ALASKA STATE LEGISLATURE
JOINT MEETING
LEGISLATIVE BUDGET AND AUDIT COMMITTEE
SENATE RESOURCES STANDING COMMITTEE
October 14, 2004
9:05 a.m.

MEMBERS PRESENT

LEGISLATIVE BUDGET AND AUDIT

Representative Ralph Samuels, Chair
Representative Mike Chenault
Senator Lyman Hoffman
Senator Con Bunde
Representative Reggie Joule, Alternate

SENATE RESOURCES

Senator Tom Wagoner, Vice Chair
Senator Kim Elton

MEMBERS ABSENT

LEGISLATIVE BUDGET AND AUDIT

Representative Mike Hawker
Representative Vic Kohring
Representative Beth Kerttula

Senator Gene Therriault, Vice Chair
Senator Ben Stevens
Senator Gary Wilken

SENATE RESOURCES

Senator Fred Dyson
Senator Ralph Seekins
Senator Georgianna Lincoln

OTHER LEGISLATORS PRESENT

Senator John Cowdery
Senator Gretchen Guess
Senator Hollis French
Representative Eric Croft
Representative Bud Fate (via teleconference)

Representative Lesil McGuire
Representative Carol Gatto
Representative Nancy Dahlstrom

COMMITTEE CALENDAR

ALASKA NATURAL GAS PIPELINE ISSUES

Presentations

The Process of and Criteria Used in Making a Decision on Whether to Invest in a Pipeline Project - Mr. Ron Brintnell, Director of Gas Pipeline Development, Enbridge

The Process of and Criteria Used in Making a Decision on Whether to Invest in An Upstream or Midstream Project - Mr. Ken Thompson President and CEO, Pacific Star Energy and Mr. Joe Marushack, Vice President of Alaska Gas Development, ConocoPhillips Alaska [Presenting on behalf of ConocoPhillips, BP, and Exxon Mobil]

Economic Impacts of Alaskan Ownership of an Interest in an Alaska Natural Gas Project - Mr. Tony Palmer, Vice President, Alaska Business Development, TransCanada

Training and Hiring Alaskans for a Gas Pipeline - Commissioner Greg O'Claray, Department of Labor & Workforce Development; Mr. Jim Sampson, Alaska President, AFL-CIO; Mr. Jim Laiti, Business Manager, Plumbers and Pipefitters Local 375; Mr. Click Bishop, Executive Board Member, Operating Engineers Local 302; Mr. Mike Gallagher, Business Manager/Secretary-Treasurer, Laborers' Local 341; Mr. Dick Cattanach, Executive Director, Associated General Contractors; Mr. Bob Morigeau, District Representative, Operating Engineers 302

ACTION NARRATIVE

TAPE 04-32, SIDE A [BUD TAPE]

CO-CHAIR RALPH SAMUELS called the joint meeting of the Legislative Budget and Audit Committee and the Senate Resources Standing Committee to order at 9:05 a.m. Senators Hoffman, Elton, Cowdery, and Guess and Representatives Chenault, Gatto, Joule and Chair Samuels were present. He announced the committee would take up the first agenda item, The Process of and Criteria Used in Making a Decision on Whether to Invest in a Pipeline Project, and introduced Mr. Brintnell.

MR. RON BRINTNELL, Director of Gas Pipeline Development, Enbridge, thanked members for this third opportunity to speak to the committee. He said he hoped to bring a unique pipeline development perspective to the discussions and gave the following presentation [based on a Powerpoint presentation, a copy of which is located in the committee file.]

> A little bit of background - today almost all major interstate pipelines, both in the United States and in Canada, are owned independently of producers. They are run independently but there has been some transition. For example, the Alliance pipeline, which Enbridge now owns 50 percent of, runs from British Columbia through to Chicago so it's a pretty substantial pipeline - not only interstate but across [the] border. It initially was mostly producers that were in that project. It was producer led. Enbridge was the only pipeline company from day one. We started off with about 15 percent ownership and that particular project, what happened is the producers had a desire to get a new pipeline up and running and so they led it to the point where they felt that it was going to get developed and they slowly exited that project and more pipeliners got involved. Because there aren't as many producers right now owning pipelines doesn't mean there isn't a role for them in the development of projects. We've seen before that that works well and I'll talk a little bit more about how pipelines evolve over time and their ownership evolves.
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> The MacKenzie Delta project in Canada is one of the most recent producer led pipelines so there are still ones that are being led solely by producers. Another example is in the U.S. Rockies and Canada - is looking to develop a project ... basically from Colorado through to Wyoming and that's being led by the producers so producers do do their own development but typically you'll see some sort of transition.
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> What does it take to get a pipeline built? Some of this will be repetitive from what you've heard before but I want to bring you a pipeliner's perspective. Basically there [are] two things that get pipelines built. You either have supply-push and that's partly what we see here today in Alaska. There [are] substantial resources available that need a home. The producers and the developers of that gas are looking

for a way to move it to market and there isn't any existing capacity to do so.

Examples of that, like I said, are the Alaska pipeline but, also more recently, the Maritimes Northeast Pipeline in the Canadian East Coast. Gas was developed out there about five years ago. The producers went out and found it. There wasn't any ready market for it on the Canadian East Coast so they developed a pipeline to run through to the Boston area and they did that jointly. That was another case where producers worked cooperatively with pipelining companies to get that project done so that was a case where supply had no home and they went out and developed a pipeline.

The other supply push is where there is insufficient take-away capacity. There is already capacity available but it is not able to take all the gas and move it to market. Alliance was an example of that, as I mentioned before, where TransCanada had a pipeline running from the western Canadian sedimentary basin to the Chicago area to Ontario to the market, but the producers felt that it was insufficient, that it was depressing prices. They went out and led the development of a new pipeline and that led to Alliance. Same thing is happening right now in the U.S. Rockies. I think you heard yesterday about Kern River's expansion to California. It's expanded a couple of times. There have been new pipelines being developed. El Paso is developing the Cheyenne Plains project to move gas out of the Rockies so it's not that there isn't capacity, it's just insufficient to get that gas moving to market, which results in depressed prices so there's a driver to try to get the pipeline built.

The other catalyst, I like to call it, is basically market pull. We heard a lot yesterday from UBS and others, and I'm sure you've heard lots of it over the last several months about the fact that Alaskan gas is needed. The market for gas is continuing to grow through gas-fired generation, just through general economic growth both in Canada and the United States, so we believe there's a need and a market desire for the additional gas - that's what's driving all the LNG development is the fact that the market requires it.

So, in the case of Alaska, we believe that there's both a market pull and a supply push. It's not just the fact that this gas doesn't have a home or needs a home. The market requires it and so we believe that the market will ultimately step up and I'll talk a bit about that because I think there is the ability for the market to play a role, not just the producers and the state to be capacity holders but others as well, and the biggest driver for the market to potentially step up is that there is increased cost of gas. Ten dollar gas? It doesn't make Moms and Dads happy, plus it makes the economics of various industries more difficult so there is the desire on the behalf of the downstream market to see not only lower prices, but also more price stability. The volatility we see today is not good for anyone.

Investment environment - what do pipeliners look for when considering to invest, not only in an Alaska pipeline but I'd like to talk more generically about investment in general. What do Enbridge or other pipeline companies look for when they're considering an investment?

Firstly, we want to know that there's an adequate supply behind the pipeline. These are long term investments - 20, 30, 40 plus years. It's nice to know that there will be an adequate supply. That doesn't mean it needs to be fully developed today. It just means that we have to have a sense that it has the ability to be developed. In the case of Alaska, we've heard a lot about the fact that there's lots of potential for new supplies and so as a developer of pipelines, we like to hear that. You know, we like to encourage new growth and if we were to work on this project, we would want to encourage the ability to move more gas on the pipeline, not just the existing shippers but those in the future as well.

In terms of shipper commitment, we want to know that those who commit to take capacity can pay for it in the long haul because this is a long-term commitment. You heard yesterday about the billions of dollars of commitment that the various parties are going to make. That's substantial dollars. The federal loan guarantee will help but we will still have to do our own independent credit checks on the various shippers. In the case of the Alaska project, they will be pretty substantive and creditworthy parties but in other projects, unlike the Alaska project, you may find a more diverse group. It was interesting in the days of the marketers, credit was an interesting issue and it became more so in the last four or five years when some of those marketers' credit wasn't so strong. So it is an area we look at pretty closely.

The constructability - can we build it, not only in terms of land access but just in the environment we find ourselves in when trying to build it. Alaska's going to be challenging. You've heard, I think over previous hearings, things about the difficulty of building in permafrost. It takes a company that's had experience and understands those challenges to get it built, so it's not just a matter of being able to have the finances to build it. You have to have the skills to be able to build it. Enbridge has had some pretty significant experience in building in permafrost. We were the first ones to build and operate in permafrost in Canada. We've been doing that since 1985 so you have to have someone who's experienced in the various challenges in being able to build a pipeline.

Material and labor - you've probably heard quite a bit about this over the last several months. With the size of this project, it does have the ability to overheat the market for labor. There's going to be a lot of jobs, a lot of job opportunities. That also - and I think someone joked yesterday about the fact that, you know, has the ability to create the desire to make more money, maybe we'll slow that project down or we'll ask for more. Hence, there has to be the ability to balance that and have dialog with the unions and with others on how we can all make a fair profit and a fair return from this but not overheat the market. You also have to have a look at what is also going to be going on at the same time. The Alaska project is not the only project that's potentially going to be going on in this kind of timeframe so, as a pipeliner, we try to see what other projects might be being developed at the same time and have that dialog to make sure that we're not trying to pull too hard on the same resources.

REPRESENTATIVE ERIC CROFT asked Mr. Brintnell to address the price of steel.

MR. BRINTNELL said that right now, the price of steel is very high. The Chinese market is taking all of the steel it can get. The price of steel has increased 50 to 75 percent over the last couple of years. That price increase is causing problems for pipeline companies in being able to predict what the costs are going to be. Some of the existing projects that are going forward today relied on relatively firm pricing, only to find out that is not the case because the market is so hot. He acknowledged that will be a challenge for the Alaska pipeline project because it will require so much steel and will tax the ability of the steel mills to produce it. He thought that issue can be dealt with by initiating a serious dialog with steel producers. He said it does not differ from the labor market in that you say, "Okay, here's an opportunity for you to make some money but let's be realistic as to what your expectations are." He said another consideration will be the type of steel used. Some of the newer steels have not been tested over long distances.

CO-CHAIR SAMUELS asked if the steel manufacturing plants or pipeline companies do the testing.

MR. BRINTNELL said the pipeline companies do and noted that some limited scope tests are underway right now for the higher-grade steels.

CO-CHAIR SAMUELS asked the timeframe of the tests.

MR. BRINTNELL said it is not the testing that is as important as getting comfortable with the technology. He said, for example, X-180 pipe has been used in the United States for a very short time on the Cheyenne Plains project, even though that steel has been around for a while.

CO-CHAIR SAMUELS announced that Representatives Fate (via teleconference), Gara, Croft and Senator French were in attendance.

REPRESENTATIVE GATTO asked Mr. Brintnell to equate the amount of steel that will be necessary to build the pipeline to another project, such as building an aircraft carrier, so that he could gauge how involved getting the metal will be.

MR. BRINTNELL likened that to comparing widgets. He thought another presenter said that it might take the entire world's steel capacity production, although he would not go that far. He said the amount will depend on the size of the pipeline. Enbridge has considered not only 48 and 52-inch pipelines, but it has also considered a 36-inch pipeline, the reason being that the existing steel mills in North America are able to handle a 36-inch pipeline. He said although capacity might have to be increased if a 36-inch pipeline is built, the steel mills could continue to build 36-inch or 42-inch pipe once the Alaska pipeline is completed. Enbridge believes a substantial part of the steel can be sourced within America but offshore sources will be necessary because of the size of the project.

REPRESENTATIVE GATTO asked if the world's steel production could be tied up in this project for one year.

MR. BRINTNELL was unsure.

REPRESENTATIVE GATTO questioned whether this project could be stalled by a lack of metal.

MR. BRINTNELL said the steel supply is a very important consideration so ascertaining where the metal will come from is part of the dialog that must take place now, as well as whether the Chinese market will remain as hot as it is now.

CO-CHAIR SAMUELS noted that Representative Dahlstrom joined the committee.

REPRESENTATIVE GARA pointed out that Enbridge is the only company that is proposing to build one or two 36-inch pipelines instead of a larger one, which could increase the cost of the project substantially. He asked Mr. Brintnell why two 36-inch pipes would make this project cheaper.

MR. BRINTNELL answered:

> ... A couple of reasons, one is do we know what the shipper commitments are going to look like from day one. Do we know what development might look like down the track? You know, we've heard the fact that we want to make sure that the Alaska project isn't just for existing producers, that there's the opportunity for others who, as they develop supply, to bring it on board. You heard a bit yesterday about being able to loop. The positives, and I want to make it clear that

Enbridge is not pushing dual 36-inches, we just think it's important to be considered as an option, is that you can start off slower. You can build one 36-inch pipe, make sure it's full and, as additional supplies come onboard, either because you don't want to overheat the market - you heard yesterday about the impact that can have on prices, which impacts your netbacks, both as the state and as the producer. You can bring on looping, 'incrementalize' the supply.

The other thing is it adds reliability. If you have a dual 36-inch line versus a single 48 or single 52, if there is an issue with part of the line, a compressor failure or somewhere along the line you need to do maintenance on a piece of the line, you don't go from 100 percent capacity to 50 percent - you go, typically, from 100 percent capacity to about 70 percent capacity - just the way you can bypass the section that you have a problem in [indisc.] to flow so there is some reliability benefits associated with dual 36.

So, in the context of what do you invest in, that's one of the things, and ... you'll see later on that I talk about reliability. Reliability is not just price. Shippers look to a pipeline company not only to give them a competitive price, they also want to make sure the gas gets to move because if you're going to have to pay your shipping commitment - and you heard that yesterday that a big part of this is ... in most cases, you're going to pay. I wouldn't say it's Hell or high water, but in most cases, you're going to pay for your shipping commitments. You want to make sure that that gas can flow. And so, in the context of reliability, what do you invest in. Sometimes duplication is more reliable and you're willing to pay more for that.

MR. BRINTNELL continued with his presentation.

And then finally, can you finance it? I'll talk a bit more about that later on. You sort of segued into my next slide, which is what motivates the various parties because, as a pipeline developer, we're only one of three parties potentially to participate. Producers do want the lowest cost of delivery. Obviously, as the state and as the producers you want the highest possible netback but I have experienced before where the lowest cost pipeline doesn't necessarily get to be the one that gets to be built. They're looking for reliability. They're looking for 'optionality.' You know, does your pipe give things that others wouldn't? And I say 'optionality,' for example, in the case of the Alliance pipeline. It provided for free fuel-only interruption - interruptible service. So what do the various parties bring to the table - so they're not just talking about the lowest demand charge but what other things can you bring to the table.

The market's the same thing. The added mix, I guess, in the downstream market is they all started buying the gas so they want to know - they want to have competitive and reliable gas pricing.

And then the transporter side - we're looking for a fair return and I will talk a bit about what we classify as fair return, risk/reward balance, later on. But we want to have manageable risk. We're not looking for no risk. There isn't the ability to have no risk but we want to understand our risk to be able to manage it and then have some financial certainty around the risk that we define.

You heard yesterday a bit about - from what we call the [indisc.] bar hopping. I like to call this the oval of opportunity. Basically, as the risks increase, as investors and developers in pipelines, we are looking for the opportunity to make more money. Now that's just - they go hand-in-hand. We will and have been, when we can take risk, pipeliners will take development risk. We like to take the risk we think we can manage. One of the things the pipeline companies do is build pipelines so we should be able to manage construction risk and we'll take some of that risk. Things that are beyond our control, for example, steel price. No matter how hard we might want to try, as an individual company, to manage steel prices, we can't. We can't control the global market so those are the kinds of risks where you have to try and look for a balance between the developer and the other industries as to who gets to share that risk-reward balance.

You know, technology - we talked a bit about that. Where do you decide to take which pipe? It really depends on where you are in the process. As we move along on the Alaskan project, it has become more and more important to move it along faster. Well, do you take the risk of unproven technology? You might and it might bring the cost down, but you have to bear in mind that you're taking a risk. So that's the kind of thing - you have a dialog with not only our own company and the banks because they're important to this, but also the shippers themselves saying look, there are things we can do. We can bring the cost down but there's a cost. The cost is the risk goes up essentially.

What do we need to invest? Typically, and I think you heard this yesterday, typically looking for return on equity around 12 to 15 percent. Fifteen percent - there are projects going on right now that are in the 15 percent area. There are those going on at 12. It could potentially be lower than that. It really depends upon what the risk balance is. Our investors look - the people that invest in pipeline companies are looking for return so they're looking for us to make, you know, an adequate return - 12 to 15 percent is kind of the range they're looking for us to make on investments, otherwise they could invest their money somewhere else. So that's kind of the range in order for us to get the equity we need in our companies. That's the range of return we're looking for. We need access to that and there was quite a bit of discussion yesterday about the fact that for this project there likely will be a fair bit of opportunity to bring in various types of debt, both through the equity markets and through the other forms but we have to understand where that debt is coming from.

I talked a bit about cost certainty. It's not cost certainty as much as it's predictability. We need to be able to predict what those costs are. What are the bands? You asked, in the context of making an investment decision and I'll bring it back to about 36 versus 52 or 48, having built quite a bit with the small diameter pipe, we are better able to predict, we think, what the cost variability might be like in that and so put a tighter band on what the outside might be, versus say, a 52 or a 48, which hasn't been tried as much so you have a higher unpredictability on a higher size pipe that you might not have on a 36. So that is having the ability to better manage and better understand that cost uncertainty. Is it worth something to the shippers? It might be or they may say no, I want the lowest cost pipe. But that's the kind of thing we consider when we look at pipes.

Regulatory certainty - I'm sure it's been talked quite a bit about in previous hearings, not so much in this one, but that's important to us as pipeline developers - understanding the process not only from gaining land access but just in terms of getting the tariffs approved. In this project we've got the FERC approval we're going to need to have. We're to the NEB - National Energy Board approval in Canada. Can we understand the process? Do we understand the process? Is it clearly defined - and not only the process going into it but over the long haul? One of the things that pipeliners are most concerned about is that we develop a project only to find the regulatory environment change after the fact. We're willing to look at the oval of opportunity and take more risk, but we don't want to then find out that after we've taken that risk and expected a higher return, only to have that clawed back after they've said well no, you've taken the risk and thanks very much and now we want a lower return. We want to have regulatory stability over the longer haul.

... The last point is we need to understand how we're going to get access to the land, both the state, federal, private and the aboriginal Native corporations that play a big role there.

REPRESENTATIVE CROFT asked what risk Mr. Brintnell is referring to since cost overruns would be added to a FERC 12 percent base.

MR. BRINTNELL said that is not necessarily true even though the implication has been made that pipeliners do not take risk. Enbridge has a long history of that not being the case. Enbridge prefers negotiated settlements in which it will take some risk. During the negotiations for the Alliance Pipeline, the developers negotiated a 12 percent return but that was variable. If the developers were able to bring the project in under budget, the return could go up. If it came in over budget, the return went down. In the case of the Alliance Pipeline, the return did go down so the shippers were not the only ones bearing the brunt of a cost overrun. He noted that more and more, pipeline companies are entering into negotiated settlements. Enbridge believes the Alaska pipeline will be a negotiated settlement that will contain some risk/reward balancing. He added:

> Other things are you take some risks operationally. Our ANR-Vector Pipeline, which runs from Chicago to Ontario, we benefit and take pain on an O&M basis, operation and maintenance basis, so if we do better than we predict, then we, the pipeline owners, get to share in some of those benefits. But if we do worse, we bear the pain and we share that with shippers. So it isn't quite as straightforward as no risk because you could build a no-risk pipeline. But, quite frankly, I don't think that any of the shippers, including the state if you decide to be a shipper, works out that way. I think you're looking for pipeline companies to take some risk and be innovative on how they might be able to do that. And we're willing to do that. We want to. I mean the reality is our investors in our companies look for us to do better than just, you know, a flat rate. They want us to try and make more money and so they're expecting us to take risk.

REPRESENTATIVE GARA said everyone has accepted as a given that the investors in a pipeline expect a 12 to 15 percent rate of return, as that is what pipelines have earned historically. He questioned why that is still the case in today's financial markets where people are looking hard to find an investment that will return 7 percent.

