

**ALASKA STATE LEGISLATURE
JOINT MEETING
HOUSE SPECIAL COMMITTEE ON OIL AND GAS
SENATE RESOURCES STANDING COMMITTEE**

October 21, 2007

1:04 p.m.

MEMBERS PRESENT

HOUSE OIL AND GAS

Representative Kurt Olson, Chair
Representative Nancy Dahlstrom
Representative Mark Neuman
Representative Jay Ramras
Representative Ralph Samuels
Representative Mike Doogan
Representative Scott Kawasaki

SENATE RESOURCES

Senator Charlie Huggins, Chair
Senator Bert Stedman, Vice Chair
Senator Lyda Green
Senator Gary Stevens
Senator Lesil McGuire
Senator Bill Wielechowski
Senator Thomas Wagoner

MEMBERS ABSENT

HOUSE OIL AND GAS

All members present

SENATE RESOURCES

All members present

OTHER LEGISLATORS PRESENT

Representative John Coghill
Representative Mike Kelly
Representative Carl Gatto
Representative Andrea Doll
Representative Berta Gardner
Representative Bob Buch

Representative Harry Crawford
Representative Bryce Edgmon
Representative Anna Fairclough
Representative Les Gara
Representative David Guttenberg
Representative Lindsey Holmes
Representative Craig Johnson
Representative Wes Keller
Representative Beth Kerttula
Representative Bob Roses
Representative Paul Seaton
Representative Peggy Wilson

Senator Con Bunde
Senator Fred Dyson
Senator Johnny Ellis
Senator Kim Elton
Senator Joe Thomas

COMMITTEE CALENDAR

HOUSE BILL NO. 2001

"An Act relating to the production tax on oil and gas and to conservation surcharges on oil; relating to the issuance of advisory bulletins and the disclosure of certain information relating to the production tax and the sharing between agencies of certain information relating to the production tax and to oil and gas or gas only leases; amending the State Personnel Act to place in the exempt service certain state oil and gas auditors and their immediate supervisors; establishing an oil and gas tax credit fund and authorizing payment from that fund; providing for retroactive application of certain statutory and regulatory provisions relating to the production tax on oil and gas and conservation surcharges on oil; making conforming amendments; and providing for an effective date."

- HEARD AND HELD

SENATE BILL NO. 2001

"An Act relating to the production tax on oil and gas and to conservation surcharges on oil; relating to the issuance of advisory bulletins and the disclosure of certain information relating to the production tax and the sharing between agencies of certain information relating to the production tax and to oil and gas or gas only leases; amending the State Personnel Act to place in the exempt service certain state oil and gas auditors and their immediate supervisors; establishing an oil and gas tax

credit fund and authorizing payment from that fund; providing for retroactive application of certain statutory and regulatory provisions relating to the production tax on oil and gas and conservation surcharges on oil; making conforming amendments; and providing for an effective date."

- HEARD AND HELD

PREVIOUS COMMITTEE ACTION

BILL: HB2001

SHORT TITLE: OIL & GAS TAX AMENDMENTS

SPONSOR(s): RULES BY REQUEST OF THE GOVERNOR

10/18/07	(H)	READ THE FIRST TIME - REFERRALS
10/18/07	(H)	O&G, RES, FIN
10/19/07	(H)	O&G AT 1:30 PM HOUSE FINANCE 519
10/19/07	(H)	Heard & Held
10/19/07	(H)	MINUTE(O&G)
10/20/07	(H)	O&G AT 12:00 AM HOUSE FINANCE 519
10/20/07	(H)	Heard & Held
10/20/07	(H)	MINUTE(O&G)
10/21/07	(H)	O&G AT 1:00 PM HOUSE FINANCE 519

BILL: SB2001

SHORT TITLE: OIL & GAS TAX AMENDMENTS

SPONSOR(s): RULES BY REQUEST OF THE GOVERNOR

10/18/07	(S)	READ THE FIRST TIME - REFERRALS
10/18/07	(S)	RES, JUD, FIN
10/19/07	(S)	RES AT 9:00 AM BUTROVICH 205
10/19/07	(S)	Heard & Held
10/19/07	(S)	MINUTE(RES)
10/20/07	(S)	RES AT 8:00 AM BUTROVICH 205
10/20/07	(S)	Heard & Held
10/20/07	(S)	MINUTE(RES)
10/21/07	(S)	RES AT 1:00 PM HOUSE FINANCE 519

WITNESS REGISTER

PAT GALVIN, Commissioner
Department of Revenue
Juneau, Alaska

POSITION STATEMENT: During hearing of HB 2001, answered questions.

TOM IRWIN, Commissioner

Department of Natural Resources
Anchorage, Alaska

POSITION STATEMENT: Provided comments on HB 2001.

CHERYL NIENHUIS, Petroleum Economist
Department of Revenue
Juneau, Alaska

POSITION STATEMENT: During hearing of HB 2001, provided a PowerPoint presentation titled "The Cost Story".

MICHAEL WILLIAMS, Chief Economist
Tax Division
Department of Revenue
Anchorage, Alaska

POSITION STATEMENT: During the hearing of HB 2001, discussed the difficulty of forecasting cost.

ANTHONY FINIZZA, Ph. D., Consultant
to the Department of Revenue
(No address provided)

POSITION STATEMENT: Reviewed the PowerPoint presentation titled "The Palin-Parnell Administration presents ACES" and answered questions.

RICH RUGGIERO
Gaffney, Cline & Associates
Houston, Texas

POSITION STATEMENT: During hearing of HB 2001, answered questions.

KEVIN BANKS, Acting Director
Division of Oil & Gas
Department of Natural Resources
Anchorage, Alaska

POSITION STATEMENT: During hearing of HB 2001, answered questions.

ACTION NARRATIVE

CHAIR KURT OLSON called the joint meeting of the House Special Committee on Oil and Gas and the Senate Resources Standing Committee to order at [1:04:47 PM](#). Representatives Olson, Dahlstrom, Neuman, Ramras, Samuels, Doogan, and Kawasaki and Senators Huggins, Stedman, Green, Stevens, McGuire, Wielechowski, and Wagoner were present at the call to order. Also in attendance were Representatives Buch, Edgmon,

Fairclough, Gara, Guttenberg, Holmes, Johnson, Keller, Kerttula, Roses, Seaton, and Wilson and Senators Bunde, Dyson, Ellis, Elton, and Thomas.

HB2001-OIL & GAS TAX AMENDMENTS

SB2001-OIL & GAS TAX AMENDMENTS

[1:06:02 PM](#)

CHAIR OLSON announced that the only order of business would be HOUSE BILL NO. 2001, "An Act relating to the production tax on oil and gas and to conservation surcharges on oil; relating to the issuance of advisory bulletins and the disclosure of certain information relating to the production tax and the sharing between agencies of certain information relating to the production tax and to oil and gas or gas only leases; amending the State Personnel Act to place in the exempt service certain state oil and gas auditors and their immediate supervisors; establishing an oil and gas tax credit fund and authorizing payment from that fund; providing for retroactive application of certain statutory and regulatory provisions relating to the production tax on oil and gas and conservation surcharges on oil; making conforming amendments; and providing for an effective date." and SENATE BILL NO. 2001, "An Act relating to the production tax on oil and gas and to conservation surcharges on oil; relating to the issuance of advisory bulletins and the disclosure of certain information relating to the production tax and the sharing between agencies of certain information relating to the production tax and to oil and gas or gas only leases; amending the State Personnel Act to place in the exempt service certain state oil and gas auditors and their immediate supervisors; establishing an oil and gas tax credit fund and authorizing payment from that fund; providing for retroactive application of certain statutory and regulatory provisions relating to the production tax on oil and gas and conservation surcharges on oil; making conforming amendments; and providing for an effective date."

[1:06:45 PM](#)

PAT GALVIN, Commissioner, Department of Revenue, informed the committees that the focus will be on the impact the tax program has on the investment climate. Also, the analysis done by the Department of Revenue (DOR) and Department of Natural Resources (DNR) on that issue will be shared. He then reviewed an outline of what the administration would present today.

1:08:48 PM

TOM IRWIN, Commissioner, Department of Natural Resources, reminded the committees that in May the governor directed the commissioner of DOR to undertake a review of the petroleum production profits tax (PPT) in a manner that ensures a transparent process, that the state is getting a an appropriate share, and that the state provides a healthy investment climate. He opined that DNR certainly agreed with those principles. He then informed the committees that DNR was asked to participate and it has participated in this evaluation process from the beginning. Commissioner Irwin opined that Alaska's Clear and Equitable Share (ACES) [HB 2001] provides a good balance between encouraging investment and providing a fair share to the state.

COMMISSIONER IRWIN then recalled discussions of PPT in which he and the deputy commissioner were very vocal in support of a gross tax alternative. He said although he maintains his like of a simple concept, one couldn't be identified. He opined that the lack of communications between departments lead to the strong gross versus net positions. However, now both sides are more knowledgeable and closer to making an informed decision. Commissioner Irwin said, "We support what the Department of Revenue is presenting today and this information led us to recognize the limitations of just a pure gross system."

1:13:21 PM

CHAIR HUGGINS requested a copy of the May directive cited.

COMMISSIONER IRWIN recalled that it was a verbal request rather than a written request.

1:13:58 PM

SENATOR WIELECHOWSKI recalled that Commissioner Irwin has been an advocate for the gross. He further recalled that there have been press reports relating that during the ACES process there was division with regard to going forward with gross versus net. Were those press reports true, he asked.

COMMISSIONER IRWIN stressed that he spent untold hours in meetings with the governor, DNR, and DOR as well as technical staff within the department and from outside of it. He mentioned the goal with this administration has consistently been what's best for the state. During review of the gross, the matter of developing correct incentives had to be addressed.

The first thought was to use a fixed number, but the variety of wells and situations is complex, particularly with heavy oils. The thought then was to have the companies put forth what the incentives should be by the cost, which resulted in data that pointed "virtually back to net." Commissioner Irwin opined that ACES, with its gross protected floor and net approach with significant incentives, is sort of a marrying of the two. He emphasized that no one was ever precluded from providing input.

[1:17:37 PM](#)

SENATOR STEVENS inquired as to why the governor has transitioned from a gross tax to a net tax.

COMMISSIONER GALVIN related that the intention is to lay out the full discussion and what was discovered that led to the development of ACES.

[1:18:56 PM](#)

CHAIR HUGGINS opined that it's important that whatever happened in the meetings resulting in ACES comes out in this public process.

COMMISSIONER IRWIN said that's why these hearings are so important. "Again, everybody in this room is for Alaska; we want to choose what's right for Alaska." He highlighted that ACES includes both gross and net as there are merits to both. He opined that today's meeting should relate the process utilized to get to the ACES proposal.

[1:21:28 PM](#)

CHERYL NIENHUIS, Petroleum Economist, Department of Revenue , said she would begin with how production tax revenues are forecast. Referring to slide 2, she explained that under the PPT there are three unknowns of which some are more known than others, such as with production. The department actually has a petroleum engineer who does the production forecast and has been for a number of years. Production, which is utilized in the production tax calculation, is updated every six months. Still, it's somewhat of an unknown, particularly so lately as there have been some production disruptions. The next unknown is price. For price forecasting, almost all of the state's economists come together for a day and discuss oil markets, various drivers of demand and supply, and worldwide prices. At the end day, [each economist] specifies what he/she believes to

be the best price forecast, which is included in the short- and long-term forecast. The price is another of the variables that is considered in the production tax calculation. Under the PPT there is a third unknown, which is the cost of production. Cost can be viewed simply as cost or as investment. Cost has two basic elements: the operating expenditures (opex) and capital expenditures (capex). Ms. Nienhuis explained that operating costs are generally those costs that go into producing oil or gas. The operating costs can be fixed or variable. Capital costs are those costs that are generally incurred for expenses that lead to some sort of asset or development that either furthers production or somehow is beyond the operating cost. Both the capex and the opex are important to the calculation of the tax.

[1:24:57 PM](#)

MS. NIENHUIS then turned to slide 3 titled "2006 PPT Costs." She explained that during the PPT debates the cost assumption sources used were basically historical data from 2002 to 2004, such as federal partnership tax returns, some departmental information on capital spending in Alaska on the North Slope, some confidential information received through the negotiation process for the gasline, and NPSL lease-cost information, some of which was a little older. There were also published reports from different firms, such as CERA [Cambridge Energy Research Associates] and Wood Mackenzie as well as financial information from companies. A lot of publicly available information was also available. Additionally, the department had consultations with industry staff and [during] the gasline negotiations some confidential information was received. She emphasized that throughout the process industry was involved as there were formal and informal discussions with them about the cost structure. Ms. Nienhuis reminded the committees that the department's cost estimates were reviewed by the legislature's consultants, and therefore were aware of the department's cost forecast.

[1:27:08 PM](#)

MS. NIENHUIS, referring to slide 4 titled "PPT Forecast Timeline", informed the committees that the first cost forecast was put together in the fall of 2005 when [the state] was in negotiations with the industry on the gasline and there was a push to change the oil tax. At that time, a number of the department's economists obtained as much information as they could and put together a cost forecast, which became part of the

fiscal note for House Bill 3001 [in 2006]. She said, "Basically, what it amounted to is somewhere in the neighborhood of \$7 a barrel." However, she noted that it wasn't all a variable cost as there were different mechanisms included that weren't totally variable. In August 2006, the fiscal note for House Bill 3001 was put out for the current PPT tax system. She pointed out that throughout the PPT's debate, the department made a point of not changing its cost estimates because it was important to not bias one different tax plan or proposal over another. Furthermore, there wasn't the time to re-evaluate the costs. Ms. Nienhuis opined that the department felt it had the costs right and there was lots of support for that. In November 2006 a revenue forecast was put together. At that time, the department re-evaluated the costs as it realized that capital costs had increased. In fact, the price of steel and labor had rose significantly, and therefore the department adjusted its forecast to increase capital costs.

[1:29:23 PM](#)

SENATOR WAGONER inquired as to what information is available to substantiate that the price of labor has increased considerably.

MS. NIENHUIS said she is speaking from two sources of information, which include industry discussions. The other source is the knowledge that certain job classifications have had higher labor cost increases than others. For example, there is a shortage of engineers, which has caused the salaries for some of those engineers to increase as well as for some of the actual mechanics and workers in the field.

SENATOR WAGONER opined that it should be easy to document those increases. He expressed interest in seeing a list of those increases and the total effect of those. The largest number of those working in the petroleum industry are those working in operations and maintenance, which probably haven't experienced much of an increase in their wages.

COMMISSIONER GALVIN clarified that Ms. Nienhuis mentions that primarily to note what occurred between the time the original fiscal note assumptions were made and prior to the receipt of the reports from the taxpayers that resulted in the current level of expectation. He further clarified, "I think it's a fair question to ask industry ... since they're the ones that talk about these things. We're just reporting back to you what we're hearing from them. We don't have those particular

sources." He said that [ACES] wasn't built on a particular source, nor did a particular source change a number.

