

HOUSE FINANCE COMMITTEE  
March 24, 2011  
8:08 a.m.

8:08:07 AM

CALL TO ORDER

Co-Chair Stoltze called the House Finance Committee meeting to order at 8:08 a.m.

MEMBERS PRESENT

Representative Bill Stoltze, Co-Chair  
Representative Bill Thomas Jr., Co-Chair  
Representative Anna Fairclough, Vice-Chair  
Representative Mia Costello  
Representative Mike Doogan  
Representative Bryce Edgmon  
Representative Les Gara  
Representative David Guttenberg  
Representative Reggie Joule  
Representative Mark Neuman  
Representative Tammie Wilson

MEMBERS ABSENT

None

ALSO PRESENT

Dan Sullivan, Commissioner, Department of Natural Resources; Representative Mike Hawker; Kevin Banks, Director, Division of Oil and Gas, Department of Natural Resources; Bob Swenson, Director, Department of Natural Resources; Paul Decker, Manager, Division of Oil and Gas, Department of Natural Resources;; Representative Beth Kerttula, Minority Leader; Rick Harper, Energy of Business Consulting Associates; Bryan Butcher, Commissioner, Department of Revenue; Susan Pollard, Oil, Gas, and Mining Section, Department of Law; Representative Alan Austerman; Representative Mike Chenault; Representative Berta Gardner; Representative Mike Hawker; Representative Beth Kerttula. Senator Hollis French; Senator Cathy Giessel; Senator Thomas Wagoner; Senator Bill Wielechowski.

SUMMARY

HB 110 PRODUCTION TAX ON OIL AND GAS

HB 110 was HEARD and HELD in committee for further consideration.

#HB110

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."

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DAN SULLIVAN, COMMISSIONER, DEPARTMENT OF NATURAL RESOURCES, presented a PowerPoint presentation: "North Slope Alaska and Arctic OCS Oil and Gas Potential." He encouraged the committee to ask about the background of each presenter.

Commissioner Sullivan discussed slide 3: "Good News, Alaska Oil and Gas Resource Potential: 'World Class.'" He stated that 33 percent (40 billion barrels) of Alaska's undiscovered, technically recoverable oil resources was in the Arctic. He furthered that 13 percent (230 tcf) of Alaska's undiscovered, technically recoverable gas resources was in the Arctic. He furthered that the numbers did not include unconventional resources. He stressed that the resource potential of the Arctic was in "the backyard" of the largest petroleum consuming market in the world.

Commissioner Sullivan remarked that the focus of the Department of Resources was to work towards a comprehensive strategy. He stressed that the taps throughput decline issue was the main source of concern for the state. He

expressed concern with some oil companies' commitment to exploration in the state, should the taxes be lowered.

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Commissioner Sullivan stressed that the tax throughput decline was the most important current issue. He felt that the issue needed to be dealt with greater urgency. He remarked that the Department of Revenue (DOR) forecasts for the taps throughput were too optimistic. He felt the DOR incorporated assumptions and billions of dollars in investments that had not yet been anticipated in other departments.

Commissioner Sullivan stated that Alaska needed to get involved on the national level when it comes to oil and gas contribution and participation. He pointed out many large oil and gas companies had invested billions of dollars in the oil and gas production and exploration outside of Alaska. He stressed that Alaska is rarely mentioned in the plans of the oil and gas company investments. He stated that Shell Oil announced a \$100 billion four year capital spending program; British Petroleum (BP) publicly announced a \$10 billion deal in Russia, and \$10 billion deal in India; Conoco Philips was doubling spending to \$3 billion in the lower 48, while not increasing spending in Alaska; and Exxon Mobil has discussed doubling US production by 2020. He reiterated that Alaska was rarely mentioned in the spending plans of the oil companies.

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Co-Chair Stoltze wanted to be sure that when Commissioner Sullivan highlighted "his perspective", it was the perspective of the administration. Commissioner Sullivan said that it was the perspective of the administration.

Commissioner Sullivan stressed that Alaska had the greatest conventional and unconventional hydrocarbon resources in the world. He explained that Alaska was often seen as the world's greatest hydrocarbon basins. He stated that many see Alaska as economically challenged because of its harsh Arctic environment; high cost of exploration; remoteness; lack of infrastructure; transportation costs; strict environmental regulations; consistent environmental group lawsuits; permitting inefficiencies; federal government anti-development policies; litigation; and the perspective

that Alaska is one of the highest tax regimes in regard to upside prices. He stressed that tax reform should be a cornerstone to help address the cost to create an economically attractive environment.

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Commissioner Sullivan stated that some viewed Alaska's tax regime relatively uncompetitive. He felt that the high taxes turned a high-class hydrocarbon basin into a mediocre hydrocarbon basin. He pointed out that there was a comparative lack of activity in Alaska. He stressed that there needed to be a balance of the tax regime soon, to ensure long term prosperity. He felt that there was a sequencing of opportunity for the state: increased production in Legacy Fields; focus on smaller pools; and opening federal lands.

Commissioner Sullivan stressed that the governor did not put forward a tax reform bill to benefit the oil companies, but to benefit Alaskans in the long run. He explained that the purpose of the discussion was to present the expert view from DNR of the resource base.

Representative Guttenberg stated that some of the industry had remarked that Alaska was profitable, but not profitable enough. He wondered if because the industry took the leases, that the companies have an obligation to the state. Commissioner Sullivan stressed that there should be a partnership with industry, and looking for common ground. He stressed that the leases with the state had provisions within the contracts. He stressed that Alaska, as a lessor had a responsibility to be sure the lessee follows the terms of the contract. He was not sure that the lease terms required productions. He remarked that Alaska was looking for the additional billion dollar investment with many different providers. He stressed that the companies' global capital is spent throughout the world, and not much is used in Alaska. He remarked that there is a provision that could be added to a lease term that requires the companies to spend more money in Alaska.

Representative Doogan wondered if the major producers would let the pipeline go dry if the Alaska did not finance the producers. Commissioner Sullivan responded that he did not know what the industry would do. He remarked that the companies might stop supplying if the state tax structure

did not change. He stressed that the state of Alaska competes for global capital. He stressed that there was a global spending boom, with much economic growth.

Representative Doogan requested a clearer answer. Commissioner Sullivan declared that he did not know.

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Representative Costello wondered why assurance to develop was not given in writing when reducing taxes. She specifically referred to the cruise ship industry, and the recent re-writing of their taxes. She wondered why the state was unable to receive assurance, after the effort was made to change the tax environment. Commissioner Sullivan understood that concern. He remarked that there could have been anti-trust issues, and there were legal constraints on the independent providers. He stressed that the settlement contained a statement from the cruise ship industry to ensure that Alaska is recognized as a competitive entity in the tourism industry. He remarked that he believed the settlement was currently upheld.

Representative Costello wondered if there was a fundamental difference between the oil, tourism, and film industries. Co-Chair Stoltze further queried if each of those industries responded similarly to a better tax climate. Representative Costello further wondered what summation could be made at what was driving these industries. Commissioner Sullivan replied that the state had to be an attractive place to do business, which includes competition, production. He felt it would be nice to have assurances, but did not know if that would be easy.

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Representative Gara stressed that some companies had expressed that their lack of exploration did not have to do with ACES. He stated that Exxon had said that even with lower taxes, they would not drill an exploration well. He stated that Conoco Phillips' investment was flat. He felt that issues that Commissioner Sullivan had addressed had nothing to do with ACES. He said that some small companies requested credits be given after one year, rather than two. Commissioner Sullivan replied that he was trying to give a sense of how Alaska lined up with other investments in other parts of the world related to the oil industry. He

stressed that there was an overall issue of the cost of doing business in Alaska. He felt that the federal government put up many restrictions towards people and companies attempting to do business in Alaska. He stressed that Alaska had a world class hydrocarbon base, but the federal government could not allow drilling in Alaska.