MR. BRINTNELL said that number is not "gospel" but one needs to distinguish between financial investors who will take a lower return and companies that know how to run pipelines. Enbridge's investors are looking for Enbridge to bring a return in the 12 to 15 percent range, depending on the risk. He maintained that this project cannot be solely financed by financial investors. He pointed out that the other owner of the Alliance Pipeline is a financial player, not a pipeline company. Its returns and expectations are different but they do not know how to run pipelines and are in it solely on an investment basis.

REPRESENTATIVE FATE recalled that a 36-inch pipeline was discussed at an earlier date and asked if that option is still on the table. He asked what some of the deleterious aspects of a 36-inch pipeline would be.

MR. BRINTNELL said that option is certainly still on the table for Enbridge because it reduces the potential risk. He said the downside is the higher cost. However, if growth to 4 BCF does not occur for five to seven years, it makes more sense.

CO-CHAIR SAMUELS noted the presence of Senator Wagoner.

MR. BRINTNELL said he would not focus on financing considerations as that topic was discussed at length the previous day but he pointed out that basically, Enbridge and the financial community are looking for the same things. The banks want to be assured they are dealing with financially strong players and that whoever is putting equity in has experience. He repeated that financial players will take a lower rate of return because they know that those who are looking for a higher rate of return have the experience and are risking their own dollars to make a return. He pointed out that regarding risk, "Our money comes last, the banks come first." Financing companies are also looking at the quantity and kinds of reserves that are backing the pipeline. He continued with his presentation:

> There can be quite a broad variety of sources of debt, and I won't go through this. Once again, you heard yesterday quite a bit about who might invest, including the equity market, pension funds, but they are looking for - they are happy to invest in pipelines because the returns are higher than they might get in other ways but they still want to know that there's someone reliable and able to run that pipe. That's why they're willing to invest in potentially not the same return that others might, because they're not pipeliners.
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> I'm going to skip through this. This talks a bit about what they're looking for and the biggest thing is debt service coverage ratio. They want to know that there's sufficient commitment to pay them back because the banks get paid first and participants like ourselves get paid later and hence, the reason why you want a slightly larger return because you're paid last.
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> A bit of a commercial for those of you who don't know who or may not know who Enbridge is. We're a pretty substantial pipeline company - about $13 billion in

assets. We own and operate the world's largest oil pipeline so we have a number of years of pipeline experience. We built the first pipeline in continuous permafrost, so the most technical hurdles and issues we've got a bit of experience with. We built a distribution company in Inuvik [ph] so we know that one of the key aspects of this project is local markets and how can that be accessed so we're looking to try and help in that.

We may or may not be an investor in the LDCs but at least we understand some of the difficulties in getting gas to new areas. We brought gas to Inuvik. We brought gas to New Brunswick, which never had gas before. So being an LDC company, a local distribution company ourselves, we kind of understand some of the challenges that it takes to get gas to new regions - just like Alaska is trying to do. We have a strong environmental track record. We have won numerous awards for building pipelines and operating our pipelines. We think we're kind of uniquely able to participate in this project and we think that we have a strong history - we do have a strong history - with engaging First Nations people.

We will be looking at taking a potential shipping commitment on the pipeline so I know there were two divergent opinions yesterday as to whether local distribution companies would in fact step up and take capacity. Enbridge is taking a very serious look at taking capacity on our own right for our local distribution company in Ontario, so we could potentially be a shipper. We are looking to go and talk to other LDCs, both in the Chicago area and as far east as New York. We believe, and we've seen indications, that they will be or might be willing to step up. The issue they face is being able to get regulatory approval. With markers stepping up several years ago and taking capacity, the LDCs were discouraged and, in fact, told they couldn't take long term capacity commitments. With those markers leaving, the opportunity is there to let them take it again, but the regulators have to be encouraged to allow them to do that. So we're going to go out and work with the LDCs to see if we can't have some dialog with those regulators and potentially with the states themselves because we think they're the ones that are going to benefit from your gas. You'll benefit because you're going to earn the royalties and the revenues. Those states benefit because the gas gets there and so we believe that there is an opportunity for Alaska to go and talk to those other states and encourage them to encourage their regulators of those LDCs to be able to take long-term commitments. And we know they are looking at it. I've talked to LDCs that are looking at potentially taking long-term commitments on LNG facilities so if they're willing to take long-term commitments on LNG, why not Alaska? So we think there's an opportunity there.

And I guess the last part of the commercial is we have had pretty extensive cross-border. The one thing we've talked about - these hearings are all about Alaska but this is a cross-border project so we think it's important to be able to look not only at the U.S. side but the Canadian side and understand some of the politics and issues and we've had a long experience, through Alliance and through Vector and other pipelines of dealing cross-border. So we think that we're uniquely well positioned there and that sort of ends the commercial.

REPRESENTATIVE GATTO said the Governor remarked that he was in active negotiations with both TransCanada and the producers. He understood the Governor to say that was because he had reimbursable service agreements (RSAs). He asked Mr. Brintnell if Enbridge has reimbursable service agreements also.

MR. BRINTNELL said Enbridge has not signed an RSA, not because it is averse to doing so but because it has been focusing on where it can add value first, which is why it is looking at having the LDC discussions and at dual 36-inch pipelines and a few other things. He noted that Enbridge is more than willing to sign those agreements but, again, believes it is more important to focus on other areas of the project right now. Enbridge's understanding is that the rights-of-way will not be exclusive so it is not concerned that there will be no opportunity. He said Enbridge officials met with the Governor's staff this week.

REPRESENTATIVE GATTO indicated that dual 36-inch pipelines will have more capacity than a single 48-inch line, so that the dual 36-inch pipelines may cost more but can deliver more. He estimated that it would take 1.8 36-inch lines to equal a single

48-inch line. He asked for the ratio of the increased cost versus what the state would get.

MR. BRINTNELL guessed the amount to be .5 billion cubic feet, maybe more. He added:

> The thing about it is is that you don't directly go to a dual 36. You loop it out so the beauty of it is that if we thought we were only going to get to the point that we needed capacity for a 48, you wouldn't necessarily fully loop out the 36. You can incrementalize yourself to the various capacities, unlike building a single pipe where you build it and it's there. In the case of a dual pipe, you can build it up over time.

SENATOR GUESS indicated that Governor Murkowski opined during his presentation yesterday that he must take some risk in order to move the project forward. She asked Mr. Brintnell his opinion about whether the state must take risk or must take some ownership in the pipeline to move the project forward.

MR. BRINTNELL replied that Enbridge believes the state has a role to play and the ability to take some risk that an independent company like Enbridge does not. He continued:

> There are some benefits that the state will get from a project that someone who was just purely investing in the pipeline won't. You know, the fact that the gas moves from the state has some benefits so I think there [are] benefits in participation ... it just depends on how you structure the risk. I'll give you an example, not necessarily what I would advocate here, but we've looked at before where some parties are willing to take more risk or have more opportunities than [indisc.] a producer who would be participating in the pipeline. They might be willing to take more back-end risks. In other words, allow the pipeline to take potentially a lower return but have more stable returns and they would get more returns at the back-end. So, you know, that's the kind of thing the state potentially could do is say okay, we'll participate on an equity basis. We'll take more returns than you will, Enbridge or a pipeline company, because we're willing to take slightly more risk. So I think that the state, you know, could have a role to

play here. Is it essential? I'm not sure it's essential but it's positive.

SENATOR GUESS said she is aware of the positives and negatives but was trying to ask whether it is essential.

CO-CHAIR SAMUELS asked if Enbridge has partnered with any government entity, regarding an equity share.

MR. BRINTNELL could not think of any government partnerships in the Canadian or U.S. pipelines but he was not sure about offshore projects in Colombia or Spain.

CO-CHAIR SAMUELS asked if Enbridge simply did not need government equity participation in the Canadian or U.S. pipeline projects or whether it chose not to deal with government bureaucracy.

MR. BRINTNELL said Enbridge did not need government equity participation. He pointed out that Alaska is in a unique position because 12 percent of 4 BCF per day amounts to a lot of gas and puts Alaska in a unique position.

SENATOR ELTON asked Mr. Brintnell if he was referring only to equity.

MR. BRINTNELL said he was. In terms of shipper commitments, Enbridge discussed a project with the Wyoming Pipeline Authority in which the state might have been a shipper. He clarified that Enbridge has had dialogs with government entities about entity participation in the past but nothing was formalized.

CO-CHAIR SAMUELS thanked Mr. Brintnell for his presentation and introduced Mr. Ken Thompson, past Executive Vice President of ARCO and the past President of Arco Alaska, and Mr. Joe Marushack, Vice President of Alaska Gas Development, ConocoPhillips Alaska. He noted that Mr. Marushack would be presenting on behalf of ConocoPhillips, BP and Exxon Mobil. He informed members that Mr. Thompson would be giving two different presentations and wearing two "hats" so he asked members to limit questions to the specific presentation entitled, The Process of and Criteria Used in Making a Decision on Whether to Invest in an Upstream or Midstream Project.

MR. KEN THOMPSON explained to members that he would be wearing the hat of an ex-ARCO Executive Vice President, having sat and participated in meetings of that corporation for his last two years at ARCO, and that he would also be arguing for capital for Alaska as President of Arco Alaska from 1994 to 1998 and explain how projects got prioritized on the capital allocation list of that corporation. He said he is currently serving on the audit committees of the boards of directors of Alaska Air Group and the Coeur D'Alene Mines Corporation, where he oversees capital allocations. He began:

> How did large corporations like an ARCO make decisions? How did capital get approved when projects were commercial? Not all projects that were commercial were approved. There is a finite amount of capital that any company can spend, as I'll describe in a moment.
>
> Before I get into that, I'm going to briefly talk about something that's extremely important from the discussions yesterday. Those were ... [END OF TAPE 04-32, SIDE A]

TAPE 04-32, SIDE B

MR. THOMPSON continued:

> ... or helped oversee signing of joint venture agreements for natural gas development and pipeline development with Malaysia. It was joint venture LLCs, profit sharing, as well as they took equity participation. I also signed similar joint venture participation agreements in the country of Thailand - also, in the country of Indonesia, where ARCO had a lot of operations. All the deals we made there in development [were] equity participation by the government company, as well as production sharing and profit sharing. I also signed deals in Trinidad natural gas and also deals in the country of Qatar in the Middle East. All of these deals were, in fact, what Pedro Van Meurs talked about yesterday.
>
> These were deals that ARCO moved ahead on on natural gas development, where those countries took an equity participation and I recommend that the legislature also approve that Alaska this time changes the business model, that this time, Alaska takes an equity participation in the pipeline - at least your 12.5 percent share to more or less obtain the tariff profits on your royalty share of gas. I've also been

recommending for two years that the state take its royalty gas in-kind and you get in the market and you see what you can do, whether it's your own little division that you set up with experienced gas marketing or you can contract that out to very viable excellent gas marketing firms.

These decisions are very important. I also found very important, and it was very significant, and I don't know if all of us fully understood the impact of what UBS was saying yesterday and Lehman Brothers were saying yesterday. After the federal legislation was passed, where the federal government will guarantee the debt, capital markets will flow to this particular project now. It is financeable. And, it will lower the risk substantially on anyone because the state, for your share, will put in 20 percent equity and the rest is - and this is significant - it is project debt, non-recourse back to the state or the corporations. You'd have to make sure that [indisc.] happen but the likelihood of that is higher now that you have those loan guarantees.

On a shelf in my living room, which I'm very proud of, is a beautiful clock that was given to me by the Prime Minister of Malaysia and the Prime Minister of Thailand for ARCO signing a joint venture agreement with those two countries for a gas pipeline from the central part of the Gulf of Thailand and development of a huge gas field there that's underway. It was an equity sharing where they take equity ownership and it's also profit sharing. And I hope someday you all have clocks because we've done the same thing here in Alaska and this time you better take the profits of transporting your own gas rather than paying it to owners out of state.

Now let me get to this other subject, which is how to pen these - how to get these on the capital allocation of these major corporations. So I want to talk about what is the importance of capital budgeting and allocation in a corporation. How do they decide what projects to do? What is the framework that executives in different locations like this one understand that process? What is the investment criteria they use, the sensitivity they look at? And then what are the risks they may look at and what are the common techniques of risk mitigation because we have to answer that risk mitigation. You heard every speaker talk about that yesterday and you hear me talk about it. That will be how we mitigate the risk, such as taking equity participation, such as sharing part of the risk involved with the other investors could make this project go forward.

I'll also talk about something that in the press and in speeches that gets thrown out somewhat haphazardly, and there is a big difference. I'm going to talk about commercial rate of return and competitive rate of return - it's very significant to understand the difference, and then just wrap up with some conclusions or recommendations.

I've already talked about experience with capital portfolios serving on a couple of boards, also serving on corporate boards, also with experience in ARCO that I've already mentioned. At one time I was also manager and resource planning for ARCO, which the sole function was capital allocation of budget - that was it. It is one of the most significant financial activities a firm does. It really determines the core activities of the firm over a long-term future. It confirms which projects receive capital to proceed timely and which ones do not receive capital. A very important point, a controversial point sometimes, but it's simple to understand - not all projects that are commercial or even competitive are approved internally when capital is constrained. When there's not enough cash to go around, not everything gets done. How do we make sure in such a world that the Alaska project makes it on the list? And the capital constraints do force an allocation process - I worked 26 years for ARCO. In those 26 years, not once did all the projects that we had on our list get approved because it was more capital than we had available. Most companies and large corporations are that way.

Decisions must be made carefully and rationally with owners, and this is important, with shareholders in mind. Why does a shareholder invest in Exxon Mobil or ConocoPhillips, a past ARCO, a BP - and it's important to understand why they invest in that versus - and then what the shareholders want to see out of an

Enbridge and a TransCanada, because that impacts the capital allocation decisions.

This is an interesting - in slide 5, really the capital budgeting fits into the financial planning of a corporation. The overall financial goal, if a business wants to stay in business, is maximize the shareholder wealth - the stock price increases and the dividends is earning enough return for that shareholder or they'll exit and take their money out of the business by selling their shares. So really, when a chief financial officer gets all this cash in, this last - in the year 2003, at relatively lower oil prices, in the 30s, not the 50 bucks we're seeing now, the CFO of Exxon Mobil was looking at this chart and said how do I spend the $30 billion cash flow I got in 2003? BP said how do I spend my $20 billion cash flow? After everything else, how do I invest the $20 billion I got left from my revenues minus all my expenses - of all fields, of all overhead, I've got $30 billion. Where do I spend it? I've got $20 billion at BP and I have $10 billion, just under 9.8 actually, was for ConocoPhillips last year. I haven't looked to see - some of those numbers may be doubled this year with oil prices. I don't know.

So how do you decide? You have to allocate between the pots. You have to make an investment decision of the capital - what projects, long-term, short-term, but you also have to make very important dividends - how much of that cash flow will go back to shareholders in terms of dividend that can prop your share price up or also many investors want to see that dividend - maybe see that dividend increase over time. You need to pay those owners.

But I want to talk about the one box about investment decision capital budgeting. You see, the cash flow - when you see a lot of cash, not all of it can come for projects. Shareholders want a big piece of that and they do deserve it in the dividends that are paid. Also that CFO, when they're looking at it, we'll talk about the debt equity mix. How much debt is safe? How much debt is unsafe? Looking at projects, how much equity, and we certainly heard UBS and Lehman Brothers talk about those debt equity ratios yesterday on this project. Whether it's 20 percent equity put in, the

> rest is debt guaranteed by the federal government, is a sweet deal. I have not seen one like that come along in a long time.
>
> Broad framework for capital budgeting - again, the maximized shareholder - and when projects go through, and when I was a young engineer looking at projects, we understood there were different phases. One, it was an idea. You're sitting around the table, an idea comes up for exploration or midstream, yes?

REPRESENTATIVE CROFT asked, "On the overall - so, a producer that knew that this was a possible commercial venture - that the pipeline was commercial - if it knew it would also have an adverse impact on the overall gas prices for the next 15 or 20 years, I mean how is that internally computed? There's a plus and minus. It will make some money on the one end but it will lower the return I would get for my LNG projects or others. How are those rationalized?"

MR. THOMPSON said the decision is very difficult because the companies must also take into consideration that delaying a project for three years might prevent an impact on gas prices on the rest of their gas, yet if that project is delayed, other competitors could bring in LNG. He said producers should be very concerned that if enough gas supply is not brought, gas prices could get to a point where a lot of fuel switching to other resources could take place and people might conserve more effectively. In addition, if different countries cannot grow their economies because prices are too high, the demand could be dampened. He continued:

> So, if you don't get your gas on the market, prices go too high, you could dampen demand for the rest of the gas. That's going to happen anyway and there's ways of calculating that. You know, DOE mentioned that if gas was brought on by 2012, gas prices would decline by about 25 cents, I think was the report if I recall right. On the other hand, other factors could cause the same thing. So it's a tough balance. You mitigate the risk is one way, and we'll talk about it later.
>
> So we have the idea phase. Then you start doing the preliminary evaluation and on something this massive, you put people on it, you spend money. Producers, for example, spent, as you all well know, $125 million. I

would say that would be in the preliminary evaluation phase.

Now we're about to approach a decision sometime and I hope the decision is made by the end of 2005. It was also very significant, a subtle point that didn't get reported by the press here, another very important point in that federal legislation was the federal government saying if there are no applications for a certificate of an Alaska gas transportation system within 18 months, certainly by the end of next year or February or March of 2006, the Secretary of Energy shall conduct a study of alternative approaches to the construction and operation. And I would say that you ought to be sure and have that in any fiscal package that you pass. You tie in with the federal law of anything you pass, you make that date very important, and I'll talk about that later of why the importance in a capital allocation decision. We want to get all these companies - producers, pipeline companies, to the true business evaluation phase, which crosses over the final detailed engineering and cost estimates into the permitting phase and what have you, and then after all of that, which could take a couple years, only then do you make that decision at board rooms to start digging dirt and put a pipeline in the ground. Most projects go through these kinds of phases and to be approved, the project must pass all of those phases. It is important that the Alaska gas pipeline project has passed the preliminary evaluation phases to the degree that companies are interested enough in the producers that they have lobbied hard for the federal legislation and are working with the state. They are wanting to be able to lay something, I think, on the table to their boards that will get them to the business evaluation phase. And when you're in a company, and you're a manager-executive even of a profit center like in Alaska, you learn this kind of stuff. That's how the company works so you get a system of capital evaluation that becomes very cultural.

SENATOR ELTON asked Mr. Thompson where the corporations are on that list now and how working through the different steps will mesh with the 18-month timeline in the federal legislation.

MR. THOMPSON said in 1996, when he was president of Arco Alaska, he formed a permanent group to work the Alaska gas pipeline. [Prior to that] the three companies formed ad hoc project teams every three years to study the project for commercial potential and determined it was not a commercial venture. The teams were again created on a two-year basis and again determined the project was not commercial, the main reason being that a lot of re-injection was going on. By 1996, Arco Alaska was the first company to form a permanent team to determine what it would take to get the project done. The team was fully staffed and Arco Alaska brought in its best folks. He told members:

> I would challenge the timetable it was in - so it's not just 18 months to make the decision about going to the evaluation phase, I'd say it's been 10 years. In 1996 we really began in-depth the preliminary evaluation phase with permanent staffing. Prior to that it was ad hoc team staffing. Does that make sense? So we were in the idea phase prior to then, in 1996 when ARCO crossed over to the preliminary evaluation phase, and I know ConocoPhillips has continued that work by having a permanent gas team, so it's been 10 years. So 18 more months to go to the business evaluation phase, but the only way to get them there is mitigating part of the risks that we'll talk about later and we know that mitigating the big chunk was federal legislation and now it's state fiscal certainty. That's the next big thing if we want to get them to the business evaluation phase, along with they want certainty in Canada as far as the regulations and they're trying to reduce costs as well.
>
> So, I would hope, in 18 months, and I met with one of the undersecretaries of energy on this very matter a year ago, the federal government sees this gas now being needed for consumers, and if in 18 months there's not something laid out there, they are looking at alternatives. And I will tell you the alternatives they'll look at, and UBS and Lehman Brothers hit on it yesterday. They will look at somehow alternative financing and who isn't out there that wants to build this and get on with it?

SENATOR ELTON asked if the process is just short of a business evaluation.