1:32:12 PM

SENATOR STEDMAN highlighted that there can be a situation in which there are hourly and salary increases when there's \$70-\$80 a barrel oil with \$7 costs. He emphasized that there's an important delineation between more employment in the basin versus actual salary increases.

COMMISSIONER GALVIN said that's precisely the type of information the ACES information provision should acquire. There is no knowledge as to whether the costs are increasing because the price of a particular item is increasing or whether more items are being purchased.

SENATOR STEDMAN opined that the goal, creating incentives for oil and gas development in Alaska and obtaining the state's fair share of revenue during high price periods, of ACES seem similar to that of PPT. He then asked if PPT is delivering the beginnings of a wave of expansion in the oil basin.

COMMISSIONER GALVIN related that DOR's view and industry experts have said that the timeframe thus far isn't an indication of a change in behavior as a result of PPT having passed. Although the industry has related that this year it will be ramping up costs, the industry doesn't directly cite the change in the credit system for PPT but rather discusses the need for more system integrity. The question would be appropriate to ask the industry.

SENATOR STEDMAN said that if the industry is changing its behavior and [PPT] is doing what is desired, then he asked if it's it too early to act.

COMMISSIONER GALVIN said the question is whether or not a change in the oil tax proposed by ACES will modify that same incentive. The basic incentives included in PPT and intended to drive that decision remain within ACES. The information being provided today is regarding whether the change recommended will dampen PPT, to which the administration's response is no. He opined that ACES should result in the same amount of incentive to increase that behavior because the credits and other incentive vehicles remain within the system.

1:36:02 PM

SENATOR WIELECHOWSKI turned to the forecasting errors of 2006, which he characterized as fundamental errors. He asked if ACES is addressing those errors in order to prevent them from recurring.

MS. NIENHUIS said she believes so. The department has much more information now than it had at the time. Furthermore, ACES requires better reporting, both in the current month and the tax return at the end of the year. Moreover, companies are required to provide forward-looking information with regard to what they expect for costs in the next year.

[1:37:25 PM](#)

REPRESENTATIVE SAMUELS suggested setting aside the tax rate question and assume that the department has enough auditors, and asked if the audit would be able to relate whether the price of a widget has increased or whether more widgets are being purchased. He noted his agreement with Senator Wagoner that labor costs couldn't have risen that much in three years. However, the cost increase could be due to hiring more people.

COMMISSIONER GALVIN related his belief that the department should be able to get a lot closer to that issue because the information from the audit would allow a determination as to whether there was an increase in man hours or other factors. As a result of both the requirement for information and the audit's ability to confirm that, more information would be available [regarding the cost of labor].

[1:38:53 PM](#)

CHAIR HUGGINS inquired as to what if Commissioner Galvin is wrong. He then expressed concern with what isn't known. He opined that he didn't want to enter a fourth year dealing with this issue.

COMMISSIONER GALVIN highlighted that the professionals within the agency are dealing with the numbers. He then highlighted that a year ago [departmental professionals] were asked to make an assumption about the current costs. Although they didn't have adequate information from the companies, they made the best assumptions possible. A few months later the numbers from the companies were available and [the department professionals] were off by 50 percent. The numbers being used from that point forward are based upon those reports. Therefore, the deviation

will be a matter of changes in the environment and the economics of the field. Today, decisions are being based on the best information available now because that reported information is available.

CHAIR HUGGINS noted his appreciation and emphasized his desire to get this correct. He then recalled that Dr. Van Meurs has said that the cost data being relied upon isn't reliable and suggested that it needs to be audited because it's overstated. Furthermore, Dr. Van Meurs has said that Alaska's gasline isn't economically feasible at this time. The aforementioned is of concern, he stressed.

COMMISSIONER GALVIN noted his agreement with wanting to get it correct also. He expressed the need to realize that Dr. Van Meurs has been gone from the state for a year, and furthermore he has expertise in certain areas but not others, such as in accounting and cost forecasting. However, staff within the agency have been working on the issue daily for the last year in order to understand what was the difference. Commissioner Galvin said, "There's a significant difference in confidence that I would have that I would have in comparing what my agency staff have brought to the table today, in terms of what they used a year ago compared to what information they have today, as opposed to Dr. Van Meurs coming in a year later ... saying ... this is what I think might have happened."

[1:44:00 PM](#)

CHAIR OLSON recalled that in Ms. Nienhuis' presentation she indicated that the decision was made with respect to the fiscal note for House Bill 3001 to use the \$7 a barrel cost and continue using it although the department was aware of the change. He inquired as to who specifically made that decision.

MS. NIENHUIS clarified that she wouldn't say that the [department] was aware of any change or didn't contemplate any change until the fall forecast. She further clarified that the [department] had no reason to suspect its numbers were wrong.

[1:44:51 PM](#)

REPRESENTATIVE DOOGAN asked if the difference between the projection and the situation the department is in now is the difference between a guess and a claim. He related his understanding that the knowledge that is available now is only

that information that has been claimed, since there haven't been audits.

COMMISSIONER GALVIN said that the discussion today and the projections are based upon the reported costs. The aforementioned is something the department is willing to rely upon as it reflects what the industry says are the costs. However, a year ago, [the projections] were an educated guess that proved to be an inaccurate reflection of what the reported costs would be.

REPRESENTATIVE DOOGAN related his understanding from previous testimony that there's essentially no penalty for the industry if it over reports its claim.

COMMISSIONER GALVIN said that there are penalties associated with interest that is accrued for the unreported or unpaid interest.

REPRESENTATIVE DOOGAN opined that the state won't "hit them in the bank account" if the company has over reported by say, 20 percent

COMMISSIONER GALVIN replied no, not under the current PPT.

REPRESENTATIVE DOOGAN asked if this problem is an inherent problem with a net tax because in order to determine whether the state is getting what it thought, a process that is likely to include an audit is required and perhaps even lead to a lawsuit.

COMMISSIONER GALVIN explained that with a system that requires companies to report costs, there are a series of clarifications. The first clarification occurs when the company has to report its costs the first time. Under the current PPT, the aforementioned occurs at the end of the year, while under ACES it would occur monthly. There is also clarification provided from the auditing process and if there are conflicts with regard to the lawsuit. Commissioner Galvin opined that anytime there are deductions based upon cost, this issue will arise.

[1:48:16 PM](#)

SENATOR MCGUIRE echoed the earlier sentiments to get this right. She asked if [ACES includes] independent experts who know what the costs should be and the best field practices. She expressed the need to be able to justify and understand any change and why the costs are what they are.

COMMISSIONER GALVIN said the he views [the administration's] responsibility as providing the committees with the best information available today, in context of where things will go from here. He said that he's merely pointing out the experience the economists had in putting together the numbers that went into the fiscal note from a year ago and operating with the best information available at the time, although that proved to be wholly different than what was experienced just a short time later. Looking forward, the reported costs are now known. Still, he reminded the committees that as more is learned, it's refined. With regard to whether the decision on the tax rate should be deferred, he pointed out that there is a cost associated with that. He then related that there is a level of confidence that exists in today's numbers that didn't exist a year ago. Commissioner Galvin said that if this is addressed again it will likely be because the costs have deviated due to two things. If the changes have occurred because the world has changed, then he opined that it isn't necessarily valid to come back because it's a net-based tax and the costs are taken as they come. However, if the change occurs because of inaccurate reportings, it would be an entirely different situation, which he didn't anticipate.

SENATOR MCGUIRE returned to Representative Doogan's comment that this is a claim, and there's no basis in reality for assessing that claim. Therefore, part of the equation is missing. Although she said she didn't disagree that through [ACES] there is a better method of obtaining information from the producers, it still relies on what the industry says. Therefore, she inquired as to what is embedded in the process, in terms of experts and personnel that have an objective ability to analyze [the claims].

COMMISSIONER GALVIN answered that one can try to rely upon these experts, such as Dr. Van Meurs, Mr. Johnston, Wood Mackenzie, etcetera. Those were the types of experts who led to the assumptions made a year ago. The question becomes: "Who's going to tell you those numbers?" The end result is that currently the numbers are coming from the source in a documented statement that had to be certified and described versus merely public statements, which provides a wholly different level of confidence.

[1:55:17 PM](#)

CHAIR HUGGINS said that he would give Commissioner Galvin and his staff a list of categories of tax projections and how valid they were or weren't for discussion. He indicated that the list relates the expectations and reality for various taxes in the long-term.

COMMISSIONER GALVIN said [the department] would be happy to review that. He opined that it's important to recognize that DOR is responsible for looking to the future and evaluating what will happen and determine a single number that will result in the state's revenue. The aforementioned means that [the department] must recognize what it can identify and accurately predict and those components for which it can only take a best guess. Within the area of cigarette taxes although the sales are unknown, the department can calculate a trend and have a certain level of confidence in that number. On the oil tax side there are three different variables: production, price, and costs. He explained that if the costs are wrong, the expectations at a particular price or production will be wrong. If the aforementioned is something that we can improve and achieve a higher level of confidence on, then the overall estimating can be better and more precise. Furthermore, then the acceptance of the price and productivity variability are just that. Commissioner Galvin said, "Here, we're saying we can give you a number that has a greater degree of confidence than a year ago."

[1:59:21 PM](#)

SENATOR STEDMAN inquired as to what level of confidence there will be. He further inquired as to what percentage plus or minus, [the projections] will be.

COMMISSIONER GALVIN said that Ms. Nienhuis will discuss that during her presentation.

[2:00:01 PM](#)

MICHAEL WILLIAMS, Chief Economist, Tax Division, Department of Revenue, pointed out that the U.S. Department of Energy's files for cost of all the production areas in the U.S. doesn't include Alaska. At the time [the division] was preparing the fiscal note [for House Bill 3001], it was realized that DOE didn't have the information on Alaska and that there weren't large changes. Only anecdotal information was available. Publications such as "Middle East Economic Survey" and "Petroleum Intelligence Weekly" would, every two to three

months, have an article reporting an increase in capital costs. For example, a 50 percent increase in capital costs in Badami was reported. Although the [division] wasn't clear about what was going on, consultations with the oil companies left them feeling pretty good. He recalled Representative Doogan's earlier question regarding whether it would be easier to have a gross tax with credits. However, credits are capital expenditures and thus in order to forecast credits, which are directly deductible from tax liability, one must know what the costs are. The aforementioned would be the case even in a gross system with credits. He then recalled Senator McGuire's questions regarding consultants and pointed out that review of some of the cost data provided by the consultants shows that they were off just as much as the state, possibly more. He related that Cambridge Energy Research Associates has a capital cost forum in which organizations can pay \$50,000 a year to sit in on the forum, which tracks projects in 28 countries around the world to understand what's going on with capital cost. After inquiring about joining that, he was told that one must be an oil company and thus the state wasn't allowed to join. However, they offered to sell their consulting services. Mr. Williams concluded by saying that determining cost is challenging and difficult as the companies keep the information very well guarded.

[2:03:16 PM](#)

COMMISSIONER GALVIN, in response to Representative Ramras, said that in the next few days the department will provide a slide relating what particular fields will look like if the investment doesn't come forth.

[2:04:29 PM](#)

REPRESENTATIVE NEUMAN inquired as to whether anyone can specify whether the reinvestment in Alaska is more valuable in terms of returning it to government or jobs.

MR. WILLIAMS answered that there are national and regional studies illustrating the impact of investments. A company out of Minnesota has an input output model. The [department] has attempted to do an input output model with the state. In fact, at one point the department negotiated with a company to develop a model. However, it was discovered that Alaska is very different from other states. So different, in fact, that major economic consulting companies don't have a model in which it can see the input and output effects of investment in the oil

industry in Alaska. The department struggled with that for a year and a half and received no response. Therefore, he said he is reluctant to say [the department] can do it.

COMMISSIONER GALVIN said that there are economists who will be able to relate the affects of the oil industry within the rest of the economy as there are a number of statewide economic studies. However, one of the points he understood Representative Neuman to be making draws upon the false assumption that \$1 less tax income equals \$1 less investment in Alaska's oil industry. The aforementioned is a truly false assumption, he opined. Commissioner Galvin specified that through ACES, the administration is suggesting that the same level of investment and more money can be brought in because the money being brought in is money that would otherwise go to the company outside of Alaska. He clarified that he didn't want to leave the committees with the impression that it's making a choice between taking more money as part of the state's share and that money otherwise going into the field.

[2:08:48 PM](#)

REPRESENTATIVE NEUMAN said that he realizes that it's not dollar for dollar. He surmised that perhaps he should talk with Department of Labor & Workforce Development staff. He then inquired as to how closely does the government work together. Representative Neuman emphasized that his concern is in regard to the impact on jobs. He expressed his desire for the dollar to stay in Alaska.

COMMISSIONER GALVIN said that will be discussed throughout the day.

[2:09:43 PM](#)

CHAIR HUGGINS recalled use of the term "lumping" and inquired as to its meaning.

MR. WILLIAMS explained that a company may spend \$2 million before the first barrel of oil is produced. The large capital investment up-front is to what the term refers.

CHAIR HUGGINS further recalled that a consultant cautioned against drawing conclusions with one-year reviews.

[2:11:14 PM](#)

SENATOR GREEN commented that she would hate to take anyone to task for errors with fiscal notes because they are rarely right as they are nothing more than a best guess estimate.

[2:12:41 PM](#)

MS. NIENHUIS returned to slide 4, and highlighted that February 2007 was when the first PPT returns were received, and they were quite close to the forecast. The true-up returns were received from the oil companies in April 2007, and the department's estimates were a bit off. Also in April 2007 was DOR's spring revenue forecast, which was the last official forecast. The department is now working on the fall forecast. For this particular exercise, the price forecast has been updated and the petroleum engineer has provided new production numbers for fiscal year (FY) 2008, which is some 40,000 barrels below what was predicted in the spring of 2007.

[2:14:07 PM](#)

MS. NIENHUIS continued with slide 5 titled "How our Assumptions Changed". The largest change since the adoption of the PPT is the level of information available. In fact, the department has adjusted its models based on actual PPT tax return filings. Furthermore, costs are now expressed in nominal dollars with an inflation component. She noted that although nominal dollars may look as if they're increasing, it might not be the case in real dollars. She then informed the committees that the department has reviewed production profiles, which illustrate that production is increasing through 2012. The aforementioned was an important component of the cost estimates that has now been added into the model.

[2:15:16 PM](#)

REPRESENTATIVE RAMRAS expressed frustration that the governor isn't present. He then recalled his belief that this special session is bad policy and ACES is a bad plan. He then recalled attending a town hall meeting during which the governor was very adept at articulating how her luggage was lost, but not adept at articulating the ACES policy. "I just don't get what we're doing here," he said. He questioned this broad overarching assumption that the existing policy can be tweaked without impacting the outcome. Representative Ramras stressed that a sweeping assumption can't be made based on one year's worth of data. He opined that there must have been a conversation between the commissioner and the governor in which there was a

catalyst that led to this [special session]. Representative Ramras said that he would rather have the governor present to articulate economic policy as this matter is the lifeblood of Alaska.

