

HOUSE FINANCE COMMITTEE
April 2, 2016
8:33 a.m.

[NOTE: Continuation of April 1, 2016 5:00 p.m. meeting]

8:33:57 AM

CALL TO ORDER

Co-Chair Thompson called the House Finance Committee meeting to order at 8:33 a.m.

MEMBERS PRESENT

Representative Mark Neuman, Co-Chair
Representative Steve Thompson, Co-Chair
Representative Dan Saddler, Vice-Chair
Representative Bryce Edgmon
Representative Les Gara
Representative Lynn Gattis
Representative David Guttenberg
Representative Cathy Munoz
Representative Lance Pruitt
Representative Tammie Wilson

MEMBERS ABSENT

Representative Scott Kawasaki

ALSO PRESENT

Janak Mayer, Chairman and Chief Technologist, analytica

PRESENT VIA TELECONFERENCE

Nikos Tsafos, President and Chief Analyst, analytica

SUMMARY

HB 247 TAX;CREDITS;INTEREST;REFUNDS;O & G

HB 247 was HEARD and HELD in committee for further consideration.

Co-Chair Thompson discussed the meeting agenda.

#hb247

HOUSE BILL NO. 247

"An Act relating to confidential information status and public record status of information in the possession of the Department of Revenue; relating to interest applicable to delinquent tax; relating to disclosure of oil and gas production tax credit information; relating to refunds for the gas storage facility tax credit, the liquefied natural gas storage facility tax credit, and the qualified in-state oil refinery infrastructure expenditures tax credit; relating to the minimum tax for certain oil and gas production; relating to the minimum tax calculation for monthly installment payments of estimated tax; relating to interest on monthly installment payments of estimated tax; relating to limitations for the application of tax credits; relating to oil and gas production tax credits for certain losses and expenditures; relating to limitations for nontransferable oil and gas production tax credits based on oil production and the alternative tax credit for oil and gas exploration; relating to purchase of tax credit certificates from the oil and gas tax credit fund; relating to a minimum for gross value at the point of production; relating to lease expenditures and tax credits for municipal entities; adding a definition for "qualified capital expenditure"; adding a definition for "outstanding liability to the state"; repealing oil and gas exploration incentive credits; repealing the limitation on the application of credits against tax liability for lease expenditures incurred before January 1, 2011; repealing provisions related to the monthly installment payments for estimated tax for oil and gas produced before January 1, 2014; repealing the oil and gas production tax credit for qualified capital expenditures and certain well expenditures; repealing the calculation for certain lease expenditures applicable before January 1, 2011; making conforming amendments; and providing for an effective date."

[8:34:47 AM](#)

JANAK MAYER, CHAIRMAN AND CHIEF TECHNOLOGIST, ENALYTICA, addressed a PowerPoint presentation titled "HB 247: Key Issues and Assessment" dated April 1, 2016 (copy on file). He provided a brief recap on slide 10 titled "Alaska's Production Tax: Origins in 2006 Proposal." He explained that if an entity had nothing other than a 25 percent net tax rate and combined it with a 20 percent capital credit - the core ideas that had eventually gone into Alaska's Clear and Equitable Share (ACES) - it would curve the 25 percent effective tax rate down (25 percent would become the maximum rate); the 20 percent capital rate meant that the 25 percent would not ever be achieved and the line would continue to decline to zero around \$60 per barrel. He elaborated that the capital credit was applied after the tax was calculated and the capital credit was a fixed amount relative to price (assuming a fixed amount of spending) and it represented a larger portion of the profits on a \$40 per barrel of oil versus the profits on a \$100 barrel. The capital credit created a progressive component to the curve; if there was nothing but a 25 percent rate and the capital credit it would bend the tax rate down to zero.

[8:37:05 AM](#)

Mr. Mayer moved to slide 12 titled "ACES: Steep Progressivity, High Spending Support." He explained that ACES had used the basic design [outlined on slide 10] and built in additional progressivity. He detailed that under ACES the goal had been to enable the tax rate to keep climbing so it would reach and exceed 25 percent. When the production tax per barrel reached a certain point (\$60 to \$80 per barrel illustrated on the slide) - below a certain threshold the tax rate was 25 percent - but above a certain threshold it began climbing in increments for each dollar increase until it reached an inflection point. He stated that for \$25 to \$50 in production tax value it increased at one rate and at a slower rate above that. The change resulted in a steady increase (yellow line on ACES chart on slide 12). He stated that the inflection flattened out at \$140 per barrel and increased more slowly after that. He furthered that the base rate of 25 percent could go much higher under ACES and could also drop to zero depending on the oil price. He discussed the reason the rate could drop to zero. He explained that notionally statute contained a 4 percent gross minimum floor - the idea of the floor had been to provide additional protection to the state when oil

prices were low. In reality, the 20 percent capital credit was applied in the stack after the net versus gross assessment. He furthered that as long as there was any basic level of capital spending it could mean a drop below the floor, meaning that the 4 percent gross floor was never actually binding.

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Representative Gara reasoned that without the 20 percent capital credit, ACES would never have dropped below the 4 percent tax floor. He remarked that it had been an expensive proposition in ACES, which had been fixed. He asked for verification that the 20 percent capital credit was still allowed in Cook Inlet.

Mr. Mayer replied in the affirmative. He added that the full suite of ACES tax credits plus additional credits were allowed in Cook Inlet without any corresponding profits based production tax.

Representative Gara stated that ACES had a tax rate that rose and rose, but the 20 percent capital tax credit was affordable. He surmised that in Cook Inlet there was no tax, but the cap of the 20 percent capital tax credit was allowed.

Mr. Mayer answered in the affirmative. In addition to the 20 percent capital credit there was a 40 percent credit on well work, which was never on the North Slope gas.

8:40:14 AM

Mr. Mayer continued to address slide 12 and summarized the debate around the ACES system. He explained that the high progressivity meant high marginal tax rates because the rate increased with each additional dollar increase in oil price. He explained that the structure meant that marginal rates were upwards around 86 percent and higher at yet-unseen prices. It meant that in many ways from a producer's economic perspective, the spike in oil prices that had occurred over the past 6 or more years in some ways had never really happened. He explained that for each \$1.00 increase when 80 to 90 percent of the increase was going to the state rather than to the producer, it looked very different in terms of the producer's incentive for further reinvestment than under a slightly less progressive system.

More importantly, it had also meant that there was very high state support for spending, which varied dramatically depending on a wide range of assumptions. For example, a new producer without any existing liability had 45 percent support for spending because they received a 20 percent capital credit stacked with a 25 percent net operating loss (NOL) credit. He explained that the 25 percent NOL credit was effectively the same thing as the existing incumbent writing off against their taxes. He elaborated that it would be true if the rate was a flat 25 percent, but due to progressivity the benefit for the incumbent producer had varied widely; the benefit could be 25 percent plus the 20 capital credits; however, if an entity had an 80 percent marginal tax rate plus a 20 percent capital credit, the marginal benefit of reduced taxes on spending could reach over 100 percent under ACES. He summarized that there could be very high effective support for spending or significant reduction in revenue from additional spending. As long as spending was low and prices were high, an enormous amount of revenue came in through the system; however, when spending was high and prices were low, it was a major risk to the treasury.

[8:42:53 AM](#)

Vice-Chair Saddler pointed to the two bottom lines on the chart (slide 12) and asked what the percent gross and percent net rows demonstrated. Mr. Mayer replied that it continued the same format from previous slides. He detailed that the percent net illustrated what it would look like as an effective tax rate (green line shown on the chart). The percent gross showed what it would represent as a proportion of the gross value (e.g. compared to a 4 percent gross tax).

Vice-Chair Saddler surmised that the gross was the percentage of value in a tax and the percent net represented the effective net tax rate. Mr. Mayer answered in the affirmative.

Mr. Mayer turned to slide 13 titled "SB21: Protect on the Low End, Give Back at The High End." The chart summarized the difference between SB 21 [oil and gas tax legislation passed by the legislature in 2013] versus ACES related to effective tax rates. Exactly what the comparison looked like varied slightly depending on the level of spending. He explained that part of the point of SB 21 was to make the

overall tax rate less sensitive to changes in spending; less overall support for spending and more predictability in the overall system. He pointed to a chart on slide 13 and explained that at oil prices between \$70 and \$110 per barrel the lines were close, but SB 21 was lower than ACES (under the current assumptions \$18 per barrel of capital and operating expenditures in the Department of Revenue, Revenue Sources Book for FY 16). He furthered that using the numbers from either of the previous two years (closer to \$20) would mean the lines depicting SB 21 and ACES were the same in the \$70 to \$110 price range.

Mr. Mayer considered what ACES would have netted versus SB 21 (slide 13). He detailed that when prices were around \$80 to \$100 and spending was in the \$20 range, the numbers were basically the same. The key difference was what happened when oil prices were well above \$100 to \$110 where the tax rate under SB 21 tapered off and reached a maximum of 35 percent. Alternatively, 25 percent was the nominal or base rate under ACES that could go lower or substantially higher. Under SB 21 the rate could reach a maximum of 35 percent and tapered down at prices below \$150 and \$160 per barrel. He explained that in the same way as ACES had the 20 percent capital credit that bent the line down to zero, SB 21 had the dollar per barrel credit for old production. He directed attention to the "\$/bbl credit" row and \$140 per barrel column on slide 13 to demonstrate his point. He elaborated on the "\$/bbl credit" row, which started out at \$8 per barrel at the lowest prices and tapered down to zero at the highest prices. The effect of the tapering was to bend the curve of the effective tax rate; there was a maximum tax rate of 35 percent at the highest prices, which could come down much lower. He continued that if it were not for the 4 percent gross floor, the number could eventually drop to zero; however, that did not happen for existing production because one of the other large changes in SB 21 for legacy production (currently the vast bulk of the North Slope tax base) was to make the comparison after accounting for the dollar per barrel credit.

[8:47:20 AM](#)

Mr. Mayer continued to address slide 13. He explained that under ACES the capital credit happened almost last in the stack. However under SB 21, the \$/bbl credit and net tax it created were compared to the gross floor; whichever amount was greater applied. He detailed that it meant the tax rate

would drop down to about 10 percent and would shoot back up again quickly to reach 100 percent around the \$50 per barrel mark.

Representative Gara stated that there were a number of older ACES fields (Oooguruk and Nikaitchuq) that received the lower tax rate. He surmised that the definition was complex, but that essentially post-2002 fields received the break.

Mr. Mayer replied in the affirmative. He elaborated that the term "new" pertaining to oil fields did not necessarily mean new since the enactment of SB 21. He detailed that various points in time and definitions around units specified what qualified as a new field.

[8:48:56 AM](#)

Mr. Mayer continued to address slide 13. Under ACES there was highly variable support for state spending (i.e. 25 percent to 100 percent), the benefit for an incumbent producer looked very different from the benefit for a new producer, and the level could vary widely depending on the price of oil and the amount of spending. Alternatively, under SB 21 the idea had been to increase predictability in terms of the overall level of state support for spending and that the tax rate should be brought down to 35 percent and should apply to everyone. The goal had also been reduced tax rates at high prices for competitiveness with a 4 percent gross floor, which would dramatically increase the tax rate as prices dropped as an effort to protect the state.

Representative Gara pointed to the red line representing SB 21 on slide 13. He noted that the tax rate decreased under an \$8/bbl credit. He asked for verification that the credit had nothing to do with whether an entity invested any money, but was a function of price.