MR. THOMPSON said that is correct and, in fact, producers may be saying they are in that phase now and could be. He explained, "I would venture certainly, in my mind, the business evaluation phase where I can start taking it to a board of directors is where now I've got a timetable to make a decision - 18 months, I have wonderful federal legislation and, hopefully, by next March or April and this next year, the fiscal package by the state is done and then you can take that and then more certainty in Canada and then you can get to that true business evaluation phase where after the couple of years of detailed engineering to get the cost honed in, as well as permitting, right-of-way procurement, you could then go to the board and you say this is a go-ahead or reject meeting."

REPRESENTATIVE CROFT noted that Mr. Thompson said that it didn't make any sense for ConocoPhillips to pursue the project earlier because it was making more money reinjecting the gas.

MR. THOMPSON clarified that decision included two main factors: gas prices were about $2 to $2.50 MCF but a constant $3 MCF is necessary to get a 12 percent return; second, a lot of the gas was being reinjected into the oil realm and there was a very high oil rate. As time goes on, that very high incremental oil rate declines.

REPRESENTATIVE CROFT asked if that is one of the problems the state faces in confronting the internal capital management. He furthered that the state is not just dealing with the economics of the project but also with competing economics within the company.

MR. THOMPSON replied, "Sure. In that case, I will tell you my advice is you're better off having, at that time, that incremental oil. That incremental oil rate through gas injection declines and declines. By 2010 it may be diminimus and it's something that the companies look at. It's something the Oil and Gas Conservation Commission is surely looking at too."

REPRESENTATIVE GARA noted, in relation to Mr. Thompson's remark that companies have a finite amount of capital to spend, that ConocoPhillips just signed onto a joint venture deal in Russia and has "angles" on jumping from there into Iraq. He asked if the fact that ConocoPhillips has committed money elsewhere should be cause for concern for the Alaska project.

MR. THOMPSON said hopefully, ConocoPhillips will also try to balance this project at the right time and to its portfolio.

However, ConocoPhillips is a D and P [Development and Production] company, as are Exxon Mobil and BP. He explained that those companies have to allocate a certain percentage in their portfolios. He pointed out that ARCO used to own a 5 percent share of LUKoil, which ConocoPhillips bought. LUKoil had set a deadline for its bid. He noted deadlines are non-discretionary in that if you don't meet the deadline, the opportunity is gone. He said as long as an opportunity is available, it is called "discretionary" and you may or may not have to allocate capital. He then stated:

> Another reason they want that deal is that purely development and production. For Exxon Mobil, return on capital employed - you heard that return on capital employed for the pipeline being 12 percent, or return on equity, return on capital employed is a compilation of all this. Return on capital employed for Exxon Mobil in upstream development and production was 30.6 percent according to their annual report. Now you would put money into development and production? Or are you going to put it in a pipeline that makes 12 percent? The answer is you do want some in 12 percent, particularly if it's strategic in getting your products to market. And if you'll notice, and by the way, that average over there I took for the allocation last year, it's 2003, I took rough averages and then rounded up out of the Exxon Mobil and BP annual reports - you can get a breakdown of how they spent their capital. About 10 percent of their capital budget, total budget after they figured out how much to go to shareholders through dividends and then their other financing needs, they allocate big bucks worldwide and average 10 percent in exploration. Very risky, it's expense, high risk. You can hit and you can lose so you balance that. Development and production, that is their bread and butter.
>
> You know, a shareholder wants to invest in these companies because they're in oil and gas development, not because they're pipeline companies. So they only allocate, and this is important to understand, they only allocated to pipelines and natural gas processing only about 10 percent. So when you're competing for the pie, it's not only you're having to compete for the total budget - maybe only 10 percent of their whole budget is getting allocated. Now if you take an Enbridge, a MidAmerican Energy, a TransCanada, I would

suspect it's 80 percent or more that goes to pipelines because shareholders are buying them because they want that more constant kind of return, as well as that's what the business is they're in. Midstream is 10 percent. Downstream, oil refining and retail marketing was 20 percent and then chemical manufacturing. CFO, CEOs, boards will discuss what percent of the portfolio - it's sort of like an individual has to decide how much in bonds, how much in money markets, how much maybe in stock. These boards will decide how much in these phases of the business and last year for pipelines, natural gas processing, 10 percent of the capital for those lines of business.

What criteria [are] used? According to a survey done by the Harvard Business School last year of 700 major corporation CFOs, 70 percent of corporations make most of their decisions that you get - you get it in the bucket - whether or not it gets done is a question, but at least to make it to the board table, internal rate of return is one of the criteria and then also discounted cash flow, net present value - if you look at all the cash flows in the future what's that worth today? And then payback period, especially if prices collapse. When prices collapse, and prices go low, companies look at payback period and only do things of short payback, for example. But my years at ARCO, at mini-corporations, certainly with Alaska Airlines, as well as Coeur D'Alene Mines Corporation, internal rate of return and discounted cash flow, net present value, are two of the most important criteria. And for those that want to learn more about this exciting topic, page 9 defines all those. Net present value, flow stream over 40 years, how much is it worth to me today? Internal rate of return is that rate of return on projects that you'd want to use and sometimes companies have hurdle rates rate of return. You just saw Enbridge talk about 12 to 15 percent, for example, and that's fairly common. Twelve percent is very common. In testimony Exxon gave a couple years ago to the state they said 15 percent rate of return.

Okay, let's have some fun now. Just quickly - here now you're the board of a corporation. I'm going to tell you you've had a phenomenal year because oil prices have been above $40 a barrel - I should have put 50 but - and you have no capital constraint. You have so much cash flow that you have no capital constraint and you have three projects that you can do - A, B, and C. And these are all over the world. Summing up that column that says INV - that's investment on the project. The C1 is the cash flow that would come from it in the first year and you see the cash flow coming, positive cash flow in the five years. You can discount it at 12 percent and you get the net present value and then I showed you the investor's rates of return. You have unlimited capital constraint. Which projects would this board do? All of them. You have enough money. They all are above the 12 percent rate of return. They're all positive net present value. Uh-oh, here it comes, tough decision for the board. Here comes a brilliant young engineer in asking for projects that - there's three of them - engineer A, B, and C and they all argue. And what's interesting, they all lay out for you projects that are above the 12 percent rate of return - 21 percent, 14 percent. Only the oil prices have fallen to $30 a barrel and you don't have $130 million capital you can spend now. You can only spend 80. It's pretty much like our families. The family wants to spend more often than what you take in and you have to allocate, you have to budget. So this corporation, this board is going to budget, you only have $80 million to spend and you have three very good projects. Which two would you do?

A key is, first look at the rate of return. If you look just at the rate of return, which two would you do? A and C. Sum up the net present value and see which two combinations yield the highest present value for the shareholders - are worth to the shareholders. [Indisc.] Again it's A and C. You add those two together and you get $11 million [indisc.] for some of the big projects. Now which one doesn't get approved? B. Is it commercial? Yes, it is a very good project - 13 percent rate of return but it never makes the capital allocation. It is commercial. It is not competitive. That's the distinction and companies and shareholders demand that it be competitive.

Would 14 percent make - you have a couple of choices. You can defer that project to future years or what's another choice that sometimes an ARCO might use for certain projects? There are a lot of companies that would love to have a 14 percent return project that maybe have some capital. But you know what? If I can hold on to B forever, what am I going to do? I'll wait.

Another big factor in just the last point I made, boards also talk about is this a non-discretionary/discretionary. We often had to break down our capital requests into those two buckets and then it made it to the discussion on those kinds of criteria - discretionary, non-discretionary. I will tell you, I've got that clock from the prime ministers of Malaysia and Thailand. We had a deadline to get the field on-stream or lose and turn it over to somebody else to develop. Why did it make our capital allocation? Actually, it was a pretty good rate of return because of profit sharing and they took risk. So it wasn't a rate of return issue but we also knew that we faced a deadline and maybe it was 18 months. That's a good one that the federal government is saying, for example. This also matters - if it's discretionary, you can hold it and wait until it fits your portfolio in the future or let someone else do it.

Now this is an interesting thing. This is a big decision. Let's get to [indisc.]. How does the gas pipeline project equity capital fit in the majors' capital portfolios? And if there's one thing we need to think about, is the way that you spread risk is taking a lot of partners. It's very common in industry. Does Exxon have to spend $20 billion on this pipeline project? Is it a $20 billion decision for them? Is it for TransCanada? No. Is it for BP? And you hear the words $20 billion. It is not. It is not a $20 billion decision for any of these companies. In fact if we look, they're going to put us at project - I'm wrong now, they did this before the federal government. They're going to project finance at 70 percent, $14 billion debt. That's not wrong. We'll be able to have more because the 80 percent - and then equity capital - if you just took 70 percent financing, the capital needed is $6 billion. Three big companies - how much capital do you have to lay out? Equity. From the capital allocation budgeting tool, how much capital do they really have to lay out? $2 billion each - a lot of money. But the $2 billion each is over 4 years of construction so it's basically on the - yea, if you look at it per year, and then this is the total capital spent last year by Exxon Mobil $15 billion, BP spent 12.4, ConocoPhillips spent 6.2 and the equity capital needed for the line shows you how much each would spend and that would mean 3 percent, 4 percent, 8 percent of their capital budget.

But a big problem is - remember the other graph that shows you could fit this capital in but remember you only have 10 percent in your company allocated to midstream-downstream because you're not a pipeline company. People want you - investors and the stockholders want you to invest in oil and gas development and so that's an important thing to look at. By the way, another factor - look at the ROCE [Return on Capital Employed] that these companies actually made - 18 percent overall for Exxon Mobil last year. That's a composite of all the projects and assets deployed. Sixteen percent in the Phillips - 16. Does a 12 percent project excite those folks? No. In fact, 14 percent is pretty tough. It's time to share risk if we want this on their capital allocation.

Now has the debt worsened? This is interesting. This might explain some behavior. Here's the debt they would each take. All of them would have to have a debt. Divide the debt by three and this shows the debt each one would have to take. Now this is how much debt they have. This is amazing - $9 billion debt, although Exxon has very little ratio of debt to equity. Now BP, ConocoPhillips has a little higher debt. In fact, if I was Jim Mahaney I might want an extra incentive or two. If I were Exxon, I wouldn't even care about the federal legislation. I might just write a check for my investment when the time comes.

So, you hear ExxonMobil not asking for incentives. They just want the federal government to pass the expedited permitting. BP wanted the other things but notice Exxon and BP don't want the commodity risk provision but ConocoPhillips does. I might too if I had a little higher debt ratio. I might want some extra assurance on downsides. On the other hand, this is still very safe. All of these companies - these are extremely good financial situations for all three of these.

Now though, a big home run for all of us was the federal government guaranteeing the debt. That debt you see there will not go on the balance sheets more than likely. They'll have to footnote it after the Enron fiasco but the debt will be owned by the pipeline company itself more than likely, and that has to be verified by the project financing terms. But these companies would report this debt in the footnotes of their financial statements and some investors would look at total debt that you see there, and a bit more of an impact on ConocoPhillips and Exxon Mobil, but still very, very financeable.

And then let me try to wrap up here in the next few minutes. You know, you don't just - when you go to the board - when I've presented big projects within Alaska to the board of directors of ARCO, I just didn't - we ran the projects at current oil and gas prices but we always had a sensitivity analysis after so many of us having lived through the down cycles of low prices. All of our projects had to make a 12 percent return at a low side oil price. At that time we used $12 a barrel. That's a sensitivity analysis. Most corporations do that. We do that at Alaska Airlines, Coeur D'Alene Mines Corporation - different sensitivity. The project had to be 12 percent at $12 oil. BP's CEO, John Brown, in a speech to investor analysts in New York last April, mentioned that BP test all projects at a downside price now of $20 a barrel. That's very common in many of the companies now, and many companies run gas projects with a downside of $3.50 per MCF.

Remember when we did that example where we had to choose and we left out one project and we did two? You then run, if those are your two, you then run your whole company financials, if you made that your capital pot, what your corporation looked like and you looked at the effect upon cash flows, the company value, the debt equity mix in the future, and then the final portfolio is decided by executive management and the board of directors.

The CEO is the most leveraging single person in the decision with the board. When you have projects that are tough and you have to make some tough calls, that's very important. And it's not only the local folks of companies. I think they argue very hard for Alaska. It is the CEOs that can finally get this over to that phase that we need it to finally be decided.

You look at a lot of risk in the upstream-midstream projects. These are some of the risks. I think Ron did a great job describing pipeline risk and, you know, for upstream and midstream projects you have forecasting risk of production, the exploration-geologic risk, political risk, permitting, and what have you. Projects must be resilient to those risks. That's why when you heard the Governor and when you heard Pedro Van Meurs yesterday, whom I highly regard - now I don't agree with Pedro on one thing, that this capital level could make these people go bankrupt or put them into dire straights. $20 billion for one company - he's right, but I don't agree with him on when you split it up among three or four companies and spread the risk that way, it is not as a percent of their capital spending each year a big risk. And a downside might be not a zero return, it might be if things collapsed, very high cost overruns and what have you, you could have impact but I would bet even then your return is 6 to 8 percent, not like with exploration. I've drilled several dry holes in my life. That's a pretty negative return. I had a few successes too. That's the only thing I disagree with him [about].

I do agree with him that risk mitigation now, if we want to get that project to get in the capital allocation of these companies that make 16 to 18 percent return on capital employed, then we have to take part of the risk and I think part of it is that equity ownership, and then consideration - I don't always know what's going on behind the scenes in the profit sharing, but it's something that needs to be considered. All the deals I did with other countries in my last two years at ARCO had those two factors. They participated in the equity and they had the profit sharing.

This is just an educational slide [18] for all of us. Commercial means this: the investor rate of return exceeds the cost of capital. I believe it was - I can't recall if it was UBS or if it was Lehman Brothers yesterday. You take a company that had to pay

7.5 percent on their debt, and then their shareholders are running at 12 percent return on their stock appreciation every year. The cost of capital would be 9.75 for that company when you weighted it. In most companies there's a premium that you put on that. So, an investor rate of return to be commercial for many companies here is 12, is commercial. Competitive? For an Exxon Mobil, for their upstream projects last year, their return on capital employed was 30.6 percent. They have some awesome projects. So, competitive, when you hear that, I believe the Alaska gas pipeline project today, especially after the federal legislation passed, is commercial today and no one would convince me that it's not commercial today. It does exceed the cost of capital on return. Is it competitive to get in the capital allocation portfolio? No. That's the distinction. Keep in mind that last point.

Corporations differ in IRR [Internal Rate of Return] hurdle rates. Return on capital employed of many pipeline companies is far less than producers and they allocate a larger percentage of their capital for pipelines and those kinds of companies might be very interested in 12 to 14 percent.

So here [are] the conclusions. [Slide 19] Getting the Alaska pipeline project into the major companies' portfolios is challenging. I believe the project may be commercial today, especially after the federal legislation, but it is not competitive. It is discretionary versus non-discretionary, although I do like the federal government's point of trying to nudge it and in visiting with the undersecretary of energy, trying to nudge a little bit of it to being non-discretionary within 18 months. It would be nice for the State of Alaska to do the same I think.

Investors who desire a commercial rate of return are important to consider as investment partners. I'll talk later about Pacific Star Energy. I will tell you this is our number one project. It is the only thing in our global portfolio and we would love to have a 12 percent return for Alaskans and our multiple partners can mitigate risk on any one firm. That's the way you spread risk. If somebody says this is too much capital to risk, get 10 players in. That's very common in exploration to have three or four instead of just one or two.

Government assurance of fiscal certainty is essential. I could not take this to the board - I had a slide each year when I presented in Santa Barbara in January to the board of directors. It was called political climate in Alaska and I would talk to political risk and what everybody was doing in the legislature and with the administration and what was the risk for the next outlook. I was fortunate that often the outlook was very positive, certainly for exploration and production and I think a lot of the things that you've done in the last few years has helped that segment of the business. Now it's time to address the fiscal certainty on the downstream side, midstream side of the gas pipeline. That's the next big thing. Canada has to do the same and I know the producers and pipeline companies are working on cost reductions.

Sharing of risk by government is essential. I will tell you I believe, and I'd recommend, you do the 12.5 percent. Now I will tell you in my own personal opinion, UBS yesterday gave an example of 25 percent. I wish they hadn't done that. I found it a bit confusing because the 12.5 percent - you already own the supply - your royalty gas, so that is not a risk for you. And then I believe you can find good customers and the state ought to be working on good customers right now. 25 percent though, you're going to have to make deals with producers on the supply and that could be a bit more riskier. 12.5 percent yes. The other you have to think about long and hard, not to rule out.

And then local ownership I'll talk about later in the second presentation. Local ownership does add incremental value. We have a report consultants say that shows for the first time quantitatively if profits off the gas pipeline are left here in Alaska, how many more jobs and how much incremental benefit it does to the economy and it's the first time it's ever been quantified to my knowledge as far as a private company owning part of the gas pipeline. It could mean an additional 20,000 jobs and $1.3 billion to the economy over a period of time if you do that, and we'll talk about that later.

SENATOR ELTON asked if it is fair to say that it is more essential that the state take an equity position in the natural gas pipeline if the pipeline is producer owned, and less essential if the pipeline is owned by pipeline builders.

MR. THOMPSON said he would advise the state to take an equity position of at least 12.5 percent regardless of who owns the pipeline. He added that is based on his intuitive judgment, having seen country after country benefit by getting the profits of moving and selling their own gas. He indicated that the equity would amount to about $50 million each year, which he would elaborate on later.

SENATOR ELTON asked, in the context of taking a shipper's risk, if it is less essential for the state to have equity ownership if a pipeline company is doing the pipeline.

MR. THOMPSON replied:

> In either case, if I were the state when you had the equity ownership and then with your gas, I would also look at what could be customers on the other end of the pipeline that would be willing to buy your gas, including we figure out all of the instate use. I'll talk about that more later in the second presentation, and that those firms are taking the shipping risk - the utilities that buy your gas are taking your shipping risk, as well as maybe firms within the State of Alaska that [are] buying Alaska gas could take the shipping risk. It may be, when you talk with customers that the state has to share in that shipping risk and you won't know until you go to the customers and the deals. But certain customers, even for pipeline companies you heard, will take that shipping risk and I think they will too for your share of royalty gas - for part of it anyway.

REPRESENTATIVE GATTO asked why everyone who speaks to the committee is encouraging the state to be an investor. He questioned whether the reason is that the speakers are charitable people and want to see the state do well or whether there is some inherent advantage to their positions.

MR. THOMPSON said he is saying that as an Alaskan advising the state on matters to consider. He said if one looks at whether the state should have invested in TAPS, the answer would have been no due to the cost overruns on construction but TAPS is the best operated pipeline in the world. He noted that a tariff of $3 per barrel amounts to $1 billion per year in revenue and the amount was $2 billion during its heyday. He said members will see later the economic benefit if more of those profits are kept instate to be redeployed, versus the pipeline tariffs going to Houston or London. He then said he feels blessed to have worked in Alaska and then moved to other countries for his last two years with ARCO to see what the other countries have done to be highly successful in the natural gas industry. That experience motivated him to tell the state to do the same thing.

CO-CHAIR SAMUELS asked if it makes sense to separate the capacity from the investment in the pipeline itself and take a percentage of one and a percentage of another so that the state could be an investor in the construction of the pipeline but still only take the 12.5 percent royalty share in the capacity itself.

MR. THOMPSON said that financial calculations have to be made.

TAPE 04-33, SIDE A

MR. THOMPSON indicated that making those decisions boils down to running the economic cases so it is hard to determine without seeing all of the numbers. He said hopefully Mr. Van Meurs and his team are doing that.

SENATOR FRENCH asked for some examples of places where collaborations between governments and pipeline owners did not work out.

MR. THOMPSON said he has seen some examples of collaborative exploration that were unsuccessful because you can lose everything. Some countries, because they want a stake in the production, will take the stake in exploration and lose when the holes are dry. He said the pipeline cases that he worked on were good for both the companies and the governments and did not require a lot of risk. He deferred to Mr. Van Meurs for a more detailed answer.

CO-CHAIR SAMUELS thanked Mr. Thompson for his presentation and asked Mr. Marushack to present to the committee.

REPRESENTATIVE BUD FATE interjected to thank Mr. Thompson who he has had lengthy discussions with. He urged members to partake of Mr. Thompson's knowledge of corporate inner workings.