2:20:37 PM

COMMISSIONER GALVIN stated that the governor has been very clear about why the legislature is in session today and the reasons why the issue must be addressed now. Commissioner Galvin specified that the issue of cost is only one part of why the legislature is in session. He characterized it as an issue of public confidence. The governor requested that the department review the situation and make a recommendation based on the information available now. The new information resulted in the need to change the assumptions used a year ago. Additionally, DOR and DNR [are present] to provide the committees with this newly available detailed information that is necessary to make the decision today. "We believe that it makes a compelling case that we can make a change and still have that proper balance," he opined. The governor has been very much involved in every step of this. However, the governor is charged with running the state and it's not her responsibility to be before the committees. The aforementioned is the responsibility of the commissioners [and department staff].

2:23:05 PM

SENATOR STEDMAN pointed out that there has been a road show around the state discussing the \$800 million gap between what would be expected under the PPT versus ACES. With an effective date of January 1, the gap is reduced to \$400 million. Senator Stedman opined that there's no reason why this couldn't be done during the next regular session and have a retroactive effective date.

COMMISSIONER GALVIN clarified that when ACES was presented throughout the state, there wasn't a slide in the presentation discussing the gap because that's not the target. The information with regard to the difference was revealed in the analysis of the PPT. He specified that he wasn't given the directive nor was ACES designed to recover that money. However, it's correct that on September 3rd when information was provided about ACES, the slides did show an \$800 million gap between the existing PPT and ACES. He noted that ACES was projected to bring in \$600 million more than the existing PPT. Subsequent to that there was a decision not to make ACES retroactive to the

entire fiscal year, and therefore the numbers presented today show the difference for FY '08 aren't for a full fiscal year. Commissioner Galvin opined that the desire was to design the best system for the long term.

[2:26:39 PM](#)

SENATOR STEDMAN inquired as to when the legislature can expect to view the algorithm that will be used.

COMMISSIONER GALVIN said that the department is working with the consultants "to replicate as best they can" because the [algorithm] includes confidential information that can't be released.

[2:27:38 PM](#)

REPRESENTATIVE SAMUELS indicated that the production in the last three months [has been lower] than the initial projection. He inquired as to how much of the loss is the result of higher costs over fewer barrels. He said that the administration can get this answer later.

[2:30:35 PM](#)

MS. NIENHUIS, continuing her presentation, referred to slide 6 titled "Capital Spending as Reported in PPT Tax Returns, March 2007 and 2007 Forecast." She reminded the committees that the PPT includes a provision called the transition investment expenditures, which is the TIE credit. In order for the taxpayer to receive credits for the TIE credits, the taxpayer must file a form with the department stating the expenditures during the five-year period of April 1, 2001 through March 31, 2006. The information on slide 6 illustrates that in calendar year 2002 there was about \$1.3 billion in capital spending, which remains fairly flat through 2005. In 2006 it increased about \$400 million over the previous year. The capital spending specified for 2007 is a forecast. Ms. Nienhuis opined that it's too early to say whether the PPT had anything to do with the additional capital spending. She then moved on to slide 7 titled "Cost Forecasts", which compares what was projected in the fiscal note for House Bill 3001 versus the spring 2007 forecast. Based on the tax returns, the total costs increased, as is reflected in the spring 2007 forecast, to about \$4 billion. Therefore, there was almost a doubling, she said.

[2:33:37 PM](#)

REPRESENTATIVE SAMUELS turned to the capital costs in the fiscal note. He asked whether the fiscal note for House Bill 3001 included Pioneer's project at Oooguruk where it spent \$500-\$600 million.

MS. NIENHUIS explained that there was a certain amount per barrel for developmental capital, which was for capital projects coming on line in the next couple of years. Therefore, it was incorporated in that analysis, although not specifically at any particular field.

REPRESENTATIVE SAMUELS asked if there were any other large dollar expenditures across the North Slope other than that by Pioneer.

MS. NIENHUIS said she wasn't sure how much she could disclose in regard to specific projects. Furthermore, [the department] doesn't have a level of detail as it has cost by unit.

[2:35:34 PM](#)

SENATOR WIELECHOWSKI asked if any of the costs specified are retroactive costs, attributable to the claw back provision of PPT.

MS. NIENHUIS replied no. Any transition or claw back costs would've been declared prior to this as these are current year, fiscal year 2008, costs.

COMMISSIONER GALVIN explained that slide 7 relates what amount of capital costs were reported that qualified for a certain amount of TIE credit. In this instance, when a company applies for credits, it received an extra bump in value.

SENATOR WIELECHOWSKI surmised then that none of the numbers on slide 6 are increased because of the claw back provision.

COMMISSIONER GALVIN related his agreement.

[2:37:14 PM](#)

REPRESENTATIVE DOOGAN asked if slide 6 reflects everyone who could have claimed TIE credits. He asked if the numbers specified are the total for capital expenditures on the North Slope or might there be more capital expenditures which weren't filed.

COMMISSIONER GALVIN responded that potentially the only category would be those taxpayers that had capital expenditures during that period, but didn't last year and thus didn't have any reason to claim a TIE credit referenced back. He said that not many in that category come to mind.

REPRESENTATIVE DOOGAN recalled that yesterday the committee was told that the total cost per barrel is \$22, although slide 7 uses a forecast of \$14.56 in total cost per barrel.

MS. NIENHUIS clarified that the \$22 includes the transportation costs to transport the oil from the North Slope to the market, which is a downstream cost. The costs [presented on slide 7] are upstream costs as they're above the point of production.

[2:39:08 PM](#)

COMMISSIONER GALVIN, in response to Chair Huggins, explained that review of the economic drivers that drive investment and the revenue that can be generated by changing the numbers identified that the state's share could be increased while protecting the investment climate. The [numbers on slide 7] are merely the numbers that were input into the model in order to ensure that there was accurate information. In further response to Chair Huggins, Commissioner Galvin specified that the modeling is based upon the \$14.56 total cost per barrel.

[2:40:21 PM](#)

CHAIR HUGGINS, referring to a slide from the previous day's meeting, highlighted that a single year [view] can be deceptive and that large costs are often incurred at discrete timeframes, lumpiness. The slide goes on to say that a single year can't depict the economic picture.

COMMISSIONER GALVIN clarified that these are the numbers being forecast based on the information that is available. He further clarified that last year's numbers, conversations with the industry, and understanding the trends were used to project forward because one can't simply say that last year will be replicated each year going forward. He opined that the department's numbers are more accurate today than they were a year ago because of the large data dump in the middle of the year when the companies provided their returns. That information was used to project going forward.

[2:41:32 PM](#)

SENATOR WIELECHOWSKI opined that these numbers and charts seem to coincide with PPT. He asked if PPT is causing this increase in investment.

COMMISSIONER GALVIN reminded the committees that the PPT was passed in August 2006 and the amount of time it takes a company to go from an investment decision to actually expending the cost is a significant lag time. Therefore, it's extremely unlikely that there were significant expenditures resulting from the passage of the PPT.

[2:42:24 PM](#)

COMMISSIONER GALVIN, in response to Senator Stedman, referred the committees to slide 4. He explained that when the true-up payment was received in April 2007 a lot of information pointed to the significant deviation from the fiscal note. A modification was made in the fall, the true-up was received and the department realized it was still off. Therefore, conversations with the industry ensued in order to determine what was occurring. Commissioner Galvin said, "It was based upon the information that came in with the annual return."

SENATOR STEDMAN inquired as to how quarterly data is handled.

MS. NIENHUIS said that this will be addressed later in her presentation. However, she informed the committees that the department does receive information at least quarterly and the models are adjusted as new information becomes available. The information mainly comes from credit applications.

[2:45:02 PM](#)

REPRESENTATIVE RAMRAS posed a scenario in which ACES passes and it's wrong. In such a scenario, he inquired as to how quickly the department will return to the legislature to implement a major policy change.

COMMISSIONER GALVIN emphasized, "There's a significant difference between the reason why we're here today and simply the fact that these numbers are wrong. That was a contributing factor." Commissioner Galvin said he didn't expect that entire series of events to occur again and result in revisiting the matter due to an error in a forecasting number.

REPRESENTATIVE RAMRAS surmised then that if the numbers are incorrect, there won't be a review of the policy unless there's another cataclysmic situation in the legislature.

COMMISSIONER GALVIN said that he could assure the committees that the numbers will be incorrect because they are forecasts. The question is whether the department should use the numbers and data it has to make the decision necessary at this time. He opined that it's inaccurate to say that the department is present today because the numbers are inaccurate; it's not a true reflection of why the administration is before the legislature. Furthermore, it's not an indication of whether the matter will be revisited. "The administration is not of the mindset that we need to revisit this once we have resolved the issue at this time," he stated.

[2:47:15 PM](#)

SENATOR GREEN suggested that people on the street have been given the idea that the \$800 million delta is the reason the legislature is in session.

COMMISSIONER GALVIN acknowledged that the dollar figure is easy to grab on to.

[2:47:58 PM](#)

SENATOR MCGUIRE asked whether the department is privy to the U.S. Securities and Exchange Commission (SEC) filings. She also asked if there is any provision for information sharing with federal agencies, such as the Internal Revenue Service (IRS), that have more resources available to them.

COMMISSIONER GALVIN answered that he doesn't believe there's a method for the department to obtain confidential information from the SEC or the IRS.

MS. NIENHUIS interjected that the department does receive federal partnership return information, which is somewhat useful. However, she noted that it's a little bit farther from the PPT calculation as it describes projects or something that isn't entirely unit operation. The primary focus, she said, will be on the required reporting from the taxpayers under ACES.

[2:49:11 PM](#)

SENATOR MCGUIRE recalled that the fiscal note for House Bill 3001, production, and the spring forecast have a slight deviation. However, the difference in operating and capital costs is double. From that one could assume that PPT stimulated investment or has altered the behavior of oil companies and how they report. She inquired as to the response of the aforementioned from the administration.

COMMISSIONER GALVIN said that the opex is less likely to be impacted by decisions to invest more in Alaska. When looking at stimulating investment, it's initially expected to be reflected in an increased level of capital expenditures that would, over time, add to the operating expenditures as new equipment and responsibilities are added. He related that the [department] was most troubled by the increase in opex and the fact that there was such a gap between what was assumed and what was reported. In regard to a change in reporting behavior, he related his belief that there's a question as to whether or not the level to which there was some over reporting or whether there was a lack of information of the true operating expenditures, which won't be revealed for some time.

[2:51:49 PM](#)

REPRESENTATIVE SAMUELS asked whether [the department] has access to billings sent between companies.

COMMISSIONER GALVIN noted that the department's accountants are more familiar with the reporting being received. However, he did inform the committees that [the department] does receive joint interest billings, a part of which includes reports of billings between partners. Therefore, [the department] does see what partners charge each other.

[2:53:09 PM](#)

REPRESENTATIVE SAMUELS asked if the larger problem for DOR is when there's a sole operator, such as the Milne Point Unit, for which there are no billings between companies.

COMMISSIONER GALVIN explained that under HB 2001 [ACES], the desire is to obtain more flexibility with joint interest billing and the information it will use. The expectation is that there will be more readily available information by an operator that has to report to partners as opposed to one that merely has to generate internal reports.

[2:55:09 PM](#)

MS. NIENHUIS turned the committees' attention to slide 8 titled "Current Revenue Forecasts". She explained that she has laid out actual estimated production tax payments that were received for the first three months of the fiscal year. There is also information regarding the production levels and the price. From the aforementioned information, the department can calculate what the tax payments should be. Rather than doing each separately, she has lumped them together and took an average of production and price. She then utilized those averages on the right-hand side of slide 8 to do DOR's forecast for the three-month tax calculation.

[2:57:51 PM](#)

SENATOR WAGONER inquired as to where the wellhead value is measured.

COMMISSIONER GALVIN answered that the wellhead value is measured after treatment, basically at the top of the pipe.

[2:58:14 PM](#)

MS. NIENHUIS continued reviewing the DOR calculation utilized to arrive at DOR's forecast. She pointed out that DOR's forecast is fairly close to the actual payments.

[3:00:10 PM](#)

SENATOR WIELECHOWSKI asked if there is an estimate of the oil companies' profits during the same timeframe.

MS. NIENHUIS replied no.

COMMISSIONER GALVIN offered to request that information from the section that would have it.

The committees took an at-ease from [3:00:58 PM](#) to [3:29:10 PM](#).

[3:29:50 PM](#)

MS. NIENHUIS moved on to slide 9, titled "Tools for Forecasting Costs". One of the tools for forecasting cost includes cost reporting. Currently, cost reporting and the annual filing isn't consistent across taxpayers. Therefore, the goal is to make it a bit more consistent in order to obtain the data

necessary in a more timely fashion. Under ACES forecasted information will be required. The aforementioned would enhance the department's ability to forecast revenues, she said. Another tool for forecasting costs is monitoring data submitted to DOR, such as the information received by way of credit applications. The hope, she opined, is that the data will be better. Another tool is the ability to monitor data submitted to other agencies, such as plans of development. The last tool is monitoring publicly available information, which is already occurring. The department keeps abreast of developments worldwide, she noted.

MS. NIENHUIS continued on to slide 10 titled "Three Cost Forecasts". The fiscal note and various publications relate the department's best guess forecast, which she referred to as the mid forecast. She said that this time around there is the belief in the need to put out some cost sensitivities in relation to various what-if scenarios. Therefore, the model includes mid, low, and high cost scenarios. The low cost scenario has different assumptions regarding unplanned maintenance costs and spending behavior, and therefore it's not necessarily a built-in margin. The low cost scenario is plus or minus 5-6 percent of what is being spent in the current high cost scenarios. The department can run sensitivities to cost. In fact, the model currently includes some of that cost sensitivity. The models also include cost adjustments based on price as the department believes that the cost adjustments over the last few years are related to high oil prices. She then turned to slide 11 titled "Impact of Low, Mid, and High Forecasts on Tax Revenues", which illustrates a cumulative forecast production of tax revenues over three years with a \$60 per barrel price. The production tax revenue forecast for three years for the low, mid, and high price scenarios are around \$6.5 billion, \$5.5 billion, and \$4.5 billion, respectively. Moving on to slide 12 titled "Forecast Adjustments", Ms. Nienhuis reminded the committees that forecasting is a dynamic process. In fact, the department updates its price and production forecast every six months. With cost forecasts, the department expects to do something similar, perhaps even more frequently. The department receives information at least quarterly, and sometimes more often. If a change or trend in costs or a large expenditure on behalf of a taxpayer is seen, the department plans to build it into the forecast and become part of the assumptions going forward. Ms. Nienhuis suggested that the department will get better at forecasting.

[3:36:20 PM](#)

SENATOR STEDMAN inquired as to when the fall forecast could be expected.

COMMISSIONER GALVIN said that the model will be available over the course of the next week. The official forecast will be complete during the first week of November. The department is trying to provide those [forecasts] relevant to the oil side sooner.