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Representative Gara remarked that the restrictions mentioned by Commissioner Sullivan only dealt with the federal government, but the bill was about the restructuring of ACES. He also stated that investment had gone up four times the rate of inflation over the previous three years: from 4.7 billion to 5.1 billion to 5.5 billion. He requested that Commissioner Sullivan converse with each oil company representative, and tell them that if they believe the tax rate is too high-reduce their royalty. He stressed that the companies should prove that the tax structure was too high. Commissioner Sullivan replied that he was using that proposal, and it sometimes worked. He stressed that there were some statutory restrictions pertaining to obtaining royalty relief, but it was important to continue to talk to the oil companies. He reiterated that every mechanism needed to be used in order to ensure a prosperous future.

Vice-chair Fairclough wondered if there was proof that the producers had moved the capital expenditure off of state property because of ACES. Commissioner Sullivan did not know.

Vice-chair Fairclough requested an answer.

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Representative Neuman requested a list of five policy issues that should be changed in DNR to ensure that Alaska is more economically attractive. Commissioner Sullivan stated that there was an issue of permitting backlog, so there was a request for further funding to relieve that issue. He hoped that regulatory and statutory ideas would be presented in the next legislative session. He stressed that there were about 75 different steps that one needs to take when getting a permit to drill.

Representative Neuman requested information regarding the impact of lack of Trans-Alaska Pipeline (TAPS) throughput. Commissioner Sullivan replied that the pipeline coordinators would be more knowledgeable. He stated that when he was in Anchorage just after the most recent pipeline shutdown, he was struck that every minute with no oil in the pipeline was incredibly important.

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Representative Wilson asked questions, and did not mind if the answers would be provided later. She wondered what leases had been provided, she wondered how many of the leases were oil companies, how many may have left because of backlog, and she wondered what the audits were in the Department of Natural Resources.

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Representative Edgmon appreciated the Commissioner's view that the issue was about the welfare of Alaskans, not the benefit of oil companies. He wondered what the Commissioner's perspective was on how ACES had impacted the global marketplace investment climate in Alaska. Commissioner Sullivan replied that there were many factors of why there was a boom in energy production in 2010. He stressed that there was an issue of a combination of high prices, turmoil in oil producing regions, and strong global economic growth. He stressed that high prices hurt Alaskans but high prices, from the state's perspective, were an opportunity to collect more taxes. He emphasized that there were many factors that contributed to cost component and investment decisions that the global and small energy companies made. He stated that taxes were one of those factors, but not the only factor. He felt that the state should be focusing on being competitive on the global level. Alaska was competing for global capital, and Alaska should be part of that competition.

Representative Guttenberg pointed out that the committee had only heard from the industry up until this day. He asked about Point Thompson. He was interested in the main argument about capital related to the project. After 22 years of development plans the lease had been pulled and litigation had ensued. Commissioner Sullivan responded that Exxon had been doing quite a bit up at Point Thompson and had been spending a lot as well. The state was cautiously

optimistic that the issue would be settled soon. Working on common interests was important. He was reluctant to characterize exactly what had happened in the litigation as he had not been directly involved, it was the largest gas field in the world and hopefully they could work together to bring the gas to market.

Representative Guttenberg queried marketability and capital in Point Thompson. Commissioner Sullivan agreed to provide that information.

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REPRESENTATIVE MIKE HAWKER noted a universal agreement of the challenge of production decline. He stated that there were many things that could not be fixed, and perhaps there were issues with things that were out of control. He wondered what the main solution would be to the oil production decline problem. Commissioner Sullivan replied that the point of his testimony was intended to provide discussion. He stated that there were many direct and indirect solutions. He stated that there is not necessarily an obvious solution, but it was important for Alaska to be a more economically competitive state.

Co-Chair Stoltze stated that he would like to see Commissioner Sullivan again in the week.

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KEVIN BANKS, DIRECTOR, DIVISION OF OIL AND GAS, DEPARTMENT OF NATURAL RESOURCES presented the PowerPoint presentation: "Northern Alaska and Arctic OCS Resource Estimates" (copy on file). He discussed his experience.

Mr. Banks discussed slide 2, and the lines of data: land capital, regulations, exploration, and production. These lines were what the industry looked at when determining the profitability of a specific area.

Mr. Banks displayed slide 3, and pointed out the active units, and potential for exploration on the North Slope. He stated that most of the units were on state lands.

Representative Guttenberg wondered if the northern-most line represented the barrier between state lands and the Outer Continental Shelf (OCS). Mr. Banks affirmed that the

line indicated OCS, which contained the three mile state limit for resource development.

Representative Guttenberg wondered how far the OCS shelf extended. Mr. Banks replied that the shelf extended for approximately 100 miles.

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Mr. Banks discussed slide 4: "North Slope 'Reserves' Estimates, Developed or Delineated." He stressed that the total North Slope Oil estimate was 5166 Million Barrels of Oil (MMBO) and the gas reserves was estimated at 34,827 Billion Cubic Feet (BCF). He stated that all of the fields on the list had been producing oil, or would soon begin to produce oil. He pointed out that Prudhoe Bay held 2,450 MMBO, and stressed that the resources in any area would follow a regular pattern. He pointed out that there were very few large prospects, but many very small prospects. He reiterated that Prudhoe Bay held the largest oil and gas reserve in North America.

Mr. Banks presented slide 5: "North Slope and Arctic OCS, Discovered and Undeveloped Resource Estimates." He stated that there were some other recently discovered prospects. The numbers and locations on the chart illustrated ranges. He looked at Umiat, and stated that it could have between 70 and 300 MMBO. He stated that Gubik could have 600 BCF of gas. He pointed out that the challenge was determining what percentage of the resource could be recovered.

Co-Chair Thomas wondered who had found the prospects. Mr. Banks replied that they were discovered by different groups and people. He believed that Umiat had been discovered by the Navy; Gubik was developed by Anadarko Petroleum Corporation; Sivilliq was developed by Atlantic Richfield Company (ARCO), and Shell is looking to take over; North Tarn was developed by Brooks Range; Kulim was developed by ARCO; Sandpiper may have been developed by Standard Oil of Ohio (SOHIO); and FEX NPRA was a series of wells that were drilled by FEX Talisman Energy.

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Representative Doogan wondered if there was no Exxon exploration and development pertaining to those areas. Mr.

Banks replied that Exxon was given credit for prospects around Nikaitchuq and Oooguruk.

Mr. Banks displayed slide 6: "Other North Slope and Arctic OCS, Undeveloped Resource Estimates." He stated that the two most important prospects were Ugnu and Burger. He stated that Ugnu had up to 20 billion barrels of heavy oil, and British Petroleum (BP) estimated that roughly 10 percent could be recoverable: 2 billion barrels. He explained that Burger had 31 million to 1.7 billion barrels of condensate, and 8 to 27 TCF of natural gas.

Co-Chair Thomas queried the definition of "heavy oil." Mr. Banks replied that heavy oil was measured by its gravity related to water. He stressed that it was a difficult oil to produce. It is very cold and viscous, had to be held in shallow reservoirs, and did not hold easily in the reservoir. The products that one could derive from heavy oil are limited.

Co-Chair Thomas requested more information about what would be considered a shallow reservoir. He replied that shallow would be between 3000 to 5000 feet.

Representative Neuman wondered what it would take to spur development. Mr. Banks replied that the real challenge was technology. Technology translates to high costs. He stressed there should be encouragement from the government to undertake production.

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Representative Neuman wondered what the chance to acquire the undeveloped resources. Mr. Banks replied that there was some development of heavy oil prospects. He stated that BP was beginning to work on developing heavy oil, but stressed that technology needed to move forward for continued development success. He reiterated that most of the technology was experimental, so it was difficult to predict how quickly development would progress.

Representative Neuman remarked that there was a potential to change tax structures and policies, so he wanted to know if it would get done because of changes.

