

**ALASKA STATE LEGISLATURE
SENATE RESOURCES STANDING COMMITTEE**

Anchorage, Alaska
September 10, 2003
1:00 p.m.

MEMBERS PRESENT

Senator Scott Ogan, Chair
Senator Thomas Wagoner, Vice Chair
Senator Ben Stevens
Senator Fred Dyson
Senator Georgiana Lincoln
Senator Kim Elton

MEMBERS ABSENT

None

OTHER LEGISLATORS PRESENT

Representative Beth Kerttula
Representative Beverly Masek
Representative Hugh Fate
Representative David Guttenberg
Representative Cheryl Heinze
Representative Ethan Berkowitz
Representative Les Gara

COMMITTEE CALENDAR

GAS PIPELINE ISSUES

PRESENTATIONS BY:

Mr. Steve Porter, Deputy Commissioner
Department of Revenue
PO Box 110400
Juneau, AK 99811-0400

Ms. Colleen Mukavitz
Commercial Manager, ANS Group
ConocoPhillips Alaska
ANS Gas Development
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Mr. Mark Hanley, Public Affairs Manager
Anadarko Petroleum Corporation
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The Woodlands TX 77380-1045 USA

Mr. Ken Boyd
Encana Gas Marketing
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Calgary AB T2P 2S5

Mr. Ward Whitmore
Yukon Pacific Corporation
1400 West Benson Blvd., Suite 525
Anchorage, AK 99503

Mr. Harold Heinze
Alaska Natural Gas Development Authority (ANGDA)
411 W 4th Ave.
Anchorage, AK 99501

Mr. Ken Thompson
Pacific Star Energy
3601 C Street, Suite 1400
Anchorage, AK 99503

Mr. Greg Bartholomew
Director of Strategic Planning and Analysis
Sempra Energy
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San Diego, CA 92101-3017

Mr. Mark Myers, Director
Division of Oil and Gas
Department of Natural Resources
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ACTION NARRATIVE

TAPE 03-50, SIDE A

CHAIR SCOTT OGAN called the Senate Resources Standing Committee meeting to order at 1:00 p.m. Senators Stevens, Elton, Wagoner and Dyson were present, as well as Representatives Kerttula, Masek and Fate. Chair Ogan said the committee would hear an update from a number of people in the industry and the

Administration on the implementation of the Stranded Gas Act negotiations. He asked Deputy Commissioner Porter whether a negotiating team has been created, who is on that team, what the team has done, and when committee members can anticipate final results.

MR. STEVE PORTER, Deputy Commissioner of the Department of Revenue, said he would provide members with the state's position on North Slope gas and would first cover the Stranded Gas Development Act and the department's negotiations with the major oil companies. He told members:

As you know, the Stranded Gas Development Act legislation was passed this last year and we do expect an application from the major oil companies. The Stranded Gas Development Act was passed last session. It provides for an applicant to be able to propose a project to the state and the opportunity for the state to negotiate a contract with that applicant. That contract could possibly provide certainty to the applicant, could provide a revenue structure that could be beneficial to both the applicant and the state. We are currently in discussions with a major oil company.

We have been preparing internally for negotiating the contract under the Act, as contemplated by the Legislature, in anticipation of an application from the major oil companies. We have not received an application to date. Right now, the focus of the Administration and the oil companies is on the federal enabling legislation in Washington, D.C.

The U.S. Congress has the energy bill in conference committee and it includes important provisions, which the state and the industry have been active in trying to support. If the energy bill is passed, as we would like to see it, it could pave the way for development of a natural gas pipeline that would take basically 4.5 bcf [billion cubic feet] per day of Alaska's stranded gas to market.

This Administration is committed to passage of that bill and putting Alaska in a position to develop not only existing gas reserves, but also new discoveries as they become available.

We do support the Alaska Highway route project as our current priority and the focus of our efforts in the near term. The reason for that is this project maximizes the value of Alaska's gas because it is a 4.5 bcf project, with potential of expanding to 5.5 bcf, with additional potential beyond that for other alternatives, depending on how much gas is discovered on the North Slope. The LNG project is for approximately less than half that volume at the current time as the Development Authority sees that project. An Alaska Highway route maximizes the timely use of all of the known reserves and provides a pathway for use of all future discoveries.

Currently the producers control the gas. This is their preferred project, and the state is committed to working with the producers. So long as they're actively pursuing the project, the LNG project will not be able to contract the purchase of gas as well so they do not have a source until such time as the oil companies are no longer actively pursuing the project.

Given the current gas reserves, recognizing the reserve requirements to underpin the Alaska Highway route project, another project would be a secondary focus until future reserves are identified. Basically, there aren't enough known reserves to allow both projects to move forward concurrently.

A spur line to tidewater would complement the gas pipeline project in the future as additional gas reserves are identified.

DEPUTY COMMISSIONER PORTER asked members to ask questions as they arise and then said he would now speak to the Alaska Natural Gas Development Authority's funding request.

We do consider the funding request premature at this point in time; prior to defining exactly what project the state and the Legislature deem is appropriate to move forward. If, in fact, the Alaska Highway gas route moves forward, then the Alaska Natural Gas Development Authority would be focused on entirely different things than if it does not move forward. I think that's important to remember.

The Legislature and the public also have not had the opportunity to assess the risks associated with the project and we think that's important. The Administration feels that a thorough exploration and subsequent discussion of the benefits and risks of a state funded project need to occur before a major commitment is made. This conversation must involve the entire Legislature, the executive branch, the public, and the Alaska Natural Gas Development Authority and should also precede a large budget request.

We are currently in the process of developing the Administration's budget and until the appropriate role of the gas authority is defined, we are uncertain what the appropriate request should be, where the funds should be originated, and what specific functions are appropriate for the Alaska Natural Gas Development Authority to pursue.

We do feel - and I think this is important - we do feel there are appropriate things the Development Authority could be doing at this time and a small or more focused funding request may be appropriate, although such a request should be submitted as part of the normal budget process.

So, if we go to what the Authority should be doing now, what are those types of things that we'd like to see the Authority do and what are the things that benefit the state and the Authority as we move both projects forward? First off, the Alaska Natural Gas Development Authority does have the statutory obligation to study and bring natural gas to market as LNG and we believe it's appropriate for them to continue to review that and to complete that project according to the statutory obligation. Those options should include a spur line to Valdez and a possible spur line to Southcentral Alaska that could provide natural gas to those residents as well.

They also serve another important role in terms of just asking a lot of questions that are out there and I think that they should be pursuing those answers as we're trying to determine which project is the most important project to move forward - not to say which project, but the stages at which each project may come into play. They should be addressing the role of the

Alaska Railroad bonding issue and whether or not you can finance a project with exempt bonds and to what level that could take - is 100 percent bonding even possible and it may be but those questions need to be asked. Can the market handle that level of bonding and what does it cost for those bonds? There are a number of other tax - you know the IRS, there's a tax exempt status request that they'd probably need to move forward with at some point in time.

There has been a substantial amount of discussion regarding the Jones Act and tankers. We would encourage them to spend time understanding that issue, developing the options so that the state can make good decisions and the Authority can make good decisions in the future.

And I think another very important thing is to identify the benefits that arise out of in-state gas use. If either project moves forward, or both of them at certain stages, the benefit to the state is extremely important, both from a contracts and local hire standpoint - but use of gas for people in the state, whether Southcentral, the Interior or other parts of the state. And, actually, the Development Authority has a substantial number of ideas, many of them are very creative, very interesting, and we would encourage them to pursue those ideas to provide them to both the Executive Branch and to the Legislature.

We believe that many of the above activities and studies can be done by using existing state and private resources. There is a substantial amount of research that could be done to compile and analyze existing data without requesting additional funds at this time from the Legislature or the Executive Branch and we would encourage them to do so over the next four months in preparation for the legislative session. That is exactly what we would recommend they do.

CHAIR OGAN noted that Representatives Guttenberg, Berkowitz and Heinze had joined the committee. He opened the meeting to questions of Deputy Commissioner Porter from members.

REPRESENTATIVE BERKOWITZ asked if the Administration has entered into any discussions with the Federal Energy Regulatory Commission (FERC).

DEPUTY COMMISSIONER PORTER said the Administration has had no formal discussions with FERC because it is awaiting a contract to see what the project will look like prior to entering formal discussions with any other parties.

REPRESENTATIVE BERKOWITZ asked if any informal discussions have taken place.

DEPUTY COMMISSIONER PORTER said not to his knowledge.

SENATOR DYSON asked Deputy Commissioner Porter if he was inferring that the LNG project to tidewater and to Southcentral would preclude the highway pipeline when he said there was not enough gas for both.

DEPUTY COMMISSIONER PORTER said he struggles with the word "preclude." He believes the focus must be on optimizing the gas on the North Slope. All existing and known reserves will be necessary to support a 4.5 bcf line. If additional reserves were discovered, that would open up other alternatives down the road. He stated:

Sending an LNG spur line may actually be very viable and may be the appropriate opportunity, and at that point, what we've done is continue to maximize the value of the state as we move forward. As we define additional reserves, additional elements of expansion can then take place. That is what this is really about. It's not necessarily an either-or opportunity.

SENATOR DYSON asked Deputy Commissioner Porter if he was speaking strictly to the economics when he spoke about maximizing the value to the state or whether he was also considering the value of in-state use of the gas.

DEPUTY COMMISSIONER PORTER said the value to the state includes everything. The department is very serious about in-state gas use and believes the Development Authority can help the state by looking at those opportunities.

CHAIR OGAN noted that Representative Gara joined the committee.

REPRESENTATIVE BERKOWITZ asked Deputy Commissioner Porter for the Administration's position on the over-the-top route.

DEPUTY COMMISSIONER PORTER asked to first answer a previous question, and said he was just informed that the Joint Pipeline Office and the Division of Oil and Gas have held informal discussions with FERC. He then told Representative Berkowitz that the Administration has been consistent in its opposition to an over-the-top route and reaffirmed that it supports the highway route.

CHAIR OGAN asked who is on the negotiating team.

DEPUTY COMMISSIONER PORTER said the team is composed of staff from three agencies: the Department of Revenue; the Department of Natural Resources; and the Department of Law. Depending on what particular topic is being discussed, particular individuals participate at each stage.

CHAIR OGAN asked if any outside consultants have been hired.

DEPUTY COMMISSIONER PORTER said that Pedro VanMeers is a member of the negotiating team.

CHAIR OGAN asked for the names of the participants from the Department of Revenue.

DEPUTY COMMISSIONER PORTER said he and Roger Marks, Chief Economist of the Division of Oil and Gas, are the two primary contacts in the Department of Revenue.

MR. MARTIN SCHULTZ of the Department of Law told members he is on the team, as well as Assistant Attorney General David Marcus.

AN UNIDENTIFIED SPEAKER said the team members from the Department of Natural Resources are Marty Rutherford, who is acting in a consulting role, and Anthony Scott. He noted that Bonnie Robson was involved until her retirement.

DEPUTY COMMISSIONER PORTER said the team will consist of six individuals from each organization.

CHAIR OGAN asked if the participants are "big enough guns" to negotiate a good deal for Alaska.

DEPUTY COMMISSIONER PORTER said they are.

CHAIR OGAN said he does not underestimate the quality of help the applicants are getting.

DEPUTY COMMISSIONER PORTER noted that he named the individuals at the table but the team consists of a broad base of consultants and support staff from the Departments of Revenue, Law and Natural Resources.

CHAIR OGAN asked Deputy Commissioner Porter when he expects to have a final product.

DEPUTY COMMISSIONER PORTER said the Stranded Gas Development Act is specific on the elements of the application. Once submitted, the application will be a public document and provided to the Legislature and the public. He hopes the team will be able to provide some type of product to the Legislature during the upcoming session.

CHAIR OGAN said he wants to see the Legislature presented with a product for approval at the beginning of the session, not during the last two weeks.

DEPUTY COMMISSIONER PORTER said the Administration has the same goal and wants to provide a reasonable amount of time for the Legislature to evaluate the contract because of the importance of this decision to the state.

