percentage of a lower cost.

REPRESENTATIVE KAWASAKI referenced the off-ramps [in the MOU] and the ability to re-view some of the issues. He questioned the domino effect of changes to the proposed bill. He requested a reiteration of earlier comments on the termination clause.

MR. MARKS answered the termination clause allows TransCanada to terminate if the point of FID is reached and there is not a project. The state would owe TransCanada for all expenses since January 1, 2014, regardless of whether the state had exercised its ownership option. He pointed out that this option could be exercised prior to Pre-FEED.

REPRESENTATIVE KAWASAKI asked whether these are adequate off-ramps.

MR. MARKS replied that, in terms of the commercial relationship with TransCanada, if the project moves forward as written in the MOU from Pre-FEED to FEED the state would owe TransCanada about \$270 million if the project does not happen.

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CO-CHAIR SADDLER, referencing slide 13, asked about the state's need for a cash partner instead of an expert partner. Recalling Mr. Marks's statement that the state could, instead of a partnership, use debt equity or Alaska Railroad Corporation bonds, he asked for a better definition of a general investment partner, what return should be expected, and what debt/equity ratios a partner would accept.

MR. MARKS responded that if the state needs a partnership for cash and not expertise, then the partner does not need to be a pipeline company. The need for a co-investor for cash would allow a competitive bid to find out the return necessary to an investor. He speculated that a cash investor may ask for less than a regulated pipeline company, although it is unknown until asked.

REPRESENTATIVE SEATON, regarding return on investment for a regulated pipeline company, inquired whether this is a return on equity or a combination of debt and equity. He suggested that none of these could compete with the Alaska Railroad Corporation tax-exempt bond structure, if that is a possibility.

MR. MARKS offered his belief that this is correct, citing the aforementioned Citigroup opinion for tax-exempt debt.

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CO-CHAIR FEIGE directed attention to slide 11, and asked about the enhanced market efficiencies with a transparent pipeline cost. He opined there would be transparency as an owner, no matter what the option.

MR. MARKS replied he was referencing the market efficiencies for small gas producers that may want to sell gas, but do not want to ship or liquefy gas. He said he envisions this process under Section 3, noting that the use of "confidential" is everywhere. He questioned whether the public would ever know the cost of the pipeline, and therefore, a third party will not know what a reasonable discount is for selling its gas.

CO-CHAIR FEIGE requested clarification to that scenario.

MR. MARKS explained that this hypothetical situation envisions a decline in gas production, allowing space in the pipeline. When the oil companies buy gas from the small producers, the small producers make a profit because they have no oil spill risks; for example, many small producers have stopped shipping oil after the incident with the Exxon Valdez. Instead, they sell on the North Slope, and this efficiency makes money for everyone. He said there would be a similar hypothetical situation with gas. Transparency in these costs facilitates efficient markets.

CO-CHAIR FEIGE requested clarification in regard to the expansion capabilities negotiated into the MOU and the HOA being insufficient. He suggested there would be a cost associated with expansion in capacity of the pipeline and it seems fair that those costs be borne by someone. Per the agreement, this cost would not be borne by one of the original partners. He expressed his understanding that the design allows for a significant expansion of throughput, however someone should pay for this addition.

MR. MARKS expressed his agreement, but said he was assessing a situation whereby expansion was not necessary as there was a bit of excess capacity available in the pipeline. In this situation, a small producer would sell to a large producer.

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CO-CHAIR FEIGE reflected on discussions regarding AGIA and SGDA, and noted that neither had succeeded in a pipeline to monetize North Slope gas. He asked whether the proposed bill has addressed the flaws in these prior pieces of legislation.

MR. MARKS replied it was not the previous legislations that stopped the proposed projects; it was the market because the market drives everything for a project. Hopefully there is now a market.

CO-CHAIR SADDLER requested Mr. Marks' opinion on the pro-expansion alignment and whether it would benefit the state.

MR. MARKS replied that with an absence of regulation no one is compelled to expand. Under a FERC or RCA regulated pipeline, if the expansion is large enough to make economic sense, then it is mandated by the regulators. He directed attention to Section 3 of the Natural Gas Act, which states that no one is compelled to expand. He offered his belief that ownership of the pipeline by the state would ensure reasonable expansion provisions, if necessary, as the state could be the expansion source of last resort. He maintained this will work if the state pursues reasonable terms and not high rates of return.

CO-CHAIR SADDLER stated there are advantages for the consumers to have a regulated pipeline, and asked whether the contractual arrangements are intrinsically worse.

MR. MARKS said he envisions consumers receiving gas based on the state's capacity, as the state will be well motivated to put reasonable terms on what it charges its citizens.

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REPRESENTATIVE SEATON, regarding expansion and non-transparency, surmised the problem is that no one would be able to figure out the wellhead value, so no one would know what a reasonable price of gas is at the wellhead.

MR. MARKS confirmed that is the problem.