BOB SWENSON, DIRECTOR, DEPARTMENT OF NATURAL RESOURCES, presented the "Arctic Alaska Conventional Oil and Gas

Exploration Potential" (copy on file). He remarked that there was a broad range of possibilities for exploration and development. He stated that the red dots on the map represented exploration wells on the North Slope. He pointed out that most of the exploration was in the Prudhoe Bay region. He discussed "maturity of expiration." He stressed the distance and vastness of the space between Burger and Prudhoe Bay covered the same distance across as the entire state of Wyoming. He stated that the area of exploration covered approximately 150,000 square miles, and there were about 500 exploration wells in that space.

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Mr. Swenson looked at slide 2: "Global Conventional Oil Resources." He explained that the slide displayed work from the United States Geological Survey (USGS), and it displayed estimates of undiscovered technical recoverable reserves. The map did not display economic filters. He stressed that the larger green dots represented areas that had potential greater than 20 billion barrels of oil. He stressed that the map displayed estimates from the year 2000. He said that new numbers should be released in the next couple of years. He pointed out that Alaska did fit into a world class province, and did not include the recent assessment by the USGS on the circum-Arctic.

Mr. Swenson discussed slide 3: "Arctic Alaska Province - 30BB." He explained that the map displayed was a view of the North Pole, and a study by the USGS and DNR on resource assessments of all the circum-Arctic basins of oil. He noted that the darker green portions represented greater than 10 billion barrels of oil (BB), and were only in the Alaskan province. He stressed that there was a significant amount of data in Arctic Alaska to help constrain the resource assessments.

Mr. Swenson displayed slide 4: "CARA Gas Provinces." He pointed out that the gas prospects were very similar to oil prospects. He reiterated that Arctic Alaska held greater than 100 trillion cubic feet of technically recoverable resource.

Mr. Swenson presented slide 5: "North Slope Regional Geology." He stressed the importance of understanding the contributing factors in determining the technically recoverable resource estimates. He explained that the slide

showed a regional map of the North Slope, which showed the Brooks Range in light blue, and the lighter green color displayed the Colville Basin. He stated that the main focus of resource development was in the Colville Basin. He explained that the map was surface geological, but the resources lie in the sub-surface. Although, without the understanding of the distribution and history of the rocks across the slope, recoverable resource estimates are impossible.

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Mr. Swenson discussed slide 6: "Simplified and Generalized Regional Cross-section." He explained that the chart showed the sub-surface of the earth, from the Brooks Range to the Beaufort Sea area. He stressed that the thrust material near the Brooks Range had very high temperatures. The Colville Basin was represented in green, and it was made up of cretaceous and tertiary rocks. The arch in the middle of the diagram represented Prudhoe Bay. It was known as a barrel rock, and the migration of the hotter oil to move upward was located in Prudhoe Bay.

Mr. Swenson displayed slide 7: "Brooks Range Geologic Mapping." He stated that one of the key aspects of resource development assessments was the geological mapping. He stressed the importance of understanding the distribution and history of the rocks in relation to the petroleum systems. He explained that the highlighted sections were areas that had relatively detailed geologic mapping.

Mr. Swenson presented slide 8: "Geologic Mapping." This was an example of one of the published maps that was produced. He showed a cross-section that represented the history of rocks were through the last million years, and detailed descriptions of the rock packages-including the important source-rocks.

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Mr. Swenson discussed slide 9: "Topical Petroleum-related Studies." He stated that reservoir studies were also important, when determining the possible extraction of a conventional resource. He stressed that a key aspect of the Colville Basin was the quality of the reservoir. He pointed out that depositional sequence of the rocks was imperative, when determining extrapolating data.

Mr. Swenson displayed slide 10: "Revising and Codifying Stratigraphic Nomenclature." He stated that the earlier stratigraphic column displayed the age and type of rock across the North Slope.

Mr. Swenson presented slide 11: "Merging Surface and Subsurface Data." He stated that it was important to take all of the information and fit it into the context basin. He showed a cross-section from Umiat to Prudhoe Bay. He explained that the findings were put into the well-control in the exploration wells, and determine an understanding of the phases. He stated that the diagram displayed the location of the expected reservoirs.

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Mr. Swenson discussed slide 12: "Foothills Structural Plays Seismic Interpretation." He stated that the chart displayed a seismic line from the Brooks Range to just south of Prudhoe Bay. He stated that there was also a consideration for how the petroleum system operates in the earth.

Mr. Swenson presented slide 13: "USGS Assessment Methodology--Geologic Basis." He explained that after all the data is gathered, the USGS looks at each region, and conducts an analysis of what would be expected petroleum and reservoir system accumulations.

Mr. Swenson displayed slide 14: "Undiscovered Mean field Size Distributions-USGS." He stated that after the analysis, field-size distribution is determined. He reiterated that there were many small fields. After the field-size is determined, the USGS needs to determine the extrapolating capability of the field.

Mr. Swenson presented slide 15: "USGS Potential for Undiscovered Petroleum in Arctic Alaska." This slide was the USGS publication of the technically recoverable resources for the North Slope region: Chukchi Shelf, Beaufort Shelf, NPRA, ANWR, and Central North Slope. He noted that the numbers were determined by a logarithmic distribution, based on the mean of the commonly occurring field sizes. He explained that the numbers in the parenthesis represented the broad distribution. He stressed that if the range was very narrow in the distribution, the amount of information was very good.

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Mr. Swenson discussed slide 16: "'Unconventional' Gas Resources (continuous resources)." He stated that there was a fair amount of activity of gas hydrates on the North Slope. He furthered that the USGS estimated that there was about 83 trillion cubic feet of potentially technically recoverable resources in the Prudhoe Bay and Tarn regions. He pointed out that gas hydrates occur across the entire North Slope. He stated that there were no estimates for shale gas, or "over-pressured, basin-centered gas", but felt the number would be very large. He pointed out that the shale gas in the deeper parts of the Coalbed region would be predominant. He explained that the coal in the Coalbed region was one of the largest accumulations in North America, and produced methane gas.

Representative Wilson wondered if there was a comparison between estimates and actual production. Mr. Swenson replied that the analysis considers the original oil and place numbers were, and remarked that the estimates were continually evolving.

Representative Wilson wondered if a returned lease was ever questioned. Mr. Swenson replied that there were discussions with companies over a returned lease. He added that lease returns hardly ever occurred.

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Representative Gara remarked that oil jumped from \$20/barrel in 2004 to \$40/barrel in 2006, which was considered a high price at the time. He remarked that even with the high price of oil, the fields were not being developed at that time. Mr. Swenson replied that there was a significant change in the technology that perhaps contributed to the change and development of exploration.

Representative Gara noted that some of the formations were modest in size, and wondered if that contributed to the restrictions. He wondered if building processing facilities might enhance development. He suggested a credit to build processing facilities for modest-sized fields. Mr. Swenson affirmed that access to processing facilities was a concern. He noted that the Prudhoe Bay field was almost an anomaly in nature, because it is so enormous.

PAUL DECKER, MANAGER, DIVISION OF OIL AND GAS, DEPARTMENT OF NATURAL RESOURCES presented a PowerPoint Presentation: "Source-Reservoired Oil Resources Alaskan North Slope." He spoke to the possibility of producing oil directly from the source rocks on the North Slope.

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Mr. Decker discussed slide 2: "Unconventional Resources." He distinguished unconventional and conventional resources. He stated that conventional resources were produced for several decades on the North Slope: discrete accumulations of oil or gas that had migrated into a trap by buoyancies. Unconventional resources represented much more continuous accumulations, and held a lower geologic risk, but a higher engineering risk because there was no certainty that the rocks would be commercially viable. He stressed that there needed to be good success with massive engineering stimulations of the reservoirs.

Mr. Decker presented slide 3: "Unconventional Terminology." He stated that when the various phrases were used, they may pinpoint a technology component that needed to happen with the rock stimulations. He stressed that the three components: source, reservoir, were the key to producing any conventional or unconventional resource.