REPRESENTATIVE HEINZE said the vice president of an [oil] producing company recently asked her about her husband's role in California and she told him he was in California promoting Alaska gas. The man's response was that Alaska has no natural gas to sell. She stated:

That troubled me. This type of thinking - I think the Alaska people are very thin on patience. I think over the years we feel like this caveat has been dangled in front of us and they seem to hold all the shots and then tell us we don't have gas to sell.

She repeated she finds the prevalence of that type of thinking troublesome, as well as the fact that no one from the Legislature is at the bargaining table. She asked members to contemplate putting a legislator on that team. She also suggested that it would be wise for the members of the Resources Committees to meet Mr. VanMeers.

DEPUTY COMMISSIONER PORTER noted that Mr. VanMeers has made a number of presentations to the Legislature over the years and the department would be happy to arrange for him to speak to the committees again.

CHAIR OGAN pointed out that Mr. VanMeers was the genesis of the Stranded Gas Act, when the state was trying and develop Alaska's LNG project. He is an economic consultant who is noted worldwide. He asked Deputy Commissioner Porter if any trial lawyers are on the negotiating team.

DEPUTY COMMISSIONER PORTER said the team has every kind of lawyer it could need available to it. He then said, regarding Representative Heinze's comment about the response that Alaska does not have the gas to sell, the debate about who can do what has been ongoing for a long time. He said the goal is to bring Alaska gas to market; there's a plan and methodology for getting it there and it doesn't matter whose gas it is. As long as the producers are actively pursuing and actively involved in marketing gas, they have the right to do so, and the state should support them 100 percent for their benefit and the state's benefit. If, at some point in the future, they elect not to, the state will need to make other decisions but each stage and process needs to follow its full course. If they elect not to, that decision will not come into play for a long time. He believes it will never come into play.

REPRESENTATIVE HEINZE said she is a strong proponent of the owner state concept.

DEPUTY COMMISSIONER PORTER said everything the State of Alaska is doing is very consistent with the owner-state [concept]. The state's job is to market the gas and maximize its value. The Administration believes the Alaska Highway route provides the best opportunity to do that. He said the Administration is doing everything in its power to make that occur. If, for some reason, it does not occur, that is the time to make other decisions but the Administration would still sit down with the producers and talk through the process.

CHAIR OGAN pointed out that he is about to assume the chairmanship of the Alaska Energy Council. At the last Council meeting, all eyes were on Alaska to see what is happening. He explained "Ogan's Golden Gas Rule" to mean the guys with the gas make the rules. He said many people have many plans on how to transport the gas but the bottom line is that the companies with the rights to own the gas must ultimately make the decision to

sell it. Those companies also have obligations to their stockholders and conflicting interests. He said that is what Representative Heinze was referring to. The Legislature has held oil and gas hearings ad nauseum; he hopes the state is successful this time.

DEPUTY COMMISSIONER PORTER said the Administration cannot guarantee success but it can guarantee that a plan is in place. He noted the timing of decisions is very important and right now the focus is on the Alaska Highway route. If additional reserves are found, a spur line to Southcentral Alaska could be concurrent. In the future, the market could expand to the West Coast and Asia. He repeated that a very definitive plan is in place; the process is staged, timed and logical.

SENATOR LINCOLN asked Deputy Commissioner Porter if he is in agreement with the material provided by Mr. Heinze for his presentation in committee members' packets.

DEPUTY COMMISSIONER PORTER said the Administration believes the focus of the Authority should be on the benefits that could accrue if one or both of the projects proceed forward. He said the Administration supports the discussion and evaluation of those proposals that are consistent with an Alaska Highway route project and an Alaskan LNG project. He noted the discussion should primarily focus on benefits to the state. He said he referred to some of the items in the Development Authority's handout that discuss a spur line to Southcentral and to Valdez, and railroad bonds. He repeated that the Authority has some very creative ideas on how to bring additional value to the state and he encourages the Authority to pursue those ideas.

SENATOR ELTON said he is aware that Mr. Heinze has been talking to other people. He said he is not sure he wants to let Deputy Commissioner Porter off the hook with his response that the Administration will agree with the Authority on those areas that it agrees upon. He said that kind of an answer leads to a bifurcated process that will cause a lot of confusion when the Administration returns to the Legislature with a plan. He asked how the Department of Revenue is working with other departments and how they are working with Mr. Heinze.

DEPUTY COMMISSIONER PORTER said that is a very good question. He and Mr. Heinze speak on a regular basis and have had several discussions about the plan and the state's position. Mr. Heinze understands that the Department of Revenue's responsibility is to see that both projects are successful. The department's focus

with the Authority is to encourage it to do those things that support the primary project and will complement it with additional information, for example, in-state gas use and benefits to Alaska.

SENATOR ELTON asked if anyone is assessing whether the economics exist for both projects.

DEPUTY COMMISSIONER PORTER asked if Senator Elton is referring to the economics of going forward with both projects simultaneously.

SENATOR ELTON asked if the markets will support both projects and whether the state has the resources to do both at the same time. He said it seems that one might trump the other.

DEPUTY COMMISSIONER PORTER said if both projects move forward simultaneously, one would trump the other because there is not enough gas.

CHAIR OGAN said that statement is contrary to everything the committee has heard in years past.

DEPUTY COMMISSIONER PORTER said to move both projects forward simultaneously would require 6.5 bcf per day, which is why timing is very important and that a plan be developed that allows for additional exploration on the North Slope. The Administration encourages that to maximize the opportunity of those explorers who find gas so that they have an alternative and method for producing that gas. That is why the Administration has recommended the main gas line first and then expansion.

SENATOR DYSON said he inferred from Deputy Commissioner Porter's earlier comments that an LNG project should not precede the highway route. He asked what would happen if Congress does not provide the incentives and guarantees, for example tax relief and a price floor, and gas is provided via the MacKenzie corridor pipeline to the Great Lakes area. He asked if the Administration would then be enthusiastic about letting the LNG project go forward if the economics are feasible.

DEPUTY COMMISSIONER PORTER said that Senator Dyson is asking whether there is a circumstance under which the Governor's Office would support an LNG project moving forward independent of any other project. He said it would take a number of contingencies to get there.

SENATOR DYSON said one of the contingencies would be the Alaska Highway route "going in a ditch."

DEPUTY COMMISSIONER PORTER agreed and said even at that point, the team will still sit down and talk to the major producers. They have gas in the North Slope they will want to "monetize."

REPRESENTATIVE FATE noted there are no receiving stations on the Pacific Coast yet although seven have been contemplated. Out of that seven, three are fairly firm. He asked how much of the marketability and availability of receiving stations went into the Administration's position on the route to Valdez.

DEPUTY COMMISSIONER PORTER told members the Administration does not believe that market price and the availability of a West Coast market are drivers. Even assuming a contract on the West Coast could be had, the Administration still believes the best opportunity and the best plan is to market at 4.5 bcf to the East Coast and then expand to other markets.

CHAIR OGAN asked Deputy Commissioner Porter to keep on his "radar screen" an economic analysis of the effect from the draw down of gas on the production of oil. He noted that a reduction in the pressure reservoir will have to be offset with water or other technology. He asked Deputy Commissioner Porter if an analysis has been done to date.

DEPUTY COMMISSIONER PORTER said the state and industry have done some research.

CHAIR OGAN said he will need an economic analysis from the Department of Revenue when the Legislature gets to the decision making point. He then asked Ms. Mukavitz to testify.

MS. COLLEEN MUKAVITZ, Commercial Manager for ANS [Alaska North Slope] Gas Development for ConocoPhillips, gave the following testimony.

At ConocoPhillips Alaska, we continue to work hard to pursue a strategy to develop ANS gas through a southern route pipeline, that is, a pipeline through Alaska and Canada and to the Lower 48.

We continue to pursue a very clear strategy to commercialize this gas by obtaining passage of federal and state legislation. On the federal side of the

equation, this strategy consists of obtaining federal enabling - which is the regulatory streamlining - legislation, and fiscal legislation. On the state side of the equation, this strategy includes filing an application with the Administration under the Stranded Gas Development Act, drafting a fiscal agreement with the state, and securing the Legislature's approval of this agreement.

As far as the status on the federal legislation, as you know, in April the U.S. House of Representatives passed their energy bill and it included the regulatory streamlining, or what we call the enabling legislation. That was followed in July by the Senate passing its energy bill, which included both the regulatory streamlining legislation and the federal fiscal incentives or mechanisms that we have proposed.

Congress is now in joint conference currently working to reconcile these two bills. We will likely know whether Congress will pass an energy bill in the next month or couple of months this fall. If you're interested, I'm happy to expand on the federal legislation and do a 'Q & A' afterwards. In terms of the status of the state fiscal certainty, as Deputy Commissioner Porter stated, the Stranded Gas Development Act was reauthorized last session and it provides sponsors in the state with a mechanism to work toward a clear and durable fiscal contract.

ConocoPhillips has initiated dialog with the state on the application so that we have a clear understanding of the application under the Act. We're focused on obtaining development of this application as the first step in the process of obtaining a predictable and durable contract, which will be necessary for the project to move forward. We remain hopeful an application acceptable to the state can be filed soon.

In conclusion, ConocoPhillips is working very hard to commercialize ANS gas. We remain committed to bringing a gas pipeline through Alaska via a southern route through Alaska and Canada but significant challenges do exist for this project. Obtaining federal enabling fiscal legislation represents one more building block into making this project a reality. I'm happy to answer any questions.

SENATOR ELTON asked Ms. Mukavitz to describe the other significant challenges to this project.

MS. MUKAVITZ said many stakeholders are involved so it takes a long time to work through the processes of such a project. She said after ConocoPhillips obtains a contract with the state, it will figure out how to form an entity and how to build the pipeline. It will then move through the regulatory process, which involves many steps. In addition, the project will require a huge capital investment. She noted that when the TransAlaska Pipeline was built, it impacted the whole country and a gas line will do the same.

REPRESENTATIVE HEINZE asked Ms. Mukavitz what she sees as the timeline for the start of construction in a perfect world.

MS. MUKAVITZ said she believes the process would take four to five years before construction could begin. The first gas would flow in 9 to 10 years. She noted that includes the permitting process, which takes about three years.

REPRESENTATIVE HEINZE asked Ms. Mukavitz for a realistic timeline, knowing the world is not perfect.

TAPE 03-50, SIDE B

MS. MUKAVITZ's response was inaudible.

SENATOR LINCOLN asked Ms. Mukavitz if anything in Deputy Commissioner Porter's testimony "raised her eyebrows."

MS. MUKAVITZ said that ConocoPhillips is generally in agreement with Deputy Commissioner Porter's testimony. She said the best option to obtain the highest value of Alaska gas is a pipeline to the Lower 48 and it is important to remain focused on that.

SENATOR WAGONER commented that this pipeline will be international, not an Alaska pipeline. He said the current administration on the East Coast of Canada is experiencing some of the same problems that Alaska is experiencing dealing with the East Coast of the United States. He questioned what makes everyone think the Canadian administration is amenable to having an Alaska pipeline go through Canada. He asked what timelines she sees for approval from Canada and said he believes that will be the bigger problem.

MS. MUKAVITZ said she believes a lot of the pieces could create a critical path as the project starts to move forward. ConocoPhillips has heard a lot of support for the project from the Canadians. Canada is clearly focused on the MacKenzie project at this time but the Alaska gas line project has the potential for great impact too and Canada stands to benefit.

SENATOR WAGONER said he would feel more comfortable if he saw more positive communications with the government in Ottawa.

MS. MUKAVITZ said to her knowledge, ConocoPhillips has not had any negative conversations with the administration in Canada. She said in discussions with Canada's regulatory agencies, they've appeared willing to work with ConocoPhillips but there is some uncertainty with that process too.

CHAIR OGAN said he has heard the Canadian government objects to the federal legislation and to the price floor. He noted that he and Senator Dyson are planning a Northwest Energy Summit in Victoria next year and have been working on relations with provincial governments in Canada. He said they should consider taking a delegation to Ottawa. He asked if ConocoPhillips is going to sell any gas to another company to make a profit on it.

MS. MUKAVITZ said ConocoPhillips has spent a lot of money to commercialize the gas and has concluded time and again that the pipeline delivers the highest value to it and the state.

