ALASKA STATE LEGISLATURE
SENATE RESOURCES STANDING COMMITTEE
April 2, 2016
2:06 p.m.

MEMBERS PRESENT

Senator Cathy Giessel, Chair
Senator Mia Costello, Vice Chair
Senator John Coghill
Senator Peter Micciche
Senator Bert Stedman

MEMBERS ABSENT

Senator Bill Stoltze
Senator Bill Wielechowski

COMMITTEE CALENDAR

SENATE BILL NO. 163
"An Act relating to the nomination and designation of state water as outstanding national resource water; and providing for an effective date."

- MOVED CSSB 163(RES) OUT OF COMMITTEE

OVERVIEW: ALASKA'S OIL AND GAS TAX CREDIT SYSTEM

- HEARD

PREVIOUS COMMITTEE ACTION

BILL: SB 163
SHORT TITLE: NATL. RES. WATER NOMINATION/DESIGNATION
SPONSOR(s): RULES BY REQUEST OF THE GOVERNOR

01/29/16	(S)	READ THE FIRST TIME - REFERRALS
01/29/16	(S)	RES, FIN
02/15/16	(S)	RES AT 3:30 PM BUTROVICH 205
02/15/16	(S)	Heard & Held
02/15/16	(S)	MINUTE(RES)
03/07/16	(S)	RES AT 4:30 PM BUTROVICH 205
03/07/16	(S)	Heard & Held
03/07/16	(S)	MINUTE(RES)
03/14/16	(S)	RES AT 3:30 PM BUTROVICH 205

03/14/16	(S)	Heard & Held
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03/16/16	(S)	Heard & Held
03/16/16	(S)	MINUTE(RES)
04/01/16	(S)	RES AT 3:30 PM BUTROVICH 205
04/01/16	(S)	Heard & Held
04/01/16	(S)	MINUTE(RES)
04/02/16	(S)	RES AT 2:00 PM BUTROVICH 205

WITNESS REGISTER

MICHELLE HALE, Director
Division of Water
Department of Environmental Conservation (DEC)
Juneau, Alaska
POSITION STATEMENT: Commented on SB 163.

RANDALL HOFFBECK, Commissioner
Department of Revenue (DOR)
Juneau, Alaska
POSITION STATEMENT: Delivered an overview on Alaska oil and gas tax reform.

KEN ALPER, Director
Tax Division
Department of Revenue (DOR)
Juneau, Alaska
POSITION STATEMENT: Participated in the overview on Alaska oil and gas tax reform.

JANAK MAYER, Chairman and Chief Technologist
enalytica
Washington, D.C.
POSITION STATEMENT: Delivered an overview on Alaska's oil and gas tax credit system.

NIKOS TSAFOS, President and Chief Analyst
enalytica
Washington, D.C.
POSITION STATEMENT: Participated in the overview on Alaska's oil and gas tax credit system.

ACTION NARRATIVE

2:06:30 PM

CHAIR CATHY GIESSEL called the Senate Resources Standing Committee meeting to order at 2:06 p.m. Present at the call to order were Senators Stedman, Costello, Coghill, Micciche and Chair Giessel.

SB 163-NATL. RES. WATER NOMINATION/DESIGNATION

2:06:52 PM
CHAIR GIESSEL announced consideration of SB 163 [version CSSB 163, 29-GS2916\I, as conceptually amended on 4/1, was before the committee]. She said the conceptual amendment referenced the correct federal law and invited Ms. Hale, Director of the Division of Water, to explain the differences.

2:08:05 PM
MICHELLE HALE, Director, Division of Water, Department of Environmental Conservation (DEC), Juneau, Alaska, explained that 40 CFR 230.3 was changed to 40 CFR 122.2 on page 6, line 14, to reference the correct definition of "waters of the U.S." The definition in 40 CFR 230.3 relates to the Dredge and Fill Program; 40 CFR 122.2 relates to the Point Source Discharge Program, which is the reference that should be used in SB 163.

SENATOR COSTELLO moved to report CSSB 163(RES), version 29-GS2916\I as conceptually amended from committee with individual recommendations and newly attached fiscal notes, one from DEC OMB component 2062, dated March 31, 2016 at 3:15 p.m., OMB component 3002 from DNR dated April 1, 2016 at 12:a.m., and OMB component 486 from the ADF&G dated April 2, 2016 at 11 a.m. There were no objections and it was so ordered.

2:10:41 PM
At ease

Overview: Alaska's Oil and Gas Tax Credit System

[Contains discussion of SB 130.]

2:11:51 PM
CHAIR GIESSEL announced the overview of Alaska's oil and gas tax credit system and said that the referral of SB 130 is pending. She invited Commissioner Hoffbeck and Mr. Alper to explain their past experiences with Alaska's tax policy.

Department of Revenue Overview

RANDALL HOFFBECK, Commissioner, Department of Revenue (DOR), Juneau, Alaska, said he has about 30 years of experience dealing with Alaska tax policy, the majority of it dealing with property tax issues, but he also served five years as the state petroleum property assessor and was a contractor to the Department of Revenue (DOR) for two years before that. Prior to that he was the tax manager for the North Slope Borough dealing primarily with oil and gas taxes. Most recently, he served as the CFO and finance director for the North Slope Borough, the government entity where the Prudhoe Bay oil fields reside, and now he is in his current position. He authored the AS 43.56 oil and gas regulations in 2001/2.

2:13:48 PM
KEN ALPER, Director, Tax Division, Department of Revenue (DOR), Juneau, Alaska, said he had been engaged in the oil and gas tax world for about 11 years. He spent 10 years working as a legislative aide primarily focusing on oil and gas issues, and in later years served exclusively as the oil and gas specialist for the House Minority. He was very involved in all aspects of the development of the last 10 or so years of oil and gas legislation: PPT in 2006, ACES in 2007, AGIA and other gas projects in 2007/8/9, and SB 21. He worked for Senator Bishop in his last position at the legislature before Governor Walker asked him to become Tax Division Director.

