

ALASKA STATE LEGISLATURE
SENATE SPECIAL COMMITTEE ON NATURAL GAS DEVELOPMENT
Fairbanks, Alaska
August 24, 2006
9:16 a.m.

MEMBERS PRESENT

Senator Ralph Seekins, Chair
Senator Fred Dyson (via teleconference)
Senator Donny Olson
Senator Thomas Wagoner
Senator Kim Elton (via teleconference)

MEMBERS ABSENT

Senator Lyda Green
Senator Gary Wilken
Senator Con Bunde
Senator Bert Stedman
Senator Lyman Hoffman
Senator Ben Stevens
Senator Albert Kookesh

OTHER LEGISLATORS PRESENT

Senator Gretchen Guess
Senator Gene Therriault
Representative Mike Kelly
Representative Bill Stoltze
Representative John Coghill
Representative Ralph Samuels
Representative Mike Seaton

COMMITTEE CALENDAR

Alaska Gasline Port Authority Presentation
Econ One Analysis of Port Authority Plan
Round Table Discussion of Port Authority Plan

PREVIOUS COMMITTEE ACTION

No previous committee action to consider

WITNESS REGISTER

JIM WHITAKER, Chair

Alaska Gasline Port Authority
Mayor, Fairbanks North Star Borough
PO Box 71267
Fairbanks, AK 99707

POSITION STATEMENT: Discussed the Port Authority Plan.

BILL WALKER, General Counsel and Project Manager
Alaska Gasline Port Authority
411 4th Avenue, Suite 200
Fairbanks, AK 99701

POSITION STATEMENT: Discussed the Port Authority Plan

RADOSLAV SHIPKOFF, Director
Greengate LLC
2001 L Street NW, Suite 901
Washington, DC 20036

POSITION STATEMENT: Discussed the Port Authority Plan

SENATOR GENE THERRIAULT
State Capitol, Room 119
Juneau, AK 99801-1182

POSITION STATEMENT: Discussed the Port Authority Plan.

REPRESENTATIVE RALPH SAMUELS
State Capitol, Room 126
Juneau, AK 99801-1182

POSITION STATEMENT: Discussed the Port Authority Plan.

DR. TONY FINIZZA
Econ One Research, Inc.
Suite 2825
Three Allen Center
333 Clay Street
Houston, TX 77002

POSITION STATEMENT: Presented analysis of Port Authority project model.

REPRESENTATIVE MIKE KELLY
State Capitol, Room 434
Juneau, AK 99801-1182

POSITION STATEMENT: Discussed the Port Authority Plan.

DAVID VAN TUYL, Commercial Manager
Alaska Gas Group
BP

Anchorage, AK

POSITION STATEMENT: Discussed the Port Authority Plan.

STEVEN B. PORTER, Deputy Commissioner
Department of Revenue
PO Box 110400
Juneau, AK 99811-0400

POSITION STATEMENT: Discussed the Port Authority Plan.

ROGER MARKS, Economist
Department of Revenue
PO Box 110400
Juneau, AK 99811-0400

POSITION STATEMENT: Discussed the Port Authority Plan.

MICHAEL MENGE, Commissioner
Department of Natural Resources
400 Willoughby Avenue, Suite 500
Juneau, AK 99801-1724

POSITION STATEMENT: Discussed the Port Authority Plan.

KEN GRIFFIN, Deputy Commissioner
Department of Natural Resources
400 Willoughby Avenue
Juneau, AK 99801-1724

POSITION STATEMENT: Discussed the Port Authority Plan.

REPRESENTATIVE PAUL SEATON
State Capitol, Room 102
Juneau, AK 99801-1182

POSITION STATEMENT: Discussed the Port Authority Plan.

ACTION NARRATIVE

CHAIR RALPH SEEKINS called the Senate Special Committee on Natural Gas Development meeting to order at [9:16:31 AM](#). Present at the call to order were Senators Thomas Wagoner, Fred Dyson, Kim Elton and Chair Ralph Seekins.

Mayor Jim Whitaker introduced the Port Authority representatives Bill Walker and Radoslav Shipkoff.

ALASKA GASLINE PORT AUTHORITY PRESENTATION

MAYOR JIM WHITAKER, Chairman, Alaska Gasline Port Authority (AGPA), said that he did not want to recap discussions that occurred in Juneau, but to pick up where they left off. Cooperation between the legislature, the administration, the producers, and the Port Authority is in the best interests of

the state of Alaska and the Alaskan people. He recognized that the producers have a significant role to play in the process and it is important to align with them and with all the stakeholders in the project if it is to move forward.

9:19:42 AM

BILL WALKER, General Counsel and Project Manager, Alaska Gasline Port Authority, offered a slide presentation on the AGPA project plan and introduced the project team:

- Bechtel Corporation - cost estimates
- Greengate LLC - financial analysis
- YPC (Yukon Pacific Corporation) - purchased from DSX Corporation (Diana Shipping Inc.) with exclusive rights to the permits and data that go with that
- TOTE (Totem Ocean Trailer Express) - presented proposals for shipping
- Burmah Gas Transport (BGT) - Memorandum of Understanding (MOU) with AGPA for tankers from their fleet of eight U.S. built General Dynamics liquid natural gas (LNG) tankers owned by Mitsui O.S.K. Lines, Ltd. and Nissho Iwai (LNG Japan)

He presented a slide of West Coast LNG activity and noted that, since the slide was prepared, a number of additional LNG terminals have applied for permits. Most recently, BHP has begun the permitting process to bring gas from Australia to California, which is a concern. The most significant terminal is Sempra's Costa Azul plant, shown on slide three, which is the first LNG receiving terminal to be built on the West Coast. It is currently under construction and has applied for expansion. Slide four illustrates that one of Alaska's advantages in the North American market is its proximity, which results in shorter shipping times to the West Coast.

9:23:47 AM

MR. WALKER said that he would not go over each of the twelve YPC and Alaska Natural Gas Development Authority (ANGDA) permits listed on slides five through seven, because they were discussed previously in Juneau, but pointed out what is noteworthy about them. YPC spent over \$100 million over a period of 15 years obtaining the permits, and they are significant. Sempra has invested about \$1 million and Bechtel \$8 million, based in part on their review of these permits.

(Pause due to feedback from remote LIO.)

[9:25:25 AM](#)

In response to discussion about whether the permits are valid or need to be modified, Mr. Walker said that Bechtel, Sempra, and O'Melveny & Myers have reviewed them, and no one has walked away from involvement in the project due to a problem with the permits. There is also a warehouse in Anchorage full of data compiled by YPC for this project over the past 15 years. The recent right-of-way acquisition by ANGDA fits in well with what AGPA is doing.

(Lost audio due to static.)

[9:27:04 AM](#)

He went on to slide eight, which shows the projects in direct competition with Alaska for the North American gas market, and stressed that all of these projects are moving forward. The FERC's report to Congress, dated July 10, 2006, stated that LNG would take away Alaska's markets if it doesn't do something soon.

(Lost audio due to static.)

MR. WALKER said it is important to recognize that there is significant competition and that none of the competing projects is forming a 4-5 year study.

MAYOR WHITTAKER added that AGPA's concern is heightened by the information on this slide. He reiterated that none of the projects shown is being held up for a 4-year study; they are moving forward and compete directly with Alaska's opportunity to take gas to market.

MR. WALKER explained that slide nine is from a FERC presentation and shows 45 terminal sites in various stages of permitting. Not all of the sites will be permitted, but enough of them will be that the American market should come into gas balance around 2012-2013. He pointed out that it shows significant involvement by the North Slope producers in LNG receiving terminals for the North American market and, while Alaska is in negotiation and study mode, they are working aggressively to bring LNG into their own receiving terminals.

He moved on to slide 10, showing the business plan of Cheniere, which has a business relationship with ConocoPhillips. It has five LNG receiving terminals in the permitting stages now and is clearly targeting the Mid-West market.

MR. WALKER explained scenario A on slide 11. He said that the Port Authority is not trying to prevent the gas line from ever going through Canada to Alberta, but is opposed to holding up the Alaska portion of the line waiting for that to happen. Because it is in the study phase now, it is hard to say what the timing of the Canadian pipeline might be, and the demand could be supplied by the numerous LNG projects around the country while Alaska is waiting.

[9:33:28 AM](#)

He went on to say that the market is not going to sit and wait for Alaska's gas. If the project gets gas to south-central Alaska by 2012, it could work and would bring value to the eventual pipeline through Canada.

[9:34:14 AM](#)

MR. WALKER cautioned that if Alaska waits until after the highway line is built, it is almost guaranteed to be too late to capture the West Coast market. Slide 14 shows the risks to Alaska, largely from the contract itself. The worst-case scenario is that Alaska could be completely shut out of the North American market due to activity elsewhere. AGPA is also concerned about subordinating Alaska's interests to Canadian demands. If the pipeline goes to Alberta first, there would be approximately 35 percent in Alaska; if it goes all the way to Chicago, 20 percent would be in Alaska and, with fiscal certainty for 30-45 years, Canadian fiscal requirements could impact the wellhead in ways that we cannot foresee and that might not be in Alaska's best interests.

[9:37:10 AM](#)

He said that a 30-45 year exclusivity contract with no guaranty of a pipeline is not good, and the no-penalty provision in the contract is a step in the wrong direction for commercializing Alaska's gas. Alaska's ability to manage its own resources is also a significant concern with this contract. Point Thomson is a glaring example of that. Right now, there is strong language in the lease regarding development of Point Thomson and what should have been done in the last 28 years; this changes those development criteria to a diligence standard. There is a provision that Point Thomson will be developed into the project, but the gasline out of Alaska would be the only project available for Point Thomson. He then stressed that the sovereignty issue is huge; the state is giving up too much in an attempt to bring reluctant partners to the table.

[9:39:27 AM](#)

CHAIR SEEKINS asked what sovereignty is being given up.

[9:39:44 AM](#)

MAYOR WHITAKER referred to Article 8 section 2 "General authority of the Legislature shall provide for the utilization, development, and conservation of all natural resources belonging to the state." That exercise of sovereignty would be supplanted by a 45-year contract. For 45 years, the legislature would have no flexibility or control over the resource.

[9:40:33 AM](#)

CHAIR SEEKINS asked what elements of the contract would do that.

(Lost audio due to static.)

MAYOR WHITAKER responded that the timeframe would be of great concern, the state's ability to respond to the market, and to control the manner in which the state's resources are developed. For the state's sovereign responsibility to be subordinated to a commercial contract for any period of time is not appropriate or necessary.

CHAIR SEEKINS asked if that sprang from the Stranded Gas Development Act (SGDA).

MAYOR WHITAKER answered that when the SGDA was written in 2002, the concern was relative to Alaska's gas having a place on the market and the market's ability to pay a price sufficient to get it there. The value of gas has significantly increased and there is some relative certainty to that value, so the premise of the SGDA has changed. The same basic question is again at issue, whether the gas is actually stranded, making concessions necessary to un-strand it.

[9:42:56 AM](#)

CHAIR SEEKINS said that he is trying to get to the root of the problem, and questioned whether the legislature provided the terms that sacrifice sovereignty in the SGDA itself.

[9:44:01 AM](#)

MAYOR WHITAKER replied that the short answer is yes. The rationale for allowing that to occur was that the gas is economically stranded, therefore the state would be willing to make concessions to get to it, including some limitation of sovereignty. The basic question is whether the gas is indeed stranded.

CHAIR SEEKINS said that the purpose section of the SGDA doesn't address whether the gas is stranded; that appears in some of the assumptions later on. It was intended to provide long-term fiscal certainty, in as much as the constitution would allow, in order to get the gas to market. The question now is if the contract itself is the root problem, or if it goes back to what the legislature did in the SGDA.

MR. WALKER replied that it is the contract, not the SGDA.

SENATOR THERRIAULT said that the SGDA doesn't allow all of the things that are in the contract, which is why the legislature is likely to face a slate of proposed amendments. He does not recall any significant discussion about loss of sovereignty at the time they debated the SGDA.

[9:46:06 AM](#)

CHAIR SEEKINS said that he still wants to know precisely what the state is actually sacrificing.

[9:47:21 AM](#)

MAYOR WHITAKER responded that it puts into question the State's ability to control 85-95 percent of its revenue stream for 30-45 years.

[9:48:06 AM](#)

MR. WALKER reviewed the benefits of proceeding with AGPA's LNG project. He commented that the time associated with obtaining senior permits would be significantly reduced because AGPA already has the permits and has only to amend them. The AGPA project provides the earliest opportunity for in-state gas to Alaskan communities and an independently owned pipeline provides the best opportunity for open competition in natural gas transportation.

[9:49:53 AM](#)

[indisc.] He used an analogy to illustrate the problem with a producer-owned pipeline and went on to say that AGPA looks at the pipeline as a non-profit utility to move Alaska's gas to market and has always proposed to move the producers' gas on a flow-through arrangement.

