

**ALASKA STATE LEGISLATURE
HOUSE RESOURCES STANDING COMMITTEE**

February 7, 2011

1:03 p.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 Mike Hawker

COMMITTEE CALENDAR

HOUSE BILL NO. 110

"An Act relating to the interest rate applicable to certain amounts due for fees, taxes, and payments made and property delivered to the Department of Revenue; relating to the oil and gas production tax rate; relating to monthly installment payments of estimated oil and gas production tax; relating to oil and gas production tax credits for certain expenditures, including qualified capital credits for exploration, development, and production; relating to the limitation on assessment of oil and gas production taxes; relating to the determination of oil and gas production tax values; making conforming amendments; and providing for an effective date."

- HEARD & HELD

PREVIOUS COMMITTEE ACTION

BILL: HB 110

SHORT TITLE: PRODUCTION TAX ON OIL AND GAS

SPONSOR(s): RULES BY REQUEST OF THE GOVERNOR

01/18/11 (H) READ THE FIRST TIME - REFERRALS
01/18/11 (H) RES, FIN
02/07/11 (H) RES AT 1:00 PM BARNES 124

WITNESS REGISTER

BRYAN BUTCHER, Acting Commissioner
Department of Revenue
Anchorage, Alaska

POSITION STATEMENT: Presented HB 110 on behalf of the governor.

CHERYL NIENHUIS, Petroleum Economic Policy Analyst
Tax-Administration
Department of Revenue
Anchorage, Alaska

POSITION STATEMENT: Reviewed how Alaska's oil taxes work.

FRANK MOLLI, President
Molli Computer Services, Inc.
Consultant to Department of Revenue
Colorado Springs, Colorado

POSITION STATEMENT: Answered questions regarding HB 110.

ACTION NARRATIVE

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CO-CHAIR ERIC FEIGE called the House Resources Standing Committee meeting to order at 1:03 p.m. Representatives Feige, Foster, Dick, Gardner, Kawasaki, P. Wilson, Herron, and Munoz were present at the call to order. Representative Seaton arrived as the meeting was in progress. Representative Hawker was also present.

HB 110-PRODUCTION TAX ON OIL AND GAS

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CO-CHAIR FEIGE announced that the only order of business is HOUSE BILL NO. 110, "An Act relating to the interest rate applicable to certain amounts due for fees, taxes, and payments made and property delivered to the Department of Revenue; relating to the oil and gas production tax rate; relating to monthly installment payments of estimated oil and gas production tax; relating to oil and gas production tax credits for certain

expenditures, including qualified capital credits for exploration, development, and production; relating to the limitation on assessment of oil and gas production taxes; relating to the determination of oil and gas production tax values; making conforming amendments; and providing for an effective date."

CO-CHAIR FEIGE stated that the issue of oil and gas production tax is important for the future of Alaska. If no action is taken now, he said, there is a good possibility that in less than 10 years the oil flow will be too low to operate the Trans-Alaska Pipeline System (TAPS). With little oil production to tax, the state will be forced to look elsewhere for its revenue. Many people feel this issue should be addressed now rather than later and HB 110 is a good start for this debate, he continued. The committee's objective is to ensure that HB 110 will put more oil into TAPS and encourage new exploration and enhanced recovery methods. The federal government continues to create more obstacles to resource development in Alaska, he opined, and action must be taken by the state to keep oil flowing in TAPS until federal agencies change direction and promote domestic oil production. The recent shutdown of TAPS was a warning that the state's financial independence is tied to the flow of oil. He said the committee will wait to make any substantive changes, if any, to HB 110 until it hears from the Department of Revenue, the governor's office, producers, explorers, contractors, and the general public.

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BRYAN BUTCHER, Acting Commissioner, Department of Revenue, introduced HB 110, noting that the bill would change the state's tax system to make Alaska more competitive both nationally and globally, produce more jobs for Alaskans, and increase Alaska's oil production. Recent articles project that North Dakota will surpass Alaska in oil production and are a wakeup call, he continued. The federal government has deterred onshore and offshore development in the state; Alaska must therefore maximize production on state lands. Many of the tax credits and incentives passed by the legislature over the past few years have helped, but production continues to decline.

ACTING COMMISSIONER BUTCHER advised there is much oil yet to be produced in Alaska. Thus, the main objectives of HB 110 are to develop currently unexplored fields and to get more production out of the "Prudhoe and Kuparuk" legacy fields that currently provide over 80 percent of the state's oil production. The

issue of oil production is important, he continued, because 85 percent of state revenues come from oil. Last month's leak at Pump Station 1 shut down TAPS for a couple of days. This leak was another wakeup call because today the pipeline carries only one-third the volume it did 20 years ago and there was concern that the pipeline would freeze up from the shut down.

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ACTING COMMISSIONER BUTCHER pointed out that developing oil on the North Slope is much more challenging now than it was in the past - for both the state and producers. The bulk of the easiest to produce oil has been produced. Therefore, attention is now on viscous/heavy oil, developing areas that have little or no infrastructure, and developing smaller pools of oil. He related that Governor Parnell is not focused on growing the size of state government; rather the governor is focused on growing the size of the private sector economy in Alaska, which will provide more jobs for Alaskans. While the executive branch has its opinion on what constitutes reasonable change, industry will have to weigh in about what the changes proposed by HB 110 will mean to industry's view of investment and exploration in Alaska.