Mr. Decker displayed slide 4: "North Slope Region." He stated that the state lands and waters were in the central portion of the map, and they were flanked by federal lands and waters. He explained that state lands had seen much exploration and development. During the most recent lease sale, Great Bear Petroleum announced that they would try to produce oil from the source rocks.

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Mr. Decker discussed slide 5: "North Slope Petroleum Systems." He stated that the stratigraphic column simplified the geology to the layer cakes. He pointed to the red-outlined boxes, which represented three main source-rock intervals.

Mr. Decker presented slide 6: "Central North Slope Seismic Transect." He stated that the east-west seismic line highlighted the Shublik and Kingak seismic line, and the

GRZ and Hu Shale line. He explained that the rocks that prospective oil producing rocks were approximately 8,000 to 13,000 feet deep. He stressed that the permafrost could reach depths of up to 2000 feet, and just under the permafrost were fresh water aquifers that needed to be protected from injection or fracking operations.

Mr. Decker displayed slide 7: "Key Geologic Factors--Shale Resource Plays." He explained that there were many factors that governed the prospectivity and productivity of shale resource place. Some included organic geochemistry; thermal and tectonic history, petrophysics; and geomechanics.

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Mr. Decker discussed slide 8: "Close Well Spacing, Many Pads." He stated that close well spacing was infrastructure intensive. The slide was from the North Dakota Industrial Commission, and it displayed the Williston Basin. He pointed out the seven mile dirt road with fourteen 5-acre drill sites. The intent was to drill one well from each surface locations. The drill went straight down two miles, and horizontal for two miles. He stated that the site conducted multiple stages of fracturing to open as much of the formation as possible. The intent was for most efficient drainage pattern possible.

Representative Neuman pointed out that the state was considering assisting in road construction to help develop oil and gas. He felt that there would be many shared services that would be used, and the connecting road would help in reducing costs. Mr. Decker replied that there was no road to resources development would being considered in shale oil development.

Representative Neuman stressed that if the state helped cover the cost of the roads, it would help the state in the long run because it keeps development at low costs over the long haul. Mr. Decker replied that additional roads to resources would spur exploration. He reiterated that none of the proposed roads to resources concerned unconventional resources.

Representative Neuman stressed that he was looking at the cost of permitting. He pointed out that the shared services would reduce costs to the state and increase opportunities to the development because of credits on exploration wells.

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Mr. Decker presented slide 9: "Close Well Spacing, Many Pads-Infrastructure-Intensive Development." The map showed the sub-surface horizontal wells that would be developed two adjacent parts of the Bakken Shale. He stated that there were two different lease holdings represented, and showed a different approach but systematic plan. After a general well-plan was set up, a well was drilled one after the other at the proper distance and length from one another. He stated that the determination of how many acres per well could be drained varied from source rock play to another.

Mr. Decker displayed slide 10: "Frac FAQs." He explained how fracking worked: "Fluid is pumped into an isolated part of the borehole under increasing pressure. When the fluid pressure exceeds the rock strength, the formation fractures and the sand-rich fluid shoots out into the growing cracks. The sand props the fractures open after the frac fluid flows back into the wellbore. Frac jobs for horizontal producers in L48 shale plays consume 1 to 5.5 million gallons of water per well, depending on rock properties, number of stages pumped, etc. Contamination of fresh water aquifers with hydrocarbons and/or frac fluids can occur where the hydrocarbon target and aquifer are not sufficiently separated. This should be avoidable.

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Mr. Decker discussed slide 11: "Frac Jobs." He explained that there was a technique called micro seismic monitoring that monitoring fracking, and microscopic earthquakes. He stated that the map displayed a well drilled for shale gas play. He stated that each diamond represented a different stage in a fracking job.

Mr. Decker displayed slide 12: "Single well flow rate over time." He explained that flow rates drop quickly early on, and then decline at a steady pace for years. He suggested that wells could remain in production for as long as one can afford to operate them.

Mr. Decker presented slide 14: "Texas Analogue." The slide was of the Eagle Ford shale play in southeast Texas. He

stated that a critical component of the shale play was that the rocks were brittle, with 70 percent calcite.

Mr. Decker discussed slide 15: "North Dakota Analogue." He stated that the light blue represented the Bakken Formation presence, and the dark blue represented the thermally mature Bakken source rock. The large darker green dots reflect the higher producing wells. He also stated that there were other producing wells, because North Dakota was a much lower cost operating environment.

Mr. Decker displayed slide 16: "Bakken Well Economics and Production." He stated that wells in North Dakota were three to four times less to operate and develop.

Mr. Decker presented slide 17: "Shublik Formation." He explained that there were some variable lithologies

Mr. Decker discussed slide 18: "Shublik Formation." The Shublik Formation was the main formation that Great Bear Petroleum was interested in. He stated that sub-zones of the formations could be mapped out and carried with a high degree of predictability.

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Mr. Decker discussed slide 19: "Lower Kingak Formation." The slide displayed a screening technique that was seen between the well logs from 175 feet to 550 feet thick.

Mr. Decker displayed slide 20: "Hue Shale/GRZ." The diagram showed a correlation for the Hue and GRZ zones.

Mr. Decker presented slide 21: "Shublik and Lower Kingak Formations" and slide 22: "Hue Shale/GRZ." The maps displayed the distribution of the thermal maturity zones. The rocks needed to be thermally mature to generate and produce oil and gas.

Mr. Decker presented slide 23: "Comparison." He pointed out that Eagle Ford in Texas was a good analog for the Shublik Formation.

Mr. Decker displayed slide 24: "Summary." He reiterated that there were many variables that impact productivity of source-reservoired oil and gas: organic geochemistry; thermal and tectonic history; petrophysics; geomechanics;

and drilling and completion practices. He explained that the development of North Slope shale oil would likely depend on successful exploration drilling, and data gathering to establish geological favorability; successful production pilot projects; lowering drilling and operating costs; all-season roads for year-round surface access to new areas; more hydraulic frac crews; sufficient water supplies for frac make-up fluid; and factual understanding and operator transparency regarding frac practices.

Representative Guttenberg referred to thermal maturity. He wondered if there was an expectation of acreage going out west, if Great Bear was successful. Mr. Decker replied that the state lands would be the first places to explore.

Co-Chair Thomas wondered if Great Bear was planning to move forward with the current tax structure. Mr. Decker understood that they would move forward with the current tax structure.

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Representative Neuman stated that fracking had occurred on the slope for many years, and he wondered the difference between types of fracking. Mr. Decker explained the some of the conventional plays used staged fracs, where there was isolation of various parts of the wellbore. In the current fracking intent, there was an effort to be more aggressive with the tight rocks. He stressed that without the fractures, the conduits through which the hydrocarbon molecules could flow were only slightly bigger than the molecules themselves. The basic difference is the size of the frac, as well as the aggression.

Vice-chair Fairclough clarified that Great Bear was happy to accept the exploration credits, but were in support of a modification of ACES. She queried the time frame to permit the leasing for Great Bear. Mr. Banks replied that average awarding of leases took about six months.

Vice-chair Fairclough wondered when the streamlining took place. Mr. Banks responded that the change took place 11 years prior.

Vice-chair Fairclough wondered when the drilling would begin for Great Bear. Mr. Banks replied that the drilling

season would not begin until the next winter at the earliest.

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Vice-chair Fairclough expressed appreciation for Great Bear exploring Alaska.

Co-Chair Thomas remarked that Great Bear had years of planning with the current royalty rate change.

Representative Wilson remarked that the Division of Mining was still a part of DNR. Mr. Banks affirmed.

Representative Wilson wondered if the reason Great Bear could not begin drilling was because of year-long state regulations. Mr. Banks stated that she was not correct. The lease award process was clear to most who were bidding. He believed that Great Bear understood that they could not begin drilling until late fall 2011.