COMMISSIONER HOFFBECK explained that SB 130 is only one part of the governor's total fiscal plan that has three parts: the Permanent Fund Protection Act, which deals with how the earnings of the Permanent Fund could be used for funding government services; and second, expenditure reductions of which the oil and gas tax credits is a significant component. He explained that the governor proposed about $400 million in savings in oil and gas tax credits, about $200 million of that being a reduction in credits that would be issued and another $200 million in payment delays of some of the credits into future years when there was more production to underlie the credits. The third part of his fiscal plan is new revenues, and this bill touches on the hardening of the floor for the oil and gas taxes and an increase of the minimum tax from 4 to 5 percent. SB 130 hits two of the three components of the governor's fiscal plan.

2:17:11 PM
COMMISSIONER HOFFBECK said he would discuss why credit reform is needed now and put their cost into perspective; he would also discuss how the various fiscal components of SB 130 impact industry and the state and the implementation plan. He would

also provide a list of presentations he had given to other committees that this committee may be interested in hearing.

Putting the cost of the credits in perspective, Commissioner Hoffbeck said the state has paid out about $8 billion in oil and gas tax credits from 2007 to 2016. About $4.4 billion of those credits were used against a tax liability; most of them were the 20 percent capital credits under Alaska's Clear and Equitable Share (ACES) and the per taxable barrel credits in SB 21.

To be fair, he said, those credits really are an embedded portion of the tax structure. Although they are referenced as credits in the statutes, they really are more of the underlying tax regime, itself, and need to be looked at in a separate light from the reimbursable credits, which is what this bill focuses on. It does not try to change SB 21 or some of the per-barrel tax credits. This bill is primarily focused on the reimbursable credits and some of the other credits that can be used against tax liability. Most of the reform is to ACES components of the tax law rather than SB 21 components.

2:19:02 PM
COMMISSIONER HOFFBECK said there had been $2.3 billion in refunded credits on the North Slope, primarily paid to new producers and explorers, and about $1.3 billion in credits that were paid in Cook Inlet, about $100 million against liability and about $1.2 billion in refunded credits.

He said that it's important to understand that there is no real tax structure within Cook Inlet right now. Oil does not pay a production tax in Cook Inlet until 2022 and gas pays a nominal tax. Because there is no real underlying tax structure in Cook Inlet an estimated $500-800 million in taxes has not been collected because of the 2022 exemption.

2:20:09 PM
The amount of credits the state paid out through 2012/13 was relatively modest, but since 2013, they have exploded. This is where one starts to see how the size of the credits versus the amount of revenue that the state is taking in is becoming much larger than that what the state can afford. His graph illustrated how the credits are continuing to grow in Cook Inlet and Middle Earth. The North Slope has trailed off a little bit in recent years, but is at a relatively consistent level. The reason this is being talked about now is because sustained low oil prices are tied to the high credit liability, and are at a level that can't be ignored.

CHAIR GIESSEL asked what factors caused Cook Inlet credits to increase so much.

MR. ALPER replied that the single greatest factor that led to the explosion in Cook Inlet credits is the passage of credit incentive legislation in 2010 HB 280, called the Cook Inlet Recovery Act and another piece of complementary legislation, SB 309. Both provided much broader incentives for Cook Inlet. In addition to the Cook Inlet gas storage facility, which was designed to fix some of the seasonal problems with supply that was being felt with the Agrium facility shutting down and reduction in ConocoPhillips' export facility, those bills added the 40 percent well lease expenditure credit and other small incentives that really added up in terms of credits being claimed in one year. The reinvestment requirement that used to be attached to credits where the money had to be put into a new project within 24 months was also eliminated along with ring fencing (credits earned in Cook Inlet could be used to offset North Slope taxes). This happened at the same time the new jack-up rig credit was put in place. That whole suite of things opened the door on Cook Inlet investment.

At the same time, the Regulatory Commission of Alaska (RCA) loosened up some of its rules around pricing and allowing of contracts. The gas price in Cook Inlet also crept up, which made it easier to make investments there. So, with all of that happening, there was an increase in spending and therefore, an increase in credits. A big share of the credit can be given to the Hilcorp Company that bought a lot of the mature Cook Inlet assets and started spending a lot of money working them over. There is no distinction in credit law between a new well or a well work-over, he said; a capital expense is a capital expense.

CHAIR GIESSEL agreed, but when she first chaired this committee in 2013, her first meeting was about the brown-out exercises that were going on in Cook Inlet and Southcentral Alaska because of the lack of gas, and said, "These credits have certainly turned that around."

MR. ALPER agreed that they needed to make sure there wasn't a supply problem, but maybe it is time to at least partially declare victory in Cook Inlet.

2:25:00 PM
SENATOR STEDMAN commented that they had spent many meetings over the years trying to re-energize oil extraction and help with gas

extraction in the Cook Inlet. It ended with the Cook Inlet rewrite in 2010. Some felt the price issue was holding back development of gas in Cook Inlet rather than the legislature coming up with incentives, and in his opinion, they over-incentivized Cook Inlet. Then the Regulatory Commission of Alaska (RCA) changed the ceiling on price and now Cook Inlet is a run-away area where the state has virtually no revenue and a huge expenditure. It's quite "a substantial imbalance." Some members of the legislature then never thought the risk of brown-outs were real.

COMMISSIONER HOFFBECK commented that regardless of exactly how the state got here, they have to deal what the issue in front of them, learning from the past, but not necessarily focusing on why. They want to keep that forward focus.

CHAIR GIESSEL said she appreciated that and that the utilities now are getting long term contracts, and they have to think about how policy changes will impact the gas available to utilities in the future.

SENATOR MICCICHE agreed that RCA improvements made Cook Inlet more attractive, but Senator Stedman didn't mention the increased delta between the shrinking Henry Hub price and the increasing value of Cook Inlet gas. He asked how that factored into the size of companies looking for gas in Cook Inlet.