ACTING COMMISSIONER BUTCHER said the three goals of HB 110 are to address progressivity, promote infield drilling in the currently producing legacy fields, and promote the development of new fields (slide 3). Alaska's oil tax regime needs to be changed to make Alaska more competitive nationally and globally, to create more jobs for Alaskans, and to increase production in the Trans-Alaska Pipeline System (slide 4).

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ACTING COMMISSIONER BUTCHER discussed the North Slope's declining production, noting that production peaked in Fiscal Year (FY) 1988 at just over 2 million barrels per day (slide 5). By FY 2010 production decreased to about 644,000 barrels per day, a 68 percent decline that has averaged about 5 percent per year. Over the next 20 years the decline rate is expected to flatten to between 3 and 4 percent, he reported. This decline rate is based upon expected production from the new Oooguruk, Nikaitchuq, and Liberty fields. What the state does in the out years will have a large say over whether the decline steepens or flattens out. He added that another issue with less barrels of oil in TAPS is that tariff costs will be more because the costs of transportation are divided by the number of barrels flowing through the pipeline. The fewer the barrels, the higher the

cost; the higher the cost, the less profit the state receives on its royalty barrels.

ACTING COMMISSIONER BUTCHER reviewed the expected production from old and new fields (slide 6). He noted that by 2020 approximately half of the projected oil production will be from new fields, meaning 50 percent of the projected oil production must come from current fields. Therefore, he continued, HB 110 has provisions for both unexplored and current legacy fields.

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ACTING COMMISSIONER BUTCHER warned that the number of exploration wells is declining, according to the Alaska Oil and Gas Conservation Commission (AOGCC) and the Department of Natural Resources (DNR) (slide 7). Between 2005 and 2007 the number of exploratory wells drilled each year increased [from 7 to 18] as the price of oil increased, but each year since 2008 the number has declined despite the price of oil staying in the range of \$80-\$90 per barrel. Only three exploration wells were drilled in 2010 and DNR expects one exploration well to be drilled in 2011.

ACTING COMMISSIONER BUTCHER reviewed the total number and type of wells that have been drilled on the North Slope (slide 8). He pointed out that the total number of currently producing wells has decreased a little, but in general has stayed fairly level [131 wells in 2005, 110 in 2010]. He explained that service wells [38 wells in 2005, 33 in 2010] are drilled for the purpose of supporting production in the field, and include gas injection, water injection, and oil development wells. He drew attention to the number of exploration wells [7 in 2005, 3 in 2010].

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ACTING COMMISSIONER BUTCHER related that annual surveys are conducted by the Frasier Institute to judge the overall attractiveness of the world's oil and gas jurisdictions [slide 9, entitled "Frasier: Alaska is #68 of 133 in terms of overall attractiveness"]. The survey asks seventeen questions about possible barriers to investment, including infrastructure, environmental protection, resource potential, and the tax system. This slide depicts a composite index of the 17 aspects of competitiveness used to rank each jurisdiction, he explained. The bars on the graph indicate the percentage of negative responses for each jurisdiction - the blue color within each bar

represents the percentage of responses that said there are moderate barriers to investment, yellow represents extreme barriers, and green represents the percentage of companies that said they would absolutely not invest in that jurisdiction. The overall negative response for Alaska was about 40 percent, he specified, which puts Alaska in about the middle of the pack. Alaska ranks worse than other North American jurisdictions, such as Alberta and North Dakota, and ranks worse than Norway. He pointed out that these surveys are somewhat subjective, but said they help show in general terms how the companies view Alaska relative to other states and countries. Acting Commissioner Butcher further elaborated that the most difficult investment climates tend to exist in other continents, such as the Middle East, Asia, and Venezuela in South America (slide 10). In North America, Alaska competes for capital dollars from North American companies as well as multi-national corporations, yet falls in the same [third] quintile as China, Egypt, and Pennsylvania.

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ACTING COMMISSIONER BUTCHER continued discussing the [Frasier Institute 2010 Global Petroleum Survey], reporting that Alaska ranks 31 out of 38 jurisdictions in North America for fiscal attractiveness (slide 11). Those states near and worse than Alaska in attractiveness are typically high tax states, he said, such as New York, Florida, and California. Expounding further (slide 12), he said the least attractive jurisdictions in North America are Alaska, California, Florida, New York, Quebec, and Northwest Territories. The high-producing states of North Dakota, South Dakota, Texas, and Louisiana [most attractive quintile] rank considerably better for investment climate than Alaska [third quintile]. Paraphrasing from the 2010 Frasier report, he said:

Seven U.S. states and regions (New York, Florida, California, the Atlantic Offshore, Alaska, Kentucky, and Pennsylvania) had relatively unattractive third quintile scores. Investors were concerned about environmental regulations in each of these jurisdictions, except for Alaska where the fiscal regime is also an issue.

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ACTING COMMISSIONER BUTCHER, in response to Representative Gardner, returned to slide 9 and reiterated that the blue within each bar on the graph represents the percentage of companies

that said a jurisdiction has moderate barriers to investment, yellow represents extreme barriers to investment, and green represents absolutely will not invest in that jurisdiction. He specified that the least attractive jurisdictions are Bolivia, Venezuela, Russia, Ukraine, and Iran, all of which have political upheaval that makes investment extremely risky. Most attractive are South Dakota, Texas, Illinois, Wyoming, and Austria, he added.