[3:37:28 PM](#)

MS. NIENHUIS directed attention to slide 13 titled "Forecasting Improved Through ACES". This legislation requires more complete cost reporting, both monthly and annually; requires forward-looking information; provides clearer rules for defining leases; and improves the audit function. She opined that all of the aforementioned will improve the department's ability to forecast. She moved on to slide 14 titled "Costs Policy Implications" and related that costs of production shouldn't be ignored in tax policy because understanding industry costs provides knowledge with regard to how dollars are spent on the North Slope. Also cost charging through credits puts the state in "partnership" with the industry from which everyone ultimately benefits, she opined.

[3:39:54 PM](#)

REPRESENTATIVE DOOGAN said that typically entities in a partnership share the costs, risks, and rewards. However, [under ACES] the state is giving tax credits to the companies and the state isn't receiving an equity position.

COMMISSIONER GALVIN confirmed that the state isn't receiving an equity position. However, upcoming slides will illustrate that the state receives a benefit. In further response to Representative Doogan, Commissioner Galvin said he is prepared to defend the use of the term "partnership" in the sense that there is a mutual benefit and a mutual risk.

[3:40:35 PM](#)

COMMISSIONER GALVIN turned the committees' attention to a PowerPoint titled "The Palin-Parnell Administration presents ACES".

[3:42:06 PM](#)

ANTHONY FINIZZA, Ph. D., Consultant, to the Department of Revenue, reviewed his background, including 25 years as the chief economist at ARCO. He said that he currently works as a consultant in the energy area and is a university teacher on energy, economics, forecasting, and industrial organization. Dr. Finizza began by stating that some of today's discussion reminds him of his forecasting class in which he takes at least a week to discuss the bias that is brought to forecasting. The strongest bias of everyone is hindsight bias, which he cautioned against. He then informed the committees that he became involved with [the ACES process] in August and was charged with pulling together the work between the department and the outside consultants and make any recommendations or communications deemed necessary. He related that he participated in a number of economic team meetings comprised of staff from DOR, DNR, and outsiders during which he didn't see any bias toward choosing the net versus gross philosophy. All on the team contributed to the analysis and developed ideas that contributed to the net system and others to the gross system. In fact, during the first week he was called upon to develop a scheme to help a heavy oil field in a gross system that might be impacted by high costs.

[3:45:51 PM](#)

DR. FINIZZA said that he would begin by reviewing the framework and methodology for analysis to develop an improved tax system. Referring to slide 4 titled "Producer Economic Metrics", he highlighted that net present value (NPV), the value of future cash flows as well as the capital investment made on a project, is the main producer economic metric. The NPV is a way to think about whether a project adds value to a firm. Slide 5 illustrates a balancing act to ensure that a tax system in place, from the producers' point of view, allows for projects to be attractive to the producers and the state. He explained that producer economics will be evaluated on whether the project adds present value if undertaken. From the state's point of view, the critical question is in regard to how much the government take is. With regard to legacy fields, fields that are in production, the important metric is marginal government take. The marginal government take is how much, at a given price, an additional dollar brings to the state. For new fields, the metric for examining government take is a discounted government take over the life of a field.

[3:49:28 PM](#)

DR. FINIZZA, referring to slide 6, explained that an NPV of zero means that the company has captured its return on investment and thus anything beyond zero is profit. He then turned attention to slide 7 titled "Stylized Project Cash Flow" and highlighted that typically there's a very heavy up-front capital investment prior to any positive revenue from the investment. The flow is returned to the investor in the future. He noted that there's an uncertainty about the cash flow and the time-value of money, and therefore the cash flow [of the up-front capital investment] has to be balanced with the return on investment. Slide 8 "Cash Flows for New Fields" has graphs illustrating an explicit production profile that draws from characteristics of the particular field. He reviewed the three graphs for the annual production, capital and operating costs, and annual net cash flow.

3:53:49 PM

SENATOR WAGONER asked if there is a general rule of thumb that companies use with regard to amortization of investment.

DR. FINIZZA noted that appreciation schedules are followed for both federal and state income tax purposes. In further response to Senator Wagoner, Dr. Finizza said that the break even point varies, although he suggested that in some high risk projects it occurs a few years after production.

COMMISSIONER GALVIN interjected that representatives from Gaffney Cline can speak to that during their presentation.

3:55:22 PM

DR. FINIZZA, continuing with slide 9 "Producer View of Future Oil Prices", highlighted the need to determine whether the fiscal regime will encourage investment, not impair investment. The first item for review is in regard to the set of prices at which one should perform the analysis. He pointed out that the forecasting of oil prices is very difficult and the industry has been burned by being optimistic with regard to high oil prices. He said, "The consequences of error are not symmetrical." The producer does have a view toward the future with a price path, which he suggested is around \$50 a barrel of oil. These are long-term investments, he noted. In terms of investment analysis, he suggested mimicking how the producers view evaluating projects. One way is to ensure that the project can pass the stress test case, such that if there was a downside

price fall the project would still return enough to cover the investment. He related that today's stress price would be \$40 a barrel. Referring to slide 10, he reviewed the common assumptions used in analyses.

[3:58:49 PM](#)

REPRESENTATIVE RAMRAS requested review of the source of funds for these types of projects.

DR. FINIZZA said that for the purpose of economic evaluation of the goodness of the project, the analysis is independent of how it's financed. Therefore, the question is whether the project stands on its own. He said that oil companies will make a later decision with regard to how to finance a project, much of which will be through retained earnings.

[3:59:57 PM](#)

DR. FINIZZA, referring to slide 10, explained that there are assumptions in order to maintain uniformity: 3 percent inflation; a producer discount rate at 10 and 15 percent with today's results shown at 10 percent; and state discount rate of 5 percent and 8 percent with today's results shown at 5 percent. He then reviewed slide 11 titled "Tax Plan Evaluation Process", which reviews the tax plan evaluation process. The process was geared toward finding good net tax and good gross tax plans. He explained that the process begins by considering tax plans falling within the \$1,400-\$2,200 million revenue range and viewed in terms of new field economics and mature field economics. The question for new fields is whether new field economics are preserved such that a positive net present value is achieved at the \$40 stress test price. The question for mature fields is whether the tax plan also preserves investment in mature fields such that positive NPV is achieved.

[4:03:16 PM](#)

SENATOR WIELECHOWSKI requested an explanation of the meaning of reinvestment in legacy fields.

DR. FINIZZA answered that it's investment to prevent natural decline and keep decline at a lower a rate. Dr. Finizza said that he would address the specifics later.

[4:04:25 PM](#)

DR. FINIZZA moved on to slide 13 titled "Seven New-Fields Analysis", which utilizes data from known fields to create the hypothetical fields. Slide 14 reviewed the characteristics of the seven fields one would typically expect in development in Alaska. The seven fields are as follows: medium heavy oil satellite in existing mature unit, offshore small reserves, satellite in existing unit, remote field, new unit with very heavy oil, offshore medium reserves, and new unity with large reserves. The fields range in reserves from 40-300 million barrels with various combinations of ownership. Slide 15 provides more detail with regard to the characteristics of the fields.

[4:06:25 PM](#)

REPRESENTATIVE RAMRAS asked if this exercise/model was designed to help the legislature understand or was it developed in a series of meetings with DOR and DNR to develop a theory to implement ACES.

DR. FINIZZA said that the seven fields model was developed with the notion of analyzing new fields.

COMMISSIONER GALVIN specified, "This was put together in order to provide us with a tool to decide where to go with a recommendation on the tax structure." The committees are being provided with a representation of that model and the mountain of data behind it.

REPRESENTATIVE RAMRAS asked then if the legislators should presume that this model was used to develop the economic theory behind ACES.

COMMISSIONER GALVIN clarified that this was the model used for the policymakers and the governor to understand the implications of various choices and upon which they could make a reasonable decision on what to move forward with the knowledge of its impact.

[4:08:32 PM](#)

SENATOR STEDMAN requested that Dr. Finizza provide a timeframe with regard to when he was engaged with the administration and the evolution of the process. The aforementioned relates to what went on at the administrative level during the change from a gross to a net.

DR. FINIZZA related that when he started in the beginning of August, the process had already been under way and the seven fields model had already been developed. He said he didn't know when the model started.

COMMISSIONER GALVIN interjected that the model comes from DNR and is one that it has had for many years in various parts. He informed the committees that back in May, June, and July the model was combined with a discussion with DOR in terms of revenue of generation such that the actual field impact of various structures was reviewed. When Dr. Finizza entered the scene, most of the analysis had already been performed and Dr. Finizza participated in analyzing the different outcomes and choosing amongst the impacts and refining it. In further response to Senator Stedman, Commissioner Galvin clarified that there are two major models involved: the seven fields model from DNR, and a revenue estimation model from DOR. The decision making within the model and the results occurred within the conversations between the departments and the governor's office.

SENATOR STEDMAN inquired as to the tweaks Dr. Finizza made to the model.

[4:12:59 PM](#)

DR. FINIZZA returned to slide 11, and stated that each of the three boxes is a model. For example, the left box represents a revenue model. The first step is to start with a set of tax assumptions to satisfy some revenue range being sought. The results, which are characteristics of the tax plan, are the same features used in the second model, the new fields model developed by DNR, in the second box. The third model is the mature fields model, which is simpler. He noted that he contributed to the third model as it wasn't finished at the time he became involved.

[4:14:59 PM](#)

SENATOR WIELECHOWSKI directed attention to slide 15, and related his understanding that for Field A the capex is \$11 a barrel and the opex is \$7 a barrel with an additional \$7 a barrel for the tariff, which amounts to \$25 a barrel to bring the oil to market. Therefore, at \$40 a barrel money will be made on Field A, he surmised.

DR. FINIZZA pointed out that with Field A the capital is put up-front and the profit comes much later. In fact, the time value

of money has the potential to destroy the value of that project because of the heavy up-front capital piece.

SENATOR WIELECHOWSKI said that Field D seems to be the most expensive of the fields listed on slide 15. However, all the fields listed are profitable at \$40 a barrel.

DR. FINIZZA reiterated that all the fields have high up-front capital costs prior to oil flowing. Profit comes many years later, probably well after the peak and thus it could be perhaps seven to eight years before profits arrive. Dr. Finizza said that the snapshot would seem to relate that the fields are profitable from day one, but that would only be the case if the capital side of the equation is eliminated. Dr. Finizza said that although he didn't develop the seven fields model, he did [review] it to ensure that it accomplished what he thought it should.

[4:17:44 PM](#)

REPRESENTATIVE SAMUELS, referring to slide 11, asked if in the tax plan one would also consider the potential of increased royalties with increased production. From the economics, he asked if the extra royalty or a steep decline curve when investments are made is incorporated or is it kept at 6 percent or 8 percent in this model.

DR. FINIZZA explained that all the analysis is performed at the same price and production profile. Dr. Finizza requested clarification of the question.

REPRESENTATIVE SAMUELS asked whether a different production profile is used if an investment isn't made. As costs decrease because spending isn't occurring, does the production drop from 6 to 6.5 percent, he asked.

DR. FINIZZA explained that [the process] was examined for the existing fields. He noted that the revenue target is short term and compared to the new fields, which doesn't impact the revenue range looked at over the next few years.

COMMISSIONER GALVIN said that the box illustrates the cycle of the analysis, not how one reaches the decision as to what is the optimal choice. He explained that one must review a range of revenue-generating taxes simply to bracket the sample size. The objective, he opined, is to ensure that no projects are lost and to only select those tax systems to move into the next level of

evaluation that wouldn't result in a decline in production. "It wasn't so much that we had to build in an assumption of a decline curve because we chose a revenue stream that was too high to allow for those projects to go forward because once ... it resulted in a loss project, it was no longer considered," he explained. He noted that the mature fields are a different model in which they were reviewed in relation to the impact to existing fields and what that would do to the mature fields. The mature field model was determined to be less sensitive than the new field model. Therefore, the new field model became the driver and the mature field model became the confirmation that it was okay.

[4:22:27 PM](#)

REPRESENTATIVE NEUMAN, referring to slide 15, related his belief that most investments in new fields are reinvestment earnings. He requested [clarification] of how the net present value and the ratings apply in the different fields.

[4:24:01 PM](#)

DR. FINIZZA indicated that it may become clearer with the results. He then turned the committees' attention to the graph referring to "Annual Net Cash Flow" on slide 8. He explained:

The one on the right, the "Annual Net Cash Flow", that's production times revenue minus costs and other expenditures that you make in that year, taxes, etcetera, coming out. And you're trying to say if I were standing at a point in time, at the beginning of this chart, and I make an investment of \$1 billion ... and if I have a discount rate of 10 percent rate ..., I would expect to be able to earn that kind ... of money each and every year. The fact that I have a negative outflow at the beginning poses a big burden, it really requires me to do very well in the future to compensate that because that dollar in five years is lost its time-value plus the opportunity to make that investment.

[4:25:39 PM](#)

REPRESENTATIVE NEUMAN surmised then that the \$1 billion investment has to equate on top of the \$32 per barrel actual cost of production.

COMMISSIONER GALVIN suggested that once one gets to the point of producing, the operating expenditures are being experienced as a single field. The profit in that particular year will be a reflection of the operating expense plus the transportation cost which will be subtracted from the price. In a scenario in which a \$1 billion up-front investment is made and the discount rate is 10 percent, then a company would need to make \$100 million a year to break even. If a company receives its \$100 million each year, then the [project] would be considered to have a NPV of zero. He explained that a company would take the price minus operating and transportation expenses, and determine whether it's above or below \$100 million year. Anything about \$100 million a year will result in a positive NPV whereas anything below would be negative and "slide that out" for all the expected positive cash flows.

[4:27:48 PM](#)

COMMISSIONER GALVIN, in response to Representative Doogan, clarified that if a field/project that would otherwise be positive and receive investment was placed in a category of not obtaining investment to proceed, that field/project wasn't considered. He reminded the committees that the goal was to protect the investment climate. In further response to Representative Doogan, Commissioner Galvin confirmed that these seven fields were the only ones used and the one at the bottom will become clear momentarily.

[4:29:12 PM](#)

SENATOR STEDMAN, referring to the graph on the right of slide 8, suggested that 25 years ago there would have been a much lower stress price than \$40. He surmised that the particular field would be skewed if a project was decided upon and \$40 a barrel of oil increased to \$80 or \$90 a barrel of oil. He then suggested that it would be rational to assume that a 25-year-old field in Alaska that's still producing is a valuable cash generating asset at \$60-\$80 a barrel oil.

DR. FINIZZA replied yes, adding that many such fields will require capital to continue to produce.

[4:30:36 PM](#)

DR. FINIZZA moved on to slide 16, which reviews some of the 25-plus tax scenarios considered. In the analysis it became apparent that given the up-front capital, a gross tax system was

enhanced and needed with a credit "to make it even come close." Still, the gross tax system wasn't found to be overwhelmingly favorable. He then highlighted that one of the gross plans utilized a tax table with a five-year tax holiday, progressivity as the price increased, and a high tax rate for mature fields. He continued with slide 17 that provides a description of a new field model. The aforementioned is a cash flow model that mirrors the production process and tax system.