MR. JOE MARUSHACK, Vice President of Gas Development for ConocoPhillips Alaska, informed members he would also be speaking on behalf of BP and Exxon Mobil. He noted he would be speaking on the ConocoPhillips decision-making process. He added that he would generalize about the decision-making process and then talk about Alaska gas in that context because Alaska gas is different and strategic. He would then make sure he answered all questions in the [September 27] letter. [Mr. Marushack's dialog accompanied his PowerPoint presentation. A copy can be found in the committee file.]

> For major oil companies, projects, opportunities arise in many ways. There's outside proposals, there's grassroots initiatives, there's management directives. Regardless of the size and the complexity of the projects, the initial approach to the evaluation follows the same path. However, the rigor with which you might go through the process could be very, very different.
>
> All projects are evaluated in terms of their value drivers. The value drivers primarily are technical, commercial and political and, in the case of the Alaska gas pipeline, each of those are pretty extreme. Companies expect to earn returns commensurate with the project risks and the project risk in the Alaska pipeline is pretty significant. Models are created. Discount rates are assumed. We've got various ways of analyzing projects there that we'll talk about a little bit - discounted cash flow, Monte Carlo - basically Monte Carlo would be a form of probability analysis, decision analysis, and then that analysis goes into your corporate overlay where you're looking at the financial strength of your project, shareholder expectations - and you're going to hear me talk an awful lot about management judgment because, in my view, the Alaska gas project is an awful lot about management judgment.
>
> The process we use in the key drivers - there [are] four or five major items there that you look at from a larger mega-project basis. Clearly [on] all projects we do analytical data and I'm going to talk to you about some of the analytical and metrics we do in a case there. The only difference between this project and other projects is the size of the models, if you

will. The models on the Alaska gas projects are multi-megs. Some of them, a simple project could be a spreadsheet, some you just do over and over again.

Commercial arrangements - those can be hard or tough, not necessarily depending on the size of the project. A lot of times, the commercial arrangements are based on the relationships you've got in the country you're dealing with, as well as the prior history of that area. I would expect commercial arrangements on this project would be very significant - the financing issues very significant, a lot of detail analysis and a lot of detail arrangements.

Project management - Ken Thompson talked a little bit about that and I'm going to talk about it in a little different context because project management, once we get through the federal legislation and the state legislation and the state contract, this project is all going to be about project management and managing that - managing costs and managing risk.

The risk mitigation plans - what you've seen on the Alaska gas project are pretty much unprecedented risk mitigation plans. We've asked for several acts of Congress. We've been fortunate that we've achieved now, assuming the President signs, many of those. When it comes to the state, we've got the Stranded Gas Act application. These are pretty much unprecedented in the U.S. to need this kind of legislation and to be fortunate enough to be making progress on them.

And then alignment of the parties is important. Alignment of the parties - one of the things that - the question was asked a little bit about what does state ownership do? State ownership, in my view, the single biggest thing it does is it aligns the parties and we'll talk in more detail about that.

Once you add all that together, you bring in your unique analysis. You looked at this gated process we're going to talk about and your senior management input. I can tell you that on this project, senior management input happens every single month, every single week, sometimes every single day. This is a very, very important project to our senior managers.

Typical value drivers - what we're really concentrating on here is maximizing value. Revenue, expense, capital and schedule are the primary components of that. If you break that - the right-hand side are issues we're working on right now. The left-hand side are issues that we're trying to mitigate where we can, but basically we take what's left over from that. In terms of the revenue side, we're all price takers, not price makers and so the revenue will be what it is. Clearly we're looking at various scenarios but the revenue will be what it is.

On the expense side, once we get this project engineered we're going to know what the fixed and variable costs are fairly reasonably. And actually, what we're doing right now is working on taxes with the state. Those things though, you're left with after the project is up and running. The right-hand side is what we're concentrating on right now - capital and schedule. We're trying to control capital and, in terms of schedule, we're looking at the project management process in order to control that capital and put in there a timeframe that actually works.

You notice the value drivers here from the producer perspective, financing is not on that sheet. The way we look at the projects, we look at projects to try to get a fundamentally good project. Once we have a fundamentally good project, a viable project, then we figure out the optimum way of financing the project. Now we haven't completely discarded financing because we did draft the loan guarantee language. The loan guarantee language is actually something that helps after we've moved to those next steps, so it helps in the financing process but it's not a key value driver at this stage of the game from the producer perspective.

We think alignment with the state and the producers is something that really is addressed pretty well in the key drivers here. What we're really trying to do - we want the wellhead value to be as high as possible. We don't control the price so we are trying to control the cost. The costs of processing and transportation - that is essentially the capital costs of the project and how you're going to pay the capital costs of the project. Now why are the producers interested in this project from an upstream standpoint? Because those costs affect our upstream, our wellhead value. We're trying to control the costs, if you will. The whole project from some liquid hub up, in my view, is an upstream project and I understand why it's a big pipeline and a midstream asset and people talk about that but the project from Alberta north is an upstream project.

Talking about some of those tools, and this is just a very, very simplified measure of the tools that we use there, this is a decision tree analysis. A decision tree analysis can go out, page after page after page on the right-hand side, given all of the various things you're looking at but what we're trying to do here is we're looking at various scenarios. We're looking at you'll see P10, P90, P50 there. You might consider some of those to be price. We look at various price scenarios. You might consider some of them to be cost - P90, P10, P50 are costs. There might be reserves. There might be exploration. These things can go out a long, long ways. What I'm trying to show here though is what the decision tree does for you is it tells us where are the key items that we really need to concentrate on. What are the key risk elements that we've got out there? It does not give us a single answer. No place in here will we get a single magic bullet answer that tells us we're ready to move forward with the project. You've got to add together all the various issues, including the strategic implications to be able to move forward.

What measures do we use? We use the standard economic measures. We use after tax cash flow. We use discount rates. We use payout. We use profitability index. We use rates of return and we can describe what those items are and how they're calculated. The bottom line is no single one of them is magic. No single one of them counts necessarily more than any other one. A lot of times folks will ask us what are the numbers or the hurdle rates. First of all, there are no single numbers because risk for every project is different. Second of all, the strategic value of the project requires different numbers in different areas. Third of all, even though if there were some cutoffs, some general cutoffs, we don't share those things. We don't share them with Exxon Mobil. We don't share them with

BP. We don't share them with the public. That would be a competitive disadvantage.

> How do we communicate then how we're able to talk among others given when we don't share prices, we don't share discount rates? Well, we come up with a third party price forecast, if you will. We bring those into our model so we can speak on the same basis.

CO-CHAIR SAMUELS asked where the economic risk would fit in the decision matrix of a scenario in which ConocoPhillips might invest all of its money in a project in the Congo, which could then suddenly nationalize the project afterward.

MR. MARUSHACK replied:

> You try. We may have - when we go way out to the right-hand side here with various other elements, there we may consider the cost of - the probability of getting nationalized. We may consider the probability of new taxes. Clearly, in Alaska, we have to consider that because that's what our Stranded Gas Act negotiations are about. Let's agree on what the take is and let's agree on it for a long period of time. But it's not that simple, Representative Samuels, and actually this is where you get into management judgment and strategic value. Many times we'll develop contracts and those contracts will have lots of elements in order to protect ourselves. But we have experience with being nationalized. In the '70s we got nationalized in Venezuela. Now we're back in Venezuela. ConocoPhillips is probably the single biggest investor in Venezuela, based on relationships, based on opportunities, and based on risk reward. Obviously, if you're going into a country where you think you're nationalized, you're going to want to be rewarded for that and you're going to want to protect yourself as much as possible. It's also tied in with the relationship and the alignment issues and maybe this is one of the more important issues. A lot of times what we've done in order to protect ourselves is we do a deal in the foreign country on that asset, then we do a deal in the market, then we do a deal in the midstream, so we're all tied together. So nationalizing any one part affects the other parts here. Again, it's an alignment issue. You try to get

yourself aligned. The more you can get aligned, the better off all the parties are.

CO-CHAIR SAMUELS announced that Senator Hoffman, Representative McGuire and Representative Berkowitz had joined the committee.

MR. MARUSHACK then said he would speak about the project management process:

> This is part of a gated decision making process. The detailed project reviews include analysis and review of the project at all stages here and the stages change. The process is designed to mitigate risk and exposure to the corporation. This slide [8] that you've got right there is physically part of an internal project management process. It's ConocoPhillips' version. Again, Exxon Mobil and BP have similar processes although everyone calls their process a little different.
>
> In stage one or the appraisal process, there is actually an area probably outside of this but we can consider all in the appraisal process. In that process, you're identifying and framing the concepts. You're evaluating those concepts. One of the things that ConocoPhillips did in this process is we didn't look just at the pipeline, we looked at GTL [gas-to-liquids] and we looked at LNG. LNG and GTL came off the table fairly - well I was going to say fairly quickly after about $14 million that came off the table. We identified the pipeline project as having the best single opportunity out there. Then we got together with BP and Exxon Mobil. We formed a project team. We spent $125 million on the appraisal process. What the appraisal process does to me is it tells me what I don't know. It tells me where my risks are so I can start mitigating risks. Out of that then you saw all the risk mitigation measures that we've implemented over the last three years since then.
>
> The next two stages would be the optimize and define phases. Further refinement and project - it moves toward a single design. It occurs in these phases. Key commercial agreements are entered into, detailed cost estimates and plans. The work done in this stage should narrow the range of uncertainty to allow a final decision to be made on the project. For the gas

project, this will take about $1 billion in order to get through these next two phases. Now the reason I've broken up that bottom line you'll see into dashes, is because we will not commit $1 billion, I don't believe. That's not normally how it works. We usually work in phases and so you'll commit some amount of dollars to do the first thing that you need to do to see how that affects the process. Then you'll go back and get some more money. Finally you'll be up through - but it will take you about $1 billion, maybe more than $1 billion to get to the stage of the AFE or authority for expenditure - the decision point.

Once you've got to that point there, then you're into the execute and operate position there. The execute is where we'll spend somewhere between $18 billion, $19 billion. If you don't have to go from Canada south, you'll spend something like $15 billion. A key element on here is a natural tension that we see between those of us who have to implement this and those who want to see the project move faster and faster. This must be a very disciplined process. Where you see projects get off track and you go back and you do analysis of what happened is they took shortcuts on their project management process. When you take shortcuts on your project management process, you're clearly going to have cost overruns.

The next slide [9] hopefully gives a summary view of how that happens. During concept and feasibility phase, those are the stages where we have the ability to make material changes - material design changes, consider the risk opportunities and how to mitigate those. The cost of doing those is fairly low. We've spent $125 million, not $1 billion. As you're moving into design and execute though, every stage you move into, the cost of making changes gets higher and the opportunity to influence how you make those changes is less. Finally, when you're in the execute stage, if you've found that you short-circuited the process and you've got train wrecks that should have been picked up in either concept or feasibility, you can't change all that much and the cost of change is very, very expensive. An example might be TAPS. Through the execute phase, you saw the project go from what - $1 billion to $8 billion, $9 billion - something like that, and the problem with that is not everything was done in order on concept, feasibility phases of analysis.

In terms of the critical elements - we've completed a $125 million study. The study concluded the project was technically feasible but had significant risks. We identified where governments could play roles and we've been working to address those risks. Where we're at on this right now is the State of Alaska fiscal certainty right at the very top. That has to get done in order to move forward. That's the single most important issue out there right now and it's also one that between the producers, the administration and the legislature, we control that process.

We've got passage of the federal legislation - very, very positive series of events there. The predictable Canadian regulatory process - we're not saying we need new laws. We're not saying we need new regulations but we do, as we're getting progress on the first two items, need a process to make sure about how the regulatory process in Canada will work, how it will work with aboriginals - and a long-term favorable market outlook.

This project - one of the questions you asked is what gets shared with your board. I'm going to go back through all those questions here in a minute here. This was actually something that's been shared with our senior management and our chairman. I don't know if it made it to the board or not but I suspect it did. What this tells us right here, this project is absolutely unique. It's not like anything else we've ever done. I think Pedro may have mentioned that this is the biggest project in our portfolio - I believe he said that - clearly for ConocoPhillips. He's exactly right. When we've been doing planning, when we've been doing logistics, there are no models that cover a project as big as this. Hence you go back to the project management process and you really have to have that well understood.

One of the key elements that we've talked about is this assessed timeline on here. This was included in our application but I thought it was important to talk about where we're at, where we're going. Right now we're working on government frameworks. We had a big success this week. We're making, I feel, progress with the state. I think the things you've heard from the Governor and Pedro yesterday were very positive. A key element, again, on that government framework is the fiscal contract.

As we move to the next stages, the next stages would be to begin environmental work for the FERC/NEB application, detailed technical work to be completed, so that those committees of an open season have sufficient assurance that the project design, cost estimates are accurate so that they can make binding precedent agreements. We hold an open season. If sufficient gas is committed, we finalize the design on whatever gas has been committed and at that point in time, then we're looking at trying to define the right-of-way and finalize that.

Finally, we get to a record decision after we get all permits back. Once you're in the record of decision, then you're starting to spend very, very significant dollars on procurement and on construction.

Procurement and construction will take - what we're talking about is, again, pretty much unprecedented. GE [indisc.] compressors are the largest compressors on earth. Those are actually backlogged compressors right now. Steel that's 48 or 52 inch, inch and a half thick, X-80, X-100, not rolled right now in any place in the world. Clearly we need 40 percent of the ability of the world to make that over a very long period of time. So when folks talk about trying to streamline or fast track this process, we've got a lot of people - a lot of people who've done big projects think this is a pretty aggressive schedule. In fact, if you had one of the engineers here talking to you rather than the commercial people, you'd have a little different spin on how aggressive this was.

We think first gas about 9 or 10 years after we're into project planning is very aggressive and we're pretty excited. It's a good opportunity.

Before I conclude, I wanted to go back through what, Representative Samuels, the letter you sent us and make sure I at least made an attempt to answer all the questions. Frequency of decision-making and whether annual or otherwise? We do annual budgets. Our budgets are approved on an annual basis. Major projects and major opportunities are reviewed on a quarterly, monthly basis. On this project, we get a lot of input on this on a very, very regular basis. We're not talking, I don't believe, in this project when we go to the board of saying commit $20 billion or $6 billion or whatever the number is. We're talking about a phased approach. Clearly what we would do is we would lay out an approximate timeline with approximate costs in it and get that approved but we're only approving this on a phased basis.

Percentage of equity and debt assumed for purposes of comparing costs of projects? We assume all projects must pass the hurdle rates if we're putting 100 percent of our own money into it - 100 percent equity. Actually, a capital budget is an equity budget. How you finance out of that capital budget is then a separate series of issues. Clearly on this project once we move forward into these phases where you're investing serious money, billions and billions of dollars, we'll be looking at how to finance that, we'll be looking at how the federal loan guarantees work. The federal loan guarantees, though, are not a panacea because you still have to work through either the project or the corporations. What the federal loan guarantees really did - going out and trying to get $16 billion in capital is, again, unprecedented. We thought the loan guarantee there would help make going out and getting the financing a little bit easier and we hope through the loan guarantee we also could get a little reduction in the interest rate that you pay because you have the federal government way behind all of the project there, which may reduce the toll a little bit also.

Net present value rate of return, hurdle rates - I think I've discussed them. Limitations on available capital? Again, this project is really, really different in that regard. This project is a strategic project. When you hear Phillips' executives talk about this project, you hear them talk about Alaska as a legacy project, a legacy asset. Including the Alaska gas project for us is our biggest opportunity. It has the ability to book substantial reserves. This is being reviewed as a project that needs to get funded in the capital - when we've got the risk and reward balanced right.

P50, P90 sensitivities - we've talked about those a little bit. Risk of the pipeline project versus exploration - I'm not exactly sure what was meant here. Exploration is a whole different concept in my view where you know that the money you're risking has a very high probability of zero return so that's built into your corporate portfolio. The Alaska gas project is very different. You're not going to invest $6 billion, $20 billion on a gross basis unless you think that this is a project that makes sense for you.

Diversifiable risk versus non-diversifiable risk - again, I assume this is a question that is - are the oil companies in the business of taking risk or not? We're in the business of taking prudent risk and so a lot of what we've done is trying to address how we limit that risk and how we minimize the risk and make this a good project for our shareholders.

Factoring the consequences of failure to invest? Again, this may be code for reserves tax and I'll assume it is because by adding additional costs or burdens to the project does nothing to improve the viability of the project.

Imposing a gas reserve tax sends a strong negative message to the same folks that we're trying to get to make a strong strategic decision to invest up here. It increases the perception of project risk and it really moves my team for how to get this project done into how to fight off a reserves tax that we don't think is justified so it takes time and sets back the project.

Ranking potential projects? Clearly there's ranking of potential projects. Alaska and the Alaska gas project is very, very different. When you see companies do these big strategic deals - LUKoil, things like that, sometimes they're in the budget, sometimes they're not in the budget. They're strategic decisions though that aren't probably part of the normal way that you allocate capital and I would view the Alaska gas project as having many of those characteristics.

> Materials available to and in the role of management committee and board of directors? Our chairman is our decision board on this project. He knows an awful lot about this project. He's very interested in this project. He will, as I think as Ken Thompson said, be highly influential about what goes to the board and what the board approves. I feel pretty good that through a process like this you get to know your decision makers pretty easy, you know what they're looking for. Clearly it's my job to take him all the information - take them the decision trees, the political aspects. It's his job then to say have I got the risk and reward balance right and make the call on the money.
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> So, in conclusion...

CO-CHAIR SAMUELS interjected to say the consequence question wasn't just aimed at the reserves tax, it was also aimed at what happens if the window of opportunity closes for Alaska as the market shifts to LNG or an entirely new source.

MR. MARUSHACK said he does not actually believe in the window of opportunity. He believes in making all projects as economically feasible as possible and moving forward to fund them. He stated:

> We want to do every economic project to increase the shareholder value that we possibly can. Now in terms of gas, do I worry that the price of gas is going to get too high and you're going to get fuel switching? Yea, I think that's a legitimate issue. Do I think LNG is going to ever close the market so that there will never be room for Alaska gas? I don't believe that at all. I think LNG has finite permitting problems - I mean we're seeing that on projects we're trying to do. I think you need a diversified source of U.S. energy. I think Alaska gas is a very positive. I think it is something that people are going to want to see and it's just a question of if the market is going to support that or not. The way I tend to look at this is I want to bring these projects on as quickly as possible. I do not have any fear of competing with LNG projects. I do have a little more fear of too high a price.

MR. MARUSHACK then continued his presentation.

Okay, in conclusion, I just wanted to reiterate here - very large project, largest infrastructure project that we can find, no models that really work in this case, no logistics models, you know, we're kind of looking at military models. That's about the only thing big enough to make any sense to us. Size of scale creates a lot of risk, a lot of risk when you're talking about the amount of dollars here. There's no single metric approach or criteria. We use a discipline process designed to reduce our risk. Lots of gates - when we're spending money, that's a positive case. Folks always want to know when do you commit the $20 billion. Actually, in no project do we commit to full funding until we're actually starting to buy steel and drill or whatever it would be. We want to avoid artificial deadlines that increase cost and risk. For the priorities, we'll try to develop a strong base project, follow a disciplined project management process, get our deal done with the State of Alaska so we can move on to the next phases.

Representative Samuels, with that I'm here to answer any questions that you may have.

CO-CHAIR SAMUELS informed members that he and Mr. Marushack have discussed proprietary information, which no one wants to give out and the difficulty of attempting to speak for three companies. He thanked Mr. Marushack for providing generic answers to questions, as that is what he asked for.

REPRESENTATIVE GARA asked Mr. Marushack to address the timeline he mentioned of 2014 as the date gas could be on line. He also asked Mr. Marushack where he stands as far as seeing the project as financially feasible and, if he sees the project as feasible, how soon he thinks gas can be on-line and whether the state's goal of getting that gas to market in 2012 can be met.

MR. MARUSHACK said, regarding getting gas on-line by 2012, ConocoPhillips and BP have operating experience on the North Slope. All three companies have a long history of investing and working on very big projects. He said he would like to bring the project on in 2012 too but when ConocoPhillips laid out the plan, it saw 2014 as the best possible case. He said fast tracking has safety and environmental implications and this project is too big to take any such risks. Regarding the tax mechanism and financial feasibility, he said ConocoPhillips and BP looked at how to make this project go forward and recognized that federal mechanisms were needed. Together with Exxon, the three companies developed enabling legislation. The companies still believe the tax mechanism is very important but they will continue to work on that in Washington, D.C. while it is negotiating with the state. When they complete negotiations with the state, they will look at where they are at on the federal side, look at the market, and then reassess and decide whether to move forward with the project.