ACTING COMMISSIONER BUTCHER, in response to Representative Munoz, said he does not have a breakdown on whether the production in other states is from state or federal land, but will get that information and provide it to members.

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ACTING COMMISSIONER BUTCHER, regarding how Alaska is rated in the Frasier report for specific investment factors (slide 13), said Alaska's strengths include geopolitical risks, the legal system process, and other things related to the U.S. having a stable environment in which to do business. Alaska is in the middle of the pack in terms of commercial environment, quality of infrastructure, and labor availability. Alaska's weaknesses include environmental regulations, cost of regulatory compliance, uncertainty concerning protected areas, disputed land claims, and the tax regime. Alaska can do something about its tax regime, he added. Expounding further, he pointed out that 44 percent of survey respondents said Alaska's tax regime deters investment (slide 14). The negative impact of Alaska's tax system is probably understated, he continued, because small exploration companies like Alaska's generous credit provisions, while the larger companies that produce the most significant amount of oil and pay state taxes have a different perspective. Alaska has steep progressivity, he pointed out. At low oil prices, say \$30-\$40 per barrel, Alaska would score better because the state's tax would then be comparatively low. However, at today's high oil price of \$90 per barrel, Alaska's unique progressivity method increases the tax on industry.

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ACTING COMMISSIONER BUTCHER said the Frasier report ranks the attractiveness of Alaska's tax regime at 34 of the 38 North American jurisdictions (slide 15). He related that 25 percent of respondents said Alaska's tax regime is encouraging to investment, which suggests the state has done a good job of marketing to some oil and gas companies, such as the smaller

explorers that have received cash for some of the tax credits. However, Alaska has discouraged large companies that invest and produce from the state's major fields.

ACTING COMMISSIONER BUTCHER illustrated the subjectivity of jurisdictional ranking by directing attention to a 2010 study conducted by Wood Mackenzie Research and Consulting, which ranks Alaska's fiscal attractiveness at 129 of 141 jurisdictions worldwide (slide 16). He pointed out that the Wood Mackenzie study places Alaska at the negative end along with such countries as Venezuela and Algeria. He included this slide in his presentation, he said, because the legislature is looking at purchasing a detailed study from Wood Mackenzie.

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ACTING COMMISSIONER BUTCHER directed attention to a Department of Natural Resources map depicting areas of heavy oil and gas development and areas that Governor Parnell has talked about in recent speeches (slide 17). The areas being talked about by the governor are located just south of the Kuparuk and Prudhoe Bay fields and they have had very little exploration in recent years, he said. The administration believes there is a high chance of finding new fields once opportunities and incentives are given to companies to explore such areas, he related. Since hitting the huge field of Prudhoe Bay 40 years ago, he added, companies have put most of their exploration and development dollars into it because the field is known.

ACTING COMMISSIONER BUTCHER said the Department of Revenue believes there is a lot of oil left in Alaska (slide 18). The cumulative production through 2010 has been over 16 billion barrels. The department believes the remaining North Slope reserves exceed 5-7 billion barrels, he reported, and the geology-based estimates of total oil volumes are much higher. For example, the department does not include any of the approximately 20 billion barrels in the Ugnu deposit or offshore volumes from the Chukchi or Beaufort Seas in its forecast.

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CHERYL NIENHUIS, Petroleum Economic Policy Analyst, Tax-Administration, Department of Revenue, in response to Representative Wilson, understood the Ugnu deposit to be a fairly large deposit underlying several North Slope units, primarily the Prudhoe Bay and Kuparuk units. In further

response, she understood the deposit to be shallower than the Prudhoe Bay and Kuparuk deposits.

FRANK MOLLI, President, Molli Computer Services, Inc., Consultant to Department of Revenue, in response to Representative Gardner, explained that the Ugnu deposit is not included in the department's forecast of remaining North Slope reserves because, at this point, there has not been a sustained test or proof of production. Until he sees that, he hesitates to put it into the Department of Revenue forecast, he said. In response to further questions from Representative Gardner, he said industry is attempting to produce the Ugnu deposit, but to date there has not been a successful method of significant, sustained production. This is because the Ugnu deposit is composed of heavy oil that does not easily flow toward the wells that are drilled.

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The committee took a brief at-ease.

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MS. NIENHUIS recapped how Alaska's oil taxes work (slide 19). Prior to 2006 oil and gas were taxed under a gross production tax, she said. In April 2006 the oil tax was restructured with passage of the petroleum profits tax (PPT), which changed the tax system to a net of the cost of production. Alaska's Clear and Equitable Share (ACES) was passed in 2007. Most of its provisions became effective on July 1, 2007, the start of Fiscal Year (FY) 2008, although some provisions were retroactive. The two major components of ACES are a net production tax, rather than a gross tax, and tax credits for various activities in oil and gas production on the North Slope.

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MS. NIENHUIS discussed the various terms used in the ACES production tax (slide 21). She explained that the point of taxation is at the North Slope wellhead. The "wellhead value" is the West Coast market price less the cost of getting the oil and/or gas to the West Coast. The "gross value at point of production" is the wellhead value multiplied by the number of barrels produced. The "production tax value" (PTV) is the gross value at the point of production minus the upstream cost to produce the oil and/or gas. The upstream cost can be broken

down into capital and operating expenses. Thus, the basis of the oil tax is like a net income.

MS. NIENHUIS, in response to Co-Chair Feige, understood that the dividing line between upstream and downstream is Pump Station 1 [on the Trans-Alaska Pipeline System (TAPS)], although there are some feeder pipelines.