[4:34:36 PM](#)

DR. FINIZZA turned attention to slides 18-19, and specified that the left portion of the spreadsheet contains the assumptions of the tax plan and is segregated into net taxes on the top and gross taxes on the bottom. The right side of the spreadsheet is the NPV at \$40 a barrel for each of the seven fields. Although the model traces the NPV at all prices, the critical point is where the stress price is. After reviewing the plan, the question would be whether the plan preserves economics. Dr. Finizza then walked the committees through ACES, as is, versus the PPT and highlighted that ACES has a higher value. He then moved on to the gross tax system and highlighted that there's no gross tax scheme in the first four rows that preserved economics such that it would be positive in a net system. He acknowledged the entry for the progressive tax table in the amount of \$40 million, and explained that in trying to implement the aforementioned tax table the difficulty in treating the field lives differently was discovered. He then highlighted that Field E, which has one of the highest costs, doesn't fair well under either a net or gross system. The negatives throughout the gross production tax scenarios suggest that they wouldn't work over a wide range of real fields that Alaska could expect in its future.

[4:40:14 PM](#)

SENATOR WIELECHOWSKI related his understanding that under ACES all the fields are fairly comparable, save Field A. He inquired as to why such a large disparity exists with the various net production tax scenarios for Field A. He further inquired as to whether there are a lot of fields on the North Slope that are comparable to Field A.

COMMISSIONER GALVIN reminded the committees that Field A is within a legacy field and is a heavy oil project, which means that it has the strained economics of the heavy oil and will potentially be impacted by the gross tax floor. The crossover

point with the gross tax floor is around \$40, \$41. Therefore, when one assumes \$40 across the line, it will impact the economics of that particular field.

SENATOR WIELECHOWSKI suggested that there would be the desire to treat heavy oil fields differently, since there's a lot of heavy oil on the North Slope.

COMMISSIONER GALVIN said that various options were reviewed and it was determined that a net-based system is the most effective means to target the heavy oil. The methods of manipulation available for a gross-based system aren't precise. Furthermore, such methods won't necessarily reflect the actual economics of a particular project because a proxy for a cost will be chosen and it's likely to miss the mark and won't be as effective as simply allowing the deduction of the costs of the marginally challenged field.

[4:42:39 PM](#)

SENATOR WIELECHOWSKI opined that if the goal is to maximize benefits to Alaskans and to maximize investment, then a tiered system could be tailored such that maximum benefit is received from legacy fields while treating the viscous oil, heavy oil, and legacy oil fields differently and having some form of a net profits tax on the exploration fields. The aforementioned would seem to achieve the best of all possible worlds, he said.

COMMISSIONER GALVIN said he would agree, but emphasized that thus far no one within Alaska has identified an integrated system in which there is a method to segregate and tax separately one type of oil for another. He noted that [DOR] spent a great deal of time working with DNR, which would be the entity upon which segregation of the oil would fall. The result of the conversation was the recognition that it wasn't going to be a practical outcome because of the inherent incentive to identify all new projects as new oil and the lack of a technically verifiable method to specify whether it's really new or not.

SENATOR WIELECHOWSKI surmised that's the point at which the auditors enter. If the aforementioned is done elsewhere in the world, he said he has faith it can be accomplished in Alaska.

COMMISSIONER GALVIN said that once the oil comes out of the ground, the auditors would be the least knowledgeable about whether it came out of what's considered a new pool versus an

existing pool. The conversations resulted in the realization that the state doesn't have the necessary tool, and therefore other options had to be reviewed.

[4:46:32 PM](#)

REPRESENTATIVE SAMUELS pointed out that the effective tax rate increases once the floor is reached, although that's the time when investment is needed the most, in a scenario in which there are falling oil prices and profits. The aforementioned seems backwards, he opined.

DR. FINIZZA highlighted that it's important to review a project in terms of prices. He related his belief that a floor would be valuable to protect the state against falling prices.

REPRESENTATIVE SAMUELS, with regard to attracting ongoing investment in Prudhoe Bay and Kuparuk, surmised that ongoing investment is necessary to keep the decline curve up.

DR. FINIZZA noted his agreement, and added that one, as a producer of those types of fields, should expect a very cyclical pattern of revenue over time. He clarified that he's portraying that there wouldn't be a serious impact on investment to say that the project will make sense at \$60 a barrel on average with deviations to \$40 and \$80 from time to time.

[4:49:42 PM](#)

REPRESENTATIVE DOOGAN recalled testimony that most of the oil revenue from the production tax comes from the legacy fields. However, only one legacy field project was modeled and it was the most difficult one at that. He inquired as to why there seems to be disproportionate modeling with only one legacy field when that's from where most of the oil revenue comes.

COMMISSIONER GALVIN explained that a new heavy oil project out of a legacy field is considered a new venture, a new level of investment, and a new target. Therefore, it's treated as a new field so the investment question is analogous to similar questions directed outside the legacy fields. At the legacy mature field level of analysis there's a certain amount of investment necessary to maintain production at certain level of decline. The gap between not investing and investing can be treated as if a separate project in the existing field and infrastructure, he explained. For example, Field A was placed in the analysis of a new field as opposed to being placed in the

overall reinvestment in the existing fields. In further response to Representative Doogan, Commissioner Galvin said that another model reviewed existing fields.

[4:52:47 PM](#)

REPRESENTATIVE DOOGAN related his understanding that in all cases Field E is under water at a \$40 stress price. He asked if that's because it has a relatively high capital cost and heavy oil will be slow to produce.

COMMISSIONER GALVIN replied yes.

REPRESENTATIVE DOOGAN surmised then that adopting a medium rate gross production tax on the new project in the legacy fields would make money.

DR. FINIZZA specified that it's at 30 and compared to ACES it's less than [30] and considerably less than under the PPT.

REPRESENTATIVE DOOGAN further surmised then that although it's less profitable, it's still profitable.

COMMISSIONER GALVIN interjected that it's important to recognize [that's the case] under this model and the information available.

REPRESENTATIVE DOOGAN pointed out that for Field A the administration's proposal only results in a 10 whereas a medium rate gross tax is a 30.

COMMISSIONER GALVIN explained that's because of the effect of the floor that kicks in at \$40. Therefore, moving to \$42 or \$43, suddenly it's at 120 whereas at the medium rate gross, the 30 doesn't change much when moving from \$41-\$43.

[4:55:07 PM](#)

COMMISSIONER GALVIN, in further response to Representative Doogan, said that in order to provide the numbers on the chart a snapshot is taken. The \$40 price was recognized as an adequate stress price, although different companies will have different numbers. He explained: "We could show you it at \$45 and the difference would be that the ACES with the floor and without the floor would have no change at any of the fields. But that wouldn't be ... a fair representation of the potential impact of the floor on an economic decision. But if we showed you that

\$45, the change in the impact of that medium rate gross would be fairly small." He suggested that companies will view the aforementioned situations differently and view more of a likelihood of a less economic situation at the gross situation rather than the floor situation.

DR. FINIZZA clarified that the notion was to move away from picking an entry in the table. Therefore, the approach was to view a tax scenario across all fields.

4:57:07 PM

REPRESENTATIVE DOOGAN opined that either these are good numbers or not. He further opined that an oil company with Field A would like the medium rate gross production tax better than ACES because "it's using the stress price that you're telling me they use and making the decision the way you're telling me they make it, that's a better deal for them."

COMMISSIONER GALVIN explained that he's trying to provide information that represents the distinctions in the programs in a way that doesn't hide any facts while not overwhelming the committees with information at each price. He further explained that the exercise was extremely dynamic and he's trying to condense a couple of months of work for the two hour presentation today. He indicated that this isn't a pure representation of the economic decision being made and offered to provide a broader view of the sensitivities between the different choices.

4:59:47 PM

SENATOR STEDMAN recalled the difficulties surrounding the floor and the progressivity under the PPT. He said that the progressivity was partially utilized to have more on the upside at \$60, \$70, and \$80 a barrel oil. After much debate, the floor mechanisms were deliberately left out because there was more economic interest for the state to take a higher percentage at \$60-\$80 a barrel oil. He said that he will personally push for the concept of the state taking a larger percentage at higher oil prices.

COMMISSIONER GALVIN characterized that as a legitimate policy call. The information being provided is the information that lead the administration to its policy calls, he noted.

5:03:04 PM

SENATOR STEDMAN recalled that the state was better off when it took a couple of years of a larger percentage with higher oil prices than having the floor. The important caveat is that the state takes the revenue during the high revenue times and roll it forward, which is occurring. The aforementioned is, in effect, preparing the state for the collapse of oil prices.

5:03:45 PM

CHAIR HUGGINS related that he received a call asking whether the state is in high level negotiations over the gasline to which he responded that he didn't know. He then recalled that during the hearing of AGIA, there was insistence from some in the legislature that as soon as requests were received, the legislature would see those and there wouldn't be any surprises. Therefore, he inquired as to whether the state is in high level negotiations over the gasline.

COMMISSIONER GALVIN replied no, and added that [AGIA] created a public, competitive process that will provide the next step in discussions in the form of proposals that are received.

5:06:01 PM

CHAIR HUGGINS said that he was told that on KTUU one of the administration's special assistants said, "We are in high level negotiations on the gas pipeline."

COMMISSIONER GALVIN responded:

That was a turn of phrase to represent that when the producers come out publicly and make a statement with regard to what they feel about the nature or the likelihood of the pipeline going forward, that it is a representation that there's a great deal of negotiation going on. Very publicly these negotiations are going on where there's an attempt to influence the market, influence the interest in participating in our competitive process. And that we shouldn't take everything at face value, that we should recognize that there is a negotiation going on out in the public, over the future of this gas pipeline. And that was the point of that representation.

CHAIR HUGGINS suggested that perhaps that needs to be clarified throughout the state.

[5:07:24 PM](#)

COMMISSIONER IRWIN noted his agreement with Commissioner Galvin. He explained that to ensure there are no behind-the-scenes negotiations, as soon as the request for applications (RFA) was put out an independent blind portal website was established. This website allows companies to ask technical questions without the administration knowing from whom the question comes. The aforementioned illustrates that the administration has gone to great lengths to ensure that this is a fair and open process.

[5:09:20 PM](#)

CHAIR HUGGINS suggested that to the extent reasonable the conversations the administration is having be shared with the legislature. He expressed interest in the legislature being up to speed when contracts are received. He then expressed concern with regard to Dr. Van Meurs comment on the economic viability of a gasline.

COMMISSIONER IRWIN commented that consultants say many things. He then related that he has heard from multiple sources in the Lower 48 with regard to the extreme demand for Alaska's gas.

[5:11:01 PM](#)

CHAIR HUGGINS emphasized the need to listen to Dr. Van Meurs and suggested that it bears analysis as to why he came to the aforementioned conclusion. Chair Huggins further emphasized, "This is about the revenue for ... 50 years out." He then asked if the administration holds the belief that the first gas will arrive in 2013.

COMMISSIONER GALVIN responded that in two months more will be known. On behalf of the administration, Commissioner Galvin said that he and Commissioner Irwin would know if there are any high level negotiations related to the gasline. Commissioner Galvin specified that no high level negotiations with regard to the gasline are occurring. Furthermore, Dr. Van Meurs' statements regarding the viability of the project were premised on his assumptions that the cost estimates used seven years ago were an accurate reflection of the cost to get from the North Slope to the market - those costs having doubled - and on the question of whether the market could bear the price necessary to

account for the doubling of those costs; those assumptions will be proven one way or another in a few months. Commissioner Galvin pointed out the need to have the process play out, receive the applications, and receive the information regarding the current cost estimates.

[5:13:09 PM](#)

CHAIR HUGGINS recalled that during the earlier mentioned KTUU broadcast, it was said that the first gas will arrive in 2013.

COMMISSIONER GALVIN said that he wouldn't back that up because he doesn't know upon what it's based.

COMMISSIONER IRWIN said that the premise with AGIA is to obtain bidders and then recommend a winning applicant.

[5:14:37 PM](#)

SENATOR GREEN commented that it's troublesome that the administration has staff making such statements.

[5:15:07 PM](#)

SENATOR WIELECHOWSKI, returning to slide 15, inquired as to the most common types of fields that the state needs to incentivize on the North Slope. A plan to incentive whatever is the most common type of field should be crafted, he opined.

COMMISSIONER GALVIN answered that there are a variety of potential developments that are foreseen. The administration isn't in a position of identifying which field is most likely since the industry is still evaluating those as well. The administration, he related, felt it inappropriate to substitute its judgment and prioritize among the seven fields. Therefore, the seven fields provides a spectrum.

SENATOR WIELECHOWSKI surmised that heavy oil legacy fields, such as Field A, are the type that should be incentivized.

COMMISSIONER GALVIN said that Field A is a representation of a near-term heavy oil project. There are probably other fields that would be further down the line, in terms of more stressed and perhaps being pursued after the state has had a longer experience with higher prices. Currently, Field A is the state's best representation of a heavy oil field.

[5:17:24 PM](#)

SENATOR WIELECHOWSKI said it would be most helpful to know what type of field the state is trying to incentivize on the North Slope.

COMMISSIONER GALVIN offered to have a separate briefing from DNR. He then pointed out that one challenge in an open public forum is to balance what can and can't be revealed with regard to various aspects of these fields.

SENATOR WIELECHOWSKI suggested that perhaps there should be a closed session because this is a critical issue. He opined that the legislature can't be expected to make this decision in a vacuum.

COMMISSIONER GALVIN acknowledged that the legislature will have to decide how much of the information it will need and the steps necessary to provide the information. He reminded the committees that the Department of Law has said that once the legislature is in session, there is more of an opportunity to have executive sessions, private briefings, confidentiality agreements, and so forth. Therefore, it's up to the legislature to make a determination as to whether it wants to engage more in the details.

[5:19:11 PM](#)

SENATOR STEDMAN commented that he is looking for more oil patches to be developed. He then recalled that earlier Commissioner Galvin had said that any high level negotiations were through the press or the news media.

COMMISSIONER GALVIN clarified that he was characterizing the intent of the statement to which Chair Huggins referred. There was a statement made in response to a public statement that characterized the nature of the project or the likelihood of additional participants. That statement was to make sure that Alaskans recognize that the state is involved in a high level negotiation as it relates to the state's natural resource. The aforementioned wasn't intended to mean that there were private negotiations between the administration and a project proponent. The aforementioned was a way that [the administration's staff] described the public discussion occurring with regard to the gasline project.

The committees took an at-ease from [5:20:59 PM](#) to [6:19:55 PM](#).

[6:20:02 PM](#)

DR. FINIZZA said that slide 19 relates the implications for the state revenues from the various [net profit tax] scenarios.

[6:21:13 PM](#)

COMMISSIONER GALVIN recalled from a previous hearing that Representative Doogan had requested an indication of the return on the investment the state is making. This is a reflection of the net present value to the state of the cash flows that would arrive through the tax system alone and demonstrates the value of the projects going forward. Therefore, in a sense it's a reflection of the investment in the form of the credits and so forth and how much the state will receive because the project moved ahead.