REPRESENTATIVE GARA asked if he would be working on the $2 low price guarantee at the same time he works with the state. And then, assuming that he doesn't get the low price guarantee, he'll see what he gets from the state and then decide whether he still needs the low price guarantee.

MR. MARUSHACK said he would call it a tax credit, not a low price guarantee. He explained that a tax credit has not been included in any federal legislation but he believes it still has some value. He plans to work with the state to get a deal done and then look at the state deal, any federal legislation at that time, the market, technical feasibility of the market, and decide how to move forward with the project. He said if prices drop substantially, that would be an important component. He assured members that he is willing to move forward as rapidly as possible to get the state deal done so that he can begin to move into the next phases.

REPRESENTATIVE CROFT asked if ConocoPhillips would commit to build the line if it got the federal tax credit.

MR. MARUSHACK noted that ConocoPhillips has said in the past that if the legislation out there was enacted and it had a deal with the state, it could move to the next step. He said the next step is investing the $1 billion to see if the project is feasible. Right now, ConocoPhillips believes it has a $20 billion project. If, after the design engineering, the project cost is $40 billion, the state and ConocoPhillips have a serious problem. Therefore ConocoPhillips will invest a substantial amount of money to move forward if it has the pieces.

SENATOR ELTON said he first heard about the 18 month provision in the federal legislation that morning and asked how that will affect the decision making process and the magnitude of the issues that need to be addressed.

MR. MARUSHACK said it does not affect him because ConocoPhillips and the producers want to get a deal done with the state as quickly as possible so that it can go before the legislature this session. He noted the reasons are high prices, the state wants the project, the producers want it, and the timing is right. He repeated the 18-month window is not as important to him because now that the federal legislation was enacted, he wants to get the deal done with the state as soon as possible.

CO-CHAIR SAMUELS thanked Mr. Marushack and announced a 6-minute recess.

CO-CHAIR SAMUELS reconvened the meeting at 11:30 a.m. and informed members that Mr. Ken Thompson would address the committee on the economic impacts of Alaskan ownership of an interest in an Alaska natural gas project.

MR. KEN THOMPSON, Pacific Star Energy, gave the following presentation.

> What I'd like to talk about now, really it is a different hat - before I talked about - was asked to talk about the capital allocation as a past, retired executive of ARCO. Now I just want to talk as an entrepreneur in Alaska and about a start-up company called Pacific Star Energy. What I really want to show is the results of the first ever-quantitative socio-economic study of the impacts on Alaska if Alaska companies, whether it's Pacific Star Energy or different companies, if Alaska companies can have ownership. If Alaskans have the chance to have a mechanism to invest themselves, what kind of impact would that mean over the next two or three decades? ... I'll talk about the vision of Pacific Star Energy. I'll talk about our value added proposition - what we think we can bring to the table working with producers or pipeline companies in the state. And then most importantly, we'll share the results of an economic impact of Alaska company ownership in the natural gas industry and that was prepared by an outside consultant, Northern Economics Incorporated here in Anchorage. And we asked them to say what if that 10 percent was owned by a company in Houston or London versus what if that 10 percent was owned by a company here in Alaska. What is the difference? Many benefits accrue regardless of who invests. There is a difference if some ownership stays here and I'll talk about the implications of that and recommendations.

A little bit about the vision of the company. We started two years ago and PSE, the way we look at it, will become an integrated natural gas consortium of Alaska. Our goal for the next few years is to have a 10 percent interest in any North Slope gas pipeline project to Alberta or a 20 percent interest in the North Slope gas pipeline from the slope to the Alaska Canadian border. You heard yesterday, I believe it was Lehman Brothers or perhaps it was UBS that talked about financial instruments in a master limited partnership way of investing that it may make a difference on the ownership for us whether we go into the Canadian segment or not.

Importantly though, we are one of the only companies talking about what we'd do with cash flow from the pipeline. Our vision would be - and I used to manage these businesses for ARCO years ago in the Lower 48 - we would take one-half of our cash flow of our share of the gas line and distribute back to our shareholder owners, individual Alaskans, Alaska companies. The other half of the cash flow, our business plan calls for reinvesting in the state and the different ways would be in hub gas distribution centers, one near Glenallen, for example, and also we are interested, like the Alaska Natural Gas Development Authority and we're working cooperatively with them, for example, on spur lines into Anchorage by 2015 to supply gas here as gas declines from the Cook Inlet.

We also are examining interest in natural gas processing. We would see taking part of the gas liquids, like propane and butane, for distribution in Interior communities, as well as Southeast Alaska. And we're not ruling out niche petrochemicals. We have done some work on that. That's a tough one to make commercial in Alaska, although we are continuing to examine small scale. In other projects, I've looked at very large scale and have not been commercial or competitive. We're taking a look at just niche petrochemicals down on the Kenai Peninsula that could be readily shipped to the West Coast.

REPRESENTATIVE CROFT asked for an example of a niche petrochemical.

MR. THOMPSON replied, "Right now one that we're looking at would be - we would spur a pipeline into Anchorage that would tie into the Enstar system. It would also allow for additional gas distribution as the Cook Inlet declines down to the Kenai Peninsula. We would build a small niche petrochemical plant there that would mainly manufacture ethylene and then polyethylene resin - it's a feedstock for plastics that could then go to other chemical plants in Asia. Although that's a very small part of our business, it would be something into the future.

MR. THOMPSON continued his presentation.

> Near term, a percentage interest ownership in the gas pipeline - in fact, if the state does not own 12.5 percent equity ownership, we would gladly take any percentage that you don't take. So if you don't take the 12.5 percent, we will. At least that money would stay in Alaska. If you take 6.25, we'd be happy in pulling together Alaskan investors to invest in all 6.25. That's what we're essentially looking at. We were very pleased to be brought into the consortium with MidAmerican Energy. MidAmerican Energy owns just over 80 percent and we were pleased to be brought into their consortium this past year as a just under 10 percent owner and then CIRI is also a part owner, just under 10 percent.
>
> We wouldn't rule out, first time ever, it might be a miracle, but 2017 our vision calls that on the North Slope, could you imagine for the first time ever, an Alaska company actually owns gas production. Right now gas production - there's no equity ownership - a couple of Native corporations have royalty ownership in the oil and gas but not one Alaska independent owns in that so we have maybe fully integrated in the future through cash flow from the pipeline to plow it back into the North Slope and perhaps acquire or explore for natural gas.
>
> This is just a schematic - slide 4 - of what we'd do. We would have ownership in the main gas line down to a hub near Fairbanks, Delta Junction and, of course, the gas line would go on to the Lower 48. We'd hope for 10 percent interest in the yellow that you see there. Then we would own a majority interest, potentially even operate the hub. Hubs are very common in the

Lower 48. They're more trading hubs while this would be, to some degree, a trading hub but much more of a mechanical hub to then get gas moved into spur lines to Fairbanks and on to Anchorage. We're looking at supplying utilities for power generation and then if entrepreneurs feel like an LNG project of a smaller scale can be commercial out of Valdez in the future, we certainly would want to look at participating in any spur line that went to Valdez.

Here's where we stand as far as funding and the game plan we can afford. We do see it as an opportunity for any interested Alaskan and that's one unique thing. In the past couple of years I've talked to the regional corporations - the Alaska Native Regional... [END OF SIDE A]

TAPE 04-33, SIDE B

MR. THOMPSON continued.

...large companies, individuals that might be interested at one point.

Seed funding - I'm pleased to say that we have successfully obtained all of our seed funding through the end of next year. We were seeking that from the Native corporations. They have decided to do their own thing from their own consortium and within a month of that, and within a month of that being announced, I did obtain another investor that fully funded our company through the end of next year. We would approach additional investors, companies here in Alaska, individuals that are accredited, for funding to then get positioned so that if the federal government 18 month deal does come into effect at the end of next year and if the state fiscal package also had that same time constraint, hopefully everybody involved - producers, pipeline companies, go to that next phase that we call the business evaluation phase and, as Joe talked about, there [are] a lot of things involved in that - the detail project engineering to get final estimates, permitting the right-of-way, we would need substantially more money by that timeframe of 2006 to 8 and so we're looking for additional investors this year and next.

I would say that's a risky phase because, as you know, that could be - that's the business evaluation phase for a couple of years. During that phase, there could be a decision made not to go ahead with the line for different reasons. If that were to be made, that's a risky investment. So for the next phase of funding, we really are approaching companies or accredited high net worth individuals. However, when construction starts, we envision and are looking at ways and talking to different investment banking firms on ways for a financial instrument for any interest in Alaska to invest. So, if an Alaska family of three wants to invest one of their permanent fund dividend checks in 2009 and own a piece of the pipe, this could be a way to do it. This would also be an alternative mechanism that the federal government talked about in their legislation, at least for a percentage of the line.

When the line is underway, we see the risk as moderate or certainly lower because once construction starts, you do know the terms from the federal and state governments. By that time of construction you will have made gas contracts with customers on the other end. Hopefully you would have secured gas supply by that point. We would be very interested in helping transport part of the state's royalty gas for example. And then we're looking at the financial instruments, investment trusts, innovative mutual fund ideas, and actually we have also screened and are looking at master limited partnerships that you had heard talked about yesterday by Lehman Brothers. Warren Buffett used master limited partnerships on pipelines over the last few years - spent about $2.5 billion, and that's been his innovative financial instrument and that's one that we're also assessing.

We believe our company can bring something unique in the gas line. More profits stay within Alaska. That's a healthy state economy. By the way, this may be mind boggling to some, perhaps, 10 percent interest from the slope to Alberta, would create the largest revenue company in Alaska. And if a 12 percent return is made on that investment, it would also create the most profitable private company in Alaska. So, a 10 percent interest may sound small, but for Alaskan business, it is very, very significant and that's what interests us in this.

Also you have a company where profits stay here. I think that an argument can be made that helps the state economy and I'll show you in a moment. That perhaps could be a very significant way of lessening risk of producer tax increases. We would pledge on part of our cash flow to build markets, investments in in-state gas use and infrastructure. We can help on permitting, enhancement of Alaska hire obviously, and then help in government relationships and then it could be that we could play a role in helping also in pulling together minor producers' gas volumes for marketing or even the state's gas.

Slide 7 is an interesting one. It's the first time that we've shown it publicly because it is the conclusion of a report and I've got a more detailed copy of that. That shows with more details but bottom line we asked Northern Economics Incorporated if an Alaska company, whether it's ours or it could be anybody, say another group comes forward and offers a better deal to Alaska investors - we're not in the picture but another one is - this could also be an example of the benefits that could be made with state owning some equity ownership in keeping profits here. What we looked at, we asked Northern Economics what if that 10 percent is owned by an Alaska company versus that same 10 percent. Obviously, whoever owns any interest - there's going to be a lot of jobs, you've heard that, 10s of thousands of jobs in construction, permanent jobs numbering a few thousand potentially, and then there's a multiplier effect. We're not looking at that. That's already been reviewed with you in other testimony. We're just looking at the incremental additional benefits to Alaska if this time, for the first time ever, Alaska's companies had equity ownership. In TAPS, Alaska companies own nothing, nor on the oil. So this is a different example of we actually become and change the business model and Alaska companies play this time. And the incremental benefit is this. Northern Economics found that about over 35 years actually, $1.8 billion in profits, just for that 10 percent ownership, would be left within the state. From that would be over 22,000 incremental, part-time and full-time jobs, about 650 new jobs per year that otherwise would not be created if the cash left the state. Some of that, a small portion, comes from the spur pipelines or natural gas processing that our company would do but really most of that comes from the multiplier effect of cash being left with Alaskan shareholders and that's important to understand that as they spend their money on different things.

We're sharing with all of the unions in Alaska and that could actually mean $830 million incremental payments to labor and that is significant, above and beyond the normal impacts that would accrue from just the pipeline itself. Bottom line, it's $1.3 billion total value added to the state economy over 35 years and that, again, is over and above what a 10 percent interest owned by an outside company provides, is the way that they looked at it. That's important for a company, whether it's ours or to facilitate another Alaskan company or series of companies to have some ownership. The federal government has done that and I'll talk about it in a moment and we'd like to have the state legislature consider it as well.

Exactly what investment is needed to secure - and I did this just because the state is looking at a 12.5 percent interest. If our company did a 12.5 percent or the state, how much equity is needed that needs to be raised. If you run all the way from the North Slope to Alberta, the cost of that is $11.6 billion. Now that would save the state - our company doesn't own anything in the gas conditioning plant, that's a leased facility that will likely be owned by the producers, and it doesn't rule out state ownership but yet I'm saying the producers would own that. And then the state or even our company would own 12.5 percent from the Slope to Alberta. There would be equity capital of $435 million or $108 million per year. So basically, we would have to obtain equity capital through our investors for that amount by the timeframe of 2009. And you see the share of debt at about $1 billion. Again that would be debt secured and guaranteed by the federal government and that debt, in this case, would be owned by the pipeline company.

From the North Slope to the border, if the state only owned 12.5 percent of that, you'd have to come up with net costs of $750 million. That was the capital that we would also have to look at. That means equity capital of $225 million. By the way, all these assume 30 percent equity, 70 percent debt so if it's actually 20 percent equity, 80 percent debt, the equity amounts, of course, are 'ratioed' down.

So the sum means that we're trying to raise by about 2009 the $50 to $100 million per year from investors and through different financial instruments, or the state, if you took the 12.5 percent, these would be your numbers to raise by that time frame.

Bottom line, what's interesting is significant implications - is if you look back on slide 7, the last from the bottom bullet says $1.3 billion added to the state economy. In a way, if the state did in a fiscal package provide additional incentives, like Joe mentioned state incentives, perhaps for commodity risk protection, if the state were to do that, you're giving some value up. There's no doubt about it, you are. However, if the state owned equity participation or even if an Alaskan company like ours owned a participation percentage, through the additional incremental benefits to the economy, you can actually gain back much, if not all, of that value that you'd have to give up to get the project going. And these are the kinds of things that I'm sure Pedro Van Meurs and his team are looking at.

We would urge that similar to our federal delegation passing a Sense of Congress regarding encouragement of Alaska company participation, if you do a fiscal package next year, as an Alaskan, we would hope you'd incorporate identical intent of the legislature, just like Congress did for a Sense of Congress and I'll talk more about that in the closing slide.

And the bottom line, we see even a 10 percent ownership by Alaskan companies could add $1.3 billion to the state economy and 22,000 new jobs but we realize we have to bring additional value that I already mentioned.

So recommendations would be that the state and/or Alaska companies and individuals should own at least 12.5 percent of the gas line from the Slope to the border or at least all the way to Alberta to the marketing hub. And we would encourage you to include intent of legislature language and, by the way, what I've included in slide 10 comes out of the new military appropriations bill that Congress passed in the exact language. Congress passed a Sense of Congress that Alaska Native corporations and other companies owned and operated by Alaskans and individual Alaskans should have the opportunity to own shares of the Alaska natural gas pipeline in a way that promotes economic development of the state and then to facilitate economic development, sponsors should negotiate in good faith with any willing Alaskan person. We certainly have found willing Alaskan persons that are interested in investing in having ownership of the - and change the business model from the old oil business model. So that's my concluding remarks. I'd like to also mention that our company would also comply and would understand and if you put an 18 month timetable on the fiscal package and we had to do everything we could to make a decision to go to the next phase and raise money for that phase of permitting and detail engineering by 2006, we feel we can. And our business plan calls for compressing the three years of the detailed engineering and permitting from three to two and our goal is to start construction by 2009 and have first sales by the end of 2012. It's about a year longer than the MidAmerican proposal but about a year has passed since that proposal. With that, Mr. Chairman, that concludes my prepared comments.

REPRESENTATIVE CROFT asked:

Putting together some of the things that we've heard over the last day ... Exxon, BP and Conoco have limited capital resources and some internal reasons not to do it. Lehman Brothers and UBS talked about the interest that people have in investing in this outside of Alaska. You've talked about the interest that Alaskans have in investing in this. I guess, putting those all together, why should we wait for the producers? If non-Alaskans are interested, equity markets are interested, if there's reasons why the producers might not want to move as quickly as we want to and you're interested, why are we waiting?

MR. THOMPSON said as a start up company, even raising the 10 percent level of capital is a challenge. Pacific Star Energy is fully funded through next year with seed money. However, when the project moves into the permitting phase, the investment gets riskier. The cost could be $1 billion over two years, although he estimates $500 million. No matter the amount, Pacific Star Energy's share will be $50 to $100 million over two years and that is the riskiest part of the project. Pacific Star Energy's challenge is to find that money by the end of next year. He feels confident that can be done, knowing the interest of the financial markets. The Department of Energy will be arguing for a 14 percent rate of return. Investors want that. This would be a good hedge fund investment not tied to the stock market but tied to a relatively flat cash flow and a FERC regulated rate of return with loan guarantees. He said raising all of that money will require some big capital players. He added that if even two of the producers sign on, Pacific Star Energy would get its share quickly because that would bless the project by large, sophisticated investors. He noted the producers have the capital; the issue is how that capital is allocated as an upstream or downstream project. He pointed out that Exxon Mobil's upstream projects had a 30.6 percent return on capital employed, according to its annual report. He noted that he does not support a gas reserves tax because the producers are at the table negotiating in good faith and financial firms are interested in investing, so a gas reserves tax will cloud the water. He believes the state needs to create a fiscal package that will provide certainty for a number of years. He said the ball game was different three years ago when no one was sitting at the table.

CO-CHAIR WAGONER asked if the state considers taking an equity share in the project - possibly larger than 12.5 percent - that could have a detrimental effect on Pacific Star Energy.

MR. THOMPSON said that is correct. He predicted if the state took 12.5 percent and the producers and pipeline companies wanted the rest, it might be more difficult to allow Pacific Star Energy a small percentage. He said, "I would hope that good hearts prevail and that they would allow Alaskans a chance to invest so that men and women on the street that want to invest - but you are right, it could mean that we would be cut out of the picture and that's the way it goes."

CO-CHAIR WAGONER suggested the possibility that Pacific Star Energy could negotiate a percentage off of the state for investment purposes for state residents.

MR. THOMPSON agreed and offered:

What we have mentioned to certain individuals in the state is doing the Exxon case - like the Alliance Pipeline. If you remember, they took a large equity percentage in that large line from Alberta to Chicago to get it constructed and built and then later sold it off. Enbridge was one of the buyers. If the state took an interest, you'd get your payout and you want to hold it long term, keep it long term. If you want to get some of your cash back, you could divest and we'd certainly be interested in being in the bidding room to bid and buy back from the state after that. Then we would create the Alaska company.

Plan B, by the way, is even if we are cut out of the line because producers don't want us in or the state takes a larger percentage, our company still is interested and would pursue Plan B, which is the ownership and investment in some of the spur lines and even natural gas processing. But that's going to be more difficult because the way that we did in Plan A - to fund that stuff, is the stable cash flow from the gas pipeline percentage so we do a 10 percent, 12 percent return project there, stable cash flow, redeploy into more risky gas processing.

12:58 p.m.

With no further questions, CO-CHAIR SAMUELS thanked Mr. Marushack and Mr. Thompson. He then announced the afternoon presentations would be about manpower requests and recessed the meeting until 1:30 p.m.

CO-CHAIR SAMUELS reconvened the joint Legislative Budget and Audit Committee and Senate Resources Committee at 1:34 p.m. and announced that Mr. Tony Palmer would present to the committee on a topic entitled, Getting a Job on the Pipeline - How Many People, With What Skills, and During Which Phase of Construction or Operation?

MR. TONY PALMER, Vice President, Alaska Business Development, TransCanada, gave the following narrative to a PowerPoint presentation [copy available in committee file].

Thank you Mr. Chairman and members of the committee. I'm pleased to be in front of this committee again after an eventful day yesterday, which I enjoyed. I didn't get an opportunity to see all of it but I did get to enjoy most of the presentations you saw yesterday. Today my presentation will be short but I was asked to speak to project workforce skills requirements. I'll walk that through for you quickly and would be happy to try to respond to any of your questions as we go through or at the end at your pleasure.

Just a quick map on the pipeline - I won't spend any time on this other than to show you that the existing prebuild starting from central Alberta - that's in the green, from a location called Caroline just north of Calgary - it currently exists down to a point on the U.S. border on the east side called Monchy. That's on the Montana border. It connects with the northern border and the pipeline going west connects at Kingsgate on the U.S. border - Idaho border - with PG&E national energy group. That used to be called PGT but now it's called GTN.