Mr. Mayer answered in the affirmative. He explained that it was very deliberate.

Representative Gara observed that at \$76 per barrel the profits tax was lower than the 4 percent minimum. He asked for verification that the 4 percent minimum kicked in at prices below \$76 per barrel.

Mr. Mayer answered in the affirmative. He elaborated that the reason for the sharp inflection point was the two different tax systems; the inflection point - based on the series of assumptions at hand - was where there was a transition between the net and gross tax.

Representative Munoz asked for a restatement of the explanation.

Mr. Mayer explained that either there was a net or gross tax; whichever amount was greater applied. Under the assumptions on slide 13 (it varied by cost structure), the net tax would eventually drop to zero. He explained that the intersection of the orange and red lines indicated the point where the gross tax yielded more than the net tax; therefore the gross tax applied.

Representative Munoz asked if the committee had been told previously that the NOL could take the gross tax below the 4 percent.

Mr. Mayer answered in the affirmative. He explained that the concept was difficult to show on a chart related to effective tax rates. He detailed that to plot and talk about an effective tax rate there had to be a profit to be taxing. He noted that the lines on slide 13 stopped a little below the \$50/bbl mark because at that point it was no longer meaningful to talk about an effective tax rate below that point. He furthered that there were \$18/bbl in operating and capital expenditures plus \$10/bbl in transportation costs; below that point there was no production tax value per barrel to tax. At that point an NOL credit kicked in and could further reduce taxes. He summarized that it was reducing taxes at a time when there was no profit by definition and therefore an infinite tax rate.

[8:52:55 AM](#)

Representative Gara had heard it said by some that the crossover point where SB 21 raised more money was \$110/bbl. He pointed to slide 13 and observed that the intersection point appeared to be closer to \$70 per barrel. He asked about the difference. He asked for verification that the chart on slide 13 indicated that ACES started raising less money than SB 21 at around \$70/bbl.

Mr. Mayer answered that it depended entirely on the cost assumptions used. He detailed that using the capital and operating expenditures of FY 14 and FY 15 (instead of the \$18/bbl expenditures from the current year Revenue Sources book) the yellow line representing ACES would be shifted up a bit more (because ACES was more sensitive to costs) and the red line representing SB 21 would be the same at prices between \$75 to \$100/bbl.

Representative Gara asked for verification that given the current cost structure and how it would affect the 20 percent capital cost deduction under the ACES system, the crossover point was about \$70/bbl.

Mr. Mayer replied in the affirmative. He added that as costs declined the crossover point was reduced.

[8:54:59 AM](#)

Mr. Mayer moved to slide 14 and discussed "SB 21: Special Incentives for 'new oil.'" He noted that new oil included a number of things developed over the course of the past decade and excluded the bulk of production from legacy fields. He addressed the gross value reduction (GVR), which had been created for the purpose of reducing the gross value at the point of production (GVPP). He pointed to a chart on slide 14 - the red line pertained to old oil under SB 21 and the purple line represented new oil under SB 21. He noted there was a similar shape to the curve, but SB 21 new oil had a lower effective tax rate at all of the prices listed. He explained that GVR was used because previous proposals (e.g. HB 110) had looked at establishing a lower rate for particular new production, but it was very difficult in practice to do that. He detailed that a big part of the way the profits-based production tax on the North Slope worked was that it did not "ring fence" or look field by field. He elaborated that the state did not want to get into the business of identifying which costs went to which production streams in order to determine what different tax rates for different assets should be. Instead, on the North Slope each company was considered one combined unit with one set of costs and one set of revenues. To try to reduce the tax rate without ring fencing, the only way to distinguish between different streams of production was at the level of production and revenue, which was easy. He furthered that if it was the

only area to make an intervention, the tax rate could be reduced - not by reducing the tax rate - but, for example, if revenue was 10 to 20 percent less than it had been, it was effectively the same thing as reducing the tax rate.

8:58:08 AM

Representative Gara remarked that the chart seemed consistent with a report issued by DOR, but he believed it did not seem consistent with a chart provided earlier in the week by Dan Stickel (assistant chief economist, Tax Division, Department of Revenue). He asked for verification that based on the chart on slide 14, the percentage paid for profits on production tax went down to zero at about \$73/bbl for GVR oil.

Mr. Mayer answered in the affirmative (based on the cost assumptions on slide 14).

Representative Gara asked for verification that for older oil fields the floor of 4 percent was reached at about \$76/bbl. Mr. Mayer answered that an effective tax rate of 4 percent was never reached; it went down to slightly below 10 percent.

Representative Gara surmised that 10 percent of profits was about the equivalent of a 4 percent gross tax rate. Mr. Mayer answered in the affirmative.

Representative Gara answered that the information was consistent with a report provided by DOR. He restated the tax rates. However, Mr. Stickel had presented a chart showing a good amount of production tax revenue for GVR oil even below oil at \$73/bbl. He asked for an explanation.

Mr. Mayer was not familiar with the specific chart. He stated that there was still substantial revenue coming into the fiscal system at those prices. Taxes declined and in some cases down to zero at precisely the point when the royalty was becoming a bigger portion (steadily more regressive). In general, SB 21 for new oil was designed to have an overall government take rate of about 65 percent across a wide range of prices; in order to achieve that, the rate needed to go down to zero because the royalty was increasing and taking up more and more. At lower prices, revenue was derived from royalty and property taxes rather than from production tax.

Representative Gara stated that the tax rate went down under SB 21 with the exclusions. He asked for verification that the exclusions (credits) had nothing to do with investing money, they were merely a function of price for GVR and old oil.

Mr. Mayer agreed. He believed the word "credit" was almost a misnomer in that sense. He elaborated that it was simply an integral part of the tax system and was not dissimilar, in some ways, to progressivity under ACES.

[9:01:52 AM](#)

Representative Pruitt surmised that GVR credit was really just a function of creating a progressive tax. He elaborated that instead of doing what had been done under ACES, the legislature had elected to use the credit. He believed the term "credit" was almost an incorrect way to describe it. He agreed that it was a credit, but it was really just a function of the tax.

Mr. Mayer answered that it was important to distinguish between two things. He addressed new oil and the GVR at the top of slide 14, which was applied to the GVPP calculation. From an accounting or statutory perspective, it was not considered a credit; it was simply a reduction in GVPP. He explained that later there was a fixed \$5/bbl credit, which was accounted for as a credit used against liability in DOR's data. He agreed that it was not a credit in the way that capital credits under ACES were - it did not depend on investment - it merely filled the same role as progressivity had under ACES. He detailed that it was an integral part of the mechanism to define an effective tax rate curve (effective tax rate shown in purple on slide 14). He elaborated that it was determined by saying that \$5 represented a much bigger portion of a \$40 barrel than a \$140 barrel; therefore, it would bend the tax rate down. He added that it was listed in statute as a credit, but it was best understood as an integral part of the tax system that existed to shape the effective tax rate.

Representative Pruitt thought the credit could be referred to as a deduction or reduction. He thought it was appropriate to make the distinctions because as conversations about the overall tax credits continued, the item would become lumped in with other tax credits. He

surmised that if the legislature was going to appropriately speak to the current tax regime, it needed to distinguish between the intent of the particular credits (a reduction or deduction) because it was not an apples-to-apples comparison.

Mr. Mayer agreed.

[9:05:06 AM](#)

Mr. Mayer continued to address slide 14. He explained that at lower prices such as \$40/bbl there was an NOL credit; later slides would show that the credit was calculated based on production tax value/barrel (PTV/BBL). The PTV/BBL was determined by GVPP; the GVP existed to reduce the GVPP. One of the issues the administration had raised, was that at the moment, because of the way the things cascaded (e.g. the NOL credit was determined by PTV/BBL), it could be much higher than 35 percent of an actual NOL. He would address the issue in more depth later in the presentation.

Representative Munoz asked at what point new oil should be considered old oil to match the overall tax system.

Mr. Mayer answered that it was a difficult question. There had been substantial discussion on the topic surrounding SB 21. There had been discussion about how much incentive the state wanted to offer for new investment. The basic idea was that legacy production required relatively little additional investment compared to new projects - if the state wanted to ensure things were economic, it required a boost. The state also had to decide how much of a boost to give to new development. Once the decisions had been made, there were various ways of structuring the system. For example, the state could determine that the GVR applied indefinitely; or, it could specify the GVR was higher, but limited to the first 5 to 15 years of production. He explained that similar economics could be achieved for a new producer in both situations. The decision had been made to have a slightly lower rate on the GVR; it would apply indefinitely, rather than worrying about making changes to incentives and other things that happen when it starts running out. Slowly over time, SB 21 new oil represented a bigger share of things. He did not want to suggest that fiscal terms should continue to be changed; stability was more important than anything. However, he did believe that

whether the GVR should be indefinite or time-limited was a reasonable question.

[9:08:20 AM](#)

Mr. Mayer continued to address slide 14. From the perspective of field economics things that change after the first 10 to 15 years of an asset's life, had a much lesser impact on the economics of development than things occurring in the first decade.

Representative Pruitt surmised that if the goal was to incentivize oil, it may be appropriate to understand what the state expected the total amount of new oil to be. He asked if new oil was projected to be a major portion of the oil produced. He wondered about the state's goal and whether it was to incentivize new oil. He reasoned that if the goal was to take over the revenue stream, it was something the legislature should talk about. Alternatively, if the goal was to work to stem the decline and make sure something was being generated, it was a separate conversation.

Mr. Mayer agreed. He expounded that at the moment new oil was a very small portion of the revenue base - it would increase over time. He would have to look at DOR data to determine if there were any projections for new oil in the next 12 to 18 years.

[9:10:02 AM](#)

Representative Gara referred to an earlier question about a possible tweak in the oil tax system. He addressed Mr. Mayer's response that an oil tax system should not be changed every year. He stated that the battle between higher and lower tax legislators and others had gone on since 2004. He had once heard that the two most unstable tax regimes (in a safe place to conduct business) were a tax system that was too high and a system that was too low. He asked if the statement was fair.

Mr. Mayer agreed. He elaborated that there were many ways of assessing fiscal regime stability, but it was possible to look at some regimes and know that they would change at some point precisely for the reason highlighted by Representative Gara. He noted that it was not desirable to invest in regimes that were too onerous, but it was good to

consider that there may be an opportunity for investment in the future because the rate may be unsustainable. He elaborated that regimes that were too generous may look great initially, but it was important to be careful because regimes that were too generous could not last.

[9:11:44 AM](#)

Mr. Mayer relayed that he was finished with his overview of core fiscal regime concepts for the North Slope, which he hoped set a background to look at some of the changes proposed under the original HB 247. He noted that he had spoken with the committee in a meeting the previous day about changes the CS contained. He addressed slide 16 titled "Monthly Gross Minimum Calculation: Neutral or Tax Hike." He had relayed that it was the type of thing that seemed to be more incremental revenue raising than a statement of principle about something that should work differently in the tax system. For instance, in 2014 a monthly gross minimum would have brought in an additional \$100 million in revenue to the state. He addressed a chart showing the core revenue calculation for old fields, which began with ANS WC [Alaska North Slope West Coast]; subtracted transport, operating and capital expenditures, PTV/BBL; determined 35 percent; and took away an \$8/bbl credit. The horizontal axis on represented time; different prices were applied for the different months of 2014. For 2014 as a whole, the dollar per barrel credit would have been \$8/bbl. The blue text in the latter columns on the chart represented the core of the net profit-based calculation. He explained that they began with 35 percent PTV and subtracted \$8/bbl, which equaled the actual tax; it was then compared to the green column, which represented 4 percent of the GVPP.