MS. NIENHUIS, in response to Representative Munoz, confirmed that upstream cost includes the cost of employees. Upstream cost is the direct cost of producing oil and gas, she said.

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MS. NIENHUIS continued her discussion of terms, noting that the "base tax rate" under ACES is 25 percent of the production tax value (PTV), but under the petroleum profits tax (PPT) the base tax rate was 22.5 percent. The "progressive surcharge rate" is a formula-driven rate that increases as oil profits grow. "Credits" are also a part of ACES. She said credits were started prior to PPT, were expanded during PPT, were expanded even more during ACES, and she believes more credits were passed last year.

MS. NIENHUIS explained that the ACES base tax is calculated by multiplying the production tax value (PTV) by the 25 percent base tax rate (slide 22). A progressive surcharge is calculated by multiplying the production tax value by the progressive surcharge rate. The progressive surcharge rate is the amount of tax, in addition to the base rate, that is applied on profits per barrel above \$30. The base tax and progressive surcharge are added together and then the credits are subtracted to arrive at the total production tax owed to the state.

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MS. NIENHUIS demonstrated how the projected Fiscal Year (FY) 2012 production tax would be calculated (slide 23). She said that at the forecast price of \$82.67 per barrel and the forecast production of 622,182 barrels per day, the value is \$51.4 million per day. This daily value is multiplied by 365 days to arrive at the annual production value [\$18.7 billion]. Royalty barrels are then subtracted to arrive at the annual taxable production/value [192,426,540 barrels/\$15.9 billion]. Next, the marine transportation costs, TAPS tariff, and other costs are subtracted to arrive at the gross value at point of production. From here the total lease expenditures (deductible operating

expenditures forecast at about \$2.5 billion and deductible capital expenditures forecast at about \$2.5 billion) are subtracted to arrive at the forecasted production tax value (PTV) of \$9.6 billion. The base tax rate of 25 percent is multiplied by the production tax value to arrive at a base tax of \$2.4 billion. The progressive tax rate, calculated here at 8.1 percent, is multiplied by the production tax value to arrive at a progressive tax of \$785 million. [The base tax and progressive tax are added together], so the total tax due before credits is \$3.2 billion. The projection for credits in FY 12 is \$450 million. Thus, the total projected tax after credits for FY 12 is about \$2.7 billion. She cautioned, however, that this is a very simplified, averaged view of the calculation for the production tax.

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MS. NIENHUIS, in response to Representative P. Wilson, confirmed that lease expenditures are considered upstream costs.

MS. NIENHUIS, in response to Representative Kawasaki, confirmed that at the projected FY 12 oil value of \$18.7 billion, the state will receive \$2.7 billion. In further response, she said the deductible capital expenditures are projections that the state receives from the companies. Twice a year the state asks the companies to forecast their projected expenditures for five years out and the figures used in this example are the most recent forecast.

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MS. NIENHUIS reviewed the tax credits currently available under ACES (slide 24), explaining that the "qualified capital expenditure credit" is an automatic 20 percent credit for qualified capital expenditures.

The committee took a brief at-ease due to technical difficulties.

MS. NIENHUIS continued, noting that a qualified capital expenditure credit of 40 percent was passed by the legislature last year for well lease expenditures outside the North Slope. She explained that the "carried-forward annual loss credit" is primarily for producers that are spending money developing fields but do not yet have income exceeding their expenditures; these producers are given a 25 percent credit for that loss in the following year.

MS. NIENHUIS said the "small producer and new area development credit" is a non-refundable credit that can only be applied in the year the producer can use it. Companies with North Slope production of less than 100,000 barrels a day can receive a credit of [up to] \$12 million [per year]. Companies with production outside the North Slope and Cook Inlet of less than 100,000 barrels [a day] can receive a credit of up to \$6 million per year. She added that the credit ramps up between 50,000 and 100,000 barrels and there is a formula.

MS. NIENHUIS, in response to Representative Kawasaki, agreed to provide members a list of those producers with production rates below 100,000 barrels a day.

MS. NIENHUIS, in response to Representative Gardner, said she believes the \$12 million credit and the \$6 million credit are additive, so a company can receive both.

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MS. NIENHUIS returned to her review of credits, explaining that the "alternative credit for exploration" has been a relatively attractive credit for companies exploring in remote areas where exploration is quite expensive. This credit is 30 or 40 percent depending on whether the exploration meets certain criteria. Prior to ACES this credit was 20 and 30 percent.

MS. NIENHUIS explained that the "Cook Inlet jack-up rig credit," passed [in 2010], provides credit of up to 100 percent for the first three exploration wells that are drilled using a jack-up rig in Cook Inlet.

MS. NIENHUIS, in response to Representative Kawasaki, said she would provide members with a listing of federal credits that are available to companies, but that she is unsure the department can provide company-specific information in this regard.

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MS. NIENHUIS, in response to Representative Gardner, confirmed that no companies have yet qualified for the jack-up rig credit, given it was just passed this last spring. However, several companies are competing to do so.

ACTING COMMISSIONER BUTCHER added that the first company to bring a jack-up rig to Cook Inlet will receive 100 percent of

the cost up to \$25 million. The second jack-up rig must be brought up by a different company and that credit would be up to 90 percent or \$22.5 million, and the third jack-up rig would be up to 80 percent or \$20 million. If the drilling results in sustained production, 50 percent of the credit would be paid back over a 10-year period.

