

**ALASKA STATE LEGISLATURE
HOUSE RESOURCES STANDING COMMITTEE**

April 21, 2012
10:12 a.m.

MEMBERS PRESENT

Representative Eric Feige, Co-Chair
Representative Paul Seaton, Co-Chair
Representative Peggy Wilson, Vice Chair
Representative Alan Dick
Representative Neal Foster
Representative Bob Herron
Representative Cathy Engstrom Munoz
Representative Berta Gardner
Representative Scott Kawasaki

MEMBERS ABSENT

All members present

OTHER LEGISLATORS PRESENT

Representative Bob Lynn
Representative Kurt Olson
Representative Pete Petersen
Representative Don Saddler
Representative Lance Pruitt
Representative Chris Tuck (via teleconference)
Representative Mike Doogan
Senator Cathy Giessel

COMMITTEE CALENDAR

HOUSE BILL NO. 3001

"An Act relating to adjustments to oil and gas production tax values based on a percentage of gross value at the point of production for oil and gas produced from leases or properties north of 68 degrees North latitude; relating to monthly installment payments of the oil and gas production tax; relating to the determinations of oil and gas production tax values; relating to oil and gas production tax credits including qualified capital credits for exploration, development, or production; making conforming amendments; and providing for an effective date."

- HEARD & HELD

PREVIOUS COMMITTEE ACTION

BILL: HB3001

SHORT TITLE: OIL AND GAS PRODUCTION TAX

SPONSOR(S): RULES BY REQUEST OF THE GOVERNOR

04/18/12	(H)	READ THE FIRST TIME - REFERRALS
04/18/12	(H)	RES, FIN
04/20/12	(H)	RES AT 1:00 PM HOUSE FINANCE 519
04/20/12	(H)	Heard & Held
04/20/12	(H)	MINUTE(RES)
04/21/12	(H)	RES AT 10:00 AM HOUSE FINANCE 519

WITNESS REGISTER

BRYAN BUTCHER, Commissioner
Department of Revenue (DOR)
Juneau, Alaska

POSITION STATEMENT: Testified and answered questions during the Power Point presentation during the hearing on HB 3001.

WILLIAM BARRON, Director
Central Office, Division of Oil and Gas
Department of Natural Resources (DNR)
Anchorage, Alaska

POSITION STATEMENT: Testified and answered questions during the Power Point presentation related to increasing production during the hearing on HB 3001.

JOHN NORMAN, Commissioner
Alaska Oil and Gas Conservation Commission (AOGCC)
Department of Administration (DOA)
Anchorage, Alaska

POSITION STATEMENT: Testified during the hearing on HB 3001.

JOE BALASH, Deputy Commissioner
Department of Natural Resources (DNR)
Anchorage, Alaska

POSITION STATEMENT: Answered questions during the hearing on HB 3001.

ACTION NARRATIVE

[10:12:27 AM](#)

CO-CHAIR ERIC FEIGE called the House Resources Standing Committee meeting to order at 10:12 a.m. Representatives P. Wilson, Dick, Foster, Herron, Munoz, Gardner, Kawasaki, Seaton, and Feige were present at the call to order. In attendance from the House Special Committee on Energy were Representatives Lynn, Olson, Petersen, Saddler, Pruitt, and Tuck (via teleconference). Also in attendance were Representative Doogan and Senator Giessel.

HB 3001-OIL AND GAS PRODUCTION TAX

[10:13:42 AM](#)

CO-CHAIR FEIGE announced that the only order of business would be HOUSE BILL NO. 3001, "An Act relating to adjustments to oil and gas production tax values based on a percentage of gross value at the point of production for oil and gas produced from leases or properties north of 68 degrees North latitude; relating to monthly installment payments of the oil and gas production tax; relating to the determinations of oil and gas production tax values; relating to oil and gas production tax credits including qualified capital credits for exploration, development, or production; making conforming amendments; and providing for an effective date."

CO-CHAIR FEIGE stated the committee would begin with presentations by the Department of Revenue (DOR) and the Division of Oil and Gas (O&G).

[10:14:35 AM](#)

BRYAN BUTCHER, Commissioner, Department of Revenue (DOR), introduced himself. He began a PowerPoint presentation, "Alaska's Production Tax: Discussing the issue" dated April 21, 2012, which illustrated the contrast between oil production taxes in Alaska and other countries and provided a context for the bill.

[10:15:14 AM](#)

COMMISSIONER BUTCHER stated that oil prices have been at an all-time high for several years. He provided a brief history on oil prices, noting historically prices would fluctuate from \$10 to \$40 per barrel, but at some point oil prices began to increase to \$50 to \$60 per barrel. However, oil prices have been at \$100 or above \$100 per barrel for several years, to the extent that most experts consider the current price as the new reality and they anticipate prices will remain in this range for the next ten years. He noted, however, prices are subject to change. The direct result of the higher prices is that projects not economic at \$30 per barrel would most likely be viable at \$100 per barrel. High prices and technological booms have resulted in big advances happening all over the world. He then focused on North America, noting an oil boom has happened in Arizona, North Dakota, and Texas, as well as Wyoming and Louisiana, but not in Alaska.

[10:16:36 AM](#)

COMMISSIONER BUTCHER stated that according to the federal U.S. Geological Survey, [oil pricing] is certainly not a resource issue [slide 3]. The federal government does not consider the North Slope basin a mature basin. Over 70 percent of state land has been minimally explored. Mr. Tangeman touched on it slightly yesterday, stating that when Prudhoe Bay was discovered all exploration flooded there since Prudhoe Bay contained such a massive volume of oil. He said there is no debating that Alaska is a world-class basin. Cumulative production from the North Slope through 2010 has been over 16 billion barrels of oil with an estimated 40 billion barrels overall, including the Outer Continental Shelf (OCS). In addition, an estimated to 236 trillion cubic feet (TCF) of conventional natural gas is also present, in fact, 8 to 8.5 billion cubic feet (BCF) of gas is recycled into the field making Prudhoe Bay the largest gas circulating facility in the world. This has been the reason so much focus on developing a big gas pipeline for export has occurred, whether the destination is Alberta or for potential export from tidewater to Asian markets. He highlighted that the North Slope production recirculates about the same amount of gas that Canada uses on a daily basis. Additionally, tens of billions of heavy and viscous oil are found primarily under the

giant Prudhoe Bay field, again, estimated to hold 40 billion barrels of conventional oil. However, he was unsure how much of that oil will be economically recoverable. He pointed out three huge shale oil and gas formations exist- similar to the Bakken shale basin in North Dakota - but little is known about the formations. Furthermore, he was unsure whether the shale oil can be developed or if the technology must first be developed. He concluded by stating there is reason to be excited about Alaska and the natural resources on the North Slope.

[10:19:54 AM](#)

COMMISSIONER BUTCHER covered "More Important Points" [slide 4]. He said as a state Alaska is in a position that it has never been in before. The state can review with a higher degree of understanding what has been happening in the oil industry. When Alaska switched from a gross tax - simply taxing the amount of oil being produced at a given oil price - the state did not know as much as it now does since the state has moved to a net tax, in which the operating and capital expenses of companies factor into the tax equation. He highlighted that since last summer the state has been working to obtain more specific information and policy makers will also have that information. He compared what's been happening in Alaska today with what happened in previous years with respect to the petroleum production profits tax (PPT) and Alaska's Clear and Equitable Share (ACES). Instituting those tax processes required a lot of modeling, forecasting, and projects, he said. He reiterated that currently the department has a much better idea of what has happened over the past five years. The department has observed that record high oil prices lead to oil and employment, investment, and production booms throughout the world. He reported that Russia and ExxonMobil Corporation (ExxonMobil) have worked out an agreement to potentially invest up to \$500 billion in exploration in Russia's offshore Arctic. This would result in Russia having the ability to reduce its taxes and eliminate its export tax to a level below Alaska's taxes. He highlighted that this agreement has resulted in a potential explosion of investment in Russia. Subsequently, the Russian government and the Russian government's oil companies are pairing with ExxonMobil in this development. Russian companies

will be taking two-thirds of the work with ExxonMobil taking one-third, but in exchange the Russian companies will also have pieces of ExxonMobil's work in the Gulf of Mexico, Alberta, and in Texas, but not in Alaska.

[10:23:03 AM](#)

REPRESENTATIVE KAWASAKI referred to slide 2 and bullet 2, which says other oil producing regions have been enjoying production and employment booms. He asked how many oil producing regions, such as Alberta, Texas, North Dakota are enjoying the employment production booms due to technology versus Alaska's large, mature, conventional oil field. He pointed out it takes more people to build a small hydraulic fracture facility. He offered his belief that their higher level of production is due to technology rather than changes in taxes.