Representative Wilson was trying to figure out why there was such pressure because of permitting. She stated that the administration was putting pressure on the legislature to pass HB 110, but the permitting and other processes did not allow that.

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Mr. Banks presented the PowerPoint Presentation: "Royalty Modification" (copy on file). He stated that in 1995, the legislature modified AS 38.05.180 (j) and created a new opportunity for DNR.

Mr. Banks displayed slide 2: "Royalty Modification, AS 38.05.180(j)." He explained that the statute allowed for the commissioner to modify royalty to allow for production from a field or pool that was not in production, producing, or shut-in.

Mr. Banks presented slide 4: "Royalty Modification, AS 38.05.180(j)." He stated that the commissioner may not approve unless he determines that lessee makes a clear and convincing showing that relief is in the best interest of the state except for royalty modification, because development would not proceed. Royalty modification was applied only to the point where the investor was inclined

to develop, nothing more. He explained that DNR may hire an independent contractor at the applicant's expense, for up to \$150,000 per application. He stated that the relief mechanism must adjust percentage based on price and may also adjust based on production rate and ultimate recovery. He announced that between issuing the preliminary and the final findings, DNR must offer to appear before LB&A to explain the preliminary finding.

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Mr. Banks discussed slide 5: "Royalty Modification Applications." He explained the February 1995 BP application for Milne Point. It was an application explicitly made only to comply with BP's contract with OXY. He stated that BP called the application formality, and did not intend to push it. He explained that in 1997, Unocal applied for 10 platforms in Cook Inlet, but did not continue to pursue the application. He stated that in 1999, ConocoPhillips applied for Tyonek Deep in Cook Inlet, but withdrew the application.

Mr. Banks displayed slide 6: "Royalty Modification Applications." He explained that in 2005, the Pioneer Natural Resources application for leases was in and near the Oooguruk Unit, with the approval effective February 2,

2006. He stated that the Kerr-McGee application for leases

in the Nikaitchuq and Tuvaq units was denied on October 31, 2006. He explained that the ENI application for leases in the Nikaitchuq Unit was approved with conditions effective January 30, 2008. He furthered that there was a 2007 Chevron application for leases in the Ivan River and Stump Lake units, but Chevron withdrew the application.

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Mr. Banks continued with the Appendix, and slide 8: "Oooguruk Unit." He explained that the Pioneer Natural Resources application for the existing Oooguruk Unit and adjacent leases was applied May 20, 2005; and the amended application was filed November 1, 2005, with approval effective February 2, 2006. He explained that the royalty modification mechanism was based on payout on one net-

profit share lease was centrally located over two reservoirs.

Representative Edgmon wondered if the Department of Revenue had any role in the decision making process and royalty modifications. Mr. Banks replied that there was an indirect role of DOR. He stressed that there were some auditing records that were required in the application process. He stated that often DOR would produce a price forecast that was generally part of the application.

Representative Edgmon surmised that the tax regimes provided a better mechanism to receive information on the tax structure. Mr. Banks replied that the mechanism was there. It provided DOR a way to audit the costs and activity associated with Oooguruk. The question related to the kind of data that was available to the department.

Representative Hawker wondered why Alaska would want to pursue royalty relief when every time royalties were reduced, money was taken directly out of the Alaska Permanent Fund. He thought it was odd to take money away from Alaskans. Mr. Banks responded that the state needed to exercise all of the levers it had. Royalty relief offered more incentive for development, and it provided an opportunity to be very surgical about the incentive. The tax system had to apply to everyone.

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Representative Hawker stated that royalties were contractual and the department had the ability to adjust them as needed. He stated that there were many steps to achieve royalty relief, and was not desired by the legislature. He stressed that the peoples' entitlement to the resource wealth was not sacrificed "glibly." He pointed out slide 9: "Nikaitchuq (Kerr-McGee)" and slide 10: "Nikaitchuq (Eni)." He wondered if the date was ACES special session and wondered if the economics had changed because of the application approval. Mr. Banks replied and stressed that the significant impact was the cost.

Representative Hawker clarified that the tax regime was not taken into consideration in granting royalty relief. Mr. Banks replied that ACES was considered in the analysis of the application.

Representative Hawker looked at a take-away of the consequences of what he saw as ACES having no causal affect granting in the royalty relief. Mr. Banks stressed that the prospect was modeled with ACES as the tax regime.

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Representative Hawker stressed that the ACES tax legislation increased taxes.

Representative Gara stated that royalty relief could not be granted if the field were economic. He felt that royalty relief was granted under circumstances that produced no royalty. Mr. Banks affirmed, but clarified that royalty relief was limited to three instances when royalty relief could be applied.

Representative Gara noted four applications denied and two granted, and wondered if the taxes were not a deterrent if there were no royalty relief applications. Mr. Banks replied that many new projects had not moved forward in a short period of time. He stated it was a difficult question to answer. He stressed that the discretion was placed on the commissioner.

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Representative Hawker looked at the issue of royalty relief. He questioned whether the fields would have been developed, if they were not granted royalty relief. He felt that royalty relief was an unnecessary sacrifice of the Permanent Fund.

Representative Wilson wondered if there was relief interior Alaska for heating oil and gasoline question. Mr. Banks replied that it was unconstitutional to offer royalty in-kind for a value that was less than what the state receives as royalty when paid by the lessees. He stated that there was some discussion in changing the price of oil paid for by Flint Hills, and it was determined that Flint Hills should go through the same analysis a lessee's royalty relief. Flint Hills turned over information about their refinery, and there was an analysis of the validity of the request. He concluded that there could not be an offer of relief for less than what was collected as royalty and value; and if there was a discussion about changing that conclusion, it would require a thorough analysis.

Representative Wilson stressed that there was a region holding financial stress of making money for the state, and burdening the residents. Mr. Banks appreciated the conversation.

Vice-chair Fairclough felt that Fairbanks could make a case that they were paying the same price for the transportation on a barrel of oil that reaches Valdez.

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Representative Costello wondered if the royalty relief was contractual through the life of the lease. Mr. Banks affirmed, and clarified that it was a matter of changing the terms of the lease. He stated that it was a contractual agreement.

Representative Costello remarked that royalty relief was not the resolution for the state. She wondered if pursuing royalty relief made a difference in progressivity. Mr. Banks replied that the analysis incorporated the tax system, and stated that the price might be different now than what it was years ago when the analysis was developed. He stated progressivity was an issue.

Representative Costello remarked that she was surprised that rates could be negotiated. She wondered if the point of royalty relief was to bring it down a couple of percentage points. Mr. Banks stated that anywhere between 12 and 5 percent was the minimum and based on a sliding scale. He stressed that awarding royalties required care when determining royalty relief.

Representative Costello wondered if there was a value of Alaskans in the Permanent Fund versus the value assigned if not put in the Permanent Fund. Mr. Banks replied that there was a concern about whether the royalty modification would be affected. He stressed maintaining as much of the reserve and Permanent Fund as possible. He stated that royalty relief was not awarded when there was no difference in investment.

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Vice-chair Fairclough queried the definition of economic feasibility.

Representative Neuman liked the royalty relief option, because it was the only flexibility that DNR had to work with a producer to bring a field online. He wondered if there was an ability to change the royalty share. Mr. Banks replied that royalty relief was the only financial mechanism available to DNR after the lease was issued. There were financial opportunities that could be exercised when the leases were offered, that could create incentives for rapid development.

Representative Neuman stated that royalty was the mechanism that was given to DNR and the legislature to help bring a field online. Mr. Banks agreed with Representative Neuman.

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Representative Doogan stressed that there was an indirect way to measure the royalty relief of ten million in the permanent fund. He wanted to know what the term "granularity of the information" meant. Mr. Banks stated that tax returns were filed with regulations that required company wide information. He stated that there was not much information about costs related to road-building facilities, building costs, drilling costs, etc. He stated that the DOR would get to those numbers when auditing tax returns. He stated that DNR had access to tax filing information, but it was difficult to determine royalty relief.