[9:51:24 AM](#)

MR. WALKER pointed out that the airlines don't own SeaTac Airport, and that is a good model to work from. He said that AGPA's project takes advantage of the North American, West Coast and Mid-West markets, as well as providing for shipping overseas

if that is in Alaska's best interests. It can also be sized to accommodate gas for a future pipeline to Alberta.

He noted that AGPA's project has been criticized for being ever changing and conceded that, although the project has always been to move gas from Prudhoe Bay to Valdez, where it would be put into LNG, changes have been made to improve efficiency.

[9:53:49 AM](#)

CHAIR SEEKINS recognized that Representatives John Coghill, Mike Kelly, Ralph Samuels and Bill Stolz had joined the discussion.

REPRESENTATIVE SAMUELS referred to the third bullet point on slide 15, RCA regulation, and asked if the FERC would still have to regulate the Gas Treatment Plant (GTP) and downstream of Valdez.

MR. WALKER replied yes, but said AGPA feels comfortable that it is exempt from FERC regulation on the pipeline and any upstream.

RADOSLAV SHIPKOFF, Director Greengate LLC, added that there will be components downstream of Valdez that will be regulated by FERC; but AGPA will not be dealing with them. Those who will be implementing the downstream components are already working through the FERC process. The regas terminal in Mexico is subject to Mexican regulation and Semptra is already in process of permitting the expansion. The takeaway pipeline downstream of the regas terminal, which will take gas from Costa Azul through Mexico and into Southern California, will be regulated on the Mexican side by Mexico, and on the U.S. side by FERC. But those expansions and incremental infrastructure will occur whether or not Alaska's gas is going through it, so the timeline is already in motion.

CHAIR SEEKINS asked if the upstream GTP is subject to the FERC permitting process.

MR. SHIPKOFF answered that AGPA believes it has many opportunities to help the producers and, if there were a benefit to owning the conditioning plant, which would compress the timeframe for them, it would consider that.

[9:56:47 AM](#)

CHAIR SEEKINS clarified that he was asking about the timeframe for permitting. The FERC said their time clock is set at 48 months or more.

MR. SHIPKOFF responded that, if the Port Authority owned the conditioning plant, the timeframe could be compressed.

CHAIR SEEKINS asked why it would be compressed.

MR. SHIPKOFF answered that it would avoid the FERC process.

CHAIR SEEKINS said it looks like there would be a fight with FERC over that. The FERC representatives told the committee that it is not going to ignore one of the biggest gas projects in the United States; it will want to control it. He asked how certain Mr. Shipkoff is that the Port Authority could avoid the FERC process.

MR. WALKER replied that most of AGPA's communication on this issue has been with the Department of Energy (DOE). He believes the issue will be resolved relatively soon; but AGPA has told the FERC that it is not looking for a fight and will work with them to avoid delays.

[9:58:46 AM](#)

CHAIR SEEKINS said he is trying to relate that to testimony by FERC. They look forward to regulating the downstream and upstream, even if the midstream is not under their jurisdiction. It sounds as if they want to control the midstream too, so there is a question about whether AGPA can do what it says it can.

[9:59:40 AM](#)

MAYOR WHITAKER said that AGPA's discussions with FERC were fairly straightforward and it was clear that their goal is to see a project move forward. FERC's closing comments were that, when Alaska decides what it wants to do, it would be ready to decide how to proceed.

[10:00:26 AM](#)

SENATOR WAGONER said that there is a lot of doubt about what ConocoPhillips will do with their LNG plant on the Peninsula. Production is decreasing and it may not have enough gas to continue operations past 2009. The state has been talking about building lines to Southcentral Alaska, conditioning the gas in a straddle plant, and shipping liquids and gas to the Peninsula to serve Southcentral. He asked if the Port Authority has looked at the feasibility of doing something like that for their LNG project using the existing plant, which could double in capacity from 250 Mcf to 500 Mcf per day. The state could continue to ship its gas to Japan and bring Sokolin gas in to the West Coast. It would be a win-win situation for Alaska. A number of

legislators are going to start insisting that the state look at processing gas liquids in the state, as that is where the jobs are.

10:03:02 AM

MR. WALKER said that Senator Wagoner raised a very good question, and one that AGPA has addressed in its efforts since 1999 in numerous discussions with ConocoPhillips about buying gas. It believes that the spur line from Glennallen to the MatSu Valley and tied into the south-central grid, which has a conditional right-of-way permit from the state of Alaska through ANGDA, can move gas south. Right now, gas moves north from the Kenai/Nikiski area. It has also looked at the TAPS preferred route through central Alaska from Fairbanks south to Anchorage, but that was not permitted. The same route was attempted for the gas pipeline, but thirty-two state and federal agencies said no, it must run parallel to the Transalaska Pipeline. AGPA feels it is prudent to maintain the permitted route and make sure gas is available to that facility. Many people forget that Alaska pioneered the LNG technology in 1969; so bringing gas to Southcentral sooner is desirable to keep that industry going and expand it. To divert everything in that direction and bypass the permitted terminal site however, would not be taking advantage of the time factor involved in what has been done to date.

MR. SHIPKOFF said that in previous presentations AGPA has shown cases that include the assumption of up to 500 Mmcf/d going via the Glennallen spur line in the direction of Southcentral. The 500 Mmcf/d assumption included the 200 or so that could extend the life of the Kenai plant, so AGPA has certainly looked at that option. It is incremental gas that helps amortize the cost of the main line to Valdez and potentially benefits ConocoPhillips because it extends the life of their facility. The reason it was not included in the numbers presented to the committee three weeks ago, is that the opportunity is not concrete and AGPA did not want to base its economics on 200 Mmcf that might not materialize.

10:06:36 AM

MAYOR WHITAKER agreed that Senator Wagoner's question is a good one, and emphasized that it is central to the Port Authority's mission to get gas to Southcentral. AGPA has talked to Agrium Inc. extensively and is still trying to determine how to meet their needs; but this is a linear process and before it can write a business plan to meet Agrium's need or ConocoPhillips', it has to have a gas supply.

10:08:43 AM

SENATOR THERRIAULT commented on the importance of preserving the jobs in Kenai, and asked about the potential for new jobs related to gas liquids. He asked if AGPA's proposal predetermines where plants could or would be built along line or in Southcentral. [Parts of testimony were indiscernible.]

10:09:54 AM

MR. WALKER replied no, it does not, but if there is no gas, or if the liquids are bound for Alberta, there is no sense talking about a petrochemical industry in Alaska.

CHAIR SEEKINS asked Mr. Walker if AGPA's project anticipates buying the gas, or just transporting it.

MR. WALKER responded that AGPA is very flexible and would do it either way.

CHAIR SEEKINS commented that he believes gas liquids could be sold anywhere and the state would own a certain percentage of those liquids. He asked if the Port Authority representatives know of any pre-arrangement by which the liquids would go to Canada.

MR. WALKER said he only knows that the premier of Alberta said the liquids from Alaska would be Alberta's "pound of flesh" for an Alaska pipeline. He pointed out that, if there isn't a spur line to Southcentral, he does not know how the state would get the liquids down there to be utilized.

CHAIR SEEKINS said that Senator Wagoner made it very clear to the energy people in Alberta that the state of Alaska is looking at getting those liquids processed here. At a recent meeting of the Pacific NorthWest Economic Region (PNWER) in Edmonton, Alberta indicated that it expected the liquids to come there because Alaska does not have existing facilities; but the legislators could not find any agreement to that effect. He emphasized that many legislators are interested in making sure those facilities are built in Alaska, to provide jobs for Alaskans.

10:14:42 AM

MAYOR WHITAKER said that in an uninterrupted market chain, the notion that the liquids would be available to whoever wanted to purchase them would be true, but given that the sponsors have vested interests in the petrochemical industry in Alberta, the state needs to be worried. That is not to criticize the sponsors

for doing what is in their best interests; but the mission of the legislature and the Port Authority is to do what is in the state's best interests. AGPA has an interest in keeping as much of that value as possible in Alaska.

CHAIR SEEKINS agreed that the legislators do too, especially those from the interior and probably from Southcentral as well.

10:16:06 AM

REPRESENTATIVE SAMUELS said that to buy the gas and to ship it are completely different ideas. The state bears all of the risk in the first scenario, but is simply running a public utility in the second. He felt that, for the Port Authority to say they would either buy it or ship it seemed unrealistic.

10:17:06 AM

MR. SHIPKOFF agreed that the risk allocation of a purchase and a shipping arrangement are different. The first order of priority in evaluating a project is to determine whether the budget makes commercial sense for all parties and whether it is economic; how the risk is then allocated is the second order of priority and AGPA is willing to have the appropriate discussions with the producers about that. It believes that its numbers show the project generates sufficient revenues to accommodate different commercial arrangements, but it is not at the point of having commercial discussions. The state first has to determine that the project is economic.

CHAIR SEEKINS said that, at this point, it is a study, not a project.

MR. SHIPKOFF countered that it is more than a study; it is ready to proceed when they have discussions about gas supply.

MR. WALKER confirmed that that they do view it as a project.

10:19:05 AM

SENATOR THERRIault asked a question about the economics of a pipe sized to accommodate additional capacity. [indiscern.]

MR. SHIPKOFF said that whether the LNG project can support itself if it proceeds with a pipeline that is sized to accommodate a Y-line expansion or a highway project in the future, and then those projects do not proceed, is a very good question. Three years ago the answer was no; it could not carry the extra expense given prices at that time. Today, economics are strong. Of course, there would have to be a reasonable

certainty that extra gas would be coming within a specific timeframe before negotiating tariffs and final engineering.

[10:21:47 AM](#)

REPRESENTATIVE SAMUELS expressed concerned about the state's risk profile in a gas-purchase situation and said that he does not buy the argument that these are just commercial discussions. He pointed out that the state carries all the risk if it buys gas and, if the market price drops below the purchase price, it could face a huge loss.

MR. SHIPKOFF responded that it is important to recognize just what is meant by "purchase agreement." The specifics of the netback purchase agreement AGPA proposed under the April 2005 purchase offer to the producers and the state, does not commit the midstream entity to a firm price obligation, so it is not taking price risks. Basically, the producers are committing to supply the gas. The midstream entity, which would be funded on a non-recourse basis post-completion, is taking the risk that the gas will be shipped, and the producers on the North Slope get the differential between market price and the cost of transporting the gas through the infrastructure. If the price of gas were \$2.00 and the state's cost were \$3.00, the producers would stop producing because they could not afford to continue; and the investors who built and financed that line would absorb the difference, which has to be paid to amortize the capital of the midstream infrastructure. The question is whether AGPA can convince the investors that the possibility of such a scenario is very remote. He thinks the view in the marketplace is good enough to make that argument convincing.

CHAIR SEEKINS asked if he anticipates shipper-paid contracts.

[10:25:55 AM](#)

MR. SHIPKOFF replied that he does not know yet, that AGPA is willing to enter into negotiations that would result in the most beneficial arrangement between it and the producers.

At ease from [10:26:21 AM](#) to [10:40:32 AM](#)

CHAIR SEEKINS called the meeting to order.

MR. WALKER said that, before he went on to the next bullet-point, he wanted to clarify an important point in response to the last question raised about risk to the state from the Port Authority Project. Alaska statutes are clear that the risk and obligations of the Port Authority do not transfer to the state

or to any of the municipalities that are members of AGPA. In addition, He believes the federal loan guarantee is non-recourse.

CHAIR SEEKINS said that the unanswered question is what the requirements will be for the loan guarantee.

MR. WALKER agreed.

MR. SHIPKOFF confirmed that DOE has not implemented any specific process yet, partly because parties in Alaska asked them not to implement any regulations before it completed its plans. So, DOE is waiting for something to come out of Alaska before finalizing the regulatory and implementation process.

[10:42:37 AM](#)

CHAIR SEEKINS asked what amount would be covered by the loan guarantee.

MR. SHIPKOFF replied that it would cover 80 percent of the project cost, up to a cap of \$18 billion total.

CHAIR SEEKINS asked how much he estimated the AGPA project would cost.

MR. SHIPKOFF answered that it depends on the configuration, but if it is sized to accommodate a future highway project, it could be \$5-\$6 billion plus another \$1.5 billion for the LNG plant, and from \$700 million to \$2 billion GTP.

CHAIR SEEKINS said that he thought the AGPA project would feed primarily off Point Thomson, and asked if it is now looking at Prudhoe Bay.

MR. SHIPKOFF said that they were asked to analyze a case in which only Point Thomson was made available to the project; but if only 1.2 Bcf is coming off the North Slope, it makes more sense to take it from Prudhoe Bay, which is already fully developed.

[10:44:21 AM](#)

CHAIR SEEKINS asked whether the projected source is now Prudhoe Bay rather than Point Thomson.

MR. SHIPKOFF replied that they can't entirely control where the gas comes from, so they are forced to look at a range of possibilities including both Prudhoe Bay and Point Thomson.

CHAIR SEEKINS asked whether the GTP would be \$750 million instead of the \$2.6 billion the committee heard about in previous discussions.

MR. SHIPKOFF answered that the GTP is fairly linear and modular, so they just scaled it down.