COMMISSIONER BUTCHER acknowledged that technological advances play a role, especially given the small cost and turnaround in the Lower 48. He related that North Dakota's and Alberta's technological advancements allow them to be economical at \$70 to \$80 per barrel, which would not be economical using Alaska's tax structure. The same has been true in Alberta. He stated that Texas has had an explosion of shale oil; however, when they flattened out their decline it was exclusively due to conventional oil. It is much cheaper to produce oil in Texas and the turnaround from exploration to production is one to two years as opposed to seven to ten years in Alaska.

[10:25:39 AM](#)

REPRESENTATIVE KAWASAKI clarified his question and asked how much of the oil in the new producing regions in Texas, Eagle Ford, and in North Dakota's Bakken shale are due to technological advances versus mature conventional oil fields.

COMMISSIONER BUTCHER responded that his question is not a yes or no answer. He pointed out that this has not only happened due to prices or technology, but rather the outcome is a combination of all of these things.

[10:26:27 AM](#)

CO-CHAIR SEATON related his understanding that the DOR seems to be suggesting that Alaska is not enjoying investment in Alaska due to low prices previously and a mature basin. He noted his statement that the federal government did not consider Prudhoe Bay a mature basin; however in 2004, the state's oil prices were at \$45 per barrel, which at the time was the highest price the state had ever had. Still, the state did not see exploration or development wells being drilled by the existing producers. Therefore, the historic high prices did not bring development or reinvestment in Alaska. In 2005, again, the oil prices were at an historic high at \$60 per barrel, with a tax rate between zero percent and five percent; however, investment still didn't happen. He emphasized his concern the DOR is trying to "paint the picture" that everything is caused by ACES; however, when prices were high and taxes were low, investment still didn't happen.

[10:28:11 AM](#)

COMMISSIONER BUTCHER declared a later slide will show the curves for the major oil producing regions in North America compared to the price of oil that will better demonstrate his point. Certainly, he stated, taxes represent a major piece; however taxes are not the entire piece. Additionally, there is a big difference between \$100 per barrel oil for a sustained time and \$45 per barrel oil. Further, Alaska is one of if not the most expensive places to do business, which results in a larger economic hurdle rate than competitors in North America have since they have a much shorter turnaround. He pointed out the cost of an exploration well in other areas is also much smaller, however he acknowledged that many other factors are considered when a company makes decisions on whether to explore or develop. Unfortunately, Alaska does not have most of the advantages as compared to other areas.

[10:29:20 AM](#)

CO-CHAIR SEATON asked the department to submit details to the committee on Alaska's higher internal hurdle rates. He related

his understanding that normally the hurdle rates are internal rates of return, which include expenditures and the return on capital. He restated his request for the DOR to provide any data it has that shows the oil companies doing business in Alaska have higher hurdle rates - internal rates of return - for their Alaska operations versus the operations in the Lower 48.

COMMISSIONER BUTCHER responded that a company's considerations for continuing development in a mature field such as Prudhoe Bay and for new exploration or development would differ.

CO-CHAIR SEATON related his understanding Commissioner Butcher has indicated that companies in Alaska have higher hurdle rates - internal rates of return - than companies in the Lower 48. He asked him to document this for the committee.

COMMISSIONER BUTCHER offered to provide what he can. He asked to clarify his point, which is that the cost and expense of doing business is certainly more in Alaska than it is anywhere else in North America.

[10:30:48 AM](#)

REPRESENTATIVE GARDNER asked for examples of specific locations of an oil boom in a mature, conventional basin as measured by increased investment and a change in the decline curve. She suggested this would get to the heart of the discussion.

[10:31:27 AM](#)

COMMISSIONER BUTCHER discussed "Historical Oil Production" [slide 5]. He pointed out this graph demonstrates the declining curve of the Alaska North Slope (ANS) production beginning in 1989 with a little over 2 million barrels per day to under 600,000 barrels per day today. He highlighted that North Dakota may have just passed Alaska as an oil producing state.

[10:32:21 AM](#)

COMMISSIONER BUTCHER suggested that Alaska's historical oil production is the main problem for the department [slide 6].

The goal would be to have production flatten out and ultimately turnaround. He pointed out this slide compares the major oil producing jurisdictions in North America, including Texas, Alaska, North Dakota, and Alberta with the West Texas Intermediate (WTI) price layered in. He explained the graph, such that North Dakota is depicted along the bottom of the graph. The WTI prices shot up in the mid-2000s due to the technological advances of shale and when the price point for shale oil development became economical. He reported that it was not economical below \$70-80 per barrel. He noted Alberta bounces around, but will be steepening its incline as oil prices rise. Alaska - depicted as the blue line - has peaked, while Texas - depicted as the yellow line - intersected with Alaska in 1990. Alaska's decline curve was almost identical to Texas's decline until mid-2000 when prices rose. Texas flattened out and in 2010, oil production - which represents almost 100 percent conventional oil - began to turnaround Texas's decline curve. In 2010, Texas was producing about 1,000 barrels per day of shale oil, perhaps less.

COMMISSIONER BUTCHER indicated that once prices rose, it became economical for Texas to develop fields and the decline stopped. Meanwhile Alaska continues on the same decline curve as Texas previously had. He found it interesting to examine the mature basins and the decline curves - that some people said could not be turned around - however; that hasn't been the case in Texas. He predicted in 2011 and 2012, Texas's Eagle Ford basin will make a huge impact since Texas anticipates adding 300-500 thousand barrels of oil production per day, per year, as the field begins to produce. He surmised that Alaska will not be anywhere near Texas anytime soon. He concluded that this slide demonstrates what has occurred in the major oil producing basins as a result of high oil prices. He acknowledged that technology, time, and cost do play a role, but one can see the effect it seems to have on every other oil producing region except for Alaska.

[10:35:35 AM](#)

CO-CHAIR FEIGE asked for the nature of Texas's tax system and whether it has changed much.

COMMISSIONER BUTCHER answered that Texas's taxes haven't changed at all. He acknowledged that Texas's taxes are relatively high compared to other oil producing states, but their taxes are relatively low compared to Alaska. He emphasized that North Dakota has been working to reduce its oil taxes. He recalled when he visited North Dakota - which has the highest oil tax in the Lower 48 - that he read a Bismarck newspaper article which compared Alaska to North Dakota. The article claimed that North Dakota would need to double its tax rate and add 25 percent in order to equal Alaska's rate due to progressivity in Alaska. Even so, North Dakota has been trying to reduce their tax rate based on an increase in their oil production. In other words, North Dakota will consider changes in their tax structure so that the higher the production is the lower their tax rate will be. North Dakota's rationale is that the state's operating costs are the same and with higher oil production the operating cost percentages decrease. Further, North Dakota expressed concern that government growth could not be sustained by their small population once oil declined. He said he was not suggesting Alaska should move in an opposite direction from progressivity; however, he described the conversation being held in North Dakota as a much different one than is being discussed in Alaska today. He likened North Dakota's circumstance as much like the boom Alaska encountered in the 1970s. As a result, North Dakota's housing has been tight and some fast food companies have offered signing bonuses for employees who will commit to managing fast food restaurants for at least a year.

[10:38:19 AM](#)

CO-CHAIR FEIGE referred to North Dakota's oil production in 1979 or 1980, noting that production did not increase when the WTI price spiked, but it did spike in about 2002-2003. He asked for an explanation for the increase.

COMMISSIONER BUTCHER answered that advancement of technology played a big role. He offered it is the difference between oil prices and economic models of companies. For example, if the price of oil rose to \$147 per barrel then plummeted to \$40 per barrel, that no company would base its decisions on \$140 per

barrel oil even if the oil prices held for a number of months. He explained it takes time to get to a point in which a company would base decisions on higher oil prices - noting \$100 per barrel oil is here to stay - but six months of \$100 per barrel oil would change their initial models based on \$30-\$50 per barrel oil. He suggested the oil producers could speak to how long it takes to "turn the ship around;" however, he did not think a company would move forward with a project - economically - if oil prices dropped to \$30 per barrel for several years since the company would operate at a deficit once production began.

[10:39:56 AM](#)

CO-CHAIR SEATON noted the oil production separation between Texas and Alaska occurs somewhere between 2001-2007 when oil was \$20 per barrel; however oil prices do not correspond. He asked for possible reasons for the changes in oil production, if it is not based on oil prices.

COMMISSIONER BUTCHER answered that he did not know. He acknowledged that the oil production between Alaska and Texas fluctuates, but it was not until the last five to six years that Texas increased and Alaska decreased, which has been the focus.

[10:41:07 AM](#)

CO-CHAIR SEATON pointed out the commissioner used his slide to illustrate a point: that the separation occurred in 1999 or 2000. However, it would seem that the department could check with Texas and find out whether the production changes were due to technological advances or a change in investment climates, since it apparently wasn't due to WTI pricing. He questioned the commissioner attributing parts of the slide to demonstrate factors that are obviously not related to the separation point.