CHAIR OGAN asked Ms. Mukavitz to describe her job position at ConocoPhillips.

MS. MUKAVITZ said that she [manages] a small group currently focused solely on passage of the federal legislation but she gets involved in all aspects. She said she believes the federal legislation has a lot of momentum and she is cautiously optimistic that it will be enacted.

CHAIR OGAN said he has upgraded his skepticism of commercializing North Slope gas from a cynical optimism to guarded optimism. He noted that one of the presenters said it needs all of Alaska's gas and as much LNG as it can import.

MS. MUKAVITZ said ConocoPhillips is seeing a growing awareness of the supply-demand fundamentals in the market and that the supply will not meet the demand.

CHAIR OGAN said gas wells are being shut in in Alberta because oil production has been lost from the amount of gas that was pumped off. Alberta cannot keep up with demand either.

REPRESENTATIVE KERTTULA asked what other projects ConocoPhillips is involved in that are potential competitors to the gas line.

MS. MUKAVITZ said ConocoPhillips does not view projects as competing. Right now, ConocoPhillips is committed to the United States market.

REPRESENTATIVE KERTTULA asked which projects ConocoPhillips has brought on line recently that would provide gas to the United States.

MS. MUKAVITZ said she does not believe ConocoPhillips has brought any on line. She said ConocoPhillips is a Lower 48 producer; it produces 1.5 bcf per day so all of its ongoing projects are within the U.S. She added that ConocoPhillips continues to produce LNG projects that have their own set of hard challenges. She pointed out that Alaska gas is by far one of ConocoPhillips' biggest and most important projects.

REPRESENTATIVE FATE commented that he had a conversation with U.S. Senate staff who said that once the Midwest commodity market and ANWR issues are settled, the conference committee would pass the package as it stands. He said the Midwest commodity issue has already been taken care of and ANWR probably will not be.

CHAIR OGAN offered that the United States has no offshore program other than in Alaska and the Gulf of Mexico. The Northeast is now supplied from Nova Scotia. He said everything he has heard indicates the demand is huge.

REPRESENTATIVE HEINZE asked where else ConocoPhillips sells its gas around the world.

MS. MUKAVITZ said ConocoPhillips sells gas where it has operations. The largest areas are the United Kingdom and Norway. It also has business development operations in Indonesia, China, West Africa, Australia and Venezuela.

CHAIR OGAN asked if ConocoPhillips plans to sell any LNG from Indonesia to the West Coast and whether it had a project in East Timor that fell through.

MS. MUKAVITZ said she thought the [East Timor] gas ended up being sold to Japan or is contracted to be sold.

CHAIR OGAN thanked Ms. Mukavitz and asked Mr. Hanley to testify.

MR. MARK HANLEY, Public Affairs Manager for Anadarko Petroleum, gave the following testimony.

You had asked us to come give you our update. We're a bit on the periphery I guess, on some of these issues, although they are very important to us. As a company with a large acreage position, particularly in the foothills, that is gas-prone, we think there is a tremendous potential for gas in Alaska - new gas and, in fact, the numbers suggest there may be more gas to be discovered than has already been discovered. So we do think there's a lot of potential.

We've done a fair amount of work in the foothills on seismic work, reanalyzing both old and new, looking at old well data. So, we are one of the companies - and I think there are multiple ones as you've seen in the foothills lease sale area. We've got a lot of new companies expressing interest in that area from independents to majors. Anadarko is partnered with Encana in a lot of the areas but there [are] people like Burlington Resources, PetroCanada, which are independents, you've got Unocal, even ConocoPhillips and others have bid on some leases down there - and Chevron, in the foothills. So I think there's a lot of potential.

The big issue for us, and you've probably heard me say it before, is access. The way we envision the gas pipeline being built...it's largely going to be a contract carrier. The difference between that and a common carrier is that in a common carrier, if the pipeline is full and you want to put your oil in, everybody gets prorated. On a contract carrier, that's not the case. You contract essentially upfront for your capacity and, once you have it, you control it. And so, there's a bit of a catch-22 for people that want to explore for gas in Alaska, which is if you don't contract up front, it's very difficult potentially to get that capacity. And those are the issues we've been working on.

We worked on the federal energy bill and had amendments included, which are in the portions that are likely to be adopted, that help with that access. We have also worked with the Administration. Anadarko and Encana did a bid and were successful in a competitive bid for the state's royalty gas. That was one way we felt could help us get access to that pipeline initially and encourage us to drill wells. The problem we have is, without reasonable access at a fair price, we won't drill any wells. I mean we've gone about as far as we can in the foothills. Nobody's going to drill any gas wells looking for gas, number one.

We do support some way to commercialize gas. I mean nobody benefits if some way doesn't help and you're not going to find any expiration but if a gas pipeline gets built, and it's controlled by three companies - all of the capacity, it makes it very difficult when there are competitors in these areas. We're not going to go spend a lot of money to find gas and ask if we can have capacity in that pipe from the people that control it. So, our issue has been access all along. We've worked on the federal side.

Just to give you a heads up, as I said, RIK [royalty in kind] was one of our issues with the state administration. Under the Stranded Gas Act, the thing we're kind of following - and we've communicated this - is we hope the state doesn't negotiate away access. You can either provide it or take it away as part of that process and so we are concerned about those issues. We're not saying they've gone in any particular direction but you've asked what the issues are. If you want companies other than what are likely - the three that will initially build this pipe to explore for gas in this state - you're going to have to make sure there's reasonable access under the system.

CHAIR OGAN said he has some concerns about the effect of the draw-down of gas on oil production. He said the Alaska Oil and Gas Conservation Commission (AOGCC) ultimately has the responsibility of conserving the resource. He believes it would be advantageous to use foothills or Point Thomson gas as the first gas that goes into the line because drawing down Prudhoe

Bay gas later will allow for more oil production and the oil is worth more than the gas.

MR. HANLEY said he does not know how a gas drawdown would impact the field. Anadarko is not an owner in Prudhoe Bay and he does not have that technical expertise, so it is difficult for him to comment, but he believes Chair Ogan is generally correct. In many cases, drawing down gas will have some impact. He noted in defense of the producers, they need an underlying base of gas to justify building any project.

CHAIR OGAN said that hopefully the economics will drive it with the producers.

MR. HANLEY informed members that Anadarko is drilling the first U.S. hydrates well, hydrates being a frozen gas on the North Slope. The well will not come on-line in the near future; this project is a long-range research project and its status is similar to that of coalbed methane 20 years ago. He said finding a way to commercially produce hydrates has tremendous potential for Alaska long term. This project is being conducted under a joint arrangement with the U.S. Department of Energy [DOE]. At this point, Anadarko is trying to find the frozen gas, core it, determine its properties, and test to see how it comes out naturally with pressure reduction.

MR. HANLEY said, in regard to the next legislative session, royalty-in-kind gas, the Stranded Gas Act negotiations, the provisions related to access, and HB 277 are of concern to Anadarko.

CHAIR OGAN thanked Mr. Hanley and asked Mr. Whitmore to testify.

MR. WARD WHITMORE, Director of Project Development for Yukon Pacific Resources, read the following testimony.

Yukon Pacific has been working on its Trans-Alaska Gas System LNG project to Valdez for 20 years. Until three years ago, we've been focusing exclusively on delivery of LNG to Asian markets. The economic hurdles that Alaskan gas faced were that we had to place a large quantity of LNG into the Asian market in a timely manner to achieve project economies of scale and we were competing with other LNG supplies, some of which were closer to the Asian market than Alaska.

Also, at a rate of less than 2 billion cubic feet [bcf] per day, the project was criticized as being too large, thereby resulting in an unacceptably high loss of oil production at Prudhoe Bay.

Recently, two significant events have occurred. Most importantly, a strong LNG market has emerged along the West Coast of North America. Second, the project has been delayed for so long that the Prudhoe Bay field has aged to the point where oil loss appears to no longer be an issue, and we may now be able to transport large quantities of propane from Prudhoe Bay that were unavailable earlier.

YPC is focusing on Prudhoe Bay simply because data is available for this field, but we certainly don't preclude use of gas from Point Thomson.

An LNG facility at Valdez will be much closer to the emerging markets along the West Coast of North America than all other potential Pacific Rim LNG suppliers. Such suppliers will have to buy more tankers than an Alaskan project to provide the same amount of LNG to the West Coast simply because they are located farther away. Depending on the project, the incremental capital costs of LNG tankers required by other Pacific Rim projects negate most, if not all, of the cost burden of an 800-mile Alaskan gas pipeline.

As I speak, West Coast markets are indicating they need to secure contracts for large quantities of LNG. Although YPC does not discount the possibility of delivering LNG to Asia, it is this large West Coast LNG demand that will allow the Alaskan project to achieve the necessary economies of scale.

Currently, a large quantity of propane is being produced at Prudhoe Bay and reinjected as miscible injectant for enhanced oil recovery. YPC understands that the need for miscible injectant at Prudhoe Bay is expected to diminish or cease altogether by 2010 or shortly thereafter. Large amounts of propane and other non-methane hydrocarbons can be transported by a high-pressure pipeline to Valdez, where they can be removed from the gas prior to liquefaction. Transport of non-methane hydrocarbons enriches the gas, reduces the unit cost for all gas moving through the pipeline, and

diversifies project revenues through the sale of products other than LNG.

Propane is of particular interest for sale as liquefied petroleum gas, or LPG, to Asian markets. LPG commands a price significantly higher than the price of LNG in Asia and represents a potentially lucrative market.

Ethane and butane removed from the gas can be used as feedstock to a world-class petrochemical facility located in Valdez.

Utility grade natural gas can be made at any point along the pipeline for use within Alaska. Also, LNG and LPG will be available at tidewater for potential distribution to coastal communities throughout Alaska.

Yukon Pacific has completely reconfigured its TAGS project to address the LNG market along the West Coast of North America, the sale of LPG to Asia, and the sale of ethane and/or butane to a petrochemical facility in Valdez. YPC modified its capital and operating costs to reflect the new configuration and has run the economics. The approach was to use low to moderate product prices and calculate a wellhead price that would yield a 12 percent return on equity such as typically allowed by the Federal Energy Regulatory Commission for common carrier pipelines. George K. Baum and Company graciously offered to run its economic models using YPC input as a bench test of YPC's calculations.

The models show that an LNG project with a pipeline flow of about 2 billion standard cubic feet per day produces a wellhead price that appears strong enough to warrant further work on either a privately or publicly owned project. I'm sure that most everyone in this room knows that YPC possesses permits for an LNG project through Valdez. YPC has also developed geotechnical databases and analytical software to rigorously address the thermal design of a natural gas pipeline traversing alternating permafrost and thawed soils.

The concept for the reconfigured TAGS project has remained essentially unchanged for the last 16 months.

YPC has been waiting to see if other parties, private or public, believe that an LNG project through Valdez is worth pursuing. The Alaska Natural Gas Development Authority has stated it will look at an LNG project to Valdez and YPC is willing to assist them at their request. And that concludes my comments. Thanks.

CHAIR OGAN asked how long Yukon Pacific has been working on this project.

MR. WHITMORE said former Governors Hickel and Egan founded the company in 1983 or 1984. Yukon Pacific worked hard to get an environmental impact statement for the project in 1988. That was used to get rights-of-way and then Yukon Pacific began working with FERC for export authorization at the Anderson Bay site. An environmental impact statement was prepared in 1995 for that site and used for place of export authorization with FERC. Yukon Pacific also negotiated at that time with the EPA and FERC and had to put in a 40 meter [indisc.]. It recorded data for 1.5 years and did a PSAR air quality permit site as well. Since then, Yukon Pacific has been looking for ways to make the project more economical. This new configuration significantly raises the return on the project.

CHAIR OGAN said the producers have said for years that they are the ones taking the risks because the gas transporter will get a tariff regardless. He again referred to his Golden Gas Rule and asked, "How do you get the guys with the gas to sell the gas to you?"

MR. WHITMORE said that has been an issue for many years. Yukon Pacific views itself as a resource. If people wish to tap into that resource, Yukon Pacific thinks it can help people pursue a project but it is not going to attempt to get the gas from the producers. Yukon Pacific feels it is ANGDA's role to deal with the producers.