Mr. Mayer explained that whichever tax was higher applied - the PTV was determined by which of the two columns was greater. For the first half to three-quarters of 2014, oil prices had been around \$100; there had been a sudden price collapse at the end of 2014 that had ended at \$60/bbl in December. He explained that when calculating the number annually, it was clearly a net tax year as opposed to a gross tax year. Alternatively, if the calculation had been done monthly, the first 10 months would have been net taxed and the last 2 months would have been gross taxed. He pointed to the November row on the chart and explained that 4 percent of GVPP was \$2.68, which was higher than the net

tax [\$1.59]. Taken on an annualized basis it was the net tax all the way through because the annual numbers showed net tax terms. However, during periods of price volatility there were times the gross minimum could be charged on a monthly basis even though the overall year showed a net tax environment. If the calculation was done annually, the end result would be \$8.71 per barrel in the net production tax; whereas, averaging out the 12 months reached a total of \$9.31 [shown at the bottom right of the chart].

Vice-Chair Saddler asked how the annual 2014 production tax/bbl had been determined (slide 16). He observed that the production tax/barrel column was the greater of the two previous columns ["Less \$8/bbl" and "4 percent of GVPP"). He observed that in November and December 2014 the gross tax was higher.

[9:16:15 AM](#)

Mr. Mayer explained that the first row of the chart (slide 16) represented the calculation on an annual basis. It showed the average price for the year.

Vice-Chair Saddler asked for verification that it was the average price per barrel.

Mr. Mayer affirmed that the top row reflected the average price for the entire year. He continued that the annual calculation worked the same as the monthly calculations and it resulted in a higher net tax; therefore, the net tax applied. He pointed to the difference between the \$8.71 and \$9.31 on the second to last column to the right of the chart on slide 16. He noted that the chart showed a high level calculation that treated the entire North Slope as if it was one tax payer. He explained that it was a difference of \$0.61/bbl, which if applied to all taxable barrels produced on the North Slope it was a rough difference of about \$100 million.

Vice-Chair Saddler asked if the \$9.31 was an average of the production tax/bbl column. Mr. Mayer answered in the affirmative.

Vice-Chair Saddler pointed to a row labeled increase [last row at the bottom of the chart] and asked for detail. Mr. Mayer answered that the row showed that \$9.31 was \$0.61 higher than \$8.71.

Mr. Mayer continued to address slide 16. He explained that it was not clear why someone would want to assess the tax on a monthly rather than on an annual basis. The tax system was done on an annual basis at present for the same reason that personal and corporate income taxes were done annually. He explained that using a longer time period smoothed volatilities associated with revenues and prices.

[9:18:57 AM](#)

Representative Guttenberg stated that usually a situation like the one presented on the chart included winners and losers. He wondered what differentiated between the two groups.

Mr. Mayer answered that the winners and losers on the chart were the state and producers.

Representative Guttenberg asked for verification that it did not include competition between producers.

Mr. Mayer agreed. He characterized the situation as a "heads I win, tails it's a draw" gamble. He detailed that if there was one uniform price with no volatility for the entire year, the question about annual versus monthly calculations would be irrelevant in terms of the end result. There was a difference when volatility existed. When there is volatility, the state wanted to take advantage of the months where more was paid under a gross tax, even though for the year it would not be in the situation.

Representative Pruitt surmised that the particular provision only came into play when focusing on the 4 percent of GVPP (when it was the higher of the two taxes). He believed that at lower prices the annual versus monthly calculation was not a concern. He reasoned that whether or not it was beneficial to the state did not become a concern until prices reached the \$70 or so breaking point. He asked if his statements were accurate.

Mr. Mayer replied that it was about volatility and that some months were in the net tax environment, whereas others were in a gross tax environment. He stated that the entire year would be month-by-month in a tax calculation; there could be volatility and it would not make a difference.

Alternatively, if the entire year was in the gross tax environment, it would not have an impact. Volatility presenting a switch between gross and net meant that switching between the two meant more money going into savings because it was taking advantage of the best of either world on a month-to-month basis.

Representative Pruitt surmised that in the current year that was projected by DOR to remain in the gross tax scenario, it was not a concern.

Mr. Mayer agreed that it was not a concern if there were not substantial increases in the price of oil later in the year.

[9:22:01 AM](#)

Mr. Mayer addressed slide 17 titled "GVR Raises Net Operating Loss (NOL) Credit Above 35 Percent of Actual Loss." The next key item carried over from the original bill to the CS was how the GVR worked with the NOL credit. He explained that the GVR was artificially reducing the GVPP to reduce the overall tax rate. He looked at a chart on the left and explained that the left hand column titled "SB 21 GVR" represented current law for new oil; the right hand column represented new oil under the proposed HB 247. The difference was what the evaluation of the NOL credit was based on. Under current statute it was 35 percent of the negative production tax value per barrel [shown in blue on the chart]. Under the SB 21 GVR column the PTV/BBL was -12 percent; however, if it had been calculated without the GVR the number would have only been -6 percent. Half of the NOL under assessment was not an actual loss; it was a loss that existed solely as a function of the GVR. He furthered that if the number had been calculated before the application of the GVR it would result in 35 percent government support for spending through the NOL (which had been the intent) as opposed to the circumstances shown on the chart where support for government spending was 70 percent; it varied widely based on price and cost assumptions. There were circumstances, particularly at lower prices, where there was substantially higher than 35 percent for government spending because of the way the GVR interacted with the calculation of how much the NOL was.

Mr. Mayer considered the lifecycle of an oil field. There was initial capital investment, the startup of the field,

reduced capital investment, operating costs, and revenues. He explained that the model looked at an 80 million barrel field with approximately 20,000 barrels of production per day and slightly over \$1 billion in development cost. At oil prices of \$40/bbl the cash flows did not look great; the investment would not make financial sense if \$40/bbl was assumed for the lifetime of the project. He pointed to the chart on slide 17 that showed a period of negative cash flows in the early years and some small amount of revenues at \$40 later on. The solid black line represented current statute and the dotted black line indicated making a correction related to how the GVR impacted the NOL. He pointed out that cash flows were \$10 million higher at the most under current statute. In the first years there was no production at all; therefore the GVR was not an issue - the NOL was simply 35 percent of the actual capital invested. Once revenues began coming in, but a substantial profit had yet to be made, there was a period of a couple of years where the GVR impacting the calculation came into play. He noted that if the chart reflected \$70/bbl there would only be a year or two that the issue factored in. The impact was bigger at \$40/bbl - as much as \$10 million per year for a couple of years of production. In the 8th or 9th year there would be a small profit, but the existing system assessed it as NOL because it was NOL once the GVR was factored in. The CS maintained that the intent of SB 21 was to have 35 percent support for government spending for everyone under all circumstances, but the issue pointed out in the chart did not seem to be consistent with that; therefore, it may be worth addressing.

[9:27:30 AM](#)

Mr. Mayer turned to slide 18 regarding a hardening of the floor that raised taxes on losses. He spoke to existing production. He relayed that SB 21 implemented a floor for the first time that bottomed out at an effective tax rate of just under 10 percent and then things began climbing - [the effective tax rate for] existing production no longer went down to zero. The bill would raise the floor from a 4 percent to a 5 percent floor (illustrated in red and green on the chart on the left). He explained that effective tax rates could only be used as a tool of analysis going down to just below \$50/bbl because after that there was no value to tax. The chart on the right looked at the absolute numbers of production tax per taxable barrel. He pointed to the inflection point around \$80/bbl where the gross minimum

kicked in; the inflection point was slightly higher in a 5 percent world versus a 4 percent world. He pointed out that the red line (SB 21) and the green line (HB 247) flattened out, but there was a key difference around \$45/bbl, which was the point when the NOL credit kicked in.

Mr. Mayer explained that SB 21 had hardened the floor in terms of the dollar per barrel credit, but the one thing that could take the tax below the floor was the NOL credit. He noted that the concept had been a deliberate policy choice. He elaborated that if an NOL occurred (there was no longer a profit to be taxed), tax simply applied to activity and revenue even in a loss making position. Overall the system had recognized for a long time that for all the reasons discussed, all of Alaska's fiscal regimes had tried at low prices to reduce the impact of the gross taxes. For example, the Economic Limit Factor (ELF) had used the economic limit formula, which had only worked for some period of time; it had been effectively to reduce the tax rate when wells were less productive. Current statute reflected a series of assumptions from a different period in time, but even the current gross tax had been established at 4 percent in some price range, 3 percent in another, 2 percent in another, and so on. The idea had been that it was important to understand and mitigate that a gross tax had a disproportionate impact at the lowest oil prices. He continued that in the past it had been hard to imagine there would ever be an NOL made by major producers; however, it was now the case.

Mr. Mayer discussed that under the circumstances, the state may need to think about reducing the gross floor, given that it was effectively an infinite rate of tax; it should never go below zero, but there should be the possibility to reduce it. He noted that it was a policy debate that people differed on. For example, it was reasonable to take the stance that the gross floor was there to provide the state with revenue protection and they understood that it was taxing at a time when there was no profit to tax. He remarked that it was a difficult and important debate. He believed the system had worked well overall and had protected the better state on the downside than the previous system; competitive regimes balanced risk and reward. He spoke about North Dakota versus Norway related to needing a system that was evaluated at both ends. The danger was that when prices were good there was worry about whether the state was taking enough on the high end.

Alternatively, when prices were low, the state looked at North Dakota, which was much better protected on the low end. He believed there was a substantial danger related to how the minimum tax worked and whether it should be hardened, increased, or other.

[9:32:37 AM](#)

Mr. Mayer believed there was a difference between the debate on hardening the floor and increasing the rate (slide 18). He believed hardening the floor would create problems for numerous people and would run a danger of impact on investment. However, he believed the danger of increasing the rate from 4 percent to 5 percent in a year when times were bad was that companies would wonder what would happen in the next year. He encouraged members to think about how the changes appeared from the perspective of long-term fiscal regime stability. He cautioned against creating anxiety about what unforeseen changes the state may implement in future years.

[9:33:54 AM](#)

AT EASE

[9:41:23 AM](#)

RECONVENED

Co-Chair Thompson noted that the 10:00 a.m. meeting would be delayed.

Mr. Mayer addressed slide 19 related to how HB 247 would impact new field development. Slide 19 included a lifecycle model of a hypothetical new development, which helped represent some of the actual development on the North Slope. The model included an 80 million barrel field with production of about 20,000 barrels per day, which would require about \$1.3 billion in capital and drilling costs. The model included an individual drilling profile with a look at how many wells were drilled annually. He looked at the chart on the left that showed initial capital costs in dark blue and government take in red. Government take was negative in the early years; the NOL credit contributed some of the capital costs; therefore, the cash flow was not as low as the total capital being spent. Later years began to generate some government take and a significant amount of revenue once costs declined.