MR. ALPER agreed that was an excellent point. Back when the RCA was rejecting contracts, what was being sought at the time was ironically to try to increase the price of gas in Cook Inlet when consumers in Anchorage were more in the $3/4 range to mimic Henry Hub, which was at $6/7. Suddenly, Cook Inlet gas became some of the best price points available and that doubled with the state's aggressive and generous credit system brought new players to Cook Inlet. However, one of the concerns with the system is that they didn't distinguish between oil and gas to the extent that the credit system was made extra generous for the purpose of gas supply certainty. The same credits were available for oil, which while valuable, is not the life and death necessary it is for the Southcentral consumer.

2:29:40 PM
MR. ALPER said he thought at the time the Agrium credit bill was being discussed that the underlying economics of a new project in Cook Inlet were fine. They could create their platforms, drill their wells, and sell their gas without tax credits. But state subsidies become necessary when there is a constrained

market, and maybe people need to look at how to build the market for gas in Alaska.

COMMISSIONER HOFFBECK noted that slide 8 showed that state tripping a point going into FY17 it hadn't seen before: the state actually paying more in credits than it brought in through all of the revenue streams combined. The credits entirely overwhelm revenues at some point in FY17. However, $200 million in credits is being carried-over from FY16, so the credits are actually absorbing all of the revenues the state is getting from oil and gas taxes right now.

In other committees this is where the discussion splits; it became an issue of oil and gas tax policy or a discussion on state finances. But to be fair, it has to be about both. There must be a balance between what the state can afford and what is necessary to have a healthy oil and gas industry.

COMMISSIONER HOFFBECK said purely as the DOR Commissioner looking at the numbers, oil and gas revenues cannot support the level of credit program the state has right now. Some form of modification is needed on a pure numbers basis. Another concern is that according to the spring revenue forecast oil prices have become "range-bound" in the $30 to $60 price range. It's at the lower end now and while it will eventually climb back up, there is no money for anybody at $30. People pull back on development and because of natural decline in the oil fields, supply will eventually start to diminish. With a supply deficit, prices will rise back up, and at $60, a lot of oil can be brought on line relatively quickly because of changes in shale oil and things like that. There may be volatility and perhaps a $20 price point might be seen or a $70 or $80 spike, but they expect it to stay in the $30 to $60 range, and those numbers simply don't work without controlling the credit program.

2:34:00 PM
CHAIR GIESSEL remarked that Prudhoe Bay is shutting down three of five rigs which equates to the loss of 300 jobs and Alaska's government has a fiscal problem, but they don't want to make the state's problem a citizens' economy problem. If it costs $52 to pull a barrel of oil out of the ground and the price is approximately $40, the companies are still losing money.

COMMISSIONER HOFFBECK said that begs the question: can the state afford to make up the differential?

SENATOR STEDMAN said restricted and unrestricted revenues will be a re-occurring theme in these presentations. It's imperative that as policy makers, legislators see the total revenues combined. For example, property tax and royalties are not reflected in this chart.

COMMISSIONER HOFFBECK responded that those could be added in. Today's message is money in versus money out of the treasury. The state has no money coming in from oil and gas that can be spent right now.

2:38:02 PM
SENATOR MICCICHE said the slide includes refinery credits, but he wanted the timing for the $200 million in delayed credits to be included, too, because it would make FY16 look very different and improve FY17 somewhat.

COMMISSIONER HOFFBECK said he could do that. He explained that the delayed credits aren't due until FY17, but in historical context, some of those credits, if the money was available, would have been paid this year even though they weren't required to be paid until next year. Payment is being held this year into FY17, because the money isn't in the budget to pay them. He explained that in the past, credits that were earned in one year but could be paid in two years, but now they are being more precise about when they can be paid.

MR. ALPER said in the past they hadn't had to be that precise on when 2011 begins for purposes of calculating credits, because appropriations were open-ended. Enough money would be transferred to meet the demand and then when more was needed, they would transfer some more. Now that funds are more dear, a greater degree of precision is necessary.

SENATOR MICCICHE said this is a specific production credit problem, and that is why he wants the refinery credits separated.

MR. ALPER explained that the refinery credit statute, which passed in 2014, has an effective date of January 1, 2015, which means the work would have been done last year, and by the nature of the corporate income tax, the division won't actually see a claim or application until October of this calendar year. Inherently, the first credits for those, if any, will be seen in FY17.

CHAIR GIESSEL asked him to clarify that no refinery credits have been claimed to date.

MR. ALPER said that was correct.

SENATOR STEDMAN followed up that it's also important that to keep things straight, they should look at the credits as if they were totally paid in the year they were owed without any appropriation restrictions, and clearly delineate what is carried forward. He expects to see well in excess of $1 billion in credits in FY18 with carry forwards.

COMMISSIONER HOFFBECK said that would be covered in about eight or nine slides, but he would also be glad to provide more granularity if that was requested.

2:43:18 PM
MR. ALPER said total credits add up to $3.5 billion through FY16. He didn't have all the analysis FY16, do he left that out. So, they are looking in greater detail at what happened at the end of the prior year, FY15. Of that $3.5 billion from the state treasury, about $1.45 billion went to six North Slope projects that are now in production in one form or another. Another $650 million went to 13 projects with no production; some have been abandoned, and some they expect future production from.

He said credits are also offered to seismic library companies that will never have production but do independent seismic work for sale or lease to other companies. It's an oddity in statute.

CHAIR GIESSEL asked how much credit goes to seismic companies.

MR. ALPER answered tens of millions of dollars, and it might be getting larger, because the impending sunset of the exploration credit is creating some unusual short-term phenomenon in the oil patch.

CHAIR GIESSEL said she had heard that the seismic library companies can sell their work, but they also can claim a credit from the state. So, it's almost as if they can be paid twice.