CHAIR SEEKINS asked whether there would be any loan guarantees available after this project.

MR. SHIPKOFF responded that this would use only about half of what is available.

CHAIR SEEKINS asked if the federal loan guarantee is a multi-project commitment.

MR. WALKER replied that he is not sure how the federal government will view it. The specific language reads that only one guarantee will be awarded, but they believe it could be viewed as a piece of a larger project. He stressed that ExxonMobil openly opposed the loan guarantee however, so he is not sure that it is an issue for their project.

[10:46:23 AM](#)

MR. SHIPKOFF added that there are many precedents in the financing marketplace, in which large scale projects pre-negotiate expansion with the lenders during the initial phase, and that AGPA intends to address that with DOE at the outset.

CHAIR SEEKINS commented that it is still an unanswered question.

MR. SHIPKOFF agreed that negotiation has yet to occur.

[10:47:33 AM](#)

CHAIR SEEKINS prefaced his question by saying that, regarding the federal loan guarantees, he assumed that it would be very difficult for anyone to get financing for a project this large without shipper-paid contracts. He asked if Mr. Shipkoff was saying they would not be necessary.

MR. SHIPKOFF explained that the loan guarantee would only protect the lenders that are funding under it, not DOE; so, DOE will have to be convinced that it is a sound investment. Many of the LNG projects have U.S. Export-Import Bank participation, which is basically the same thing.

[10:48:44 AM](#)

MR. SHIPKOFF continued that firm shipper-pay commitments are certainly a commonly accepted way to provide security and reasonable certainty of revenue to midstream lenders, but it is not the only way. They will accept an alternative arrangement if the economics are strong enough, and AGPA believes they are.

[10:49:39 AM](#)

CHAIR SEEKINS asked Mr. Shipkoff if he thinks the DOE would provide the loan guarantees without shipper-paid commitments.

MR. SHIPKOFF responded that he cannot answer that if he does not know what the rest of the picture looks like; but if there is a strong contractual and commercial structure, which mitigates the risk properly, the answer is yes.

[10:50:05 AM](#)

SENATOR DONNY OLSON joined the discussion from Anchorage.

[10:51:24 AM](#)

MR. WALKER continued with the seventh bullet-point on slide 15. He said that AGPA believes the larger the footprint of this project in Alaska, the better it is for the state. If one considers only the construction jobs associated with the pipeline, the Port Authority project and the Sponsors' project are comparable; but AGPA is looking at the operations, maintenance, and spin-off industries as well. One of the driving forces behind AGPA in this project is to maximize the in-state use of the gas liquids, which are the "feedstock" for a petrochemical industry in Alaska.

He said that the last slide is a list of what has been accomplished to date and what still needs to be done. In brief, AGPA was established by a public vote, received an IRS ruling of exemption from federal income taxes, obtained firm project cost estimates from Bechtel, structured the project to accommodate in-state needs through the ANGDA spur line, secured an exclusive option on YPC permits and data, worked with marketing interests in North America for LNG out of Alaska, obtained MOU's with Jones Act compliant shippers, performed financial modeling, submitted a formal offer to the producers to purchase Alaska North Slope (ANS) gas, and continue to address changes in the North American and export markets. What remains to be done is to acquire commitments for gas supply.

[10:55:24 AM](#)

SENATOR WAGONER asked Mr. Walker if he had a breakdown of pipeline maintenance and LNG jobs.

MR. WALKER replied yes, that he would get that list to him.

MR. SHIPKOFF brought slides showing some of the key themes from his presentation in Juneau three weeks earlier. He said that he would not go into the same detail he did at that time, but that he did bring the detailed slides with him in case anyone has questions that are not covered in today's presentation.

Before beginning the presentation, Mr. Shipkoff elaborated on a comment made by Mr. Walker, that they have heard comments that the Port Authority project keeps changing. He believes that AGPA has been very consistent in the project it is proposing. It has also been very diligent in optimizing its project and responding to changes in circumstances, as any responsible developer would do. The fundamental project has not changed. It proposes to transport gas from Prudhoe Bay to Valdez through a pipeline parallel to TAPS, to liquefy it, and send it to market. The market plan has changed since 2000, because the better market is now on the West Coast.

[10:58:27 AM](#)

He stressed that AGPA is not proposing a Y-line project; it is proposing an LNG project that enables the producers to develop their highway project via a Y-line expansion. The Y-line is not AGPA's project. He said it is important to know that they view the LNG project as incremental to, not competing with, the highway project.

[11:00:09 AM](#)

MR. SHIPKOFF directed the committee's attention to his first slide, which shows that AGPA's project proposes a minimum initially of 1.2 Bcf on the North Slope, for about 1.1 Bcf of LNG going to the West Coast after fuel and consumption. The large stylized representation of the pipeline from Prudhoe Bay to Delta Junction is intended to illustrate that it will be sized to accommodate a future highway project. The highway project has been described as a project that takes 4.3 Bcf on the North Slope and transports it to Canada. If you add that 4.3 to this project's 1.2, it is 5.5 Bcf on the North Slope, so AGPA believes it adds an incremental value.

MR. SHIPKOFF commented that some have suggested that a Y-line worsens the economics of the highway project because some volume is taken away from the pieces that are not shared, and therefore

the highway project loses its economy of scale. That is only correct if the assumption is that the same amount of volume is taken on the North Slope and is then split in two separate directions. It is true that, under that scenario, the pieces of the highway project that are not shared would have some diseconomies of scale; but there is no reason that the project has to take 4.3 on the North Slope. There is no magic to that number; it happens to be the number that optimizes their economics. If 4.3 is the optimal volume of gas to go down the highway, that can be done. It is not clear how 4.3 could be limited by reserves, given that a 4.3 project as proposed currently under the contract, needs 50 Tcf. That is 15 Tcf more than what is currently known to exist on the North Slope, so if it is premised on an additional 15 Tcf as yet undiscovered, the question is whether exactly that amount will be discovered. If the discovery is higher than 15 Tcf, it means a larger project than the 4.3 highway project could be implemented over 30 years. If it is less than that, the highway project as currently proposed does not work, and the economies of scale laid out in the fiscal findings no longer exist.

[11:03:12 AM](#)

He said that AGPA believes the scenario that was evaluated under the fiscal interest findings, which was a Y-line taking 4.3 on the North Slope and splitting it two ways, was flawed, not only because the fiscal interest findings ignored AGPA's cost assumptions and seemed to arbitrarily increase them, but because that case does not necessarily make sense. If 4.3 is the optimal amount that should go to Canada, exploration results in exactly 15 Bcf of reserves, and the reserves are limited to 50 Tcf as assumed under the highway project, 4.3 can still go down to Canada by shortening the life of the project. If the objective is to use the same reserve space, one can compare the two projects on a 50 Tcf basis and simply look at what happens if the LNG project goes first. Assuming it goes for 30 years and needs 13.5 Tcf, then the highway project might need up to an additional 35.9 Tcf to total 49.4 with a life of 22 years. If there is more than 15 Tcf discovered, for a total of 63, which is the scenario we presented 3 weeks ago, the highway project can proceed with 4.3 for the entire 30 years and the full economies of scale will be achieved on the shared components.

[11:05:24 AM](#)

MR. SHIPKOFF said it is important to recognize that if infrastructure for the highway project is amortized over a shorter time than 30 yrs, the incremental cost will go up. However, on a net present value (NPV) basis, AGPA's numbers show

that the increase in cost associated with shortening the life from 30 to 22 years still puts the total present value (TPV) generated by the producers at a significantly higher level than it would have been if the highway project was implemented on its own. From AGPA's perspective, the question isn't how much volume the highway project sends to Canada, it is whether the LNG project can support itself if the highway project doesn't come to fruition, and the answer is yes.

[11:07:06 AM](#)

MR. SHIPKOFF said that, if the highway project is implemented and starts operating in 2016, the netback jumps up significantly over what is projected for LNG only, starting from \$2.00 and increasing from there. On a real basis, the netback in 2012 is a little below \$2.00, increasing over time. The assumption is \$5.50 Henry Hub (HH), with a \$.50 basis in Southern California (SoCal). The netback increases, even on a real basis, because levelized nominal tariffs decline in real terms over time.

He displayed a slide showing the NPV associated with several configurations of an LNG project and a subsequent highway project, or a highway project that is implemented at the same time. The LNG project on its own, starting in 2013, generates a significant present value to the producers, assuming 12 percent discount rate in the upstream. The highway project on its own generates approximately \$11 billion. If the Y-line is implemented with an LNG project starting in 2012 and assuming a 30-year project life, then a highway line is implemented assuming 4.3 Bcf to Canada, the project life on the highway component is shortened so that the total amount it produces is 49 Tcf, and the value increases to \$12 billion. If there are future discoveries in addition to the 15 Tcf that is necessary to bring the reserves up from 35 to 50, the value is closer to \$13 billion.

MR. SHIPKOFF explained that, even if both projects are implemented simultaneously, the present value is higher than the highway project.

[11:10:24 AM](#)

He said that that this picture is mirrored by the returns to the state. The LNG project generates approximately \$5 billion of present value to the state. The Y-line generates about \$18 billion at 49 Tcf, and about \$22 billion at 63 Tcf. The Y-line project, even if the LNG component is delayed until 2016, generates a higher value than the highway project alone.

[11:11:23 AM](#)

MR. SHIPKOFF said that some have questioned whether 5.5 would be too much gas to the market, and whether 1.2 can be absorbed on the West Coast. AGPA believes that the total gas to market is likely to be same under any of the scenarios it has looked at; But Alaska would get the largest share under the implementation of an LNG project first, to be followed by the highway line.

He went on to the next slide, showing potential supplies from discreet sources to the North American market. The west coast would receive more than 1.5 Bcf, but he has used that figure because it is the unsubscribed capacity announced by Sempra for the expansion. The highway project can deliver 4.2 to Canada or the Midwest starting in 2016 or later. There will be 1.5 Bcf going to the West Coast. In the highway project, that 1.5 will be supplied from elsewhere, so the total between what is coming in via Costa Azul and what is coming in from Alaska will be 5.7. AGPA proposes that 1.1 go to the West Coast starting in 2012. An additional 400 Mmcf/d will be filled from foreign energy suppliers, and the highway project can still deliver its 4.2 to Canada and the Midwest.

[11:14:18 AM](#)

MR. SHIPKOFF reminded the committee that it is possible that the highway project might never be implemented, in which case there would still be 1.5 of foreign LNG coming to the West Coast, and the 4.2 would have to come from somewhere on the Gulf Coast. [indiscern.]

He commented that the independent producers have expressed concern that the provisions for open season and expansions under the contract are not sufficient. If there is some uncertainty whether pipeline capacity will be available, it might discourage explorers from investing. Having a pipeline that is sized for expansion downstream will serve as an exploration incentive, and if the pipeline can pay for itself, it isn't a problem to have a pipe that is partly empty for a few years. [indiscern.] Early implementation of an LNG project will make a highway project more likely. [indiscern.] The reverse is not true, because if the LNG project has to wait for the highway project to be implemented, there might no longer be a market for the gas. [indiscern.]

[11:17:04 AM](#)

MR. SHIPKOFF said that the LNG project gives Alaska the opportunity to access markets that will not be accessible to the highway project. Once the pipeline is built and the LNG

facilities are constructed in the way that enables expansion, it enables Alaska to capture additional markets such as Japan and East Asia.

[11:18:08 AM](#)

He said that he wanted to finally address a question that the Port Authority often hears, which is: If you have such a good project and it's bringing all this incremental value to the producers, why aren't the producers coming to you. He feels it is a legitimate question and, while AGPA may have missed something or be wrong in its calculations, he does not think that is true; he has confidence in the analysis and would welcome the opportunity to sit down with the producers and discuss it. He believes that when the producers are ready to seriously consider a project, they will implement an LNG project because the value is there. The state simply has to be in a position to prioritize an Alaskan project, and it isn't yet. The contract does not create the conditions that prioritize the project.

[11:19:16 AM](#)

REPRESENTATIVE KELLY prefaced his question by saying that, since the legislature met with AGPA in Juneau, there has been a significant change in the political picture and, while the legislature has been at the table negotiating the agreement, gas and oil prices have increased dramatically. People are skeptical that the current governor and the legislature can complete a contract and get legislative approval within 100 days. He asked if the legislature needs to start over on several major issues associated with the gasline contract, due to the price increases.

[11:22:38 AM](#)

He also wanted to know what AGPA recommends with regard to this project, assuming the legislature recognizes that the gas is less stranded due to market price and still wants to move forward.

[11:23:02 AM](#)

MAYOR WHITAKER replied that it is appropriate to "hit the reset button". It is clear that the people of Alaska think so too. The Port Authority has been prepared to compete from beginning, and to present a project that is in the best interest of Alaska. AGPA will continue to do what it is doing and is willing to engage with the legislature and any new administration to get this done.

[11:24:20 AM](#)

CHAIR SEEKINS asked Mr. Whittaker whether he is correct in assuming that the AGPA proposal doesn't depend on the SGDA.

MAYOR WHITAKER answered that it does not.