COMMISSIONER BUTCHER responded that the oil production between Alaska and Texas separates, but comes together again and by 2005 it's very close. He agreed the state dipped and plateaued in early 2001-2002, but pointed out that ultimately the gap closes up again.

10:42:27 AM

CO-CHAIR FEIGE asked members to hold questions.

REPRESENTATIVE GARDNER remarked that she felt it was appropriate for her to ask questions on this slide since others were.

10:42:42 AM

COMMISSIONER BUTCHER discussed "Two distinct elements of ACES: Can't discuss one without the other" [slide 7]. He related discussions the department held with companies that highlighted differences in their viewpoints on ACES, depending on the timeline for exploration to production. He said that ACES includes very generous tax credits, which were made over the past several years to help spur exploration. A new company who would begin oil exploration will receive 45-60 percent reimbursement on their estimated tax benefits on expenditures. Once companies transition to production, the smaller companies have experienced difficulties in finding larger companies to assist with development. He noted that typically many "wildcat" operators buy leases, find oil, and then sell their leases to larger companies, but they have had difficulty moving forward due to Alaska's much higher tax rate, which is higher than any place in North America or any other Organization for Economic Cooperation and Development (OECD) companies - with the exception of Norway. He said the department has observed disconnects between oil development and an increased production in the state due to Alaska's production taxes.

10:44:32 AM

COMMISSIONER BUTCHER turned to "ELF, PPT & ACES: Did the Pendulum Swing Too Far?" [slide 8]. He explained this slide provides the history for the past seven or eight years in Alaska. He referred to a comparison of the estimated production tax revenue from ELF, PPT, ACES as Proposed, and ACES for FY 2012-FY 2016. He acknowledged that Alaska would not have received its fair share under ELF, which needed to be overhauled and raised, that was accomplished by PPT. He said the yellow

bar on the graph indicates the revenue under ACES as Proposed, and the red bar indicates the current taxes. The difference between ACES as Proposed, and ACES as passed occurred near the end of the special legislative session on ACES. He commented that progressivity was made much more aggressive in the final version than in the original ACES bill. He characterized the taxes as a sizable jump between the PPT and ACES as Proposed. He said the department thinks the legislature may have gone up a little higher on taxes than it should have. He concluded that the ACES as Proposed taxation rates make more sense to the DOR. He declared that he wished he had projections on the graph to outline the effects of the proposed HB 3001, but he offered to provide the graph to the committee. He predicted that the bar would be somewhat comparable to PPT and ACES as Proposed.

[10:46:43 AM](#)

COMMISSIONER BUTCHER referred to the "Monthly ANS Crude Prices Under Net Tax System [slide 9]." Even though ANS crude prices have been over \$100 per barrel for the past year - and he anticipated prices will hold - the fact remains that oil prices have been below \$100 per barrel 70 percent of the time from FY 07 to today. He cautioned against expecting oil prices to remain high given the history of oil prices. In 2008, oil prices jumped to \$140 per barrel, but quickly nosedived to under \$40 per barrel. He acknowledged there are a number of reasons for the fluctuation, but primarily he attributed the price drop to the worldwide contraction in the economy. At that point the Organization of Petroleum Exporting Countries (OPEC) recognized \$140 per barrel was detrimental to the world's economy. He said he mentions this as a reminder of the volatility of oil. As oil prices rise and contribute positively to Alaska's treasury, higher fuel costs also negatively impact rural Alaska and Fairbanks. Additionally, high oil prices have had a detrimental effect on the U.S. and the world's economy. Even though the prices have been fairly constant over the past year, it doesn't mean factors that affected oil prices won't happen again, he said.

[10:48:53 AM](#)

REPRESENTATIVE KAWASAKI referred back to slide [6], "Historical Oil Production: How Did Our Competition Fare When Prices Spiked?" He asked how much new incremental oil is derived from technological advances versus conventional oil well drills in oil producing regions of Alberta, North Dakota, and Texas.

COMMISSIONER BUTCHER offered to provide a breakdown of what is produced from conventional methods and the amount produced from shale.

10:49:56 AM

REPRESENTATIVE GARDNER also referred to slide 6, noting the commissioner stated that Texas's increase was derived from almost entirely mature basins, yet the Institute for Energy Research (IER) disagrees. The IER cites information from the U.S. Energy Information Administration indicated in 2011 Texas produced 1,427 thousand barrels of oil per day - 22 percent more than in 2010 - which represents the highest production since 1997. Further, the IER indicates the increase was primarily due to the Eagle Ford shale formation, which is not conventional oil. She asked for specific examples of mature fields that have seen a boom.

COMMISSIONER BUTCHER clarified that he mentioned that the projections on slide 6 ended in 2010, at which time little shale oil production had occurred. In 2011, Texas's oil production increased by a few hundred thousand barrels, which continues into 2012. He offered to provide a year-by-year breakdown of shale oil production from Eagle Ford shale, which produces the vast majority of shale oil produced in Texas.

REPRESENTATIVE GARDNER asked whether it would be inaccurate to say that the increase is due almost entirely from mature basins.

COMMISSIONER BUTCHER answered that it is accurate to say that the decline flattened out, turned around, and began to incline almost entirely from conventional oil. He related a huge increase in 2011 and 2012 was the result of shale oil, which he previously pointed out.

[10:51:55 AM](#)

REPRESENTATIVE PRUITT referred to North Dakota's increase in production. He understood the tax rate is considerably less in North Dakota. He inquired as to North Dakota's full take, including private royalties.

COMMISSIONER BUTCHER offered to provide the information. The department prepared a report in January that outlines various tax regimes and he offered to provide a breakdown between the two. He suggested North Dakota's tax is 6.5 percent up to \$50 per barrel, and the tax increases to 11 percent above \$50 per barrel. The royalty rates vary, but tend to range from 10-20 percent royalty on mature fields, including a large part of the Bakken field, since it had been producing conventional oil at very small percentages. Some of the newer fields have been taxed at 25-30 percent - which does factor in - although it is necessary to factor in other pieces, too. He illustrated the ease in getting to oil sites in North Dakota, by stating his brother is currently working in North Dakota and stays about 500 yards from where he works since it's possible to drive there. Thus it gives the state a glimpse of the many variables that must be considered when comparing states or provinces. He concluded that the numerous variables led the DOR to produce a report on oil tax regimes since the numerous factors make it difficult to compare taxes.

[10:54:54 AM](#)

REPRESENTATIVE PETERSEN referred to slide 4, "More Important Points." He recalled Commissioner Butcher mentioned this was based on actual information; however, the commissioner also mentioned audits are not finished. He suggested the audit information would be useful to assess how well ACES has been working. He asked the department to provide more information, acknowledging he understood some information is proprietary information.

COMMISSIONER BUTCHER offered to provide capital and operating expenditures to the committee; however, he said that it is more difficult to analyze how well tax rates have been working. He

explained that some companies claim tax credits but have no production since they are still exploring for oil. Other companies have been producing and receive tax credits. The companies that currently receive tax credits are in the exploration phase, but will not provide any information until production occurs. He offered to review the past four to five years. It is difficult to draw a line between what exploration occurred due to the tax credits and what would not have occurred without the credits. He suggested that the oil companies may be able to provide these details.

[10:57:27 AM](#)

CO-CHAIR FEIGE noted that production tax credits have been in effect since 2007 under ACES. He asked for the number of companies that have moved forward with production.

COMMISSIONER BUTCHER deferred to Mr. Barron, Department of Natural Resources (DNR). He commented that DOR is limited to what information it can release since the DOR has access to confidential taxpayer information. He stated that the DOR can speak generally about tax credits as a whole, but cannot provide information for a specific company.

CO-CHAIR FEIGE asked whether the DOR is restricted by statutes.

COMMISSIONER BUTCHER answered yes, the company can choose to release information, but the department cannot release it.

[10:58:37 AM](#)

REPRESENTATIVE PETERSEN referred to slide 7, "Two Distinct Elements of ACES: Can't discuss one without the other" and to the previous comment about the difficulty a small "wildcat operator" would have in switching from exploration to production. He further recalled the commissioner thought the tax might be impediment for these small operators. He said he has read one big impediment is access to facilities, whether it would be processing facilities or the pipeline itself. He asked him to comment.

COMMISSIONER BUTCHER stated that access to facilities is more of a DNR issue; however, he recalled the last two fields to come on were done by smaller producers. He related that he has not heard of any difficulty in the field in his limited conversations about facilities.

[10:59:51 AM](#)

REPRESENTATIVE OLSON referred to "ELF, PPT & ACES: Did the Pendulum Swing Too Far?" [slide 8]. He recalled the commissioner previously offered to update the slide with projections under HB 3001. He asked whether the slide could also be updated with North Dakota's tax structure.