I will speak today to primarily the two - there are four phases of the project. We're still in the development phase. I will speak primarily to the preconstruction and construction phases, which are the highest labor components for this project and then operations as well, which I will not speak to today. I'll give you a high level project schedule and I'll speak to labor details in terms of types of employees required for this project and quickly a contracting plan and finally summarize - I do have a couple of videos to show you some actual construction.

First to address preconstruction - this slide [4] shows you general categories of preconstruction and construction phases. Prior to preconstruction, there will be work done in the field to gather data for project planning, engineering, environmental, socio-economic, etcetera, which will provide opportunities for local businesses. The labor numbers that I'm going to show you and the quantities are not included for events occurring before the preconstruction phase. Just to indicate for you what terminology we're using when we talk about preconstruction, we mean gravel processing, access road construction, stockpiling equipment at sites, building camp sites, compressor station sites, development, receiving the pipe so

> receiving it within the state, double jointing - that's connecting the pipe so you have two pieces of pipe connected together, coating the pipe - it needs to be coated to protect it for a long term basis, that would occur as well. Haul and stockpile the pipe - so haul it to locations along the right-of-way to be ready for construction and brush clearing on the right-of-way. That's fundamentally what we mean by preconstruction. Sometimes it's called logistics but fundamentally preparing to do the construction phase.
>
> The construction phase is truly pipe construction - connecting the pipe, laying it in the trench and covering it, and compressor station construction as well.
>
> This is our project schedule [slide 5], which we put in front of the state with our Stranded Gas Development Act application on June 1. I've given you two designations here, both calendar years starting in 2005, as well as year one through eight and I can tell you that, of course, it's all driven off of the first row, which is when the commercial agreement is struck. We have anticipated here a commercial agreement being struck by the middle of 2005. If that doesn't occur, the project schedule will shift backward proportionately. So just be aware of that.

CO-CHAIR SAMUELS interjected to note that ConocoPhillips testified earlier that such a schedule would be considered to be extremely aggressive. He asked Mr. Palmer to respond.

MR. PALMER said if a commercial agreement is reached with TransCanada by mid-2005, TransCanada can achieve this schedule to begin service in 2012.

CO-CHAIR SAMUELS asked if he is speaking to "signing on the dotted line to gas flowing."

MR. PALMER said TransCanada holds an existing certificate in Canada and would not have to file for new certificates, which would give it a timing advantage. He then continued his presentation.

> I won't take you through the other components. This is all laid out but fundamentally we'd work through the engineering and field study data and you'd be at a

point in 2008 where you'd have arranged your financing, starting to procure you're equipment, as well as steel, then you'd start preconstruction at the same time - the end of 2008. Then we have a two-year construction timeframe, which I can tell you includes working winter and summer both in Alaska and Canada and I'll actually show you the winter-summer construction schedule as we walk through with how many crews and where they're working. So I'll show you that later in the presentation.

CO-CHAIR SAMUELS asked if regarding gearing up for job opportunities, most of the [employment] will occur between 2009 and 2012.

MR. PALMER said the bulk of the work will occur beginning in late 2008 and end in late 2011. He then continued.

So I'll take you through the numbers by skill type during preconstruction. This is for the Alaska component of the project only and these, of course, are preliminary estimates based on what we have given you before. It's a 48-inch pipeline, high pressure, moving 4.5 bcf/day initially. That's what's contemplated here. If the project changes and volumes change, these numbers will change.

So, just walk through it - pipefitters and welders, in fact I'll show you a video shortly to show how the welding process has changed on high-pressure pipelines over the years. Equipment operators - modest numbers there as well. A large number of truck drivers and I have a video on that as well showing you how moving the pipe to the site is a very significant event during preconstruction. Some labor numbers - supervisory and others - and other is really the catchall for all the other components. Then you see totals in the 1300 to 1600 individuals hired just during that peak time of preconstruction.

Here are the construction numbers - during the actual two-year construction timeframe. This is a peak labor requirement. You'll see ranges around this. Once again you see larger numbers for pipefitters and welders, equipment operators and truck drivers - very large numbers at this point, as well as laborers. Higher number, of course, for supervisory and others, once again a catchall, gives you numbers in the 5500 to 7000.

Now you will see that preconstruction does overlap construction because this will be staged down the right-of-way and, in fact, I'll show you here on the next slide, which is a summary because events will be occurring simultaneously in different locations along the right-of-way.

CO-CHAIR SAMUELS asked if Mr. Palmer is estimating 6,000 full-time jobs for three-years.

MR. PALMER replied, "No. What I'm describing for you here are 6,000 at the peak. Now over the course of that two years, we may be at lower numbers at some point during the two years, but what I'm giving you are the peak numbers and those jobs will be for most of the period but I can't assure you they're going to be for the full two years." He then continued his presentation.

The next slide [8] is just a summation of the previous two to show you that in terms of overall peak, you're looking at numbers in the 1600 to 8600 range so in the order of 8,000 full time jobs during that two to three year timeframe, they will not necessarily be there for the full three years but they will be there for a significant component of that - a very significant project in terms of establishing manpower, putting it in place in these categories.

This next slide [9], and I hope it shows up better in your handout than it does here, the next slide identifies for you contractors A-B-C and D so four different contractors, four different spreads, to use pipeline terminology, would be working winter and summer. And if I just looked, starting from Prudhoe Bay, at the orange, the orange is winter construction so contractor A would have winter construction in our schedule starting from Prudhoe Bay south and contractor A would have a second winter construction from about midway between Prudhoe down to Atigun Pass. They would do the second part of that. They'd have a summer construction south of the Atigun Pass and so on as you work your way down the right-of-way. So there will be simultaneous work occurring across the project by contractors A-B-C and D, winter and summer. And the same thing will be occurring on the Canadian side so that you'll have a massive alignment of individuals on this project both in Canada and Alaska at the same two to three year window.

[The following testimony accompanied a video MR. PALMER showed.]

I would like to just spend a moment for those of you that may not be familiar with construction. This is what we mean by trenching. This is how the majority of the pipe trench will be established. You dig it with a trencher. When you go through the Atigun Pass and up through the Brooks Range you'll clearly be blasting but a lot of the digging of the actual trench is done with a piece of equipment like this. You can do that for a 48-inch diameter pipeline. We do that on our systems across Canada. Just to give you an indication as to how quickly this moves down the right-of-way is a very efficient piece of equipment that allows you to dig the trench and dispose of your waste material.

One more item I thought I'd show you - the old version of moving pipe and this, as you can see, is some 80 to 90 years ago. Here's why you need so many truck drivers. You can see this truck is transporting big inch pipe along a right-of-way. You can see a number of significant volumes of pipe already aligned along the right-of-way. That's what I mean by preconstruction. This will be an assembly. That's why you can complete construction on a project in a couple of years because you've got things ready to go.

One more video - here's the old version of welding pipe. Once again, from 50 or 75 years ago, if you look at this old truck on this side, you can see how ancient this video is but this is the way a lot of people think welding is done on a pipeline. That's no longer the case I can assure you. And you'll hopefully see in this video here the new mechanized welding. These are trained welders that operate this electronic equipment but we've done significant technological advances working with trade unions, as well as steel manufacturers as to how this can be done. And now you can see - this case happens to have a single welding torch head. We're now doing it with tandem multiple heads on the welding torch. It makes the project go faster and it's safer and you get a better weld.

SENATOR BUNDE asked if during the construction of the TransAlaska Pipeline, virtually no Alaskans were pipeline welders. He said his impression is that the pipefitters union is very tight and headquartered in the Lower 48. He questioned whether that is still the case.

MR. PALMER said he did not have an answer about the availability today but said that TransCanada would clearly prefer to retain local residents. That would be more efficient for the project. TransCanada believes that by identifying the labor needs now, Alaskans can begin to position themselves for those jobs.

SENATOR BUNDE commented that it is not only a matter of training, it would require the worker to get a [union] card, so that matter needs to be investigated further.

MR. PALMER agreed.

CO-CHAIR SAMUELS asked if, regarding the design work, TransCanada would be doing that work in-house or whether it might hire Alaskan firms.

MR. PALMER explained that TransCanada generally would do a project of this scale with a combination of in-house engineers and outsourced engineers, Alaskan and Canadian. TransCanada worked with VECO and Canadian engineering firms on its last project. He continued his presentation.

> Just to summarize - peak labor requirements of approximately 8,000. These are direct labor jobs on the pipeline. They do not include other labor provided by Alaskan businesses. No multiplier effects here. So they are not positions that engineering firms will have retained. They're not support services. They're not materials. The labor force estimates are preliminary until final design. I've described that to you. We would argue that training should commence once commercial agreements are in hand. The project phases, as I described, one year for pre-construction and two years for pipe and station construction and they cross over; they're concurrent.
>
> That's all I had. Thank you.

SENATOR ELTON asked Mr. Palmer if he sees training as TransCanada's role or a role for other entities.

MR. PALMER said he generally sees that as a role for other entities, such as community colleges, industry, and unions. However, TransCanada has been involved in training programs in an advisory position in the past and understands how that training should occur.

SENATOR ELTON asked if TransCanada has helped to fund training programs in the past.

MR. PALMER said it has on occasion. He noted that federal money will be forthcoming to assist Alaska in job training.

CO-CHAIR SAMUELS thanked Mr. Palmer and asked Commissioner Greg O'Claray to address the committee.

COMMISSIONER GREG O'CLARAY, Alaska Department of Labor and Workforce Development (DOLWD), gave the following presentation entitled, Training and Hiring Alaskans for a Gas Pipeline.

> Yesterday Governor Murkowski addressed you with respect to the equity involvement of our state in the construction of this particular project, or at least the ownership of the project. My role as commissioner of the Department of Labor and Workforce Development is quite simple. My charge is to provide an opportunity for every citizen of our state that's an Alaska resident to be employed in good paying jobs within the industries that are fostered by this particular project.
>
> The federal legislation that Senator Lisa Murkowski brought back to us here the other night when she stepped off of the Northwest flight at the Ted Stevens International Airport has a proviso in it that you should be aware of. Many of you have seen the legislation. I won't quote from it but I'll give you in general what it says. It provides for $20 million in tax dollars to be funneled through the Alaska Workforce Investment Board, which is the Governor's workforce investment board under the Workforce Investment Act. That is supported by and actually directed and operated through the Department of Labor and Workforce Development. Out of the $20 million, 15 percent of that will be dedicated toward a training facility to be located in Fairbanks, specifically for training pipeliners.

Before I get too far in my remarks, I want to tell you that I'm about to execute signature on a grant that will provide for training of 100 pipeliners that will be working on the North Slope beginning this winter. It's a joint agreement between the Alaska Works Partnership - the pipe trades unions from the Fairbanks area. All of those folks, by the way, will be testifying after I've completed my remarks and various contractors that are going to be doing work on the Slope. Tara Jollie, if I might Mr. Chairman, I'd like to introduce Tara Jollie who is our administrator for the STEP program - State Training and Employment Program.... You don't mind a little theater, do you Mr. Chairman?

I hereby sign this document that will allocate the state's share of a match - total grant in the amount of $344,063 of STEP funds that you authorized through your good efforts as legislators. The industry has come forward. Mike Andrews, are you here? Mike, what was the amount of match from the industry?

MR. ANDREWS replied $175,000.

COMMISSIONER O'CLARAY continued.

So the industry is participating with us on a joint basis and we will be training the 21st Century next generation of pipeliners and I want to congratulate the Alaska Works Partnership, the contractors, and the oil industry-producing owners that participated in this particular effort. Thank you.

SENATOR BUNDE asked for a definition of "pipeliner."

COMMISSIONER O'CLARAY introduced Mr. Laiti, the business manager of the pipe trades in Fairbanks, and told members he is a pipeliner. He said the description of a pipeliner during the construction of TAPS was anyone who could get dispatched, walk on two feet, and chew gum at the same time. He pointed out the actual job description could fit a number of trades and crafts involved in the construction of a pipeline.

SENATOR BUNDE repeated his concern that Alaskans can be trained for these jobs but, as happened with TAPS, they might not be able to get dispatched as pipeline welders. He asked if that is still the case and, if so, what can be done about it.

COMMISSIONER O'CLARAY said during the TAPS project, that particular project labor agreement involved the International Presidents of the Building [and Construction] Trades and was negotiated at a higher level than in-state. It did not involve any local union business agents. The signatory party from the Plumbers and Pipefitters International, Marty Ward, signed that agreement. Under the agreement, the only skilled pipe welders came from Local 798 in Tulsa, Oklahoma. He said although he may ruffle some feathers, if his efforts combined with the efforts of partners who are working to train Alaskans are successful, there will be no need for Local 798 to come to Alaska. He added that in the language being negotiated under the Stranded Gas Act, the Department of Labor has a seat at the bargaining table at Governor Murkowski's request. He said he cannot disclose the exact language being negotiated, it will be brought before the legislature for consideration. That language will be stronger, more precise, and will make sure DOLWD is involved every step of the way with respect to training and pipeline employment. He and the Governor believe that a project labor agreement is applicable to this project, just as it was with TAPS. His charge is to ensure strong enough language that Alaskans will come first in every case.

SENATOR BUNDE said he is glad to hear that.

REPRESENTATIVE CHENAULT asked whether the labor agreement will be part of the proposal brought to the legislature for approval or something done at a later date.

COMMISSIONER O'CLARAY said it is his desire that it be included in the agreement. He furthered:

> The appropriateness of putting the project labor agreement requirement in the Stranded Gas Agreement, or the agreement negotiated under the Stranded Gas Act, is debatable. When the contract could or would be signed, in my view, should be negotiated between the parties - that is the contractors slash owners that will be involved and organized labor. Again, let me restate. I believe the only way to guarantee Alaska hire that's supportable in the courts - let me repeat that - that's supportable in the courts by precedent, is to have a project labor agreement in place. I believe that those discussions should begin as soon as possible, as soon as an interested party that comes forth with a viable proposal to build the line is

identified, I think those discussions should be undertaken.

REPRESENTATIVE GARA asked Commissioner O'Claray what other options DOLWD is pursuing to make sure that the court rules that prohibit a certain level of Alaska hire don't get in the way. He asked if there might be an advantage to involving Native corporations that may have a right to hire local residents.

COMMISSIONER O'CLARAY said some things can be done to ensure that rural residents participate in building the line. He said a specific section of the TAPS agreement required Alaska Native hire.

TAPE 04-34, SIDE A

COMMISSIONER O'CLARAY said the state has gained from its TAPS experience and he believes there should and will be an effort on the Administration's part to make certain that rural residents have a preference. He added that of the 100 people who will be trained as pipeliners beginning in November, over 40 percent are rural residents. The Alaska Works Partnership has done a marvelous job of recruiting people interested in apprenticeships in the building trades from Bush Alaska. Recruitment entailed traveling to villages and reaching agreements with several tribal governments. He recognized the efforts of Mike Andrews, who was the original executive director of ERIC, which preceded the Alaska Workforce Investment Board. Mr. Andrews put together an aggressive group of recruiters. He then said he believes any agreement should contain a provision that identifies the demographics of Alaska so that rural residents will have priority for training and employment. He suggested asking Mr. Palmer how TransCanada handled its project labor agreement in Canada.

REPRESENTATIVE GARA asked Commissioner O'Claray if he could share the legal memo with the legislators so that they can feel assured that everything possible is being done to hire Alaska labor.

COMMISSIONER O'CLARAY said he could share the legal memoranda and the court rulings but he was unable to share draft documents associated with the Stranded Gas Act negotiations. He pointed out that several legal precedents deal with the legality of project labor agreements.

REPRESENTATIVE JOULE said, regarding the 100 pipeliner jobs, it sounds like a lot has already been done in terms of selection and advertising.

COMMISSIONER O'CLARAY said a lot remains to be done. He said no one should be deluded into thinking that the state can train and staff all of the jobs with Alaskans. He explained:

> And let me tell you why. We can't afford to ... because at the peak numbers that were shown, what do we do with those folks when the pipeline project is over with? Certainly some of them will have skills that will transfer to maintenance and operations, but perhaps the producers that own the Alyeska line would be willing to replace some of their non-resident workers with those folks. I would hope that would be the case but no one, at least in my department - I don't believe anyone in organized labor or the state really believes that we'll be able to train that many skilled people and provide them with sustainable work, but we will try.

REPRESENTATIVE JOULE asked how an interested person would "get their foot in the door" for the training program that begins in November.

COMMISSIONER O'CLARAY said one way is to visit or get on-line with one of the Alaska job centers, administered by DOLWD. A person could also contact one of the pipe trade groups or the Alaska Works Partnership Outreach Program. He emphasized that the Stranded Gas Act proposal will also include another provision dealing with Alaska vendors and Alaskans in general because the economic benefit of this project is not limited to the construction jobs. It also includes use of local companies and vendors who will provide services and materials. He said Alaska has sold itself short over the long haul by not putting teeth in its procurement law so that public entities must pay attention to the local economy when contracting - that is part 2 of Alaska hire.

REPRESENTATIVE JOULE noted that Commissioner O'Claray said that 40 percent of the 100 recruits were from Bush Alaska.

MR. MIKE ANDREWS, Director of Alaska Works Partnership, told members that under the training proposal signed by the Commissioner today, an estimated 100 people will be involved in a two-week pipeline training program in Fairbanks to start around November 8. About 60 of those workers will come from the Fairbanks North Star Borough and 40 will come from the Northwest Arctic and the North Slope. The training provides an opportunity to work as a team among the four pipeline crafts: the pipefitters, the operating engineers, the skilled laborers and the teamsters. They construct as a team, so the program will individually train journey persons who need upgrade skills on new equipment. No training has taken place for five years and equipment has changed. Additionally, the other trainees will be apprentices who will be learning pipeline trades. He said the Alaska Works Partnership has budgeted to recruit at least 40 persons from the Northwest area who will be recruited through the apprenticeship programs. The work will start in January and is tied to a ConocoPhillips project at West Sac. The idea is to demonstrate the skills as a team during the second week of training in Fairbanks, where participants will construct a 2,000 foot 8 inch pipe. He added that it will primarily be a demonstration of the team's skills for H.C. Price and Norcon and will act as a model or a test.

REPRESENTATIVE JOULE asked Mr. Andrews if he feels confident that the Alaska Works Partnership will not repeat the mistakes made during the construction of TAPS.

MR. ANDREWS said Alaska Works Partnership was formed several years ago by the building trades unions and their apprenticeship programs to reach out to rural Alaska to provide open programs, union or non-union, to get people into the construction trades. It takes several years to train each worker. Its funding came at the request of Senator Ted Stevens through the U.S. Department of Labor. The Alaska Works Partnership has been piloting for the department the creation of a system that reaches out to the village levels. The Partnership has served 60 villages in rural Alaska and has brought on average 60 new apprentices into the trades each year. In addition, it has recruited 150 building maintenance repair apprentices to build houses in rural Alaska. This system will have a statewide impact. It was put together to show how quickly labor and employers can respond to the opportunity of new jobs on the North Slope.

SENATOR ELTON noted, in response to Representative Chenault's question, that Commissioner O'Claray said a labor agreement may not be ready when the package comes to the legislature. He asked Commissioner O'Claray if he would consider putting contingency language in the agreement saying the agreement was contingent upon signing a project labor agreement.

COMMISSIONER O'CLARAY said he is not empowered to discuss the provisions being debated but urged members to articulate that concern to the Governor and negotiators of the Stranded Gas Act. Those negotiators are the commissioners of the Department of Revenue, Natural Resources, and the attorney general.

REPRESENTATIVE McGUIRE asked what is being done regarding training in the Southcentral region of Alaska. She pointed out that a lot of people have moved to Anchorage from rural Alaska who are looking for a trade.

MR. ANDREWS said the Alaska Works Partnership's grant resources have been for the primary purpose of recruiting from rural areas. He acknowledged that he is working with DOLWD right now to provide ways for people to get access to individual training at job service centers. The Alaska Works Partnership and Associated General Contractors have also spent a lot of time working with high schools in Anchorage, Fairbanks and Delta to create a construction trades program that would allow students direct entry into the trades from high school. They have also been working with rural school districts in an effort to get more applied learning in those areas. He said the Partnership would like to do more in the urban areas but is working with limited resources.