[6:21:49 PM](#)

DR. FINIZZA moved on to slide 20, which refers to the government take and the position of Alaska in relation to the other tax and royalty regimes. He highlighted that the median government take, discounted at 10 percent for ACES, over the six potential new fields with a positive present value is 70 percent.

[6:22:32 PM](#)

SENATOR WIELECHOWSKI drew attention to the median government take of 68 percent under the PPT, which varies quite a bit from the average tax rate projected by Econ One last year at which a tax rate at \$60 under various proposals resulted in about 61 percent government take. He related his understanding that under ACES the state boosts its tax rate significantly. However, ACES raises less money than what PPT would raise. Therefore, he inquired as to how ACES has a higher tax rate than PPT.

DR. FINIZZA explained that [the information on slide 20] uses today's cost structure and each field has the same cost structure. The Econ One information from last year used a different concept and was done over existing production, and thus there was no information regarding new fields. Also the Econ One information was looking at undiscounted government take.

SENATOR WIELECHOWSKI surmised then that the way in which the calculation is occurring is changing under ACES. He said that he has a much harder time understanding that there's a much higher tax rate under ACES because the state is receiving less money under ACES than under PPT.

6:25:22 PM

COMMISSIONER GALVIN clarified that there are different ways of calculating government tax. The 61 percent is based on one method of measurement as current cash flows are reviewed across the entire North Slope in current amounts. However, [slide 20] is looking at future projects and reviewing them from cradle to grave over the net present value of the cash flows. He then highlighted the need to recognize that the government take is inherently a calculation on the net. When costs increase by 50-100 percent, that alone has a significant impact on the government take calculation when reviewing Alaska specific economics. Commissioner Galvin said that an apples-to-apples comparison would be more analogous to the slide addressing the current cash flow and the difference between the two is primarily the cost. Therefore, when compared across the same method of calculation, the deviation is the cost story.

SENATOR WIELECHOWSKI inquired as to why a different calculation would be used this year as compared to last year.

DR. FINIZZA echoed that [slide 20] is reviewing the fields where the full cycle, cradle to grave, can be measured. Those were calculated in fields under production for a long time, and therefore one wasn't able to make the calculation like that [in slide 20]. This [calculation] isn't appropriate for new fields and [the Econ One analysis] didn't include new fields.

SENATOR WIELECHOWSKI related his belief that one would want a lower tax rate on new fields.

COMMISSIONER GALVIN said that it's a matter of comparison. He clarified:

We're not saying that the numbers that were used last year were the appropriate target or not. We used the same calculation method and under ACES, it's 65 percent that we're going to get to. This time around, because we have the field models, we can also ... model government take based upon the project's life cycle, which is, frankly, the one that you find most

of the time in the government comparisons between different regions. And so, we were able to do that for these ... six fields that were economic. ... we're not substituting one for the other because we're providing them both. But we're saying this is an additional tool for making that evaluation.

[6:28:46 PM](#)

REPRESENTATIVE DOOGAN requested why, for the government take, the calculation uses a 5 percent NPV and a \$60 price.

COMMISSIONER GALVIN, with regard to the discount rate and the state's perspective, clarified that the time value of money is different to the state than to private industry. Therefore, it's appropriate for the state to review the cash flow stream with that different discount factor. From the industry's perspective, the industry views it as a higher risk factor because it wants to obtain a higher return on its money. When one reviews the industry's investment decision, the industry will test it at the stress test, \$40, rather than the expected price. However, it would be misleading for the state to say that it will check what revenues will be available at a \$40 price when the state expects it to be much higher and thus the state uses what's closer to the expected long-term price, \$60.

REPRESENTATIVE DOOGAN surmised then that \$60 is closer to what the state is forecasting oil prices will be over the long term.

COMMISSIONER GALVIN stated his agreement.

[6:30:32 PM](#)

DR. FINIZZA moved on to slide 21, which places the six projects in the array of all the projects in the analysis that Petroleum Finance Company (PFC) did for tax and royalty regimes. As the graph illustrates, Alaska's government take falls in the third quartile.

[6:31:00 PM](#)

SENATOR WIELECHOWSKI asked if it's true that the discount rate is a huge factor. He further asked if it's fair to say that the tax rate can be adjusted, and companies can bear it when there are high capital credits up-front.

COMMISSIONER GALVIN said yes.

DR. FINIZZA nodded yes.

[6:31:45 PM](#)

REPRESENTATIVE RAMRAS inquired as to how to address the fact that this is a significant tax policy change within 14 months.

DR. FINIZZA commented that various factors beyond government take, including prospectivity and fiscal stability, are considered in determining where someone might invest and in that sense, it's a factor. However, it isn't a factor in this analysis [before the committees today].

[6:33:22 PM](#)

REPRESENTATIVE RAMRAS commented that he has been troubled with regard to the deviation to the KTUU news story and said that he thinks highly of the staff who was quoted by KTUU.

[6:34:13 PM](#)

DR. FINIZZA continued with slide 22, which concludes the new fields portion of the analysis. After all the scenarios that were run, it was determined that the new fields would likely not be developed under a gross tax system, as a broad tax policy. For these heavy capital intensive fields, capital credits are essential to preserve investment efficiency and keep that climate positive. Dr. Finizza pointed out that ACES tends to level the playing field for small producers [and new entrants] because of the ability to monetize losses at the tax rate.

[6:35:03 PM](#)

REPRESENTATIVE DOOGAN related his understanding that references to a "gross tax system" refer to a tax system with no credits or deductions of any kind.

DR. FINIZZA mentioned that things that did have a tax credit for investment were included in the gross tax system. However, it wasn't a cost-based system in which operating costs could be deducted.

REPRESENTATIVE DOOGAN surmised then that a gross system is a system in which the companies wouldn't be able to deduct operating costs.

COMMISSIONER GALVIN indicated agreement. He then highlighted that missing from this slide and the charts is that comparisons of the various gross tax systems was performed using an apples-to-apples comparison. In other words, the goal was to compare the net tax with a gross tax that would result in a similar amount of revenue. The various rates and investment impacts are all on gross tax-based systems that are expected to result in a similar amount of revenue to the state. Therefore, on slide 22 when it says that new fields would likely not be developed under a gross tax system, it's a gross tax system that would bring in a similar amount of revenue as would ACES, for example.

[6:37:11 PM](#)

SENATOR STEDMAN referred to the monetization of credits. He asked if there has been an analysis on the purchasing power loss that the credits will produce. He expressed interest in obtaining background as to why the state should take an interest (indisc.).

COMMISSIONER GALVIN explained that the information on slide 22 that specifies, "Can monetize losses at same rate as large producers" refers to net operating losses an explorer would experience when that explorer doesn't have any production. Under PPT, that's carried forward the following year at the 20 percent rate. An existing producer would be able to deduct that at the 22.5 percent rate. Under ACES the explorer can carry it forward at the tax rate, and therefore it's an equivalence with a year delay. The aforementioned is illustrated in some of the increase in value between going from the PPT to ACES on some of the projects. With regard to receiving 100 cents on the dollar for credits, Commissioner Galvin explained that the state doesn't receive reports regarding the amount for which credits were sold. The reports received prior to the August 3rd report was that the companies were having difficulty finding a market, but since that time there have been reports that companies have sold a number of credits close to full value. In the end, the administration believes there's a policy justification for the state providing full value rather than requiring it to be sold at a discount. In terms of quantifying the discount, that will have to come from the companies.

SENATOR STEDMAN opined that with issues such as this there seems to be a lack of backup. He further opined that if there were issues in a particular market, the numerics of the trade would be available to illustrate that there's a problem and there would be calculations on the opportunity loss of carrying these

[credits] forward. He said he wasn't sure that the state should be all that concerned. In fact one of the questions that needs to be asked is whether the 20 percent credit is too much.

COMMISSIONER GALVIN reminded the committees that it's a private market with private deals, and thus the parties determine how much information they will make available to the state. Aside from that, it's ripe for a policy discussion with regard to whether it's appropriate for the state to provide full value or not. There is also the question as to whether explorers should be provided with the same level of credits as others are provided.

SENATOR STEDMAN recalled that some of these issues were fully debated under PPT while others weren't.

[6:42:12 PM](#)

DR. FINIZZA directed the committees' attention to the analysis of mature fields, which he said isn't as detailed as the seven fields analysis as there isn't much knowledge of the project specifics. Still, some assumptions can be made that result in the conclusion that a gross tax doesn't bode well for mature fields. As specified on slide 24, the assumption is that reinvestment in legacy fields requires substantial capital in order to keep the decline from occurring very quickly. He pointed out that one mode to consider is placing a mature field in a harvest mode in which the field is allowed to decline naturally. The assumption was 15 percent decline per year. Another mode, reinvestment, is one in which capital is invested to stem the decline such that it's at 3 percent per year. If each mode is thought of as a separate project, one can perform the analysis in the same sort of net present value manner and compare the economics of investing versus investing less. A picture of that, slide 25, illustrates a reinvestment mode decline that's a slow slope and the harvest mode with a sharp decline of 15 percent.

[6:44:23 PM](#)

SENATOR WIELECHOWSKI inquired as to the mode under PPT.

DR. FINIZZA said that currently [the state] is close to the reinvestment mode, which he opined would probably be the case for any net system.

[6:44:46 PM](#)

REPRESENTATIVE RAMRAS inquired as to how a more aggressive tax would impact the harvest mode. He related that one could conclude that the more is harvested in taxes, the more the reinvestment mode could be hampered.

DR. FINIZZA answered that in general, that's true. However, at a given net tax rate, even if the tax rate is higher than under the PPT, one would still be better off investing than adopting a harvest mode. He explained that the aforementioned is the case because the net present value is still higher to invest. He acknowledged that although it may be lower in a lower tax world, it would be better than the alternative.

REPRESENTATIVE RAMRAS surmised that the alternative is to leave the oil in the ground.

DR. FINIZZA replied yes, adding that one could leave a lot of it in the ground.

COMMISSIONER GALVIN pointed out that the oil itself, the production of the oil, and the profits that will be generated are the motivators to obtain the investment. The tax system won't make the decision. Regardless of whether it's PPT or ACES if the value of the oil remains and making the investment remains, the investment will be made.

[6:46:28 PM](#)

REPRESENTATIVE RAMRAS noted his agreement, save for those marginal projects that are lost, the dampened investment climate, and the view that Alaska becomes a basket of instability. To shift tax policy again and dampen the broader climate introduces another variable, that of instability, that hasn't been articulated in any of today's slides. He opined that tax policy impacts behavior. He then inquired as to Dr. Finizza's sense of the variable that tax policy impacts behavior.

COMMISSIONER GALVIN reminded the committees that yesterday there was discussion with regard to stability, which is clearly an issue as it relates to the attractiveness of investment in Alaska. Today the discussion is centering around the economic side in which stability can't be quantified.

REPRESENTATIVE RAMRAS interjected that stability will be discussed every day because it's a big deal.

COMMISSIONER GALVIN clarified that these are economic models and the issue of stability isn't included in each slide. He emphasized that the issue of stability isn't being ignored.

[6:49:36 PM](#)

CHAIR OLSON expressed concern with the work product being produced in this short time. He highlighted that when this issue was addressed the last time it took eight months.

[6:49:54 PM](#)

REPRESENTATIVE DOOGAN inquired as to from where the 3 percent and 15 percent came.

DR. FINIZZA specified that those percentage came from information he collected with regard to the production forecast that was made for the state. He noted that there were a range of potential volumes that seem to fit the harvest mode.

REPRESENTATIVE DOOGAN surmised then that Dr. Finizza determined that if there was no reinvestment, there would be a 15 percent decline in production. He inquired as to the assumptions that resulted in the 3 percent annual decline.

DR. FINIZZA, referring to slide 26, explained expenditures of \$15 a barrel for the reinvestment mode over the 20-year horizon. In the harvest mode, those things to keep the field going would result in about \$5 barrel. The critical variable is the difference between the two. The assumptions were applied to various sampling of tax cases. Over the 20-year horizon, the NPV of those strategies with those tax policies was calculated. In the first column, the sustain production mode, ACES had a NPV a little over \$8 billion. In the harvest mode there would still be a positive NPV of about \$6.9 billion. Therefore, a producer with these options would improve its NPV by investing to sustain a low decline mode. If there was a switch to any gross case, the opposite conclusion happens in each such that the sustained production load had a NPV lower than just allowing for strict harvesting. The volume of oil recovery in both cases is fairly substantial as well, 1 billion barrels less.

[6:53:31 PM](#)

REPRESENTATIVE DOOGAN surmised then that the lower the taxes, the more barrels of oil will come out of the ground. He asked

if the aforementioned is why the NPV under the PPT is higher than the NPV under ACES.

DR. FINIZZA explained that the PPT has a higher NPV because the tax rate is lower. The NPV under PPT of doing nothing or to allow a rapid decline by investing less is higher than the ACES case. The difference between the two still relates that under the PPT, the NPV is improved with investment as would be the case with ACES and even a higher tax rate.

REPRESENTATIVE DOOGAN asked whether the 3 percent of sustained production is a prediction of what will happen if the changes the governor recommends are passed. In other words, will the decline rate be cut in half with the passage of HB 2001.

DR. FINIZZA said that he made no assumptions about any change in the decline rate as a result of any of the tax policies. In further response to Representative Doogan, he confirmed that he picked 3 percent and then ran the calculation.

[6:55:35 PM](#)

SENATOR STEDMAN inquired as to the amount of extra capital necessary to maintain 750,000 barrels of oil per day or increase to 1 million barrels on the Trans-Alaska Pipeline System.

DR. FINIZZA said he couldn't answer that question.

COMMISSIONER GALVIN related his understanding that no matter how much investment is made in the legacy fields, the [producers] won't be able to level it out. With regard to the question as to whether the decline can be slowed by investing more money, Commissioner Galvin said yes. However, the question regarding how much the decline can be slowed remains. This slide simply illustrates that the amount [an explorer] needs to invest to stave off the production decline is a decision that will be made from now over the next 20 years. He opined that [the administration] wants to ensure that the tax code doesn't provide a disincentive for that investment. Based on these assumptions, under ACES or PPT the choice will be to make the investment because more money will be made from the oil than if the investment wasn't made. However, under a gross tax scenario on the legacy fields, the investment decision is driven toward not investing and letting the field decline. The aforementioned isn't in the state's interest. Commissioner Galvin pointed out that the aforementioned led to the decision in terms of the

impact of gross tax versus a net tax and where the rate could move.

SENATOR STEDMAN recalled discussions during the PPT when it was said that an extra \$1 billion reinvestment a year in the field is necessary on an ongoing basis to slow decline. He expressed interest in having some targets as the oil basin is monitored.

[6:59:52 PM](#)

REPRESENTATIVE SAMUELS asked if the 15 percent decline refers to normal reservoirs around the world or only to Prudhoe Bay and Kuparuk.

DR. FINIZZA said that's probably a better question for a geologist rather than an economist. He said that he has received numbers from geologists relating to Prudhoe Bay. He then recalled a similar decline rate in BP discussions.