COMMISSIONER BUTCHER said he would see what he could do. He characterized North Dakota as "a different beast" but offered to try to show their structure and Alaska's production and cost estimates.

[11:00:37 AM](#)

CO-CHAIR SEATON related his understanding that the conversation has been discussing contractor take. He suggested only showing government take and excluding private royalties to try to compare competitiveness. He asked whether that could also be included in slide 8.

COMMISSIONER BUTCHER agreed. He said he had been thinking of that since if it is not included the outcome would be pretty invalid. He pointed out that people in North Dakota have owned farms for decades and some family members have sold subsurface rights years ago, while others are now benefitting from shale oil. He commented that the footprint for fracking is very small. Some people rent an area without subsurface rights for \$30,000 per year, while others who own the subsurface rights are earning \$1 million plus the rent. He concluded this has resulted in animosity among neighbors.

[11:02:24 AM](#)

REPRESENTATIVE FOSTER asked whether the report could contain charts. He referred to slide 6, "Historical Oil Production: How Did Our Competition Fare When Prices Spiked?" and asked whether he could add in Texas, Alaska, North Dakota, and Russia.

COMMISSIONER BUTCHER answered that he previously mentioned Russia since Pedro van Meurs emailed the department to indicate their tax rates were lower, so the information will be based on his analysis.

[11:03:28 AM](#)

REPRESENTATIVE P. WILSON asked him to update the slide to indicate when PPT and ACES went into effect since the effective date is not always the same date as passage.

COMMISSIONER BUTCHER agreed to do.

[11:04:01 AM](#)

REPRESENTATIVE SADDLER asked how precisely the department can tease out the effects of any one factor on production.

COMMISSIONER BUTCHER offered his belief that differences exist between companies. He said that Repsol has had leases taken away in other countries. He suggested that when Repsol was interested in Alaska, they may have considered other factors than a company based in the Lower 48 would consider.

[11:05:08 AM](#)

REPRESENTATIVE HERRON referred to slide 7, titled "Two Distinct Elements of ACES: Can't discuss one without the other" and asked for clarification on whether the commissioner had testified that tax credit should be reduced, as well.

COMMISSIONER BUTCHER responded that the department believes the tax credit element of ACES is working since it brings new companies and potential investment into the state. The DOR has been working to separate out the effects, but it may take a few years to sort out the positive and negative aspects.

[11:06:15 AM](#)

REPRESENTATIVE HERRON referred to slide 9, titled "Monthly ANS Crude Prices Under Net Tax System." He recalled hearing testimony that oil prices will stay relatively stable and may bounce slightly. He asked for confirmation the DOR anticipates oil prices will be holding at \$100 per barrel

COMMISSIONER BUTCHER answered the DOR and most experts anticipate oil prices at \$100 to \$110 per barrel.

[11:06:51 AM](#)

REPRESENTATIVE HERRON related his understanding the decline curve is at six percent with private sector investment estimated at \$1 billion per year. He asked whether HB 3001 would reduce the decline curve to three percent, and for the estimated figures.

COMMISSIONER BUTCHER answered that question is a difficult one to answer. He anticipated that DOR and DNR would try to determine the ballpark figure of what would be needed. He was unsure a chart would be possible given the variables. He suggested that a new exploration company will spend more in billions than an existing producing company who was working to extract more oil from a field to a certain percentage. He offered that the DOR would work on developing a ballpark figure.

[11:07:53 AM](#)

REPRESENTATIVE HERRON related his understanding that the governor would like to increase production from .5 million barrels per day to 1 million barrels per day. He suggested incremental investments of \$2-\$4 billion would flatten the decline curve out. He asked whether HB 3001 would increase production to 1 million barrels per day.

COMMISSIONER BUTCHER characterized 1 million barrels per day as a goal that would be great to attain. He predicted DNR would agree that to one day to hit 1 million barrels per day would

require "shale [oil], potentially heavy [oil], and other things." He suggested that he would be thrilled if the state, over the next five years, could flatten the decline curve out and begin to turn it around as Texas has done.

[11:08:47 AM](#)

CO-CHAIR FEIGE asked for the effect on the state to flatten out the curve.

COMMISSIONER BUTCHER answered that to do so would help solidify and make for rosier fiscal future for the state. He pointed out that the high oil prices have muddied the fact that oil is declining since the state is bringing in more revenues than the state expends. He recalled policy discussions held a few years ago about instituting a state income tax and eliminating permanent fund dividend checks, besides making deep budget cuts. However, as the state's oil continues to decline and if oil prices dropped, the state's taxes would drop below the mid-1990s level, which is about what it needs to balance the budget. He concluded that if the oil prices in the state drops to \$90 per barrel Alaska will be in a deficit.

[11:10:33 AM](#)

CO-CHAIR SEATON referred to slide 7, titled "Two Distinct Elements of ACES: Can't discuss one without the other." He recalled testimony that small producers could not bring in capital due to the tax rate. He asked whether the smaller producers in Cook Inlet are having trouble obtaining capital for their operations due to the zero tax rates in Cook Inlet.

COMMISSIONER BUTCHER agreed the Cook Inlet taxes are much lower than those on the North Slope basin, but the estimates for potential oil is much smaller. He characterized it as a different situation, although he suggested that DNR may be able to enlighten him on the potential for different finds between the two regions.

CO-CHAIR SEATON wanted to establish that tax rates are driving small producers to not have access to capital. He recalled,

historically, the committee has heard that the small producer's tax credit is ineffective in obtaining capital and he presumed bringing capital in is the function of the new oil portion of HB 3001. He further recalled testimony that the small producer's tax credit expiring in 2016 does not allow them to bring capital in since the tax credit will be gone before the small producers are in production. He asked whether the administration supports extending that credit until 2022 to allow small producers to get capital invested, anticipating the tax credit once production begins.

COMMISSIONER BUTCHER answered, "Yes, that's something we would be happy to work with the committee on."

[11:13:06 AM](#)

CO-CHAIR SEATON referred to access to facilities. He asked whether capital underground is one thing and above ground is another. He related a scenario in which one small producer found oil and tested the flow. The producer came to the state asking for a loan for production to get past the bottleneck. He asked whether the administration is supportive of incentives for capital for production facilities to ease the access problem.

COMMISSIONER BUTCHER deferred to the DNR to answer that question.

[11:14:00 AM](#)

CO-CHAIR SEATON explained that if the crux of the new oil portion is to bring capital to Alaska, noting that facility access has been identified in numerous publications by numerous individual companies, he would like the DOR to review making loans at 10 percent interest in terms of whether it would facilitate getting oil in the pipeline by 2014. He noted this would be two years sooner than Point Thomson's projected 10,000 barrels per day production.

COMMISSIONER BUTCHER answered absolutely; that the governor is focused on getting more oil production in the pipeline. He said he is open to discussion.

11:15:13 AM

REPRESENTATIVE PRUITT recalled testimony that several regimes peaked at the perfect time, when prices were high and the DOR often refers to their success. He asked how confident the DOR is that if the legislature makes tax changes that Alaska will not be "Johnny come lately." He further asked whether prices could drop and Alaska would find itself short in the future. He suggested Alaska would be trying to react to the success that other areas and regimes have had.

COMMISSIONER BUTCHER responded that there would never be a definitive answer to the question. He pointed to estimates on oil pricing and on the world economy; however, the general sense is the U.S. and world economy will expand and need for oil will be greater than it is today. He suggested that it appears the world will need oil.

REPRESENTATIVE PRUITT asked for the impact of new regimes. He referred to the Falkland and to Iceland. He said he understood the dynamics, but asked for the impact that new regimes bringing new oil into the market will have on the marketplace and whether the value of oil will benefit Alaskans.

COMMISSIONER BUTCHER answered the biggest advantage Alaska has is it is politically stable. He said it is a goal of the Congress and U.S. to become less energy dependent. He suggested that becoming less reliant on other volatile parts of the world will always make sense.

11:17:48 AM

REPRESENTATIVE KAWASAKI referred to slide 8, titled " ELF, PPT, & ACES: Did the Pendulum Swing Too Far." He recalled earlier testimony that under the ELF system Alaska was not receiving its fair share.

COMMISSIONER BUTCHER agreed the state did not receive the levels of revenue it should have received.

11:18:26 AM

REPRESENTATIVE KAWASAKI suggested that under ELF, the companies and corporations, specifically in the two big legacy fields, were taking the money. He then referred to the decline curve [in slides 5-6] and stated that in the most precipitate decline from 1983 to 2003, the state's production kept going down. He suggested the whole assumption has been that if taxes are lower the state will get more production, but the state has seen historically - with high prices and low taxes - that the state has not seen an increase in the two legacy fields. He asked how the DOR intends to change that with HB 3001. He recapped that under ELF the state received little in taxes.

