ALASKA STATE LEGISLATURE
HOUSE RESOURCES STANDING COMMITTEE
March 24, 2014
1:14 p.m.

MEMBERS PRESENT

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

MEMBERS ABSENT

All members present

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
02/20/14	(S)	Heard & Held
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
02/26/14	(S)	MINUTE(FIN)
02/27/14	(S)	FIN AT 9:00 AM SENATE FINANCE 532
02/27/14	(S)	Heard & Held
02/27/14	(S)	MINUTE(FIN)
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
03/03/14	(S)	Heard & Held
03/03/14	(S)	MINUTE(FIN)
03/04/14	(S)	FIN AT 9:00 AM SENATE FINANCE 532
03/04/14	(S)	Heard & Held
03/04/14	(S)	MINUTE(FIN)
03/05/14	(S)	FIN AT 9:00 AM SENATE FINANCE 532
03/05/14	(S)	Heard & Held
03/05/14	(S)	MINUTE(FIN)
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
03/10/14	(S)	Heard & Held
03/10/14	(S)	MINUTE(FIN)
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

WITNESS REGISTER

NIKOS TSAFOS, Partner, Energy Consultant
enalytica
Washington, DC
POSITION STATEMENT: As consultant to the Alaska State Legislature, provided a PowerPoint presentation in consort with

his partner, Mr. Mayer, entitled, "Project Structure, Finance, Cash Flows and Midstream," regarding the Alaska LNG Project proposed under CSSB 138(FIN) am.

JANEK MAYER, Partner, Energy Consultant
enalytica
Washington, DC
POSITION STATEMENT: As consultant to the Alaska State Legislature, provided a PowerPoint presentation in consort with his partner, Mr. Tsafos, entitled, "Project Structure, Finance, Cash Flows and Midstream," regarding the Alaska LNG Project proposed under CSSB 138(FIN) am.

ACTION NARRATIVE

1:14:21 PM

CO-CHAIR ERIC FEIGE called the House Resources Standing Committee meeting to order at 1:14 p.m. Representatives Hawker, Seaton, P. Wilson, Tarr, Kawasaki, Saddler, and Feige were present at the call to order. Representatives Johnson and Olson arrived as the meeting was in progress.

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

1:14:43 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."

CO-CHAIR FEIGE noted that the legislature's consultants from enalytica are providing a presentation regarding the proposed Alaska Liquefied Natural Gas (LNG) Project.

1:15:03 PM

NIKOS TSAFOS, Partner, Energy Consultant, enalytica, said he will be talking today about existing project structure versus alternative project structures, financing options available to the state, cash in and cash out as regards how much the state will be paying and what the state can expect to get in return, and the midstream [portion of the project]. Addressing slide 4, "Executive Summary," Mr. Tsafos said there is enormous variation in structure when looking around the world at how other LNG projects are structured. Regarding Alaska's circumstances, the current [proposed] structure has a great deal of merit. Regarding the financing plan, Alaska would be responsible for paying its share of the investment. Where that money would come from is currently unknown, but there are various options available to the state. Regarding the modeling of various structures, enalytica ran an economic case as well as a stress case to quantify what would happen if things went wrong. He cautioned that the stress case he will present is a negative, but not catastrophic, scenario; he therefore asked members to please not take this model as the worst that could happen. Useful in this stress case is that it reiterates a message enalytica has presented, which is that LNG projects usually do

not lose money, rather they may not make as much money as would be liked.

1:18:34 PM

MR. TSAFOS continued addressing slide 4, saying the Memorandum of Understanding (MOU) between the state and TransCanada makes sense when it is assumed the state is capital constrained. Given this assumption, it makes sense to focus the state's money, as is done under [CSSB 138(FIN) am], on the liquefaction and foregoing some of the participation in the pipeline and gas treatment plant (GTP). Regarding the tariff - TransCanada's charge to the state for the state's participation - the tariff is expensive when compared to a loan because the state could probably borrow money for a lower rate. However, the tariff is attractive in terms of what tariffs are generally in the marketplace. There are two ways to judge this. The first is how much it would cost the state if it undertook the project by itself. The second is the tariff cost charged to the state if it were to find a different partner. Regarding the money that will be generated by this project, TransCanada will receive between 1 and 7 percent of the total return, depending on price and whether [the state exercises its buyback option]. Regarding the finer points of the MOU, the risk allocation is something worth focusing on.

1:21:31 PM

MR. TSAFOS turned to slide 5, "Proposed Project Structure Has Lots of Merit," and reminded members of their previous request for a review of other project structuring possibilities besides that proposed under CSSB 138(FIN) am. He noted there are four pieces to the project: the upstream, which is gas in the ground; the treatment plant, which purifies the gas; the pipeline, which is 800 miles long and goes to Nikiski; and the liquefaction facility, which liquefies the gas for transport on ships. Of the options listed under each of the four pieces, the ones highlighted in grey represent those [proposed under the bill]. A project could be created by combining one item from each of the four pieces/columns. Any of the options listed for each piece could be selected and combined to create a project. Some of those combinations probably do not exist in the world today, but most of the combinations would have an example of a project somewhere in the world that is structured in that way.

1:23:39 PM

MR. TSAFOS reviewed the various options for structure listed for each of the four components of the project. Under the upstream component, one option is for the oil companies to own and produce the gas with the State of Alaska (SOA) participating through royalty and taxes. This option is the status quo, or in-value, world. Another option is for the oil companies to own a share of the fields, but the state becomes a partner. In this option, the state owns a share of the asset instead of, or in addition to, being a royalty or taxing authority. Usually this would happen at the beginning of the process, so this would have been a good discussion to have in the mid-1960s. When looking at LNG projects around the world, usually a sovereign becomes a partner from the beginning of the lease or the concession term. In today's world, the option would be for the state to buy into the field. The last option is where there are no oil companies and the state fully acquires the upstream. There are places in the world where this happens, usually when the state nationalizes and becomes a 100 percent owner of the asset. There are places where the state is 100 percent owner for assets that have yet to be leased committed to a lease.

1:25:32 PM

MR. TSAFOS noted that all of the structure options listed for the gas treatment plant, pipeline, and liquefaction components are the same. He said the structure chosen for each of these three components may or may not be the same as that chosen for the other two components. One option is the oil companies own 100 percent of the assets. A second option is that the oil companies and the state own the asset, which is what is envisioned in the Heads of Agreement (HOA). A third option is for the oil companies plus the state plus a third party. A fourth option is the oil companies plus a third party. These last two options are the worlds envisioned by the MOU and the HOA together. A fifth option is the state being 100 percent owner. A sixth option is the state and a third party. The last option is for a third party being 100 percent owner, which was the beginning structure for the project under the Alaska Gasline Inducement Act (AGIA) until one of the oil companies joined into that process. The options highlighted in grey are the structure options chosen under the HOA and the MOU [as well as in CSSB 138(FIN) am].

1:27:22 PM

MR. TSAFOS described each of the structure options on slide 5. Regarding the options listed under the upstream component, he said the proposal [under CSSB 138(FIN) am] for the state to move from in-value to in-kind, or the idea of the state taking physical ownership of the gas, is between the first option where the oil companies own and produce the gas with the State of Alaska (SOA) participating through royalty and taxes and the second option where the oil companies and the state become partners. This is because the state is in some ways a partner since it is responsible for some of the cost through the tax system and because the state is entitled to some of the gas. Thus, in some ways, the state is becoming a partner by virtue of its gas entitlement. Regarding the third option under upstream, he said expropriation, while a path open to the state, might be too harsh. The drawbacks to this option are the amount of money the state would have to pay upfront and the state having to learn how to run this massive asset on its own.

1:28:55 PM

MR. TSAFOS addressed the options for structure under the gas treatment, pipeline, and liquefaction components, conjecturing that he does not need to say much about why the state would not want the oil companies to own 100 percent. If the state had an asset where this was the only gas around, it might not be a bad structure; but, if the state is looking to develop an infrastructure that should be open to others and to incentivize the development of additional gas, this structure poses some challenges. Regarding a structure of 100 percent state, he said there is merit to this in terms of the state's ability to create an open access pipeline network. The challenge to that structure would be chiefly financial given the [estimated total project cost of $45-$65 billion]. Regarding a structure of the state with a third party, he said there are places where that happens but it generally does not happen because it is very difficult for someone to come in and make that big investment without also having that visibility on the upstream as it is difficult to coordinate and integrate with the upstream. Regarding a structure of 100 percent ownership by a third party, he said it would have the same problems as with the option of the state and a third party.

1:31:11 PM

MR. TSAFOS said what comes across when looking at this structure is the integration benefits of having one company see through the entire chain, with the benefit of that infrastructure not

being exclusive. One example was brought up during the [2/4/14] presentation by Steve Butt, Senior Project Manager of the Alaska LNG Project for ExxonMobil Development. In his presentation, Mr. Butt stated that during the AGIA process the thought was that there would be four trains at the gas treatment plant. However, once [all of the producers] were brought together and there was access to all the data information across the entire chain, it was found that three trains would be the optimum number. When looking at the structure highlighted in grey representing the MOU and HOA, it is seen that there is a lot of merit in avoiding the pitfalls of an oil company-only asset, but gaining the benefit of having the oil companies involved to gain efficiencies across the entire value chain.

1:33:18 PM

MR. TSAFOS brought attention to the difference in structure between the liquefaction component and the pipeline and gas treatment plant components as proposed by the MOU and HOA. He said this difference makes sense in that the state's primary interest is to ensure that if someone develops more gas, this gas can be delivered by putting it through the pipeline. That structure really needs a third party for the gas treatment plant and the pipeline. However, for the liquefaction facility, an entity finding enough gas to expand the liquefaction facility could take on the task of building that additional capacity. A third party owner in the liquefaction would not be as critical as for the pipeline. Similar ownership between the pipeline and liquefaction is unnecessary because liquefaction is the building of a parallel facility at the same location, so the same ownership that allows open access to the infrastructure is not needed.

1:34:43 PM

REPRESENTATIVE KAWASAKI related it has been argued that under state ownership there is better transparency when it comes to negotiating. He read a statement by a legislative consultant, Roger Marks: "It is possible that any partnership with private parties who generally operate with greater confidentiality than public entities could limit transparency." He requested that enalytica address this statement, adding that Mr. Marks made this statement under the "ownership section dealing with whether state ownership is a good thing or not."

JANEK MAYER, Partner, Energy Consultant, enalytica, replied there are two different considerations. There is the question

of transparency toward the state's administration, and transparency beyond the administration to the legislature and to the general public. It is difficult not to think that the state as an active participant does not radically increase transparency toward the executive branch because it is an investor in this project and is making key decisions along with the other members and therefore has access to all that information. His impression from the aforementioned quote is that the argument being made is that the state is being brought in to private participation in a private project, and it may no longer have the same impetus to disclose everything to the legislature or the public, which, he allowed, may be true. He said he thinks CSSB 138(FIN) am goes a long way in terms of this initial contract negotiation process and how that will be handled in terms of both things that need to be maintained as confidential through that process and then an eventual public process for approval or disapproval of the contracts that are negotiated. But, if core interest of the state is in understanding the details of the project so that its financial interest is protected, it seems to him it is hard not to think that that is addressed by participation, whether or not that means that all the details are suddenly open to the public.

1:38:22 PM

REPRESENTATIVE HAWKER pointed out that missing from the chart on slide 5 are the transmission lines from the Point Thomson and Prudhoe Bay fields to the treatment plant, which in the HOA are carved out for special treatment. He asked whether the transmission lines are a relevant consideration in this chart, recognizing that upstream is defined differently in this project than in the past.

MR. TSAFOS responded enalytica did not include the transmission lines in this chart because they were not thought relevant. Whether the transmission lines are considered upstream or gas treatment matters for taxation, but does not matter in the broader structure of the project.

1:39:39 PM

REPRESENTATIVE HAWKER took issue with the statement that the transmission lines are relevant to taxation but not in the broader perspective, saying it is not a congruent statement as taxation is a big issue for the state.

MR. TSAFOS answered that it classifies the lease expenditure that is deductible for the upstream and it also defines the point of production. Agreeing it is important, he qualified that it is not important in terms of how that structure is thought about. Where exactly the split is between each column/component is quite important in how the pass is made from one column to the other. Enalytica did not include an additional piece as it is either part of the upstream or part of the treatment plant in terms of an LNG project structure. Rarely is there another party that comes in to just do the pipeline from the upstream to the treatment plant, and that is the context in which he meant the transmission lines are not important to the structure. He agreed it is important to the economics in how the state's share is calculated and how lease expenditures are calculated. Because enalytica thought that the transmission lines will be part of either the first or second column, it was thought unnecessary to have an additional column for them.

1:41:22 PM

REPRESENTATIVE HAWKER appreciated the difficulty of simplifying a very complex project into a chart, saying an inherent danger of simplification is that it provides the appearance that the chart is an exclusive list of options. Drawing attention to the statement on slide 5, "Possible Project Structures based on Ownership," he expressed concern that ownership and control are not equal. Both have merits and when the gives and the gets come to the contract that is established, ownership and control can be managed through the relationship. Saying slide 5 is purely an ownership analysis, he queried whether the state should be concerned about control in addition to ownership or whether control is not an issue for enalytica.

MR. TSAFOS, in regard to the dangers of trying to simplify the complex, replied that enalytica could show this ownership in terms of what it entitles the state to in terms of capacity rights and control. Speaking to the question of control, with the state as a minority partner, he noted the question of how much control 20 or 25 percent [ownership] gives the state, and against what. When compared against zero, the state probably has quite a bit more control, but at the same time it does not have a majority share. It is important to understand that if this proposed legislation passes the state will spend the next year developing joint venture agreements and setting up the corporate structure for this project. In that corporate structure, one of the things that will be defined is the kind of

agreement the different decisions require. As with any company, some can be passed with a majority vote, some need two-thirds, and still others need unanimous consent.

MR. TSAFOS hypothesized that major decisions [for the Alaska LNG Project], such as whether to go to Front-End Engineering and Design (FEED) and authorize the next $1-$2 billion, or whether to construct the project, will most likely require unanimous consent. Looking at projects around the world, when companies are not interested or unwilling to move something forward, the project either completely slows down or the companies leave. Qualifying that this does not mean it has not happened, he said he cannot think of an example where 51 percent of the ownership of an LNG project decided to go ahead with the project, while 49 percent did not want to. He allowed this does not protect against all sorts of decisions. As a minority owner, there will be decisions in which the state is on the losing side. When looking at the joint venture agreements, it is crucial to understand exactly what those decisions are. The administration will negotiate those agreements and in some things the state will only have 25 percent veto power and in some things the state will have no veto power. There will be many times the state will not care to have veto power, such as more technical or operational aspects, whereas the operators might care a great deal.