ACTING COMMISSIONER BUTCHER, in response to Co-Chair Feige, confirmed that two companies are seriously discussing jack-up rigs.

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MS. NIENHUIS, in response to Representative Herron, understood that the \$12 million and \$6 million credits were passed by the legislature to encourage development of new fields. She said it takes some time for small producers to get to the point of where income exceeds expenses. In further response, she said she would look at the legislative history and provide information to members about why the particular dollar amounts of \$12 million and \$6 million were chosen.

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MS. NIENHUIS provided examples of how the tax and the credits affect the different types of producers. For the first example she used a new entrant with no current production in Alaska that is pursuing an exploration project requiring \$200 million in investment (slides 25-26). Depending on whether that project meets certain criteria, she said the state would give this company a credit of 20, 30, or 40 percent, which would be \$40-\$80 million in tax credit for this size project. If the company were to experience a loss it would be eligible for a 25 percent net operating loss tax credit, which could be worth up to \$50 million. Thus, for this \$200 million investment the company could receive a credit of \$90-\$130 million from the state. The credit could be directly recouped from the state via refundable tax credits or the credit could be transferred to a company in the state that does pay tax. Regardless of whether the credit is directly refunded or transferred, she explained, the state would pay \$90-\$130 for the exploration and the company would pay \$70-\$110 million. The state therefore bears the risk for failure, as does the new entrant, because the state does not recoup this money even if the exploration effort fails.

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MS. NIENHUIS, in response to Representative P. Wilson, allowed that \$200 million is high for just an exploration well. The exploration tax credit was set at 40 percent, she said, because exploration costs can be very high depending upon the distance from existing infrastructure.

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MS. NIENHUIS next provided an example of an incumbent producer that already has current production to which a tax credit can be applied (slides 27-28). If this incumbent pursued a non-exploration development requiring \$200 million in investment, she said, it would receive a 20 percent capital investment credit of \$40 million. That capital investment would reduce the incumbent's production tax value (PTV), which would reduce the taxes due. This is because the progressive surcharge rate is triggered off the profit per barrel, so if expenditures are higher the profit per barrel is lower and this would lower the tax rate. The deductions and credits would total more than 45 percent (greater than \$90 million) of the \$200 million. The state would therefore be paying more than \$90 million of the new development's capital cost, meaning the incumbent would be spending less than \$110 million. Once again, the state would be an investor in the project and would bear the risk for failure as would the incumbent investor.

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MS. NIENHUIS summarized the key points of tax and credits under the ACES system (slide 29). For credits, the state can cut a check [to new entrants] or reduce the tax liability owed by incumbents. In both cases the state is an investor and shares the risk with the company doing the project. She said the aim of ACES is to incentivize investment through the state bearing risk and reducing the costs incurred by explorers and producers. Tax credits and the net-based structure make the state an investor in exploration and new development activities.

MS. NIENHUIS, in response to Representative P. Wilson's recollection that the average number of dry wells is 5 out of 6, agreed the state is sharing a lot of the risk and cost. Tax credits have increased, she allowed; for example, in FY 2010 the state paid about \$250 million in tax credits. She said she thinks the belief at the time ACES was passed was that this was a trade-off the state could bear.

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MS. NIENHUIS, in response to Representative Dick, said she believes other states also provide incentives, although she could not say whether they are of the same magnitude as those in Alaska. Also, she added, there are federal tax credits.

MS. NIENHUIS, in response to Representative Kawasaki, nodded her agreement to provide committee members with information on what the federal tax credits would be for the examples she provided earlier (slides 26-28).

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MS. NIENHUIS, in response to Representative Foster, said she believes the Interstate Oil and Gas [Compact] Commission (IOGCC) publishes the tax rates and incentives offered by other states. She agreed to provide members with this information.

ACTING COMMISSIONER BUTCHER cautioned that most other states are based on gross and Alaska is net, which makes it complicated to put together an accurate comparison. He said the department is putting together a slide to provide such a comparison, but was unable to have it ready for today's presentation. In response to Co-Chair Feige, he agreed to put together a comparison of the top 10 states that Alaska is competing against.

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ACTING COMMISSIONER BUTCHER said the main changes proposed by HB 110 are in the progressivity rates, the tax cap, the tax calculation, the tax credits, and the base tax rate (slide 31). He explained that HB 110 would define progressivity as discrete brackets rather than a continuous function and, like the bracket system used for federal income tax, the progressivity would be applied only to the incremental revenue. Under current law, the progressivity rate is 0.4 percent on each dollar over \$30 per barrel in profit up to \$92.50 in profit, and after \$92.50 the progressivity drops to 0.1 percent on each dollar. This increase in tax percentage is on the entire barrel, not just the last dollar, which at high oil prices can result in 70-80 percent of each increased dollar in profit going to government. He pointed out that the oil industry is very high risk/high reward; for example, "Shell" has put \$3 billion into developing the outer continental shelf and is at risk of not getting this money back. The majority of exploration is not productive enough to develop, so when it is productive enough to develop the company must recoup those losses.

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ACTING COMMISSIONER BUTCHER, regarding the tax cap, noted that state taxes can currently go up to 75 percent on a barrel. Under HB 110 the tax cap would be limited at 50 percent of the profit per barrel for legacy fields and 40 percent for new fields. The lower tax cap for new fields is to encourage exploration and development because the taxes for those fields would be less.