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REPRESENTATIVE BETH KERTTULA, MINORITY LEADER, introduced Mr. Rick Harper. She discussed that he was a person who could break down complex ideas into information that was easy for people to understand. He was present to provide his independent review of HB 110.

RICK HARPER, ENERGY OF BUSINESS CONSULTING ASSOCIATES, provided a PowerPoint presentation titled "An Independent View of HB 110" dated March 24, 2011 (copy on file). He discussed his background, which included PPT and ACES. He had worked at ARCO Gas for a long period of time. He hoped

to help with the committee's understanding of the bill. He had been in the oil and gas industry for over 38 years. He had involvement in international exposure and was involved with ARCO for over 15 years. After leaving ARCO he remained as an independent consultant for 10 years.

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Mr. Harper had advised New Mexico, Oregon, Texas, and Alaska. He looked at the view from the perspective of how the industry would act or behave with the passage of HB 110. He referred to page 3 of the presentation. He did not believe that the industry had made their case at that time that a tax rollback of the scale in the governor's bill would be offset by production gains. He had seen the debate steered by industry in the direction of competitiveness for the state on an on-going basis. He did not believe that was the appropriate way to go about things. He believed that the bill disproportionately benefited existing production. He believed that the industry's response to the bill suggested that the state's goals would not be met and that there were alternatives to HB 110.

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Mr. Harper continued to discuss page 7: "What is the alignment with industry?" He recommended that the committee consider the premise of a study given that if the fundamental premise of a study was flawed that it was not valuable. He believed that what the committee had not heard was more important than what they had heard. He discussed page 10 "Authorizations for Expenditure." He remarked that there would not be a fiscal comparison placed before decision makers. He discussed the net present value calculation. The "expected case" included decisions to invest in capital the focus was always on the down-side. There would be a downside on resources, taxation, etc. In the end the approval was based on the expected case.

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Representative Hawker referred to page 10 and Mr. Harper's opinion that most proposals use an expected oil price in the 60 to 70 range, and wondered if there was evidence to demonstrate that opinion. Mr. Harper did not know what the companies were using because of confidentiality. He stated that his professional opinion was that it was in the 60 to

70 range. He suggested that Representative Hawker ask the industry directly.

Representative Hawker remarked that he did not believe that anyone had asked the industry the particular question. He felt that the industry was not denying those requests. Mr. Harper replied that he appreciated the comment and that he would want to see the hard document before moving forward with a decision. He believed it would be a critical element that he would want to see. He would not want to get away from the upside of high oil prices. He would want to know what the industry was basing their decisions on.

Representative Hawker referred to page 10 related to fiscal and non-fiscal issues. He stressed that there was a suite of considerations that the industry takes when making determinations. He thought that the slide represented an over-simplification of the issue. Mr. Harper responded that he was correct. When it came time to make a decision in a company the decision makers were not shown all of the details capital requests were streamlined.

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Mr. Harper discussed page 11 "What Issues are considered?" He referred to testimony from Ken Thompson and the term "prospectivity." He believed that prospectivity was by far the main driver in any economic decision to evaluate whether to go forward. The oil industry was very concerned about protecting the downside, better protection on the downside was important. He moved on to page 12 that continued to discuss what issues were considered. He explained that timing, permits, and technical issues were important and the effective tax rate was the rate that ruled the day. The bottom line was that the effective tax rate based on the effective case was the most important and primary driver.

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Mr. Harper discussed page 13. He was concerned about the debate related to Alaska's competitiveness. Each capital investment stood individually, and he stressed that Alaska was not competing against the rest of the world. Capital was not limited at all; however, it may be limited in an individual company. The energy sector was by far the best performing sector, along with commodity producers. He felt

that if a project was expected to generate a substantial rate of return, it would attract the capital that was needed.

Representative Hawker did not believe that the statement was true about competition against the rest of the world. He wondered how it was that everyone else was saying something different and why did Mr. Harper believe that Alaska was not competitive with the rest of the world. Mr. Harper responded that he had not had the same experience. He discussed his experience in working with oil companies in the past. Companies were entitled to do what they wanted to do; however, they had a legal obligation to develop the lease that they took from a lessor. In a broad sense, he did not believe that capital constraints were an issue for development in Alaska.

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Representative Hawker did not understand the concept that capital was unlimited. Mr. Harper did not agree. A company would have the obligation to move forward on a lease as long as there was an expectation of profit. The company had an obligation to make the investment on the leased land, as long as there was a reasonable expectation of a prudent officer standard.

Representative Hawker discussed Mr. Harper's statements about capital. He believed competition was absolutely inherent in where a company would spend capital. Mr. Harper responded that capital was not unlimited; however, a solid rate of return would attract capital. When he had worked for an oil company their mantra was that if they could make a project happen they would.

Representative Gara relayed that the committee had heard from the Department of Revenue about the Frasier survey. The survey discussed that there was a page that ranked tax systems around the world. He explained that it was determined that Alaska was viewed either favorably or not as a deterrent to investment by 75 percent of the companies that were surveyed. He wondered whether Mr. Harper was familiar with the report. Mr. Harper was familiar with the report. He felt that each project and each field bore stand-alone economics.

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Representative Gara discussed companies that were investing in Libya and Venezuela. Alaska had never nationalized a company and he wondered whether that played into how attractive investment in the state was. Mr. Harper replied that oil executive committees always discuss that issue. He pointed out that Alaska would rank at the top in that discussion.

Representative Costello wondered if capital was infinite. Mr. Harper responded that capital was not truly infinite; however, capital was present. He was involved in venture capital and remarked that money was moving towards industry.

Representative Costello surmised that if a project was profitable, it would be developed. Mr. Harper agreed.

Representative Costello wondered how he would explain a project that became unprofitable in the middle of development. Mr. Harper responded that many projects became unprofitable during progress.

Representative Costello ascertained that Mr. Harper was saying there was risk for the company when industry went out looking for oil. Mr. Harper answered in the affirmative. The bill seemed to provide a great deal of benefit to existing production and did not seem to advance the state in the exploration and development area.

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Representative Costello she discussed that the fiscal note that was included in the bill did not read \$2 billion per year and that the \$2 billion was included in a multiple year projection. She discussed that the industry was taking a high risk and that the state was providing incentive to invest in Alaska. She discussed that there was a production problem; she referred to previous testimony that reported to the committee that the pipeline was in danger of shutting down.

Representative Hawker discussed Repsol, and that they would take advantage of the extremely competitive front-end system. Repsol had announced that they would invest a significant amount in exploration and the company was not capital constrained; however, they needed some relief on

the upside. He felt they were case point that was contrary to Mr. Harper's presentation. Mr. Harper replied that the comment on page 13 regarding a "zero sum" game was in a different context. He pointed out that it was not about drilling in either North Dakota or Alaska, because they were both going to be drilled. He stressed that within those states, which prospects had a reasonable expectation of profitability. He recommended that the companies present the hard analysis, when convincing the legislature.

Representative Wilson understood that if a company had 20 projects, they would take risk factors into account before they begin a project, then the company would rank a project with profitability being one of the most important factors.

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Representative Wilson suggested that ACES could bring that from 20 to 3, and wondered if that might have an impact on whether a project was completed. Mr. Harper stressed that all 20 projects would be profitable. He stated that the companies have an obligation to the lessor to complete work on the lease. Some companies were cash-rich, others capital-constrained. The company has a firm obligation within a reasonable period of time to every project.

Representative Wilson did not know what "reasonable" would mean. She asked whether the tax regime would rank the projects aside from the other factors. Mr. Harper responded that he was trying to advocate as an advisor to accept the premise that the companies have an obligation. If not accepting the premise, there could be ranking change. He advised that at the time the lease was made available-terms were negotiated, not a term saying to agree to develop the property only if in the upper 50 percentile. He stressed that a lessee was obligated within the lease terms to develop the property within a reasonable period of time.