CHAIR OGAN asked if the marketers will have to go to the producers and say they want to buy the gas and what will drive Yukon Pacific to decide to build the project.

MR. WHITMORE said Yukon Pacific's view right now is that it is looking for other people to do the project. For years, it tried to be the facilitator but, as of about two years ago, it decided that role was inappropriate. Yukon Pacific decided if it could find other people to try to get the project going, it would pursue it, otherwise it won't. He said if Yukon Pacific remains

the only entity that believes the project will go, it will not happen. It is now in a purely reactive mode to see if other people want to do the project. Yukon Pacific has permits; CSX would like to monetize those permits.

REPRESENTATIVE HEINZE asked if a representative from Exxon was invited to present at today's meeting.

CHAIR OGAN said yes, but Exxon declined the invitation. He then asked Mr. Heinze to present.

MR. HAROLD HEINZE, Chief Executive Officer of the Alaska Natural Gas Development Authority, said he posted charts to show the benefits of ANGDA to Alaskans and said ANGDA is all about trying to capture the benefit of North Slope gas for Alaska. He stated ANGDA is not a facilitator; it is a "doer." He said he would explain ANGDA's funding request and ANGDA's business concept and approach in his presentation, which follows.

We were created by a ballot measure in the last November election. That ballot passed 2 to 1 and frankly received support from every district in the State of Alaska - very strong. We did not really come into being until after the session was over. Our board members were appointed in May and the first meeting of the Authority was held in June of this year so we're only a few months old.

In terms of our board, they are the ones who are responsible for the organization. There are seven of them. I know Andy Warwick, our chairman, is up in Fairbanks. We have a number of the members here - if you could stand? Scott Heyworth, John Kelsey, Bob Favretto of Kenai. Let's see, who am I missing? Dan Sullivan and Warren Christian....

The Authority under the law that created it has several unusual ingredients. It is a public corporation of the state, similar in many ways to the Alaska Railroad, the Alaska Permanent Fund, other creations of the state. Additionally it has a lot of characteristics that are unique to government in that, for instance, we have the right of eminent domain, we have the right to administer state land as a state agency, we have the right to issue revenue bonds and so on. So, the idea was to combine the best business approach and, frankly, governmental approach.

We've focused on building an operating facility here in Alaska. We intend to both buy and sell gas, so we are looking at North Slope gas from a bigger picture [than] from just the state's royalty share. We are looking at buying and selling gas in a business-like way. We expect that we would at some point invest that risk and, again, I'll later on explain to you some of those risks. But, again, if you're going to be a 'doer,' you have to invest that risk and the good news is that you get to receive the rewards of that risk.

We're benefit driven. Again, that's important because we are more than just a commercial entity driven by return on investment. We have a responsibility to look at broader issues than that and see our impact on individual Alaskans and the economy and the total revenue picture of the state.

And then finally, I think it's realistic to tell you up front, we would expect to deal with people who have much more expertise and involvement in terms of both shipping and marketing type functions. We would intend to restrict our activities generally to the boundaries of Alaska and contract for whatever we needed beyond that - again, with a very business-like approach.

The idea of benefit focus here interplays with the LNG project and I'd like to explain that to you. While the Authority is focused clearly on North Slope gas benefits, it appears that the export scheme is absolutely integral to achieving those benefits. Very frankly, I can't find any way to make the benefit side of this work in any economy of scale without doing some sort of export project so the two are just linked. Every time I look at an export project, I find lots of benefits from it. When I try to achieve the benefits without an LNG export type scheme, I can't make it work. So, we then have proceeded to look at the LNG side of it. Fortunately, that's been looked at, as you heard from Yukon Pacific for several decades. It actually was looked at for a decade before then under the name of El Paso, so it actually has been around.

Additionally, besides Yukon Pacific, an entity called the Alaska Gas Line Port Authority, which was formed

by a number of our major communities along the pipeline route, also looked at a number of the concepts related to LNG export. They also, besides Yukon Pacific, have made their work available and so even though we are a few months old, I feel like we have decades of knowledge to start from. We've come a fast way.

Right now, it is very clear that the West Coast market opportunity is emerging very dynamic and it actually favors Alaska because of the short nautical distance sailing. We are only half as far as the next closest competitor and only a third as far as most of the competitors. That's a significant advantage in the LNG scheme.

CHAIR OGAN interjected to ask how far the gas will have to be transported to tidewater.

MR. HEINZE replied that different projects in the world have different characteristics. Some projects in Indonesia are not as far from the coast but the terrain that must be traversed makes those projects more costly. In the case of Sakhalin, a 540-mile pipeline will be required. ANGDA does not feel it is at that much of a disadvantage and has every reason to believe it is very competitive on a world scale. He explained the problem is the market is going fast - people are out there gobbling it up everyday. ANGDA is doing the best it can to compete against those projects and find a home for Alaskan gas. It is a difficult situation because once markets become saturated, or they secure supplies, one has to wait a long time for another chance. He continued his presentation.

Looking at the funding request here, our board at its last meeting respectfully requests from you a funding of up to \$3 million to finish conceptual design and make a cost estimate, schedule, benefits analysis and marketing plan by January '04. I should point out to you that is the statutory requirement put on the Authority by the law. We must finish that by June of '04 - all of those things so we are simply here accelerating that request.

CHAIR OGAN noted that some of the work has already been done.

MR. HEINZE said he would address that in the remainder of his presentation.

SENATOR LINCOLN noted the request says January of '04.

MR. HEINZE said he is accelerating the request; the legal requirement is June of '04. ANGDA has accelerated the progress so that it will have a majority of the engineering work done by January of '04. He continued his presentation.

Again, what I'm here today - again, so we understand each other, I realize you cannot appropriate money to me today. I understand that. I'm here asking for \$2.5 million. I am asking for the Legislature to demonstrate its support for moving this project forward by being positive and in essence saying you would appropriate that grubstake of money out in the future here when you come back into session. All I want is a \$2.5 million grubstake and if I had 21 and 11 signatures, I believe I can borrow that money right here in Alaska.

As far as the accelerated funding request, in general it satisfies the statutory requirement in January instead of June. It is design funding and it is focused on new concepts and increased Alaska benefits. We sit here right now, Senator, with probably 95 percent of the project done. We've had a chance to look through what Yukon Pacific has done and others and I'm very satisfied that we are - there's a lot of good work. Now we haven't had a chance to pour through the details but we've looked at it enough that it's there. What we lack is that last bit of closure on these design concepts and, as I'll explain to you, the concepts we've developed here are very important because they are concepts that have not been examined so far and, number two, they are concepts that increase the Alaska benefit content of the project significantly. So I'll talk about that.

The other part is, very frankly, we've talked a little bit about the producer-led highway project effort and you are all aware that they, not that long ago, finished \$125 million worth of engineering on that. And frankly, I'm behind. I'm behind in having a meaningful conversation with them. I don't know how to go talk to them given I haven't got a finished conceptual design and they've just finished \$125 million worth of work. So what I'm asking for is \$2.5

million to let me catch up so I can at least go have that conversation on somewhat of an equal footing.

The other reason it's only \$2.5 million frankly is we're getting a lot of things contributed free. I'll show you a list of things we're getting for free. It's a lot of money but there's some things you do have to pay for if you expect to achieve them. And then finally, the \$2.5 million - I will look you in the eye and I will tell you that 90 percent of that funding is right here in Alaska with Alaska companies.

To give you some specific benefits again, referring to the chart and some of the other things there, for instance, the spur line to Cook Inlet is indicated there. The spur line has never been looked at in these studies. There is no estimate of cost to do it. That is absolutely essential. You're talking about 85 percent of the residential, commercial, and industrial base of Alaska is sitting right here and we're running out of gas, we're down to our last 2 bcf in Cook Inlet. It wasn't that way 25 years ago but it is that way today. I don't know if we can wait a decade to figure out what we're going to do about that.

We're going to study a barge mounted LNG concept. Everybody's looked at LNG plants before but nobody's looked at a barge mounted one. The advantage of barge mounting the plant is that it could be built at the fabrication sites down in Nikiski, here at the Port of Anchorage, and elsewhere. That means we could hire people and they would not be living in a camp. They could go home and sleep in their own bed at night. It would be a local resident workforce. In this area, we have at least a couple thousand craft people that would be able to work on that project. We could pay them more money. They could bring their lunch in a brown bag. We wouldn't feed them or house them so that saves us cost and we could pay them more money and it all comes right here into the economy because again, it's very hard to control Alaska hire in a remote camp but it's very easy to control it in a local hiring situation.

We want to look at a concept called the LNG thermos bottle barge. If you have an LNG plant, you can fill up smaller container barges and you can take them to

every coastal community in Alaska. Now Barrow already has energy but we could probably go as far north as Kotzebue and we could probably go as far south as Ketchikan if we wanted, and I think that's a pretty significant potential.

We have at least one major portion of our industrial sector in this state, both the Kenai LNG plant and the Kenai urea plant and both of those, because of lack of gas reserves, face difficult futures. We can directly influence that. And then finally, by way of example, nobody's worried about the propane content in this gas and it turns out when we, in a preliminary sense, looked at how do you supply energy in the Yukon River area, one of the keys might be to have plentiful propane available because [it] is very easy to handle and transport hydrocarbon.

We've gone through in the last ten days and we sat down and developed a work schedule for this project. I submitted to the committee, for the record, a full copy of that. We involved a number of contractors: ASRC, VECO, PND, Wood MacKenzie and Northern Economics. They went through and they helped us scope the work. They provided very significant efforts in terms of estimating the cost to do the work that we need to do to finish off the conceptual design. I would intend to sole source the contracts with the approval of my board, of course, and the majority would frankly be fixed price. That's how we'd get it done for the price.

I did include a table of how we would spend the money, spending \$2.5 million. The majority of it, almost \$1.8 million of the money, is to finish off the design and execution plan. If we can bring those to closure by January and have a total concept, I'll show you some of the advantages of that later. Additionally we've included money in here for the benefits analysis, which has never been done. We've included in here a marketing and competitor analysis, which is again vital to our continued competition in the LNG markets of the West Coast in the world. I allowed \$150,000 for specialized legal opinions. That may be a little too much money for the lawyers but, basically, the idea would be to research the tax, the bond, and the shipping related issues with that money. Then finally

we have a small staff and we will remain at a small staff, and I've included money for that.

The next page shows the contributed studies and besides, again, acknowledging Yukon Pacific and the Gas Line Port Authority, we need tanker design and cost information and we have talked to the West Coast's largest ship builder and we have talked about potentially cooperating with them in ways that they would help us understand the design and cost issues there.

Training and Alaska hire - I think the labor movement in Alaska is entitled to a lot of input as to what kinds of things we need to do to develop workers to maximize Alaska hire.

Then finally gas compositions and conservation - there are a number of conservation related issues that I believe the state agencies involved in conservation have more than enough authority to cause hearings to be held and public information to be developed so that we can all see what's going on. There also, frankly, is a lot of state in-house expert consulting available. In areas of revenue and economics and those things, we don't need to go outside. In terms of social and environmental impacts, we don't need to go outside and certainly, in permitting and land use, the state itself knows more about that than almost anybody. [END OF TAPE]

TAPE 03-51, SIDE A

MR. HEINZE continued.

...that potentially is billions of dollars in the Alaskan economy. The difference between having enough gas in this broad Cook Inlet area and not is billions of dollars so, it seems to me, a few hundred thousand dollars for the only study of it seems like a wise investment at this point. The barge-mounted LNG plant - again it might sprinkle an extra billion dollars in this economy. Again, it seems like it's worth studying - nobody else has.

We have a brand new concept for looking at the LNG birthing and plant location in Valdez. People have

traditionally talked about Anderson Bay. There are issues related to it. We're looking at a whole new concept which would utilize the old town site in Valdez with a dredging and a sheet piling type operation and the plant barge mounted in the area. That alone would probably add hundreds of millions of dollars to the business opportunities in petrochemicals and other things in the Valdez area - just that change of location.

And then, finally, the idea of the barge mounted cryogenic storage units and supplying Alaskan communities with clean and abundant energy, I don't know - \$100 million, \$200 million, whatever number you want to write down. It's pretty big stakes as far as I'm concerned.