MR. TSAFOS, continuing his response, said that the State of Alaska will likely be the second largest owner with 25 percent and ExxonMobil will likely have a bit more than 25 percent. Based on his experience, he cautioned committee members not to assume that the oil companies will always agree with one another or will always sit on the same side on any given issue.

1:47:49 PM

REPRESENTATIVE HAWKER agreed with the aforementioned analysis by Mr. Tsafos. He said the state should try to anticipate and identify every one of its conceivable concerns and write them into the joint venture and limited partnership agreements, saying that regardless of ownership the state has the right of refusal. He added he is trying to keep in mind the concept that this project is a pipe within a pipe. Although Mr. Tsafos said that the state owns 25 percent of this project, he argued, that it is not really ownership as it is within a limited liability partnership that the state does not control, and therein lays his concern because those different issues must be anticipated

and dealt with. He noted the legislature has no say in how those issues get resolved.

MR. TSAFOS answered that the state has a 25 percent share in the liquefaction, whereas, in the pipeline and the gas treatment plant, the state's share comes through TransCanada.

REPRESENTATIVE HAWKER clarified he is talking about the pipeline and the gas treatment plant.

MR. TSAFOS agreed with Representative Hawker in that it must be seen how that agreement is structured. He said enalytica's understanding is that the intention of this structuring is to ensure that TransCanada and the state participate as a 25 percent owner as opposed to having one company own 15 percent and another company own 10 percent. Whether that is a wise decision depends on the level of control and influence that the state will have in that joint venture and he does not think that is known yet. Thus, it will be well worth looking out for this when these agreements come back [to the legislature].

1:51:00 PM

REPRESENTATIVE TARR asked whether it would have been premature to expect some of those major decisions to have been outlined in the Heads of Agreement (HOA), thereby providing comfort to the legislators.

MR. TSAFOS offered his understanding that the MOU had some language to that effect.

REPRESENTATIVE HAWKER confirmed that it does.

REPRESENTATIVE TARR pointed out the MOU is the state's alignment with TransCanada, while the HOA is the alignment with all the partners.

MR. MAYER responded that it was probably premature. He said the HOA does not commit the state to take gas in-kind or to have an equity share; rather, the HOA sets a vision where, if satisfactory agreements can be reached, this will happen. The question of satisfactory agreements is integral as it answers the question of what the state has control of and veto over, as well as an endless array of other issues.

1:52:43 PM

REPRESENTATIVE TARR said it would be instructive to consider whether language should be included in the bill to have the force of law for expectations that would be used to work on those joint venture agreements. She remarked that the timeline is an issue given "how little control we might have once the enabling legislation goes forward" because "at that point we would no longer be the negotiator ... we would be hoping that the deal was negotiated in the best possible way on our behalf ... and then eventually come back, but we would not actually be able to participate in that way."

MR. MAYER concurred, saying the aforementioned points out why it is so important the legislature be clear about, and have confidence in, this process of executive session briefings with the administration as these contracts are being negotiated. Additionally, the legislature must have confidence that these are going to happen on a regular basis and will have the full degree of transparency needed to understand what is being contemplated and what might be traded off, and provide an adequate opportunity to say "do not go here because ... going there would fundamentally jeopardize the ability for us to approve this when it actually comes back to us." Without that, he continued, it seems the legislature does face an up or down vote, and cannot have confidence. The process of executive session briefings is so critical and one that the legislature needs to have full confidence in.

1:54:54 PM

REPRESENTATIVE HAWKER drew attention to the MOU, Exhibit B, page 1, Alaska LNG Project Equity Option Term Sheet, item 3, which is the area of the document being talked about and which reads [original punctuation provided]:

> The Limited Partnership Agreement would provide that TADI [TransCanada Alaska Development, Inc.] or its Affiliate would own 100% of the general partner of the Limited Partnership, and such general partner would hold a minimal (less than 1%) interest in the Limited Partnership. The General Partner would make all decisions on behalf of the Limited Partnership, provided that the Equity Option Agreement will provide that certain fundamental decisions (e.g. change to distribution policy, winding-up of Limited Partnership, sale of significant interest of Limited Partnership in AK LNG) could not be made without the approval of the Optionee (before the option is

exercised) or the Limited Partner (after the option is exercised). The General Partner would be entitled to recover all of its reasonable direct and indirect costs that are associated with it acting as the general partner.

REPRESENTATIVE HAWKER noted that, basically, there are words in the aforementioned that say the State of Alaska. He expressed his concern that those are very vague descriptions of the kind of control that would be put in place through the contractual relationship. Regarding an up or down vote, he said it is important to remember that the legislature passes enabling legislation that empowers the administration to go forward and ink the document that inherently involves the Equity Option Term Sheet, which does not come back to the legislature for approval. The legislature is proceeding in good faith that the administration get it right for the next 50 years, a concern he struggles with in this whole process.

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REPRESENTATIVE KAWASAKI recalled discussion about the difference between ownership and control. He said his concern with the state becoming a part owner or junior partner in a pipeline is for how that balances out with the state being a sovereign, a taxing authority, and a regulator, the state's current role. He asked whether there are examples of similar situations.

MR. TSAFOS replied that the typical case in the world of LNG is for the state to be an owner in the project rather than not. Most LNG projects "out there" have a sovereign as a full equity partner all the way from the investment to marketing that gas. However, when a state wears multiple hats things can sometimes get confusing and difficult. In his experience working with national oil companies, he related, it sometimes becomes difficult to separate the company functions from the sovereign functions and sometimes national oil companies act as regulators or as the authority that grants the leases. So, in some ways, a national company can be thought of as encompassing four or five of the State of Alaska's departments or functions within those departments. The lesson is that things can be structured in a good way that delineates the responsibilities of the state-owned enterprises, the responsibilities of the regulators, and the relationship between them. It is important to sketch that out in the proper way, but this is by no means a conundrum. It is typical for states to be both regulators and part owners in the resource.

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REPRESENTATIVE KAWASAKI requested specific examples.

MR. TSAFOS answered oil examples include Brazil and Venezuela, and LNG examples include Qatar, Algeria, United Arab Emirates, Indonesia, Russia, and Yemen.

REPRESENTATIVE KAWASAKI maintained the aforementioned examples are different because they are state-owned oil companies that are partners. He queried whether there are examples where the state does not own its own oil company and oil company interest so that it is more similar to what is proposed for the Alaska LNG Project.

MR. MAYER responded there are plenty of examples of states that either did not have a large or any national oil company at the outset. They typical situation is still one of participation through a national oil company even if it is a fledgling national oil company that is sometimes referred to as a purse box national oil company, which is a place to mail checks to. The bill before the committee is also a corporate entity of the State of Alaska which would participate and, in that sense, is no different in some ways to a fledgling national oil company in another jurisdiction. There is one part of this that is unique to Alaska, as far as he is aware, and that is the question of creating the equivalent of an equity share of the gas itself by taking the royalty and the tax in-kind and turning that into a state profit share. In that sense, Alaska is already used to relatively unique, hybrid models. For instance, the profit-based production tax laid on top of royalty is a hybrid in its own way. This comes from the state wanting to be a more active participant in its resource, but coming from a general U.S. framework that is one of private ownership and a much less involved role of the state. The basic foundation here of leases and all the rest, and the way this foundation is written is not one in which the state naturally has an equity stake in the upstream and other things. The unique component of the Alaska LNG Project is its construction of royalty and production tax in-kind to create an equity share for the state. The broader point of equity participation in a project is the norm rather than the exception.

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MR. TSAFOS returned to his presentation, addressing slide 6, "Various Financing Options Open to LNG Projects." Qualifying that this is again a simplification, he said there are two ways to finance a project of this type: balance sheet financing and project financing. Under balance sheet financing, the project sponsors provide funds. For example, each part-owner could put down the same percentage as its ownership, creating a pool of money for building the project. These funds can combine debt as well as cash flow, so when one party puts down, say, $10 billion, that money could be both revenues as well as debt that was raised. The ultimate guarantee comes from the project sponsor and the sponsor's balance sheet. It comes down to faith in the project sponsor, the company that is putting in the money, and the faith that that company will pay its debts. This type of financing is easier if all the parties have great balance sheets. Under project financing, third parties lend money to the project directly, not to the sponsors. In this case, money would be loaned to the Alaska LNG Project, not to ExxonMobil, BP, Conoco, and the State of Alaska. The project would get some equity; for example, the project could be capitalized with 30 percent equity from the pockets of the sponsors, with the rest borrowed by the Alaska LNG Project. Crucial is that the guarantee for the debt is the project revenues, not the project sponsor. The difference between the two options is that with balance sheet finance the ultimate guarantor is the project sponsor and with project finance it is the revenues of the project. Because of that, the rate for project finance depends on risk of the project and, in particular, the risk of the people who are promising to pay back the money. This form of finance is attractive because it is easier to accommodate riskier sponsors. For example, when an LNG project was being done in Qatar in the mid-1990s and the State of Qatar was bankrupt, a lender may not have wanted to loan money to the State of Qatar, but the lender may have wanted to loan money to a project being led by ExxonMobil in which the State of Qatar was a partner and the revenue was guaranteed by the Japanese utility that had promised to buy gas from that project. In the case of the Alaska LNG Project, the financial strength of the state's partners is probably not at the top of the list.

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MR. TSAFOS, continuing his discussion of financing options, said it was important to keep the distinction between the two in mind because project finance is non-recourse debt, so the bank can only take the asset, which, from an accounting perspective,

allows a project sponsor to not have that asset on its balance sheet. In thinking about debt specifically for the Alaska LNG Project, project financing would make a difference for the state's credit ratings, its debt numbers. Under balance sheet finance for the Alaska LNG Project, the State of Alaska would borrow money or take money from taxes to put into the project, while under project finance it would be the Alaska LNG Project that is borrowing the money. This is an important distinction when looking at the key questions for the State of Alaska. These have not yet been answered and should not be answered until the details are clear. The first key question is the mix of debt and equity. In the case of Alaska, equity means carrying revenue that the state has. The second key question is whether the debt will be specific to the LNG project or part of the broader state balance sheet liability. The third key question, if the state puts in equity, is where that equity will come from. This is linked to the fourth question which is whether the permanent fund could put in money and, if it does, where does the money go when it comes out. Whichever path the state chooses, there is a precedent as there are projects that do balance sheet finance and there are projects that do project finance.

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MR. TSAFOS moved to slide 7, "Project Finance Well Established in LNG," emphasizing that project finance is an extremely well established principle and practice in the world of LNG. He noted slide 7 provides a list of recent examples of LNG projects that have secured third party financing. Alaskans may think that no matter what other projects exist Alaska's project is going to be bigger than anyone has ever seen and therefore this type of financing does not apply to Alaska, although it does. For example, Ichthys [in Northern Australia] raised $20 billion in third party financing which came from the Japan Bank of International Cooperation (JBIC), the Korean and Australian export and import banks, commercial banks, and the project sponsors. Papua New Guinea, a project in which ExxonMobil is a partner, took $14 billion in third party financing. Australia Pacific LNG, a ConocoPhillips project, [took $5.8 billion in third party financing]. The Tangguh project in Indonesia, a BP project, [took $3.5 billion in third party financing]. This list of projects shows that all three of the Alaska LNG Project partners have quite a bit of experience with third party financing. A benefit of project financing is that financing from sovereigns, credit agencies, and multilateral banks tends to be quite competitive relative to commercial bank rates.

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REPRESENTATIVE HAWKER, regarding the absoluteness of statements being made in the presentation, asserted that while the debt itself is technically non-recourse under project financing, an organization must still put the debt on its books due to the underlying level of risk assumption. An organization cannot insulate itself automatically from recognizing the liabilities associated with the project on its balance sheet just because the financing arrangement is, arguably, non-recourse.

MR. TSAFOS agreed that Representative Hawker is correct in his observation that enalytica's statements are absolute when there is finer detail. Mr. Tsafos said it has not yet been determined what kind of separation there will ultimately be if the Alaska LNG Project is done using project finance and whether this asset will be completely off the State of Alaska's balance sheet.

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REPRESENTATIVE HAWKER said a classic example is that until recently the State of Alaska was not required to recognize its post-retirement benefits in its balance sheet, although the state chose to do so. Accounting promulgations were recently changed to mandate that this be done, affecting many municipalities. It is not only something empirical. Those issues are subject to future regulatory authority that could change the character of the project. The classic definition of mega-project is a project that changes the economic and regulatory weather around it. When this project gets going, the accounting world could very well say that this project cannot be hidden from the world.

MR. MAYER added that this was not included here to set up something firm and absolute, but rather the opposite -- to set out the extent of the unknowns in all of this. At this moment there is only a vision for a project; the vast majority of the details are yet to be hammered out. One big unknown is how this might be financed in terms of the overall project and the individual partners. Later in today's presentation the question of the midstream and TransCanada will be addressed. A question raised numerous times by the administration is the state's overall balance sheet and ability to carry debt for this process and therefore ability to fund its share, which is a reason why having a partner like TransCanada is attractive. A vast amount remains unknown about how this will be financed and therefore

what the implications are for the state and the state's balance sheet. It may well be that the state is seriously capital constrained and that for purely financial reasons having a partner could be very attractive. It could also be that the inverse is true and large amounts can be financed through non-recourse debt which would not have to go on the state's balance sheet. The state might turn to other assets or to a range of other things by maintaining flexibility in how it seeks to structure this or to exercise an off-ramp [in the MOU with TransCanada] if it finds it does have the financing capacity and wants to pursue that.

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MR. TSAFOS, in response to Co-Chair Feige, confirmed that IHS [slide 6] is a consulting company that he and Mr. Mayer used to work for.

MR. MAYER added that the report published by IHS is available.

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REPRESENTATIVE KAWASAKI, in regard to easier accommodation of riskier sponsors under project finance, asked if this is Alaska. In regard to the rate depending on project risk, he asked who decides that and how would the risk be formulated for the Alaska LNG Project. He further asked how enalytica thinks the risk of this project will be perceived.

MR. TSAFOS responded that easier to accommodate riskier sponsors is a general statement and has nothing to do with Alaska as far as the state's current financial solvency given Alaska's balance sheet is definitely strong. Regarding how project risk is assessed, he recalled that at the LNG 17 industry conference, ExxonMobil gave a presentation about project finance for Papua New Guinea. ExxonMobil put up a picture of the closing day on the $14 billion loan and it showed stacks of papers across the full length of a 40-foot room, all of which had to be signed, noting that who determines and how it gets determined is a very long process. The difference between project finance and balance sheet finance is that when loaning money to ExxonMobil the question being asked by the lender is whether ExxonMobil can pay back the loan and when loaning money to the Alaska LNG Project the question being asked by the lender is whether the Alaska LNG Project can pay back the loan. The lender ultimately cares about how much the project is going to cost, what kind of contracts are available for selling the gas, and being

comfortable that these contracts will be honored by both the buyer and the seller. Sovereign risk in the case of LNG projects usually takes two forms. One is security risk, such as building something in the Niger Delta or something adjacent to a war zone. The other type of risk is if the country is bankrupt it can be expected that that country will take radical steps to redeem itself and a big asset like an LNG project would be a prime candidate for a state or sovereign to go after in order to generate money to get itself out of a tough position. So, the answer is whoever is willing to loan the money -- the lender determines the project risk. The lender assesses security, technical risk, and operational risk, and puts these together to determine a cost of debt.