REPRESENTATIVE SAMUELS inquired as to whether one could consider that all reservoirs act similar in that they produce 10-15 percent a year and then start to decline. He asked if one can determine the amount of investment it would take to stop the decline, or are all the fields different.

DR. FINIZZA said that he hasn't studied that. Although there aren't too many fields around of this size to make the comparison, it would be worth doing.

SENATOR WIELECHOWSKI opined that another column or chart specifying Alaska's NPV is necessary if a billion more barrels is received under the PPT.

COMMISSIONER GALVIN specified that the same amount of barrels is received. In further response to Senator Stedman's earlier question, Commissioner Galvin explained that the needed opex and capex investment of \$15 per barrel is similar to what is being experienced across the North Slope with \$14.56 per barrel, which equates to almost a \$2 billion capital expenditure per year. "We're probably in the ballpark, if not even pushing it a little bit higher than the billion dollars of reinvestment required in order to hit this same number. So, I think ... it's a comparable number than what you were talking about a year ago," he said.

[7:03:29 PM](#)

SENATOR STEDMAN asked if there's a chance that the state might be on track with PPT.

COMMISSIONER GALVIN opined that hopefully the state is moving toward that reinvestment mode and getting [explorers] to maximize their opportunity to produce oil. Furthermore, perhaps the net structure and up-front credits will drive the state to that. The question become if the aforementioned will be driven away if the state moves to ACES, which is what this analysis is intended to illustrate.

[7:04:25 PM](#)

DR. FINIZZA said that another gage, to determine whether the state is driving investment away is to review what the producers are actually keeping out of each additional dollar, which is illustrated on slide 27. The graph on slide 28 plots all of the ongoing projects in the PFC database. The graph highlights where the Alaska legacy marginal take is relative to mature fields. He related that the [fields] with the higher marginal government take are in Norway and the ones that are lower are in Norway or Australia.

[7:05:40 PM](#)

SENATOR STEDMAN, referring to slide 27, surmised that it's speaking to the vast majority of the basin, Kuparuk and Prudhoe Bay. Under the PPT the government take is 61 percent of the [\$1.00] whereas last year Econ One estimated that the government take at \$60 a barrel of oil is 60.4 percent, which he suggested could be a rounding error.

DR. FINIZZA said that's fortuitous since the run performed last year was under a different cost structure and production profile. The information being provided today uses the latest production forecast as well as the higher costs. Dr. Finizza said that it was felt important to use this metric as opposed to what was used by Econ One last year. Furthermore, it provides a way of comparing mature fields in other parts of the world.

SENATOR STEDMAN requested written delineation of the two.

[7:08:30 PM](#)

DR. FINIZZA concluded with slide 30, which uses ACES at \$60 and peels back some of the features of ACES in order to relate how much each, when relaxed, would change total revenues for the

next three years. He noted that there won't be a very dramatic fiscal change in 2008 because half of that year is already included. Therefore, he suggested that it may be best to review the impact on fiscal year 2009 to gauge the importance of some of these pieces. For example, under fiscal year 2009 ACES is estimated to have tax revenues in the amount of almost \$2 billion. If the tax rate is moved to the PPT rate and everything else under ACES remained the same, \$229 million less would be produced in fiscal year 2009. If ACES remained the same save changing the progressivity to the PPT progressivity, it would result in approximately \$150 million less in 2009. He reviewed the results of various changes to ACES.

[7:11:21 PM](#)

DR. FINIZZA, in response to Representative Samuels, said that the assumption for [fiscal years] 2008-2010 is that it's declining. The projects all assume the mid cost numbers related by Ms. Nienhuis.

REPRESENTATIVE SAMUELS then requested the production forecast for this particular model.

[7:12:29 PM](#)

SENATOR STEDMAN, returning to the government take of PPT as reported on slide 27 and projected under Econ One's slide from last year, reiterated his earlier statement that the two, in terms of the percentage of government take, seem to be on top of one another.

DR. FINIZZA restated that the two were calculated using different methodologies. Therefore, if the current assumptions were utilized with the Econ One presentation of last year, different numbers would result because of the use of different concepts. If the same concepts were used, the result would be fairly close. "So, I would not think they would quibble with our percentages here," he said.

[7:14:22 PM](#)

REPRESENTATIVE DOOGAN directed attention to slide 18 and related his understanding how a company would rank the various scenarios relative to Field A. He asked if there is any way for the state to determine if a company would be satisfied and make the investment with ACES and no floor, although it wouldn't produce as much as under other scenarios.

DR. FINIZZA stated that a company should be willing to undertake a project that has positive NPV at its stress price. In further response to Representative Doogan, Dr. Finizza said that basically anything not in parenthesis is an investment that a company may make when viewed on that one metric.

REPRESENTATIVE DOOGAN surmised that the reason the information in slide 18 is being discussed at length is because the state can't do anything about the world market price of oil or anything to make more oil on the North Slope. The state can only tinker with the taxes.

DR. FINIZZA responded that the state can tinker with the taxes, which includes providing capital credit investments and things of that nature.

REPRESENTATIVE DOOGAN related his understanding that one must keep in mind that if the price decreases or increases, then, in terms of investment decisions, this "goes right out the window."

DR. FINIZZA replied yes, if the new stress price is \$50 or \$60.

[7:17:30 PM](#)

CHAIR HUGGINS characterized this as a rather sterile look. He then opined that there are many risks beyond NPV and the tax structure.

[7:19:15 PM](#)

SENATOR WIELECHOWSKI highlighted that the experts he has heard have said this can be done and more money can be made without discouraging investment. If the state were to adopt ACES, how would a business person view the situation, he asked.

DR. FINIZZA opined that the financial view would suggest that the investments are doable and considered on the worldwide view to be projects that would be undertaken.

[7:21:02 PM](#)

RICH RUGGIERO, Gaffney, Cline & Associates, said that the decision "depends upon where you were when." He then recalled working with an oil company on a major project in another part of world. The opportunity for NPV growth was tremendous, but the company wasn't willing to make the decision because the

company had a number of other larger opportunities and had, as do many oil companies, limited ability in terms of people resources. There are a number of different factors that are considered in these decisions, but they probably don't remain the same over time. With regard to whether the tax system will be better or worse than the previous tax system, Mr. Ruggiero related that investment decisions were being made much like the oil companies are doing today, that is around a wide range of tax systems or fiscal policies. He suggested that businesses will choose a situation in which they can achieve higher production within a realm of manageable risks, although it may be at lower cost return.

[7:24:06 PM](#)

REPRESENTATIVE RAMRAS inquired as to the impact of changing the tax policy with such frequency.

DR. FINIZZA noted that he has reviewed two recent reports on fiscal stability, the PFC report and the Wood Mackenzie report. He related his belief that the PFC report is correct in that the fiscal stability in Alaska is much closer to a neutral position rather than an extreme change. Dr. Finizza said that personally he didn't believe one should view Alaska as an unstable environment. Furthermore, he opined that he didn't believe producers would leave because of this proposed tax change.

[7:26:28 PM](#)

SENATOR STEDMAN asked if anything, short of nationalization, could be done to completely drive out the producers from a basin that's 20-30 years old and on the magnitude of Kuparuk.

DR. FINIZZA said that he has no opinion on that, adding that every change has the potential to be followed by other changes. However, he didn't believe it's at that situation.

SENATOR STEDMAN related his understanding that the risk is not the industry leaving the oil basin, but rather not reinvesting to help slow the decline.

DR. FINIZZA replied yes.

[7:27:57 PM](#)

REPRESENTATIVE SAMUELS asked if Dr. Finizza does modeling for Alaska for the economy as a whole. He asked if the models

review how the spending circulates around the economy. For example, if the state raises the tax to 40, the investment dries up and declines to 15 percent. He inquired as to whether any models review the impact of the aforementioned scenario on the private sector.

DR. FINIZZA replied that although such hasn't been done, it's possible. In the example cited, there would be an issue and modeling should be performed.

REPRESENTATIVE SAMUELS acknowledged that his example was extreme, but highlighted that Alaska's economy is small and susceptible to a [slight deviation] from oil and federal government funds.

DR. FINIZZA said that there are economic consultants who have done regional impact models with input/output analysis, and there's likely one for Alaska.

[7:30:04 PM](#)

COMMISSIONER GALVIN turned the discussion to what ACES provides as value for explorers. As discussed earlier, ACES primarily provides cash for credits earned by explorers and is exercised through a tax credit fund that would fund the credit payments from the state. Another value is the ability to carry-forward value of investment at the full tax rate. He requested that Mr. Ruggiero comment on isolating Alaska as a place for new entrants in comparison to the rest of the world.

[7:32:14 PM](#)

MR. RUGGIERO began by addressing the attractiveness of Alaska or any regime relative to any other regime. As Dr. Finizza mentioned, [companies] look at the NPV or internal rate of return (IRR) that can be made as well as whether there are barriers to entry for new entrants as opposed to an incumbent. He then recalled an earlier question regarding the expectation on the time to recover an initial investment. In much of the development of oil fields it's not uncommon for it to take 3-6 years to receive the return on the capital expenditure. For gas, the return on investment can be 5-9 years as gas generally has a lot of infrastructure. The question becomes where [a particular project] stands in relation to other countries or other regimes. Under the production sharing contract (PSC), the recovery of costs is commonly known as "cost oil" and the attractiveness of regimes is based on how quickly one can

recover the costs through cost oil. He related that some regimes place no annual cap on the ability to recover and thus every dollar received, as soon as production occurs, goes to the oil company's account to repay it for the capital it spent to develop the project as well as for current operating costs. However, in other regimes there may be a cap with regard to the amount of revenue each year that can be used against the cost oil account, with the remainder going to profit oil and split with the government. Therefore, the result is that countries will tweak various aspects to make their system look better than others, such as with the uplift and the share of first tranche petroleum, royalty. In tax and royalty regimes, the recovery is basically the corporate code for depreciation, which also varies.

[7:37:23 PM](#)

MR. RUGGIERO highlighted another key impact with regard to attractiveness. He related that a situation in Trinidad and Tobago when then-Amoco was able to advance [development] relative to its competitors in the country. At that time Amoco was "Ring Fenced" in the country and thus all the exploration to find more gas and any associated costs could be deducted against current income because the company had other active operations in the area. Basically, Amoco was able to write off as soon as there was an expenditure and thus reap the tax benefit. Others who were competing to place gas in the train were part of single field, single-blocked ring fenced PSCs. Therefore, anything those companies spent on exploration had to wait until the field was developed, put on production, and had revenue against which it could be deducted, which may mean 7-11 years of expenditures before it could be written off. Therefore, the type of factor as well as the timing is a factor.

MR. RUGGIERO turned to the question of how important the timing is to the decision-making of an oil company. He posed a scenario in which in year zero an entity invests 20 and for the next 10 years that entity has an income of 10, for a total of 100. The entity splits that income such that the oil company, contractor, receives 32 and the state receives 68. He noted that the aforementioned scenario is a 10 percent IRR, which means that the NPV is at zero, the break even point. On a 5 percent discounting, the state's NPV is 52. At this point, the entity only has to tweak it a bit, such as by allowing more cost recovery early on, and suddenly with the state still receiving a total of 68 over 10 years and the oil companies still getting 32 units of cash flow, it becomes a 14 percent IRR and the NPV

becomes positive. He noted that the state's NPV would decrease with the lower discounting, but not as much as the oil companies' NPV increased. At this point, one can become generous and give credits or 100 percent of cash flow in the early years can go toward recovery of the 20 investment. Therefore, a little up-front incentive creates a 19 percent IRR while the state's NPV 5 didn't drop much. In the extreme, if the oil company was to receive all 32 of its units up-front and the state receives its 68 units on the backside, a very good project in terms of IRR and NPV has been created for the oil company. Mr. Ruggiero said that the way in which a company is allowed to recover its investments has a significant impact in the economics and, from his experience, on decisions regarding where to invest.

[7:42:01 PM](#)

MR. RUGGIERO then turned to the question of the relative attractiveness of the credit system on a worldwide basis. From his perspective, [Alaska's] credit system compares favorably on an international basis. Furthermore, it's done in such a way that the state and the federal government actually become the majority investor in exploration that takes place. Moreover, the credit system quite significantly levels the playing field between a new entrant and an existing player. In Alaska, the ability to obtain the credits and the ability to take a loss forward and turn into another credit means that a company can obtain a return of the majority of the investment rather quickly. After taking into account what can be deducted against state income and federal income and what can be taken as credits, the net contractor share of a new investment, depending upon the rules related to previous units and existing wells, is \$.21 to \$.36 on the dollar. The combination of the state through the credits and the federal government through income tax deduction of the expenditure result in the two together paying 64-79 percent of the investment. The aforementioned is very favorable on a world scale, he emphasized, as very few countries allow the write off of credits or deductions so quickly.

[7:44:53 PM](#)

SENATOR WIELECHOWSKI asked if the system can be structured with the credits up-front in order to sustain government at it's current [budget] plus 3-4 percent inflation and make it to 2020.

COMMISSIONER GALVIN explained that the purpose of the analysis thus far has been to identify the investment opportunity that exists in Alaska and to ensure that the tax system provides as good an opportunity to participate in those investments as possible, with the market driving the rest. He further explained that the credit program is being utilized to entice new entrants and attract new investment. The is goal to strike a balance that provides maximum opportunity to attract investment.

[7:47:24 PM](#)

REPRESENTATIVE SAMUELS related his impression that many of the true exploratory credits aren't taken advantage of. He then asked if some of the credit systems Alaska offers is in the margins.

[7:48:37 PM](#)

KEVIN BANKS, Acting Director, Division of Oil & Gas, Department of Natural Resources, informed the committees that the division is receiving paperwork from DOR to validate the data requirements and the targets for which credits are being applied. Therefore, he said he knows that credits are coming and thus are being used. However, he said that he didn't know how much money the state has paid out for the credits that have come in to this point.

[7:49:29 PM](#)

REPRESENTATIVE SAMUELS inquired as to the percentage of credits used in Prudhoe Bay, Kuparuk, and Alpine as opposed to the credits used in the outlying areas in the NPR-A and the foothills.

COMMISSIONER GALVIN highlighted that it's important to recognize that the 20 percent credit is equivalent to the basic PPT credit. Therefore, the analysis specifying [that the state pays] 64-79 percent represents the value of an in-field credit; the amount of credit being provided to the existing entities drilling within the existing areas.

REPRESENTATIVE SAMUELS inquired as to whether anyone is doing wildcat exploration.

MR. BANKS replied yes.

[7:50:57 PM](#)

CHAIR HUGGINS recalled that the conversation of amending the PPT began because the costs were much higher than thought. However, now the discussion is how attractive and beneficial this will be to both the state and the industry. He related his assumption that some of the more generous aspects of PPT are being withdrawn, such as the claw back. He then requested an explanation of the reasoning behind the expansion from 12 to 24 months for the cost expenditure recovery.

COMMISSIONER GALVIN said that for new entrants and explorers, [ACES] would be what it [has to deal with] whereas a company that is in the process of entering will experience a lower value in the move from the existing PPT to ACES. Commissioner Galvin said that with regard to the new entrants, the focus is on net positives while for existing players it would be viewed as a net negative. Those in between will be dependent upon the individual company.