REPRESENTATIVE SEATON noted the terms state that any party can expand but no one has to expand. A party choosing not to expand has no liability for cost. However, he noted, if the increased volume lowers the cost, even those who chose not to expand will benefit from the lower cost. Each party's costs are different and not known. He asked whether it makes sense for the non-participants in the expansion to share in the benefits but not the liabilities.

MR. MARKS replied pipelines live and die by economies of scale; the bigger the pipeline, the lower the per-unit cost. Expansion usually lowers the per-unit cost. He explained that expansion benefits from the base capacity, so it makes sense for the base capacity to benefit if the expansion lowers the cost for everyone.

REPRESENTATIVE SEATON noted that AGIA has the same arrangement, but if the expansion costs more there is a liability up to 15 percent above the current rate; if it costs less, then all share in the benefits. He pointed out that there was not any sharing of the upside cost. He inquired how to figure the benefit for increased flow in [the Alaska LNG Project] pipeline when there is no unified tariff.

MR. MARKS answered there are four pipes within [the Alaska LNG Project] pipeline. If someone wants expansion capacity, the state would be the expansion source. There would be a per-unit cost, but he said it unclear regarding the transparency of the negotiations.

REPRESENTATIVE SEATON commented "it sounds about as foggy as I thought it was."

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CO-CHAIR SADDLER asked whether, from Mr. Marks' perspective with other worldwide LNG projects, there are any special concerns or challenges for marketing this volume of gas.

MR. MARKS replied there are huge challenges due to the size of the project and having to amortize the pipeline. It is necessary "to put a lot of gas through to get the per-unit cost down, which makes a marketing challenge." In Asia, gas is marketed contract by contract, utility by utility, which is different than in the Lower 48. The Asian market is growing about 2 billion cubic feet per day per year. At an expenditure

of \$65 billion, the state does not want the pipeline to be empty for very long; the gas must be sold quickly because a slow ramp-up has a negative effect on the rate of return. He pointed out the necessity to market a lot of gas in a short period of time. This proposed project will produce 2.4 billion cubic feet (BCF) per day, so it could take four years to market this much gas, meaning the pipeline would be empty for three years. If it takes four years to get 2.4 BCF a day, and the market is growing only 2.0 BCF a day, this project must capture 30 percent of the incremental market in Asia every year, which is quite ambitious.

MR. MARKS, responding further to Co-Chair Saddler, explained that with a market growth of 2 BCF per day, it is not possible to get 2.4 BCF a day into the market in the first year because the market is growing slow and lots of other people are competing to sell gas to this market, and the gas must be sold utility by utility by utility. The size of this project makes a challenge because of needing to get a lot of gas into the market in a short amount of time while the market is only growing incrementally so fast. To capture 30 percent of the incremental market in Asia for four years in a row is an ambitious task. Even in this good case the pipeline will be partially empty for three years, so if it takes five years to market the pipeline will be empty even longer. This is one of the unique commercial challenges of this project because of it being an 800-mile-long, high-cost pipeline.

CO-CHAIR SADDLER offered his understanding that LNG projects do not typically start at that low level of utilization and then take years to catch up.

MR. MARKS replied the other LNG projects are smaller projects that do not have to sell as much gas, so it is easier to market.

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CO-CHAIR FEIGE pointed out that Alaska has the advantage of not having to drill the wells to produce the gas, so as soon as the gas is contracted for, there is the certainty that the gas is there and is available immediately upon pipeline completion. He asked whether that counteracts any of the aforementioned disadvantages.

MR. MARKS responded it would counteract "a little bit." He drew attention to slide 5, which depicts the upstream costs, but not the project pipeline costs for various new LNG projects. He allowed Alaska may have a low upstream cost because the gas is

already being produced. He said the break even cost that he calculated more than offset the upstream cost for these other projects. Most of the depicted projects are not developed and not being produced, but they are proven. While producing the gas will not be cheap, it is not the biggest challenge for those projects; their biggest challenge is getting into the market with the cost of the LNG part, not the producing gas part.

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REPRESENTATIVE P. WILSON recounted that people have mentioned a bigger size pipeline. She asked whether there is an optimal size for a pipeline relative to cost.

MR. MARKS answered that when the state was previously talking about a pipeline to North America, the size contemplated was 4.5 BCF per day. If that gas can be gotten into the market, it is easy to sell -- just put it into the pipeline grid and it goes. But Asia is a challenge. A larger pipeline would bring down the per-unit cost, but necessitates the sale of more gas. Asia is the exact opposite problem that the state had in North America, so the producers have tried to find the sweet spot to make the pipeline as large as possible but not so big that the gas cannot be gotten into the market. He pointed out that although the market is growing, and given how much of the incremental market Alaska would have to capture each year, it is still ambitious to get even a smaller amount of gas into the market, which is one of the big problems with this project.

REPRESENTATIVE SEATON requested the committee receive in writing the questions that Mr. Marks has suggested asking.

MR. MARKS suggested the request be made to the Legislative Budget and Audit Committee and he will be happy to provide them.

[CSSB 138(FIN) am was held over.]

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ADJOURNMENT

There being no further business before the committee, the House Resources Standing Committee meeting was adjourned at 7:03 p.m.