COMMISSIONER BUTCHER answered that in reviewing oil prices during those times the relatively high level of oil at \$40 to \$45 per barrel was not nearly what it would be today. He said he has had companies state that they don't base decisions on \$100-\$120 per barrel. He also said the state makes its estimates on the forecast, but the oil producers will be more conservative. He characterized the view today as a different world view than it was at that time.

11:20:42 AM

REPRESENTATIVE KAWASAKI said he didn't really answer the question. He stated that when taxes were exceedingly low under Prudhoe Bay and Kuparuk, the decline curves were even greater than now. The entire assumption has been that if Alaska changes its taxes to give oil companies more profit, the companies will reinvest in declining legacy fields; however, the state has not previously seen that so why would the state experience a different outcome now.

COMMISSIONER BUTCHER answered that companies will be able to give insight into this. He related a scenario in which a model includes taxes and capital at \$20 per barrel oil and another model is run at \$80 per barrel oil. He indicated that some projects that were not economical at \$20 per barrel are economical at \$80 per barrel. He said that nothing would be economic on the North Slope if oil was at \$9 or \$10 per barrel.

11:22:02 AM

REPRESENTATIVE PRUITT asked what impact the fall of the Berlin Wall, in 1989, had on the opening of significant amount of oil basins not previously available. He pointed out the capital could be spread to other areas. He asked him to describe the impact on Alaska, which had been the subject of substantial focus.

COMMISSIONER BUTCHER related that Pedro van Meurs laid out the number of countries which would be stable and friendly to American companies 20 years ago and compared it to today, which is radically different. He acknowledged the number of companies available to multi-national companies has changed the overall investment landscape.

11:23:21 AM

REPRESENTATIVE GARDNER referred to slide 9, titled "Monthly ANS Crude Prices Under Net Tax System" and to the decline curve in investment. She asked what would be needed to bring the governor's production goal to 1 million barrels per day. She recalled he indicated that would likely include shale, heavy oil, and legacy field production. She further asked for the various proportions of oil production sources the administration anticipates with passage of HB 3001. She recalled ExxonMobil had previously testified that it would take \$3-5 billion annually to stem or reverse the oil decline in the legacy fields. She was unsure if the testimony indicated stem or reverse the decline, but either way, she wondered would passage of HB 3001 result in that type of investment and what type of data could the department provide to support it.

COMMISSIONER BUTCHER answered that he would discuss this with DNR. He pointed out the difficulty in determining the economic viability of heavy oil or shale oil production. He predicted either one could come into production in five years or else not happen at all. He said he did not know enough to figure it out, but he offered to attempt to do so.

11:25:08 AM

REPRESENTATIVE GARDNER suggested with the magnitude of state participation needed that the state must have estimates on the types of fields, particularly since the tax structure could be designed to support heavy oil, shale oil, or legacy fields. She questioned how the legislature could effectively make decisions if the legislature doesn't know the target.

COMMISSIONER BUTCHER answered that the DOR holds discussions on these matters with oil companies. He declared that if a lever can be moved the parties, including the legislature and the governor, will have conversations. He offered his belief that improving the investment climate and tax regime for companies will improve the economic situation. He related his understanding that it would be a company-by-company discussion. He asserted that everything becomes more economic under the bill.

11:26:24 AM

REPRESENTATIVE GARDNER agreed to the necessity of holding company-by-company discussions; however this is the administration's proposal and she expected the administration would have held those discussions at the time the proposal was developed. She also indicated that yesterday the Senate posed a series of questions. She expressed interest in the answers and asked for a timeline.

11:27:08 AM

COMMISSIONER BUTCHER answered that he hopes to get the information to the Senate and the committee sometime next week. He spoke of the constraints posed by being in committee hearings the entire day.

11:27:31 AM

The committee took an at-ease from 11:27 a.m. to 11:31 a.m.

11:31:55 AM

WILLIAM BARRON, Director, Central Office, Division of Oil and Gas, Department of Natural Resources (DNR) introduced himself.

[11:32:33 AM](#)

JOHN NORMAN, Commissioner, Alaska Oil and Gas Conservation Commission (AOGCC), Department of Administration (DOA), offered to characterize some of the potential sources of increased oil and gas production in Alaska. He stated he would discuss legacy fields, new discoveries, heavy oil, shale oil, natural gas condensate from Point Thomson, outer continental shelf oil, Arctic National Wildlife Refuge (ANWR), production from the Beaufort Sea, and North Slope natural gas during his presentation.

[11:33:31 AM](#)

MR. NORMAN characterized the legacy fields as Alaska's "bird in the hand." He said Alaska counts on the legacy fields daily and should not take them for granted. During the regular session, Commissioner Foerster testified that the health of all of the fields on the North Slope depends on the health of Prudhoe Bay. He compared it to the anchor tenant at a shopping mall since a good tenant helps everyone. The state's anchor tenant is the Prudhoe Bay field. He recalled that years ago, the original estimate for the Prudhoe Bay field was 9 billion barrels of oil; however, thus far the state has recovered more than 11 billion barrels of oil with an anticipated 2 billion barrels of oil remaining to be recovered. Except for North Dakota's Bakken basin, the remaining asset [in Prudhoe Bay] represents the largest discovery in the U.S. in many years. In fact, it is currently one of the largest conventional oil fields in the U.S. Prudhoe Bay owners have been spending substantial amounts of money to finesse the additional oil. Negative impacts on profitability, such as a drop in the price of oil, increases in taxation or increases in regulatory burden will put some of these 2 billion barrels of oil at risk. Conversely, there is increased potential for greater ultimate recovery from Prudhoe Bay, depending on technological advances and other things in the future that may positively impact profitability. "We don't have

control over technology or advances or oil price, but we can certainly caution in increasing the burden on an operator either through taxation or regulation," he stated. He then stated that this characterization is also valid for Alaska's other legacy fields. New discoveries positively impact the production profile in Alaska and the state must continue to encourage new operators to take risks for new exploration. He offered his belief it is not likely that another Prudhoe Bay will be found in currently allowed areas. He said that it is easy to find fields in the upper Cook Inlet region and some in the central North Slope have been found. However, he said nothing is wrong with Alpine, North Star or other smaller fields. He referred to these fields as ones that would be considered huge fields in other places. He noted that the cost and remote location of Alaska works against Alaska.

[11:38:28 AM](#)

MR. NORMAN stated that the fields are viable due to their proximity to the infrastructure of the legacy fields. One factor to keep in mind is that as exploration moves farther from the legacy fields and Prudhoe Bay the challenges of commercializing these fields increase. He then turned to heavy and viscous oil, which is the subject of attention currently by industry. Although the resource estimates for heavy and viscous oil vary depending upon with whom one speaks, almost everyone would agree there are potentially at least 20 billion barrels on the North Slope. However, it is not an easy resource to commercialize as the challenge to extract viscous oil would be similar to filling a sandbox with molasses and using a drinking straw to recover only the molasses. Mr. Norman stated that the key to developing "this" will be advances in technology. The AOGCC understands that research is actively ongoing in Alaska and other jurisdictions, including internationally. However, this development is not a given. He then moved on to shale oil development, which has created a boom in the Lower 48 that now extends from New York, Pennsylvania, and through North Dakota. He noted shale is often the normal source for oil which then migrates into the conventional reservoirs. He characterized the geological risk as low since geologists can predict where the source rock is located. The risk lies in whether enough oil

exists and if it can be extracted from the rock, but the only real way to find out is to drill. He pointed out that the state has exploration incentives in place that have piqued the interest of at least one shale oil explorer - Great Bear Petroleum, LLC - and this will be subject the Mr. Barron will comment on later.

[11:41:19 AM](#)

MR. NORMAN turned to the estimates of condensate associated with gas at the Point Thomson field. He suggested that it is safe to estimate at least 200 to 400 million barrels of oil exist at Point Thomson. He said that the settlement of Point Thomson litigation was good news. He explained this was worrisome to the commission since there is a significant conservation issue. He explained anytime liquid is associated with gas it creates a tradeoff, such that one might want to blow-down the field, but each time that happens some liquids are lost so it is really just a matter of calculating how much will be lost. He related the goal is to optimize and develop the field first and ideally try to produce every single drop of liquid and then blow-down the field; however, that is often not possible. Point Thomson's operator has been working on a cycling project to recover the liquids, which will be transported by the Trans-Alaska Pipeline System (TAPS). He pointed out that this is another example of a known resource with an uncertain outcome. He stated that the condensate is present, but it is uncertain whether cycling to recover it will be commercially viable. The outcome of the current pilot project will provide valuable answers, he said.