[7:54:54 PM](#)

CHAIR HUGGINS posed a scenario in which a company drills two holes, which are dry and thus the company leaves within 18 months. In such a scenario would the company lose anything, as far as cost recovery for the investment, by departing from the state, under ACES.

COMMISSIONER GALVIN answered that the aforementioned company would receive more money back from the state under ACES than under the existing PPT.

[7:56:16 PM](#)

SENATOR STEDMAN pointed out that there isn't any data on the markets of these credits, and therefore it's difficult to place a dollar value on it.

COMMISSIONER GALVIN said, "Let's assume \$.96 and the question becomes if it's \$.96, is it worthwhile to the state to require an explorer to earn a \$1 credit and get \$.96 for it and existing taxpayer to get \$.04 and the state to be out a \$1 as opposed to the state giving the explorer the full \$1."

SENATOR STEDMAN said he understands the state will be out \$1 either way. Senator Stedman characterized the 20 percent credit as huge and one that will light the gas basin on fire and cause

the need to return in a few years to ratchet it back. He inquired as to where in the global oil basins are there 20-40 percent credits. "Isn't this 20 percent credit an aggressive credit and an aggressive economic stimulus for that oil basin," he asked.

COMMISSIONER GALVIN replied yes. However, with regard to the nature of the transferability of the credit the question is whether the state is offering equal value whether its an incumbent or a new explorer. By having that barrier to obtaining full value to the explorer, the incumbent receives full value plus the opportunity for a windfall.

SENATOR STEDMAN emphasized that the state should be able to see what kind of market is actually there. Some historic trading activity should be available prior to modifying this policy, he opined.

COMMISSIONER GALVIN remarked, "Well, I guess the question would be if the answer was \$.98 or \$.68 is there going to be a different answer."

SENATOR STEDMAN related his belief that the less liquid the credit, the wider the discount because at some point there will be competition between the harvesters to dilute their taxes. He recalled earlier indications that once HB 2001 was introduced, the market became more liquid. Is that the case within this market, he asked.

COMMISSIONER GALVIN said that the identification of a lack of a market was merely a recognition that the situation was worse than expected. Even if [the credits] are being sold in a liquid market, they will be sold at a discount. The aforementioned results in a policy question for the state regarding whether it's an appropriate inequality between new entrants and incumbents.

SENATOR STEDMAN interjected that the aforementioned was settled under PPT and can be settled again.

8:00:30 PM

REPRESENTATIVE DOOGAN turned to the earned credits of 20 percent, up to 40 percent of qualifying expenses and asked if that's under PPT or ACES.

COMMISSIONER GALVIN said that it's under both. He mentioned that would be addressed in the next presentation.

REPRESENTATIVE DOOGAN related his understanding that the farther out one is drilling, the larger the credit. Therefore, an independent explorer far from the oil fields of the North Slope can get up to 79 percent of its costs paid for by the state and federal government. He inquired as to what part of that 79 percent is from the federal government.

COMMISSIONER GALVIN estimated that about 15 percent of that 79 percent is from the federal government.

REPRESENTATIVE DOOGAN surmised then that the state is paying \$.64 on the dollar for the riskiest investment that can be made in the oil and gas industry in the state, under these credits.

COMMISSIONER GALVIN noted his agreement.

[8:02:26 PM](#)

REPRESENTATIVE SAMUELS recalled that when PPT passed, the largest loser was ConocoPhillips Alaska, Inc. because its large field, Kuparuk, had a zero tax while the second largest loser was the federal government, followed by BP and ExxonMobil. With regard to buying the credits, he recalled that there was the desire to ensure to cap the amount the state could buy until 2011 because of the concern with regard to cash flow to the state. He asked if taking the cap off is of concern under ACES.

COMMISSIONER GALVIN explained that under ACES there is a vehicle to provide the funding. He said that the issue is cash management, in terms of whether the state has the money with the authorization to make the payments. The administration has recognized that it's a management issue in terms of the appropriation process and thus has been addressed by the establishment of that credit fund. Currently, there is a mini version of the same issue because the administration has to anticipate from one year to the next, without that fund, what authorization will be requested looking a year-and-a-half in advance to obtain the authorization to pay off the credits. Having the fund in place provides a buffer in order to have a minimal affect.

The committees took an at-ease from [8:06:21 PM](#) to [8:07:03 PM](#).

[8:07:04 PM](#)

MR. BANKS directed attention to his PowerPoint presentation titled "Alternative Tax Credits for Oil and Gas Exploration ACES Amendments to AS 43.55.025". He noted that he will be discussing credits that were established prior to PPT. He said that he sometimes thinks of these credits as exploration incentive credits (EICs) while others refer to them as the 20:40 credits because of the fact that on some wells one can receive as much as a 40 percent credit, which is determined by how far away the site is from existing units. In the amendment [to AS 43.55.025] a time dimension would be added to the number of wells for which a credit could be received from 50 days to 540 days. The aforementioned provides an explorer the opportunity to work a similar prospect over two drilling seasons on the North Slope. There is also a definition for targeting distinctly separate targets, which means that in addition to being 3 miles from an existing well the same horizon shouldn't be penetrated. In spite of the fact that these are some of the riskiest investments on the North Slope, the state should be able to be sure that new opportunities are being targeted. The 40 percent credit is allowed on wells drilled more than 25 miles from an existing unit in the North Slope and more than 10 miles from an existing unit in the Cook Inlet. He then reminded the committees that under the existing law there is a 40 percent credit for seismic surveys and ACES adds a new credit for old seismic data, data collected prior to 2003. This new credit provides the state the opportunity to purchase old data. He noted that the commissioner of DNR has to make a determination that the data is of appropriate quality, is for a location in which the state is interested, and is in a readily usable format.

[8:10:54 PM](#)

REPRESENTATIVE SAMUELS asked if Point Thomson is considered an existing unit.

MR. BANKS answered that Point Thomson is considered an existing unit as it is under PPT.

[8:11:18 PM](#)

REPRESENTATIVE DOOGAN asked if the reference to within 25 miles refers only to onshore units.

MR. BANKS said that it would only be within state waters and onshore.

8:11:34 PM

MR. BANKS, in response to Representative Samuels, related his understanding that the federal government doesn't have similar credit provisions for offshore units. He reminded the committees that in the Gulf of Mexico the minerals management offers a royalty holiday on the first several million barrels of oil produced. There is no pre-production exploration offered. The state can offer royalty relief, which offers a similar effect, but it's only the success leg that the relief is offered. Therefore, when it's factored into an explorer's economics, they are discounting the value of that credit or lower royalty on a basis of the percentage of its success. The royalty discount doesn't have as much "horse power" as a credit awarded up-front.

8:13:19 PM

SENATOR WIELECHOWSKI asked if the 5 percent credit for old seismic surveys is mandatory.

MR. BANKS said he interpreted to be left to the discretion of the applicant to sell the old seismic surveys. In further response to Senator Wielechowski, Mr. Banks stated that the commissioner of DNR wouldn't purchase bad seismic data.

8:14:11 PM

CHAIR HUGGINS asked if HB 2001 comprehensively covers the entire state.

MR. BANKS replied yes, noting that there are provisions that apply outside of the North Slope and into the Cook Inlet.

8:15:09 PM

MR. BANKS returned to his presentation. He informed the committees that ACES requires preapproval of exploration well plans or seismic survey plans, and therefore there is a judgment up-front so that an applicant doesn't have to worry about being turned down after drilling due to a misinterpretation of the statute or regulations. Furthermore, it protects the state from being obliged to pay a credit on a prospect that wasn't appropriately drilled. Mr. Banks, referring to slide 4 "Information Requirements", noted that many of the changes to [AS 43.55.025] have to do with what the state receives in turn

for its investment in exploration. To date, the aforementioned has been relatively limited. The state, he opined, should strive to acquire the information and provide it to others, if the state so desires. More information would, in general, enhance the value of the state's prospects and be of interest to potential explorers. Therefore, rules will be established so that the state obtains core information, acquires test fluids, and obtains seismic data. Normally, DNR receives seismic and well information on all wells drilled in the state. However, the well information is made public after two years.

[8:20:38 PM](#)

REPRESENTATIVE SAMUELS posed a scenario in which DNR acts as a commercial agent and sells royalty-in-kind (RIK) oil in the marketplace. In such a situation, the department having access to tax information may be construed as an advantage in the marketplace over those who are now the commercial competitors.

MR. BANKS pointed out that there are differences in the missions of DOR and DNR that impact the cultures. When DNR was given the ability to audit its own royalties, it changed DNR's culture. He explained that if DNR acquires any taxpayer information in the pursuit of an audit in a royalty case, DNR faces the same criminal penalties as DOR if that information is revealed. He then turned to the issue of whether the state receives an advantage when selling RIK gas or oil because of access to taxpayer information. Now that DNR audits its own royalties and because of the provisions of several of the royalty settlement agreements, DNR does receive contract information about oil and gas sales from the lessees. He pointed out that the information is received after it has already happened in the marketplace. He further pointed out that DNR enters this commercial space very rarely. In fact, the last time DNR engaged in RIK activity was when DNR sold oil to Flint Hills for a 10-year contract in 2004. Mr. Banks opined that it's not an issue because the department so seldom participates in that marketplace and the information DNR has is of relatively limited value. He added that since 1984 [DNR] has only sold oil to in-state refineries. Furthermore, the last time DNR sold oil to an entity that would export it to the Lower 48 was done in a bidding process, which resulted in fairly transparent pricing. Mr. Banks noted that when DNR sells in-state, it takes into account the economic benefits beyond royalty revenues.

[8:25:13 PM](#)

REPRESENTATIVE RAMRAS recalled a conversation with Jeff Cook, Flint Hills, who related that Flint Hills is nervous that if there continues to be a decline in oil production, the state will have difficulty selling an adequate amount of oil to Flint Hills and Alyeska Pipeline Service Company may opt to batch oil through TAPS every 2-3 days. He highlighted the risk to the economy as there are 450 direct jobs in the Fairbanks North Star Borough and the proximity of a refinery to Eielson Airforce Base. He requested comment about the issues surrounding Flint Hills and the result of declining production of TAPS.

MR. BANKS specified that currently, the contract obliges the state to deliver between 56,000 and 77,000 barrels a day. If the state fails to meet that, Flint Hills takes the risk. When the pipeline went down last August, it was a fairly significant risk for Flint Hills and DNR scrambled to obtain more oil from other units in order to supply the refinery. The producers cooperated by excusing some of the notice requirements. It's possible that in the future, before the expiration of this contract in 2014, the state may not be able to meet the aforementioned requirements.

REPRESENTATIVE RAMRAS related that Flint Hills is concerned that there could be a situation placing them at risk in about 3-4 years. With regard to the different regions in the state that are vulnerable, Representative Ramras emphasized the impact to Fairbanks in terms of jobs and adding a risk factor to Eielson Air Force Base. He then expressed the need for stability.

[8:30:18 PM](#)

MR. BANKS returned to his presentation and directed attention to slide 5 titled "Timing Requirements". Currently, it's possible to receive a credit for a well that's suspended or in some sort of operational shutdown. [Under ACES], the credit will be limited to ensure that the wells are completed or abandoned. Currently, wells are kept confidential for 24 months and after 30-day notice the information can be made public. The aforementioned may be extended by permission from the DNR commissioner if there is land near the well that remains unleased. He noted that it applies to the state as well as private and federal land within the state. Under ACES, if one applies for a credit that potential extended confidentiality isn't received. Similarly, seismic surveys aren't governed by any limits to confidentiality. He explained that the state only acquires seismic surveys if they were shot over state land. However, under ACES all seismic information, no matter from

where, would be given to DNR and the confidentiality would be offered for 10 years. Under the [AS 43.55.025] credits the applicant was required to give information to the state within 30 days, which is changed to six months under ACES. When the data is remitted the state offers the credit certificate.

8:33:17 PM

MR. BANKS referred to a map titled "North Slope Oil and Gas Activity 2006-2007". He directed attention to the cluster of reddish wells in the center of the map, which represent wells permitted by Chevron in its White Hills prospect. He said that Chevron probably won't drill all of those wells and would be lucky to drill half of them in the time during which their permits apply. Focusing on activities in the last year, he highlighted Cronus, Noatak, and wells drilled by Fedex (ph) and PetroCanada not on the map that are deep in the NPR-A. He then turned attention to the Colville River area where ConocoPhillips has drilled exploration wells within that unit. He continued to review the various wells and the stages in which they are at the moment. With regard to an earlier question, Mr. Banks said that there has been a fair amount of drilling and exploration activity.

8:39:07 PM

REPRESENTATIVE NEUMAN highlighted that Chevron's White Hills wells are away from developed infrastructure. He asked if the PPT credits could account for the increase in activity away from known infrastructure.

MR. BANKS said that he doesn't know because he said he didn't know how long ago those wells were planned.

8:40:41 PM

REPRESENTATIVE NEUMAN expressed the hope to see more [of such development away from existing infrastructure] in the future as it will spread the infrastructure and make it more feasible for more wells to be drilled.

MR. BANKS pointed out that in the lower left area the shaded areas illustrate gas accumulations that Anadarko intends to drill. Therefore, in addition to credits, gas is becoming a more likely possibility for development on the North Slope, he opined.

[8:42:06 PM](#)

SENATOR WAGONER inquired as to the percentage of liquids in the Anadarko leases as they were drilled in the past.

MR. BANKS said that if that information is available and not under confidentiality restrictions, he will provide it to the committees.

[8:42:43 PM](#)

CHAIR HUGGINS, referring to the distribution of exploration and potential production, said that it looks like there will be quite the spider web of infrastructure for delivery to market.

MR. BANKS said that the White Hills prospect is one in which folks have known about for some time and it hasn't been proved up.

CHAIR HUGGINS opined that it will take money and people to develop these wells located far from the infrastructure. He inquired as to the timeframe of permitting and construction, assuming that there is success in 90 percent of what was described on the map.

MR. BANKS said that probably the fastest development in recent years is the Ooguruk project, followed closely by the Colville River Alpine prospect. Those came online in a matter of seven years or less. Those two represent an unusual situation because they were located relatively outside of existing infrastructure. For prospects like those of White Hills, it will obviously take longer.

CHAIR HUGGINS clarified that his point is that it will take time, money, as well as permitting. He then commented that the number of jobs involved for Alaskans is dramatic.

[8:45:50 PM](#)

SENATOR STEVENS asked if it's true that as one moves west to east there's less gas and more oil.

MR. BANKS said that he wouldn't make that generality. However, north to south one finds more of the gas prone options because the geology of the foothills represent something similar to the American Rockies where much gas is found.

The committees took a brief at-ease.

[8:47:20 PM](#)

CHAIR OLSON announced that the sectional analysis will be heard in separate committees.

[HB 2001 was held over.]

ADJOURNMENT

There being no further business before the committee, the House Special Committee on Oil and Gas meeting was adjourned at [8:48:18 PM](#).