ACTING COMMISSIONER BUTCHER said HB 110 proposes a yearly tax calculation based on average prices and costs. Currently, this is done on a monthly basis, which has proven difficult for both industry and the Department of Revenue. A yearly calculation would be a more simplified method. Regarding the base tax rate, HB 110 would keep the current base rate of 25 percent, except leases or properties not producing as of 12/31/2010 would pay a base rate of 15 percent.

ACTING COMMISSIONER BUTCHER noted that the proposed changes for progressivity rates, tax cap, tax calculation, and base tax rate would take effect 1/1/2013. He pointed out that due to the laws changing from the Economic Limit Factor (ELF) to the PPT in 2006 and then changing again at the end of 2007 under ACES, the department is only now catching up with its audits. The passage of HB 110 would be the third law change in five years. Therefore, this effective date would give the department the opportunity to write the regulations and work out the kinks.

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ACTING COMMISSIONER BUTCHER further explained that HB 110 would allow tax credits to be claimed in the first year instead of splitting the credit into two years as required by current law. This change would take effect on 1/1/2012 and would have a negligible effect on the state. Additionally, HB 110 would extend the 40 percent well lease expenditure tax credits to the North Slope. Given the expectation that in 10 years 50 percent of production will be from currently existing fields, the state needs to do what it can to help overcome the problem of viscous oil and other challenges in the existing fields.

ACTING COMMISSIONER BUTCHER, in response to Representative P. Wilson, said the tax cap is currently at 75 percent. In response to further questions from Representative P. Wilson, he explained that under HB 110 companies would still make estimated

tax payments to the state on a monthly basis, but those payments would be based on the rolling average for the year. Regarding the base tax rate, he said the proposed 15 percent base tax rate for oil and gas coming from leases or properties not producing as of 12/31/10 would be in permanent statute until the governor or legislature decided to make a change at a future date.

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ACTING COMMISSIONER BUTCHER, in response to Representative Dick, explained that a unit is defined in statute as a group of leases covering all or part of an accumulation of oil and gas. The lessees agree to operate the leases as a single unit under an approved plan of exploration or plan of development. The basis for being a unit is the approved unit agreement which gets approved by the appropriate agency, which for state land is the Department of Natural Resources and for federal land is the U.S. Bureau of Land Management.

ACTING COMMISSIONER BUTCHER, in response to Co-Chair Feige, confirmed that a "unitized" area is an area that a company would plan to put into production as opposed to exploration.

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ACTING COMMISSIONER BUTCHER, in response to Representative Munoz, agreed to provide members with estimates for infrastructure costs to tie pipelines from new fields into the Trans-Alaska Pipeline System, along with information as to who would pay those costs.

REPRESENTATIVE MUNOZ, in response to Co-Chair Feige, said she imagines "the line would need to be extended into the new areas" that have been talked about.

CO-CHAIR FEIGE responded that it would depend upon where the discovery was made.

ACTING COMMISSIONER BUTCHER added that he is sure "Shell" has put a lot of thought into what its costs will be to connect with the Trans-Alaska Pipeline System from the developments it is looking at in the Beaufort and Chukchi seas. He reiterated that he will see what information he can find on this type of cost.

ACTING COMMISSIONER BUTCHER, in response to Representative Herron, said that when developing HB 110 the department did not look into brackets for progressivity as it would relate to

declining production. He explained that the department kept HB 110 on the same curve for progressivity as currently exists in state law because the department thought brackets had more value than tweaking the current law.

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REPRESENTATIVE P. WILSON asked how much revenue the state would forego as a result of these changes, although she understood the reason for making these proposed changes is to get more flow through the Trans-Alaska Pipeline System.

ACTING COMMISSIONER BUTCHER replied that the department's fiscal note estimates a revenue reduction of approximately \$5 billion over the next five years, which does not include the revenue increase that the department expects further out the road after the increased development has occurred. It is very difficult to try to figure out, he continued. If the price of oil were to reach \$100 or \$110 [per barrel] for two years in a row, that \$5 billion would be gone and there would be even more than anticipated, and it goes the other way if the price drops lower. He added that the Office of Management & Budget (OMB) projects that at the end of that five-year period, the state would still have significant reserves in the Constitutional Budget Reserve (CBR) even with a sizeable increase in state government. He noted that the department will have details at a later date.

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ACTING COMMISSIONER BUTCHER returned to his presentation and addressed the effective, nominal, and marginal tax rates (slide 32). He said the effective tax rate is the tax rate that a company would pay after taking out tax credits and anything else. The nominal tax rate is the rate in statute; for example, the 25 percent base going up, but it is not applied in the real world to the pluses and minuses of tax credits. The marginal tax rate is a theoretical rate that would be applied to each additional \$1 of profit; for example, for higher and higher potential profit it would be the amount of government take and the amount left over for the producer. As progressivity is currently calculated, the higher the profit the higher the marginal tax, which can reach over 80 percent.

ACTING COMMISSIONER BUTCHER, in response to Representative P. Wilson, further explained that the nominal tax rate is the number in the bill. Under current law, for example, the nominal tax rate is the base rate of 25 percent up to \$30 a barrel [in

profit] after which each additional dollar [in profit] would increase the tax rate by 0.4 percent, so the tax would be 25.4 percent, 25.8 percent, and so on. It is the tax rate "on paper" and does not include subtraction of tax credits. In further response, he confirmed that the nominal tax rate is the tax rate not counting all the pluses and minuses along the way.