MR. NORMAN turned briefly to the outer continental shelf (OCS), noting Alaska's jurisdiction runs seaward for three miles and by law Alaska has some revenue sharing between 3-6 miles. The legacy fields are Alaska's "bird in the hand" but the OCS is a "bird in the bush." He indicated there is significant potential for Alaska's OCS to offer opportunities for a large oil discovery. He surmised that Shell Western E&P Inc. has been patient in its attempts for exploration, which is an indicator of a potentially large oil discovery. He declared that a discovery, even in federal waters, will have enormous benefits to Alaska - from jobs to extending TAPS. He identified the

greatest obstacle to developing the OCS off Alaska is the federal government's policies. Alaskans should try to influence these policies. He stated the commission is often asked about the recent Gulf of Mexico events and if time permitted he would offer contrasts; however, Alaska's situation is significantly different. The AOGCC's jurisdiction runs statewide and it exercises the police power of the state since it is not a property management agency. He opined that the AOGCC believes resource development can occur responsibly and carefully. He said, "We all live here and we want to be sure that's the way it does proceed."

[11:44:50 AM](#)

MR. NORMAN mentioned the Arctic National Wildlife Refuge (ANWR). He stated that the AOGCC is not certain of ANWR's potential until drilling occurs; however, his belief is that it can be done responsibly and it is not an either-or situation. The area necessary for drilling would be relatively small and the obstacle is political - a giant obstacle - but conditions can change and the nation could realize the necessity for the resource development. Currently, the state is being denied the opportunity to assess and quantify the resource, which is somewhat irresponsible, he said.

MR. NORMAN turned to the Beaufort Sea. Currently, oil is being produced offshore in the Beaufort Sea, including North Star and Endicott production. He pointed out there are likely other discoveries and at least one exploration effort is being planned with [BP Exploration (Alaska) Inc.'s] Liberty project. He pointed out the Liberty project lies in federal waters, but can reap benefits for Alaska; however, it is not without risks since it will consist of an ultra-extended reach well. He explained it will begin and travel from Endicott Island underground for several miles. The technology necessary for the Liberty project will push the limits of current drilling technology. Therefore, the operator has kept the commission closely advised and the commission is also keeping informed by federal oversight agencies. He said the AOGCC believes the operator is proceeding diligently and cautiously to assure the technical risks and challenges are assessed and addressed before work begins.

[11:47:21 AM](#)

MR. NORMAN turned to North Slope gas. He cautioned that from the AOGCC's perspective the natural gas must be used properly. Still, the AOGCC's opinion is that every bit of known North Slope gas associated with an oil reservoir is or will be beneficially used to obtain more oil from the ground. He said there is a way to orchestrate this and time it such that when the time and conditions are right for a major natural gas sale, there are procedures for adjusting and setting a new offtake rate so gas can be removed. However, currently the AOGCC is satisfied that industry is proceeding properly and natural gas is being cycled in a beneficial manner. He made an observation that until 2005-2006, oil and gas were in tandem, but since that time oil and gas have been decoupled and valued independently. He pointed out that the nation is awash in gas, and thus the relative values [of oil and gas] are no longer the same. He suggested that legislators, property managers, and Alaskans must ensure that the state underscores the importance of not selling gas if it means sacrificing oil development to do so.

MR. NORMAN turned to gas to liquids (GTL) technology, and related that currently GTL is a very inefficient way to develop a product since about 40 percent of the resource is lost in the process of going from gas to gas liquids. Additionally, GTL plants are very expensive to build. He previously mentioned Shell Western E&P Inc. has been constructing some of the largest plants in the world. The AOGCC has been optimistic that in the future there may be some promise for GTL, but currently "the jury is out."

[11:51:02 AM](#)

CO-CHAIR FEIGE recalled him mentioning the offtake rate on the North Slope, which he believed was 2.7 BCF. He asked how the number was arrived at and how has it changed over the years.

MR. NORMAN answered that the number was arrived at approximately 25-30 years ago when the commission hired consultants who determined without harming the ability to produce oil, that at

the time it was possible to take off 2 BCF of natural gas per day. He recalled that about .7 BCF would be necessary for fuel and consumption as part of the process. He said that number still remains in existence as part of the AOGCC's rule in setting the ground rules for producing the Prudhoe Bay reservoir. He explained that a few years back, during the time of the Stranded Gas Act and the Alaska Gasline Inducement Act (AGIA), the AOGCC became concerned since an application had not yet been made. The process is such that a company comes to the commission and applies to amend and change the Prudhoe Bay offtake rate. The company would suggest an [offtake] number, document it, and the AOGCC would undertake a public process, including publishing it, and providing an opportunity for the public and legislature to weigh in on the proposal. He concluded that an administrative record would be made and this is not something the AOGCC arbitrarily does. He emphasized that the number is carefully examined.

[11:53:09 AM](#)

MR. NORMAN explained that the AOGCC went through the process because the commission did not want to delay any major gas sale or pipeline. Further, the AOGCC entered into some cooperative agreements with the operators at Prudhoe Bay and Point Thomson to gain information and not cause delays. However, as a result of their inquiry, the AOGCC determined it did not have enough information to adjust the offtake upward. No one had come in to request 4, 4.5, or 5 BCF per day. He said the AOGCC concluded that there was insufficient information in the record to do so. He acknowledged that the commission recognizes that the AOGCC will revisit this as part of a public process and adjust the figure when a company or consortium is ready to move forward on a project. He offered that with each passing day as oil flows in TAPS, the conservation issue and the AOGCC's worry is reduced since the oil in the field is reduced and at some point it will be a matter of "blowing down the field." He cautioned that is not necessarily the case at Point Thomson since 2-4 million barrels of oil liquid exists, which is about the size of an Alpine field. He identified this as what is at risk if someone simply went straight into blowing down the Point Thomson field - simply because of the characteristics of that field.

[11:55:02 AM](#)

CO-CHAIR FEIGE asked, with respect to ANWR, what knowledge the state has that leads us to believe ANWR contains so much oil.

MR. NORMAN answered that the AOGCC is the repository of confidential information entrusted to the state. The AOGCC has certain information that has been the subject of litigation, which has been afforded extended confidentiality. He related that by law, when unleashed acreage exists and one operator has made a significant, proprietary investment to drill, that the operator should get the benefit before it is made public.

MR. NORMAN said the AOGCC has one or two people who could begin to answer that question. The AOGCC's access to information is on a "need to know basis." He said he does not want to know the answer. He emphasized that this is proprietary information, but estimates could be made since the USGS has made estimates. He concluded it is reasonable to think the potential is there, but he could not speak to any specifics.

[11:57:08 AM](#)

REPRESENTATIVE KAWASAKI said that the state has been blessed with Prudhoe Bay as one of the largest fields with recoverable oil equals to double the East Texas oil field. He asked whether any other examples of fields the size of the Prudhoe Bay and Kuparuk - legacy or conventional fields - ramping up and dropping down. He related the discussion surrounds whether there a way to change the production curve in a mature field.

MR. NORMAN answered that the AOGCC does not know how to interrupt the field; however lots of innovation is occurring. People have been experimenting with microbes to break up the oil. When Prudhoe Bay began the estimates were for 9 billion barrels and the operators have greatly exceeded that figure. He recalled some years back an operator proposed injecting water in the gas cap to improve the reservoir. He offered his belief that he was skeptical, but it has been beneficial. He suggested

that something will happen but he does not see anything on the horizon that will interrupt the decline at this point.

11:59:50 AM

REPRESENTATIVE KAWASAKI recalled learning about re-pressuring fields during his time in the legislature. The legislature has been considering monetizing natural gas and transporting it to communities such as Fairbanks. He asked how the AOGCC would suggest the state monetize gas for in state use.

MR. NORMAN responded that the AOGCC has written a letter which indicates it would not see any problem with drawing down up to 2.7 BCF of natural gas per day, which would be more than adequate for in state use. He did not want to suggest that taking off any gas is problematic since it is not; however, to launch into major gas sales ranging from 4-5 BCF or greater, would require careful analysis to ensure that oil is not left behind. He likened the natural gas projections as being similar to asking a real estate appraiser to give an owner an appraisal on a house now, but to also to predict the property's value in 2018. He offered his intuitive feeling that the state can get there with Prudhoe Bay, that Point Thomson is problematic, but certainly for gas for in state use the AOGCC does not see any difficulty.

12:02:14 PM

REPRESENTATIVE GARDNER said she liked the analogy of Prudhoe Bay being the anchor tenant in a shopping mall. She offered from the legislature's perspective it is as though the tenant also controls the elevators and doors. She recalled earlier testimony on remaining oil and barrels that could at risk due to low prices or from tax burden. She related the legislature's consultants have discussed decision-making and the impact of taxes. She related her understanding that prospectivity and price are the two biggest determinants - far and away - and beyond that are other considerations, including the tax burden, which does not stand separate from the credits, incentives and other terms. She related the AOGCC's commissioner qualifications are set by statute. She inquired as to whether

anyone on the AOGCC is an expert in tax structure, petroleum economics, or anything similar.