One of the questions I was asked was why proceed now to finish the project concept design. Why not just wait? And I tried to pick off four reasons here. One frankly is the market pull. The market I have no control over. It moves and if we're going to play in the market you have to go with it. You have to market yourself and you have to put your best foot forward every time you go out there. Right now I'm doing - at least one person I'm talking to in the room so I hope they don't listen, right now I'm doing the best I can with a 90-95 percent product, at a concept level. I need a 100 percent product at a concept level to sell it. I mean, you can only use the mirror so many times and then they catch on.

Secondly, producer decisions. Very frankly, I'm very supportive of the producers' efforts to bring our gas to market through a pipeline following the highway on down. I would encourage you to realize if somebody wants to spend \$20 billion to do something good for Alaska, I think we should help them do it. I'd be happy to go back to Washington and testify in their favor. I hope they get every break possible from the federal government. On the other hand, I know that historically their statements, and I know in everything they've studied so far, they are not looking at the benefits to Alaska, how to deliver the things that are on that chart. The only way I know to have the conversation with them is for me to have something to work from in a technical sense that at

least says here's how we will do this. Here's how we would approach this and we want to make this work with you and then have that very business-like discussion. Right now, I don't know how to do those things. I don't know how to have that conversation with them until we do.

From a project management point of view, very frankly I have to tell you closing out the engineering design by January or February would allow us to use the next four or five months to do the business plan, the marketing plan, and all of the other things it really takes to make a good business judgment on the next decision, which will be a big decision by the state to spend hundreds of millions of dollars, frankly.

Then finally, energy in Alaska. I'm sorry, I read the paper every day faithfully and every day there's decisions being made somewhere here in Alaska about energy in our communities and whatever. We need to understand what's on that chart and what could happen, what the alternatives are so that it is available for those communities as a framework when we make those decisions. So I don't think we can wait.

Some people have asked why are you getting into the business - the gas business and the Authority is definitely a different approach. This is not to facilitate, this is not to sit back, this is get in the business. We intend to buy and sell. We intend to build and operate and, as such, we are very directly involved. Basically, we believe, and I'll show you the numbers here, that while an Alaskan LNG project is very marginal for a commercial entity like the producers, as they've told you - I believe they're telling you the absolute truth, it is very marginal for them. But for a non-taxable state entity, just like the Alaska Railroad and everybody else, we're not taxable. We're serving a public purpose. If we are non-taxable, that savings takes us from being marginal to highly competitive. It makes all the difference in the world.

Frankly, we also have a very limited portfolio of other choices. We don't have a lot of things that we can do or work on or approach us to our gas. And then finally, we don't have multiple shots at the Pacific

Rim market. I mean things out there are happening and either you play or you don't play. We may lose some things on merit but, frankly, I don't want to lose things because we didn't try.

I went through and I've delineated to you how to spend \$12 billion to build an Alaska LNG project. I'm not going to tell you this is our cost estimate. It's some numbers. It's some very reasonable numbers. I believe they're towards the high end. We have not had a chance to go through and verify the estimates that these are taken from. We have not had a chance to go through and see if we can improve on these numbers. We think we can. If you take \$12 billion - spent like that, and then you go through and you calculate what's traditionally called the cost of service, this number represents a number that when you add the wellhead price to it, it tells you what you basically can fit up against in terms of a market price. For instance, in this case, I calculated that if you were a highly rate-of-return oriented commercial investor type entity, you would need \$2.90 for every unit transported through the system to make money, to come out where you wanted to be as an investor. Now if you take \$2.90 and add to it some reasonable amounts for wellhead price, that's not where we want to be in terms of the price world out there today. On the other hand, if we are non-taxable, that same number calculates to be \$2.20 and \$2.20 for a cost of service is lower than any other cost of service we've seen. Now I'm not telling you that's what we would do. I'm not telling you that we would necessarily build everything but that starts to illustrate to you how powerful this concept of the Authority [is] and its ability to adjust the cost structure here.

And then finally, if we looked at the pipeline and the facilities involved, like we do a highway in Alaska - when we go to build a road we don't ask the rate of return. You look at - it connects A and B and you look at the fact that its infrastructure stimulates activity at A and B and that's what you care about. Well, basically what that means is you just pay your bond debt. If I did that calculation, I get \$1.65 and, again, I hope it's not lost on you that in the arithmetic of the world, if you take \$1.65 and you take \$1.35, which is the high at-risk price mentioned

by the producers in Washington, D.C., that's \$3.00 and \$3.00 will fit into any market I know of right now, anywhere. So that starts to get pretty powerful.

There is risk, and again, I put together a table of risk for you. All of those elements of risk are risk elements that anybody who builds a pipeline has to endure. They are very real. Fortunately, the Authority hopefully doesn't have to undergo fiscal changes. That risk isn't there for us, but all the others are. We believe there are ways, in a business-like way, to understand, to minimize and move forward on those risks. For instance, if we are taking the risk, we would expect to be able to offer people on the North Slope a fixed price for their gas. Again, you can speculate with me. What would be the effect if the Authority offered a firm \$1 mcf price right now on the North Slope - no risk, you don't have to make any investments, we just buy your gas for \$1 an mcf. Now I'm not negotiating in public here but I - wouldn't that stimulate development? Would we find more reserves? Would things happen? Would somebody maybe want to see to us even? I tend to think we'd have a chance, at least.

There were several other questions that came up earlier that I probably ought to just touch on. One is your gas rule, Senator. I would say we would offer a fair, no risk price and if people wanted to take it, I think we would be very happy to be in the gas business under those circumstances, realizing there's both risk and there's reward at that point. I think that's one of the important things we could do.

We've heard people evaluate choices in this case and, again, I probably can calculate the same numbers they can. All I can tell you is that what people see as the best value as a commercial entity may not be the same as what we see as the best value as the Authority because of our entirely different business structure - as to the fact that the two projects may or may not interact with each other and how that interaction occurs. Some of you know I'm a reservoir engineer by background. The only statements I've seen on this issue are by a former colleague who is also a reservoir engineer and I respect. But, you know, very frankly if there's anything on the record at all right

now on that issue, it's pretty skinny so I'd just love to see somebody come forward and let's have a good public discussion on what should or shouldn't happen on those volumes.

The second thing is, I believe once there is a real belief that gas can be sold on the North Slope for a fair and reasonable price, you're going to see so much exploration happen so quickly, that instead of worrying about whether there's 35 trillion or whatever, it's going to be a bigger number. I think also you have to keep in mind that a lot of the people that comment on this issue are folks that have gas in a lot of other settings and, you know, at times you [have] to compare what they're saying here and there. For instance, in terms of LNG, very frankly every one of the producers on the North Slope is in one form or another trying to sell LNG into the West Coast. They've all seen that there's a market there. They're all smart people. They've all pursued it to varying degrees and in varying ways. But that's the reality. For instance, the MacKenzie Delta, again a similar list of companies is involved there. You know the MacKenzie Delta pipeline is moving forward rapidly. I don't know if you've thought what it's all about. It's based on 6 trillion cubic feet [tcf] of gas and they plan on a production rate of 1.2 bcf per day. Now if I just take those numbers and scale them up, our known gas reserves right now would support 7 billion standard cubic feet per day and that seems like enough to me for the moment. And so, again, I don't know where the consistency is in the story, but I don't have a problem with seeing all of the projects being compatible. I don't see any problem in working the projects through.

My approach is not to compete on this one. I would like the opportunity to work with the producers. I'm concerned that they are making decisions on the pipeline right now that could influence how we get our benefits. I'd like to be sitting down and having a very business-like discussion with them to come to grips with commercial terms. I don't mind paying money to share in the cost of whatever needs to be done but we need to be part of the discussion. I think clearly the markets will support both projects.

And then finally, the other question was, I believe, again, if there [are] legitimate offers for gas, that everybody involved - the producers certainly, have committed to consider any serious offer. I would like to be in a position to make them a serious offer. I can't right now. I don't have enough and that's part of the grubstake, part of trying to move this forward so I can make that legitimate offer. Certainly the state's royalty gas, and I hope it's not lost on us, that the state's royalty gas as I recollect being a former commissioner, I believe it has to be available for what's on that chart. Again, my recollection of our resource ownership in common is that if there is an in-state use, that that royalty gas will be made available and I don't believe anybody can trade that one away.

That's my view. We're coming at this from a very benefit-driven approach. We're trying to be very positive and yes, we are pushing a little bit and at times I find myself a little bit outside the plan and I assure you I am on board with the Administration in terms of being a very pro-development, move forward Administration. At this moment, I have a responsibility under the law, a law that was created by the people and I'm going to pursue it. I'm going to do the very best job I can and what I'm asking for is your support of that. That's all.

REPRESENTATIVE FATE said he has repeatedly heard that there is a West Coast market but it is going to take five to seven years before Alaska LNG could be shipped, if the project started today. He said that target must be timed with if and when a receiving station on the West Coast, of which there are now none, would be on line to receive the LNG. He asked Mr. Heinze how he would negotiate a contract and wedge Alaska LNG into that market when nothing will be produced for seven years.

MR. HEINZE said several parts of that question are important. First, timing is everything. The project concept the Authority is working under does not take the extent of time quoted by others. He noted if the state moves forward in a punctual manner, gas could be on stream in 2007. Alaska has several advantages. First, it would use a pipeline route that already has pipe on it. He does not know the producers' timeline but if they intend to lay that pipe early and quickly in the process, the Authority can meet that kind of a timeline. He said the

permitting issues will not be problematic if the TAPS line is followed. The TAPS right-of-way was recently renewed; the environmental studies have all been done and there are no residual issues to his knowledge. He said he thinks this project can be executed faster than most people believe.

MR. HEINZE said second, the market situation on the West Coast is one that has emerged. People who were very alert six months or a year ago sensed that it was going to happen. He acknowledged that there are a whole series of proposals on the table; one is very high quality [Sempra]. He would like Alaska gas to supply the Sempra project. He has also talked with Mitsubishi who has a very good project. The Mitsubishi project is not as advanced as Sempra's, but the Mitsubishi project may fit Alaska's timeline more easily. He said to close the gap, Alaska must move forward. A lot of LNG is moving around the world so Alaska could meet its contractual requirements of supplying LNG. Prior to Alaska's project coming on stream, the Authority would buy LNG produced by others.

REPRESENTATIVE FATE asked what the contract price would be based on.

MR. HEINZE said the pricing arrangements are part of the risk. The Authority visualizes a pricing structure that, at the market end, is driven by a basket of prices. At the going price, different economic results will occur. In general, one can buy cargoes that reflect the current price in the market. The Authority would not be speculating; it would be buying at the time to fill a demand at the time. That represents a risk, but a very low one. He maintained there are ways to structure the timing compatibility with other projects, although the Authority has not thought them through completely.

REPRESENTATIVE FATE said he spoke with FERC representatives not long ago and learned, on the issue of separation of the pipelines, certain questions remain unanswered regarding a gas pipeline versus an oil pipeline. He said he is not convinced that Alaska could use the permitting process for one type of pipeline and transfer it to a different type. He wishes someone could assure him that the permit renewal for the oil pipeline will cut the timeframe.

MR. HEINZE said the Authority has taken a hard look at that question. An expedited EIS process can be completed in 18 months. This project would be eligible for an expedited EIS process because the information is on file. Second, Yukon

Pacific has a federal grant of right-of-way, which is transferable. Yukon Pacific does not have a full grant of the state right-of way, but the Authority can administer the land for the state government as any other department might. The Authority has looked at the fundamentals. He acknowledged that technical issues do exist, but they are very solvable. He said there is no reason the two pipes cannot be placed close together.

SENATOR ELTON said his reaction to Mr. Heinze's testimony is that he wants to invest. However, statements made in other testimony about one project trumping another give him pause. In addition, the Authority will need cooperation from the producers and the markets. He expressed concern that with the Administration and producers' attention focused on another route, everyone may be walking all over each other. He said he needs to be convinced that it is appropriate to have a bifurcated process.