REPRESENTATIVE KELLY wanted to clarify that the delay resulting from the end of the special session and the change in administration will not cause any change in direction as far as the Port Authority is concerned.

MAYOR WHITAKER said it would not.

[11:24:54 AM](#)

CHAIR SEEKINS asked for other questions before transitioning to the Econ One presentation.

SENATOR THERRIAULT commented that the presentation was mailed to the participants who are attending via teleconference.

At ease from [11:25:48 AM](#) to [11:37:19 AM](#)

CHAIR SEEKINS introduced Dr. Finizza

ECON ONE ANALYSIS OF THE PORT AUTHORITY PROPOSAL

DR. TONY FINIZZA, Consultant to Econ One Research Inc., provided a brief background of his qualifications and an overview of today's presentation. He has had industry experience and worked at Atlantic Richfield until he retired in 1992. He currently does consulting work in the energy area and teaches energy economics, industrial organization, and business work ethic at the University of California, Irvine. He said he would be presenting an analysis of the Port Authority project and would discuss the financial metrics he intended to use, his use of the AGPA model in this work, key drivers, results, sensitivities, and recommendations.

[11:39:38 AM](#)

DR. FINIZZA said that he would address the project economic, compare alternatives, and look at the timing, as it is obvious that the Port Authority's work is driven in part by its ability to monetize natural gas sooner. His comparisons will use existing projects of a similar size in terms of reserves and net present value.

DR. FINIZZA started on page 12, showing that the appropriate financial criteria is net present value (NPV) of future cash flows. It is a way of determining whether the project would add value to a firm, and these cash flows would be discounted at a rate that represents the uncertainty of the cash flows. He noted that Econ One used a different discount rate than AGPA, but it is the same one they have used in all of their other work, and the same one that the other analysts have used. Finance theory holds that, if NPV is positive, the project adds value to a firm and is a project that should be done.

[11:43:38 AM](#)

He explained that internal rate of return (IRR) isn't particularly helpful, so he would not go into that. He moved on to page 18, Financial Metrics Used, and reiterated that he would be using NPV to evaluate the economic merits of the project.

[static or wind noise]

He went on to say that he used the Port Authority's model for his analysis. Mr. Shipkoff and Mr. Walker briefed him on the plan after the August presentation and offered the model to Econ One for analysis. He determined that it was a sound model for what he was doing, and was then able to argue on the basis of assumptions rather than the model. His first step was to benchmark their model by the highway project, so he had to change some key assumptions, including discount rates, inflation rate, profile of capital expenditures, upstream capital, severance and royalty rates, effective SIT rate, and liquids value in Asia.

[11:47:52 AM](#)

DR. FINIZZA pointed out that slide 22 is slightly different from the copy on page 22 in the packet provided to the committee. By using the common assumptions on gas and oil price, the basis differentials between AECO [Natural Gas Exchange] and Henry Hub, changing all the discount rates and inflation to what is listed on page 19, using 2005 fiscal terms, and using the capital cost assumptions in the AGPA work in Econ One's model, he found that the NPV was virtually the same for analysis of the AGPA project and a highway line. The state revenues are very close and royalty values are virtually the same. Based on this match, he felt he could use AGPA's model with Econ One's assumptions.

[11:49:50 AM](#)

SENATOR THERRIAULT corrected information on page 20. In the Econ One column, net revenues are shown as 14,890, but should read 15,259.

[11:50:17 AM](#)

DR. FINIZZA touched on page 22, the key drivers of the economic value that will feed into the assumptions. [Parts of the testimony were indiscernible.] Econ One had to make assumptions about commodity value, the benchmark for North American gas, and basis differentials in the two market places, AECO and Southern California. It also had to make a call on oil, because there is great potential for liquid petroleum gas being extracted from the gas stream, and there is a difference between where the LPG is projected to go under the AGPA project and AECO. The second set of key drivers listed on that page includes capital costs, natural gas resource rate, and the timing of projects.

REPRESENTATIVE KELLY commented that Dr. Finizza had said unconventional natural gas pricing will be the benchmark for the key driver, not LNG, and asked if Dr. Finizza could relate that to the hurry Alaska is in.

DR. FINIZZA responded that he would talk about that later.

[Additional discussion between Representative Kelly and Dr. Finizza was broken up and partly obscured by background noise.]

[11:55:19 AM](#)

DR. FINIZZA went on to page 23, which is a picture taken from the annual energy outlook of the Department of Energy, Energy Information Administration. It illustrates the importance of Alaskan gas and LNG in the demand mix that is needed for the next 20-30 years in the United States. Alaska is projected to be about 6.5 percent of the total gas; LNG is expected to be even larger.

[11:56:04 AM](#)

He turned to page 24, a bar chart representing assumptions about gas prices, and explained that P20 indicates there is only a 20 percent chance prices would average below that figure over the time period in question; P80 indicates that there is an 80 percent chance that prices would average below that figure over the same time period.

He noted that it is important to recognize that people who are developing projects will always try to test a stress price at which they don't expect to get very high returns, but do expect

some economic return. They don't want a negative NPV at that lower price.

[11:58:36 AM](#)

DR. FINIZZA said that, once he had information about the market-setting price Henry Hub, he also had to make assumptions about the price differential in other markets. Page 25 illustrates basis differentials on gas around the country, Henry Hub, Alberta, Chicago, and Southern California. The assumption Econ one used in its highway analysis is that the AECO differential is \$.90 below Chicago and Henry Hub. So whatever the Henry Hub price is, the price that the market would give Alaska gas going to Alberta is \$.90 lower. The differential in the Southern California market would be \$.50 lower than Henry Hub. Page 26 shows that price average at \$.58, but it is quite volatile.

He turned to page 27, which shows the ratio of West Texas Intermediate (WTI) to HH spot prices over time, and noted that there is a lot of volatility. The average over the 5-year period 2001-2005 was roughly 7:1. The AGPA analysis used 6.55, which is close enough, so he used that assumption in this work.

[12:01:27 PM](#)

DR. FINIZZA said that both gas streams will have the advantage of an uplift from extracting liquids plus propane and butane, and could expect some extraction of ethane, but only included the potential for extracting propane and butane in this analysis. Different assumptions will be used for propane extracted in Canada vs. Japan. On page 28, the top line illustrates that the average differential propane price is relative to a basing point, Mont Belvieu or Japan. It averages roughly \$.05 per gallon. The lower line is the comparable ratio difference between propane prices in Alberta, and is $-.05$, so the difference between one and the other is roughly \$.10. That means that, if you could bring propane to Japan, you would obviously get a greater value there.

CHAIR SEEKINS asked where Mont Belvieu is.

[12:03:26 PM](#)

DR. FINIZZA answered Texas. He said he also had to do the comparison for Butane, which has a higher economic value than propane. The picture on page 29 shows the ratio of butane to propane. Alberta averages about \$.10 and Japan about \$.083.

[12:04:14 PM](#)

He said that page 30 shows some stylized supply and demand curves, with the first reflecting conditions today. There is a small amount of LNG coming in, which can be brought in cheaper than most gas, then there is a large amount of conventional gas that is still below the market price, and then much higher cost unconventional gas, which is what he believes is setting the price of natural gas in today's market.

[12:05:24 PM](#)

DR. FINIZZA fast-forwarded to Page 31, showing conditions in the year 2020. He would expect more natural gas to be coming into the gulf coast mainly, and expects a greater demand. The demand shift is possibly a little less than the incremental LNG that was brought in over this time period, so higher costs and unconventional gas are still setting the market. He created this schematic to illustrate how much LNG would have to be brought in to get this intersection of supply and demand out of the higher cost and unconventional gas area. Given these demand conditions, he does not believe there would be enough LNG to push it that way.

[12:06:41 PM](#)

He proceeded to page 32 and commented that it is possible that the price of natural gas will be lower with all of the natural gas coming in, but it will be a small change.

[12:07:20 PM](#)

CHAIR SEEKINS said the committee would recess and reconvene at 1:20 pm.

Recess [12:07:43 PM](#) to [1:37:04 PM](#)

DR. FINIZZA said that page 33 summarizes the key pricing assumptions and, with the exception of uplift value expected for propane in Japan, AGPA's assumptions and Econ One's are very much in accord. He commented that another important assumption to include here is the capital costs, as shown on page 34. In the pipeline segment from Alaska to the Yukon, the assumption is for higher capital costs than in the original producers' study, which seems appropriate given the price increase that was expected from the escalation of component prices of the pipeline since the producers' study was done. This came from work that Bechtel did for AGPA. The pipeline from Yukon to Alberta is also higher than the producers' study and is derived by taking the ratio 5100:5900 used in the producers' study, and applying the same thing to the various pipeline segments from Alaska to Alberta. In other words, there was no independent calculation of

the Yukon to Alberta pipeline; it was just scaled up in proportion to the higher costs expected from the Alaska portion. The point here is that, these assumptions are using higher, and perhaps more realistic, capital cost numbers.

1:40:00 PM

DR. FINIZZA turned to the upstream development numbers on page 35, which he used throughout this work. He assumed that no capital development would be required on the North Slope, \$1.2 billion in capital development for Point Thomson, \$870 million for other ANS, and \$400 million over a 12-year span for the 'yet-to-find'.

He reviewed the national supply figures on pages 36-39, which show that, according to the U.S. Geological Survey (USGS), Alaska contains 40 percent of the undiscovered U.S. reserves. If only the unconventional reserves are considered, and USGS only looks at unconventional reserves for Alaska, it is 25 percent of the U.S. reserves. Known North Slope reserves are 35 Tcf and, according to USGS, roughly 120 Tcf is technically recoverable for a total of 155 Tcf. According to the Alaska Division of Oil and Gas 2006 report, the 35 Tcf in known reserves breaks down as 24.5 in Prudhoe (23.5 Prudhoe and 1.5 Greater Point McIntire), 8.0 in Point Thomson, and 2.9 in other ANS.

DR. FINIZZA discussed the USGS Assessment of Technically recoverable gas resources in Alaska on page 40. The mean value breaks out to about 60 Tcf in the National Petroleum Reserve in Alaska (NPRA) and 34 on the central North Slope. Page 41 presents economic reserves on the central North Slope, where it specifies distribution at a given market price that is backed up by taking away transportation costs, the fiscal regime, and the cost of development, to see what is economic. At \$5.00 per million BTU in today's dollars, it shows approximately 20 Tcf just from the central North Slope that would be economic.

1:45:01 PM

DR. FINIZZA presented various cases that differ by the configuration, or the type of throughput volume and the starting year of that segment. For example, the first Y-line indicated on page 43 is a case that has a total of 4.3 Bcf, 1.2 Bcf LNG and 3.1 Bcf highway volumes. The LNG component is shown starting in 2013, the highway segment in 2016. All of the cases except the LNG only, end up bringing 49 Tcf to market. In the case of the LNG only, it assumes that the pipeline from Prudhoe Bay to Delta Junction is sized for expansion.

He proceeded to page 44 on the economics of the LNG project as a stand-alone at 1.2 Bcf/d, or 13.5 Tcf over the life of the project, with start-up in 2013. This case assumes that AGPA sized the pipe for a future Y-line expansion that did not materialize. At a fixed dollar base price of \$6.00, there is a positive NPV of about \$6 billion NPV10, for producer upstream net cash flow. The state would get just under \$5 billion using NPV8. These numbers are larger than those shown by Radoslav Shipkoff, because he was using an NPV12. Testing this at the downside stress test case of \$4.00, there would still be a positive NPV according to these assumptions.

[1:48:29 PM](#)

DR. FINIZZA said that one way of looking at it is, when the NPV goes to zero for the producer at about \$2.92, there is no economic value to the project. The key feature of the project is the timing of the LNG piece relative to the part of the project that goes down the highway after 2016. Page 45 lays out some of the LNG and highway projects' implied netbacks with and without the diversion option. It indicates that the LNG segment will provide a lower netback because of the higher costs related to LNG; but the project counts on the fact that there would be some value in LNG from 2013-2015, which more than balances the averaged-in netback for the rest of the life of the project when the LNG is holding it back. So, the question becomes whether the LNG project can get on line in 2013, at least three years before a highway project. If that is true, it does have economic value.

[1:51:14 PM](#)

He moved on to page 46, showing an economic comparison of an early LNG start-up on three scenarios. The first case shows the highway line only, starting in 2016 and resulting in an NPV of \$16.5 million. The second shows the Y-line starting in 2013 with the highway coming on in 2016, and results in an NPV of \$17.3 million. The third case shows the Y-line starting in 2016, at the same time as the highway line, in which case the producer cash flow and NPV are below either the highway project alone or the highway and the Y-line starting in 2013. Without that time advantage, the economic value is lost.

[1:53:10 PM](#)

DR. FINIZZA took a moment to explain the diversion option. LNG prices in Japan are highly correlated with oil prices, largely due to contractual linkages. The Port Authority identified a potential option to capture value from the volatility in gas prices and decided it would be worthwhile to divert cargoes to Japan when gas prices are high. That option adds about \$.50 per

million BTU to the value of the stream. The analysis looks sound; but it might be imprudent to consider it in the base case.