[9:43:05 AM](#)

Mr. Mayer turned to slide 20 titled "Refund Limits Boost Capital Needs and Lower IRR." The slide addressed the current impact of proposed refund limits on new developers. The range of possible effects is quite significant, depending on whether it was the only asset a company owned or if they had existing assets that were also claiming an NOL; it was a proposed per company limit of \$25 million, not a per asset limit. The NOL credit essentially brought forward a deduction that a company would otherwise have later in the cycle to substantially reduce the amount of capital it needed to build a project. The chart on the left showed cumulative cash flow and how much total capital a company needed to develop a project. He explained that if a company wanted to develop a project it would not need the full \$1.3 billion because at some point the project would become self-financing and self-sustaining. He continued that at some point costs would be incurred while oil was being produced and the revenues could go towards financing the additional drilling. He estimated that a company would need around \$350 million to develop the project on slide 20 under the current 35 percent refundable NOL credits. He pointed to the solid black line on the chart on the left, which represented SB 21 GVR with a refundable NOL - from that point onwards the project would become self-sustaining. The chart showed that by 2022 or 2023 the company would have recovered all of its initial investments and would be bringing in revenue.

Mr. Mayer explained that by reducing the refundability of the NOL the amount of capital required to develop a project would increase substantially. The dotted line at the bottom of the chart depicted what would occur if the credit was non-refundable and had to be claimed out of future tax liabilities. He pointed out that by 2027, the lines on the chart merged and became the same thing; however, the dotted line was substantially lower for the previous years. He explained that the scenario required substantially more upfront capital of over \$500 million (due to the absence of the 35 percent refundable NOL credit); however, after 2027 the company would pay less in taxes and would recoup its investment at that point.

[9:46:14 AM](#)

Mr. Mayer continued to address the chart on the left of slide 20. He explained that a dollar per company limit scenario fell somewhere between the black and dotted lines. For example, if there was a \$25 million limit for a company with only one asset, the project may only slightly increase capital needs (e.g. from \$350 million up to \$400 million or \$450 million). He added that the amount would depend on other assets a company owned and whether it was claiming NOL on any of them. In general, as the limit increased, the impact it had for a company was substantially less. He explained that if it was a \$75 million limit for a single asset, it probably would not have an effect; however, if a company had another project that was eligible for an NOL, even a \$75 million limit would have some impact. He explained that DOR would have to provide some precise numbers on how many companies would be impacted by what exact limit. He noted that one could say that the \$200 million limit proposed in the CS should be a binding limit for no one currently on the North Slope. He expounded that numbers in above or below \$100 million had some impact on some people, but the precise impact would vary substantially from company to company.

Mr. Mayer continued that there were two large impacts of any binding limit on the amount that could be refunded: the amount of capital required to develop a project and the corresponding internal rate of return (IRR). He pointed to a chart on the right of slide 20, which showed that non-refundable credit meant a company needed \$5 to \$10 dollars higher in oil price to get the same IRR as it could get under the refundable credit. He explained that if the bill implemented a \$25 million limit in mid-2016, it would mean companies currently undertaking developments could need 50 percent more capital than they anticipated. He explained that it would be a very difficult position for companies to be in. Additionally, if companies needed to raise additional capital they would need to do it in an environment that did not require going back to investors for additional capital because all of the IRRs were much lower than anticipated due to the change. He highlighted several issues including when the limit would apply, who it would apply to, and whether there were ways of grandfathering in existing investment (if the limit was strict). He noted that if the limit were high it was unlikely to be such a problem because it was likely to have less of an impact on current investment. Possibly the largest concern was not about the current refunded NOL

credit, but about what may happen if there was a major new investment (e.g. development of a new Kuparuk-sized field). He stated that it could easily be a total of \$2 billion in NOL credits in the first couple of years of development. He thought anyone should think about that figure and have concern about what it would mean for state finances and whether the state could afford the amount. He reasoned that over time a large field discovery would be wonderful in terms of all of the future revenues it would bring, but it could be a severe strain on the state finances in the short-term. The hope was that a large project would be economic regardless of the timing and he believed it was reasonable to put a limit in place to limit the potential downside exposure of the state. He questioned the right level at which to set a company limit.

[9:50:43 AM](#)

Mr. Mayer addressed slide 21 titled "Changes Make Regressive System Even More So." He continued speaking to new development. He explained that the biggest impacts came through the higher floor. The idea of making the gross minimum floor binding for new oil meant going from effective tax rates of zero at current prices to gross minimum taxes of 5 percent at a time when there was no profit to be taxed. The charts on slide 21 provided a look across a wide range of prices and how the structure of government take was impacted. The slide used a hypothetical asset of \$1.3 billion in capital investment and considered what portion went to the state and what portion came from different components of the system. The chart on the left represented SB 21 GVR for the new asset; it was a system designed to create a level of government take between 60 to 65 percent across a wide range of prices. He noted that production tax was something that was levied when oil prices were \$70/bbl and above. He explained that across the price environments, production tax made a positive contribution to the state's overall take from the asset. He detailed that in the early years production tax through the NOL credit would be negative, but in the later years the state would receive tax revenue from the asset. As long as the oil price was \$60/bbl to \$70/bbl or higher, over time the revenues would exceed the credits the state spent.

Mr. Mayer continued to address the left chart on slide 21. At lower prices the credits would exceed revenues. He expounded that oil prices at \$40 to \$60/bbl for the 20

years of the project's life would not be a good investment and the tax credits paid in the early years would be greater than the recovered revenues. He noted that it was only one piece of the picture. There was also the regressive royalty that took a large share of any available profits in low price environments. He continued even though production taxes were negative for the state if low prices were assumed for the lifecycle of the asset, the royalty was high enough that government take did not go down (dotted black line) until prices below \$60/bbl; negative production tax brought government take down. Government take was still regressive because the impact of the regressive royalty was greater than the impact of negative production tax (because the value of the credits was greater than the value of the taxes). At \$40/bbl the state would receive close to 100 percent government take despite the fact that the credits were contributing to the company and not the state.

[9:54:25 AM](#)

Mr. Mayer addressed the chart on the right of slide 21, which accounted for changes proposed under HB 247. A binding floor meant that gross tax had to be paid even for new oil.

Representative Gattis asked Mr. Mayer to repeat his previous point. She believed it was very important.

Mr. Mayer agreed that it was an important point. He repeated that at lower prices (particularly below \$50/bbl) despite whether the prices were assumed to remain at that level for the life of an asset, the credits paid out at the start of development were greater than the production tax revenues received in later years, which was a negative to the state in net. However, the royalty was so regressive that when all things were factored in - government take was regressive and going up at the low price levels of around \$40/bbl - it was close to 100 percent.

Representative Wilson spoke about tax credits, which represented the state investing in a project (just as it would buy shares of stock). She furthered that the state hoped the investment would become profitable, where the state would still contribute to its part and the company would pay more, until a point was reached when the state

was no longer investing, but it was receiving money. She asked for the accuracy of her statement.

Mr. Mayer answered she was correct in relation to the overall workings of the tax structure. He elaborated that the state contributed 35 percent of the upfront costs and received up to 35 percent of the cash flows that came as a result (in addition to royalties, taxes, and other).

Representative Wilson reasoned that if a new field was discovered, it may not be the right time for the state to make a \$2 billion investment. She surmised that it was not necessarily a bad investment and it could bring the state more money for years.

Mr. Mayer agreed. He stated that it was all about the timing of cash flows as opposed to the actual amounts. Unlike previous years and the situation in Cook Inlet, the only real credit on the North Slope was the NOL credit; it was clear when looking at the overall economics that it was providing the same benefit that existing producers had through the tax system and was an investment in the future of production. The only changes under contemplation changed the timing of when the investment was made - whether the state was paying its share of the capital upfront like other investors or later by taking less cash flows; in net the two strategies were the same. The question was whether the state could afford the upfront investment or not and understanding that it provided a substantial benefit to the developers.

Representative Wilson surmised that the state must be a pretty good investor thus far because 90 to 95 percent of what it took to fund government had come from the oil investments. She asked whether the Department of Natural Resources (DNR) made the determination that the state may want to invest in a project because its profitability was verifiable. Alternatively, she wondered if someone could come in and drill a hole merely to get the tax credits in the hope that the state would not conduct due diligence.

[9:59:07 AM](#)

Mr. Mayer answered the state did not have the control of a direct equity investor. He elaborated that unless particular things were put in place to address the issue, the due diligence was all conducted by the companies

themselves, which were acting in their economic self-interest to make profitable investments. The state was not making an assessment on its view.

Representative Wilson wondered what was broken. She reasoned that tax credits were really an investment and she did not believe the state was giving companies anything without something in return. She highlighted that the goal of SB 21 was to get more oil, which she believed was working. She wondered what the administration hoped to gain from the passage of HB 247.

Mr. Mayer replied that when he looked at how SB 21 was working on the North Slope, he did not believe anything was broken. He opined that overall the system worked fairly well. He elaborated that the bill made changes in other areas like the GVR and NOL that he believed were legitimate issues raised by the administration. He thought the question of what the state could afford in terms of timing of cash flows was also a very legitimate question to be raising. Particularly, if a \$2 billion investment arose, he believed it was right to be concerned about what it could mean for the state's ability to manage those cash flows over a period of years and to think about what the state could put in place to mitigate against the situation. However, broadly speaking in terms of the overall regime of taxes and credits on the North Slope, he did not see something as broken, but as something that had worked quite well.

[10:01:05 AM](#)

Representative Wilson asked for verification that Mr. Mayer would not do anything to change SB 21 at the current point in time as it pertained to the North Slope.

Mr. Mayer agreed.

Representative Gattis asked if Mr. Mayer would make changes to Cook Inlet.

Mr. Mayer returned to slide 6 titled "Big Difference between North Slope and Cook Inlet." He did not believe anyone could think the Cook Inlet credit structure was sustainable.

Representative Gara remarked that he did not know the utility of asking someone who consulted to help build SB 21 whether there was anything wrong with SB 21. He asked for verification that there were other jurisdictions in the world that produce oil very well that did not offer cash payments in terms of tax credits.

Mr. Mayer answered in the affirmative. He reasoned that Alaska was probably rare in structuring things the way it did. He referred to Australia, which had a similar system, it carried expenses forward with interest and deducted them against future taxes to try to maintain the time value of money. He explained that Australia used the method precisely because it was concerned about managing cash flows.

Representative Gara referred to Representative Wilson's point that the state had no control as to whether it was putting tax credits into fields that had no good prospects or really great projects and anywhere in between. He reasoned that unless someone from the state was in a company board room, it would not know whether the tax credit payments given to a company were what led to the production or other.

Mr. Mayer replied in the affirmative. He did not think it was appropriate to think about the NOL credit as an incentive to create new production; it was simply the same benefit that would happen later through the tax system.

[10:03:59 AM](#)

Mr. Mayer moved to slide 23 titled "Activity has Responded in Recent Years" related to Cook Inlet. He relayed that the presentation appendix included an analysis analytica had done for the House Resources Committee on Cook Inlet and the nature of what had happened there. He expressed intent to provide highlights of the analysis. He discussed that Cook Inlet had gone through several cycles since the 1950s. He pointed to a chart on the left of the slide that showed exploratory wells spudded; the chart on the right showed development wells by year of first oil/gas they produced. He noted that in both cases there had been a substantial uptick since 2010. Recent exploration activity was on par with some of the previous peaks; development drilling had been relatively more stable over years, but the recent

growth was some of the highest growth in production drilling in Alaska's history.