MR. HEINZE acknowledged that he is selling but he is trying to be honest about the risks. He said he was trying to convey to members that the Authority has a couple of competitive advantages. First, in the LNG market, Alaska's distance to the West Coast is an advantage. Second, as a business entity, the Authority does not have to pay income tax. That is a big advantage. Those two advantages have convinced him that the state needs to make a business decision. He wants to use those competitive advantages to provide benefits for Alaska. He said the state has choices. He is asking the Legislature to bet \$2.5 million and believes it will feel better at the end of the day.

SENATOR ELTON asked, given the previous testimony, whether Mr. Heinze feels that part of his job is to sell this to the markets, producers and to the Administration.

MR. HEINZE said he believes the Administration has a very well conceived approach and knows what it wants to do. He supports the Administration's efforts and believes the Authority's activities enhance the Administration's efforts. He said different people have different interpretations of why the initiative passed the way it did. He believes the two reasons were a timing frustration and the perception of a lack of credibility regarding benefits to Alaskans. He is trying to address those issues by being timing and benefit proactive.

SENATOR LINCOLN referred to Deputy Commissioner Porter's handout, particularly to the Authority's funding request, about

which Deputy Commissioner Porter said that funding request, is premature prior to knowing the outcome of the energy bill [before Congress]. He also said it would be appropriate for the Authority to study the market in a way that complements the Alaska Highway route project. She said he laid out the state's position toward the Authority in a clear manner. She said her impression, from Mr. Heinze's presentation, is that the Authority has a board and executive director that are "gun-ho" and have a directive from the people of Alaska. She asked what mission the voters understood the Authority to have. Her second question was in relation to the Authority's ability to take lands using eminent domain and asked if any Native lands will be affected on either of the routes.

MR. HEINZE referred to a map of the routes and said the route from Prudhoe Bay to Valdez would follow the TransAlaska pipeline. That right-of-way is already controlled. He noted that part of that right-of-way passes through Ahtna land and he has called that corporation to talk about it. He pointed out the real grant of right-of-way is controlled by the federal and state governments and the gas line would be in such close proximity to the oil line, he does not believe there would be a lot of issues. He expects he will have to deal with two or three Native entities but, since the right-of-way has already been designated for transportation, the Authority could easily work out terms.

MR. HEINZE then said, in terms of the Authority's relationship with the Administration, he apologizes if he sounds confrontational. However, he believes what he has shown the committee is responsive to the direction that he was given as part of the team. He works for state government and for the Governor. He made sure that the monies he asked for are benefit driven. To the extent he differs over the point of what may happen on the energy bill in Washington, D.C., he said he is just a stubborn Alaskan who refuses to have timing dictated by what happens there. He said if this is a good time to move forward, he believes the Authority should. The Authority is doing nothing to threaten efforts in Washington, D.C.

SENATOR LINCOLN said Mr. Heinze is asking the Legislature for \$2.5 million, which is not a lot in the big scheme of things, but given the fiscal crisis, that amount matters. She said it seems strange that a deputy commissioner would come before the committee and say that the funding request is premature. She cautioned Mr. Heinze that he is going to have a hard sell.

MR. HEINZE agreed that he may have a hard sell and clarified that the Authority is asking to borrow \$2.5 million and to pay interest. He said it will always be difficult for public corporations to find their own way but the Authority has nothing to start with. He said he has to be entrepreneurial.

REPRESENTATIVE HEINZE said as past president of ARCO, commissioner of the Department of Natural Resources, and state gas "czar" under Governor Hickel, the Legislature has put a lot of store in what Mr. Heinze is saying. However, legislators have to answer to the people down the road. She said many people are very serious about wanting to work with Alaska. She asked Mr. Heinze what the possible return to the state will be on the \$2.5 million.

MR. HEINZE said he tried to illustrate that several issues run in the billions of dollars. He said he has no way of knowing the status of the producers' issue. He said they may be making decisions right now that might impact the composition of gas carried down the pipeline. He said one of those decisions might mean that propane cannot be provided to the Yukon River. He said he knows that the Legislature and the Administration represent the will of the people, but he is also a creature of a law that was created by the will of the people and he is trying to pursue that mission. He is trying to do the work of the people without challenging anyone else who is doing similar work. He asked committee members to look at the Authority's motives, and the positives and negatives of it. He said \$2.5 million is a lot of money in a tight budget but the Authority is requesting a loan.

CHAIR OGAN said as bankers, the Legislature has to answer to its stockholders.

SENATOR WAGONER said he understands Mr. Heinze's desire to take advantage of the window of opportunity that is open right now, but members have been told that the Administration is negotiating to sell the rights to Alaska's 12.5 percent royalty gas. He asked how that sale will affect the Authority's ability to do the projects it has outlined.

MR. HEINZE said the Authority represents an alternative approach. It may be appropriate for the state to dedicate its royalty, but the state must reserve enough gas for instate use. He said he was planning to offer Anadarko money for every million cubic feet it found and thought he could probably get a few wells drilled for the state. He said the alternative the Authority is struggling with is the extent to which the state

wants to use a business-like approach. He said the intent of ballot measure 3 was clear in that the Authority is not to study or facilitate, it is to take action. He said there is a lot of gas on the North Slope and he thinks the Authority can buy gas at a reasonable wellhead price because the owners will not have to take the risk.

SENATOR WAGONER commented that when Phillips was built in Kenai to supply LNG to Japan, that amount was 100 percent of Japan's import amount. Now it amounts to less than 1 percent. He asked if the same scenario is projected for the West Coast and the rest of the United States.

MR. HEINZE said the highway gas line is definitely going into the Midwest and that is the best and biggest market in the world. On the other hand, the LNG market to the West Coast is a very strong market. LNG is a wonderful solution to the problems associated with moving gas into that market, and someone will bring LNG in.

CHAIR OGAN thanked Mr. Heinze and asked Mr. Bartholomew to testify.

TAPE 03-51, SIDE B

MR. GREG BARTHOLOMEW, Director of Strategic Planning and Analysis, Sempra Energy, gave a slide show, which he described as follows.

The first slide illustrates historical consumption and production in the Lower 48 states. In the early 1970s, a gas shortage was primarily driven by price regulation. Consumption and production of natural gas declined. Price deregulation occurred in the mid-1980s, and production and consumption increased. From then until now, a gap between production and consumption has opened up. The gap has been filled primarily with Canadian imports, which currently represent 16 percent of U.S. natural gas consumption. The U.S. Government has projected very aggressive growth for consumption. Most energy consultants take a less aggressive stance toward consumption but all suggest a growth, driven primarily by electricity growth and a belief that the U.S. economy will continue to grow. Sempra believes that Lower 48 gas production has peaked and will decline. The primary question at this time is how fast that production will decline. Sempra has plotted two different [indisc.] - a high and a low, both based on U.S. Potential Gas Committee probable and possible resource estimates. Also plotted is Sempra's most

likely scenario. Sempra believes that natural gas supply is a grave concern for the U.S. economy. Unless LNG liquefaction capacity is built, the United States will have a very difficult time over the next 20 years. Sempra also believes that Canadian natural gas production may have peaked, in which case LNG imports will be even more critical.

MR. BARTHOLOMEW said he has spoken to representatives from many of the countries around the world with stranded natural gas. He recently learned from one of the leading energy consultants that only been one significant natural gas discovery has been found in the Lower 4 this year, which is shocking the entire industry. Even though rig counts are increasing, the drilling is concentrated in fewer and fewer plays. For example, two-thirds of the drilling in Wyoming is currently in two fields. Despite the good news on the surface, the outlook is increasingly bleak as one looks at the details.

CHAIR OGAN asked Mr. Bartholomew to give the committee an overview of what Sempra Energy does.

MR. BARTHOLOMEW said Sempra Energy's primary business is ownership of a Southern California gas company and the San Diego Gas and Electric Company, both natural gas distributors. Sempra Energy also generates electricity and has built five power plants, generating a total of 1.5 gigawatts of power. In addition, it owns a power plant in Texas.

CHAIR OGAN asked if Sempra Energy is a transporter and consumer of natural gas and creates electricity to wholesale to utilities.

MR. BARTHOLOMEW said there is a large barrier between the regulated and unregulated side of the business so they are essentially independent businesses. Sempra also owns a solutions business that works with commercial/industrial customers. He continued his presentation.

The next plot shows what has happened with respect to U.S. oil production consumption. Lower 48 production peaked in 1970 and has since declined over 50 percent. That decline has been mitigated somewhat by new frontiers that have been brought on from the shallow Gulf of Mexico, Alaska, and the deepwater Gulf of Mexico. He noted there are not many frontiers left in North America yet consumption continues to increase. Imports represent 60 percent of consumption and that may increase to 75 percent over the next decade. During the 1990s, prices escalated

steadily about 5 percent per year. In the year 2000 and 2002, price spikes occurred, signaling a much tighter market than expected. The current outlook in prices is that LNG will be on the margin in North America in the indefinite future and natural gas prices will likely trade above \$4. Currently, the markets are trading in the \$4.50 to \$4.75 range.

MR. BARTHOLOMEW showed a plot of gas demand for western and southwestern states. Those states comprise an 8 bcf/day market. Demand has recently grown but, in general, growth in the western states is expected to be modest. The western states are a relatively small market that is not well integrated into the rest of the nation. He said all of the major producers are interested in building an LNG terminal on the West Coast because all West Coast supplies are declining rapidly. Sempra predicts that California's local gas production is going to decline quickly, driven primarily by the fact that 40 percent of California's gas comes from a single field. Coalbed methane in the San Juan basin is declining at a 10 percent rate, and the non-associated gas is expected to begin to decline in a few years. The Permian (ph) Basin in West Texas and Eastern New Mexico has been holding flat for the last 15 years and is also declining.

MR. BARTHOLOMEW said drilling will not solve the problem. Drilling in many of those areas has become "price inelastic," meaning rig count does not increase no matter how high the price is. In many of these areas, rig count is actually decreasing despite the high prices in more and more regions of the United States. He said many people have stated that the Rocky Mountains are America's last hope for natural gas production. He said most of the growth in Wyoming production after 1998 has come from the Jonah field and Powder River coalbed methane. Without those, Wyoming natural gas has been relatively flat. Rig counts for Wyoming have actually been declining over the last six years, excluding the previously mentioned projects.

CHAIR OGAN said he just spoke with Senator Coe (ph) of Wyoming who said Wyoming has a \$500 million budget surplus this year, primarily from coalbed methane.

MR. BARTHOLOMEW said the concern is that there are fewer and fewer plays. Everyone focuses on coalbed methane and the Jonah and Pinedale fields because there is not much left to drill on. He said fortunately, there is a lot of gas left in the world. North America uses about one-quarter of the world's consumption. The global reserves-to-production ratio shows a 70-year supply

and, except for the Arctic, the Lower 48 and Canada do not have a lot of resources left.

MR. BARTHOLOMEW showed a map of the major plays in the Pacific Basin. Sempra is talking to all of the parties interested in delivering gas to the West Coast. Alaska is on the bottom of the list because the other countries have made getting gas to the West Coast their highest priority. Sempra has been meeting with many of the heads of state in these locations. In the meantime, Alaska is still wrestling with the decision of whether it wants the big pipe or whether it wants to build an LNG terminal. Until Alaska can make up its mind, it will not be considered as a serious player. Most of the VMPs have invested between one half and one billion dollars in each one of these projects. The stakes for the countries where these projects are located are exceptionally high. In some cases, the democracy of the country rests on what it can do with its LNG. Sempra has been working with some of these parties for a very long time. Sempra would like Alaska to be a player because the money would be kept in the country; however, the question is whether Alaska can move fast enough. Sempra is ready to start construction and it has to have contracts very soon.

SENATOR LINCOLN asked if Alaska's location, being 2300 nautical miles away from the West Coast market, makes it more feasible than the other locations.

MR. BARTHOLOMEW said the competition is not about what location is the most economic, it is about who is willing to take the price risk and make the commitment for the capacity first. It comes down to who has the greatest desire to do their project. He said he is not here to pressure Alaska; he is trying to be honest about the situation. Everything depends on who wants their project the most.