[1:56:40 PM](#)

He illustrated the economic impact of the diversion option by pointing out that if the diversion option were included in the figures on page 46, the second Y-line option, with a start-up of 2016, would produce a better NPV than the highway line alone.

Moving on to page 49, Dr. Finizza showed the economic impact of more rapid production on the highway line. This analysis shows two Y-line options, one assuming that the highway volume starts at 3.1 Bcf/d and is added to the Y-line's 1.2 Bcf/d; the other assuming that the highway volume starts up at 4.3 Bcf/d and is added to the Y-line's 1.2 Bcf/d. Both options assume that the project is over as soon as total gas reaches 49 Tcf. In both cases, the NPV is higher than the highway line alone.

[1:59:08 PM](#)

REPRESENTATIVE SAMUELS asked if Dr. Finizza ran an analysis assuming 5.5 Bcf/d from the highway line.

DR. FINIZZA replied no, because he could not figure out how he could add to the capital. He knows the highway line has expansion capabilities and that it could be done, but he has not figured it out.

[2:00:04 PM](#)

REPRESENTATIVE KELLY asked if, since it doesn't involve looping up to 6 Bcf, it would have favorable economics with compression.

DR. FINIZZA replied that it might show favorable economics, but he would be concerned about what it would do to the field and what the resources look like.

REPRESENTATIVE SAMUELS asked about the first Y-line case on page 49, that shows 1.2 LNG and 3.1 from the highway. He said he believes TransCanada testified that their economics fell apart below 3.5 Bcf/d on the highway; so, if the field cannot support more than 4.3 and 1.2 goes into LNG in 2013, it could result in a quarter of the gas and a higher tariff, preventing the 3.1 highway line from going forward until more gas is available.

DR. FINIZZA responded that he is not sure he understands Representative Samuels' question.

REPRESENTATIVE SAMUELS replied that, if 3.1 is not an economic number and the field will not support 5.5, the 1.2 LNG project is all you'll get until more gas is discovered.

DR. FINIZZA answered that Representative Samuels had identified a risk that he hasn't actually looked at, but that might be worth pursuing.

He directed the committee to page 50 to see how production would have to look to fill the pipeline. This analysis assumes the production at Prudhoe and Point Thomson is as expected, providing 5.5 Bcf/d, and that the additional resource would be found by the time the highway line is ready to go.

CHAIR SEEKINS asked if that would make the possibility brought up by Representative Samuels even more onerous.

DR. FINIZZA agreed that there is increased reserve risk with expanded production.

[2:05:47 PM](#)

SENATOR THERRIAULT asked for an explanation of the graph on page 50.

DR. FINIZZA said that this assumes that 5.5 Bcf/d is required and shows how production would have to be split to support that. It shows a little over three from Prudhoe Bay, a little over one from Point Thomson, a little less than one from other ANS reserves as yet unknown, and about a half from yet-to-find. This illustrates that the project would have to tap the yet-to-find sources fairly early.

SENATOR THERRIAULT [indiscern.]

DR. FINIZZA replied that by the time the project life is into the late 30's, all production would be yet-to-find. In this scenario, he questions whether the increased reserve risk is manageable, and what the impact of the faster ramp-up would be on reservoir economics.

Moving on to page 52, he mentioned that the assumption in the 2000 fiscal findings was that property tax would be based on capital and, because LNG is more capital-intensive, it would raise more property tax. He said AGPA had features in their model that allowed one to look at a throughput based property tax, but that would result in less property tax.

DR. FINIZZA said that he did a case for increased capital escalation, but he isn't sure how legitimate it actually is. It reflects a \$2 billion hit on the NPV to the producer upstream net cash flow.

[2:08:54 PM](#)

REPRESENTATIVE KELLY asked how linear the increase would be in the comparison between the NPV and the percentage on the increase.

DR. FINIZZA replied that, between the two cases shown on page 53 it is probably pretty linear, but as the midstream capital goes up, they start to diverge rapidly. Page 54 is a slide he showed in June, which is included to illustrate the estimated netback values at the pipeline inlet.

[2:11:20 PM](#)

In conclusion, Dr. Finizza said that:

- The highway line of 4.3 Bcf/d has a higher netback than an LNG project delivering gas to the West Coast.
- The AGPA project does add value if it can bring gas to market 3 years before the highway line as it proposes to do; but the advantage disappears if the LNG component is delayed.
- The project has a diversion option that adds materially to the LNG netback and is soundly motivated, although it is imprudent to include it in the base case.
- There is a large gas potential on the North Slope. The initial expansion will be relatively cheap, but later expansion would be more costly. An LNG spur or expansion of the proposed LNG component might be less costly at a later date.
- An LNG Y-line is economic if gas can be brought to market significantly before the highway line, and if the cost of expanding the highway line at a later date is higher than LNG.
- If the LNG component can be built early as proposed, it is in the best interest of the producers to do so, and the current contract is not consistent with this.

[2:12:17 PM](#)

DR. FINIZZA mused that those who propose that this plan will not provide the stated advantage because there will be litigation, are thinking it isn't in the producers' best interests. He wondered what they know that AGPA doesn't.

[2:13:13 PM](#)

SENATOR THERRIAULT alluded to the TransCanada analysis.
[indiscern.]

DR. FINIZZA asked if they had proposed taking all of existing Tcf and no additional yet-to-find, for a total of about 3.5.

SENATOR SAMUELS commented that he believes, in the presentation Mr. Shepler made after the Port Authority spoke in Juneau, he said that the economics get shaky at around 3.5 and at 3 it just doesn't work.

[2:14:46 PM](#) Recess [2:16:10 PM](#)

MAYOR WHITTAKER said that AGPA met with TransCanada and they made it very clear that, until Alaska decides what it wants to do, they are not prepared to say exactly what they will do. They did say however, that when the proposed pipeline hits Canada, it is theirs and they own the rights to it. They also said that 3 to 3.5 Bcf/d at the Canadian border is a deal maker for them.

MR. SHIPKOFF said that he thought Dr. Finizza's presentation was very helpful. He asked the committee to turn to page 19 of Dr. Finizza's presentation, which highlighted some of the differences between AGPA's and Econ One's projections. With respect to the producer upstream discount rate, he pointed out that they disagree about what is the appropriate discount rate, but using a higher rate results in lower present values, so AGPA is being more conservative in its analysis than Econ One. On upstream capital expenditures, AGPA is not engaged in discussions with the upstream players and has to rely on what is available in the public domain, while Econ One has access to confidential information; so it may have keyed off incorrect information to arrive at \$3.2 million as opposed to Econ One's \$4.8 million. He said he did not think that changing \$3.2 million to \$4.8 million would affect the relative value of the results. On state income tax rates, AGPA used 9.4 to set tariff rates at the midstream level, but at the upstream level it used 4.7 as a proxy for the effective tax rate after the apportionment factors were taken into account. So, there is very little difference between Econ One's 3.75 percent SIT rate and AGPA's 4.7 percent.

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MR. SHIPKOFF continued to say that he would address the differential on East Asia pricing of the uplift from propane later, in the pricing assumptions.

[2:21:17 PM](#)

He said that on page 26, Dr. Finizza's data goes back five years and shows a historical average of \$.58 discount. AGPA took a similar approach. It looked at the historical data, went back five years and came up with a \$.47 discount. He pointed out that various publications show historical price data, and they do not all agree. In either case, these are historical figures and not projections.

DR. FINIZZA pointed out he was right about \$.58, but he used \$.50.

MR. SHIPKOFF next commented that slides 31 and 32 do a very good job of illustrating that it is irrelevant whether AGPA's project can compete with foreign LNG at tidewater. It is competitive with all of the suppliers into the market place.

He reviewed the differences in assumptions shown on slide 33, commenting that, as Dr. Finizza pointed out, AGPA and Econ One are essentially in alignment on these items with the exception of Japan's uplift. He believes there is a conceptual disconnect if all of the pricing assumptions used in an evaluation except for one, are based on historical data instead of what the expectation of the future is going to be. If the analysis is going to be strictly on the basis of historical data, it should be consistent throughout. If the analysis is going to use expected volumes and projected markets, it would be better to re-evaluate all of the assumptions and engage a firm that specializes in running North American gas pricing models to run all of the cases going forward. He said he has a problem with selectively applying expected data to just one assumption.

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CHAIR SEEKINS asked Mr. Shipkoff if AGPA intends to ship 1.1 LPG to Japan right out of the gate.

MR. SHIPKOFF replied yes. Shipping propane and butane out of Valdez has strong economics.

SENATOR THERRIAULT asked about the price differential relative to shipping LPG to Japan. [indiscern.]

DR. FINIZZA said that Mr. Shipkoff is right that this is somewhat a disconnect from the historical levels of the last five years, and the view that led Econ One to include this, is that much of what propane is used for will be replaced by other commodities such as natural gas itself.

MR. SHIPKOFF said he agrees with the validity of Dr. Finizza's approach; but that it might be worthwhile to perform the same exercise for some of the other elements of the assumptions.

[2:28:27 PM](#)

He skipped to page 43, which shows various configurations of the Y-line, the LNG, and the highway project. From AGPA's perspective, if 4.3 Bcf/d is the volume that makes sense to go through Canada, there is no reason to reduce it. As Mayor Whitaker pointed out, the cases that have been presented using a lower number were formulated in response to discussions in Juneau last February.

SENATOR WAGONER said that, if the pipeline to Canada is calculated at 4.3 Bcf/d and 1.1 LNG goes to Delta and only 3.2 or so to Canada, it seems as if Alaska's tariff will increase. He asked if anyone has calculated Alaska's tariff overall.

MR. SHIPKOFF replied that the 4.3 Bcf/d project going through Canada is a 30-year project with a requirement of 50 Tcf, which is 15 Tcf in excess of known resources on the North Slope. So, existing resources do not drive the 4.3. If the project is limited to the 35 Tcf currently known, that provides about 3.5 Bcf/d to Canada over 35 years. To get to 4.3 would require shortening the project life unless other reserves come in. He believes that the 4.3 Bcf rate is the best rate of flow to achieve economies of scale.

MR. SHIPKOFF stressed that, although he questions the validity of the case, even with 1.2 to the LNG segment and only 3.5 going down the highway to Canada, the present value effect of the three year differential is better than is provided by the highway project alone. The loss in netback is more than offset for both the producers and the state, by the value of generating some revenue earlier.

DR. FINIZZA said he thinks the roundtable should discuss how the 4.3 Bcf/d line was established. It certainly had to be related to what Mr. Shipkoff suggested as well as the resource base. He said he has a feeling it relates to production from the two key fields where no reserves exist.

SENATOR THERRIAULT asked a question about the volume required for the highway route. [indiscern.]

MR. SHIPKOFF responded that Senator Therriault is correct. It appears that the state and the producers would be better off keeping the volume down the highway line at the same flow rate and shortening the life of the project, if there is a limit on the total reserves produced.

[2:35:55 PM](#)

REPRESENTATIVE KELLY asked why the producers sized the highway line at only 4.3 Bcf/d.

CHAIR SEEKINS said they would discuss that during the roundtable.

MR. SHIPKOFF said that, on slide 43, the analysis does not take into account that lower volumes going to the same market will command a higher price, which partially offsets the fact that the gas is being split out from the highway line to the LNG segment. Even without taking that into account, assuming the timing advantage exists, the NPV is better with the Y-line.

He proceeded to slide 45 comparing the netback with and without the diversion option and pointed out that when the diversion option is taken into account, the difference between the highway only segment and the highway with the LNG segment is well within the 20 percent expected margin of error for calculating all of these projects. To suggest that one netback is clearly better than another at this point is disingenuous and is probably missing part of the picture. From his perspective, netback potential showing within the tenths of cents instead of dollars shows that the two projects are a tie.

DR. FINIZZA commented that the inclusion of the diversion option adds \$.50 that is obviously not within the margin of error, since it is one of AGPA's reasons for doing this project.

SENATOR WAGONER asked what was the volume of the Y-line proposed by ANGDA to go to Southcentral.

MAYOR WHITTAKER said he believes the discussion was 200-400 Mmcf per day, but he wasn't sure.

[2:42:15 PM](#)

MR. SHIPKOFF commented on the option value and its inclusion in the analysis (page 47). He said that he agreed with Dr. Finizza that, when a project is being evaluated on a stand-alone basis for investment purposes, it makes sense to look at the economics without a diversion option. He also agreed that, in a downside

scenario, to stress test the economics of the project, one would not want to include this diversion option. However, he did not agree that it should not be included in the base case, which is supposed to be the best estimate, nor does he think it is accurate when comparing two projects to assign a value of zero to the option.