[10:05:10 AM](#)

Mr. Mayer turned to slide 24 related to Cook Inlet oil and gas production. He explained that when it came to the Cook Inlet turnaround that was frequently referred to, it was important to distinguish between oil and gas. He detailed that there had been peak production of oil in the 1970s of more than 200,000 barrels per day, a steep decline into the 1980s, reaching a low of 7,500 in 2009, and a marked increase in the past 6 or so years; current production was about 18,000 barrels per day. He explained that gas production was a very different picture, which had experienced a long plateau in the 1970s and 1980s. The chart on the right showed three lines: the red line represented gross production of gas from the well, the green line represented gas reinjected into fields (particularly into the Swanson River field), and the orange line represented production net of reinjection and withdrawal. The actual gross production from the fields started to decline substantially in the mid-1990s and would have led to substantial falls in total gas production in Cook Inlet, but the blowdown at Swanson River meant that a lower plateau was achieved for several years; the full impact of decline had not occurred until the blowdown had ceased in the middle of the last decade, at which point decline began again. Gas had declined to around 150,000 million cubic feet (mmcf) per day in the latter part of the previous decade; however, there had been some stability in the last several years. Turnaround in oil production had more than doubled over the last five years, whereas gas production had plateaued. One of the key reasons for the difference, was that unlike oil, gas was constrained by physical demand.

[10:07:34 AM](#)

Mr. Mayer addressed a summary of what had happened to oil and gas production and activity in Cook Inlet in recent years (slide 25). There had been stable gas production and oil production had more than doubled. He relayed that the gas market had experienced a major transition in everything from supply, demand, prices, competition, and expectation. Cook Inlet was becoming a steadily less material asset and interest in reinvesting capital was waning for legacy

producers like Chevron and Marathon. Additionally, there had been suppressed prices that had been far below Henry Hub, which had been seen as a very high price that "we were not sure we were willing to pay," and a long period of under investment occurred as a result. He explained that there had been changes in all of those things. He detailed that Hilcorp was a new entrant and mandated high pricing under its consent decree; it was focused on workovers and turning the basin around and credits were part of the incentive to help the work along. He expounded that the changes happened in all mature basins - older, mature players became less interested and were replaced by new ones. He believed there were probably particular challenges in Alaska that made the process slower, meaning there had been fewer new entrants interested in investing. Throughout that process, credits probably made it more attractive to companies like Hilcorp and in enabling much smaller players to undertake activity that may not have been possible without the credits.

Mr. Mayer addressed how sensitive the outlook in Cook Inlet was to changes in the fiscal system (slide 25). He addressed DNR estimates of about 1.2 billion cubic feet (bcf) in remaining reserves in the mature fields and estimated an additional 400 bcf in Bluecrest's Cosmopolitan project and Furie's Kitchen Lights project. He stated that it was not reasonable to divide the 1.2 bcf in existing developed fields by annual production and assume that there was 10 years of production, because production happened to decline. Strong reinvestment may continue plateau production for another five years or more; however, it was hard to look at the resource base alone and think that decline would not occur again in five to six years. Unless the resource estimate was significantly on the low side, it was hard to imagine that even with substantial ongoing reinvestment in mature fields that decline would not occur again at some point in the future. He furthered that at some point there would be an incremental wedge of new unmet demand that would need to be met from somewhere. Fortunately, Furie had brought new reserves online at Kitchen Lights - how much the reserves were remained unknown. The biggest question centered on the policy aim of the substantial subsidy that went into Cook Inlet through the tax credit regime. He believed the biggest thing needed was to ensure that new development on new projects could occur, if the aim was primarily about security of gas supply to Southcentral Alaska.

10:11:52 AM

Mr. Mayer continued to address slide 25. He communicated that at current gas price levels, brownfield investment in old fields should be profitable with or without credits. He would address modelling to illustrate the point later in the presentation. By in large, credits were much more important when it came to developing new resources; it was especially the case because of the demand constraints. There was only a very small incremental amount of unmet demand and trying to develop a new field with nothing other than that demand was very difficult to make the economics work. At the moment there was significant uncertainty over the future of the fiscal regime in Cook Inlet. He elaborated that the past year there had been a discussion about potential caps on how much was paid out and sudden panic over the impact on financing that occurred around credits. He believed that when looking at the cash coming in and going out, it was hard to see the regime as sustainable. Combined with the fact that the regime was set to sunset over the next several years, it created significant uncertainty about what the system actually looked like. He noted that - as many people at the House Finance Committee had testified - there was nothing worse than that uncertainty when trying to run economics and decide whether or not to invest. It was important to think about the aim of the fiscal system regime, the most efficient way to provide support for the security of gas supply to Southcentral Alaska, and if there was a way of doing those things as part of an overall review and setting a long-term stable fiscal regime for Cook Inlet (rather than making one incremental tweak in the current year with uncertainty about what the future looked like).

10:13:55 AM

Mr. Mayer moved to slide 26 and provided an analysis backing up the claims about brownfield investment being economic even without credits versus what was required for new development. The slide looked at a hypothetical new gas development in Cook Inlet. He qualified that some of the costs shown may be on the high side - they were based on the most recent new development in Cook Inlet, which had occurred during a time of some of the highest costs seen. He believed there was solid reason to think that the costs could come down. The scenario looked at building a project

scaled to produce more than 100 to 145 mmcf/day with investment of hundreds of millions of dollars in new facility capital costs (e.g. platform, pipelines, and other). The problem was that currently there was constrained demand; demand was well met by existing mature fields. He furthered that if demand increased slightly and mature fields declined slightly over the next five to ten years, it was not feasible to have a full development that produced the desired project size. He elaborated that a company may only have the ability to drill two or three wells over the next several years. He discussed a production profile that built slowly from 15,000 mmcf/day to a peak of 40,000 mmcf/day in a decade's time. He explained that the economics of that type of project looked very difficult, particularly if a company had to spend anything like the aforementioned costs on facilities. He believed the costs were representative of recent activity, but it could drop substantially in future years. He furthered that there was a major capital outlay in the early years with not much revenue following because production would never reach the capacity the project aimed to develop. He believed the scenario represented the current reality of new gas development in Cook Inlet.

[10:16:35 AM](#)

Mr. Mayer addressed six bar charts including a number of metrics for the hypothetical gas project under a constrained market (slide 27). The top three charts looked at the split of total net present value (NPV) of the project, discounted at a 10 percent rate. The red line represented the NPV of all of the credits, royalties, and other things received by the state; the green line represented the company's NPV; and the blue line represented the federal government's NPV. He explained that if a project was heavy in capital requirements but never received significant revenue, the scenario was nothing other than a complete subsidy by the state. At high prices, the project was potentially very marginally economic; however, returns would still be very low.

Mr. Mayer addressed the bottom three charts on slide 27, which showed the investor IRR in red and government take in blue. The charts indicated that it was a very generous fiscal regime with less than or slightly over 40 percent government take; even in the very low rate of government take and a huge government subsidy, the IRR went from less

than 10 percent to the mid-teens under the highest prices. At realistic gas prices, the investment was not highly attractive for anyone - particularly anyone with a high cost of capital. He added that the companies were mostly reliant on private equity and people who required high rates of return to be willing to invest. Unless the upfront capital costs could be reduced substantially, even with the effect of 65 percent subsidy, the project remained challenged. The project became substantially more challenged under the proposed HB 247. He summarized his earlier testimony that there were currently three credits in Cook Inlet: the 25 percent NOL credit, 20 percent qualified capital expenditure credit, and a 40 percent well lease expenditure credit. He detailed that the 25 percent credit was stackable with either of the other credits depending on the nature of the capital work; therefore, credits were between 45 and 65 percent for a new developer's total capital spending.

Mr. Mayer explained that under HB 247 the credits were reduced to the 25 percent NOL credit (both capital credits were taken away), IRR rates would be lower, and the outlook for the state looked substantially better - at high oil prices it could be breakeven or slightly positive for the state. He noted that constrained new investment looked substantially more challenged for the new investor. The CS fell in a middle ground between the status quo and original HB 247 scenarios. He expounded that in addition to the NOL credit it maintained the 20 percent capital credit. He detailed that it would provide 30 percent state support for the hypothetical project, but the NOL credit would only apply to new developers without a production tax liability. He explained that the support also applied to established companies through the 20 percent capital credit in a way that would not happen through the governor's original bill. How the approaches were balanced depended entirely on the desired outcome.

[10:20:58 AM](#)

Mr. Mayer turned to slide 28 and addressed the second hypothetical project the presentation considered, which took place in an unconstrained market environment. The scenario assumed the same capital expenses for facilities (several hundred million dollars for platforms, pipelines, and other), but factored in an optimal development market. The project assumed three wells per year for the first

three years of development and another well every year for a decade. The project could then achieve 140 mmcf/day in gas production and maintain a steady plateau at that rate for several years. The project became a solid economic development under the unconstrained market environment - the only thing that was changed was the number of wells drilled and the amount of production achieved. He relayed that the project looked much more like a cash flow profile of a health investment. He explained that the scenario did not represent the current development reality in Cook Inlet - demand was currently severely constrained. He reasoned that without the constraint there could probably be healthy developments without substantial credits. However, it would require a change in the existing demand dynamic, either in terms of a substantial export consumer or something else.

[10:22:26 AM](#)

Mr. Mayer moved to slide 29 and addressed six bar charts including a number of metrics for the hypothetical gas project under an unconstrained market (slide 27). Currently, the economics showed healthy IRRs under the status quo system, an NOL credit-only system, or in a system with the NOL and capital credits. All cases showed a substantial reduction in support for the project, but with fairly solid economics, if it were possible to build such a project with substantial export support or increase in demand.

Mr. Mayer addressed a third project 3 scenario on slide 30 that did not require the development of a new field or spending several hundred million upfront. The slide did not factor in the NOL credit because by definition an existing mature field did not receive that credit. With the 20 percent capital credit and 40 percent drilling credit the project was highly economic. He added that the scenario was not specifically representative of anyone's actual economics, but broadly speaking additional ongoing drilling in mature fields looked economic in a wide range of scenarios including vastly less credits.

[10:24:21 AM](#)

Mr. Mayer moved to slide 31 and addressed 6 bar charts related to project 3. The scenario showed an IRR of somewhere between 50 and 100 percent; without credits the IRR fell substantially, but into a range (20 percent and

higher under HB 247 with no credits) he believed was still very attractive to many players. He furthered that under the CS the work would continue to have a 20 percent capital credit; the heightened rate of the 40 percent well lease credit would be removed.

Representative Gara referred to discussions over the years about a shortage of gas available for existing contracts in Cook Inlet. He reasoned that no one explored for fields without someone to buy the gas. He discussed that every time a new contract had come up someone had discovered gas. He believed that the amount of gas available for the existing contracts was being measured before someone vocalized needing a new contract for new gas. He thought that when a new contract arose and new gas was needed that people went out and found it. He remarked that Cook Inlet carried a high premium close to \$7 or \$8 instead of the Henry Hub price of \$2. He noted that no production taxes were coming from Cook Inlet and asked what would be wrong with letting the free market operate. He reasoned that of course there were dwindling gas supplies on contract because that was how contracts work. He asked why it was all needed.