[12:03:45 PM](#)

MR. NORMAN answered no; that the AOGCC exists to provide factual information to the DOR and others. The AOGCC's jurisdiction is statewide so if oil is produced on federal lands their jurisdiction would extend to the National Petroleum Reserve-Alaska (NPR-A), and to the Native corporation's 44 million acres. He suggested that it has been interesting to listen to the testimony. He explained his background, such that he started his career in Texas, and he understands the history of Alaska's statehood - which was due to oil discovered at Swanson River. Further, he understands the hopes and expectations of Alaskans. He held up a publication that he said is the history of how Prudhoe Bay was selected by the state. He referred to numerous basins and early state development. He said, "With respect to taxation, that production will not increase by taxing it higher. It's just not going to occur." He offered that from his perspective it is all part of a total climate. The industry wants access, infrastructure, but "the herd mentality" still exists, and industry has oil plays and hot areas and companies don't want to be left out of hot areas - if the Falkland Islands is hot, or off the coast of Brazil - so they will move in that direction. He offered his belief that Alaska's time will come around again, but right now Alaska does not have the cachet it once had. He says this because he interacts with regulators and officials and he understands their mindset. He related that Texans has a greater understanding of the industry than Alaskans do - noting he speaks as a 50-year Alaskan. He suggested that Texans are less hostile to industry and Alaskans are sometimes unnecessarily hostile to an industry that has provided and is providing tremendous benefits; however, it should be carefully regulated.

[12:07:36 PM](#)

MR. NORMAN turned to oil taxation. He said he hears a statement in Alaska: "Let's get our fair share." The fair share is a concept that comes from the oil and gas lease sale process. The

state obtains royalty, bonus money, promotes the sale, make best deal and encourage development through unit agreements and exploration licenses. He acknowledged that the state should promote production, but he has always viewed tax differently. He cautioned against government taking "another bite of the apple" through its taxing powers. He related a scenario to emphasize this. He stated if he operated a car wash and the state discovered he was successful they would want the state's fair share of his profits. He regarded the tax policy as starting from the premise of funding government and taking care of the needs of the citizens instead of getting right to the point of pressing someone. He has held many discussions with the prior governor of North Dakota. The governor's goal was to get people trained for jobs in 2004. He initially thought he was nuts since shale oil technology was lacking; however he realized later that the governor had vision. He characterized North Dakota's business climate as positive and one in which industry is welcome, although they must obey the law, and hire local people. Alaska does not have a broad base of private property ownership like North Dakota has so there isn't a broad base of Alaskans who understand the industry. Although Alaskans receive a permanent fund dividend check, the connection to oil is indirect. In other states the royalty checks are mailed to people so they take an active interest in the industry. He reiterated he recommends that the state be less hostile, watch industry carefully and expect them to pay. He surmised that the hostility stems from a lack of understanding of the oil business.

[12:11:23 PM](#)

REPRESENTATIVE GARDNER responded that his point is well taken. She stated that the AOGCC's responsibility is to regulate the industry, but she suspected the AOGCC has the necessary information to do so. However, the legislature does not have enough information to know the full impact of the decisions, while at the same time the legislature has been admonished by the courts as being too trusting. She acknowledged she is sometimes troubled that the severance tax is considered a tax rather than a sales price. Alaska has a limited resource that may or may not be developed, but the state's responsibility is

to assure that it obtains the value of the resource for future generations. She said to allow the resource to flow away without understanding the value of oil makes these discussions difficult. She pointed out that the decisions surround unimaginable amounts of money yet the legislature must still vote on them and be diligent without possessing adequate information. She agreed confidentiality is important, but she said she is reluctant to sign confidentiality agreements since she wants to be able to tell constituents the reasons for her vote.

[12:13:28 PM](#)

CO-CHAIR FEIGE recalled hearing testimony that no one ever increased production by increasing taxes.

MR. NORMAN answered that is a broad law of economics.

[12:14:08 PM](#)

REPRESENTATIVE SADDLER asked whether any false assumptions exist with respect to the health of the North Slope resources.

MR. NORMAN answered that none come to mind. He clarified he assumed that by health he meant ensuring the best possible recovery from the oil fields. He stated that the AOGCC's job is to keep an eye over the fields. He characterized the first line of defense as the DNR's Division of Oil and Gas. He described their working relationship as a good relationship. He pointed out that the AOGCC also watches Native lands. He indicated that the AOGCC will fine a company millions of dollars if a company is out of compliance with Alaska's regulations. Additionally, the AOGCC issues conservation orders, which are all located on their website. He reiterated that he did not know of anything that legislators should have in the front of their minds.

[12:16:01 PM](#)

REPRESENTATIVE HERRON recalled that 8 BCF of natural gas is produced and reinjected; however, he wondered if Mr. Norman said that to maintain the maximum recovery of the oil basin that the

state could siphon off 2.7 BCF of natural gas for a future gas line.

MR. NORMAN answered yes, for a future line. He recalled the conversation has generally been considered in 2017-2018 or 2019. He agreed with those dates. He said that Commissioner Foerster is always quick to say if someone wanted to immediately today start pulling gas off the AOGCC would need to have an emergency meeting to consider it.

[12:17:19 PM](#)

REPRESENTATIVE PETERSEN referred to shale oil technology. He asked what type of oil is produced using this process.

MR. BARRON described the typical crude produced from the shale oil process as a very nice crude oil, particularly in Eagle Ford and the Bakken areas. He agreed that the state does not know what type of crude will be extracted from the potential Shublik production. He explained that Eagle Ford is unique. He stated that the terminology is different. The Eagle Ford project consists of three areas of development: gas component, condensate component, and an oil component. The industry is chasing each one of those relative to product price. If there is a high gas demand and high gas price the rigs will shift to gas development in the Eagle Ford shale gas zone and when they want to chase oil they will move back to the oil zone.

[12:19:24 PM](#)

REPRESENTATIVE PETERSEN referred to a map of potential production areas not on the North Slope. He asked what types of tax regimes the legislature could develop to promote development in other areas sooner. He highlighted that there are areas of the state that would like to have local access to natural gas not currently available.

MR. NORMAN said he did not know of anything. He suggested that the best thing is to have someone drill and discover the resources; however it is difficult to make something occur if the industry is not interested in the area. He related that

anecdotally, the AOGCC has observed positive response to the incentives in Cook Inlet. He reiterated the best thing to encourage development is to allow access, provide stability, predictability, and hope for discovery.

[12:21:47 PM](#)

REPRESENTATIVE PETERSEN asked whether the geological formations on the map he referenced earlier have the potential to produce oil, gas, or condensates.

MR. NORMAN answered that he identified geologic basins with production potential, but by no means is it assured that production will occur.

[12:22:20 PM](#)

REPRESENTATIVE MUNOZ said the legislature understood companies are thinking of investing up to \$14 billion with more favorable fiscal terms in Alaska in legacy and new fields. She asked whether he could estimate what \$14 billion in investment might correlate to in terms of recoverable barrels; that is benefit to the state.

MR. BARRON said he was not able to do so. He pointed out that a certain amount of the investment is required to maintain the current infrastructure, which is aging across the North Slope. He further pointed out that while some things will need to be replaced, it may not improve the flow. In terms of how much of is ordinary maintenance and how much would be an incremental increase, Mr. Barron said he did not know.

[12:23:42 PM](#)

REPRESENTATIVE SADDLER asked for the relative ranking of the effects on oil production on some of the elements, including resource, commodity price, the technology, taxes, and access.

MR. BARRON answered that the industry is dealing with a multivariable component, including the product price, lifting cost, corporate overhead, facility cost, taxation, fiscal

regime, the environment, and the stability of the government. These variables come into play and any one could shift the balance. He suggested that a dramatic product price swing would make a difference. A new tax or a tax reduction would make a difference. He was unsure how to balance those and give a weight to that is difficult. He offered his belief that most companies run hundreds of economic simulations to value, estimate, and solve that problem. He offered that the oil companies' assessments are different. In some cases taxation and political stability are equal. He referred to product price and questioned if it would be stable for 5-10 years. Every company has their own escalation factors and forecasting branch. He concluded that most companies run economics in a static position assuming a low product price to see what element drives the cost. He characterized it as a very dynamic model to run and he could not answer the question specifically.

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REPRESENTATIVE SADDLER said the legislature's mission and challenge is to reverse engineer those variables and try to figure out what impact Alaska's taxes will have on different producers, price points, technology, and access.