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MR. MAYER concurred, adding that a lender loaning money to ExxonMobil for a project cares about ExxonMobil's balance sheet and credit rating. A lender to the Alaska LNG Project is thinking about companies, balance sheets, and credit ratings, but more than anything a lender cares about the "take-or-pay" contracts that have been signed, who the contracts are with, and the credit ratings of those buyers. The future cash flows of the project open the financing and the lender is assessing the creditworthiness of that contract, how much it absolutely requires these entities to pay or be in default, and how "good for it" those entities are.

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MR. TSAFOS turned to slide 8 to address the methodology of cash in and cash out. For the Alaska LNG Project, the state earns money in two ways: by virtue of being a project owner and being a sovereign. Project revenue is calculated by multiplying the volume times the price, minus capital expenditures, minus operations and maintenance, minus debt service, and minus the tariff paid to TransCanada. Cash flow from sovereign functions comes from state income tax and property tax. Thus, as a sovereign, the money the state makes from the project includes project cash flows and sovereign cash flows.

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MR. TSAFOS looked at four cash flow scenarios, each assuming a 25 percent equity ownership for the state: 1) no debt and no TransCanada partnership; 2) no TransCanada partnership but the state finances 70 percent of its share with debt; 3) TransCanada

is a partner and the state exercises its buyback option so the state has a 10 percent share in the gas treatment plant and the pipeline and TransCanada has a 15 percent share in those components; and 4) TransCanada is a partner but the state does not exercise its buyback option, so the gas treatment plant and pipeline are 75 percent oil companies and 25 percent TransCanada and the liquefaction plant is 75 percent oil companies and 25 percent State of Alaska. All the revenue from project ownership and from sovereign functions is not necessarily available for the state to spend in any given year, as both restricted and unrestricted cash flows must be reviewed. Restricted cash flow, income that must go to the permanent fund and income that will pay property tax, must be subtracted to determine the unrestricted funds available to the state.

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MR. TSAFOS, in response to Co-Chair Feige, confirmed that the property tax is the share of the overall property tax that goes to municipalities. He said enalytica has made an assumption of putting 80 percent into restricted funds for property tax; thus, if property tax is $100 then $80 will go to the municipalities.

REPRESENTATIVE SEATON, noting that the State of Alaska's system has tax credits, inquired whether those would be considered a capital expense.

MR. MAYER replied the bigger question is not tax credits, but tax deductions of capital spending, which is upstream spending on gas and deduction against the oil. That is accounted for in the model as a cash outlay; it is reduction in revenue that shows up in the cash flow. The final results are net of all these, including net of losses in taxes due to expenditure.

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MR. TSAFOS moved to slide 9, "SOA'S Cash Calls and Off-Ramps," explaining that the y-axis of the graph is in millions of dollars. The x-axis depicts four sets of different colored bars, each set representing one of the four phases of the project -- Pre-FEED, FEED, Construction, and Online. Each green bar represents the scenario of no TransCanada and no debt, which is the HOA, the maximum that the state could be on the hook for paying out and the maximum the state could expect to get back in return. Each yellow bar represents the scenario of no TransCanada and the state borrowing 70 percent of its share. Each red bar represents the scenario of TransCanada as a partner

and the state buy back of its share so that TransCanada ends up with a 15 percent share and the state a 10 percent share. Each blue bar represents the scenario of TransCanada owning 100 percent of the gas treatment plant and the pipeline and the state does not exercise its buyback option and remains purely an owner in the liquefaction. The text at the bottom of the chart explains how to get from the first phase to the second phase, from the second phase to the third phase, and from the third phase to the fourth phase.

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MR. TSAFOS, responding to Representative P. Wilson, said the "70/30 D/E split" for the red bar means 70/30 debt/equity, which is 15 percent for TransCanada and 10 percent for Alaska, which comes from the state buy back of 40 percent of the 25 percent that it has given TransCanada.

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MR. TSAFOS addressed the set of negative bars representing the [Pre-FEED] phase, specifying that the negative for the state could be anywhere from $55 million to $104 million, depending on which structure the state chooses. In an option where there is no TransCanada (green and yellow bars), the number is negative $104 million; if TransCanada is brought in (red and blue bars), the number is negative $55 million because TransCanada is covering the state's share for a portion of the studies. At the end of the Pre-FEED process, the state has three options, one option being to abandon the project and, if TransCanada is a partner, reimburse TransCanada $50-$60 million per the terms of the MOU.

CO-CHAIR SADDLER announced that Co-Chair Feige has passed the gavel to him.

MR. TSAFOS continued his explanation of slide 9, explaining that if TransCanada becomes a partner it pays for the state's share. So, if the state drops TransCanada or abandons the project, the state must reimburse TransCanada for carrying the state's share into the project, as per the MOU. Another option for the state is to adjust its equity, which it can do throughout the phases of the project. The state could, for example, reduce its equity from 25 percent to 20 percent by selling 5 percent. The third option is for the state to keep things as they are and proceed to the FEED stage.

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MR. TSAFOS said if the project goes to the FEED stage, the state will be required to pay its share of the FEED study, from $500 million to $270 million. He reiterated that the green and yellow bars represent not having TransCanada as a partner and the red and blue bars represent having TransCanada as a partner. At the end of the FEED stage, if TransCanada owns 100 percent, the state will have spent [$266] million (blue bar in FEED stage) plus $55 million (blue bar in Pre-FEED stage) for a total expenditure of between $310 million and $320 million. If TransCanada is not a partner, the state will have spent $486 million plus $104 million. After the FEED study is completed in 2017 or 2018, the state [again has three options]. One option is to abandon the project in which case the state would need to reimburse TransCanada for paying the state's share. Another option is to adjust the state's equity by selling some of its share. The third option is that the state can keep things as they are and proceed to the construction phase.

MR. TSAFOS pointed out that the construction phase is when the large amounts of money are invested. The green bar in the construction phase represents the state taking no debt [and not having TransCanada as a partner], in which case the state would be on the hook for about $11.7 billion.

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REPRESENTATIVE HAWKER expressed his concern and asked what the probability is that these are in fact the numbers, slide 9, given that Pre-FEED and FEED are about identifying the cost of this project. He queried whether the consultants are privy to information that legislators are not.

MR. MAYER answered that the numbers on the slide are not a precise measurement; the aim is to be illustrative and to give a very rough idea. For example, enalytica's numbers are similar, but by no means identical, to the numbers presented by the administration's consultant, Black & Veatch, as each has done its own modeling with its own assumptions. These numbers are an order-of-magnitude indication, and are not precise forecasts of what will happen as the project has not been scoped in any detail. These numbers are very, very rough indications of what could happen.

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REPRESENTATIVE HAWKER expressed his concern that enalytica sees the world differently than Black & Veatch. He said enalytica works for and is providing counsel to the legislature while the administration is providing its perspective to the legislature based on the work of its consultants, Black & Veatch. Hearing that there is such a material differential between the two consulting firms is a bit of concern. He said he hopes there will be clarification of the differences and recognition of a common answer.

MR. MAYER responded that when the numbers are compared directionally, the two consulting firms come to very similar conclusions on many of the core issues. But, he allowed, when it comes to specific revenue amounts there is a wide range of difference, including that enalytica presents its analysis in real, constant dollar terms as opposed to looking at the impact of inflation over time.

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REPRESENTATIVE HAWKER inquired whether Black & Veatch is using discounted dollars while enalytica is using whole dollars.

MR. MAYER replied that, in regard to recent presentations, he does not know. However, he continued, in the timeframe being talked about, the differences are not enormously material and he takes a lot of confidence that [the two consulting firms] have approached this entirely separately, come up with entirely separate sets of assumptions and models, and yet come up with analysis that, on core issues, is directionally very similar.

CO-CHAIR SADDLER commented that the committee has the time to hear the two and compare the conflicting models and conclusions.

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REPRESENTATIVE HAWKER, regarding slide 9 and the assumption of 25 percent equity for the state, inquired whether that equity is referring to the state's "pipe within a pipe". Regarding the cash splits depicted on slide 9, he inquired what the assumption is for the equity split between TransCanada and the state.

MR. MAYER answered that it assumes a 25 percent gas share. The green and yellow bars depicted in each scenario represent 25 percent equity across the entire value chain. The red and blue bars [depicted in each scenario] represent the world of the MOU and TransCanada. In the buyback option [red bar], the State of

Alaska has 10 percent and TransCanada has 15 percent in the gas treatment plant and the pipeline [for a total of] 25 percent in the midstream. The blue bars represent the full 25 percent to TransCanada in the gas treatment plant and the pipeline, and 25 percent to the state in the liquefaction.

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MR. MAYER, responding to Co-Chair Saddler, confirmed that the cash outlay depicted for each phase is the dollar amount for that phase only and not a cumulative number.

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REPRESENTATIVE SEATON, regarding the state selling down its equity, asked whether that means the state would be partnering with the entity that purchases the equity. For example, could the state split its equity, or sell the entire portion and become a revenue receipt partner so that the state is back into its normal receipt of tax and revenue share.

MR. TSAFOS responded the answer is half yes. The half that is yes is that the state could sell, say, 5 percent of its 25 percent share in the liquefaction to, for example, Mitsubishi. Depending on what the state sells determines what the state is left with. The state could sell all of its gas at the wellhead, but that would not necessarily push the state back into the old world of traditional tax royalty because the state is already in the new world. It is just a matter of where the state sells its 25 percent of gas. For example, the state could sell its gas up on the North Slope, or in Nikiski, or in Japan. So, the answer is the state can bring a partner but there are many different ways in which the state can bring that partner that determine what the state ends up receiving over a long period of time. Normally, a lump sum is received up front, but what is received afterward depends on what exactly was sold.

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REPRESENTATIVE SEATON recounted that the committee has often heard that when a percentage of gas is sold, the gas buyer generally wants to have that same percentage all the way up the chain. He posed a scenario in which the state has 25 percent in gas and 25 percent in liquefaction, and inquired whether the state could return itself to a more traditional governmental position of revenue receiving by selling both of those ownership positions.

MR. MAYER replied that, in principle, the idea of the state selling its share of the gas is exactly as Representative Seaton said, in that the state would be trying to monetize the present value of the future revenue stream and claim that now. In a traditional project where the state has full ownership, including the upstream, that would be relatively straightforward. In this case, where the state has that gas share by virtue of royalty and tax, some specific contractual structures might need to be put in place to enable a sale of that future gas stream along with the corresponding equity stake. Mr. Mayer imagined there are a number of ways the state could do that, but said many details would need to be worked out to determine how to implement that and whether there are, indeed, any limitations.

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REPRESENTATIVE SEATON requested enalytica to run those scenarios to see whether any provisions in the bill would prevent the state from exercising its more traditional governmental role and receiving a revenue stream, not necessarily all up front as a net present value but a sale with revenue stream over time instead of the participation.

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CO-CHAIR SADDLER noted there are limitations in this deal that Alaska cannot sell its share to a TransCanada competitor. He asked whether that could limit the state's ability to meet its obligations should it find itself short of cash.

MR. MAYER agreed this is a good point and said it is certainly a limiting factor under the MOU. Unlike selling an overall equity share in the project along with the share of gas that goes with it, if one sought to allocate that participation to another partner, the basis on which that participation was allocated would usually be one of trying to get the lowest possible bidder on tariff because ultimately what is being sold is a share of something that is just the right to recover the future cost through a tariff, not the right to gas and revenue that comes from the gas. So, in that sense, it is not something that would be looked at to sell as a revenue-generating item as would be the case for the overall gas share and sharing the infrastructure.

2:53:39 PM

MR. TSAFOS addressed Representative Hawker's comments, saying enalytica's awareness of the uncertainty is why a stress-case scenario was modeled in which capital expenditures are 25 percent higher to provide a sense of the range of uncertainty. He noted this will be discussed later in the presentation.

2:54:27 PM

MR. TSAFOS resumed his discussion of slide 9, drawing attention to the portion of the graph for the construction phase. He reminded members that the idea of the graph is to understand the total numbers if: 1) the state pays for everything out-of-pocket and has no debt (green bars); or 2) the state takes on debt (yellow bars); or 3) the state takes on TransCanada as a partner (red and blue bars). He noted that the depicted numbers come with the caveats relating to precision as previously mentioned by Mr. Mayer. In the construction phase, the state could be on the hook for about $12 billion if it takes on no debt. If the state finances with 70 percent debt, it would be on the hook for about $5 billion. The addition of TransCanada as a partner could bring the state's cost down to about $4 billion or $3.5 billion. He said he is trying to give the committee a sense about capital constraints and TransCanada at this stage of the project, and the flexibility the state has in its equity share and its upfront spending.

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REPRESENTATIVE TARR remarked that while several options are being evaluated, the options that really are on the table are the two TransCanada options due to the documents. She sked how committee members can appropriately evaluate the risk between the blue bars versus the yellow bars [the scenario of TransCanada 100 percent gas treatment plant and pipeline and 70/30 debt/equity split versus scenario of no TransCanada and 70/30 debt/equity split]. She observed that these two scenarios are closer financially in terms of the state's overall commitment ($3.5 billion versus $5 billion, respectively).

MR. MAYER responded future slides will look at this question and will help with that answer.

MR. TSAFOS added it also becomes quite different when the stress case scenario is looked at, which is where the difference between having TransCanada and not having TransCanada becomes quite interesting.

2:57:41 PM

MR. TSAFOS wrapped up his discussion of slide 9 by bringing attention to the online phase of the project. He pointed out that once construction starts it is now too late to stop [and not proceed to online]. The only question at this point is whether the state is still comfortable with its equity share. Once online, the revenues to the state will range from $4 billion to $2.9 billion annually. He reiterated that the idea of the chart on this slide is to see what the state's commitments are at each stage of the project, what is the directional change between one option versus the other so members can start asking questions, such as what the difference is between having TransCanada or not having TransCanada and how much that partnership helps upfront but how much revenue is foregone later on.

2:58:58 PM

CO-CHAIR SADDLER inquired what the state's total expenditure will be over the initial project term of 25 years.