MR. ALPER explained that the company that is paying for the work gets to claim a lease expenditure, so they are paying less tax. The credit is only being paid on the difference between what the library paid and what it received for selling it. The exploration credit is not quite so much and they simply get it. It gets a little difficult for the Tax Division when a library

sells that data a couple of years later to a second customer. A seismic library company is not necessarily an oil company, but by statutory definition, once that credit is claimed, it becomes an oil company taxpayer. Therefore, when they sell it the second time, they should pay taxes on it. But the division doesn't have the ability to diligently follow up on all those people, and he thinks some revenue may be slipping through those cracks there.

He said that a small amount of credits are used on the non-North Slope area called Middle Earth, most of which is claimed by Doyon. That makes it easier for the division, because the numbers are all confidential. Another $450 million went to projects that now have production in the Cook Inlet area and another $450 million went to eight projects that are in process. That all adds up to the $3 billion.

2:47:36 PM
The next couple of slides indicated that six North Slope projects had lease expenditures of $1.4 billion and 38.5 million barrels of production with refundable credits of $37.30 per barrel. That number will come down, because these projects are for the most part paid for, but there will be continuing production every year that will reduce the average (dollars in credit per barrel produced over time), plus the money that went to the fields that are not in production, which would increase that number. The lease expenditures on those projects at the end of FY15 is $4.94 billion. This means the state has reimbursed 29 percent of companies' lease expenditures on these projects.

Slide 12 takes the same analysis and looks at Cook that had $450 million in lease expenditures on six producing projects equating to 55.9 barrels of oil equivalent (BOE). He explained that a producer receiving credit for one new project is getting credit applied to all of their gas production. Their fields are not parsed out from each other. If a company has four fields and only one of them is new and they are earning credits on it, they are getting that credit for all of their gas.

Setting that aside, that 55.9 million BOE of total production would lead to $7.80/BOE credits or about $1.30/mcf, a number that will decrease over time due to additional production from these fields. Lease expenditures for these projects through FY15 were $1.09 billion, which is lease expenditure credit support of 40 percent.

2:50:00 PM

The estimated value to industry of the Cook Inlet tax caps is $550-$850 million from 2007-2013 (slide 13). The total production for that timeframe in Cook Inlet was 250 million cubic per day (equaling 640 BCF/or 106 million BOE). Adding 10,000 barrels/day, one gets to the equivalent of 132 million barrels BOE. He used a midpoint $700 million estimate, the value of the caps equals $5.30/barrel or $0.88/mcf. Adding that to the calculation from prior slide 12, the sum of credits and tax caps is $2.18/mcf.
SENATOR MICCICHE said that spans of 2007-2013 were narrowed to after the Cook Inlet Recovery Act passed, the investment per BOE for the state would increase dramatically.

MR. ALPER agreed.

SENATOR STEDMAN asked what the revenue side to the State of Alaska was for Cook Inlet over the same timeframe (FY7-FY15).

MR. ALPER answered he thought the production tax revenue was in the neighborhood of $25 to $27 billion and total oil and gas revenue was $40 billion or so. Senator Stedman brought up an important point, that the tax credit system was put in place with the expectation that fairly robust oil and gas revenues were going to be coming in (in the billions of dollars per year). This system was envisioned as something of a reinvestment of some fraction of the state's revenues to get tomorrow's oil drilled and built. According to Commissioner Hoffbeck, state revenues have shrunk to where it is not even supporting government any more, and the credits are relatively unchanged, if not larger. So the system is very different now from how it was original constructed.

SENATOR STEDMAN said Cook Inlet didn't have billions of revenue that he knew of and asked ballpark numbers for what Cook Inlet contributed to the treasury. The $25 to $27 billion referenced came from the North Slope.

MR. ALPER answered the production tax will be very close to zero. The 17 cent/mcf works out to about $15 or 20 million per year in a typical year, but most of that would be lost through the small producer credit. The royalties and other revenues from Cook Inlet would be in the ballpark of tens of millions of dollars per year.

SENATOR STEDMAN said he was trying to make the point that Cook Inlet is a closed basin and the state energy subsidy goes to the Anchorage Bowl. It doesn't produce any revenue to the treasury

to speak of that would benefit the entire state. He was concerned that the presentations hadn't dealt with how they got in this position in the first place.

2:55:45 PM
COMMISSIONER HOFFBECK said in fairness to the presentation, they had a history section and pulled it out in order to focus more directly on the specifics of the fiscal issue. However, they could add it back in.

CHAIR GIESSEL said they had presented that history numerous times before a number of committees and it's all on line, and the Senate is able to do that kind of research. So, committee members could look it up. She added that the Cook Inlet supplies gas for the Kenai Peninsula, the MatSu Borough, and it is trucked to Fairbanks; so 50 percent of the state's residents benefit.

SENATOR MICCICHE said the number referenced to communities impacted by Cook Inlet gas is higher than 50 percent of the state's population. He asked Mr. Alper to correct that the production for Cook Inlet in 2007 was essentially zero, since the Cook Inlet Recovery Act didn't come into effect until FY11.

MR. ALPER responded that the statutory tax caps were part of the PPT bill that passed during the 2006 special sessions. So, the 17 cent/zero rate has been in place since that point. The rates were designed as a "hold harmless" to mimic what the taxes were in the year before the effective date of PPT (2005).

2:58:17 PM
SENATOR STEDMAN said this is the bill's first hearing in this committee and he was trying to put things into context - depending on if they want the public to be able to follow the information and hopefully support the legislature's conclusions. At some point they must talk about what the credit is, why the state has it, and when it would be used. "If you put the cart before the horse, these conversations get real interesting." There is a reason why he and a lot of colleagues swim around in the tax codes. Many policymakers understand the basics of the tax and credit system. They need to get a firm basis down and try to get some stability in the tax code.

MR. ALPER said it's true that the tax code is very complicated and every time it changes it tends not to get simpler.