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Representative Wilson stated that she stated that ACES does have an impact on where Alaska would rank on a list of projects. Mr. Harper responded that the lessee had an obligation to the state to fulfill every profitable project with a reasonable period of time.

Representative Wilson stated that she did not accept the term "reasonable period of time"; she preferred the projects to be completed immediately.

Representative Guttenberg wondered why the oil projects were not being completed, and were considered less profitable. Mr. Harper responded with Slide 26 "Total capital spending, as well as spending per barrel, is increasing rapidly." He stated that the trend has been clear, with robust growth. The kinds of declines seemed reasonable; there had been discussions about what could be done. BP had stated that they would go forward with their projects.

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Mr. Harper "Oil Industry boosting Alaska spending" (Slide 27):

Alaska's oil industry is boosting its spending in the state more than expected, which may be good for future oil production and jobs, but is limiting the state's profit from rising oil prices.

Mr. Harper stated that the state's official oil production tax estimate was down slightly from the year prior. He stressed that the committee needed to focus on the reserve projections and production plans directly from each company.

Representative Gara was concerned with the profitability of the governor's proposal, and pointed out that the tax would be reduced without any obligation to invest in Alaska. He believed would be smarter to enhance processing facility credit and exploration well credits. Credits directed at the activity would encourage development. Mr. Harper agreed that would make sense. Credits encourage investments. He stated that there were also reasonable alternatives.

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Mr. Harper Slide 15, "Obligations of a Lessee":

- 1) The reason Alaska is desirable is prospectivity.
- 2) Companies bid leases based on belief in these rocks.
- 3) Signing the lease is a go / no go document.
- 4) The decision to sign the lease is a commitment to develop

given 'reasonable expectation of profit'. 5) After that point Alaska is not expected to compete with the rest of the world.

Representative Hawker queried the definition of "reasonable assumption of profit", and noted that huge bodies of law that dispute in establishing the terminology. He asked why production was declining, and wondered a course of litigation should be pursued. Mr. Harper pointed out that Prudhoe Bay was in decline, because it was a mature oil field. He stressed that the state should and does enforce the lease terms. He stressed that the capital will be attracted, and if adjustments need to occur to the tax structure-the changes be made based on hard certified numbers from the industry.

Representative Hawker stressed that testimony in the room was not under oath. He wondered if there were any other situations in the state that demonstrated that lease holders were not living up to the prudent operator standard. Mr. Harper did not know.

Representative Hawker did not want people to think that Mr. Harper was claiming that leaseholders were not living up to

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Mr. Harper stated he had not seen evidence that Alaska would be undesirable. He understood the desire to see more exploration quicker, might be evidence that something needed to be done- like changing the tax structure. He was concerned that the industry had not proven its case that the abatements and concessions in the bill if granted would result in specific and firm obligations.

Representative Hawker mentioned the annual report of the Division of Oil and Gas, and stated that field projections and AFEs were being presented to DOR. He pointed out that field development plans were discussed extensively with DNR, and stated that the field development plans were the entire foundations to the projections of the annual report. He wondered if Mr. Harper was certain that information was not provided. Mr. Harper said he was certain he had not seen that evidence presented to the legislature.

Representative Hawker restated Mr. Harper's statement. Mr. Harper had seen no evidence that it had been presented in

any form in the House Finance Meeting considerations of the ACES tax restructuring.

Representative Hawker stated that AFEs had not been requested in the proceeding. Mr. Harper had been hired to advise likely outcome as result of HB 110 and comment on evidence presented "here." He had not seen it presented by industry as to whether or not there would be a payback to the state.

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Representative Guttenberg stated that as a policy maker, he had not seen industry represent facts. He stressed that the industry represented corporate interest. The committee had not seen the items mentioned. The industry had represented a unified message but the legislature had not had access to the development plans and projects. Mr. Harper advised steering the debate to what would happen in concrete terms if the bill was passed and not allow the debate to merge to a way to manage the statistics. He recommended a different approach to the argument.

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RECONVENED

Mr. Harper discussed Slide 20 "How Can We Reverse the Trend." He stated that the commissioner of Department of Revenue had acknowledged that there were a number of factors that influenced investment decisions.

Mr. Harper displayed Slide 21:

- In the absence of concrete and verifiable analysis of specific prospects, a presumption should be made that no change in taxation is warranted.
- Alaska offers Royalty Relief if a producer can prove the economics of a field require it.
- It's only been requested four times since 2000, and granted twice.

Mr. Harper Slide 30 "Firm commitments from industry are lacking" He stressed that all companies carefully word what

they say, but there was no identifiable commitment to add new oil or to reduce the rate of decline.

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Mr. Harper stressed that industry's tone was important. He emphasized that what was not seen was most important.

Mr. Harper Slide 32 "Is Industry About to Walk Away from TAPS?"

- Major producers own a piece of the line. The economics of TAPS and oil production are integrated.
- 6% decline highly unlikely given current ongoing investment and updated projections.

Mr. Harper Slide 34 chart AOGA "North Slope Oil Production with OCS" He highlighted the potential that the OCS brought in terms of the life of TAPS.

Representative Guttenberg requested further explanation of the chart on slide 34. He stated that it was a chart that was presented in February 2011 by DNR. He just wanted to show the potential that the OCS could bring to TAPS.

Co-Chair Stoltze asked whether the word "exacerbated" could be substituted for "completely eliminated." Mr. Harper yes.

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Representative Hawker stated concerns about the chart. The implication would create false precisions by putting things on charts.

Mr. Harper Slide 36 "Changes to Progressivity"

This is where most of the revenue will be lost: \$800 million to over \$2 million /year depending on the price of oil.

Representative Hawker felt that the slide presented false precision, because the committee had not had the opportunity do view or discuss fiscal note. He stated severe concerns on the premise of the fiscal note. He referred to empirical evidence regarding the future projections that the state used was over-stated. Mr. Harper corrected the suggestion the HB 110 would result in

production. He offered the concern that the incremental production be enough to offset within a reasonable timeframe.

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Mr. Harper slide 37 "Nominal Tax Rates," and stated that the graph was made by DOR comparing ACES and HB 110.

Mr. Harper discussed Slide 38:

Under current law (ACES), our taxes can be envisioned as the area inside this rectangle. The profits per barrel, on the horizontal axis, line up with the tax rate, on the vertical axis.

Mr. Harper concluded the presentation, and opened up to questions.

Representative Wilson requested a dollar for dollar comparison between current structure and the proposal. Mr. Harper had not conducted analysis. He urged pursuing the issue.

Representative Wilson wondered if he was not able to do that. Mr. Harper had not been asked to make a comparison.

Representative Wilson he could do it in three days. Mr. Harper replied no.

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Representative Guttenberg looked at slide 42 "Changes to Progressivity", and queried the marginal tax rate. Mr. Harper stated that a debate had been pushed in the direction of marginal tax rates. He believed the effective rate based upon the expected case assumptions was most important. The marginal rate was not unimportant, but what is most important is the effective rate.

Vice-chair Fairclough slide 22 related to lost jobs, and wondered why the correlation did not imply causation. Mr. Harper stated that the first axiom of economics stated that correlation does not necessarily imply causation. He stated that there were many factors that contributed to lost jobs, and directed the committee to slide 23, which showed how employment had gone through the different tax regimes.

Vice-chair Fairclough appreciated Mr. Harper's point of view. He noted Monday hearings in Anchorage with explicit numbers on how service-industry businesses had been negatively affected from the decline in production on the North Slope.

Vice-chair Fairclough pointed out that North Dakota's oil industry was booming, and she asked what economics were contributing to Louisiana, Oregon, and New Mexico for oil production. She queried employment and production levels.