MR. TSAFOS replied that the cumulative cash flows, as well as the split between the different partners, will be provided later in the presentation.

CO-CHAIR SADDLER asked whether that will be in net present value.

MR. TSAFOS answered it will be net present value as well as undiscounted when addressed later in the presentation.

2:59:43 PM

MR. TSAFOS turned to the graph on slide 10, "LNG Income Includes Restricted Revenue," explaining that not all of the revenues will be available for spending because some of it is permanent fund and some is property tax. He pointed out that the set of four bars on the far left of this chart represent the state's total annual income and is the same set of bars depicted on the far right of the graph on slide 9. The middle set of four bars represent the state's total income minus the permanent fund. The set of four bars on the far right of the graph represent the state's total income minus the permanent fund and minus the property tax due the municipalities. Responding to Co-Chair Saddler, he said enalytica made the assumption for allocating 80

percent of the total of property tax to municipalities, but qualified that this assumption is not a forecast or statement that this is going to happen. He said [the graph] is to give a sense of the orders of magnitude of how these numbers differ when going from total revenue versus revenue that is available to spend unrestricted.

[Co-Chair Saddler returned the gavel to Co-Chair Feige.]

3:02:14 PM

REPRESENTATIVE HAWKER inquired whether the aforementioned numbers in the overall model include the state's royalty share.

MR. MAYER responded yes, the entire model is built on the basis of a 25 percent share of the gas, which comes from the royalty and the production tax.

3:02:50 PM

CO-CHAIR FEIGE recessed the House Resources Standing Committee until 6:30 p.m.

6:35:19 PM

CO-CHAIR FEIGE called the House Resources Standing Committee meeting back to order at 6:35 p.m. Representatives Hawker, Johnson, Seaton, P. Wilson, Saddler, and Feige were present at the call back to order. Representatives Tarr, Kawasaki, and Olson arrived as the meeting was in progress. Representative Isaacson was also present.

6:35:33 PM

REPRESENTATIVE HAWKER addressed slide 11, "Stress Testing SOA's Cash Calls and Revenues." He drew attention to the far left set of four bars depicting the base case construction for the years 2019-2023 and compared them to a handout in the committee packet which he believed came from the administration. He observed that for the scenario in which the state goes it alone with no debt (green bar), enalytica's graph has an expenditure of $11.7 billion while the administration's expenditure is $13.2 billion. For the scenario of 40 percent state buyback, enalytica's expenditure is [$4.05] billion while the administration's figure is $9.3 billion. He asked what accounts for these differences.

MR. MAYER replied he would expect to see differences because enalytica arrived at its numbers through its own assumptions and exercise. These numbers are actually very close from the perspective of just how little is known about this project and the Pre-FEED process has not even been commenced. Any numbers will be an abstract effort what the possible future looks like. In a year and a half there will be substantially tighter numbers with potentially better assumptions and substantially better estimates. By the time it comes to make the final investment decision there should be some very accurate numbers as to what those costs actually are. Any number at this point is about direction of analysis in coming to understand whether the structure makes sense and whether the range of things makes sense. The only thing that can be said about the actual precise numbers is that they are all certainly wrong.

MR. TSAFOS added that part of the question is how the capital is spread across that construction period. Crucially, it is how that capital expenditure is spread on the different years, and also whether it is assumed that the day the project comes online all the capital has been spent. For example, enalytica has some spending on the first year of operation, the reason being that this is a massive project with three different trains. So, even when the project comes online, there will still be some capital expenditure. In looking at the construction phase, it does not mean that is all the money the state spent for the project; it is the money the state spent before it has any income, and the entirety of the $1.5 billion could be attributable to that. Even a simple difference in approach in terms of what is calculated [affects the resulting numbers]. For example, the diagram referenced by Representative Hawker is likely counting just the total capital expenditure, while enalytica's number is recognizing that some construction capital may be spent after 2023 during the first year of operations, which could account for that difference.

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REPRESENTATIVE HAWKER qualified he is not indicting enalytica's work, but questioned the figure of $3.9 billion for the green bar depicted under the base case online phase. He asked whether the $3.9 billion in revenue is a net number after capital costs still being incurred in that period.

MR. MAYER answered the number is an average across the project life, with some years the revenue being higher than that number and some years lower. The way enalytica has modeled it in the

first year the number is lower [than $3.9 billion] due to that additional spending. However, on average over the project life, [$3.9 billion] is the range of net annual cash flow after all expenses are taken out.

MR. TSAFOS added that [the $3.9 billion on slide 11] comes from using the formula on slide 8. It equals all of the revenue, minus capital expenditures, minus operation, minus debt service, and minus tariff, plus state income tax, and plus property tax. Thus, the first year would not be as high. He allowed enalytica could have also shown the cash flow for every single year for the next 20-25 years, but opted for this approach rather than a yearly cash flow because this method was more intuitive even though using averages loses some precision over time. The goal was to create something that is more intuitive for people to understand the trade-offs, recognizing that some precision is lost through that approach.

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REPRESENTATIVE HAWKER said that is $1.5 billion of precision. He related that when reading these numbers in enalytica's previous testimony, his take away was that this was the first year of operations. Thereafter, it was not at all clear to him that this was an averaged annualized return for about 20 years of project life. He inquired whether that return is skewed heavily to either end or whether it is just the front-end year.

MR. MAYER responded it is overall very even over time. He allowed there is certainly variation for a range of reasons in given years and said he would have to go back to see if there is more than a billion dollars in variation in any given year, but reiterated that overall it is a very even cash flow.

REPRESENTATIVE HAWKER asked whether it is enalytica's number or the administration's number that is closest to right.

MR. MAYER replied both of these numbers are definitely wrong, as he had said before.

REPRESENTATIVE HAWKER said that answer just made his point.

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MR. MAYER, in response to Co-Chair Feige, confirmed enalytica's flow charts are for the entire project, the liquefaction plant as well as the midstream.

MR. TSAFOS added that when looking at the flow chart, he believes all the other numbers are fully 100 percent equity, so none of the other options are directly comparable with enalytica's numbers because these do not include any debt, "like the 6.9 and 9.6."

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REPRESENTATIVE HAWKER inquired why debt would make a difference given it is the cost of building the project that is being talked about, unless enalytica is including capitalized interest on the project from an accountancy basis. He further inquired whether enalytica is talking about the cash cost of constructing the project. Noting that interest is capitalized into the project, he inquired whether that is in enalytica's numbers but not in the administration's numbers.

MR. MAYER answered the green bar assumes no debt whatsoever by having the entire cash outlay be reflected as such; then, the corresponding green bar shows all the revenue that would come in that scenario. The yellow bar reflects the 70/30 debt/equity ratio -- what that would mean in actual cash not including debt that the state would need to provide; [then, the corresponding yellow bar] is the actual cash net of debt payments that the state would receive.

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CO-CHAIR SADDLER understood the green bar is all equity so there is no debt and no financing. He further understood that the yellow bar labeled $3.445 billion is net of the debt expense.

CO-CHAIR FEIGE noted it is 70 percent debt.

MR. MAYER responded yes.

6:48:03 PM

REPRESENTATIVE HAWKER asked whether the administration's figure of $13.2 [billion] for construction includes capitalized interest.

MR. MAYER replied either he or the administration would have to get back to the committee with an answer.

REPRESENTATIVE HAWKER asked what basis was used by enalytica for the Pre-FEED, FEED, and construction cost numbers, given it did its own modeling. He recalled that earlier testimony by the administration that its numbers were based on the old Alaska Gasline Inducement Act (AGIA) proposal and not the new cost data coming from the new project and the new players.

MR. MAYER answered enalytica assumed a total project cost of about $49 billion for the base case scenario: about $45 billion for liquefaction, pipeline, and gas treatment plant, plus $3-4 billion for upstream costs primarily at Point Thomson. The stress case scenario increased those numbers 25 percent. He reiterated that the only purpose of any of this quantitative numeric analysis, at this point, is to have a directional understanding. For example, how does having a gas share and equity compare with being a taxing entity in-value? What is the role of TransCanada in all of this in terms of its relative impact as opposed to absolute numbers where there is not yet a project with any concrete details to really know what these numbers actually will be? The purpose is to understand, relatively speaking, whether one structure makes sense versus another and what the impact is of a particular intervention; it is not to be able to say that it is known what income the state will be receiving in any given year.

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REPRESENTATIVE HAWKER understood Mr. Mayer to have said the numbers do not make any difference because what is being talked about is structure. However, there are numbers on the page and they are big numbers, and they are numbers that legislators are being asked to make judgments on. He inquired what foundation was used for the $49 billion in enalytica's model.

MR. MAYER responded it is a combination of publically available producer estimates with enalytica's own understanding of what a well at Point Thomson costs to what might be a reasonable assumption for a range of different components.

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REPRESENTATIVE SEATON understood that on [slide 11] as well as others, the Pre-FEED is the years 2014-2015, FEED is 2016-2018, construction is 2019-2023, and revenue begins in 2023, rather than 2024. He inquired whether this is a nomenclature problem or that revenue will be coming in during the [last year of construction].

MR. MAYER replied there is an overlap because the new project comes online partway through 2023. He allowed it would have been clearer for ease of understanding had enalytica drawn a firm line on January 1.

REPRESENTATIVE SEATON maintained it does make a difference in the calculations as to whether or not it is a full year of revenue in the year the revenue begins, and the chart makes it look like it is a full year of revenue [in 2023]. He requested the chart be rewritten.

MR. TSAFOS agreed to rewrite the chart [to show the online phase beginning] in 2024. He qualified, however, that enalytica does not want that change to imply a precision or a certainty that the state should be expecting money in 2024. What is trying to be shown in this chart is the average cash that the state can expect to get, based on these assumptions, when the project is online. Thus, it is more the year after construction ends rather than to say to count on this amount of money in 2024.

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MR. MAYER, at Co-Chair Saddler's request, repeated enalytica's assumption for the total project cost: about $45 billion for liquefaction, pipeline, and gas treatment plant, plus $3-4 billion for upstream costs. In further response, Mr. Mayer confirmed that enalytica's information source was publicly available producer estimates plus enalytica's own analysis based on experience for what would be reasonable costs for a range of components. He added that the entire purpose of the next one and a half years is to start to get a better handle on all of these things and to start to be able to make much more detailed and informed decisions. Once the entire FEED process has been gone through there will be a final investment decision that the state needs to make on the basis of some very real numbers. At this point, these are numbers to run for a model to get a sense of how value in the project is shared between the partners, the role of TransCanada and how much value that takes. These are the things the legislature is being asked to decide on at the moment. The legislature is not being asked to take sanction on a $50 billion project; if it were it would need much more detail and much more concrete, reliable, accurate figures than any of these numbers. Any numbers presented by anyone at this time can only be a best guess that will almost certainly change as more is discovered.

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MR. TSAFOS added to Mr. Mayer's comments by pointing out that when the LNG project in Norway was undertaken, the company did not have a full grasp of the total cost until a year after the project was running. He qualified he is not saying this to scare committee members, but to say that it is an inevitable "chicken and an egg" problem -- more information is needed to make a decision, but until some decisions are being made no one wants to spend the money to get better data. The hope is twofold: 1) as more study is done the cost can be narrowed down along with identifying places where the cost can be lowered; and 2) to look at whether this project is viable at all because if it does end up in the realm of $65 billion it is quite possible that the partners and the State of Alaska will say they need to go back to the drawing board and rethink this. The challenge is that the decision point cannot be arrived at until money is spent based on a hunch that this might work. In this sense, there is nothing different about the State of Alaska than any other company and sovereign that has ever undertaken a project of this magnitude. A risk faced in all projects is the spending of more money only to find the project is a no-go. He reiterated that enalytica is trying to give committee members a sense of how these things move as the assumptions are moved around and, hopefully, that, rather than the specific revenue numbers, is the key takeaway.

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CO-CHAIR FEIGE offered his understanding that the stage-gated process has far less risk than simply making the decision to go forward without a process of refining the project design. He understood enalytica's intention here is not to say that if the state goes it alone it will cost $11.727 billion, but to show that the relative cost of going it alone is much more than the yellow bars which are more than the red bars which are more than the blue bars. It is to give committee members a relative idea that one particular option is going to cost more than another one, not what the specific costs and commitments are at a particular time.

6:59:26 PM

MR. TSAFOS, in response to Co-Chair Saddler, confirmed that the cost of $45 billion [for gas treatment plant, pipeline, and liquefaction] includes the marine terminal because the liquefaction plant is a marine terminal.

MR. MAYER, in response to Co-Chair Saddler, confirmed that the $45 billion also includes the transmission lines from the gas fields.

7:00:02 PM

REPRESENTATIVE HAWKER recalled that earlier today enalytica stated that the transmission lines were not included as an element in the conceptual ownership graph. However, it was now just stated that the transmission line cost is included in the $45 billion. He further recalled that the additional cost of $3-4 billion for upstream costs does not include the transmission lines. He asked whether that $3-4 billion is paying industry's development of Point Thomson or other fields.

MR. MAYER replied that is an assumption on what is required for additional gas-related development, primarily for a number of additional wells at Point Thomson as well as initial gas processing that occurs on the upstream before gas enters the transmission line to the gas treatment plant. That is a total amount for the total project. The state would make a contribution to that through the tax system under which there is a 35 percent production tax on oil. As the legislation is currently written, all upstream costs, regardless of whether they are for oil or for gas, are deductible against the oil production tax. In other analyses, enalytica has shown the possible impact of that. During construction, the state will be receiving lower oil tax revenues, 35 percent of the upstream cost that is being spent in those years.

7:02:15 PM

REPRESENTATIVE HAWKER asked whether anyone has done an analysis on exactly how much the state is going to be paying to develop the infrastructure for the upstream of Point Thomson that is not a state asset, and not part of this project, as it is an asset of the producers.

MR. MAYER responded it can be thought of as 35 percent of $4 billion, but there will be a better view of that down the road.

CO-CHAIR FEIGE interjected "lease expenditures."

7:03:01 PM

REPRESENTATIVE HAWKER understood that $4 billion is what Point Thomson is going to cost as it sits at the moment and that amount does not include any of the additional development to bring gas online. He said he is not trying to pick problems with enalytica's methodology, but the discrepancies between the administration and enalytica are causing him much consternation.

MR. MAYER answered that enalytica and the administration have approached these things independently, yet have come to similar conclusions on the core issues. If there are areas on which it disagrees with the administration, enalytica will let members know. If he were a legislator looking at this, he would take a great deal of comfort in that two different groups of people with two different approaches and assumptions looked at this and came to very similar conclusions in the directional analysis, despite the independence of their approaches.