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ACTING COMMISSIONER BUTCHER compared the current nominal tax rate under ACES with that proposed by HB 110 (slide 33). Under ACES the nominal tax rate is 25 percent until a production tax value of \$30 per barrel is reached, at which point the tax rises in a continuous 0.4 percent per dollar until leveling out at 0.1 percent [when the production value reaches \$92.50]. Under HB 110, the base rate on production from current fields would remain at 25 percent up to a production tax value of \$30 per barrel, at which point the tax would rise in brackets until it reached a tax cap of 50 percent. Under HB 110, the base rate on production from new fields would be 10 percent lower and would rise in brackets until reaching a tax cap of 40 percent.

ACTING COMMISSIONER BUTCHER compared the current marginal tax rate under ACES with that proposed by HB 110 (slide 34). Starting at \$30 per barrel in production tax value, the marginal tax rate under ACES is very steep, he said. This is because each 0.4 percentage per dollar applies to the entire barrel, not just that next dollar. At [\$92.50] per barrel in profit, the ACES tax reaches 87 percent, at which point onward the progressivity drops from 0.4 percent per dollar to 0.1 percent. Under the bracketed system proposed by HB 110, the marginal tax rate would increase in bracketed steps, but it would not rise as steeply as under ACES because the brackets apply the tax rate only to the bracketed amount instead of to the entire barrel.

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ACTING COMMISSIONER BUTCHER, in response to Representative P. Wilson, agreed to provide one graph depicting both the marginal and the effective tax rates so that committee members can see the difference between the two. He explained that the marginal tax rate is what industry looks at when determining whether to develop a field. Each company has its own projections on the price of oil and how it perceives the future, and looking at the marginal tax rate provides an indication of the high end of potential tax. It is the marginal tax rate that is seen in a

negative sense when the differences between Alaska and other jurisdictions are discussed.

ACTING COMMISSIONER BUTCHER, in response to Representative Herron, explained that HB 110 would cap the tax once the profit per barrel reaches a certain level, rather than provide a stair-stepped decrease in tax. He clarified that all three tax rates are based on the production tax value or profit per barrel, not the price of oil. The [\$92.50] cap is the profit per barrel, not the price per barrel. On average, the subtracted costs are \$25-30 per barrel. Thus, the [\$92.50] profit represents a price per barrel of about \$120.

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ACTING COMMISSIONER BUTCHER, in response to Representative P. Wilson, elaborated further about the cost per barrel versus the price per barrel. Because the tax is on the profit, not the gross, what is looked at is the dollar amount per barrel times the production minus the transportation, operating, and capital costs. The total of these three costs averages about \$30. Therefore, at a price of \$90 per barrel of oil, less \$30 in production cost, the profit is \$60; therefore, tax on the \$60 in profit is 40 percent.

ACTING COMMISSIONER BUTCHER, in response to Co-Chair Feige about whether there is incentive to control costs under this type of tax regime, said the lower the spending that a company has, the higher the profit. Even though the state would be taking 40 or 50 percent of the profit, it would still create more profit for the company by reducing the costs than it would be to increase them. He offered to have the department's auditors address members about this issue at a later date.

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ACTING COMMISSIONER BUTCHER, in response to Co-Chair Feige, confirmed that the Department of Revenue sets the costs of production and transportation.

MS. NIENHUIS pointed out that the cost for each barrel on the North Slope can be different because the crudes come from different areas of the state and the properties are developed by different companies. So, while the department uses an average cost of \$26-\$30 per barrel, each property can have a different amount than that. Thus, this tax is really a company-specific

tax in that the company's tax rate and tax liability are determined by the taxes on the company and what it spends.

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ACTING COMMISSIONER BUTCHER returned to his presentation and compared the current effective tax rates under ACES on the gross value at the point of production with the effective tax rates proposed by HB 110 (slide 35). He said the effective tax rate under HB 110 would not rise nearly as quickly or as steeply as it currently does under ACES, and [the administration] believes this reduction would spur development.

ACTING COMMISSIONER BUTCHER concluded by reiterating that the current well lease expenditure credit under ACES is 40 percent outside of the North Slope and 20 percent within the North Slope (slide 36). He said HB 110 proposes to increase the North Slope credit from 20 percent to 40 percent for capital expenditures directly related to exploration wells, stratigraphic test wells, producing wells, and injection wells.

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MS. NIENHUIS, in response to Representative Gardner, described the different kinds of wells, but qualified that her knowledge of the different kinds of wells is limited. She said an exploration well is presumably pretty far from existing infrastructure. She understood a stratigraphic test well is drilled to determine and delineate the various areas of the reservoir. A producing well is drilled to produce oil and an injection well injects fluids into a reservoir to enhance the oil recovery.

ACTING COMMISSIONER BUTCHER added that an injection well is a service well and this type of well is included under service wells on slide 8.

MS. NIENHUIS, in further response to Representative Gardner, explained that there are tangible and intangible drilling costs. An intangible drilling cost is not a physical asset; rather it is the cost of engineering, labor, and other things that go into drilling a well.

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CO-CHAIR SEATON asked whether the 40 percent tax credit for capital expenditures in Cook Inlet has been effective in producing the expected rapid exploration and development.

MS. NIENHUIS replied that this tax credit is relatively new, having been put in place in spring [2010]; therefore, she believes the department's experience with the credit is too short to be able to fully evaluate any effect.