He agreed that Dr. Finizza's question of whether the historical value of this option will hold for the future is a good one. There is no certainty that the relationship between Japanese LNG pricing and oil prices will remain the same; it is calculated on contractual formulas provided for by long-term supply contracts that expire and have to be renegotiated. The value of the option does not necessarily derive from the link between Japanese LNG prices and oil however, but from the lack of correlation between Japanese and U.S. pricing. Even if Japanese LNG pricing changes and is no longer linked to oil pricing, it does not necessarily mean that it will correlate more closely to U.S. prices. As long as Japanese and U.S. prices do not move together, there is the opportunity for arbitrage, which is what the value of the option tries to address. Every LNG project has a diversion option implicit in it. A more reasonable approach is to include the option into base case.

[2:47:21 PM](#)

SENATOR THERRIAULT asked a question about gas exports. [indiscern.]

MR. WALKER responded that AGPA has a 25-year export license.

CHAIR SEEKINS said he would be interested to know how many diversion options have federal guarantees for the loans attached to them.

MR. SHIPKOFF responded that his understanding is that the highway project intends to use the loan guarantees fully, and that a large part of the gas is not going to end up in Alaska, but in Canada.

CHAIR SEEKINS said that he has been told just the opposite and would like some information to confirm it one way or the other. His understanding is that most of the BTU value that goes in at the northern border with Alaska will be coming out the southern border from Canada. If that is not true, he hopes it will be clarified in the round table. Alberta said it doesn't want our gas for the tar sands [low quality source of hydrocarbons] because they are using their own plus MacKenzie gas.

SENATOR WAGONER agreed that Alberta said MacKenzie gas would be their primary source.

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MR. WALKER said that they will certainly provide what they have available. The highest number he has seen in the tar sands project for gas is 3.7 Bcf. The MacKenzie Valley is projected to be 1.2 Bcf. The 3.7 is at 3 MMbd and beyond that, it continues to increase. He said the producers have been building a pipeline out of the tar sands into the Lower 48 refineries and, based on comments they've made themselves, their goal is to get the gas into the tar sands as it feeds off the steam to get the oil out.

CHAIR SEEKINS said that one of the questions brought up to the Canadians at the Energy Council and at Pacific Northwest Economic Region (PNWER), is where the gas is going when it leaves Canada. They anticipate that once it gets to the Canadian hub, it may not be necessary to build any infrastructure south of that to get it to the U.S. market, because they expect a decrease in their exports that would free up space in the existing infrastructure.

SENATOR WAGONER said that, for every barrel of oil produced out of the tar sands, they average \$3.00 in value of gas to produce a barrel of oil.

CHAIR SEEKINS reiterated that the Canadian government is telling him that is not the case.

[2:52:51 PM](#)

SENATOR THERRIAULT questioned the BTU value of the gas. [indiscern.]

CHAIR SEEKINS said that is assuming the gas coming out of Alaska is going to Alberta. Canada would like to have the gas liquids, but Senator Wagoner made it clear that Alaska is going to try to take those out before they get across the Canadian border.

SENATOR THERRIAULT commented on the transportation cost of gas through Canada and the diversion of molecules of gas from Canada back to the United States. [indiscern.]

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CHAIR SEEKINS responded that he would not object to that, as it means a larger netback for the people of Alaska, but as he understands from Alaska's federal delegation, they are planning

on the gas getting to the U.S. and that is one of the reasons they are offering the loan guarantees.

DR. FINIZZA said that he wonders, in the absence of the Alaskan gasline, if the volume of gas crossing the Canadian border is going to be equal to the Alaskan production or not.

CHAIR SEEKINS answered that he thinks they are counting on at least that number of BTU's, if not the actual molecules, getting across the border.

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MR. SHIPKOFF commented that both the Chair and Senator Therriault made a good point, which is the difficulty in assessing where the gas is going, because there is a difference between physical gas and contractual gas; and once the molecules enter the Alberta hub, is the state tracking physical molecules, or BTU displacement.

CHAIR SEEKINS replied that he thinks it would be tracking volumes.

MR. SHIPKOFF continued that, once those issues come into play, one has to look at the economic equation, in which it doesn't matter where the gas goes. The diversion option only arises in one economic set of circumstances, and that is low prices in the U.S., which means no gas shortage, and high prices in Japan.

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SENATOR WAGONER said he doesn't know what is contained in the legislation regarding loan guarantees, but he assumes that getting gas to the lower 48 is part of it.

CHAIR SEEKINS responded that the federal delegation agrees.

MR. SHIPKOFF commented on pages 49-50 regarding depleting gas reserves. In all of AGPA's model cases, it assumes production from each field is limited by what the long-term sustainable rate of production from that field is going to be, as best it can calculate that figure from available data. When AGPA says it is increasing production, it is not suggesting that it is ramping up production from the same field and depleting the reservoir faster and possibly imprudently. Fields that would have been developed at a later date are simply brought forward earlier. There is the same amount of production at the same rate, but separate investments occur at an earlier date. This is illustrated by Dr. Finizza's slide 50, where the YTF has to

occur faster. The question then, is whether it increases reserve risk.

He said that, from his perspective, reserve risk means the risk to the producer-owner of the project that the reserves will be different from the expectation. It is important to note that, to proceed with any of the options under discussion, the 50 Tcf has to be proven to exist. Investors will not put money into a project that relies on a 50 Tcf base to pay for itself, before it is known with a high degree of certainty that 50 Tcf does exist.

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MR. SHIPKOFF said that Dr. Finizza makes an important point on page 51, that there is a potential for liquid loss. AGPA's model does not take that into account, because it does not have access to the appropriate information. Liquids from Point Thomson are not taken into account for the same reason.

Finally, he pointed out that one of the principal advantages of the LNG project is, if you look at the overall cost of transporting the gas from Prudhoe Bay to market, the total cost of the LNG project is less subject to uncertainty than the highway project and has a relatively low risk of overruns.

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SENATOR WAGONER commented that the reason the producers have stated for wanting to build the pipeline is that they have the technical capabilities and experience building a pipeline in Alaska. He pointed out that the last pipeline they built was 800 percent over the estimated cost, and asked Mr. Shipkoff what makes him think AGPA could do any better.

MR. SHIPKOFF replied that he doesn't know, but the pipeline on AGPA's project is a much smaller component of the cost of getting gas to market. There is a lot of uncertainty associated with it and the reason Bechtel's numbers were so much higher than everyone else's is that Bechtel acknowledged that and loaded them with contingencies that had to be stripped out in order to compare "apples to apples".

MR. WALKER added they have looked at other companies, such as TransCanada, that have an impressive record of coming in on or under budget on similar projects.

MAYOR WHITAKER stressed that AGPA does not intend to build a pipeline; it intends to hire the best in the world, with the best track record, to build the pipeline.

SENATOR THERRIault voiced concern about costs during construction and asked whether AGPA has considered any mechanisms to keep costs down.

[3:06:52 PM](#)

MR. SHIPKOFF responded that AGPA recognizes that overruns in the midstream result in adverse impacts on the upstream economics, and it has offered the producers a role in the construction process.

DR. FINIZZA commented that, regarding Point Thompson, Mr. Shipkoff said his model does not take credit for the liquids from that project and Econ One did not include them either.

MR. WALKER thanked the committee for engaging Econ One to prepare this analysis and for allowing AGPA to meet with them. He said that they are pleased with the open process and think it was very helpful.

REPRESENTATIVE KELLY asked the AGPA representatives exactly what they want the legislators to do and in what time frame.

MAYOR WHITAKER thanked Representative Kelly for getting to the point and replied that they believe it would be a mistake to continue with the contract as it is. They think that the legislature should enter into an agreement in the next six months that results in approximately 2 Bcf/d of gas to a Port Authority-type entity, allowing for an LNG project to underpin in-state usage and an eventual highway project. He ended by saying that AGPA believes there is a lot of room for cooperation and collaboration between the legislature, a new administration, the producers, and the Port Authority or another entity that can accomplish the same end.

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ROUNDTABLE DISCUSSION OF THE PORT AUTHORITY PLAN

CHAIR SEEKINS introduced members of roundtable discussion:

David Van Tuyl, Commercial Manager, Alaska Gas Group, BP
Mike Menge, Commissioner, Dept. of Natural Resources
Ken Griffin, Deputy Commissioner, Dept. of Natural Resources

Dr. Tony Finizza, Econ One Resource, Inc.
Roger Marks, Economist, Dept. of Revenue
Steven Porter, Deputy Commissioner, Dept. of Revenue
Bill Walker, General Counsel, Alaska Gasline Port Authority
Radoslav Shipkoff, Financial Advisor to the Port Authority
Jim Whitaker, Chairman, Alaska Gasline Port Authority

Representative Bill Stolz
Representative John Coghill
Representative Ralph Samuels
Representative Mike Kelly

Senator Thomas Wagoner
Senator Ralph Seekins, Chair
Senator Therriault
Senator Kim Elton (via teleconference)
Senator Fred Dyson (via teleconference)

STEVEN B. PORTER, Deputy Commissioner, Department of Revenue, commented on the importance of the Port Authority's participation with the state in the LNG project, and said that the state has entered into a memorandum of agreement with the Port Authority to work together to develop that option to the point that it can move from being technically feasible to being commercially economic and competitive with the Canadian route. He said that one of the things he has been looking at is the risk to the state of participation in a mega project. He quoted from a book titled Mega Projects and Risk: an Anatomy of Ambition that is specifically about local and state government participation in mega projects:

When actual versus predicted performance of megaprojects are compared, the picture is often dismal. We have documented in this book that cost overruns of 50 percent to 100 percent in real terms are common in megaprojects, and above 100 percent are not uncommon. Demand forecasts that are wrong by 20 percent to 70 percent compared with actual development are common. The extent and magnitude of actual environmental impacts of projects are often very different from forecast impacts. Post-auditing is neglected. Substantial regional, national, and sometimes international development effects commonly claimed by the project promoter typically do not materialize, or they are so diffuse the researchers cannot detect them. Actual project viability typically does not correspond to the forecast viability, and the latter often being brazenly over-optimistic. We have identified the main cause of this

megaproject paradox, namely the fact that the more and bigger megaprojects are built despite their poor performance record, as one of the risks is negligence and lack of accountability in the decision-making process. We have shown that project promoters, unsurprisingly, are happy to go ahead with highly risky projects as long as they themselves will not carry the risks involved and will not be held accountable for the lack of performance. We have also shown that with the conventional approach to megaproject development, all too often promoters have been able to dodge risk and accountability. Finally, we have proposed measures in institutional development to curb this problem. The aim is to decrease the risk of government, taxpayers, and private investors, being led or misled, as often turns out to be the case, to repeatedly commit billions of dollars to under-performing projects. Clearly, nobody has an interest in risking an under-performing project in and of themselves; however, contractors and other project promoters who could stand to gain from the mere construction of projects, and who are often powerful movers in the early stage of project development, may have a self-serving interest in underestimating the costs, overestimating demand, and similarly underestimating environmental impact and overestimating development effects.

MR. PORTER said that the key is to always track where the risk lies. Sometimes a person who is a true believer in a project might unintentionally paint a rosier picture than is realistic. He pointed out that in some areas of their proposal, the Port Authority has been quite optimistic and that is OK, but it is important to recognize it and to understand where the risk really lies. Their proposals generally carry no risk to the Port Authority; it is usually transferred to the producers, the bondholders, or the downstream. That means that any incremental value AGPA takes from the project, is taken without contributing the risk-benefit to the project. In an ideal world, it makes sense to transfer as much risk as possible; but that carries a cost, and it is important to ensure that the benefits go with it. When risks are transferred to the bondholders, bonds will be more expensive, and that has to be weighed in the economics. For example, when Bechtel came up with their numbers, they put a premium on them because it is a turnkey deal. That is a fair approach, but it leaves money on the table. In the producers' world that is called "leakage", everyplace that a billion dollars or a hundred million dollars leaks from their pocket

to somebody else's, and they will try to grab that back. So, when you do a "turnkey" deal, you pay for it. Those are real dollars, and you always have to be asking yourself where the risk went and if it cost you money.

3:29:56 PM

MAYOR WHITAKER said that he could not argue with anything Mr. Porter said; the transfer of risks does carry a cost. He found it hard to understand why the state negotiated a contract that clearly transfers significant risk from the producers to the state without gaining any benefit from the assumption of that risk. [Parts of testimony were indiscernible.]

MR. PORTER agreed with Mayor Whitaker that the risk analysis applies to all projects.

MR. SHIPKOFF echoed Mayor Whitaker's comments. He agreed with Mr. Porter's remarks and felt it was important to recognize that both projects are megaprojects and carry a significant amount of risk. It is also correct that any risk-mitigation strategy has implicit in it a cost to pay whoever is taking that risk on. One of the reasons for adjusting the numbers in AGPA's current analysis and stripping out some of the extra cost that came with the Bechtel turnkey numbers, was to put the two projects on an equal footing so the state can determine for itself whether to engage in a turnkey contract or not. He repeated that AGPA would be happy for the producers to manage the construction project or to do it themselves. AGPA wants a project, not necessarily a project built by Bechtel under a turnkey arrangement.

CHAIR SEEKINS asked Mr. Walker if this is the first time that has been stated in testimony.

3:34:18 PM

MR. WALKER replied that it might be the first time in testimony, but not the first time it has been presented. He said that they discussed all of this with BP some years ago.