3:00:12 PM

Slide 14 showed the status of the credit fund and how demand is moving around for FY16-17. The FY16 appropriation was capped at $500 million through a line item veto. Of that, $473 million money has been paid out to date even though it is near the end of the fiscal year: about $200 million went to North Slope producers and $273 to non-North Slope producers. That leaves $27 million in the fund; about $4 million in claims are in some form of the payment process.

Meanwhile, his division has an applicant que worth $675 million:, $10 million in older net operating loss (NOL) credits from prior years (where the department requested additional information), $22 million in older exploration credits that also need more information, and $552 million in 2005 credits (NOL credits, the non-North Slope qualified capital expenditure (QCE) and well lease expenditure (WLE) credits).

He explained that other well credits are only applied for at the end of the year, because a loss has to be proved, and the tax filing deadline was March 31. The capital and well credits are sometimes applied for quarterly or even more frequently, but they will be processed together this summer and will largely go out the door in July and August.

3:02:50 PM
Meanwhile, thus far, they have $60 million in 2015 exploration claims and another $31 million on top of the $552 million in preliminary applications that for some reason aren't really done yet and awaiting amended returns. That means the "minimum demand" for FY17 "stuff in hand" is $652 million. That is an extremely current figure, based on filings that came in on Thursday from major and minor taxpayers throughout the state. They expect additional credit applications during the coming CY16, which could also be paid in FY17, and about another $40 million for QCE and WLE from Cook Inlet.

MR. ALPER said the exploration credits for both the North Slope and Cook Inlet are extremely aggressive, an additional 30 or 40 percent on top of some other credits, and they are sunseting on July 1, 2016. They are now realizing that companies are going for those credits before the sunset date through "frontloading" projects to try to max out companies' abilities to get those exploration credits, a one-time cost, but still very much as a cost in FY17. They are expecting about $20 million between the refinery credit and the credit for the Interior gas utilities gas storage project. Should that go forward and the tank gets built, a credit claim could come in some time this year for

reimbursement. So, foreshadowing the spring FY16 forecast, they will most likely revise the number from $825 million that they presented about two weeks ago down to about $775 million.

CHAIR GIESSEL thanked him for the very current information asked if he could group the exploration credits together to let them know where they are being claimed in each basin.

MR. ALPER answered yes and added that Table 8-4, on pages 77-78, in the Fall Revenue Sources Book has the same information although in a different format. But the simple answer back when it was $825 million it was almost exactly 50/50: $410 million in one basin and $415 million in the other.

CHAIR GIESSEL said she wanted to see the value of each specific credit.

MR. ALPER explained that AS 43.55.890 says data can be aggregated for confidentiality purposes if there are three or more companies so that numbers cannot be reverse engineered. He explained that if he told them all of the North Slope credits, then he'd be telling them there is only one in the Cook Inlet slide 15. However, he would do everything he could to parse these numbers as fine as possible under the law.

SENATOR COSTELLO asked how companies responded to the governor's decision to cap credits.

COMMISSIONER HOFFBECK answered there was angst amongst the companies, because a lot of these credits are used as collateral for loans, and when the vetoes were put in place the capital markets pulled back saying if they can't be certain the credits are going to be paid, then they aren't any good as collateral against the loans. So, he spent the better part of a month talking to various lending institutions and assuring them that the credits would be paid. However, the veto introduced uncertainty into some of the companies' decisions as to moving forward. For the most part, the state saw the type of work that would have happened without the veto, but it took some work to put that back together again.

3:08:55 PM
SENATOR COSTELLO asked if that is something that can affect the state's credit rating.

COMMISSIONER HOFFBECK answered no, because there is no statutory requirement that these credits have to be cashed out by the

state. The credits are earned, but they could be held until there is production or they could be sold to somebody who has a tax liability who could then use the credit. The credit rating saw it as a responsible action in light of the state's financial situation.

SENATOR COSTELLO asked if all the credits are transferable.

MR. ALPER answered that all of the cashable credits are transferrable. There are caps on transferability meaning the company who is buying them can only reduce their own tax liability to 80 percent of what it would otherwise be. And considering how little production tax liability is in the next couple of years, there is, to be fair, a relatively soft market for transferable credits. The small producer credit and the per-barrel credit on production are both not cashable and not transferable. Those are use it or lose it credits.

SENATOR COSTELLO asked how often credits have been transferred.

MR. ALPER answered that it happened in the beginning of the era of transferable credits (PPT time period), but the anecdotal information they received was that the market price for credits was 70 cents on the dollar and the major producer was the one getting the full value of it because they were using it to against their tax bill. In 2007, with passage of ACES, the legislature decided to get rid of credit repurchase caps and reverted back to a take away per company per year limit that used to be in statute. Since then, there has been almost no transferring of credits in the oil and gas world.

CHAIR GIESSEL asked if the net operating loss (NOL) credits are cashable or transferable.

MR. ALPER answered yes.

3:12:25 PM
SENATOR STEDMAN said it would be nice to model - using the first in first out system for payment by the state to the companies - how the accumulated credits versus the appropriations will impact the state. With a $70 million appropriation for the credits he expected it would take a while to get to the FY17 credits, and he has been told by at least one company whose credit is $65 million that their interest rate for their loans on the project is 20 percent.

He also wanted the numbers for how much will be carried forward to FY17 in accumulated credits north of 68 latitude and south of 68 and the expectation for FY17 credits.

MR. ALPER responded that that information is on slide 14.

SENATOR STEDMAN clarified that he didn't want the $500 million broken down; he just wanted the aggregate amount of credits that were accumulated and the appropriation.

MR. ALPER answered that he would do everything possible to get that information for him. In the next couple of slides he would get into the new world of NOLs earned by major producers that are very explicitly not cashable, and those are all going to be carried forward. They will be coming from the major producers, not from this pool.

CHAIR GIESSEL said he could get that information to her and she would distribute it to the committee.