REPRESENTATIVE McGUIRE asked Mr. Andrews to approach Southcentral area lawmakers about this subject because the perception that Anchorage has a lot of jobs for people simply is not true. Many young people want to stay or return home but need a good paying job to do that.

MR. ANDREWS informed members that the Alaska Works Partnership recently entered into a memorandum of agreement to do work for the Cook Inlet Regional Housing Association so it has created a pathway there.

SENATOR ELTON asked about rural communities in Southeast Alaska.

MR. ANDREWS said the Alaska Works Partnership has had an office in Juneau for over a year and has been active with Klukwan, the Tlingit and Haida Housing Authority, and the vocational center in Juneau, but he admitted the training has been focused on the needs of employers and projects so employers must be willing to commit the trainees.

CO-CHAIR SAMUELS noted the arrival of Senator Cowdery.

COMMISSIONER O'CLARAY introduced Andy Baker from Baker Aviation in Kotzebue and asked that he address the committee on local hire in Kotzebue. He told members that Mr. Baker was recently elected as chair of the Alaska Workforce Investment Board (AWIB). Under the federal legislation, the $20 million minus the 15 percent for construction of the Fairbanks facility will go to the AWIB. He also introduced Ramona McAleese, the new executive director of the Alaska Workforce Investment Board.

MR. ANDY BAKER, Chairman of AWIB, said that fitting training to available jobs is an exciting approach. He looks forward to working on the government side putting Alaskans to work.

MS. RAMONA McALEESE, Executive Director of AWIB, explained that AWIB is basically the old Job Training Partnership Act program. AWIB is responsible for allocating all Workforce Investment Act funding that comes to the state. Last year, those funds amounted to $18 million. AWIB is also responsible for the STEP program. AWIB has commitments and measurements to allocate funding for rural areas; right now 60 percent is allocated to rural areas. She said the AWIB is committed to the Governor's Alaska hire initiative.

SENATOR BUNDE asked if half of the $20 million will be used to build a training facility in Fairbanks.

COMMISSIONER O'CLARAY clarified that 15 percent of the $20 million, or $3 million, will be used for the facility.

MR. JIM SAMPSON, Alaska President, AFL-CIO, thanked members for the opportunity to address the committee and noted this is the first time the AFL-CIO has received an invitation to address a legislative committee. He said he was accompanied by representatives of four Alaska unions, all of who have at least 30 years in pipeline construction representing workers in Alaska. These four unions have built about 98 percent of all pipelines in Alaska. He gave the following presentation.

> While any Alaska natural gas line project will have major associated building trade work, such as a gas conditioning plant on the Slope, compressor stations, or LNG facilities in the case of an LNG project, these representatives also have a good understanding of training requirements for these types of projects as well.

If I may, if I could just introduce for the committee those who are here - Jim Laiti is here. He is a business manager of the Plumbers and Pipefitters Local 375 in Fairbanks. Along with him is John Kanabe, their training director. We have district representative Bob Mahaney of the Operating Engineers Local 302, and Click Bishop, who is the training director for the state, is with us as well.... We have two business managers with the responsibility of providing laborers on pipeline work in the state. One business manager is out of Fairbanks. His jurisdiction is all work north of the 63rd parallel. We have one here today with the responsibility for Anchorage and Valdez. He's really our LNG guy. [They are] Tim Sharp and Mike Gallagher, originally from Valdez and they're here as well. Joe Mahaney isn't here. It's probably a communication goof-up on my part and I apologize for him but we will hopefully do the best we can to answer any questions regarding trucking. If we really need some help we have Barbara Huff here in the audience and she's a trucker with the Teamsters.

What I hope to do is just give you a couple of thoughts on how we view the project and then ask these folks to give you four or five minutes apiece and be prepared to answer any questions.

The building of an Alaska gas line project will be the largest construction project in the history of North America. It will require thousands of field construction workers not only for the Alaska portion of the project, but an even larger workforce for the Canadian piece to the hub in Alberta and on to the Midwest. The project cannot be built on the American or Canadian side of the border without an agreement with labor. In response to the Alaska natural gas line project agreement Sense of the Senate language recently included in federal legislation, labor is prepared to negotiate a project agreement with the sponsors of the project similar to the terms and conditions of the agreement used in the building of the TransAlaska Pipeline. This means any discussions with labor will include the National Building and Construction Trades Department of the AFL-CIO and international union representatives, which I believe will be in Alaska's best interest and the interest of gas line sponsors, as these international unions represent both workers in Canada and Alaska across the border.

We anticipate the pipe for the project will move on American ships manned by maritime crews represented by the AFL-CIO. We anticipate AFL-CIO longshoremen in Alaska will unload the ships and, once unloaded, we believe the pipe will be moved by the Alaska Railroad, represented by railroad unions of the AFL-CIO or by trucks driven by Teamsters. We anticipate the Alaska Laborers to coat the pipe, members of the Operating Engineers to do the trenching and the dirt work and UA welders to weld the pipe. We also anticipate the other Alaska building trades to be involved in construction of compressor stations and the gas conditioning plant on the North Slope.

We believe it's extremely important to Alaska that efforts be made early on to prepare the Alaska workforce for the project, and those of us here today from labor thank the committee for your interest in this area. All of us, the state, labor and pipeline sponsors need to look at the past and improve our efforts to give qualified Alaskans, regardless of where they live, whether it be urban or rural Alaska, an opportunity to work on the project before non-Alaskans.

Our efforts to prepare for the project will be determined by the amount of work in the market between now and the start of any natural gas pipeline project. As legislators what you do today will determine whether Alaskans work on the project or not. Under the Stranded Gas Act, you approve any contract the administration negotiates with gas line sponsors and we believe our legislators must do everything they can to assure that whatever they can do be done to give Alaskans and, just as importantly, Alaskan contractors, the opportunity to work on the project.

Yesterday you spent considerable time on risk and reward. Labor costs are a big component of any pipeline project, especially one of this size. The state and sponsors need to understand the labor costs. They need to know that they will be able to secure qualified workers. They need to ensure that the project is built without any interruption of work and we need to have appropriate labor protections for Alaska workers. We can do this by working together now to ensure that these protections are put in place. Labor is prepared to work with the state and the sponsors to do this.

We have been working closely with our congressional delegation over the last couple years to ensure the availability of federal funding for training Alaskans for our project. We encouraged Senator Stevens and Senator Murkowski to include training funds in the federal legislation. In the military construction appropriations report passed earlier this week, as other speakers have said, there's $20 million and I'm sure there's a lot of people looking at that $20 million. Labor also requested funds. It was our request for $3 million up to 15 percent, to expand our training facilities in Fairbanks. We believe that Fairbanks, the Interior, will be central to any project, whether it's an all Alaska project or whether it's an LNG project. Our request that those funds will be included in federal legislation was to help us expand and augment and supplement our existing training program that we have in Alaska. Our hope is that that facility will be built primarily - it will be built to be used by pipeline unions and contractors and it will have a residential addition on there for the purpose of bringing in workers from rural Alaska to house them so we can train rural Alaska workers in some of the more complicated aspects of training - the training that we can't deliver out to rural Alaska.

The skilled construction workforce that Alaska has today is directly tied to the commitment of Alaska's construction industry led by the Associated General Contractors, the National Electric Contractors, the Mechanical Contractors, the trucking industry and others. Labor in the industry has 29 jointly administered apprenticeship programs that exist in Alaska at this time and these programs account for about 85 percent of all actively registered apprentices in the state and about 95 percent of all construction apprentices in the state. We have 15 jointly managed training facilities in the state, with a combined value of $25 to $30 million. We have training instructors and training facilities that employ 90 people full-time and 60 part-time contract instructors. All of these facilities, for the most part, are funded by private contributions from our contractors.

Last year we brought in about 350 new construction apprentices. Teamsters 959, even though they're not here today, is prepared to offer opportunities in training to Alaskans in preparation of a gas pipeline, as well as the three pipeline unions that are here today. Recently Teamsters 959 director of training for Alaska, Mark Johnson, was appointed to be the director of training for the Teamsters nationwide. His 40 or 50 years in Alaska and his commitment to the state, I think, is going to be beneficial for [indisc.] sponsors and Alaskans in the training of Teamsters on that project.

There was a discussion of the Stranded Gas Act and the AFL-CIO's position on that. I will provide the committee with a copy of a letter I sent to Governor Murkowski on March 4th, which contains some of our recommendations for contract negotiations for [indisc.] sponsors, including the inclusion of a project labor agreement. So with that, that concludes my remarks.

CO-CHAIR SAMUELS asked, when it comes to international rules, whether Alaskans will be able to work in Canada or whether Canada must address its own citizens first.

MR. SAMPSON said he is not an expert on immigration but he has found, in his experience, that it is easier for Canadians to work in Alaska than vice versa. He noted interest among [indisc.] sponsors about worker movement between the two countries. A lot depends on how the Canadians would build the line and where the spreads would begin and end. He said from the view of labor, the project will take thousands of skilled people so if all pipeline spreads fire up at one time, manning the spreads will be very problematic. He said a lot of piping has already been done in Canada but a lot of work remains to be done. In one case, extra help was needed on a British Columbia project so workers were imported from the Northwest. He explained that Mano Frey is the regional vice president of an international pipeline union. He is responsible for seven or eight western states and four or five provinces in Canada, including Alberta, British Columbia and the Yukon. He represents pipeline laborers in those areas. He felt if Canadians needed help, Alaskans would be willing to go whenever called.

CO-CHAIR SAMUELS asked Mr. Sampson to comment on Commissioner O'Claray's statement that during the construction of TAPS, all of the welders came from outside of Alaska because of the agreement.

MR. SAMPSON deferred to the representative of the welders' association for an answer but stated that all of the union representatives present were involved in TAPS and there are many opinions on how that project worked out.

SENATOR BUNDE expressed concern that the international unions were not friendly to Alaskans during the construction of TAPS. He cautioned Mr. Sampson not to follow the same procedure used then.

MR. SAMPSON said he is very familiar with the TAPS agreement and what support Alaskans got. He believes that Alaskan labor will be leading at the table in these negotiations. The Alaskan unions have a relationship with the national building trades in Washington. He said he does not believe a president of an international union would say that Lower 48 workers should have a work priority over qualified Alaskans. He said Alaskan union representatives are prepared to make big commitments to Alaskans in a negotiated contract.

SENATOR BUNDE said he was not casting aspersions about Mr. Sampson's good will but was just cautioning him that Alaska is sometimes a small fish in a big pond.

SENATOR COWDERY said his understanding is that the pipe to be transported is very heavy so that even if overload permits are obtained, many of the bridges cannot handle those loads.

MR. SAMPSON said the size of the pipe differs among the proposals so that is yet to be determined. He suggested several transportation scenarios but said he is sure the industry will ask for waivers on road to weight and that those problems can be addressed relatively easily.

SENATOR COWDERY said he is hoping his bill to extend the railroad through Canada will come about.

MR. SAMPSON agreed, but said the pipe can also be trucked if need be and jested that the unions are willing to build roads, bridges, dams or any other project that might be required.

MR. JIM LAITI, Business Manager with Pipefitters Local 375, Fairbanks, introduced Mr. John Kanabe, retired training coordinator, who was instrumental in implementing some of the corrections to the lessons learned during TAPS. He read the following prepared statement.

> Thanks, Mr. Chairman, and committee members, for this opportunity. I appreciate that. As I said, I'm the business manager of the United Association of Plumbers and Pipefitters, Local 375, in Fairbanks. We are one of three pipefitter locals in the state and we were chartered in 1946. My personal experience began with my apprenticeship in Local 375, beginning late in 1969. Back in those days you could still join an apprenticeship program if you were under 18 and many of us, while we were still in high school, started then.
>
> My timing was very fortunate. It was right in the middle of the construction boom we witnessed in the 1970s. I gained a tremendous amount of experience that many others weren't able to gather prior to those times here in Alaska. I also experienced first hand the decline that we saw following that boom.
>
> Regarding the issue of maximizing Alaska's workforce involvement in a gas project, the best way, in my opinion, to prepare Alaskans for this project is to utilize the existing programs, facilities and instructors already in place. These apprenticeship programs have evolved tremendously, like I said with ours, but I think ours is a good example of most all of them from the lessons that we learned from TAPS. Prior to that time there wasn't a project similar to that, not just in our area but probably in the world.
>
> The Local 375 apprenticeship program is representative of many others in the building and construction trades. In order to produce journey level craft persons, the pipefitters 5-year program requires completion of nearly 2,000 hours of shop and classroom training and 8,000 hours, approximately, of on-the-job mentoring type training under the supervision of

> qualified craftsmen to turn out each journeyman at the end of the typically 5-year period. I'd like to re-emphasize that training by itself will not create an effective workforce. There's got to be a linkage to on-the-job experience. An analogy would be you wouldn't build a competitive football team solely on play books and videos and there's got to be a translation into field experience. You can't beat that on-the-job experience and, as an example, you know pipeline level of welders, because of the productivity and the quality requirements, those guys need to work most of the year-round. I mean their skills deteriorate and they're capable of being employed full time. If there's not a project here in-state...

CO-CHAIR SAMUELS interjected to ask if the unions factor into their decisions about training the downside risk that the trainees will have no marketable skills after the pipeline is completed.

MR. LAITI said these large projects create a bell curve as far as employment goes for skilled craftsmen but Alaska will need more skilled craftsmen after the project is completed for maintenance and operations and the unions can estimate that amount. He noted the pipefitters' union tries to keep people working while they are in the apprentice program and is pretty successful. It is also market driven.

SENATOR ELTON said Mr. Laiti's play book analogy suggests a potential problem in that if training begins now, a presumption must be made that once that training is done, projects will be available for possibly 5,000 hours of on-the-job training.

MR. LAITI said that is correct. He acknowledged there will be some conjecture that will have to be made about the timeframe between project approval and when it starts. He said some of the skilled workers will have to be imported since it will not be beneficial to have 1,000 pipeline workers unemployed in Alaska after the project is finished. He noted that he was forced to leave Alaska to work in 1979 and 1980.

MR. JOHN KANABE said many workers can be trained to a certain level and then "polishing" them would take a short period of time.

SENATOR ELTON said if unions begin training Alaskans now for Alaskan jobs, they may not be able to get the on-the-job training necessary for them to become welders; they may end up as welders' assistants.

MR. LAITI said these folks will need continuous employment until the project starts to maintain their skills. [END OF SIDE A]

TAPE 04-34, SIDE B

MR. LAITI continued his prepared statement.

> ... into the construction industry is without comparison. According to statistics compiled by Information Insights in their May 2004 report, labor and management JATCs in Alaska accounted for 84 percent of nearly 1400 active registered apprentices. These apprentices benefit directly from the culture that we've seen developed in the oil industry in the last probably 10-12 years.
>
> Attention to safety - a safe workplace, workforce productivity, producing a quality product with careful consideration for our environment - I mean these are all refinements and changes we've seen probably in the last, as I said, 10 or 12 years and that's good for the state, good for our workforce, good for the product that we build. We've come a long way since TAPS. Let's make the most of our collective experience using language for a project labor agreement that will ensure utilization of our proven apprentice programs.

MR. KANABE added that the pipefitters union has been training continuously since 1951. The union is market driven, meaning it can only train for the jobs that are out there. He noted that the union has hundreds of trainers, all of them journeymen. Classroom training is only one component and most learning occurs in the field. He said journeymen have a vested interest in training new workers.

CO-CHAIR WAGONER asked how many people will be trained during the project during the next year on the Slope.

MR. LAITI clarified that that project consists of about 24 miles of pipe and he expects that everyone who goes through the pipefitters union pipeline orientation will have an opportunity to work on that, but not at the journeyman level. He explained that the four pipeline crafts have gotten together in the past to provide training at different levels. Everyone who participates as a pipefitter is at the welder's helper level, apprentice level or lower. Some of them will have the opportunity to work as journeymen prior to the pipeline project. He said there has been interest in dictating total Alaska hire. The Plumbers and Pipefitters Union national pipeline director has visited Alaska and is very sensitive to the Alaska hire issue. Its general president has also visited a number of times, which did not happen when the TAPS was underway.

CO-CHAIR WAGONER said he wants to hire as many Alaskans as possible, but questioned how many certified pipe welders are available in Alaska today.

MR. LAITI estimated 200 to 250, depending on the type of certification. He said the Local 798 union began to train to that standard in the early 1980s and helped [Local 375] welders to learn to perform to the non-destructive testing standards, which are almost to nuclear standards.

CO-CHAIR WAGONER surmised that many of those welders will not leave their current jobs to work on the pipeline.

MR. LAITI said some will, some won't.

CO-CHAIR SAMUELS called Mr. Bishop to testify.

MR. CLICK BISHOP, Apprenticeship and Training Coordinator for the Operating Engineers Local 302, introduced district representative Bob Morigeau from Anchorage, and thanked members for the opportunity to speak. He told members he has been with the operating engineers for 30 years and worked on the TransAlaska Pipeline right after completing high school. He has also worked on civil, heavy and highway work and spent 17 winters working in Prudhoe Bay. He began his current position in 1991, at which time he had 17 apprentices. Today he has more than 120. He said technology has changed so that today, the project will rely on hydraulic excavators with GPS technology and trenching machines. This new equipment requires much more training than was required 30 years ago.

CO-CHAIR SAMUELS asked if the new technology will require fewer people.

MR. BISHOP said the peak manpower numbers provided by Mr. Palmer showed the need for a lot fewer operating engineers than the 1974 project required. He noted that as the pipeline crafts came together in 1997 and 1998 with the industry, labor and the oil companies, it did some training for North Slope work. Out of the 28 students that were trained in his craft, 25 were employed. His apprenticeship program is designed to only train the number of people that can be actively employed. He works hard to recruit from rural Alaska. Apprenticeship numbers for Alaska Natives depend upon timing but run from 30 to 40 percent of participants. He said the unions can collectively do a better job to assure training for this project than they did in 1974. He commented that the Pebble Mine project may be starting at the same time as the gas line and that could create a manpower problem. He offered his services to the committee for any help it may need.

MR. BOB MORIGEAU, District Representative, Operating Engineers 302, told members that he traveled to Alaska 30 years ago from Montana and remained here. He explained that most of the work done by the Operating Engineers is heavy highway work; 7 out of 10 of its projects have no mandated training or apprenticeship hours. This project would be a perfect vehicle to increase its numbers because many contractors will not employ trainees on their own unless mandated in the job specifications. Close to 7 out of 10 Department of Transportation and Public Facilities projects have no training hour mandates. If projects contain such mandates, the union could increase its number of trainees from 15 or 25 per year to 50 or 60. That would provide a perfect vehicle to ramp up for the pipeline project.

REPRESENTATIVE JOULE said one disadvantage of union membership for rural Alaskans is that if there is no work in their areas, the chance of being called for a job is remote. He asked if they are called regardless of where the work site is located once they are in an apprenticeship program.

MR. BISHOP said the fact that apprentices leave the villages because steady work is not available in the villages is one of the things that he gets "beat up" on by elders when he goes to the villages. He explains to the elders that at some point in time, the workers will be able to retire in the villages. He lamented that is a tough issue and said they keep apprentices actively employed and work hard with rural students.

MR. MORIGEAU commented that the hiring hall recognizes local hire issues and gives preference to rural workers who live within the vicinity of a job, regardless of where that person's name sits on the out-of-work list. Hiring is done via telephone so, if a person is on the out-of-work list, they get called and offered a job no matter where it is.

MR. MIKE GALLAGHER, Business Manager of Laborers' Local 341, Anchorage, said he is responsible for the geographic area of Southcentral Alaska. His counterpart, Tim Sharp, is responsible for the geographic area up North. The Alaska Laborers' Training School is jointly managed with contractors appointed by the Alaska General Contractors (AGC). They have two training facilities in Anchorage and Fairbanks. Trainees from other areas are provided with room and board. He noted in 2003, the laborers' union trained over 2000 people at those facilities. It also does satellite training in Kenai, Kodiak, and Southeast. Training consists of pipe laying for water and sewer lines, grade checking, building construction, concrete, pipeline construction, road building construction, drilling and blasting, and upgrade training for certification. The union spends an average of $1.3 million per year on training of the Alaska workforce and has spent over $2.5 million on training assets.