MR. TSAFOS added that the number enalytica has for upstream developments and the state contribution through the tax system does show up in Black & Veatch's analysis. He recalled a Black & Veatch chart that shows oil only and then oil and gas, and when looking at these two things it can be seen that the oil and gas turns below the oil in the beginning years because there is a tax deduction for lease expenditures, and that is primarily for Point Thomson.

7:05:36 PM

REPRESENTATIVE HAWKER said he thinks the cost to develop Point Thomson is more like $10 billion rather than $4 billion. While Mr. Mayer said the numbers do not matter because the numbers are close, the issue is that they are close enough to illustrate enalytica's concurrence with the approach and the mechanism that is brought forward by the administration for how this all works together. He asked whether he is supposed to take away that enalytica is endorsing the administration in the MOU and the project proposal.

MR. MAYER responded enalytica has areas of agreement and areas of difference. However, when it comes to the quantitative analysis, Black & Veatch and enalytica get very similar numbers for such things as how much equity does the state need to have to be equivalent to the status quo, or how does in-kind compare to in-value, or how much value does TransCanada consume of the project total and that compares to other options available to the state. He would draw comfort from this given that there are, in fact, no accurate numbers available anywhere. It is not

a question of accurate enough, it is simply a question of numbers at this point are best guesses based on very little information. In a year and a half there will be much better information and a few years later there will be substantially better information. In the meantime, the purpose of quantitative analysis is not to forecast the future, not to say it is known exactly what will be spent and what revenue will be received. The purpose of analysis is to declare the fundamental things the legislature needs to understand and grapple with as those tend to center around a few big things like whether to take value as a taxing entity or gas in-kind and an equity stake, and how those things compare across a range of different prices. In looking at the MOU, what does TransCanada's participation actually mean? How much potential value could the state be foregoing under that option? What might some other options be? How do these things compare? Having initial approximate numbers to view as a model provides some understanding for how these variables move against each other and where relative value lies. Understanding where relative value lies is very different from being able to say it is known exactly in this year what the state should expect because none of us know that.

7:08:50 PM

REPRESENTATIVE P. WILSON understood what is being looked at is the different options that the state has and what it would look like in one option and what it would look like in another so members can make a general decision about what is the best thing for the state to do at this point in time.

MR. TSAFOS concurred, adding that a lot of these paths are still open to legislators even if enabling legislation is passed. Legislators would not be 100 percent tied to one of the four bars depicted on the charts. The legislature would still have the opportunity to go anywhere from the green bar all the way to the blue bar. Legislators are not even being called to make a choice regarding which of the four options. Clearly, there are things legislators can do that push the state into one direction or the other. However, even if the legislature approves everything before it, it could still go to a world with no TransCanada because the MOU provides a way for doing that. Clearly, the enabling legislation sets in motion a certain path, but it does not close off all the roads. There is a certain amount of technical analysis that can be done and there is a certain amount of philosophical gut-feeling. What enalytica is trying to do is highlight the numbers and articulate the trade-

offs. In a project of this magnitude there is always going to be an element of gut feeling because even when at the point of taking final investment decision, it is a decision in which no money will be seen for 5 years and making a bet of what the world looks like for another 25 years. Even when all of the available information is had, legislators will still find they do not have quite as much information as they would like. That is the nature of a long-term, long-lead business. An investment is being made today that is going to pay off over the next 25 years. There is an inherent uncertainty to this project that the state will have to become comfortable with if it is to choose this path.

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REPRESENTATIVE TARR calculated that with an oil production tax rate of 35 percent, the state could potentially lose almost $1.5 billion in revenue. She asked whether the revenues depicted [on slide 11] for when the project goes online include that annual loss of $1.5 billion.

MR. MAYER answered any relevant ongoing spending is captured in these numbers, but the majority of the development spending happens before the project comes online. Reminding members that enalytica has provided this analysis in other forums, he said between $200 million and $300 million in capital spending will happen each year over a number of years, totaling about $1 billion of capital spending over that time. The $200-$300 million annually will be foregone oil taxes to the state. According to the administration's modeling forecast, revenue to the state from production tax and royalty base will be reduced around [$4.5] billion. Costs will be deducted and written off against oil taxes.

MR. TSAFOS pointed out that "those numbers are included in ... the minus in the construction phase." So, it is not just what is spent, it is also what the state does not receive from the oil taxes. That is why Mr. Mayer said that any ongoing spending is in the online world, but during the construction phase that is embedded into these numbers.

REPRESENTATIVE TARR regarding the average [revenue] numbers depicted on [slide 11], part of the consideration for legislators is what the state has in savings if the state is in a deficit-spending world and how many years that will last. She requested from enalytica that these numbers be broken out into a 10-year timeframe so it can be seen whether the state will be

running out of money before new revenue comes in and where those time periods overlap to show how the state will transition through these time periods.

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REPRESENTATIVE HAWKER commented that when he is looking at the charts he is looking for the anomalies and what sticks out as something that creates an obvious relational difference. He noted a "cash call" is the cash that is needed to put into the project and that this does not mean it is because of an overrun or something bad. A cash call is how the state steps up to the plate with the checks it must write. [Regarding slide 9], he observed that for the Pre-FEED and FEED phases there is little difference between the height of the option bars, but for the construction phase there is a mega-difference between the green and [yellow] bars, which represent the state participating without debt and with the debt/equity split, respectively. When the state has no debt it does not have to answer to a cash call. The difference between the $11.7 billion green bar and the $4.9 billion yellow bar is the debt component. He observed that under the no-debt option, the construction cost is $11.7 billion and, once online, the average annual revenue is $3.9 billion; under the [70/30] debt/equity option, the construction cost put out by the state is $4.9 billion and, once online, the average annual revenue is $3.4 billion. He inquired whether the $3.4 billion is net of the state's debt service costs.

MR. TSAFOS responded it is net.

MR. MAYER added the difference is the debt service cost.

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REPRESENTATIVE HAWKER observed from slide 11 that if the state were to undertake this project without TransCanada and with a 70/30 debt/equity split ([yellow] bar), the construction cost would be $4.9 billion and payback would begin one and a half years after that.

MR. MAYER replied yes, but advised members to bear in mind that the reason the state's economics look quite good is because the state is both a project participant and a sovereign receiving other forms of cash, such as property and state income taxes. So, when all of those are included in the analysis the state's payback is relatively quick.

REPRESENTATIVE HAWKER remarked "we are the sovereign" and he sees why the state would want to use a debt/equity split for all kinds of reasons, including that there is a four-year payback. He questioned what it is that TransCanada really brings to the table when the state can get a total cash payback in one and a half years and after that be free and clear and getting all the cash to itself.

MR. TSAFOS answered that the aforementioned is the base case and advised members to look at the stress case to see how easily the numbers and payback can look different when some of the assumptions are changed. He requested the committee allow him to answer the question when he gets to the last section of his presentation, which is about the midstream and TransCanada and includes what enalytica has to say about the financial and non-financial benefits of TransCanada.

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REPRESENTATIVE TARR, regarding the scenario on slide 11 of no TransCanada and no debt (green bar), expressed her surprise that the reward under that scenario is not proportional to spending twice as much relative to the other scenarios. She asked whether the amount of return reflects how much the fixed costs - in terms of capital expenditures - influence this project versus a change in the market price.

MR. MAYER queried whether Representative Tarr's question is about the difference between the green and yellow bars in terms of the big difference in the upfront cash but relatively smaller difference in the [revenue] that follows.

REPRESENTATIVE TARR said she is referring to the green bar and why the reward is not proportionately equal.

MR. MAYER responded that in both the green and yellow scenarios the state is taking the full 25 percent throughout the value stream. The only difference between them is the choice of financing: financing entirely with the state's own cash versus financing through some form of debt. The difference between these two is the difference in upfront capital cost being spread over 20-25 years of the project and the corresponding 5 percent rate of interest. That difference of half a billion dollars is not just for one year, but for every year of the project life and is paying back that initial upfront capital cost.

MR. TSAFOS added that oil companies really like LNG projects because, once over the upfront hump, LNG projects generate money for a very long time. The challenge is getting over that hump in the beginning. Key to remember is that while the capital is huge up front, the ongoing operating capital is tiny relative to that upfront investment. This goes back to a previous statement he made before the committee that LNG projects generally do not lose money; they may not make as much as was anticipated, but once a project is running things have to turn really sour to actually lose money. The low annual operational cost is what really drives the economics. That is why the overarching question is whether the project can actually be built at the projected cost; once built, this project returns a huge amount of cash. For example, the pipeline in Kenai came online in 1969 and now the economics of exporting this cargo from Kenai look great -- all the capital has been spent, the asset has been amortized, and that is essentially the logic.

7:27:30 PM

MR. TSAFOS returned attention to slide 11, explaining enalytica approached a stress case in three different variables. [The first variable], capital expenditure, was raised 25 percent higher than the projected $49 billion. The figure of 25 percent was chosen as reasonable based on the list of worldwide LNG projects that was provided in enalytica's previous presentation to the committee in which project cost overruns varied from 0 to 125 percent, and 25 percent is the average of those overruns, including the zeroes. He qualified that cost could be higher not because of overruns but because cost rises between now and construction. [The second variable], sales price, was dropped to $7 per million British Thermal Units (MMBTUs), which is equivalent to about $50 per barrel oil. Currently, the cheapest gas coming into Japan is at $11-$12. If oil were to drop to $50, this Alaska project would have finance problems in addition to LNG plant problems. Therefore, enalytica believes this model to be quite an aggressive stress case. He submitted that if the price of gas was to decline to $7, the overwhelming majority of proposed projects throughout the world would not be sanctioned. He further submitted the price would not stay at $7 for very long because no one would build a project to feed the market at $7. Another benchmark for comparison, he specified, is gas in the Lower 48 at $3 Henry Hub. About $5-$7 is needed to ship that gas to Asia. So, even at $3 Henry Hub, gas delivered to Asia would be at a price higher than $7, which is another way of saying that $7 is a low price. [The third variable], average utilization, was put at 80 percent rather than 100 percent.

Utilization reflects two things, he explained. First, in Alaska the amount of gas that can be produced depends on the temperature -- the colder it is, the more gas that can be put through the infrastructure; depending on the temperature, Alaska may be unable to produce at 100 percent. Second, when looking at new LNG projects around the world, it is seen that projects without problems tend to operate at 95-100 percent. [Average] global utilization is in the high 80's because new projects operating at 100 percent are added with infrastructure that has been online for 40 years. Older projects operate at a low utilization because the gas they were developed to export has been depleted. Therefore, 80 percent global utilization is really an average of two extremes, rather than projects actually operating at that level. Continuing, Mr. Tsafos noted that a number of things can lead to low utilization, some of which are not relevant for Alaska. Most common is a domestic gas diversion in which the sovereign reduces export to meet the demand of its people. He submitted, however, that no matter how much Alaska might try to do that, Alaska would be unable to consume enough gas to push the utilization that low. More realistic for Alaska would be outages or accidents; thus, Alaska likely would not have 80 percent utilization over a 10-year period but may have low utilization over a 1-year period.

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MR. TSAFOS said enalytica added together the three events of higher capital expenditure, lower price, and low utilization to create a perfect storm. He explained that the two sets of four bars on the left side of the graph on slide 11 are the base case construction costs discussed earlier and the stress case construction costs, which are a 25 percent escalation of the base case. The only variable changed during the construction period is the construction cost; price and utilization do not matter because no gas is being sold during this period. The two sets of four bars on the right side of the graph represent the base case online revenue discussed earlier and the stress case online revenue, in which all three of the variables are playing a role. Sales price is playing a role because less is being earned per molecule of gas, utilization is playing a role because less gas is being sold, and capital expenditure is playing a role insofar as borrowed debt. If money was borrowed and the cost went up 25 percent, then 25 percent more would probably have been borrowed and that money would have to be re-paid. In the stress case for the green bar scenario (no TransCanada and no debt), construction cost may be $14.7 billion and revenue may be $1.6 billion per year, which is a 10-year

payback period, ignoring the time value of money and that money further out is worth less than money today. Mr. Tsafos pointed out that even if all these stress case variables happened, the Alaska LNG Project would not quite turn negative and the project would not come to the legislature to ask for more money. But, in retrospect, the project would look like a bad investment because the state would be earning a low return for a high upfront capital investment. This stress case scenario is a caution to the best-case scenario (slide 10) which looks quite positive with a quick payback period. He noted that the stress case figures on slide 12 are an average because at some points the price might be lower and at some points the utilization might be lower.

7:35:58 PM

CO-CHAIR SADDLER inquired whether the model was created for each variable happening by itself or for all three variables happening together.

MR. TSAFOS responded that individual modeling was not done, but he offered to do so.

CO-CHAIR SADDLER understood the initial cost estimate for the Trans-Alaska Pipeline System (TAPS) was $800-$900 million, but the final cost was $8 billion. He asked whether enalytica can give him, as well as the public, any comfort that the final cost for this LNG project will not be 10 times the current estimate.

MR. TSAFOS replied he is not in a position to give that comfort. However, he would say that if construction has not started, and the cost estimate is $450 billion, that would be good reason not to do this project. The most extreme case of cost escalation he has seen is Russia's Sakhalin LNG project at 120 percent. Qatar's Pearl gas-to-liquids project began at $4-5 billion but ended up costing over $20 billion. No one can give a guarantee that the cost started with will be the cost ended up with. Comfort can be taken somewhat in that Alaska's partners are probably as good as one could get in terms of keeping the cost down. While good partners do not insure against cost escalation or against things going bad, the best that can be done is to put people in charge who know their jobs quite well.

7:38:47 PM

CO-CHAIR SADDLER inquired whether the Sakhalin and Pearl projects had single players or partners. He said he is asking

this question in an effort to know whether it was the absence of partners that led to the cost overruns.

MR. TSAFOS explained that the Pearl gas-to-liquids project went from the standard practice project of 30,000 barrels a day to 140,000 barrels a day, so it was really a technological overrun rather than a project overrun. Sakhalin had some very Russia-specific challenges. Sakhalin had a 500-mile pipeline through territory similar to Alaska's and had many challenges for environmental permits. The biggest challenge was stark disagreements with the sovereign. Shell and its partners sold the 50-plus-one share stake in the Gazprom project, Gazprom being one of the state-owned companies in Russia, and at that point some of the problems went away and the project was able to progress. Speaking generally about cost escalation, he said it can be related to global commodity factors, such as steel or cement being more expensive. Cost escalation can also be related to the specific country. For example, someone wanting to build an LNG project in Papua New Guinea would also have to build roads and infrastructure where none exist. Other times, cost escalation can be a factor of competition for laborers. For example, Australia has a large number of mining and LNG plants competing for the same labor.