MR. BARTHOLOMEW then went on to say the Lower 48 is fairly well connected with pipes so the West Coast is competing against the Atlantic Basin also. The primary competition is from Trinidad, Venezuela, West Africa and Qatar. Qatar has 900 trillion cubic feet and very much wants a large amount of the North American market. Even though the shipping distance is very far, Qatar has a lot of gas. Sempra has received all of the necessary significant permits from the Mexican government. It plans to begin building in January and will have contracts prior to building. It is in the final stages of commitments with many players but those commitments are non-binding and non-exclusive.

CHAIR OGAN asked about Marathon.

MR. BARTHOLOMEW said that Sempra is the only company that has all of its permits. Shell does not own its land [in Mexico] and, as a consequence, cannot get a land use permit until it owns the land. Marathon does not own its land either and has not filed for an environmental permit or a land use permit. Sempra Energy owns 400 acres and plans to build on 72 acres. Sempra's advantage is that its location is isolated. It is invisible from the highway and has no close neighbors.

CHAIR OGAN asked how much gas Sempra will be able to handle.

MR. BARTHOLOMEW said its initial capacity will be 1 bcf per day. Sempra will have room to build two more tanks to allow it to potentially double its capacity. Sempra received its FERC permit today for its Cameron facility in Louisiana. Construction of that facility will begin in the first quarter of 2004.

CHAIR OGAN asked the source of the gas for that facility.

MR. BARTHOLOMEW said Sempra is still talking to suppliers.

CHAIR OGAN asked if Trinidad is a likely location.

MR. BARTHOLOMEW said he cannot comment on that.

CHAIR OGAN asked if Mr. Bartholomew is in a position to make a deal with producers to buy gas if the state could get someone to step up to the plate and build a transport system.

MR. BARTHOLOMEW said Sempra is having discussions with all of the producers but he is not in a position to talk about supply arrangements. He said once Alaska is prepared to be earnest in its negotiations, Sempra will be very much prepared to talk about a contract.

REPRESENTATIVE HEINZE said Mr. Bartholomew mentioned that its current contracts are not exclusive. She asked if that is open to negotiation if the state can show something to convince Sempra at a later date that it is serious.

MR. BARTHOLOMEW said if Alaska really wants to do LNG, it will need to get very earnest in the next couple of weeks with the intention of finalizing a contract by the end of the year. He said all is not yet lost but the window is closing very rapidly.

CHAIR OGAN asked if Sempra would be interested in 1 bcf from Alaska.

MR. BARTHOLOMEW noted the West Coast is a relatively small market. He stated:

If 2 [bcf] a day were landed on the West Coast, if Sempra were to expand to accommodate that, it would make building a second terminal rather difficult. Okay, so, if Alaska thinks well, they can miss this opportunity and we'll catch the next one, it may be very difficult to do that.

CHAIR OGAN asked Mr. Bartholomew if he would be presenting to the Finance Committee tomorrow.

MR. BARTHOLOMEW said he will be.

CHAIR OGAN thanked Mr. Bartholomew and asked Mr. Thompson to testify.

MR. KEN THOMPSON, President of Pacific Star Energy, told members he was the past president of ARCO-Alaska and also headed up global gas marketing for ARCO and LNG marketing in the Asian Pacific region for ARCO. He told members he agrees with the charts shown by Mr. Bartholomew and he believes North Slope gas will be needed in the Lower 48 in the next 10 years. Pacific Star Energy believes Alaska's gas should never be tied up in one market; it should go to multiple markets. He stated:

We really foster what I would call a plan that would ship gas to the Lower 48 that would allow gas to be tied into the Chicago area, New York, as well as Pacific Northwest and we also endorse at some point LNG shipments from Alaska to the West Coast. We are a consortium of various Alaska companies across the state that [is] interested in having an equity investment in any project that happens. As oil has evolved in Alaska, no Alaska company today owns an interest in the TAPS oil line. No Alaska company today owns equity interest in the oil. We want to change that and when the natural gas industry evolves, it will be Alaska companies and Alaska individuals that hopefully can own up to 10 percent equity in any gas pipeline project and eventually even natural gas production.

Producers maintain legal title and legal marketing rights under the leases to 87.5 percent of the gas. On the other hand, the state does maintain - if it elects to take gas in-kind - maintains legal rights, legal title and full marketing rights to its 12.5 percent share of the gas. We think the state, while it cannot mandate that any project include Alaska investors, it certainly can suggest it and have strong input because of our ownership in natural gas.

If investors such as those mentioned by Mr. Heinze were to approve capital investment for construction of an LNG terminal for shipment of LNG to either the West Coast or even Asia, Pacific Star Energy would be interested in assessing equity ownership in that project as well. Very importantly, we submitted our plan a year ago last month to our investors and basically our plan is in two pieces. One, we'd own a ten percent interest in any gas project. Number two, we would use that cash flow within Alaska to play a vital role to building natural gas infrastructure within the state.

We are interested in constructing with private equity a hub distribution center in Alaska, a natural gas processing facility for natural gas liquids such as propane and butane to Interior communities, and we have already submitted and talked about concepts to our board of constructing spur pipelines to Fairbanks, Anchorage and even potentially to Valdez. We also will assess in the future regional electricity generation stations.

PSE, or Pacific Star Energy, also will carry on the work that has already been done to look at commercial viability of a natural gas petrochemical business on the Kenai Peninsula as spur lines come into the Anchorage area.

I'm extremely excited to tell you today that 12 companies have finalized investment and signed joint venture agreements with Pacific Star Energy so we are fully grubstaked, as [indisc.] would be. We're fully funded for the next two years to mid-2005. Our owner companies, we have 12 at this point - Arctic Slope Regional Corporation, Aleut Corporation, Bering Straits Native Corporation, Bristol Bay Native

Corporation, Chugach Alaska, Cook Inlet Region, Doyon Limited, Koniag Incorporated, NANA Development Corporation, Sealaska Corporation, the 13th Regional Corporation, and Pacific Rim Leadership Development are our current investors. We are currently talking with several village corporations that have expressed interest in investing and we have approached and will be approaching several non-Native Alaska companies. We have already talked to securities attorneys on even an Alaska IPO at the start of construction of the pipeline in 2007 so that every individual Alaskan can invest in this project.

We plan to work cooperatively with the major producers. Major producers do, we feel, control the gas project decisions in the near term and we are working with them cooperatively. We will cooperate, as I've already told Mr. Heinze and the Gas Authority, we just want a project - plan A being the producers' projects and let's call Plan B the Gas Authority project. We will invest in either Plan A or Plan B but there needs to be a Plan A or Plan B and we have funding through mid 2005 because we believe that producers should decide a project by the end of next year or mid-2005 or the Gas Authority make decisions by then and the state facilitate one of those two into happening.

We think that Pacific Star Energy and having Alaska companies can add new value to any project; for example, more profits would stay within the state to help the Alaska economy. We can foster investments. In fact, it's part of our base plan to have investments in in-state gas use and value-added processing. We will enhance Alaska hire. We can provide assistance obtaining pipeline permitting across Native and other lands and we want to assist in transportation of the state's share of royalty gas and, as Mark Hanley talked about, for smaller producers we think we can assist smaller producers in helping transport their gas. We certainly can assist in government relationships and we will deliver on our share of capital. To date we're fully funded through midyear 2005 and then at that point, phase 2.

Let me get to the bottom line of what we think is the optimal business plan. One, Alaska should foster both

these projects and the work continuing for the next two years. Alaska should not choose one over the other. It would be a big mistake and I say that from having marketed gas and having marketed LNG throughout Asia. As an old marketer, the worst situation you can get into is to market to one market. They, then, dictate the terms. Alaska should get its gas to multiple markets. I envision someday that there will be a project that's the Lower 48 pipeline. It will go into Alberta and from Alberta will be expansion of lines to the Pacific Northwest, Chicago, and New England. I envision that someday there will be a spur pipeline built down to Valdez, or perhaps even extend the pipeline to the Nikiski area and extend that LNG plant's life for shipments to the West Coast. We would make a mistake to ship only to the West Coast. I worked that market. I've made a lot of money and I've been burnt in that market. I've made a lot of money in the Midwest and I've been burnt there too. You want four or five regional markets that you're into that you can play one off the other based on the regional economic conditions - one percent growth on the West Coast now and the gas demand - 1.5 percent is being forecast in the upper Midwest and the New York area.

We hope that we can play a role. We hope this time when the natural gas industry evolves, that Alaskans will own at least ten percent. I will tell you this - I do think to keep an eye, very clearly, on the national policy - on the energy policy act - if that passes, I think there is a high chance and then also if the majors are able to negotiate a satisfactory agreement with the Administration and the Legislature, I do think you'll see chances higher than ever - and I've been in this business 30 years - I think the chances are highest ever that a decision will be made to go ahead by the end of next year.

If the national energy policy act does not pass, I think you'll find the major producers, and I cannot speak for them, if I were them I would not go ahead with the project without that passing. At that point, I'd give Mr. Heinze as much money as he needs. On the other hand, if it passes, I think the timing for the Gas Authority is not 2004. I think we have to play it out with the major producers to the end of 2004, cooperate, make that large project into multiple

markets happen. If the producers aren't moving ahead by the end of 2004, I'd give the Gas Authority the money they need in 2005. And that sort of wraps up my personal perspective.

REPRESENTATIVE HEINZE said she heard two messages from Mr. Thompson: one that the state should go down this road and get behind both projects; and second, wait another year and then give the Gas Authority the money it needs.

MR. THOMPSON explained that he was talking about money beyond \$3 million for the Gas Authority. He repeated that he believes both efforts should continue. He believes the Gas Authority will need far more because if the major producers cannot announce a project after a successful energy policy act, the producers should not be criticized because for them, the project is not competitive with other projects in the world. However, it will be time for Alaskans to build this project. He thought the major producers would be willing to sell their gas at that point.

REPRESENTATIVE HEINZE asked, "So, in that case, would you grubstake it?"

MR. THOMPSON said he has not looked at the full budget to know what the grubstake is. He said his grubstake is about \$1 million for the next two years. He added as a manager in any one of these companies, it is foolish to only come in with one project. These companies always compare two or three projects so certainly the major producers would understand that the state needs to look at multiple projects. He stated he opposes funding LNG in 2004. He said it is important to play out what the major producers are going to do. He said if the national energy policy act fails for the Alaska gas pipeline, the state needs to be prepared to fund a lot more than \$3 million for the Gas Authority.

REPRESENTATIVE FATE said the timeline Mr. Thompson has proposed is longer than many legislators want to see. Given that, and having acknowledged that the major producers are in contracting discussions with the Administration, he asked if Plan A could be forged on the premise that the national energy policy act will be enacted, since everything indicates it will. Back-up plans could also be devised in case the national energy policy act is not enacted, which would prolong the timeline. He asked why some presumptions can't be made that would shorten the timeline.

MR. THOMPSON said Pacific Star Energy's Plan A would go into effect if the energy policy act does pass because there are positive signs. Negotiations will continue and agreements with the major producers would be wrapped up by year's end. Early in the legislative session, the producers and Administration would propose the agreements for legislative approval. During the last half of next year, the boards of the directors of the three major companies would approve moving to the next step. Permitting would occur in 2005 and 2006 and pipe would be laid in the ground in 2007 through 2010. Gas sales would begin in 2011. LNG spur lines could be built soon after that, as new gas reserves are discovered. He advised that he would not sell more than 3 to 4 bcf per day from Prudhoe Bay due to oil loss but new gas discoveries could happen once the line is built. Companies will be exploring and there will be plenty of gas for an LNG project as well.

MR. THOMPSON said Plan B would kick in if the energy policy act does not pass. Alaska's view must be more like that of Indonesia, Qatar, and Malaysia. Those governments get involved and do what the Alaska Gas Authority is talking about. He said a New York Times article from the previous day reported that Sempra Energy and BP came to an agreement on the Tangguh project in Indonesia. That project is at tidewater so no pipeline is necessary. Labor costs are one-one hundredth of the costs in Alaska. He said other governments often help fund the LNG plant at a zero or very small return. He said when ARCO was in discussions, governments would help sponsor the LNG plants, which is why Indonesia is one of the most competitive suppliers. He said Alaska will have to play more of that kind of role if the energy policy act does not pass or if the major producers do not move forward by 2004 or 2005.