3:15:21 PM
MR. ALPER recapped slide 15 saying that when the spring forecast comes out, the total claims will probably be around $775 million. Slide 16 talks a little bit about how the state got from $825 million to $775 million. It went up a little because the NOL claims were higher by $100 million than expected for calendar year 2015.

He explained that "calendar year (CY) 2015 equals FY17" is not an intuitive way to look at the numbers and that a loss finishes in on December and taxes are filed on March 31. The NOL credit statute, AS 43.44.023, says the certificates shall be issued in 120 days, and 120 days later means the last week of July. That's when the Tax Division scrambles "to get all the credits processed and out the door." Then many companies will turn around and request repurchase the next day and the money should be available in the Tax Credit Fund. So, in essence, the bulk of CY15 credits will be paid in July and August of 2016, which is in the early months of FY17, and what appears to be a two-year lag is really just a four-month lag.

He said because all of the CY15 NOLs are going to be FY17 credits, the decision was made to take all the future NOLs from CY16 off the FY17 pool and move them into FY18, because realistically that is when they will be paid. Making that calculation correction reduces the total by about $150 million. The net effect is the FY17 projection goes down by $50 million,

but FY17 and FY18 will have larger credit estimates by at least $50 million.

3:17:59 PM
SENATOR STEDMAN asked that this data be brought forward in table format so the public can follow along.

MR. ALPER said it is his preference to provide math data in table format, because it reads better that way, but in the context of a presentation it's sometimes easier to turn it into bullets. But he would do that interpretation for him.

MR. ALPER said the growing carry forward NOLs are a new and growing problem. The beginning of a net profits tax where there was such a thing as a net operating loss credit was basically in 2007. All of the companies except for the three majors have been able to get cash for their credits whether there was a cap or not (in the later years there wasn't). Cashable credits were part of the way the state did things with the singular exception of companies producing more than 50,000 barrels a day, of which there were three, the larger producers. Now with Hilcorp crossing the 50,000 barrel threshold, there are four. This means they won't be able to get cash for credits going forward. The division knows that at least one of the majors has an NOL for the prior CY15. That NOL credit can be used to offset their monthly tax payments beginning in January of CY16, and can reduce them as far as zero for as long as it takes to work through their NOL credit. Eventually, in the later months of the year there will be tax payments. This will partially offset what the minimum tax payments would have been in CY16 (half FY16 and half FY17), but not take it all the way to zero. So, the state will have positive production tax income. However the revised forecast that the governor released last week - and they believe the price of oil isn't going to change - indicates that all three majors have operating losses in CY16 and in some cases, relatively robust ones, and possibly for years beyond.

This is a new world, he said, and that means that by January 2017, the state's monthly production tax payments will be effectively zero. Once this calendar year ends, if the forecast holds, everyone will be completely offsetting their production tax.

MR. ALPER explained that the smaller numbers - $10 million and $15 million - are from some sidebar pieces of production tax, the main one being the 5 percent gross tax on private royalties. Some private companies receive royalties; the main one now is

the Arctic Slope Regional Corporation that owns a chunk of the land under CD5, ConocoPhillips's new development on the North Slope. They will be receiving a certain amount of royalties and that is taxable income and shows up under the production tax umbrella, although it's very different from the traditional production tax.

MR. ALPER said if the majors have larger loss credits than it takes to zero out their minimum tax, the credits can get carried forward and get added to any losses that might get accumulated in the following year. The bottom half of slide 18 is a table that tries to show how that happens based on the actual numbers in forecast documents and the ANS oil price (starting at $40 and creeping up to $65.90 10 years from now). The production tax revenue drops to a number very close to zero; zero plus the outlier issues increasing in the later years. The column on the right is new information - the carryforward credits form this concept.

3:22:04 PM
At end of 2017, there will be $632 million worth of NOL credits that are in hand and not cashable, because they are with the major producers who have already zeroed out their taxes. So that increases the NOL credits to $747 million in 2019 credits. Then it goes down as the price of oil increases.

MR. ALPER said that the price of oil is forecast to go from $43 to $60 between 2018 and 2021, but the production tax is only projected to be $32 million in FY20/21, the reason being the drawdown of the accumulated NOL credits. However, that number zeroes out in 2025.

SENATOR STEDMAN asked for a synopsis of any credits that can apply to activities on private land and if the state has a mechanism to recoup any of that credit investment.

MR. ALPER said there are two different answers to that. The work done on private land is fully eligible for all of the credits - the credits are silent as to what part of the state they are in whether state, federal, or private land. The difference is if it's on state land the state gets the royalty. If it's not on state land, the state gets 5 percent (or the equivalent of .06 percent) of the gross of the owner's royalty. That is "a must be paid number."

3:25:05 PM

SENATOR STEDMAN asked what the assumption for the appropriation on the carry forward credits is.

MR. ALPER answered the assumption is that the appropriation will be whatever the demand for re-purchasable credits is.

SENATOR STEDMAN suggested footnoting the tables on how the appropriation impacts credits, because clearly there is a $500 million limit this year, and people need to be able to understand both sets of data.

CHAIR GIESSEL said it would also be helpful to have the calculations of how much is required to be in the Tax Credit Fund, complying with the formula in AS 43.55.028.

MR. ALPER thanked her for the question, because he had been internally wrestling with how to come up with a number the legislature might appropriate if it was something other than the claimed number. The most obvious alternate scenario to model would be the 15 percent formula that is in statute.

SENATOR COSTELLO asked him to provide the oil price assumptions that were used in projecting that price.

COMMISSIONER HOFFBECK replied the department can do that. Briefly, he explained that the department uses a probabilistic model with a range of prices, and for budgeting purposes they select a specific price point within it, typically the mid-point. But the price is now below the mid-point of last fall's probabilistic modeling, and they selected the price point that reflects the current price of oil, because it will be in the $39 range for the year. Then they slowly brought it back up over a four-year period until they got to the 50 percent confidence level.

CHAIR GIESSEL said it would be informative to hear about the process the department goes through.