7:43:29 PM

REPRESENTATIVE JOHNSON calculated that under the [yellow] bar scenario [no TransCanada, 70/30 debt/equity split] the state receives a 15-16 percent return on investment. He further calculated that under the red bar scenario [TransCanada and 7/30 debt/equity split] the state receives a 13 percent return on investment. He said he wants "to ask Representative Hawker's question again."

MR. MAYER responded that a very important point is being raised, which is the basic nature of fixed claims. Fixed claims can come from debt on the project or fixed claims can come from participation of a partner that takes a tariff. It is a bigger impact with a partner that takes a tariff, like TransCanada, because the implied financing cost is a little higher. The basic nature of fixed claim on the project cash flow is that when prices are low, and revenues are lower than anticipated, the effect of that change is amplified because someone else has a fixed claim on the project cash; thus, the relative movement is borne by the state.

REPRESENTATIVE JOHNSON said his basic premise is the state still makes less money in a worst case scenario with TransCanada as a partner.

MR. MAYER replied that the worse the scenario, the less attractive TransCanada looks. In an optimal world there are many reasons the state might like having TransCanada and other reasons the state might not, but overall the share taken by TransCanada is really very small. Definitely, however, in lower price environments and lower utilization environments, the basic nature of any fixed claim is that it has a disproportionate impact when prices are low, when utilization is low, when revenue is low in the future. That is also true, he pointed out, when taking higher debt on the project, but that is true to a slightly lesser extent because the cost of that debt is slightly less.

REPRESENTATIVE JOHNSON remarked he looks forward to enalytica's future slides, but he remains unconvinced.

7:46:29 PM

CO-CHAIR SADDLER requested further elaboration of the term "fixed claims."

MR. MAYER answered the basic idea is that the state, as an equity holder in the project, has an entirely variable claim on the project cash flows. When the project does well and rakes in lots of cash, the state rakes in lots of cash; when the project does poorly and has very little cash, the state takes only a little bit of cash. An entity that is not an equity holder but that loans money to the project or to the state, or an entity that is a pipeline company that has a tariff, is entitled to a known fixed amount of money each year into the future. That fixed claim is a small percentage of the overall total project when times are good and there is lots of revenue, but when times are bad and there is substantially less revenue, that fixed claim takes up more and more of the total.

7:47:34 PM

REPRESENTATIVE HAWKER understood the point of the chart is to show that these projects never turn negative once started. However, he said, it is still relevant to legislators as to how much the state is going to get in a negative situation. He further understood there is not much difference [in the effect on revenue] between the state choosing to do a debt/equity basis

without TransCanada or a debt/equity basis with TransCanada. Regarding a systemic low market price environment of $7, he said the Alaska LNG Project would be a non-starter. However, he pointed out, it could be possible to have the project get as far as being sanctioned or final investment decision with a 25 percent increase in capital expenditure and/or sub-utilization once the project comes into operation. He asked whether it would it not be more realistic for members to instead be considering a chart that shows only increased construction cost and sub-optimal utilization, with no decrease in market price.

MR. TSAFOS responded enalytica will be breaking the three risks down as per Co-Chair Saddler's request. He concurred that, if at the point of final investment decision, the sales price is $7 the project would not be sanctioned. However, he said, that is not really the risk. The risk is that the project is sanctioned and four years later the price of oil crashes and the price of gas drops to $7. The state is basically taking a 25-year bet because it is going to be 5 years before the project comes online and then has to run for 20 years after that.

7:50:36 PM

CO-CHAIR FEIGE inquired whether that bet is being taken given that the sales price is locked in at the start with a marketing contract, which is before the final investment decision.

MR. TSAFOS replied that if the contract is written as things are in today's world, it will be linked to oil so that the gas price will go up and down together with the price of oil. How much the gas price goes up and down will be known at the time of signing the contract, but the price of oil will not be known. As enalytica has explained in the past, the state is not taking on price risk in the conventional way of thinking about oil price risk, which is that if a new supplier starts selling gas into Asia for $10 it will not matter for the state because the state already has its contract and price. Instead, the state's contract price is going to be indexed to something. In Asia today that something is oil. So if the price of oil goes up, the state's gas price will go up, and if the price of oil goes down, the state's gas price will go down. There are ways in which the state can limit what that high number and what that low number may be. The state might be able to say that because $7 looks so bad it does not want the price to ever go below $10. The buyer may agree to that as long as the state also agrees that the price may never go above $15, because that is how the trade works. The state will absolutely be taking on price risk

if not selling at a fixed price. The state will understand what that relationship, that exposure, looks like before it makes a decision; and the state can also take measures to reduce its exposure by giving some upside to protect against the downside.

7:53:36 PM

REPRESENTATIVE KAWASAKI asked whether marine transportation is included in the estimated costs of $45 billion, a $4 billion gas treatment plant (GTP), and $3 billion upstream.

MR. TSAFOS answered marine transportation is not in the total of $49 billion. The reason it is excluded from these calculation is because sometimes the buyers arrange the transportation and sometimes the sellers, and sometimes the seller builds its own ships and sometimes the ships are leased. A number of things will be discussed during the contract bid; if the state decides to build its own ships it would probably look at ordering the ships around 2020.

MR. MAYER added that there is, instead, a tariff subtracted from the revenues; the cost of shipping is netted off the cash flow.

7:54:50 PM

REPRESENTATIVE KAWASAKI requested the committee be provided a chart that models a higher capital expenditure, given the overrun examples of TAPS and other countries. Regarding a utilization of 80 percent and the state as sovereign possibly taking some gas for in-state use, he asked when the best time is for making that decision. He asked whether any of the other partners might decide to sell in-state.

MR. TSAFOS responded utilization could be 100 percent and the Alaska market still be flooded, so it is not about whether Alaskans are or are not getting gas. For example, Egypt could develop fields that produce seven million tons and build a facility that exports five million tons and have two million tons going to the domestic market. Then Egypt has a revolution and the government decides to push gas to the market, so now five million tons go to the domestic market and two million go to export. Another example could be a country producing seven million tons equivalent that goes down to five. No sovereign would decide to export all that and deliver no gas to its electric utilities; the sovereign would at least prioritize the domestic market. This does not imply that supplying Alaskans with gas is going to lead to a lower utilization. The structure

and the size of the Alaska project embeds a cushion of Alaskan gas, so it would be very hard for the state to divert so much gas as to actually hurt the utilization of this project, with the exception of perhaps an extremely cold winter where for a month there may be less utilization because of having to meet in-state demand. He clarified that what he was suggesting earlier is that when looking at utilization and why it may deviate from 100 percent, domestic gas diversion tends to be a pretty common reason. However, that would not be a number one reason for concern in Alaska.

7:58:37 PM

REPRESENTATIVE TARR said she would like to add tax as gas (TAG) and royalty-in-kind to the topic of oil linked to gas prices. She surmised that in a low price environment the state would receive more revenue by taking production tax based on per-unit volume than it would by taking tax as gas. She asked how this could be evaluated in a stress case scenario.

MR. MAYER replied it is an excellent question and enalytica has modeled and presented this to the committee previously. While the aforementioned phrasing of the question is what one would intuitively think, in reality it is exactly the opposite, which is the reason why modeling is done. It comes back to the idea of fixed claims on cash flow. When last before the committee, enalytica presented a working of production tax and royalty to compare them to oil and expressing everything in oil equivalent terms. He posed a scenario of $100 for oil price, $10 for combined total tariff on transportation for TAPS and marine tariff combined, which results in $90 at the wellhead on the North Slope. In a world of gas and LNG, that oil price of $100 would lead to about $80 per barrel of oil equivalent of LNG delivered to Tokyo. Because the midstream is so much of this project, the tariff would be more like $60-$66 than $10. The result is about $15 in value at the wellhead and a small movement in oil price would completely wipe that out. The state is the shock absorber, everything else is fixed to get its fixed claim of the value. It is correct that if the state did reach a circumstance where project cash flows are actually negative, then there is a weakness that comes from being in-kind because with royalty the state would at least effectively have a floor of zero, although zero is not strictly true when it comes to profit-based production tax on oil. In a truly catastrophic world, the state could actually lose money, but short of that, overall in low-price cases the state does as well or slightly better at high prices. If it were certain that the price of LNG

was going to stay where it is for the next 20 years and it was possible to have a project through the in-value structure, then the state would probably rather take in-value. But, if it is thought that the price could go down to $10/MMBTU, value to the state looks much better in the equity and in-kind world than in the in-value taxing world because the state is not the shock absorber absorbing all of the price risk while the midstream gets its fixed cut, instead everyone rises and falls together.

MR. TSAFOS added that another way to think about it is $7 in Japan and taking out transportation, liquefaction, pipe, and gas treatment plant. This would leave the state with less than zero. Royalty and tax would be multiplied by zero so there is nothing left, which is what Mr. Mayer was describing. [As the project is proposed], the state would still make some money if prices go low because the state is not taking what is left over after subtracting these other things, but rather the state has a piece of all these things.

8:03:52 PM

REPRESENTATIVE TARR inquired whether that would be true in all four of the scenarios being talked about. She surmised it would be true in the scenarios involving TransCanada because of its fixed claims.

MR. MAYER answered the fixed claim he is talking about is the implied tariff of not being an equity holder, not the involvement of TransCanada -- having value solely at the wellhead that is determined by subtracting a tariff, whoever and however that is calculated. The other uncertainty in this case is transparency in how that tariff is calculated, particularly on the midstream. When the state takes value solely by taking tax or royalty in-value at the wellhead, the variable claim in the system and everything else gets its fixed share of the value because the state subtracts that fixed amount before it assesses its value.

CO-CHAIR FEIGE understood that if the state is taking its royalty and taxes in-kind, then as long as the pipe is putting out something the state is always getting something. If the state takes in-value and the price gets too low, then by the time all the costs are pulled out the state could go negative.

MR. MAYER [*indisc.*] zero.

MR. TSAFOS added it is the equivalent of $10 TAPS and an oil price of $9.

8:05:56 PM

REPRESENTATIVE SEATON noted the project cost estimate has been presented as $45-$65 billion. But in these slides, he observed, the depicted stress case cost is $61 billion. He therefore asked whether $61 billion is a reasonable stress case figure.

MR. MAYER responded that when running the economics on this project, he and Mr. Tsafos struggled to see an initial case of the cost being in the range of $65 billion and the project being sanctioned at that range. The project is attractive at $50-$55 billion, so enalytica added the 25 percent on top of that.

8:07:09 PM

MR. TSAFOS moved to slide 12, "Stress Test: Restricted vs. Unrestricted Revenues," explaining that the three sets of bars on the graph depict the total income, total income minus the permanent fund, and total income minus the permanent fund and minus property taxes due to municipalities. He pointed out that the revenue to the state is positive, but once the money is taken out for the permanent fund and the property taxes the state would have to put in an approximate $63 million [under the scenario of TransCanada 100 percent gas treatment plant and pipe and 7/30 debt/equity split].

8:08:37 PM

MR. MAYER addressed slide 13, "SOA Needs to Carefully Weigh Key Questions," noting this slide was presented when enalytica was previously before the committee. The slide is a non-financial standpoint of TransCanada's involvement as written in the Memorandum of Understanding (MOU) and it compares [four] possible ways of doing the project. During that presentation, enalytica said the state clearly would not want to have a project that is purely a producer project with no interest by the state or by a third party. This is because of the question of alignment and possibilities for disputes over where value could be, and, in particular, when it comes to third party expansion and wanting to have someone in the mix that has a clear interest or that makes money from expansions and pursuing expansions. A project consisting solely of the existing producers would be executed very well, but the producers would not have a clear and compelling interest in wanting to expand

the project to accommodate other people's gas. The producers are companies that make money by moving molecules to market, not by moving other people's molecules through a pipeline. In a scenario of the producers with the State of Alaska, which is the world anticipated by the Heads of Agreement (HOA) without the MOU, there is better alignment between the producers and the state in terms of the question of possibilities of dispute over tariff and so forth. In this scenario there is a question about what things would look like at a later date for expansion. This is because all of the impetus would be on the state to pursue expansions either by itself or by a producer trying to bring in a pure midstream company as a partner to pursue those expansions assuming that the other producers were not interested in undertaking expansions.

8:11:12 PM

REPRESENTATIVE SADDLER requested an explanation of the x marks and check marks on slide 13 and whether the lines and text on the chart align with the charts that follow.

MR. MAYER replied there is no correlation with the charts that follow; it is a summary. The check marks represent positive aspects, x marks represent negative aspects, and question marks represent things that are indeterminate or difficult to weigh.

8:12:00 PM

MR. MAYER resumed his discussion of slide 13, reiterating it looks at the non-financial aspects of the MOU and bringing TransCanada into the pipeline and gas treatment plant. He reiterated that in a scenario of producers only there would be clear ability to execute the pipeline and gas treatment plant without an additional dedicated midstream party. The question becomes one of ability to execute future expansions to get other people's gas in the pipeline and encouraging other people to explore the North Slope. Another question asked for each of the four scenarios is whether there is a cost and a benefit associated with continuity and momentum in this project and, if so, what are the potential costs of postponing the project or not going ahead with what is being proposed. In looking at the scenario of producers, State of Alaska, and TransCanada as suggested in the MOU, enalytica saw many of the same strengths seen in the scenario of producers and the State of Alaska, but also seen are substantial benefits in third party expansion and ability to execute on those third party expansions. In the scenario of producers, the state, and a third party other than

TransCanada, the primary difference is the question of alignment of interest and disputes around tariff and allocation of value, and what the tariff would be if the third party is not TransCanada. The answer is unknown and can only be found out by going to a competitive bid. In this last scenario there is also the question of whether continuity and momentum would be maintained with a third party that is not TransCanada.

8:14:41 PM

MR. MAYER said an important question the state needs to weigh is the exit from the Alaska Gasline Inducement Act (AGIA) process if the state does not want to go down the path of the MOU and what compensation the state might have to pay and what intellectual property the project would retain. A second important question for the state is whether the HOA process in the broader project framework might slow down if there was substantial dispute around the midstream. A third important question is having either a different midstream player or an open competitive process and whether this process would deliver better terms than those under the MOU. Related to that is the scarcity of bidders involved in the AGIA process and, in particular, the very few that actually made qualifying competitive bids. The question is whether that was representative of the industry's interest in an Alaskan pipeline in general or whether it was specific to what happened then, and might there be more interest today. The last key question is the possibility of a better tariff being offered under a competitive bid process and how to weigh the possible, but very uncertain, benefit and possible cost against the questions of benefits that come from momentum and the potential costs of dissolving AGIA. These are questions that need to be considered further in regard to the non-financial aspects of TransCanada's participation.