MR. TIM SHARP, Business Manager of Laborers' Local 942, Fairbanks, told members he represents 1100 members from above the 63rd parallel and in Southeast Alaska. He said his members can be likened to the "Marines" of the industry and would do the drilling and blasting on the right-of-way for a pipeline job. They also do pipe coating, carpentry, sheet metal work, insulation, and load and unload trucks. He said the consistent themes he heard during the last two days are risk management, maximizing value, rate of return and best policies. He said his programs tie into those themes well. He explained:

> I saw a lot of heads nodding here yesterday that the Legislature, along with the people of Alaska, decided on a southern route and they did that for a lot of reasons but I think the main driver was jobs and opportunities for Alaskans. I think the issue before us and the thing that we help bring to the table is how do you develop that integrated approach to manage the risk or maximize the value out of these jobs and opportunities. Those are our programs. Those are all the trade programs because they're the best in the industry - I mean they're just recognized as the best. They have that track record, and even had we never testified, it's just the accepted fact that no one does it better than the unions. We can turn on a dime. We can train for any new particular skills that the contractors bring before us. If there's new cutting edge stuff we're right there for them. We just need to know which way we're going and we go there.

It's been covered before that we're market driven. We don't train for the sake of training. There's an outcome for our training programs. There's a job or we don't do it. We deliver a seamless career package for Alaskans. We get them right to work at the end of these programs. We - and Mike covered it - and I think this is key and I would like it to be maybe noted that all of our training programs are administered jointly. There are contractors on the other end of this equation. We don't just go do what we think is a good idea. There's a check and balance and it's well thought out.

I guess the other thing, in terms of what makes us different, is whatever projects we do, whether it was the TransAlaska Pipeline up to today, we leave in our wake residual benefits. We're not a drain on the local economy. We nurture the local economy with health benefits. We pay our own way. We have pensions that are created as a result of our jobs and projects that we are involved in, leaving Alaskans a chance to retire here. We help feed the equation here in terms of local economy. Because we're market driven, and I think the representative from TransCanada mentioned it earlier, the need to get going. You can't train, for instance, a journeyman pipefitter in a year. No one has a crystal ball but we don't have the luxury of waiting for all the certainty that we might need to get going on this but I'll tell you right now, if we don't get going, we will be - and [Representative] Joule mentioned it, how do we not make the same mistakes we made the first time. Well this is the whole key. If you have the project labor agreement, if you have the glue that kicks this all into gear, you have the certainty that gives the trades a target to know how many people to prepare for, when this is going to happen, what the needs of the contractors are, it guarantees results as opposed to some of the other language we've seen in past bills. It's enforceable language as opposed to words like 'endeavor,' or 'may,' or 'we should strive for Alaskan hire' - we can get Alaskan hire this way.

I guess I'll try to keep it short because there were four people before me that might have given you everything else.

CO-CHAIR SAMUELS thanked Mr. Sharp.

REPRESENTATIVE JOULE asked Mr. Gallagher how well his local union is doing recruiting people who have moved from rural Alaska to Southcentral.

MR. GALLAGHER said he believes they are doing well. About 27 percent of their apprentices are from rural Alaska. One problem is that people come from rural Alaska on an interim basis so housing is problematic. The AGC and organized labor discussed that issue this year and devised a mechanism to resolve that problem in which workers will be provided with either housing or per diem.

MR. SHARP invited all members to the pipeline demonstration in Fairbanks in November.

CO-CHAIR SAMUELS thanked Mr. Sampson for attending and apologized to the non-union groups that wanted to testify. He explained that he set the agenda and did not intend to omit any point of view but the number of people who wanted to testify was overwhelming. He said he would try to invite those people to speak at the next hearing. He then called Mr. Cattanach to testify.

MR. DICK CATTANACH, Executive Director, Associated General Contractors, told members he would share his perspective on some of the comments made earlier. He stated:

> You need to understand what the construction industry is and how big it is. We talk about 8,600 employees at the peak. You have to recognize that in 2004, we're expecting an average construction employment of 17,400 workers. So we're looking to grow by 50 percent if these projections are correct. And that's all construction workers. That's laborers, that's operators, that's Teamsters, that's carpenters, that's bricklayers, that's a lot of people who aren't going to be involved in this. So if you look at the impact on the trades, you're going to see that we're probably going to increase the impact to trades by two-thirds or more. We'll double them in some cases.
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> To think that we can hire everybody locally is a fool's errand. I mean it's not going to happen and I think we need to understand that. The commissioner

pointed out some very good reasons why we couldn't do that. Some of the other gentlemen have talked about what happens after and if you were here in the late '70s, you saw all those construction people and unemployment lines. There was no work for them. What we need to do is be concerned about that as well.

Some of the things that I think are important for us to think about - our construction ranges from an average in 2004 of about 13,700 in January. January, if you look at the graphs, is traditionally the low time of the year for construction employees - to a high of about 22,000, which will be in August. That difference is about 8,300 employees. If we could construct the pipeline in the winter, we could have a relatively even transition from people that would be laid off normally into the pipeline. But when we add it on top of summer construction, those are 80-some hundred more people that are going to have to be trained and come into the industry.

We also need to remember, and it was pointed out, training is not homogeneous. You don't provide training and then you have somebody that can go and do everything. A carpenter that's been trained is not a finish carpenter when he's gone through his minimum training. That takes time. That takes an awful lot of time. So what you're going to have is a lot of entry level jobs that you've prepared people for. They're not going to be doing the skilled labor jobs. Those, unfortunately, are going to come out of our existing workforce. When I say 'unfortunately,' you have to recognize what happens. They're going to come out of the workforce but they've got to be replaced so the roads that are built in Southcentral and northern Alaska - all over Alaska, are going to be built with people that don't have any experience because the experienced people are going to be working on the pipeline and who would deny them the opportunity to work 12 hours a day, 7 days a week and take home those huge checks, rather than work highway construction for 40 hours a week. You're going to see that. You're going to see the skilled labor moving to this pipeline. That's going to have a huge impact on construction, as we commonly know it. So if you think you've got delays right now driving around Anchorage or other places, imagine what it's going to be like when you take the skilled workforce and they're building the pipeline. It's a problem we're going to have to learn to live with and it's a problem that it's actually nice to know in advance so we can start doing some planning.

One of the things that was pointed out is that what you see in construction is we have a very good construction labor force. It's there because of a relationship developed between management and labor many years ago. An apprenticeship program paid for by the private sector through negotiated agreements with labor unions - they provide 86 percent, a comment I heard, of the trained workers in construction. The government doesn't play a role in this. So if we're going to get the government involved in training when they're not involved in the job placement and everything else with that, we need to make sure that we all understand what that role is so they're just not training people that end up standing in an unemployment line because nobody's looked at the job opportunities. There needs to be a better thought process going into what the role of government should be. They have to be part of it. They've got money but what should their role be? I really don't have the answer.

We've heard discussions today about local hire. We're all in favor of local hire. I haven't heard one mention about maintaining local contractors. When the pipeline was built, principal contractors were Bechtel, Fleur, Parsons - these are outside companies that owe nothing to Alaska. They contribute nothing to Alaska. They leave nothing when they leave except, if we look at the missile defense system, some broke contractors, broke subs who have to work with them and end up going broke. I would like, when we think about local employment, to extend that to try to get local contractors involved and you say do we have local contractors. You have VECO. You have AIC. Who mentioned AIC or, actually, one of the gentlemen mentioned AIC. You have Kewitt - Peter Kewitt, one of the largest companies in the world. You have Wilder who is owned by Granite Construction. You have Alasko (ph) - Alaska Quality, owned by a French company. These are Alaskan companies. They can certainly provide some of the expertise we need.

What I fear is we're going to see Bechtel and Fleur and these people who owe nothing to the state, have no allegiance to the state, you'll never see them in Juneau saying we've got some laws we need to change, we've got some conditions we need to address. Instead they'll come, they'll take their money and they'll leave the state and that's of concern. That's something that my membership is very concerned about. And with that, my remarks are concluded.

SENATOR BUNDE said when he thinks of Alaska hire, he thinks of the people who do the hiring, as well as the people who get hired. He then asked if recruiting young people into the trades has been challenging.

MR. CATTANACH said the construction industry has to grow by about 1,250 workers each year right now just to replace the growth predicted by the Department of Labor and turnover. He said according to statistics, the state has had no in-migration since 1990 so that demand is not going to be met by importing workers. The demand must be met by high school graduates or unemployed workers yet Anchorage's unemployment level is below the national average. Alaska high schools graduate about 7,000 workers per year, of which an estimated one-third will go to college, therefore, the construction industry has to attract about 20 percent of those graduates to meet its needs. He said that schools are doing an abysmal job at training. Students do not graduate ready to go to work. They do not know how to show up for work every morning. Counselors are not advising students to go into the blue-collar trades. He noted that labor is doing what it can to improve the image of blue-collar workers and money is what attracts those graduates.

SENATOR BUNDE said enticing people to get trained should be part of the legislature's discussion.

CO-CHAIR WAGONER said he left the community college system in 1986 when the university system and legislature decided to merge the two. That merger has been very unsuccessful because the community college mission got lost. He believes in reconstituting the community college system because they are strong in vocational training and thinks something will be done about that in the next few years. He said it is important to increase awareness among high school students and students who do not complete high school. They can be enticed into the community college system for further training.

MR. CATTANACH said students must be proficient in math to enter the construction trades.

CO-CHAIR WAGONER agreed but said math can be taught using an applied method rather than with a theoretical method.

SENATOR ELTON asked Mr. Cattanach if he has any suggested course of action to protect Alaska contractors or whether he has been working with the administration on that issue.

MR. CATTANACH said the AGC has been shut out of that discussion so he raises his voice about it whenever he can. He said the AGC got shut out during the oil pipeline construction. He said he is bothered by the fact that the trained workforce in Alaska was trained by the contractors who are here and have made a commitment to the state, yet they get left out. He said he has carried that message to the administration but he is not sure how well it resonates.

SENATOR ELTON said it would be helpful for both labor and management to come forward with ideas that would work.

REPRESENTATIVE JOULE said he is glad Mr. Cattanach raised the issue of Alaska contractors. Regarding vocational education and whether students are prepared, he sees that as a great opportunity but certain things must be fixed first. Our secondary school system does not offer much in the way of vocational education because of the [foundation] formula so that is a change the legislature would have to address. He said Representative McGuire mentioned the King Career Center earlier. His belief is that because the economies of rural Alaska and the rest of Alaska are joined at the hip, the legislature needs to figure out how to make those kinds of partnerships that can reach across Alaska to get students to take advantage of those systems. Some school districts are talking about the need for boarding schools in Anchorage to allow rural students to take advantage of those opportunities. He said the legislature needs to look down that road as these discussions take place.

TAPE 04-35, SIDE A

CO-CHAIR SAMUELS announced that the committee would take up its roundtable discussion. He started by explaining the procedure for ratifying a contract. He told members the [Stranded Gas] Act provides the Administration with the authority to accept applications from entities interested in building a gas pipeline, shipping gas through the pipeline, or doing both. The Administration can negotiate with applicants on royalty, tax and other terms subject to certain limitations contained within the act itself. When and if the Administration successfully concludes negotiations with an applicant, it is to prepare a best interest finding in favor of the proposed contract. The Administration will then release the proposed contract, the preliminary best interest finding, the financial, technical and market data supporting the contract, as well as the work papers, analysis and recommendations of any independent contractors used by the Administration. The Legislature has been guaranteed access to a lot of the information that is currently confidential, as soon as the negotiations have been completed.

CO-CHAIR SAMUELS further explained that when the proposed contracts, findings and data are first released, the administration must provide a minimum of 30 days for public and legislative comment. The administration must offer to appear before the Legislative Budget and Audit Committee for discussion of and questions on the proposed contracts and other documentation. The administration can provide more than 30 days for public and legislative comment. When the comment period closes, the administration must prepare a final best interest finding within 30 days if it plans to proceed with the proposed contract. The final best interest finding must discuss all comments formally registered during the comment period. The comment period is the Legislature's first formal opportunity to express its opinion on contract terms and on any amendments to the proposed contract that it considers appropriate. Legislators can comment individually by committee, as the House, as the Senate or however they choose during this period and no vote will be required. After the 30 day comment period, which by statute is the Legislature's "first bite of the apple," the proposed contract goes back to the administration for 30 days to prepare its final finding and any proposed amendments to the contract. The Legislature will then get a second "bite of the apple" when the contract comes before it for a vote. There is no deadline for a legislative vote; the Legislature will have the opportunity to hold more hearings in any committees before it votes. The Legislature can also take whatever time it needs to review supporting documentation and consult with legal counsel.

CO-CHAIR SAMUELS commented that because of the short timeframe before the legislative branch, the Legislature has been in contact with various entities, including experts of FERC and the NEB. He acknowledged that it has been difficult at times to find people who are not already employed by the administration, a pipeline company or the producers and would have a conflict of interest. He noted that some want to work quickly to avoid delaying the project. The purpose of the joint hearings has been to "get up to speed" because of the difference between the Legislature's legal right to take all of the time it wants and the practical reality of having to work relatively quickly.

CO-CHAIR SAMUELS informed members that he has been advised by legal counsel that the Legislature can approve the contract, reject it unless certain conditions have been met, or reject it outright. If the Legislature rejects the contract with certain parameters, it takes the risk of rejecting the contract completely. He summarized that the role of the Legislature in this contract is to put one entity in charge of the negotiations so that all 60 legislators are not "picking it to pieces." He pointed out the Stranded Gas Act is silent on some issues; those issues will have to be decided upon when the time comes.

SENATOR ELTON suggested that Chair Samuels circulate copies of the description he provided to all legislators.

SENATOR BUNDE reflected on the Governor's opening remarks in which he said he wanted a signal from the Legislature. His personal view is that this portion of two legislative committees cannot speak for the entire Legislature and that this Legislature cannot speak for the legislature that is sworn in in January. He furthered:

> I don't know how we can give the Governor what he wants other than personal opinion or personal preference and I'm certainly willing to do that. Personally I'm not opposed to some sort of equity position if - if, and that's a really big if for me, appropriate firewalls can be instituted that will protect any future pipeline management from political pressures from both the administration and from the Legislature. Representative Croft and I had a little brief written conversation earlier and he pointed out that we've done that very well with the Permanent Fund, however, at that time, there wasn't any direct payback to the public from the Permanent Fund. The dividend didn't come in for seven more years. At this juncture and when we make these decisions, I think there will be some direct financial influence for the public, whether low gas prices or high wages or a combination thereof, and I'm concerned that the

state's best long term interest may not be aligned with some individual's short term interests.

So, with that proviso that there has to be some very impenetrable firewalls, then I could possibly support an equity position but, as I think has been said several times here, the devil will be in the details. So, I can't make a commitment for the Legislature. I can make a minor, sort of, little bit of commitment for me.

CO-CHAIR SAMUELS said he didn't want to put words in the administration's mouth but he believes one of the goals of having the hearing at such an awkward time so close to the election, was to get the conversation out to the public arena so that people can give the matter consideration. He agreed the "devil is in the details" and that legislators cannot provide answers until it sees the proposal.

CO-CHAIR SAMUELS then told members he is interested in getting more information about the international workforce question.

REPRESENTATIVE DAHLSTROM informed members that she attended a public meeting the previous evening sponsored by the Friends of the NRA, during which she talked about yesterday's legislative meeting. The overall response of the group was excitement about progress being made on the natural gas pipeline. No one seemed to be concerned about state ownership of the gas line, however people needed time to think about how to finance that ownership. She said she personally likes the idea of investing in the pipeline with their Permanent Fund dividends and believes many people would like that choice. She said her constituents will not be happy if the Legislature uses $1 billion from the Permanent Fund. She emphasized the need to get more details to make an educated decision.

REPRESENTATIVE CHENAULT commented that investing in the pipeline with dividends might be an option as early as next year. He then noted that Mr. Cattanach commented that the Legislature needs to be involved in training plans for this project, whether it is with the contractors or different unions or whoever ends up with this project. His personal view is that he questions how deeply the Legislature or state government should fund the whole thing. He thinks contractors and the companies can work that issue out amongst themselves.

REPRESENTATIVE FATE asked that the questions about royalty-in-kind and the percentage of equity the state might have be pursued. He said it should be clarified that at the present time, the 12.5 percent royalty can be taken in value or in-kind and that the in-kind royalty should be separate from any equity amount the state holds unless the two are combined. He cautioned that if the two are combined, the state might not be able to use the royalty-in-kind for the benefit of people in the state, as suggested by Ken Thompson.

REPRESENTATIVE FATE said his second concern is that the problem of the inadequacy of our present transportation infrastructure needs further consideration. He noted the Haul Road is in deplorable condition and has been almost ignored for 24 years, even though it is the lifeline of the State of Alaska. The problem is even more severe south of Fairbanks to the border. The current transportation system simply will not facilitate the weight of the pipe. He said the Legislature must begin to consider that issue now so that any improvements on those highways will be completed before the targeted date of pipeline construction. He cautioned that could create a bottleneck.

CO-CHAIR WAGONER said, in response to Representative Dahlstrom's concern, that he does not believe the Legislature would want to take money out of the Permanent Fund earnings because it would have to first look at what it would have to pay in bonded indebtedness versus what those earnings would earn. If the Legislature can get the bonds cheap enough, the state would actually be making the state money by using its bonding capabilities. He noted the Permanent Fund is currently earning 16 to 18 percent. He said many of his constituents want the opportunity to invest their permanent fund dividends to help fund the gas pipeline for two reasons. First, they realize the overall importance of the gas line to the state. Second, they want to invest in something on a long-term basis and have the opportunity to participate in their own future. He said he is not afraid to say no to every other crazy scheme that is presented to the Legislature.

SENATOR GUESS thanked Chair Samuels for the presentations he arranged for members and said one question that needs to be answered sooner rather than later is whether the state falls under the federal guarantee because the state's risk is tied to that question. She then suggested spending more time considering the range of risk and on how that risk is being portrayed to the Legislature and to constituents. She said the overview of risk in general during the past two days was great, but she feels the need to determine what that risk looks like regarding whether the state will not collect any taxes and whether it will require a $300 million line item in the budget. She further questioned how access will play in, given the federal legislation, which contains fairly constrained access provisions. She questioned whether the state could leverage its share to ensure access for future exploration and whether it may need to play that role.

CO-CHAIR SAMUELS said he would provide a better synopsis of the Legislature's role and provide bullet points on the exact roles and procedures of the legislative branch. He will also provide a better synopsis of what the federal legislation does and does not do and how far reaching it is. He suggested that if members hear from people about state participation and risk, those comments be relayed to Senator Guess, Representative Joule, Senator Wagoner, or himself, since they are acting as the conduits [with the administration].

CO-CHAIR WAGONER suggested that he and Chair Samuels send out a joint letter to every legislator that contains a copy of the Governor's presentation and ask them to approach their constituents for input.

CO-CHAIR SAMUELS jested that the downside of that is legislators who did not attend these two days of hearings will be providing an explanation.

CO-CHAIR WAGONER said they could just provide the Governor's presentation and ask whether the people of the state want to look into a state equity position in the pipeline. He said many people are already approaching him with opinions as they are already contemplating it.

SENATOR ELTON noted that the discussion cannot focus only on risk - it must also focus on reward if legislators want to sell the idea to constituents. To do that, legislators need to fully understand the potential rewards.

CO-CHAIR SAMUELS commented that Dr. Van Meurs said the risk was very small but the hole was very deep.

REPRESENTATIVE GARA agreed with Senator Elton and said his biggest concern is that the Legislature needs to be vibrant and a vocal participant during the 120-day comment period before the federal government about the access rights. He suggested sending a message to the Governor, if appropriate, saying the Legislature wants as much access as possible and wants the state's interest pushed as far as possible and to request interim funding from the Legislature if necessary. He cautioned that the administration will need sophisticated negotiators and experts during a period when companies with conflicting interests need the same personnel to do the opposite. He said that should be set up now because it could radically change the prospects of what the gas line will look like over the next 120 days.

CO-CHAIR SAMUELS said he and Commissioner Corbus and Senator Therriault discussed access issues with the Governor's Gas Cabinet but those issues should be further emphasized.

SENATOR GUESS agreed with Representative Gara that it is important to have someone focus on the federal regulation public comment period on behalf of the state for the next 120 days. She said Dr. Van Meurs is busy trying to negotiate, so to also expect him to stay on top of the regulations [is not feasible]. She said if she were one of the players involved, she would have draft regulations submitted to FERC by now.

CO-CHAIR SAMUELS thanked everyone for their participation and adjourned the meeting at 4:00 p.m.