MS. NIENHUIS, in response to Co-Chair Feige, offered her belief that wells have been drilled by companies that expect to get the 40 percent [qualified capital expenditure] credit.

CO-CHAIR FEIGE, regarding the Frasier report, asked what other factors besides Alaska's fiscal structure cause the state to be ranked in the middle in terms of competitiveness.

ACTING COMMISSIONER BUTCHER responded that it generally has to do with the U.S. political system, which is stable and seen as a positive compared to politically volatile countries. He suggested this question be asked of industry members when they testify before the committee at a later date because each company has a different view of the positives and negatives of investing in Alaska.

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CO-CHAIR FEIGE asked what the Department of Revenue's record has been on predictions versus what actually happened.

ACTING COMMISSIONER BUTCHER replied that in terms of production the department has tended to be optimistic. He said this has to do with a number of variables, one of which is that the department's forecasts are based on the assumption that TAPS will be running 365 days a year. In terms of oil price, he allowed the department has been "all over the place," but that it is thought the department has improved in these forecasts over the last few years.

ACTING COMMISSIONER BUTCHER, in response to Representative Kawasaki, nodded his agreement to provide members with a copy of the 2010 Frazier report. In further response, he said he would provide members with what information he can in regard to how Alaska's position of overall attractiveness would be shifted in the Frazier report if Alaska were to have the best tax regime.

ACTING COMMISSIONER BUTCHER, in response to Co-Chair Feige, confirmed that the more attractive Alaska's tax regime, the less would be the state's revenue.

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REPRESENTATIVE KAWASAKI asked how Alaska's strengths and position in the Frazier report would be changed if the billions of dollars in foregone tax revenue were instead used to punch a road to Umiak or provide infrastructure that improves the state's economy. He said he does not think the administration has made a case that the tax changes proposed by HB 110 would actually bring more jobs to the state.

ACTING COMMISSIONER BUTCHER responded that for today the department was asked to present a high level explanation of HB 110 as well as to discuss where the department thinks the state is today. He said the department will be providing more detailed information at its next presentation before the committee and these details may provide answers to the aforementioned question.

REPRESENTATIVE GARDNER posited that in addition to the state doing something about its tax regime, Alaska could also do something about many of the other investment factors listed on slide 13. For example, Alaska could do a lot about the availability of labor and the quality of infrastructure because those are responsibilities of state government.

ACTING COMMISSIONER BUTCHER agreed, but said that for today the department was just focusing on what HB 110 had to do with it.

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CO-CHAIR SEATON inquired whether the Frasier report has moved the producers in Alaska to make significant investments in the five most attractive jurisdictions listed on slide 14 - Illinois, Chile, Utah, Northern Territory, and Uruguay.

ACTING COMMISSIONER BUTCHER suggested this question be asked of the producers directly and pointed out that Alaska has no control over what states or countries are studied by the Frasier Institute. He acknowledged that just because Illinois has the lowest and most attractive tax regime does not mean there is a lot of activity in that state.

CO-CHAIR SEATON noted that the title of slide 14 states "44% of respondents say Alaska tax regime deters investment." He asked whether this means that 56 percent of respondents did not say that Alaska's regime deters investment.

ACTING COMMISSIONER BUTCHER replied that 44 percent of respondents in the survey specifically pointed out that they consider the tax regime a deterrent. He said he does not know whether 56 percent said "not a deterrent at all." He offered to provide more information in this regard.

CO-CHAIR FEIGE suggested that maybe the other 56 percent were not considering investing in Alaska because they are invested in other places.

CO-CHAIR SEATON added it may be that this 44 percent of respondents are not considering investing in Alaska either, given this is a general survey which makes it difficult to interpret exactly what the response means.

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CO-CHAIR SEATON referenced the nominal tax rates depicted on slide 33 and asked whether it is the stepped increase in marginal tax rate that is being addressed by HB 110. He surmised that the gestalt is about a bracketed tax like the [federal] income tax where the lower tax rate is paid on the lower amount of income and the higher tax rate is paid only on the higher amount of income and asked whether this is incorporated into the proposal. He noted that slides 33-34 depict the profit, so the [average production] cost of \$26 is below the starting point of \$0 [in production tax value] shown on the graphs. For example, he said, no barrels of oil were produced this year in the \$0-\$40 range, which would be equivalent to the [federal] income tax of where no tax is paid on the first \$10,000, and the tax rate on the next \$10,000 would be at 15 percent, and so on. Under HB 110, the tax would be whatever it averages for the year rather than the month. He questioned whether the analogy to an income tax is appropriate because it seems to him that there would be no base amount of production that is taxed at 25 percent. For example, if the average [price] this year is \$82 [per barrel], the tax would be 48 percent for all of the oil, none would be at 30 percent. He asked whether he is correct in this calculation.

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ACTING COMMISSIONER BUTCHER responded that the first \$30 of profit per barrel would be taxed at 25 percent. In response to further questions from Co-Chair Seaton, he said that at \$50 of profit on the barrel, \$30 of the profit would be taxed at 25 percent and then the \$30-\$50 of profit would be taxed at the bill's proposed bracketed increases. He confirmed that the bill's effective tax rate would be much lower than it currently is under ACES (slide 35).

CO-CHAIR FEIGE offered his appreciation for the Department of Revenue's work on HB 110.

[HB 110 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 2:53 p.m.