Mr. Mayer believed it was an important debate to have at present. He remarked that it was hard to view the current numbers in Cook Inlet as sustainable. The only thing that he found concerning with the free market response was the substantial lag of time between existing demand and the demand being filled. He left exploration and the several years it took to find gas out of his response. He spoke about a scenario where there was a known resource that needed to be evaluated for development and sanctioning - the process would take several years. For most of those developments the ones with attractive economics (particularly without economic support) included substantial volume of new demand. He believed if the aim was a security of gas supply it was hard to think that most of the money would be spent on that rather than on oil development and other things. He explained that it was hard to know what credits got spent on (e.g. credits spent on oil versus gas and new development versus existing fields); the information was obscured by confidentiality. He believed that if the aim was security of gas supply, there was an argument to be made that there could be another four or five years of plateau if levels of investment in mature fields persisted, followed by decline. If the scenario was

left to the free market the decline would go on for a couple of years and after several years of decline and unmet demand there would be enough of a new incremental wedge to make a substantial development attractive. He believed that there were different ways of overcoming the situation, but a limited and targeted measure of effective subsidy solely around that aim was not necessarily a terrible idea. He stated that it was a very different proposition to widespread credits for a whole range of activities.

[10:29:46 AM](#)

Co-Chair Thompson announced that the 10:00 a.m. meeting was canceled. He noted the importance of the topic at hand.

Representative Wilson asked how to make the distinction between companies in the development stage with loans and economics based on the current tax system. She wondered how to make the changes without detriment to companies who had invested based on the current system compared to companies interested in investing because of great tax credits.

Mr. Mayer believed the question about companies that had invested in Alaska based on the state's word [current tax structure] was difficult. On the one hand, particularly related to mature fields, it was hard to conclude anything other than that additional drilling was attractive regardless of credits. It was an obvious area to explore if the state was trying to scale back on the credit expense because it could be hard to see why the state needed to spend the money. On the other hand, it was also true that a company in particular had invested in the assets based on the attractive credit structure and the legislature was now changing the terms. He explained that if he were in the company's shoes, his biggest concern would not be whether the credits would exist in the future, but that he had no idea what the future tax regime in Cook Inlet looked like. He furthered that when running economics on new investment, the investor would have to apply all types of penalties because they did not know what to expect in 2, 4, and 10 years' time. He explained that if credits were removed substantially for some of the work - which he believed was not a terrible idea - it needed to go hand-in-hand with making only one overall change to the system in Cook Inlet as opposed to making tweaks over time.

[10:33:19 AM](#)

Representative Wilson was trying to determine if there was a way to specify that companies that had come to a certain point would continue under the current credit system and to cut back on credits for future investors. She wondered if it was possible to make changes to avoid devastating current companies while stopping the state's liability in the future.

Mr. Mayer answered that the first thing to consider was the issue of timing. He detailed that it may not be as much about total levels of credit support as to when a change was implemented. He referred to a couple of companies with active development plans, which would be seriously and adversely impacted if a change was implemented in the middle of the current year. Whereas, he believed most of the developments could be undertaken by those companies if the state maintained the current credits for a year or two. He added that the issue was separate from ongoing work that was not new project development, but incremental drilling in existing fields - almost all of the gas Southcentral currently depended on, which was largely fairly economic work to undertake. He addressed the perception of the companies undertaking the work about the reasons they came to Alaska to invest. He considered how the state would convey that changes to the fiscal regime were part of a process of establishing a long-term stable and durable, competitive and attractive set of fiscal terms as opposed to revisiting the issue over and over with no clarity on what economics would look like.

Representative Wilson asked if the committee would hear from any gas companies only undertaking exploration. She noted there was a large distinction between what was done for developers versus exploration.

[10:36:36 AM](#)

Representative Gattis referred to Mr. Mayer's testimony and surmised that in relation to credits in Cook Inlet, the state was looking to keep companies in the queue when Southcentral looked for gas and wanted to keep continuous gas. She believed it was important to consider not pulling the rug out under companies when thinking about potential rolling brownouts and other. Anchorage depended on the state's source of gas. She believed part of the

consideration should be about what companies could produce moving forward.

Mr. Mayer agreed with much Representative Gattis's statements, but made a couple of distinctions. He addressed exploration versus development of known, but not completely proven undeveloped resources. There was a substantial resource currently known that needed to be developed to bring security for the next decade or more. He expounded that from an investor's perspective it was much lower risk work than exploration. To the extent that credits were being used to fund exploration (the precise numbers were not public due to taxpayer confidentiality) there was a legitimate question about what sort of work credits should be supporting. He believed it was reasonable to conclude that currently the highest priority was development of known resources. Additionally, he considered how much the current gas supply from mature, declining fields required the support from the state and if changes were made to the fiscal system, how to ensure it was part of the context of long-term stability.

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Mr. Mayer noted that the next section of the presentation was a wrap up. He asked if there were any other questions about the Cook Inlet tax credits.

Representative Wilson asked what specifically needed to be done with Cook Inlet to level things out and have money for the state.

Mr. Mayer answered that the state could not afford to spend what it was currently spending on tax credits. He believed there were difficult decisions to be made about how much to cut back and how much to target specific activities versus being more broadly based. He noted that the changes required having a consensus about the aim of the program. If the aim of the program was only about the security of the Southcentral gas supply he believed two things were necessary: setting a timeframe (the next year or year after) and how tightly to constrain the activities.

Representative Wilson believed the current gas under production would last for 10 years. She wondered if the changes made in the House Resources Committee were sufficient or whether the changes did not go far enough. She understood that they should not wait until 2022 when most of the credits went away.

Mr. Mayer agreed that broadly speaking when considering the gas in the ground, 10 years' of gas was accurate. However, there was an important distinction to be drawn between existing mature fields, which may have that in total, but are unable to produce at the current plateau rate to meet the full demand for the full 10 years; the fields were likely to go into decline at some point. Therefore, it would be important to ensure there was incremental additional production. He detailed that some of the incremental production had already occurred in Furie's Kitchen Lights field - but the exact capacity was currently unknown. He surmised that perhaps there could be 5 to 10 years in supply.

Representative Wilson reiterated her question about action taken by the House Resources Committee.

Mr. Mayer answered that it came down to a judgement call based on priorities. The initial CS focused on maintaining the NOL credit. He believed the reason the committee had made that decision was because the NOL credit applied only to new developers or explorers. He detailed that the original bill aimed for support to go to new developers and not mature fields; however, the CS factored in that a particular company invested in Alaska due to the current tax regime (the company represented the bulk of the gas supply for Southcentral at present) and aimed at not pulling the rug out. He remarked that it was a much more expensive decision to make in terms of impact. The House Resources Committee bill version maintained only the NOL credit and restricted it to significantly fewer players on a limited basis. However, a similar level of support (provided under the CS) through the capital credit was applicable to much broader work including work that was probably economic without it. The question was about how to weigh the different things in making the decision.

[10:55:11 AM](#)

Representative Wilson asked how much more money they were talking about in the latter years. Mr. Mayer replied that the question related to the cash impact to the state could only be answered by the Department of Revenue; the details needed for the calculation required confidential taxpayer information.

Representative Pruitt stated that Cook Inlet was a different discussion than the North Slope. He believed interchanging the two systems and the intent of the two systems made the issue difficult. He surmised that from the state's perspective, the intent of the North Slope was to generate revenue for the state; whereas, the intent behind Cook Inlet was to provide gas for the economic stability of Southcentral. He believed they ended up skewing the two different systems and the purposes behind them. He referred to discussions within the legislature about whether it could allow Cook Inlet to go back to a free market system. He thought that a free market scenario had existed prior to the passage of the Cook Inlet Recovery Act by the state legislature in 2010. He detailed that the state had offered incredible incentives including no tax, royalty changes depending on production, and other; however, it did not increase investment by companies. He asked how reverting to a free market system would impact the state. He wondered if they would find themselves back in the same situation that had not worked before.

Mr. Mayer replied that it was unknowable what would actually happen due to the numerous variables. He clarified that the credits were not the only thing that changed in the period of declining production and rolling brownouts; a significant number of changes had occurred during that time. The single biggest change during the period was the natural evolution in the life of any basin where the investment became steadily less material over time, the investor became less interested in doing the intensive workover work required to maintain the asset, and they eventually divested from the asset, at which point a new company came in. He explained that the scenario happened in all mature basins worldwide. He believed the transition occurred in Cook Inlet at a particular time and was aided and abetted by a couple of things including low gas prices. With the transition of ownership came the following: a change in the way the Regulatory Commission of Alaska (RCA) had to approach gas pricing decisions; the consent decree; and a multitude of things that changed the pricing picture.

He mentioned development of storage and what the seasonal nature of demand meant for how gas could be delivered. All of the items had been key building blocks in creating a more stable gas supply. He concluded that credits had been important but were not the only thing that had changed. Given those things and if it was true that drilling in mature fields was economic in a wide range of environments, he considered whether it required the credit to continue at the current level or if it could be changed to a past level. He believed many things had changed since a time when the system should have been economic, but companies were not lining up to invest.

Mr. Mayer discussed that the impact of a substantial move towards a more free market approach was unknowable in many ways. He furthered that it was hard to look at the numbers on slide 31 and think (particularly related to mature fields) that there was not still substantial incentive for an existing investor to continue. More than anything else, for an existing investor to want to continue the work, it required certainty about the stability of the future of the system as much as anything. He elaborated that the question of developing new resources went back to the issue of constrained demand; there may be some role for more targeted support to enable the new development to occur, understanding that it was effectively a state investment in spare capacity that was not currently needed; however, it would be needed in the future in order to avoid a disruptive transition.

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NIKOS TSAFOS, PRESIDENT AND CHIEF ANALYST, ENALYTICA (via teleconference), agreed with Mr. Mayer's statements. He spoke about free market that included a certain amount of instability and uncertainty, which resulted from depending on the market. The question really was whether or not policy makers, the public, and the market participants were comfortable with the uncertainty. For example, there was a large boom in shale gas production in the Lower 48 but gas price had also gone to \$12 at which point "everyone came out of the woodwork to start producing more shale." He furthered the way the market worked meant there may be periods of time where there were very high prices in order to incentivize the desired type of behavior. In a mature basin there was a natural transition from long-term contracts to shorter-term contracts; in many ways the

scarcity of gas in the Cook Inlet was really a perception of scarcity. He elaborated on the idea that companies had previously been able to get 10 to 20-year contracts with all the desired flexibility and were now only able to get 2 to 4-year contracts. He expounded that it was not necessarily that they were not able to get gas, but it was necessary to adjust to a completely different mindset in terms of how the resource was managed. He addressed slide 44 titled "Gas Prices have Risen Considerably Post 2004." He discussed that the slide at the beginning of the meeting put about \$400 million of credits into Cook Inlet. He explained that Cook Inlet had produced about 100 bcf in the previous year; at the prevailing gas price of \$6.00, Cook Inlet brought in about \$600 million - the state had provided support for \$400 million. He explained that that the state was also supporting oil in addition to gas and new development in addition to existing resources. He clarified that it was not that there was a \$600 million market and the state supported \$400 million, but the figures provided a sense of the magnitude. It was clearly a market that did not function quite properly.

Mr. Tsafos detailed that in relation to that market there were three levers that could be pulled. The first lever was fiscal (e.g. credits and other) and the second lever was price. He referred to an image of the prevailing value of gas in the Cook Inlet (slide 44) and noted that the price went up briefly around 2008, but overall since about 2007 the price had been fairly flat. He questioned whether the price really reflected the scarcity of gas in the Cook Inlet. He elaborated that it was hard to look at the price and believe that it captured all of the nuances of the scarcity of supply and demand. The third lever was regulatory - regulatory options that countries around the world had used to create stronger markets and strengthen competition. He referred back to the \$400 million to \$600 million comparison and surmised that based on the three levers, the system was weighted heavily towards fiscal. The relevant question was not so much about how to change the fiscal lever, but how to think more generally about rebalancing the policy toolkit in order to make the market function better. He emphasized that it was important to think about options outside of the fiscal lever because there were other things a sovereign could do to increase the functionality of the market. At the end of the day, there was potential supply, but there was not really

demand; therefore, it was important to think about how to use fiscal policy to develop a better market.