COMMISSIONER HOFFBECK explained that they convene a group of typically 20 to 40 people with various oil price forecasting expertise (academic and on-the-ground experience) in the fall and try to come to some consensus over what they feel the price is going forward. Then they do statistical testing on long term historic averages for prices adjusted for inflation as well as looking at supply and demand coefficients. They actually look at what other forecasting agencies put out. The group then does a Monte Carlo analysis on the probabilistic modeling of what oil

prices would be starting with where it is now. So, they really have three ways of looking at it: one is this group, one is the Monte Carlo process, and one is the supply and demand coefficients.

SENATOR COSTELLO asked for the assumptions used on slide 18 of the production tax revenue projections.

COMMISSIONER HOFFBECK said absolutely.

3:31:03 PM
MR. ALPER added that those are the numbers that are in the spring forecast they published last week.

CHAIR GIESSEL stopped at slide 18 saying the committee would next hear from enalytica.

SENATOR STEDMAN went back to Senator Costello's earlier question about the price range and said it would be helpful to talk about the minimum tax range the state is in and the expectation of when it will get out of it. Most people can realize that the state will be at a minimum tax range for the entire environment and that cuts through a lot of the chase when they look at revenues.

MR. ALPER said he was formulating a graphic showing where the minimum tax overlays the gross and net and credits that it would be ready soon.

Presentation by enalytica

3:32:57 PM
CHAIR GIESSEL thanked Mr. Alper and said the next speaker would be oil and gas legislative consultant, Janak Mayer.

JANAK MAYER, Chairman and Chief Technologist, enalytica, said he had worked over the last decade in the consulting environment for the oil and gas sector primarily dealing with financial modeling, evaluation, and economic analysis of upstream oil and gas projects. For the last four or five years he has done a lot of work for the Alaska Legislature through the Legislative Budget and Audit Committee, two or three of those years with PFC Energy, and the last couple of years with his own firm and that of his colleague, Nikos Tsafos. Most recently, they had done work around natural gas commercialization of the AKLNG Project, and have been engaged through the Legislative Budget and Audit Committee as consultants for the legislature as a whole to

provide independent and dispassionate advice and analysis on its questions.

3:35:20 PM
NIKOS TSAFOS, President and Chief Analyst, enalytica, related that this is his third or fourth year engaged with the Alaska Legislature, and like Mr. Mayer, he used to work for PFC Energy. His background is in consulting on the oil and gas industry with a focus on gas commercialization and gas market analysis. He has spent the last two years working on a range of issues Alaska has been dealing with on both oil and gas and especially on the AKLNG Project.

3:36:20 PM
MR. MAYER said their presentation today, Alaska Oil and Gas Credits, focuses on the background for some of the core questions around oil and gas credits in Alaska, both on the North Slope and in Cook Inlet: trying to put numbers into some perspective as well as the broader context of the history, the purpose of the credits, how well the purpose has been achieved, and how much they are needed going forward.

Slide 2 was a high level visualization of some of the total numbers one sees in the Revenue Sources Book. Looking back at 2015, there was a total of $1.3 billion in credits. He divided them up between North Slope and non-North Slope (Cook Inlet and a small portion outside of Cook Inlet) credits: $879 million on the North Slope and $413 million outside of the North Slope.

He divided the credits further into what was refunded and what was taken against liability. On the North Slope, $224 million was refunded versus $655 million taken against liability. In Cook Inlet, that situation is reversed: $404 million was refunded versus $9 million taken against liability.

3:38:24 PM
Another aspect of the credits is their purpose. The North Slope dollar-per-barrel credit is $595 million; it is an integral part of the tax system. Thinking about it as a credit is almost a misnomer, even though it is written in statute that way. It really exists as a way of introducing a progressive element into the tax system of curving the tax rate down at lower oil prices (SB 21) in exactly the same way as progressivity combined with capital credits did under Alaska's Clear and Equitable Share (ACES). About $203 million is net operating loss (NOL) credits on the North Slope. By and large these two credits substantially remain on the North Slope when other credits (capital credits,

exploration tax credit, and the small producer tax credit, which ends in May 2016) have ended. The yellow category of "other" includes those things that are at various stages of sunsetting. The core of what is happening on the North Slope is the per-barrel credit and the NOLs credits. The tax system will recognize NOL credits eventually, but the question is if they are paid now or later.

MR. MAYER explained that unlike the previous capital credits and credits in the Cook Inlet, which are very much about the state providing incentives to do something, these credits recognize the value of the tax system of expenses incurred. Whether that happens now or later is a timing question not an absolute question of amounts of money.

3:41:31 PM
The Cook Inlet revenue is a fraction of the North Slope's and there are very substantial credits being paid out there, the vast majority being refunded versus being taken against liability. He assumed that was mostly small producer tax credits going against the minimal tax liability that is incurred from gas and other things in the Cook Inlet. Lumping the two together as state support for activity in the Cook Inlet, he would talk about the rationale behind that state support, what it was years ago and what it is now, and then discuss if there are ways of reducing it.

MR. MAYER said roughly speaking there are three categories of tax credits; the per-barrel credit, the NOL on the North Slope, both fundamental to the tax system, and the third category of support or subsidy to incentivize particular behaviors, which is really about what is going on in Cook Inlet.

3:42:58 PM
SENATOR STEDMAN said the state is in a minimum tax environment and will be there for quite a while. The issue that sticks out is the $595 million per-barrel credit, but it is just a calculation to get down to the 4 percent of the wellhead value minimum tax. It's not a credit the state pays out; it's just a credit to exercise if one is in a minimum tax environment. It makes the amount of credit numbers change significantly.