8:17:01 PM

MR. MAYER turned to slide 14, "TransCanada Tariff Offer Within Market Norms," to begin addressing the questions of how much value of the overall project does TransCanada take up and whether that is a good deal. The first question is about what is proposed under the MOU in terms of tariff and how that compares to trying to bring in a different third party through a competitive process. The best way to begin understanding the answer to this question is to benchmark against market norms. To do this, enalytica analyzed all of the 2012 data presented to the Federal Energy Regulatory Commission (FERC) on Form 2, which

is the annual report that FERC regulated U.S. pipeline companies are required to submit. The cost of debt, cost of equity, and the relative share between the two are regulated by FERC, and this is what enalytica is presenting in the charts on slide 14. The left chart is the capital structure for proportion of debt to proportion of equity. The right chart is the cost of debt, the cost of equity, and the overall weighted cost of capital. Mr. Mayer explained the charts consist of "box plots," which are the way of showing the distribution of a variable. The vertical lines above and below the boxes are the maximum and minimum of the dataset. In the chart for capital structure, it can be seen that the proportion of debt varies from no debt to 68.1 percent debt. Between those two numbers are the box plots which depict the twenty-fifth percentile, the median, and the seventy-fifth percentile. The bottom quarter of all data observations are below the level of 34.7 percent debt in the capital structure. The bottom half, or those observations below the median, are below 40.2 percent debt in the capital structure. The bottom three-quarters are below 46.7 percent debt in the capital structure. The top quarter, or the highest ratio of debt in the capital structure, is between 46.7 and 68.1 percent.

8:20:16 PM

CO-CHAIR SADDLER understood the top line of the box is three-quarters and above, the middle line is 50 percent, and the lower is 25 percent.

MR. MAYER answered yes, clarifying that this is in terms of proportion to the total sample that is being represented in each of those areas.

CO-CHAIR SADDLER inquired about the source of the data.

MR. MAYER responded it was the most recent year available of FERC-reported data that pipeline companies regulated by FERC report on FERC's Form 2, and opined that the data year was 2012.

CO-CHAIR SADDLER offered his understanding that the chart is for comparing the costs for the proposed Alaska project versus other FERC-regulated projects.

MR. MAYER replied yes. In further response, he said the overall dataset was all of the Form 2 reports available, which were 45-56 observations for those companies that submit a Form 2 and that on that form report cost of debt and cost of equity. He further explained that Form 2 is a regulatory filing with FERC

that contains a wealth of information about pipeline companies and includes on one page the cost of debt and cost of equity.

8:22:09 PM

REPRESENTATIVE HAWKER inquired whether the charts on slide 14 are relevant to this discussion given the slide's title is about TransCanada's tariff being within market norms. He said he is unsure that a FERC pipeline is comparable to this pipeline because everything heard to date is that this will not be a FERC regulated pipeline. This pipeline is essentially one big gas gathering line feeding a proprietary industrial process, not a classic FERC pipeline with multiple customers that crosses state borders. It would seem reasonable that should the state become involved in developing proprietary gathering lines that there be a tariff structure that is not necessarily representative of an average FERC-type line. He asked what the grounding is for using a FERC regulated pipeline to benchmark this project that was presented as having no desire to be a FERC regulated pipeline.

MR. TSAFOS explained that this reflects data availability and the market. There is no intent for FERC data to be shown because this pipeline will be regulated by FERC. TransCanada has made an offer to charge a tariff to the State of Alaska that is based on 75 percent debt and 25 percent equity, cost of equity 12 percent, cost of debt 5 percent, plus a rate tracker to the yield of the U.S. Treasury. The question is how to assess this offer. One way is to go to bid and see if there is a better offer. The other way is to look at what pipeline companies typically make, what the market is for these things. Is there a market for an 800-mile pipeline in Alaska? No, because no one has built one yet; so there is absolutely unique character to this project that cannot be benchmarked as there is not anything to benchmark against. While there may not be other pipelines of this length to compare, there is a market for building pipelines and charging companies to transport gas through them and that market can be reviewed. Does this mean that the offer on the table is the best possible offer? The analysis is how that offer compares relative to what pipeline companies are expected and able to make in a market that is regulated similar to the U.S. This analysis is not intended to say that FERC is going to regulate this pipeline; it is to use benchmarking instead of a completely arbitrary analysis. Slide 15 reflects rates of return (ROE) for FERC versus the National Energy Board (NEB) Canada, as TransCanada is a Canadian company.

It is not because that number is the relevant price, but it is to give members information to put in context for this deal.

8:27:01 PM

REPRESENTATIVE P. WILSON requested further explanation to the charts on slide 14.

8:27:41 PM

CO-CHAIR FEIGE drew attention to the line between 0 percent and 34.7 percent on the left chart, explaining that if there were 100 projects, 25 of those projects would fall within that range. The next 25 projects would fall between 34.7 and 40.2 percent. The next 25 projects would fall between 40.2 and 46.7 percent and the final 25 projects would fall between 46.7 and 68.1 percent. The chart shows the distribution of these projects.

MR. MAYER confirmed Co-Chair Feige's explanation is correct. In further response to Representative P. Wilson, he confirmed that this same principle was used for the box plots on the two charts on slide 14.

8:28:29 PM

MR. MAYER continued his review of slide 14, noting that debt and equity on the left chart are directly proportional to each other; if there is 40 percent debt there is by definition 60 percent equity. The MOU proposes a 75/25 debt/equity split. It can be seen from the left chart that 75/25 is out of the sample in terms of U.S. FERC regulated pipelines; the state is at a higher level of debt relative to equity than anything that has been reported to FERC through [Form 2].

8:29:16 PM

REPRESENTATIVE HAWKER noted it had been said earlier that there is nothing to benchmark this project against, yet these charts are benchmarking this project against FERC regulated pipelines in the Lower 48. He expressed agreement with enalytica's question of whether TransCanada's offer makes sense, but argued that the real decision and the real benchmark are comparing the TransCanada offer to what else Alaska might be able to accomplish, irrelevant of what goes on with FERC regulated pipelines in the Lower 48. Basically, it is what the state could come up with in the open marketplace for a debt/equity structure. He said this chart bothers him, suggesting it might

actually point legislators in the wrong direction when comparing FERC regulated projects to a completely unique, stand-alone Alaska project that has nothing to do with FERC regulation.

8:31:13 PM

MR. MAYER, in response to Representative Hawker, said there were two questions for how this compared: what we could do on our own, or if we tried to seek a different partner through a competitive process. He said that it did not help to answer the first question for comparison if the state went ahead on its own. He explained that the slide aimed at the second question to how this might compare with other offers if there were an open and competitive process. He said there was not a perfect answer without a competitive process, as it could be better or it could be worse. He offered his belief that to establish whether this was a direction to pursue, the first question was to ask for the available data points for the capitalization structures and cost of debt and equity for other pipelines. These would give a basic idea for the reasonableness of the offer, as any other bidding company would also be subject to either FERC or NEB (Canadian) regulations and would have certain standards for cost of debt and cost of equity.

8:32:51 PM

MR. TSAFOS added that he accepted the limitation to the utility of the chart. He directed attention to the weighted cost of capital, and theorized that the maximum for all the U.S. pipelines in this analysis was 5, in comparison to the weighted cost of capital from TransCanada of almost 7. He pointed out that they were trying to figure out how the offer on the table compared to other pipelines in the world for expected and attained returns and capitalization structures. He acknowledged that the utility of the chart was somewhat limited, although there would not be a clear answer unless there was another competitive bid.

8:34:37 PM

REPRESENTATIVE HAWKER asked why there was a comparison with all the FERC pipelines, instead of only comparing the benchmarks of all the other TransCanada projects.

MR. MAYER offered to discuss data points relevant to the TransCanada projects.

MR. TSAFOS, in response to Representative Hawker, read from Section 9, page 121, of the recently published TransCanada 2013 annual report. He spoke about a recent decision by the National Energy Board (NEB) of Canada, which allowed a rate increase for the Canadian Mainline pipeline, one of the largest in Canada. This decision established a return on equity of 11.5 percent on a deemed common equity of 40 percent. Moving on to page 122, he relayed that another settlement with the National Energy Board of Canada had established a 10.1 percent return on equity on deemed common equity of 40 percent. He directed attention to the A & R Pipeline in the U.S., owned by TransCanada, which reported a 9 percent cost of debt and a 12.25 percent cost of equity. He declared that the challenge was to distinguish the difference between a long established pipeline and a new pipeline with risks similar to an Alaska pipeline. He explained they offered all the data, instead of limiting to only TransCanada, as TransCanada invested in Canada, the Lower 48, and Alaska.

8:40:00 PM

REPRESENTATIVE SEATON asked how dependent the weighted cost of capital was to the "75 - 25 debt equity."

MR. MAYER replied that it was very dependent, and using the parameters from the MOU, the 12 percent cost of equity was multiplied by 25 percent, the 5 percent cost of debt was multiplied by 75 percent, and these totals were then added together for the 6.5 percent weighted cost of capital.

REPRESENTATIVE SEATON referenced earlier discussions which stated a goal of 70 - 30 on pipeline issues, as it would save money, although there were difficulties in those negotiations. He asked if 75 - 25 was considered very good.

MR. MAYER expressed his agreement that this was very good for the pure debt equity split, and he pointed out that getting below 70 percent debt was unusual and aggressive. He noted that there could be separate discussion for the cost of debt and the cost of equity, but for the pure capital structure used, he declared that 75 - 25 was quite aggressive.

CO-CHAIR FEIGE asked if the tariff was based on the 75 - 25 equity split, in this case. He asked about the effect on the actual rate of return for TransCanada if they could not borrow 75 percent of their commitment.

MR. MAYER, in response, said that there were two ways to answer. The first was to explain that structure and cost of capital for rate making purposes was intended to have some bearing on the actual structure and cost of capital of a pipeline company, although, to some extent, it was a regulatory fiction. He pointed out that there could be a difference between the allowed structure and the allowed cost of capital in comparison to the actual underlying costs which the company used. In the majority of cases, although there was a 60 - 40 structure, many companies were able to finance at 70 percent above debt and maintain their cost of equity, which would increase the actual return on equity versus the regulatory allowed return on equity. He noted that although most tariff setting did not involve more than 70 percent debt, it was possible to raise that much debt even with the limits and risks for higher amounts. He pointed out that the lower percent of debt would reduce the actual return on equity. He declared that the financing risk was limited by an option to terminate in the MOU, if satisfactory financing could not be arranged. In this circumstance, the State of Alaska was still required by the MOU to repay the development costs, with 7.1 percent interest.

8:44:51 PM

MR. MAYER resumed his review of slide 14, "TransCanada Tariff Offer Within Market Norms," noting that to the extent that this was a useful comparison, there was a substantially higher level of debt in the rate setting capital structure, which was an advantage to the state. He said that an overall review for cost of equity, cost of debt, and the weighted average cost of capital revealed terms toward the bottom of "what was out there." Directing attention to the weighted average cost of capital with a median of 9.8 percent [graph on bottom right of slide], the lowest data point in this sample was 6.5 percent and the resulting cost of capital under the MOU during the period of pipeline operation, not including the time of development and time for future expansions, would be 6.75 percent, which was at the lowest end of the sample. He allowed that it could be useful to make comparisons of FERC regulated pipelines with the allowable returns, the weighted cost of capital, and the returns on equity under the NEB in Canada.

8:46:20 PM

MR. MAYER moved on to slide 15, entitled "FERC ROE HISTORICALLY EXCEED NEB (CANADA) ROE". He pointed out that the return on equity allowed by FERC was above those historically allowed by

the NEB. He directed attention to the FERC settlement cases, the end result of a dispute. He stressed that, to the best of enalytica's knowledge, most of the sample projects had a 60 - 40 debt equity split. He explained that an 8.5 percent return on equity would result in a 6.4 percent [cost of capital], still near the 6.75 percent range previously discussed. He shared a caveat that Canadian pipeline companies had been fiercely contesting these very low returns on equity in recent years. He directed attention to the NGTL system in Canada, which had a settlement with the shippers, approved by the NEB, which raised the allowed return on equity to 10.1 percent. He reported that the Canadian Mainline pipeline had a return on equity revised upward by the NEB to 11.5 percent. He said that these more recent returns reflected a much closer return to those allowed by FERC, and he noted that both of these projects had a 60 - 40 percent debt to equity ratio.

8:49:57 PM

MR. MAYER addressed slide 16, entitled "SOA EQUITY LEADS TO HIGHER GOV'T TAKE ON AVERAGE" and referenced the overall shares of cash flow to the State of Alaska. He referred to an earlier question by Representative Tarr for the comparison of overall value to the state if the state was a taxing entity for royalty and value at the wellhead versus having a share of gas and equity. He compared the overall split of the project cash flow for in value versus in kind with 20 percent and 25 percent equity as entailed by the HOA. If it was guaranteed that the higher prices in Asia would continue, then there was an argument for the state project to remain with in-value, as long as the price remained high. However, he pointed out that as the price declined and the tariffs remained static, the revenue would also decrease quite dramatically. He acknowledged the benefit to a higher share of equity, especially an equity share that was proportionately better across the prices to an in value share.

8:53:09 PM

CO-CHAIR SADDLER asked if the graph reflected property tax and corporate income tax.

MR. MAYER replied that the graph depicted everything, including cash flows to the state from being an equity participant with saleable gas.

CO-CHAIR SADDLER directed attention to the graph for in value, and asked if that included production tax value, corporate income tax, and royalty.

MR. MAYER expressed his agreement.

CO-CHAIR SADDLER asked for clarification for what was included on the remaining two graphs.

MR. MAYER explained that the two other graphs also included revenue to the state from the sale of LNG, net of the costs, plus property tax and state income tax.

MR. TSAFOS clarified that the graphs were adding up the annual revenues presented earlier and included the other partners.

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REPRESENTATIVE SEATON asked for clarification that the graphs reflected the decline of the percentage of revenue, noting that the state only had 25 percent of the gas sales.

MR. MAYER explained that this was a proportion of gas flow rather than revenue, although, in absolute terms, the total was also dropping. When the price dropped, the cash flow to all the parties would also drop.

REPRESENTATIVE SEATON asked for clarification that with a price increase, there was a percentage drop.

MR. MAYER expressed his agreement, stating that the overall shares of cash flow were highest in the low price environment.

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MR. MAYER directed attention to slide 17, entitled "TC'S SHARE OF CASH IS HIGHEST AT LOW PRICES," which described the equity at 25 percent and compared it to two of the MOU options. The first was for the no buyback option and the second included the exercise of the buyback option by the State of Alaska.

CO-CHAIR SADDLER asked if the definition of the TransCanada share of cash included cash flow, all the revenue going through the pipeline.

MR. MAYER explained that this was the percentage of net cash flow of the entire project over its lifetime. He pointed out

that the net cash flow, net of all costs for developing and running the project, could go to one of the three producers, the federal government through federal income tax, the State of Alaska, or TransCanada as a tariff.