REPRESENTATIVE HEINZE asked Mr. Thompson to provide his comments in written form. He agreed to do so.

CHAIR OGAN asked Mr. Myers to testify.

TAPE 03-52, SIDE A

MR. MARK MYERS, Director of the Division of Oil and Gas, Department of Natural Resources (DNR), said he would first address some questions that came up earlier. The first question was what might happen, regarding in-state use, with the RIK gas contract. He said that contract has been negotiated but has not been approved by the royalty board or by the Legislature. That contract requires a preference for in-state use so it would not

be in conflict with the general state policy of providing in-state use for gas, provided the state gets at least the end-value revenue from that gas.

The second question was about oil loss in Prudhoe Bay. If no additional mitigation was done in terms of additional gas cap water flood or CO₂ reinjection into the reservoir, the off-take would be about a 2.5 bcf per day or up to 500 million barrels per day in a worst case scenario. If mitigation involves additional incremental water flood into the gas cap, a CO₂ reinjection into the reservoir, the number is probably closer to 200 million. That presumes the beginning off-take of gas in 2010 or 2011.

CHAIR OGAN noted that depends on where the gas is taken from.

MR. MYERS said that assumes about 2.5 bcf per day coming out of Prudhoe Bay for the first 18 to 20 years of the gas line. Some incremental oil would be picked up in the later years, past 2030, from Prudhoe Bay because the economics of operating the field are better in the off years when production is low. He said there is a wedge of increased production for time, but there is a net loss of oil due to the lowering pressure.

The third question was related to the state's rights to produce gas. MR. MYERS said the state does own its gas. The state can control gas off-take through its plan of development or plan of exploration through unitization because it has the lease contract rights. There is also an implied covenant to market with the leases. That said, the state cannot just say it wants its share of the gas out of the field right now - that would have to be part of a negotiated deal. If there is a market and the gas is not being produced, the state does have some rights under its leases under the unitization rules.

MR. MYERS said his presentation would include a review of Alaska's gas resource reserves, where additional gas might be found, and what the division knows. He then gave the following testimony based on a slide presentation.

If you look at this first slide, we have about 19 percent of the U.S. total gas reserves, and that's the Prudhoe Bay and Point Thomson reserves and some associated gas in the other fields on the North Slope. If you look also in those areas in green, there are other areas that are very under explored or virtually no exploration has occurred for gas in these

sedimentary basins. Indications are most of these areas in green are very gas prone and would contain gas that could be potentially commercialized. You can see TAPS is on there for scale but you can imagine a southern gas line route that will go past multiple lease basins.

So I'm going to walk through the situation in some of these basins but first I'm going to talk a little bit about what is there, again, our 35 or 36 tcf, depending on if you count associated gas in the fields. Then you have the upside potential, the amount of gas people estimate might be there and might be technically recoverable of that amount of gas in place - a pretty substantial large number - about 160 tcf is the current estimate. That number, of course, is just an estimate. It's from a multiple series of estimates from each basin that's broken out in this slide.

The other unconventional resources are huge in Alaska. As mentioned, gas hydrates, as Mr. Hanley mentioned with Anadarko's testimony - a very incredibly large quantity of gas hydrates exist and some of that directly underneath Prudhoe Bay and the Kuparuk River oil fields.

And then the last big category, the unknown, is coalbed methane and I'll talk a little bit about those numbers. You can see those numbers are just incredible in size - you know, 33,000 tcf or so in the hydrates and 800,000 tcf in coalbed methane. Those are sort of in place numbers, no economic filtering. The economic numbers, obviously, would be way less than that but still, a huge potential gas resource.

If you look at activity in Alaska, very little activity on the North Slope in fact, basically no drilling activity has been done specifically for gas. It's all been related to oil. Gas discoveries have been incidental to the oil discoveries. We know there's a significant quantity of gas in NPRA, we know in the Prudhoe and Point Thomson units, but basically if you look at the rest of the North Slope, very little gas has been explored for.

If you look geologically though, in incidental encountering, almost - this is the geological column

of the North Slope, all the little - on the right are the red dots listing fields and formations, but it just shows you that all the way through the geologic column, there are major gas shales. If you look at the potential gas in the future, it will come from some of those units like the Blue Lisburne unit in the foothills. It's very akin to similar basins that occur in the Rocky Mountain areas and in British Columbia, but are virtually untested. Some wells have been drilled in the foothills that do have gas shales at these intervals but no modern wells have really been drilled to test the potential. But certainly the geology suggests it's there. There's a general concurrence between the companies doing exploration in the foothills that the gas, in fact, is there and that their problems aren't so much exploration risk but they're commercial risk.

To show you the North Slope situation again, I said no wells really drilled - I will caveat that with the exception of Anadarko's gas hydrate exploration test just south of the Kuparuk and Prudhoe area. But if you look on this map, this kind of shows you multiple things. It shows you in green the outline of the sedimentary basin. The pink and brown colors are current state leases and federal leases and then the hatched areas are the coal methane that occur and the area in the green line is the gas hydrate stability field where we might expect to find the unconventional gas hydrates. So on the North Slope you overlay multiple different types of potential gas. Again, the primary source here that you would look for is conventional gas.

As you move further south in the area where you see that large lease block in the bottom of the green area, that's in the North Slope foothills. That is an area that we believe is dominated by gas, it's dominated by very large geologic structures. It's very akin to the Rocky Mountains or the British Columbia over-thrust belt. It is an area where companies have leased a substantial amount of acreage. Those companies include PetroCanada, Anadarko, Encana, UnoCal, Burlington Resources, and some others in lesser amounts. But they are banking on geologic concepts primarily for gas. At this point, they have not drilled any wells on those leases. They have shot

some seismic data. They've re-valued it and done a series of field works like, as Mr. Hanley said, have looked at the wells but they have not yet drilled. They have no plans that we know of for drilling in the area.

Gas hydrates - I'll just say basically gas hydrates are methane that's frozen in a crystalline matrix. The important thing about hydrates is the volumetrics in hydrates are huge for the given area - about 180 times. A conventional gas volume and a block of hydrate are the same size.

This just shows you under the existing infrastructure where the known hydrate accumulations are. The neat thing about the North Slope is these hydrates exist underneath the existing infrastructure. The pads and wells are there. A tremendous amount of data exists on their location but not a whole lot of data exists on how we commercially produce those. Anadarko's project is one of those. BP has a project where they're looking at it as well, both of these partially funded by DOE.

CHAIR OGAN asked if they either have to figure out a way to change the chemical composition of the hydrate to release the gas or heat it up.

MR. MYERS explained it is the same problem with ice water where the phase is changed with temperature or the pressure regime. Changing either one changes the stability field and the hydrates will come out of solution. Right now most of the data is known because when the wells are drilled through the hydrate zones, the wells are drilled quickly to try to case them off so that the hydrate field is not accidentally destabilized. The bottom line is that a great deal of data is available and the potential reserve is equivalent to or larger than the known gas reserves. He said that looking at any place in the world that will have large scale hydrate production, it will come from the North Slope first. Also associated with the 36 tcf number is some free gas in the shallower zones.

MR. MYERS said he would discuss the area south of the foothills. The North Slope and foothills have tremendous potential and contain enough gas to supply multiple projects. Without drilling to quantify those resources, no proposals can be taken to the bank. The state clearly needs to stimulate exploration drilling

in the foothills to get a better understanding of the numbers. Moving south, Alaska has nearly half of the nation's coal. It underlies about nine percent of Alaska's surface mass. Much of that coal is of the right rank and properties to produce coalbed methane. Coalbed methane numbers range to 1,000 tcf or more. Unless the coalbed methane can be produced economically, that number does not have a lot of meaning.

MR. MYERS reviewed a map of the Interior basins and the pipeline corridor and the resources that could be reached along that corridor. Both coalbed methane and potential gas are in the Yukon flats, Nenana basin, and the middle Tanana basin. The state has done an exploration licensing program in several of these basins. Exploration work permits are required under a license proposal. Exploration licenses have already been issued or will soon be issued for over 2 million acres. The licenses are about to be issued in the Susitna basin, the Nenana basin and the Copper River basin. He said the few wells that have been drilled had gas shales in them but the value of those reserves have not been fully quantified. Without a distribution system, the economics will always be problematic with the exception of Fairbanks, where there is a local market for a sufficient amount of gas.

CHAIR OGAN asked who has the exploration licenses.

MR. MYERS said Andex Petroleum has the license in Nenana; Forest Oil has two license proposals in the Susitna Basin; Peer Flame (ph) has one south of Susitna, and Andex and Forest Oil have one in Copper River. In addition, three parties have shown interest in a license proposal for Bristol Bay. He noted the Copper River Basin is dominantly gas prone and the Susitna Basin is an extension of the Cook Inlet Basin.

MR. MYERS said he would next discuss some of the issues in Cook Inlet. Of about 11 tcf of total gas reserves in Cook Inlet at one time, 9 have been produced, so about 2 tcf remain. Most of the gas in Cook Inlet was discovered in a search for oil. Of the largest 10 fields, only one was specifically found while exploring for gas. Cook Inlet has historically had more gas than market and the gas was stranded, which is why the LNG plant and a large-scale fertilizer operation were built. That is changing now. Current usage is about 220 bcf per year. The chart shows the distribution of that gas use.

REPRESENTATIVE HEINZE asked if all of the Beluga Point electric generation is based on gas reserves.

MR. MYERS said that is correct; it is all gas generation based on the Beluga River field. He said that Southcentral's entire infrastructure is dependent on gas, from energy to its economy. The whole economic picture will change if there is not enough gas. He noted the utility market uses much more gas during certain periods of the winter than the chart demonstrates. He said historically, there has always been extra gas but now gas has to be put in storage to meet peak demands. The utility market pays more for gas than the LNG export or fertilizer market because the utilities must have it. The demand for utility gas has spurred more exploration.

REPRESENTATIVE HEINZE said she does not believe people realize how vulnerable they are.

MR. MYERS said a ten-year supply is in bounds but we need to find more reserves. As gas supply has dwindled, there has been more exploration. Most of that exploration is deliberately focused at market. For example, Northstar's goal is to provide gas to the Homer market. Ninilchik's goal is to provide gas to the utility market. He said the question is how long is it sustainable and what is the reserve base. He said the good news is that exploration is occurring due to the gas price.

MR. MYERS said one of the key drivers in the long-term supply of gas for Alaska will be coalbed methane, particularly for Southcentral Alaska. To that end, the state has shallow gas leasing and a large conventional pioneer unit in the Wasilla area. He said it is important that the state find out just how commercial coalbed methane is. To date, Evergreen Resources has drilled eight wells and is now testing them. There is a lot of tension in Alaska because these projects are being challenged environmentally. The resource sits in an area with a fairly high population density, by rural Alaska standards. He said it is important to understand the resource because it could be the supply to fill the gap for Southcentral Alaska.

MR. MYERS said another potential area for exploration licensing and leasing are the onshore portions and state water portion of the Bristol Bay-Alaska Peninsula area. The local communities approached the state looking for a cheaper supply of energy. The Administration proposed several activities. He explained the Alaska Peninsula area was explored up to 1985. That area has multiple gas and oil shoals but the resource base in that area has not been quantified. He said if commercial quantities of gas were found in that area, it is pretty well suited for an LNG

project. The deeper part of the basin is in the federal acreage, which is under a federal moratorium. The state is not suggesting that the federal moratorium be lifted but it is planning a lease sale in the southern part of the basin in 2005. To that end, the division will be coming to the Legislature and asking for a small change to its leasing program to allow the division to do the lease sale in 2005. Under the normal process, the division would have to wait until 2006 because it would have to introduce the sale at the first session of the legislative session rather than the second session.

MR. MYERS said the division will play a role in helping to get wells drilled by providing incentives. The current EIC incentive allows the state to pay for part of the cost of data gathering. A new state program enacted last year allows up to 40 percent of the cost of the well to be credited to severance taxes. In addition, the Governor is looking at strategically placed roads to access certain areas, particularly on the North Slope. In those areas, it might be better environmentally to create baseline roads rather than temporary roads or rely on partial ice roads. He offered to answer questions.

There being no further questions, CHAIR OGAN thanked all participants and adjourned the meeting.