MR. BARRON said he really does not want to step into the legislature's seat. He echoed the commissioner's comments. The state needs to understand and try to identify the things that the state can control and influence. He related that Representative Petersen asked a good question, in asking what is impacting the ability to get to new basins. He pointed out that Alaska has its own set of unique problems, some of which are self-imposed. He acknowledged that some of the barriers are for protection of the state's assets, but the state needs to recognize they are barriers. He turned to his PowerPoint, "Potential of increasing production" and pointed out that winter exploration season is good for exploration in some areas, but in others, such as in Cook Inlet it doesn't make sense to use ice roads since the road cannot be maintained with any assurances [slide 2]. He suggested that the legislature should think through and be cognizant of such [barriers]. He said the cost of development creates a barrier as a cost of production. He

recalled the commissioner of DNR commented on some of these, trying to capture the threshold and hurdle rate; however, not economic hurdles, but the hurdles necessary to jump to get into business, such as cost of production, lack of physical infrastructure, and roads.

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MR. BARRON brought up other barriers to new production [slide 2]. He recalled substantial discussion this legislative session on the roads to resources, which is critical. He pointed out that there is not any road to Badami oil field or on the west side of Cook Inlet. The industry and state must build a road each year. He offered his belief that some exploration areas could be less challenging if a road had existed. He characterized the Cook Inlet region as a challenging area for exploration and development, but the potential exists for world-class gas production. He pointed out that power distribution systems are limited. Considerable dialogue has been held on access to facilities. He described the process as a complicated, economic development process that must be worked out integrally between two companies. The company with the assets has also been challenged to do more each day, so if they try to negotiate an agreement for excess capacity, it might limit their ability to do work on their current assets to satisfy the commission, but also satisfy their obligations and plan of development. He asked who is at risk or responsible for the loss of reserves when the facility goes down due to equipment failure or for routine maintenance. He characterized these as complicated negotiations and every company's negotiations will be a little different. Some companies do not want to be part of a shared facility since they want to control their own destiny and have access to the pipelines. He reported that Brooks Range Petroleum is struggling to finance their facilities. He said they have publically indicated their facility will now be a stand-alone facility. He wished them luck and noted that their oil could help fill the pipeline. He turned to environmental, subsistence, and permitting issues, some of which are unique to Alaska.

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MR. BARRON surmised the environmental impact in North Dakota is not there since it is mostly North Dakota farming and ranch land. Most of the North Dakota and Texas lands are private lands - subsurface and surface. He said the fear of ongoing litigation risks exists. He concluded by discussing the last item on this slide: fiscal certainly. Companies want to know what will be in place for a long time. He agreed this is a legacy for kids, but the dialogue must include a fundamental understanding on whether to capture everything today in a basin that is still a world class basin. He questioned how to develop a tax and royalty system that establishes a protocol and is robust for all kinds of fields and what type of development scenarios can be contemplated.

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REPRESENTATIVE DICK referred to GTL and to what he thought was the Fischer-Tropsch process, which is over 60 years old. He recalled hearing alternative and newer GTL methods. He suggested that the legislature needs to keep its mind open to all options and not narrow the options.

REPRESENTATIVE PRUITT recalled him mentioning the offshore area from three to six miles. He asked whether concerns exist in tapping an area that extends beyond six miles offshore. He also asked whether the state can still extract oil if part of it is on state land and some of it is on federal land.

MR. NORMAN answered that the problem doesn't exist since it is carefully worked out as the reservoir is developed. He pointed out that the state currently has differential ownership and in this case there would be revenue sharing with the federal government. He said the legal framework and technology currently exist.

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REPRESENTATIVE PRUITT asked whether the state has opportunity to "stick a straw over" into ANWR and have a "federal milkshake."

MR. NORMAN recalled a law article written on that subject, which he offered to provide. He answered that the state cannot invade; however the state can drill right to the line and rely on drainage. Still, the federal government could drill an offset well to prevent against drainage. He acknowledged that Alaska borders ANWR on one side. He recalled Governor Murkowski had considered drilling an offshore well on Alaska's tide and submerged lands. He further recalled the matter was discussed in the U.S. Senate and U.S. Senator Lisa Murkowski was working on a bill to say that if the federal government has permanently put ANWR off limits to drilling that in effect Alaska's subsurface has no value. He wondered if Alaska could directionally drill, as Representative Pruitt suggested. He recalled the Liberty well is looking at a lateral displacement of at least eight miles, so arguably there would be no harm since the state would be producing oil that is not going to be produced. Additionally, it would benefit the nation by reducing the balance of payments and reducing dependence on foreign oil imports.

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MR. BARRON interjected this is what the commissioner has referred to as the right of capture. He offered his belief that this has been done, tried, and proven. It is possible to drill on land and remove product from an adjacent property. Technically, from an engineering and drilling standpoint it can be done. He segued into Representative Petersen's question of what to do to incentivize remote areas. The state has worked with the federal government and put up adjacent lands for lease in recent lease sales. The state lands had more reasonable entry rates for leasing to encourage participation. He summarized that the cooperative effort between the two groups encourages the desired action.

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REPRESENTATIVE PRUITT encouraged them to drill the hole and if the federal government also drilled that it would provide an argument for the state's actions.

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CO-CHAIR SEATON related the House Resources Standing Committee held an interim meeting on barriers to oil and gas development. He said the committee was disappointed that at the time the industry did not identify the barriers, such as ice roads. He hoped the industry would come forth to collectively try to solve the problem. He related his understanding that the owner agreement allows any of the three companies to veto the project so if the terms were not acceptable to one it could get vetoed. He asked whether that specific concern is real and any way the legislature can solve that problem.

MR. BARRON answered yes; he related his understanding that is part of the agreement on the North Slope. He did not know if the state can get around that, nor does he know what type of impact this has had on the development of Prudhoe Bay, which has been robustly developed. Additionally, the three companies work on a broader portfolio of international projects. He said that Representative Hawker said it best when he said that the state must be competitive not just economic. He stated that the lease sales, rental sales, rates, and severance taxes must be set competitively so when the companies run the economics, Alaska rise higher on their international list rather than lower. He was unsure of the overall impact.

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REPRESENTATIVE GARDNER stated that besides Badami, the shale lease areas Great Bear Petroleum, LLC, has taken up also need roads and not ice roads. She asked whether any statutory change or regulatory changes are necessary to allow roads, and not ice roads, to be built.

MR. BARRON answered it falls under self-barriers. He explained in the best-interest findings, that one of the historic findings is that exploration should be done on ice roads and ice paths. The state and companies don't necessarily want a permanent road for dry hole and then need to pull the road up. That has begun to be a problem due to shortened drilling season, and the distance requires longer roads. The state has encouraged

industry to identify ways to avoid an ice road in their exploration mitigation plans. He recalled that Great Bear Petroleum, LLC has worked very closely with the Alaska Department of Fish & Game and the Division of Oil and Gas to identify sites along the haul road on previously disturbed paths so the company can move its rig in early next month to explore by using existing disturbed soil. He characterized this as creative and preferable. The division would like to have ice roads as a preferred option rather than a requirement, he said.

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REPRESENTATIVE GARDNER asked whether any statutory change is necessary or if they currently have the authority.

MR. BARRON offered to get back to the committee since it may be possible to craft something beneficial to the state and still protect the other parties.

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REPRESENTATIVE GARDNER asked whether any other area has a reserves tax as Texas does and if there is value to do so.

MR. BARRON answered that he would defer to the DOR.

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CO-CHAIR SEATON said it seemed like he would like the legislature to mandate the department to do something it has the authority to do, with respect to the best interest finding. He asked for clarification.

MR. BARRON agreed it is within the purview of the division; however, the way the standings are changed is from information and requests from citizens and the industry. He said that when the division receives a request or an option to look at another alternative, then the division can go into the best interest finding and make a determination that it is not necessary for this specific project. He agreed it would be a clear decision;

and under the purview of division on whether to require or not require an ice road.

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CO-CHAIR SEATON said it wouldn't be necessary for the legislature to have a finding that it requests the producer build an exploration road instead of an ice road and to consider it in the best interest finding since the division has the full ability to do so now.

MR. BARRON clarified that what he was referring to were the roads to Badami, Umiat, and west Cook Inlet. The state could help fund or work with the federal government on permitting for wetlands to gain access, which is one of the biggest hurdles. He pointed out other states are scattered with roads for industry to use.

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REPRESENTATIVE GARDNER pointed out the federal government has been working on creating a federal coordinator position to help with permitting and to share information. She asked whether that has happened and whether this will be helpful on these types of projects.

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JOE BALASH, Deputy Commissioner, Department of Natural Resources (DNR), answered that it is true the president issued an executive order last year creating a lead person for permit coordination. He characterized this action as two steps forward, but one step back, since some things are being dumped into groups or subgroups on individual topics that are spinning out. He reported that the DNR has meetings in Washington D.C. next week to try to get things back on track.

[HB 3001 was held over.]

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ADJOURNMENT

There being no further business before the committee, the House Resources Standing Committee meeting was adjourned at 12:54 p.m.