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Representative Pruitt thought it was appropriate to define the situation as a constrained market. He believed it was probably appropriate to put Cook Inlet in the constrained market category. He reasoned that the market was constrained for reasons beyond the fiscal consideration. He elaborated that in the past when there had been a free market, the market had been determined because most of it had been utilized in a utility scenario. He opined that the market had not truly been free - the customer had not been paying the price the companies were willing to sell the product for. Alternatively the Regulatory Commission of Alaska had determined the price. In essence a certain limitation had been placed on what the state felt the price would be - it did not allow the free flow of the market and eventually found itself having to pay additional amounts because no one was making the investment. He referred to the current conversation about the fiscal reality, which he believed was a determination of whether or not the state wanted to see a direct payment by the people utilizing the gas to cover whatever it cost and whatever agreement could come forward between the producer and individuals; or whether or not it was a statewide priority to incentivize through fiscal scenarios (i.e. credits or royalty reductions) to ensure that gas supply remained available at a reasonable rate for Southcentral customers. He asked for the accuracy of his remarks.

Mr. Mayer agreed. He believed the point related to the three fundamental policy levers that could be used to address the situation. The Cook Inlet Recovery Act did certain things in terms of the way the RCA made pricing decisions, but overwhelmingly the weight of the current policy response was on the fiscal subsidy lever. He estimated that production was closer to 80 bcf rather than 100 bcf in terms of what was actually consumed in the state. He continued that \$400 million in subsidy was almost all of the value of the gas. He remarked that it was quite stunning to think about how much was paid out in credits. He reasoned if the aim really was about security of gas supply, it was currently possible to buy almost all of the gas for the amount currently spent on credits. Whether the state could instead rely on a better approach to market

pricing (other things could be done on the regulatory structure of the market) became difficult because one of the biggest impediments was a lack of competition - currently the Cook Inlet market had only one major player and because of the structure of limited demand, there was a limited ability for new companies to come in. Regulatory interventions to change the scenario had been utilized in many other places, but those systems also created winners and losers by definition. The issues needed to be thought about very carefully when considering how to create a structure that could move closer to a free market world and rely less heavily on overwhelming government support.

[11:10:32 AM](#)

Mr. Tsafos agreed that there were options to think about to create better markets, which was the kind of policy that created winners and losers in terms of creating demand by looking at market share or requiring a certain number of contracts for a diversity in supply. He clarified that he was not suggesting the strategies necessarily needed to be undertaken by the state, but there was a question about the regulatory leg of the policy; thus far it had been heavily weighted towards the fiscal. There were jurisdictions that completely ignored both fiscals and regulatory and basically only manipulated the price. He explained that Alaska was not unusual for relying one of the levers more than others, but as part of a well balanced approach he thought it was important to consider how to reallocate the emphasis.

Representative Gara referred to the discussion about winners and losers. He remarked on the state's \$4.4 billion deficit and explained that there were currently many people on the losing end who could barely handle the burden of the budget (e.g. individuals with disabilities and other). He did not know how much the state could afford to just be nice to the oil and gas industry due to the state's large deficit. The state had adopted a gas storage credit, which had benefitted Cook Inlet well. Additionally, the state had changed the RCA rules so producers could charge more for their natural gas. He addressed that the system was currently demand-constrained (people did not need the gas), which was deterring exploration. He believed that the idea of adding extra subsidies was operating under the assumption that companies needing natural gas in the future were not smart enough to contract with explorers to look

for the next level of supply on their own. He asked if the state could trust that at some point those needing natural gas could contract with companies to look for natural gas. He asked if the tax credits would change the behavior.

Mr. Mayer answered that his focus on the comments was less on exploration than it was on development of known but undeveloped resources. He believed there was a pure free market solution to the problem, given enough time and willingness to survive market volatility. For example, if there were rolling brownouts and substantial gas shortage, it would at some point become economic to develop the gas phase at Kitchen Lights (a known, undeveloped resource that would require substantial investment to bring online). The question then became about what the volatility and disruption would be if left to the free market and how well the free market could solve the problem. Alternatively, from a government policy perspective if the state provided additional subsidy to enable those things to occur, compared to the amount of money currently spent on the credits, how to develop known but undeveloped resources was a much smaller piece of the current picture. He believed it was reasonable to ask what amount of support was required to assist some of the work that may not otherwise occur (and may not occur without an additional source of demand) as opposed to providing blanket credit by subsidy for a very wide range of activities that may have nothing to do with developing known but undeveloped resources.

Representative Gara appreciated the remarks and hoped it was the perspective the state moved ahead with. He noted that every \$50 million the state could save in unnecessary subsidies was something that mattered to the state. He furthered that the laws [providing subsidies] had been passed with the idea of encouraging Cook Inlet natural gas production for local use. He furthered that many of the subsidies were being spent for oil, which had not been intended to get the breaks. He noted that the oil was paying no production tax. He continued that many of the credits were going to ConocoPhillips for its export facility to export gas that it made money on and paid no production tax for. At some point he hoped the advisers could help the state be as conservative as possible in deciding which tax subsidies it should pay for under its current budgetary circumstances. He reasoned that every dollar going towards something it did not need to go towards was being taken away from someone else. He asked

the advisers to consider whether the state really needed to incentivize oil and export facilities that it never intended to incentivize. He added that there were private companies that knew when they needed to start contracting with a company to look for their next round of supply of gas.

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Mr. Mayer agreed that the questions were important. He replied that it was difficult to get into the specifics without knowing the precise confidential taxpayer details. However, it was hard to look at the activity and not think that a vast amount of the credits were going to support oil that was being produced with some of the most generous fiscal terms on the planet. He surmised that there could be long debates about what was intended when the credits were established and how much the credits were about providing a "sweet" deal on oil in order to also get the gas along the way. He believed that when looking at what the credits had been at the time the change had been enacted versus what they were at present and what revenues were and had been, it had been easy to say that the state was giving some credits away in Cook Inlet, but when considering how much the state was making overall, it was a no brainer if it brought supply security. He explained that it was a very different calculation at present when looking at how much the state was receiving and spending in Cook Inlet. He turned to slide 43 and addressed exports. On the one hand he believed Representative Gara was right that providing a subsidy to ensure security of gas supply for Southcentral was one thing, but providing a subsidy for gas exported to Japan was a separate and more difficult conversation. He discussed that Alaska had a seasonal structure of demand, and supply had become steadily less able to live with the seasonality. For the vast majority of history, the LNG facility at Kenai had produced fairly steadily and had not been particularly seasonal. He pointed to the chart on the left of the slide: the red line indicated export from October to March and the green line represented export from April to September. He explained that the lines had historically been similar, but had dramatically diverged in the past couple of years. The data showed that Kenai had become a seasonal facility and was providing some of the swing capability that also came from storage - the ability to moderate the natural seasonality of Alaska's demand.

Mr. Mayer addressed price and believed that one of the things that would get difficult and put more pressure on current prices on storage as a solution (rather than Kenai) was related to the prices Kenai received. He elaborated that historically the price had been \$16/mmbtu; currently the price was about \$6/mmbtu. He stated that when thinking about the price of gas in Cook Inlet and the costs involved in liquefying and shipping gas to Japan or elsewhere, it became much harder to see why anyone would want to keep doing that at present. He elaborated that it was one thing when the owner of the facility (a depreciated asset) was also the owner of the upstream - it was possible to see how that could work if they did not have to buy the gas. However, an owner of the upstream facility had to buy the gas from a producer (e.g. ConocoPhillips was getting out of its upstream position) or the upstream producer was having to pay the liquefaction under a toll, the economics became much more difficult; it was hard to see how export at the moment would continue to offer the same seasonal flex as it had in the past couple of years.

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Co-Chair Thompson relayed that the meeting would adjourn at 12:00 p.m.

Mr. Mayer turned to slide 33 and addressed a summary section of the presentation comparing status quo, the original HB 247, and the CS. He addressed the North Slope and discussed the issue of annual versus monthly assessment of things like the per barrel credit and how it interacted with minimum tax. The status quo would continue an annual assessment. The change would require companies to do something that was close to lodging their annual finished tax return on a monthly basis; it was the sort of thing that generated additional revenue in times of volatility - it would have brought in an additional \$100 million. However, as far as he could see it was really more about incremental revenue raising than about some pressing change needing to occur in the structure of the overall system.

Mr. Mayer continued to address slide 33 and spoke to the GVR and NOL credit. He reiterated his earlier testimony that for new developments in times of low oil prices there could be several years where a company could be eligible for NOL, but producing oil making revenue. He continued that rather than uniform 35 percent support for everyone

(in some cases a company could get much more than 35 percent support for a loss or an NOL credit when it was not technically making a loss in certain circumstances), the bill and CS proposed to change the system so the NOL would not be calculated taking into account the effect of the GVR. He observed that the change would have a substantially negative impact on some companies. He referred to recent testimony by Caelus Energy LLC that the change would erode about 13 percent of the NPV of its investment in Nuna [oil development project]. He believed it was clear that the intent of SB 21 had been 35 percent support for government spending across all circumstances and the proposed change would fix that; it was not a major impact to the treasury, but was a question about how the system was designed to work.

Mr. Mayer addressed proposed changes to the gross minimum tax on slide 33. The bill proposed to harden the floor for all production, which would mean no longer letting the NOL credit take producers with a liability below the 4 percent floor. For new GVR-eligible production, which currently had no floor other than zero, would also have a hard and binding floor. Additionally, the rate would increase from 4 percent up to 5 percent. The CS maintained the status quo: a 4 percent gross floor for legacy production with the ability for the NOL to take the tax below that amount; and no effective floor for GVR production. He spoke to NOL credit reimbursement and had considered that it was really about a benefit a company would otherwise receive later in the tax system being brought forward at a time when a new developer had no liability; however, there was a potential liability to the state in the event that a major new Kuparuk-size development was discovered.

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Mr. Mayer turned to slide 34 and explained that the proposed change of HB 247 was a \$25 million per company limit along with restrictions on large companies (with more than \$10 billion in revenues) from being able to claim the reimbursement credit at all. Whereas, the CS had a much higher per company limit of \$200 million. He addressed the GVPP calculation and explained that HB 247 specified the number could not go below zero. There had been a slope-wide system of deduction of costs (including deduction of costs for transport prior to calculating revenue), whereas the change could limit the deductibility of some transportation

costs. He elaborated that the CS would maintain the status quo. He relayed that the bulk of the refundable credit outflow went to Cook Inlet tax credits, but only a fraction of the state's petroleum revenue came from that region. Cook Inlet also had a 25 percent NOL credit. He clarified that the NOL credit was very different in Cook Inlet than on the North Slope because it was not part of a corresponding profit-based production tax. Additionally, the 20 percent capital credit established under ACES continued, but without the ACES-type production tax (only no tax on oil, a flat gross minimum tax on gas, and a 40 percent well lease expenditure - up to 65 percent government support for spending). The proposed change under HB 247 was to repeal the qualified capital expenditure and well lease expenditure credits (effective July 1, 2016) and leaving only the 25 percent NOL credit. The focus on the NOL was a way of specifying the state's desire to concentrate on the new developers (not mature production) and for the situation to take care of itself by tapering out when people actually had production. There had been discussion that implementing the change on July 1 had major impacts on companies with existing capital commitments through the next year. Therefore, the CS would implement a phased series of changes starting in the middle of the next year that would go into effect fully by 2018. Additionally, the CS would continue some level of support for the ongoing work in the mature fields - the NOL would be reduced to 10 percent, maintain a 20 percent capital credit, and effectively phase out the well lease expenditure credit.