CHAIR SEEKINS asked if this is a point he wants on the record.

MR. WALKER replied that he is happy to have it on the record. They want a project and would love to engage with the producers.

DAVID VAN TUYL, Commercial Manager, Alaska Gas Group, BP, responded to an earlier comment suggesting that the producers are not serious about pursuing ANS gas development. He said that is not the case, BP is very serious about pursuing development

of North Slope gas and its actions over the past few years speak to that more loudly than words. In a joint study in 2000 with ExxonMobil and ConocoPhillips, BP spent \$125 million on development of ANS gas. Since that time it has worked with the state to develop and improve a contract to accomplish that. He did agree with the Port Authority that it is best to pursue an economically viable project sooner, which is why he is involved in these discussions. [indiscern.]

[3:38:32 PM](#)

ROGER MARKS, Economist, Dept. of Revenue, asked how plausible the scenario that Econ One analyzed actually is and whether it would be able to start up in 2013.

CHAIR SEEKINS pointed out that Econ One did not analyze the plausibility of the project, but a model that was provided to them.

DR. FINIZZA added that both Econ One and FERC believe this project will be under FERC jurisdiction and, although the Alaska Natural Gas Development Act says municipalities are exempt from it, the context is projects that are within municipalities for intra-state shipment of gas. The Port Authority may disagree, but if it were under FERC jurisdiction, then if someone builds a 4 Bcf/d pipeline to Delta Junction and 1 Bcf goes from Delta Junction to Valdez with no commitment for another 3 Bcf of gas, FERC would not allow the cost of the empty space to be recovered in the tariff. So, if the Port Authority builds a non-recourse pipeline, that is, project revenues alone repay the investors, and the FERC does not let them recover the cost of the empty space, investors stand to lose a huge chunk of money if the pipeline doesn't go from Delta Junction to Alberta and on to the Lower 48. This means that there has to be a sanctioned project from Delta Junction to Chicago in order to proceed without risking loss to investors; and that puts the project on basically the same time schedule as the producers are. Consequently, He does not think the scenario he was given to analyze is realistic.

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MR. SHIPKOFF responded that they have heard that argument before, and that their FERC counsel in Washington said it would not be an issue.

Before explaining why that is so, he wanted to step back and talk about the scenario they are proposing. The Port Authority, in agreement with the shippers, decides to accommodate future

expansion because both the Port Authority and the shippers anticipate the need. The Port Authority will not be doing this in a vacuum; it will be the result of discussion. That being the case, any agreement between the producers and the Port Authority will be a negotiated rate, not a recourse rate. By definition, that means that the Port Authority and the shippers have agreed that it is the most economic scenario. He said that he personally finds it inconceivable that, if all parties think that is the most commercially reasonable deal, FERC will not allow it in the tariffs. The regulatory approach is not going to drive the economics of the largest oil and gas project in the United States. There are precedents in which FERC has approved including unused space in its rates. It is not over sizing, it is sizing the pipeline properly for future volumes. AGPA's FERC counsel thought that, not only would FERC allow this, it is highly unlikely that they would approve anything less, because building a smaller diameter pipe initially would essentially hamper future expansion.

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MR. VAN TUYL pointed out that Mr. Shipkoff suggested that, if all parties to the gasline approached FERC agreeing that this is the best commercial deal, FERC would bless it; but that won't happen. As BP has stated before and as Dr. Finizza's Econ One analysis states, the cost of delivery for LNG on a per-unit basis is significantly higher than the gas pipeline project. Of course, one can't know what the market will do, but it is possible to gauge the cost of a project and pursue the lowest cost project. The highway project is that. The LNG project carries a higher per-unit cost and a gas pipeline at reduced volumes, which is a combination of the worst of both worlds, because you lose the economies of scale on the gas pipeline and deliver gas at a higher per-unit cost. The gas pipeline is the best way to get Alaska's gas to market at the lowest possible cost.

CHAIR SEEKINS asked Mr. Whitaker if there have been discussions with the producers about jointly approaching FERC.

MR. WALKER replied no and reminded him of the TAPS arrangement negotiated with FERC, which was negotiated between the state of Alaska and the producers. It was later ruled by the regulatory commission (RCA) that it was not in the best interests of Alaska.

[3:48:34 PM](#)

MIKE MENGE, Commissioner, Dept. of Natural Resources, said that, concerning any assertions related to FERC and loan guaranties, Section 116(b) of the Alaska Natural Gas Pipeline Loan Guarantee Act states that:

(b) CONDITIONS- (1) The Secretary may issue a Federal guarantee instrument for a qualified infrastructure project only after a certificate of public convenience and necessity under section 103(b) of this division or an amended certificate under section 9 of the Alaska Natural Gas Transportation Act of 1976 (15 U.S.C. 719g) has been issued for the project.

(2) The Secretary may issue a Federal guarantee instrument under this section for a qualified infrastructure project only if the loan or other debt obligation guaranteed by the instrument has been issued by an eligible lender.

(3) The Secretary shall not require as a condition of issuing a Federal guarantee instrument under this section any contractual commitment or other form of credit support of the sponsors (other than equity contribution commitments and completion guarantees), or any throughput or other guarantee from prospective shippers greater than such guarantees as shall be required by the project owners.

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MAYOR WHITAKER said that they are very familiar with the statute and there is nothing in the language that they find prohibitive. He said he expects a letter from the secretary [of Energy] indicating that there will not be a problem given that the project moves forward. He also said that the specific reference to an LNG project in the statute is very telling.

CHAIR SEEKINS asked Mayor Whitaker if a copy of that letter could be made available to the committee.

MAYOR WHITAKER said yes.

MR. WALKER said that, when he met with the general counsel for the Department of Energy for clarification of the section that Commissioner Menge read, the direction to him was that if AGPA is FERC exempt, bring the project directly to the Department of Energy to apply for the loan guarantee. Counsel was very clear on that, and he expects to receive a letter to that effect within 30 days. He said he would provide a copy of that letter to the committee as soon as it is received.

MR. PORTER said he wanted to go back to Mr. Van Tuyl's mention of the per-unit cost of development. That is what the producers will look at; the state has to create an LNG project that is competitive on the per-unit cost of development standard. The problem with this project is that its success is predicated on getting to market earlier. It is never wise to take an uneconomic project and try to make it economic by speeding it up. The project has to be commercially viable and "heads-up" competitive with the Canadian line.

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MR. MENGE pointed out that the Port Authority did Herculean work in the closing hours of Congress to get the project included in the loan guarantee; but he cautioned that the language in the statute clearly indicates that the certificate will have to be issued before the Department of Energy can issue the loan. That means the Department of Energy will either have to ignore the statute or to seek clarifying language from Congress, both of which are risky.

MR. WALKER said he disagreed. His comment to Mr. Van Tuyl is that the overarching problem the Port Authority has had in the state is that there is nothing in the lease that says the risk has to be down to a certain level before a project can proceed.

[3:56:24 PM](#)

He continued that the Port Authority was not created to be a hindrance, but to create additional value and benefit, and it has continually tried to do that despite a rather hostile response from the administration. It is not trying to force the state into something uneconomic; it genuinely wants to see a project in Alaska that is good for the producers and good for the state.

[3:57:32 PM](#)

MR. MARKS said that what concerns the Department of Revenue about the LNG project is the limited West Coast market for LNG gas. The West Coast now has about a 9 Bcf/d market and growth is projected to be slow between now and 2020. Because it is an isolated market, gas sells for \$.50 less on West Coast than it does in Chicago; the action is in the upper Midwest. Through the evolution of the Port Authority project, it first focused on Asia, but that market didn't work. Then it looked at putting 4 Bcf on West Coast. Now it is down to 1 Bcf to the West Coast, and he conjectured that they have realized that market is pretty small. The target of the analysis is the Sempra Plant in Baja

California, which seems to be the only West Coast site with a chance of being built; but it is over subscribed. Sempra is the parent corporation for Southern California Utilities, and it doesn't care how much gas comes in or what happens to the price, because it makes money by moving gas through its pipes. The Kitimat plant has permits, but does not have financing. It doesn't have financing because it doesn't have gas, and it doesn't have gas because it is commercially challenged. The forecasts show that there will be only about 1.8 Bcf/d of LNG needed on the West Coast by 2020, including the 1.2 Bcf/d starting up in 2008.

[4:01:10 PM](#)

He said that the other big source of gas for the West Coast is the Rocky Mountains. This is the non-conventional gas that Dr. Finizza talked about, not only conventional gas but also coal bed methane and shale gas. Resource estimates for the Rockies are upwards of 300 Tcf. It is a classic example of supply response to higher price; with higher prices, more gas becomes economic. There are three pipelines that come into the Rockies from the West Coast and could be expanded, but they are building an 1800 MMcf pipeline from the Rockies to eastern Ohio because the West Coast doesn't need the gas. So, the department believes that there is no West Coast market for LNG, and that is another reason the administration believes the highway route makes more sense.

[4:03:10 PM](#)

SENATOR THERRIAULT asked Mr. Porter whether his comment about the danger of trying to accelerate the project was in response to a perceived notion that the producers are not moving fast enough, or was a criticism of the Port Authority's assertion that they can get it done sooner.

MR. PORTER replied that the issue applies to any project. The producers' timeline to project sanction is about four years. Somehow, the Port Authority got that down to a couple of years. The producers have learned over time not to overlap certain tasks, because doing so increases the risk of mistakes and cost overruns; so when reviewing the AGPA project, you have to ask what parts of project are being worked concurrently and what that does to the risk.

[4:05:25 PM](#)

MAYOR WHITAKER responded to Mr. Porter's comments about the small West Coast market and competing sources of power. He also addressed Mr. Marks' assertion that risks are somehow limited on

the Canadian line, pointing out that the state is being asked to sign a deal with no knowledge of what the Canadian side wants out of it. He said that what he has is a project that can move forward. It may hit a roadblock that it cannot get past, but he knows it has viable permits, available funding, and a stable market. [Parts of response were indiscernible.]

4:09:01 PM

He said he also knows that it is normal to pay to reduce risk, yet the state is paying concessions to assume more risk, and he does not understand that.

4:09:48 PM

MR. SHIPKOFF disagreed with Mr. Marks' comments on the West Coast market. With regard to the administration's view that there is not room in the West Coast market for more than 1.8 Bcf of LNG, he pointed out that Sempra is expanding the terminal to 2.5 Bcf and has received expressions of interest to 2.9 Bcf so far. The West Coast market is smaller than the Mid-West and East Coast markets combined, but it is not uneconomic. The Rockies Express project is not sending gas to the West Coast because there is a bottleneck in their ability to send the gas to all of the markets they might access, and they will get a higher value in the Mid-West. Once they start sending 2.9 Bcf to the Mid-West however, it will decrease the price of LNG in the Mid-West and increase it on the West Coast.

MR. WALKER said that it is not true that Sempra does not care what the gas sells for; he was in the meeting when Sempra proposed to put \$5 million into this project outside of the federal loan guarantee. It is interested in investing in this project and has not done so only because of the response it received from Governor Murkowski.

MR. MARKS responded to Mr. Shipkoff and Mr. Walker that, just because Sempra got more interest than expected in the recent open season, does not mean the market will absorb that much gas. The Rockies Express underscores that fact that producers are willing to pay higher shipping costs to the East Coast and make less profit, because they do not believe the West Coast market can absorb the volume of gas. He reiterated that Sempra makes money on their pipes, not buying and selling gas.

4:16:08 PM

SENATOR THERRIAULT asked Mr. Marks if the fact that the Rockies Express project has invested in pipe to the Mid-West and East

Coasts indicates that the market has evaluated the potential for the import of LNG and determined that the market will not be flooded and will continue to be economic.

MR. MARKS replied that, as Mr. Shipkoff stated, gas is bottlenecked in the Rockies for lack of pipeline capacity. Prices there are low because more gas is being produced than can be consumed, and some available gas is not being produced because there is no market. There are three pipelines from the Rockies to the West Coast that could be expanded for less than what it will cost to move the gas to Ohio. The lion's share of imported LNG is targeting the East Coast and the coastline where it comes in. As it moves inland it becomes less economic, so the target market for Alaskan gas is the middle of the U.S. and far from LNG import sites.

[4:18:04 PM](#)

MR. VAN TUYL said that he has never said that there is a magic number necessary or tied to BP's lease obligations. His observation was that the lowest cost way to move gas to market is through a gas pipeline. He also responded to Mr. Walker's implication that the study BP did in 2001-2002 netted two pages of results, by assuring the committee that it resulted in rooms full of binders, data, and samples, everything that is needed to begin the permitting process.

[4:19:58 PM](#)

MAYOR WHITAKER replied that he did not mean to imply that there were only two pages of data collected or available; the definitive statement was that the legislature received two pages of bullet points that failed to address the issue. He offered to provide a copy of those two pages to the committee.

DR. FINIZZA asked how the producers arrived at the 4.3 Bcf/d figure for the line to Canada.

CHAIR SEEKINS asked Mr. Van Tuyl to respond to that question.