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Mr. Harper answered that he had highlighted his involvement with the listed states, and was currently class action lawsuit in Texas' oil company's failure to pay taxes. He stated that Oregon's unemployment was "horrific", but it was not an oil-dependent state.

Representative Hawker recalled that Exxon had prevailed in most of the cases regarding Point Thompson. Mr. Harper replied that was not his understanding. He stressed that post implementation of litigation was radically different than what was happening before litigation.

Representative Hawker concurred, and recommended on the record they do it about a year and a half before. He believed examining the court record would reveal that the litigation may have been a bargaining chip.

Representative Hawker wondered if Mr. Harper felt the most important metric was the effective tax rate. Mr. Harper stated that the effective tax rate was the most important factor when determining whether or not to invest capital in a specific project. Exxon testified that they agreed with that premise.

Representative Hawker agreed as well. He stated that bracketing would reduce the rate to a nominal effective rate. He believed the purpose of HB 17, a bracketing bill, was to create an effective and reasonable rate.

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Representative Hawker wondered if brackets would reduce a higher nominal rate to a lower effective rate. Mr. Harper

showed slide 46, which was developed by DOR. He would not be making a determination, but suggested that the concessions were extremely substantial. Representative Hawker respected Mr. Harper's opinion.

Representative Gara directed attention to Slide 55 "Required Production to Replace Loss Revenue" and asked if this was attempt to estimate how much new oil would be needed to offset the tax losses under HB 110. Mr. Harper did not develop the model. He focused on the first column under ACES, and the last column under HB 110. He suggested that if one presumed the assumptions that were present, it would indicate how much production would equal the amount of revenue currently being collected in taxes.

Representative Gara noted that DOR had promised an answer on the question.

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RECONVENED

BRYAN BUTCHER, COMMISSIONER, DEPARTMENT OF REVENUE, explained that the testifiers would discuss the bill by section.

SUSAN POLLARD, OIL, GAS, AND MINING SECTION, DEPARTMENT OF LAW, discussed a PowerPoint presentation "CSHB 110 Presentation Bill Sectional" (copy on file). She outlined her strategy for discussing the bill. Section 3: AS 43.05.225 would be amended to reduce interest rates on overdue taxes and refunds to federal rate plus 3 percent or 11 percent (page 4). She discussed the changes to Section 6: Levy of Tax. The tax levied on oil and gas produced from leases or properties containing land that was within a unit or in commercial production as of December 31, 2008, was 25 percent base plus progressivity.

Ms. Pollard discussed changes to Section 7 (page 6). The threshold was lowered for calculation of minimum tax on oil and gas production from the North Slope.

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AT EASE

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RECONVENED

Ms. Pollard moved on to Section 8 on page 7. The incremental bracketed progressivity rates applied if annual production tax value was over \$30, to the fraction of the production tax value that fell within the incremental rate. The incremental rates were up to 50 percent for production subject to the 25 percent base rate and up to 40 percent for production subject to the 15 percent base rate.

Ms. Pollard addressed Section 9 on page 8. The statute that required monthly payments was revised to account for the annual progressivity calculation and new tax rate for certain fields. She discussed changes to Section 27 on page 8. The way annual production tax was calculated remained the same and there was no intent to change the basic calculations. She moved to page 9 and discussed that capital credits would be taken in the year they were earned. Section 11 removed the requirement that tax credits for qualified capital expenditures be taken over two years.

Vice-chair Fairclough wondered where the date change was located. Ms. Pollard replied that it was at the end of the bill.

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Ms. Pollard discussed changes to Sections 15 and 16 on page 10. The only change was to remove the exclusion of the North Slope.

Representative Guttenberg knew that there was a reason that the line had been drawn. He wondered what the reason and rationale was. Commissioner Butcher clarified that the location was 68 degrees south and he could not speak to the reason for the change. The department would provide the information.

Representative Doogan wondered what the department meant by "fairly minor" in terms of the change. Ms. Pollard had been referring to the revenue change that was relatively minor.

Ms. Pollard continued with page 12. Section 17 was a completely new section that was added to allow a credit against production taxes for a producer that incurred more than 80 percent of its wages and compensation for Alaska

residents. The credit was for the percentage by which wages paid to Alaska residents exceeds 80 percent of wages and compensation paid by the producer in the state.

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Representative Joule believed that when local hire was mandated that issues developed. He was interested in hearing more as the discussions progressed.

Representative Hawker wondered whether the agency had done an analysis on the cost per job that was available. Commissioner Butcher replied that there was not currently an estimate.

Representative Hawker was concerned that a small percentage using employee numbers calculated to a huge percentage.

Vice-chair Fairclough wondered whether the committee could get a legal opinion on Section 17 for next week. She wondered whether there was severability clause inside the bill in the event that it passed. Ms. Pollard responded that it was possible to have a repeal.

Representative Guttenberg referred to HB 308 from the prior legislative session, and stressed that there was much work on that issue.

[3:59:44 PM](#)

Representative Edgmon wondered whether there was a producer that was currently near the 80 percent mark. Commissioner Butcher responded that they would provide an answer later.

Ms. Pollard pointed to page 13 "Small Producer Credits," that related to changes in Sections 18-20. The sunset date for AS 43.55.024 (a) and (c), non-transferable credits was extended from 2016 to 2021. The small producer tax credit for a calendar year was raised from \$12 million to \$15 million. It applied if average production was less than 100,000 BTU equivalent barrels a day.

Representative Wilson wondered whether the companies took advantage of hiring locally. Commissioner Butcher replied in the affirmative. There had been some concerns about constitutionality with the local hire issue; however, the other changes were fine with the department.

Representative Wilson wondered about the figures \$12 million to \$15 million. Ms. Pollard continued with the presentation on page 14 "North Slope Exploration Credit," that listed changes to Sections 21 and 24 and Sections 22-23.

Representative Guttenberg discussed expansions on an existing field. Commissioner Butcher would be happy to provide details at a later time. He added that he would also speak with DNR.

Ms. Pollard continued on page 14. She discussed exploration expenses, which were extended.

Representative Edgmon asked for the technical definition of "unitization." Commissioner Butcher replied that DNR could provide a definition or they could read the definition from the Department of Law.

Representative Doogan discussed the credits under AS 43.55.025 and wondered what credits were included in the statute. Ms. Pollard replied that the jack up rig was added to the provision.

[4:07:31 PM](#)

Ms. Pollard addressed page 15 "Disclosure of Credit Information," and changes to Section 28. The section amended AS 43.55.890 to clarify that DOR may publish detailed information related to tax credits, including the statutory type and amount of each credit taken under each statute, and whether the expenditure was for exploration, development or production.

Representative Edgmon wondered whether it would be before or after the audit. Commissioner Butcher responded that it would be before the audit.

Representative Wilson wondered whether the statute would include tax information that companies may not want to be public for their competitors. Commissioner Butcher remarked that there would not be changes to the confidentiality laws that were already in place.

Representative Wilson wondered why the information should be disclosed. Commissioner Butcher replied that the data

would be for information that was not currently gathered. The department was not provided with a breakdown from producers, when the information was disclosed, the department would be able to share the information.

Representative Gara referred to page 14 and changes to credits. He wondered if there was an increase to credits in-field for 40 percent, and an increase to a 30 percent credit for exploration. Ms. Pollard responded that the change related to the 43.55.025 credit. The credit had been added in House Resources Committee. She stated that there was an additional provision was added regarding to exploration on the North Slope. Representative Doogan asked whether the date moved back one year.

Co-Chair Stoltze discussed the schedule for the remainder of the day and for Friday.

[4:21:45 PM](#)

AT EASE

[4:21:58 PM](#)

RECONVENED

Co-Chair Stoltze clarified that the meeting on Friday would commence at 1:30pm.

HB 110 was HEARD and HELD in committee for further consideration.

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[4:22:22 PM](#)

ADJOURNMENT

The meeting was adjourned at 4:22 PM.