CO-CHAIR SADDLER asked for an estimate of the three producers' share of the net cash flow over the life of the project, net of all expenses.

MR. MAYER said that, without TransCanada, and its 25 percent equity, there would be 40 - 50 percent of the total project value to the State of Alaska.

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CO-CHAIR FEIGE asked what percentage of the value would go to debt service, if the state had to borrow money without the TransCanada option.

MR. MAYER replied that this would be better addressed in upcoming slides, but it would be expected that the state would have a 4.5 to 5.5 percent cost of debt, as opposed to the 6.75 percent weighted average cost of capital. He stressed that the weighted cost of capital included a 12 percent return on equity, and was an after tax return. He suggested that there would be "an effective cost of somewhere in the 8's" under the TransCanada option, as tax was not included in the 6.75 percent weighted average cost of capital.

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REPRESENTATIVE HAWKER, addressing the cost of gas on the graph, mused that $8/MMBTU was a project non-starter and consequently an irrelevant number; whereas, the $18/MMBTU was a higher end benchmark. He reflected that the difference between no TransCanada and the TransCanada involvement with no buyback only projected an increased cumulative return to the state of a couple percent. Moving on to the graph of TransCanada with the buyback, he surmised that the return was only one percent higher to the state. He opined that a state buyback of ownership, with its commensurate risks and costs, would only have a cumulative return of a fraction more while assuming all the risk. He asked if it was possible to see quantifiable numbers, as this appeared to be at odds with his perception of the return on an annual basis. He questioned the additional risk for such a small return.

MR. MAYER, in response, said that these were the same numbers as expressed previously. He offered his belief that there were two fundamentally counter intuitive issues relative to the HOA and the MOU. First, the assumption for taking gas in kind along with a 25 percent project share actually allowed the state for between 40 - 50 percent of the project value, as the state was a project participant and a sovereign entity that actively charged state income tax and property tax from the other participants. He pointed out that the municipalities were included in the analysis as part of the state as a whole. Regarding TransCanada, he pointed out that, although a 25 percent share of the project to TransCanada was half the capital value of the project, there were different ways for each party to generate value through the project. To generate full value, it was necessary to have an equity stake in the project as well as gas and the revenues generated from its sale. He pointed out that it was possible to have a tariff that only allowed for the initial outlay of capital, with no net cash flow return for debt or equity. He reported that the tariff structure on the chart allowed for a return on debt and a return on equity, which provided a portion of the project cash flow. This portion was greater at low prices because it was a fixed claim on the project cash flow, so it represented more at low cash flow. However, in a higher price scenario, assuming the state exercised its buyback, it would be 1 percent of the total project cash flow. In this same scenario, assuming the state did not exercise its buyback, it would be closer to 2 percent of the total project cash flow. He reported that this could increase to 7 percent if prices were lower and the state did not exercise its buyback. He expressed agreement that the overall share of total value created on an undiscounted basis over time did not take a big portion of the value.

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MR. TSAFOS drew attention to the graph on the far right of slide 17, "TC [TransCanada] with Buyback," and explained that, although there was payment of a tariff to TransCanada in addition to the sales price for its share, there was not any payment for the gas that the state shipped using its own capacity. He pointed out that this lowered the realistic tariff, and that it was necessary to place the relative cost of these components in perspective. As the tariff was a fixed amount, the higher the cost of the gas, the lower the tariff as a percentage.

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REPRESENTATIVE HAWKER relayed that it was necessary to remember that the gas going through the pipeline was the state's royalty and tax. He suggested that the graphs include a straight bar line illustration which would remain a constant no matter the price of gas. He declared a need to evaluate the gain versus the assumption of risk with the addition of TransCanada as a business partner. He opined that the chart revealed "very marginal, cumulative, ultimate, hypothetical cash returns over the project life." He asked for the number of years this was projected.

MR. MAYER, in response, said it was 25 years.

REPRESENTATIVE HAWKER declared that these returns were marginal for the assumption of a great deal of risk with state ownership.

MR. TSAFOS asked what Representative Hawker was comparing to state ownership.

REPRESENTATIVE HAWKER referenced the charts on slide 17, and compared the bar depicting $18/MMBTU on each chart. He said that the percentage of cumulative cash flows to the state over the project life was only minimally increased by a partnership with TransCanada versus having no equity position. He pointed out that there was risk with an equity position.

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MR. MAYER acknowledged the small portion of royalty that was foregone with TransCanada owning all the equity. He expressed disagreement that there was not any risk without equity; reporting that companies accepted fixed, highly regulated returns as they were low risk, low reward, and low return relative to other investments. He shared that a pipeline would have a tariff, and that according to the MOU, there was very little risk for TransCanada between now and the final investment decision (FID), as they were able to "walk away at a number of points and be fully reimbursed." He stated that TransCanada would need a substantial outlay of capital at some point to build the pipeline, at which time they would charge a tariff proportional to the capital outlay. He said there were benefits for TransCanada involvement, including being expansion capable and expansion minded as a partner during negotiations with the producers. He noted that TransCanada did absorb financing risk if not able to raise the 75 percent debt, even though the state did bear a lot of risk as it paid the shipping tariff.

REPRESENTATIVE HAWKER responded that this was presuming the state passed enabling legislation as it would not have any review for the MOU which involved the indemnifications for TransCanada insulating them from risks. He acknowledged that the state would keep the risk, however the choice by the state was whether or not to own a "chunk of the pipe." He offered his belief that the chart on slide 17 reflected that ownership of this "chunk of the pipe" offered a minimal ultimate return for this additional risk.

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MR. TSAFOS expressed agreement that what the state would transfer to TransCanada was not that high. He pointed out that the assumption of risk was a fixed claim, and that the tariff paid to TransCanada was fixed to an agreed upon tariff structure. He reiterated that the overall percentage share of the tariff was lower at higher gas prices.

REPRESENTATIVE HAWKER offered his belief that $8/MMBTU would not result in a successful project for the state.

MR. MAYER, in response to Representative Johnson, directed attention to slide 18, entitled "'IN KIND' W/EQUITY OFFERS MORE DOWNSIDE PROTECTION." He explained that this reflected the absolute value for undiscounted, cumulative cash flows over the project life as a taxing entity compared to an equity participant with gas. He directed attention to the three charts depicting the State of Alaska, Producers, and Federal Government. He reported that an "in value" structure was preferable if there were higher MMBTU prices for the entire 25 year span of the project, although value fell very quickly as the prices dropped because of the fixed claims charged. He noted that an "in kind" structure gained more value with greater participation, as a 25 percent share was substantially preferable to a 20 percent share. He noted that this was limited to the share amount that could be financed for capital expenses and the share size to which the producers would agree. He reported that the HOA had anticipated a share range of 20 - 25 percent. He pointed out that the producers had greater returns for the "in kind" structure with higher LNG prices, however with falling prices, the value fell quickly.

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MR. MAYER moved on to discuss the comparative value for the state with a 20 percent share versus a 25 percent share, slide 19, entitled "LIMITED VALUE FOREGONE UNDER TC W/BUYBACK OPTION". He described the left chart as being the State of Alaska total cash flows, comparing the range of value for 20 percent equity share and no involvement with TransCanada, 25 percent shares with the TransCanada buyback, and the sum of the total cash flows from the project undiscounted over time. The right chart compared the same flows, but with a 10 percent discount rate for net present value. The idea for this was to look at the capital outlay required to build the project, and the benefit for financibility. The outlay after paying the debt equity ratio of 70/30 was about the same in both the aforementioned 20 percent and 25 percent examples, and if just comparing this outlay, the choice would be for the 25 percent share with TransCanada. He pointed out that there was foregone value by not having the full 25 percent. He reported that the difference was the greatest when viewed on an undiscounted basis, simply for total cash flows. When there was a discount for the upfront cost by TransCanada, which emphasized that they had the majority of this cost, the difference was much smaller. He offered an example of a $15 MMBTU price, with a $75 billion value to the state for the life of the project, and he estimated a loss of about $5-6 billion to TransCanada for tariff. He pointed out that the loss to the state was about $400 million after reviewing the effect of the reduction to the net present value discounted at 10 percent.

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MR. MAYER pondered the different ways to think of the non-financial benefits with TransCanada, which included its active role in future expansion during contract discussion with the producers. He also reviewed the role for TransCanada as a finance option. Although there was a marginally increased value for the state to finance the project without TransCanada, there was the question for the capital constraint and that resulting loss of value. He acknowledged that there were a lot of unknowns that may be answered further along the project, and that there was still the option for the "off ramps" to terminate the project agreements.

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REPRESENTATIVE SEATON, comparing slide 19 and slide 9, asked if the difference was all because of a NPV (net present value) 10.

MR. MAYER expressed agreement, and noted that the chart on the left was undiscounted, whereas the chart on the right reflected the impact of the 10 percent discount rate.

REPRESENTATIVE HAWKER referenced an earlier statement by Mr. Mayer as the cumulative take away of the entire presentation and asked if the title of slide 19 was saying the same thing as "there is little to be gained by us going it alone."

MR. MAYER replied that, relatively speaking, it was saying the same thing.

REPRESENTATIVE JOHNSON pointed out that, although a few billion was relatively small given the scope of the project, it was "still a whole truckload of money." He referred to the earlier discussion of non-tangible aspects for having someone at the table to support expansion.

MR. MAYER reflected on the Washington, D.C. dictum "a billion dollars here, a billion dollars there, pretty soon you're talking real money."

REPRESENTATIVE JOHNSON mused about the current budget for education relative to this money.

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MR. MAYER moved on to slide 20, entitled "OTHER QUESTIONS FOR THE MIDSTREAM," which stemmed from the micro level detail of the MOU. He said that it was important to be aware that TransCanada would recoup its expenses. If the state terminated, it would pay back TransCanada with a 7.1 percent interest rate. If the project did not reach a final investment decision, TransCanada would be reimbursed. If TransCanada decided to terminate because of lack of board support or lack of financing, it would still be reimbursed with this interest rate. He noted that there were important questions regarding the risk versus the reward, including control and the appropriate split. He said that the second crucial point was whether the state would decide to terminate the agreement with TransCanada and go for the project alone at the time of final investment decision. He said that the state had numerous opportunities to terminate along the path to the project. However, the state needed to offer the option for participation to TransCanada within the next five years, with a provision that the cost of debt and the cost of equity for the tariff could be negotiated based on the conditions at that time. He opined that the decision to go it

alone should include a better understanding for these benefits, and that there should be consideration for what determined a good faith offer for participation by TransCanada, and how firm was the "off ramp." He offered his belief that the final question for the midstream should be for who benefited from and who bears the cost for a subsequent expansion. Under the current terms of the HOA, an expansion that raised the unit costs of the pipeline was paid by the expansion parties and the initial parties were not included in those costs. He said there were many reasons to support this decision for certainty at the time of final investment decisions. He said there was reasonable question whether expansion which benefited the economics of the project should include those who did not support the expansion.

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CO-CHAIR FEIGE requested that Mr. Mayer and Mr. Tsafos address what the revenue could look like with expansion. He offered his belief that the pipeline would lead to "a great deal of exploration activity" and a need to get the resource to market, which could benefit the state. He noted that the initial contract agreement was for 25 years, and the MOU had details which allowed for a change of ownership, or not, at that time. He asked what should be considered for that time at the end of the initial contract.

REPRESENTATIVE TARR asked what to review in order to better understand the other opportunities and options for expansion.

MR. MAYER replied that there were a range of granular options, some of which were contemplated in the MOU and the HOA. He stated that only two sets of parties could really bear the cost of expansion, either solely by the parties seeking and participating in the expansion, or by everyone.

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REPRESENTATIVE KAWASAKI referenced slide 6 regarding the mix of debt and equity and asked whether it was necessary to have the answers to the questions presented on slide 20.

MR. MAYER acknowledged that these questions should be answered, although some of the questions needed to be weighed and considered for reasonableness of risk and reward by each member themselves, and some questions, including those regarding the off ramps in the contract, may require legal analysis.

MR. TSAFOS said that the first two questions on slide 20 were not legal or technical questions. The third question for solidity of the off ramp was a legal question, and the fourth question was one of judgment for whether the upside should be shared but not the downside. He stated that questions one, two, and four were facts and each person needed to determine if they were comfortable with them, or whether it was necessary to change them. He noted that the third question was a legal fact, and he would not presume to offer an answer to it.

REPRESENTATIVE KAWASAKI paraphrased from the LNG key issues [Included in members' packets] and said:

> from a purely financial perspective the impact of TC's involvement may be seen as akin to a loan, the reduce in capital investment in the project required by the state, and the state pays back the loan through a fixed payment in the form of tariff, also like a loan it increases some of the state's exposure of risk by adding a fixed claim on the project cash flows that must be met before the state receives its share. Compared to other forms of debt, TC's involvement's relatively expensive form of financing, average weight of capital's significantly above the states own cost of debt.

REPRESENTATIVE KAWASAKI questioned, as this was in the paraphrased analysis of the fiscal question, what should be done. He offered his belief that it was not a huge financial benefit, and he asked what the state was getting from this partnership.

MR. MAYER, in response, said that from a purely financial perspective this was not a net benefit to the state and there was not a significant foregone value. It was a relatively small amount of the overall total project value. He asked if the other benefits from the involvement of TransCanada outweighed the purely financial cost that was relatively small in the scheme of the overall project.

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REPRESENTATIVE SEATON addressed the fourth question, and expressed concern with the lack of liability to participate in the escalated costs from expansion and then an expectation for benefits from the expansion. He asked if there were relative

terms for similar expansion projects internationally, as this was "an unbalanced formula here if there's no exposure to higher costs, but there's savings on the downside." He opined that, as the state would probably be an expansion party with others and therefore should be the beneficiary for lower tariffs, this was one of those decision points that should be decided before moving forward.

MR. MAYER agreed to look into providing some points of comparison to other projects. He stated that the points raised were ideal ones for the producers and the administration to get their thoughts and reasons on the nature of the expansion principles.

MR. TSAFOS added that he was unsure whether there was more analysis that could be done, as this was more of a question of judgment. He suggested that the administration could have some good reasons that had not been discussed.

REPRESENTATIVE SEATON asked if there were other expansion projects with similar language, although generally more balanced on the downside.

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REPRESENTATIVE JOHNSON said that he wanted to look at the ultimate stress test under the current agreements for what would happen under a variety of scenarios, including if ExxonMobil Corporation bought ConocoPhillips Alaska, Inc., if TransCanada had to file bankruptcy, and if Sinopec Group bought TransCanada. He asked to know what the options were for the state, and offered his understanding that the State of Alaska was the "deep pockets."

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[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 9:47 p.m.