MR. VAN TUYL answered that there were three main factors in determining the appropriate off-take rate: what the upstream impact of exporting gas from slope might be, downstream pipeline design for the lowest unit cost and maximum expandability, and field off-take. The result of these considerations was a nominal 4.5 that came to be a 4.3 actual delivered volume. He explained that, if the figure were increased 1 Bcf/d, in order to have an expandable design you would need to use a high-pressure system and bigger pipe. The cost of manufacturing and handling that

kind of pipe is prohibitive, so there would be a step change in the unit cost. The 4.3 Bcf/d design provides a low unit-cost delivery and is expandable at basically the same unit cost using in-fill compression. The producers are still working with Alaska Oil & Gas Conservation Commission (AOGCC) to determine what the appropriate off-takes should be for those fields. Currently Prudhoe Bay Oil Pool rules limit gas off-take to 2.7 Bcf/d and they are still looking at Point Thomson.

[4:24:08 PM](#)

CHAIR SEEKINS asked Mr. Van Tuyl about the to Canada/through Canada issue.

MR. VAN TUYL said that it is the producers' intent to deliver the gas to North American markets, meaning Alaska or the Lower 48, not Canada. Language in the federal statutes expresses the sense of the Congress and defines what the qualified project is. Section 103 of the Alaska Natural Gas Pipeline Act reads:

The commission shall presume that sufficient downstream capacity will exist to transport the Alaska natural gas moving through the project to markets in the contiguous United States.

He said that the definition of a qualified infrastructure project refers to parts of the project "...that are used to transport natural gas from the Alaska North Slope to the continental United States." This language underscores the intent to deliver gas to the Lower 48, not to other markets. In addition, the National Energy Board (NEB) and Canadian producers have raised concerns about leaving the gas in Canada, as that would have deleterious effects on their market.

[4:26:32 PM](#)

CHAIR SEEKINS asked if it is that these molecules of gas leave Canada, or if there would be an exchange.

MR. VAN TUYL said that it could occur either way. There will be an open season in Alberta and the producers are not sure what is going to happen with the physical construction of pipe out of Alberta. There may be sufficient existing capacity at a reasonable cost to allow all of Alaska's gas to flow on existing pipe, or to expand existing pipe to allow that, or it may be necessary to build new pipe, which is the base-case that the producers have assumed. If they have to build a new pipe, it is possible that other shippers will move their gas on the new pipe, so molecules might be intermingled and exchanged.

MR. MARKS added that Canada is a significant exporter of gas to the United States, so the arrival of 4.5 Bcf from Alaska does nothing for demand in Canada and would simply mean more gas would move from Canada to the U.S.

[4:29:50 PM](#)

MR. WALKER said, in response to Mr. Van Tuyl's comments about gas into Canada, that a project is only required to bring gas all the way to the U.S. if it has a loan guarantee, and the producers have not applied for one. Also, BP has no interest in the tar sands, but ExxonMobil and ConocoPhillips do; and a representative from ConocoPhillips said it just wants to get its gas to the tar sands and take it out as oil. He said AGPA would get a paper to the committee on it.

[4:30:47 PM](#)

MR. VAN TUYL said that he can speak for BP, and repeated that it is BP's intent to move the gas to consumers in Alaska or in the Lower 48 states. He said that Mr. Walker was correct that he was reading from two parts of the statute, one that describes the loan guarantee, and it is the producers' intent to access that. The other quote is from the Alaska Natural Gas Pipeline Act itself, which is the entire regulatory structure for this project.

[4:31:52 PM](#)

MAYOR WHITAKER said he sensed that some people may believe the Port Authority plan intends to take gas somewhere other than the Lower 48.

CHAIR SEEKINS said he does not believe that is the case. The question stemmed from the comment that a majority of the gas was going to Canada.

[4:33:01 PM](#)

MR. SHIPKOFF said that Mr. Van Tuyl has confirmed his understanding of the origin of the 4.3 figure used in the highway project. He is not suggesting that the highway project plus the Y-line or any incremental project should be limited to only 4.3 Bcf/d total. AGPA's numbers suggest that if 4.3 goes down the highway line and an additional 1.2 to Delta Junction, the NPV is still significantly in favor of doing both projects.

[4:35:59 PM](#)

REPRESENTATIVE KELLY asked if the AOGCC was asked to give an opinion on whether the North Slope will provide the 5.5 Bcf/d.

COMMISSIONER MENGE replied that the AOGCC is in process of gathering that information, but does not have an answer at this time.

[4:36:59 PM](#)

SENATOR THERRIAULT said he believes that the AOGCC expects to have an answer to that question for Prudhoe Bay by the end of this year. It has gotten great cooperation from the companies, so it has not had to replicate the reservoir modeling for itself. It is possible that, if one develops Point Thomson as a gas field, it will trap a lot of liquids in the ground; so, the AOGCC may not allow a retrograde field to be developed as a gas field.

[4:38:21 PM](#)

DR. FINIZZA said that, if one can send 4.3 Bcf/d to Canada and an additional 1 Bcf to the West Coast at a profit, the present worth (PW) goes up; but that isn't the right question. If that incremental 1.5 Bcf were put through the same Canada line, it would bring more money, so the question isn't whether one can make money sending LNG to the West Coast, it is whether it is competitive with the other option.

MR. SHIPKOFF responded that may be true, but the producers are not proposing to bring 5.5 to Chicago, they are proposing to bring 4.3 to Chicago. There is a limit on how much the market can absorb, how it would affect price, and downstream take-away capacity. Also, AGPA is not suggesting that the field be ramped up beyond what is prudent in the long-term.

DR. FINIZZA interjected that he assumes it is more economic to take the gas down through Canada. Looping economies might change and actually become more competitive, but the state will have to monitor that.

MAYOR WHITAKER said he thinks that consideration of NPV as a determinant is being missed.

MR. PORTER responded that he believes he has covered that.

[4:40:49 PM](#)

CHAIR SEEKINS said that, as Dr. Finizza pointed out, starting a project three years sooner has value; but he questions whether the assumptions are correct. For example, whether the project will be exempt from FERC regulation, whether it will get the federal loan guarantees, and whether AGPA will buy gas or get

the producers to ship it, and under what arrangement. He said he understands the need for flexibility in planning, but the key on the economic side seems to be the NPV arrangement.

4:42:30 PM

MR. SHIPKOFF responded that the value the project brings to the table is that implementation can commence as soon as they have an agreement for gas supply, and that the starting time differential may be longer than three years. There is even the unlikely possibility that the LNG project is the only one that will ever be implemented.

4:43:24 PM

CHAIR SEEKINS agreed that the committee has heard repeatedly that delay hurts everyone in terms of NPV. Econ One did an analysis of what a year delay would cost the highway project.

4:43:44 PM

DR. FINIZZA replied yes, that delay represents a present value loss.

REPRESENTATIVE SAMUELS said that the loss was projected to be one percent for a 1-year delay. For example, if the state had a 7.25 deal to break even on an NPV basis, with a 1-year delay it would have to go to 8.25. With a 3-year delay, it would have to go to 11.25. So, it would have to raise the tax rate by 50 percent with a 3-year delay to go to NPV basis and break even.

He noted that the information the committee did not get from Dr. Finizza is, if we have 5.5 available from the field in 2016 and it goes down one line, how does that compare on an NPV basis, to sending 1.2 south and 4.3 to Canada.

DR. FINIZZA interjected that is assuming 5.5 is feasible with field production.

REPRESENTATIVE SAMUELS agreed that, if it is not feasible, then a 1.2 line is all that would ever be built, because shipping only 3 across the continent is not economic.

4:45:42 PM

KEN GRIFFIN, Deputy Commissioner, Department of Natural Resources, directed the committee's attention to page 49 of Dr. Finizza's presentation and the first case, showing highway-only figures with producer net cash NPV of \$21.6 million. The next case is a Y-line starting in 2013 and a highway line starting in 2016, splitting the 4.3 Bcf. There is a two percent increase in

producer net cash NPV to \$21.9 million; but to get that required two pipelines installed at comparable cost, and the addition of the full infrastructure for the LNG project. So, for what is essentially the same NPV, both capital investment and completion risk have increased substantially. He said that this illustrates that IRR or PI is important as a measurement of the efficiency of the investment. He said that Dr. Finizza showed the total value of the two projects as essentially equal given the assumptions here, but he did not show the efficiency of the capital that was invested. If that figure were calculated, it would show that the highway project has much higher investment efficiency for the same return.

[4:48:01 PM](#)

DR. FINIZZA responded that he did talk about the efficiency but that he didn't calculate it.

[4:48:17 PM](#)

CHAIR SEEKINS Announced that they will recess at 5pm and come back at 9am.

[4:49:01 PM](#)

MR. PORTER agreed with Mayor Whitaker that the unknowns in Canada do pose a substantial risk. Aboriginal agreements and other issues could delay project sanction beyond the four years projected, throwing the whole timeline off. The problem with moving forward now is that, if Alaska builds a line to Delta before things are settled in Canada, it will get beat up in negotiations due to the unused pipe it is carrying.

[4:50:18 PM](#)

MR. SHIPKOFF responded that Mr. Porter's assertion that the line to Delta would weaken our negotiating position with Canada is only true if the line to Delta is not economic in its own right. He also pointed out that the differentials in NPV on page 49 are all calculated based on the assumption that incremental reserves are exactly 15 Bcf, which is a conservative estimate. He also reminded the committee that the LNG project could be implemented immediately, while there is no assurance if or when the highway project could take place.

[4:52:14 PM](#)

MR. GRIFFIN stated that it is not accurate to say the LNG project reduces risk to the state. The largest part of the construction risk for any of these projects will be the Alaska portion due to terrain, weather, and logistics. We do have TAPS right-of-way, but a lot is working against construction here

with regard to cost and timing; so, while Alaska is able to cut off the cost risk of getting a pipe across Canada, the major portion of that range of risks will exist in Canada [Alaska]. We will have a 1 Bcf/d project to balance that against vs. the potential for a 4.5 Bcf/d project going through Canada. We are not going to be able to sit down and frame the estimates of that total project the way it was perceived in conversation.

[4:54:14 PM](#)

MR. MARKS said he'd like to explore the plausibility of starting up with a 1 Bcf pipeline in 2013. If the state builds a 4 Bcf pipe to Delta Junction before deciding to do the highway project and can recover only 1 Bcf/d, it will not be able to get financing. If it is non-recourse financing and there is no money to repay the investors, it won't be approved. If it goes into the project planning to build the highway project, it is on the same timeline as the producers' project with a startup in 2016. Consequently, the 2013 startup is implausible and the NPV benefit does not exist.

[4:55:43 PM](#)

MR. SHIPKOFF said that AGPA does not know with certainty that it will be able to deliver gas in 2013, but the highway project does not know with certainty that it can deliver gas in 2016 either. He believes the LNG project has an advantage because it has a headstart on the permitting and can start three or more years earlier than the highway project.

[4:56:28 PM](#)

MAYOR WHITAKER said he was dumbfounded by Mr. Marks' assertion that the risk comparison is valid! He said that he totally disagrees with his statements.

[4:57:23 PM](#)

MR. MARKS asked if the committee wants to start talking about why the administration wrote the gas contract as it did, and how it calculated the risks.

CHAIR SEEKINS answered no, not at this time.

SENATOR WAGONER said he hadn't heard a response from Mayor Whitaker to Mr. Marks' comments about AGPA's inability to obtain financing for a line sized to accommodate expansion.

[4:58:52 PM](#)

MR. SHIPKOFF said he thinks he answered that in Juneau three weeks ago, and that Mr. Marks' assertion is absurd.

[4:59:26 PM](#)

MR. MARKS said that he does not believe the FERC will allow the project to recover the cost of empty space, in which case he does not believe that a lender would finance it with no assurance it can get the money back.

[5:00:16 PM](#)

MR. SHIPKOFF responded that he answered this question about an hour ago, that their FERC counsel in Washington DC said he thinks the FERC will not only allow, but insist on sizing the pipeline for future expansion. The larger issue is that the project will not proceed in isolation, it will be done in agreement with the shippers, and FERC is not going to overrule a commercial deal because its recourse rate regulations do not allow that.

[5:01:09 PM](#)

MR. PORTER said that he understands the statement that, if it is going to work, there has to be a commercial agreement with the shippers. That means the producers have to agree to pay the premium and get a smaller netback, and buy into the idea that the present worth is based on getting gas to market three years earlier. He said he doesn't think the producers believe that is a rational choice, so there won't be a commercial deal. It also means that this creates multiple projects, which means multiple mobilizations and de-mobilizations on a large scale. All of that is what is referred to as "leakage". He said he keeps coming back to the fact that the only way the Port Authority is going to get the producers on board with a commercial deal, is if it comes in with a low enough per-unit price.

[5:02:37 PM](#)

REPRESENTATIVE SEATON asked whether the question of maximum value to state would be addressed.

CHAIR SEEKINS said the committee would be working on that tomorrow.

Adjourn [5:03:26 PM](#)