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Representative Gara remarked that much of the changes largely effected small producers and explorers. He discussed that at about \$76/barrel companies paid a profits tax of about 10 percent, which slowly rose to 35 percent at \$155/barrel); however, at prices below the 35 percent mark, the big three companies received a 35 percent deduction of operating and capital costs. He remarked that the deduction was not classified as a credit, but he believed that was what it is. He noted that small companies received a cash payment or NOL, but he believed it was fair to say that the big companies were getting the deduction. He asked if his statements were accurate.

Mr. Mayer agreed. He elaborated the structure existed because in most circumstances the companies were paying an

effective 35 percent marginal rate (the amount varied slightly depending on price) and not an average rate. Slide 34 provided a picture of the overall system for a new field with GVR. Legacy production had a similar amount of government take at the \$50 to \$70 range, which increased by about 5 percent at higher prices. Overall, it was still a system that was designed to deliver between 60 and 70 percent government take; there was not an enormous giveaway at those price levels. The purpose of the declining tax rate at those price levels was precisely the place where the royalty became a steadily greater share of the total. The only way to achieve government take in that range was to reduce the production tax within that price range in order to compensate for the increasing royalty.

Representative Gara noted that they needed to consider overall fairness. He wanted to bring attention to the fact that they [the large producers] were essentially receiving a 35 percent tax credit even though it was much higher than the tax rate they paid at those prices.

Representative Pruitt asked if in light of the current oil prices, there were other jurisdictions that were increasing taxes on oil and gas.

Mr. Mayer answered that other regimes were contemplating both increases and decreases [in taxes]. He elaborated that jurisdictions with more diversified economies that could survive economic downturns and were concerned about the future and wanting to maintain a desirable investment climate and not kill a mature industry, were looking at reductions. Alternatively, places that were more dependent on oil revenues may not want to increase taxes although they may realize it was not ideal policy. For example, in the United Kingdom (U.K.), substantial cuts had been made to taxes in the North Sea; the cuts had been implemented by the same government that had enacted substantial tax hikes in 2011. The government had recognized that the hikes they had put in place had made life difficult and could result in a boom in decommissioning, given the mature age of the basin. Consequently there had been very substantial cuts in profit-based petroleum taxes in the U.K. in the current and previous year. The purpose of the cuts had been to communicate that the government knew it was an industry in peril, particularly at current prices, and they wanted to do everything possible to maintain it. He provided Columbia as another example and explained that the government had

reduced tax and contract rates for certain offshore blocks to try to maintain ongoing exploration despite the low prices.

Mr. Mayer addressed the two tax increases he was aware of. Russia had a very regressive fiscal system that took a large share in taxes. He detailed that Russia had previously scheduled reductions in the rates, but the action had been postponed and they were now considering increasing the taxes. He remarked on a recent New York Times article, which highlighted that the current slim profit would be taken away [if taxes were increased] and there would no longer be capital to reinvest. The author had specified that the situation reflected the "oil industry equivalent of eating the seed corn." He remarked that it was potentially a sacrifice of a significant amount of long-term interest due to short-term desperation. Brazil had also increased taxes. He detailed that the increase was about a dispute between state and federal government. He explained that royalties went to the state and the remainder of the tax system revenues went to the federal government. There was a dispute about the way the royalty was calculated in Rio de Janeiro where many of the large deep water pre-salt projects were located - the state claimed the pricing formula used to determine the royalty was unfair and undervalued the resource and if the federal government would not increase the amount, the state would levy its own state-based tax. The federal government would not change the way it was calculated; therefore, because the state is highly resource-dependent it had implemented an additional tax that substantially increased the breakeven price for the large, expensive, offshore pre-salt fields.

[11:36:45 AM](#)

Mr. Mayer continued to answer the question. He believed when governments that had implemented tax increases looked at the economics of the long-term investment they did not necessarily think the policy was ideal; however, they were struggling with ideal policy versus the short-term needs of the state.

Representative Pruitt spoke to Russia and its increase. He stated that Russia still had its own national oil company Rosneft, which would not see an impact. He wanted to know what the state should expect if it looked at the increase

to the private sector. He wondered if the private sector in Russia would maintain its investment or back off if additional increases occurred. He recognized that Rosneft did not have that implication and continued to invest without the other challenges. He referred to a recent Reuters article specifying that Rosneft benefitted from a \$2 to \$3 lifting cost, which was substantially lower than anything facing Alaska. He asked about the ramifications of a tax increase. He wondered if Alaska would see a reduction in production on the North Slope.

Mr. Mayer replied that it varied widely between the original bill and the CS. Under the original bill depending on how items like floor hardening, per company limits on NOL refundability, and when and how they were applied, could have a substantial negative impact on investment. For instance, how the per company limit was approached and when it was put in place in relation to the NOL credit, had a big impact on whether it was an overwhelming negative for the economics of smaller producers currently investing. Related to the hardening of the [tax] floor there were varying degrees; however, all variations substantially increased taxes on an industry that did not have profits to make. He believed all of those things could negatively impact investment.

[11:39:55 AM](#)

Mr. Tsafos agreed with Mr. Mayer's statements. He elaborated that any investor was looking at both the current and future tax systems, which was also tied to the fiscal health of the state. He thought much of it would come down to what kind of risk premium the state placed on Alaska. He referred to Mr. Mayer's earlier testimony about making changes to a tax system in increments [and creating uncertainty for investors]. Generally, more resource dependent states tended to have more volatile systems because they tried to protect themselves due to their dependency on resource revenues. Whereas, more diversified economies could withstand some of the ups and downs. He stated that it should not be considered only as taxes on oil and gas, but as the overall risk assessment that prospective investors place on what would happen. He elaborated that companies considering investment were taking a 10 to 15-year bet on the broader fiscal health of the state.

Vice-Chair Saddler asked why it was important for constituents to understand Alaska's system of oil and gas tax credits, what it was trying to accomplish, and what the bill sought to change.

Mr. Mayer replied that it was important because it was about the long-term sustainability and viability as a resource-dependent state, about the current state of the state's finances, and how to balance the two. He elaborated that the long-term viability of the state required steady reinvestment (particularly as long as the state was resource-dependent) predominantly on the North Slope and it required an investment climate that remained favorable to do so. He believed that under SB 21 there had been substantial improvement and reinvestment, which was starting to show some results in terms of flattened decline; he noted that the changes became more challenging to maintain as prices declined. On the other hand, there were aspects of the current system that created severe financial strain when oil prices were low. The biggest part was the sheer amount of credit subsidies in Cook Inlet; it was hard to think the situation was sustainable. The state also had a problem related to the timing of cash flows on the North Slope; it was not about providing money as a subsidy as much as it was the ordinary operating of the tax system, but being structured in a way that payments did not necessarily coincide with revenue.

Mr. Mayer relayed that the current system worked well in some ways and enabled a level of government take to occur, which may otherwise be more difficult; it provided a benefit to companies that would not exist otherwise. The relevant question was whether the state could maintain those benefits or create limits in the current constrained environment. Specifically, he questioned whether the state would have the ability to pay out hundreds of millions of dollars (potentially billions of dollars) in any given year in the event a new large development was discovered. Alternatively, he questioned whether it was necessary to put limits in place to constrain that potential. He believed those were the core questions needing answers at present. There were other considerations introduced by the bill related to the minimum [tax] floor and other ways of raising revenues. He believed the options were a way of recognizing that although the revenue situation was urgent, the state may not want to get into incrementally raising revenue if it could potentially erode investor perception

of the system stability for what was probably a relatively small gain. He questioned whether the state wanted to substantially raise taxes on revenue at a time when there was no actual profit to tax and whether the decision represented smart policy.

11:45:17 AM

Representative Wilson spoke to exploration credits and asked if it would make more sense for the state to take on an investor mindset prior to the start of a project in order to determine whether it should invest in the project. She reasoned that much of the state's revenue would go towards the investment. She referred to the current system where companies decided whether or not to invest and the state became a player by default.

Mr. Mayer replied that he would not focus the conversation on exploration credits, which essentially expired in the current year in most cases. He noted that exploration activity could still be supported through the NOL credit. Where the issue became particularly relevant was in relation to the state's exposure (predominantly on the North Slope) through the refundable NOL credit, whether it should be capped, and how. The bill and the CS proposed a per-company cap on how much could be refunded. Another option was to specify that refundability was not the norm of the tax system, but it was something that had to be applied for. For example, in the future a producer would need to ask for special consideration if they could not afford the full royalty for the first 5 to 10 years of operation. He elaborated that it would be some type of process where a company would present the administration with their economics to request eligibility for the credit. He believed the issue was a judgement question and that there would be merit in giving it consideration.

Representative Wilson did not believe the state wanted to stop investing in things that would provide a future return. She asked if there were any other regimes that were involved in deciding whether to invest in a company. She reasoned that the state should not invest in a company that was a step away from bankruptcy.

Mr. Mayer answered that he could think of relatively few tax royalty regimes operating in the way Representative Wilson suggested. By in large, tax royalty regimes apply in

more hands-off government jurisdictions and also tended to be more diversified with a wider range of tax base. The regimes tended to operate through the tax system because they were interested in setting overall policy, not getting into the details of particular projects and how to assess them. The alternative was that many of the most resource-dependent locations used things like production sharing contracts and active national oil companies. Often the contract was negotiated with the national oil company and not directly negotiated with the government. In that scenario, there was a very direct conversation between the international and national oil companies about what the economics looked like, what the terms would be, who was investing what, and how the returns would be allocated. That level of detail and involvement was significantly easier to facilitate in the environment he had specified, than through a tax royalty system. He believed the question was if the goal was increased control over how things worked, how much it made sense for a tax royalty system. He reasoned that someone could make an argument to operate that way, but it would look very different than tax royalty regimes in many places.

[11:49:57 AM](#)

Representative Wilson was struggling with how the state should decide whether to invest or not invest in something that would have a huge impact in the future. She believed it was a different conversation than Cook Inlet at present. As a representative from the Interior, she wanted resources to go to her region instead of being exported. She stated that was more of a subsidy for one area compared to other parts of the state. She believed it was even more concerning if the state subsidized for someone else to use the state's gas.

Representative Guttenberg believed it was appropriate for the legislature to be considering the situation at any oil price. He remarked that the presentation was solely on the North Slope and Cook Inlet. He was concerned about the Frontier Basins. He reasoned that at present they were not major players, but at some point in the future that would change and they would represent a critical part of the state's economy. He asked how to keep their environment stable and prevent hindering their explorations and efforts.

Mr. Mayer believed the comments were very reasonable; if current arrangements were extended for the situation he imagined the fiscal impact would not be massive in the broader scheme of things.

Co-Chair Thompson thanked the presenters for their presentation. He asked members to provide any written questions to his office.

HB 247 was HEARD and HELD in committee for further consideration.

Co-Chair Thompson discussed the agenda for the following meeting.

ADJOURNMENT

11:53:43 AM

The meeting was adjourned at 11:53 a.m.