3:45:16 PM
MR. MAYER agreed that the per-barrel credit is a math exercise. The North Slope credits are broken down in detail on slide 3. The elevated level of 45 percent were the result of transition arrangements under SB 21, because it substantially reduced the

level of overall government support from 45 to 35 percent, and this is a way of holding that level at 45 percent for an additional two years to allow companies that had made investment decisions under the assumption of that high level of support (under ACES) to continue and from this point forward know it is down to 35 percent. The basic purpose behind that incentive is to equalize the impact of the tax system to make it the same between a new developer without a tax liability and an income producer with one. He explained that the inequality is not about the big guys on the North Slope that dominate everything and the state needs to help the little guys; it's really about pure hard math and simply saying a series of deductions are allowable when one has a liability, and the NOL credit is providing exactly the same thing to companies that don't have that liability. He will talk about how that math works in the coming slides.

He mentioned that the dollar-per-barrel credit is for so-called "old" legacy production from the big producing fields and ranges from zero to $8/barrel or $5 per-barrel of "new" oil under SB 21.

3:47:31 PM
SENATOR STEDMAN asked him to clarify the difference between the per-barrel credit and the $5 gross value reduction (GVR) credit where one can be taken against the floor and one cannot.

MR. MAYER answered that could be better answered with some slides in a short while. He added that for old oil there is a sliding dollar per-barrel credit that ranges from $0 to $8 depending on where the price is; it's highest when prices are low and it exists to curve the effective rate of tax down. It can't be used to go below a 4 percent gross minimum floor. The only credit that can do that is an NOL credit, which he would go through shortly.

By contrast, the calculation of the gross minimum floor for new oil is effectively done first, and then the question of the $5 fixed per-barrel credit is done after that. That means that the hard gross minimum floor doesn't apply in the same way. Essentially these are both integral components of the tax system that is used to figure out what the actual effective tax rate should be in a range of different price environments and to reduce that tax rate in lower price environments to create an overall progressive system, which balances out regressive elements of the overall fiscal system, which is the royalty. He would cover how those pieces fall together a little later.

3:49:53 PM
The elements that are at various stages of phase out are: the exploration credit that expires on July 1, 2016, and the small producer credit which expires on May 1, 2016, but phasing out with a nine year tail from the time an eligible company received first production.

Non-North Slope (Cook Inlet) credits are a form of state supported subsidy that offers to incentivize particular types of activity. There is a loss of credits tied to capital spending and the NOL credit is the same in statute as the one on the North Slope, but it functions very differently, because the North Slope has a profit-based production tax and the NOL credit is simply a way of recognizing expenses that would otherwise be deducted against liability. Cook Inlet doesn't have a profit-based production tax, and so the NOL credit in lots of ways is similar to either the capital credits under ACES or the capital credits that exist in Cook Inlet, except that it's something that can only be taken by a producer that effectively doesn't have production.

The 20 percent for qualified capital expenditures is the same credit that used to exist under ACES on the North Slope; it continues to exist in Cook Inlet. The additional heightened credit of 40 percent for capital expenditures are also intangible drilling costs for well-related spending. These two credits can be taken and stacked together if one is eligible for a NOL credit (if one is a new developer) to receive a total of 45-65 percent total state support.

SENATOR STEDMAN remarked that the committee is being told that there is no way for the treasury to recoup the 45-65 percent in credits being issued in the non-North Slope region, Cook Inlet specifically.

MR. MAYER said that is correct; the one exception is Cook Inlet royalty.

MR. MAYER said the exploration credits in both Cook Inlet and the North Slope expire on July 1; the one exception to that is outside of those two basins (Middle Earth) where the proposal is to extend those. The small producer tax credit is used to reduce a liability to zero if less than 50,000 BOED is produced declining in a straight line up to 100,000 BOED. In Cook Inlet the tax liability is primarily from gas. For companies working in Frontier basins (Middle Earth) there is an up to $6 million-a-year credit), structured similarly to the small producer tax

credit that has the same phase-out timeframe as the small producer tax credit. That was the end of his description of various North Slope and non-North Slope credits in statute.

3:54:05 PM
He said the key part of the conversation is about the refunded component that are cash payments from the treasury. Those have grown very substantially over time, and looking from FY11 onwards, the North Slope part of that component is pretty stable. The most striking growth has been in Cook Inlet; the majority of FY15 is actually Cook Inlet and FY16 is essentially capped at $500 million total. The numbers are correspondingly large in FY17 and he assumed that was because the rest of the FY16 cap is being paid out in FY17.

3:55:18 PM
MR. MAYER said slide 6 illustrates for FY15 the sheer difference between Cook Inlet and the North Slope, credits versus revenues. There is about $2.3 billion in restricted and unrestricted petroleum revenues, about $1.6 billion of that being unrestricted. There are about $600 million in credit payouts, and those are substantially greater than the revenue from production tax, although by no means greater than the whole stack of revenues. To get the full picture, he said, one needs to distinguish between what is happening on the North Slope and what is happening in Cook Inlet: there the disparity is quite striking. The amount of revenue that comes from the Cook Inlet is relatively small versus the majority of the refunded credits that are paid out. It's hard to look at that in the current fiscal environment and think that that is a sustainable position the state can maintain.

CHAIR GIESSEL commented that the other striking thing about this slide, besides what Mr. Mayer already pointed out, is what a massive piece the royalty is.

MR. MAYER said royalty is a gross tax and those are inherently regressive; that is to say they represent a much greater share of the pie when prices are low than when prices are high. And that is in contrast to the progressive element of the system, the production tax, which is specifically designed to shrink away as prices go down. The royalty alone takes a vast portion of the overall value of a barrel of oil and in many cases, more than 100 percent. In that sense, royalty, more than anything, provides the lion's share of the value to the state at low prices, because the other components of the system, particularly the profit-based production tax only exist when there is

actually profit to tax. Whereas the royalty provides revenue to the state even when there is no profit.

SENATOR STEDMAN asked Mr. Mayer to graph FY16 even though part of it is still hypothetical, because it ends at the end of June. The contrast will be the price difference between roughly $70 and $30 a barrel for oil. He thought that would make the bars on the graph look a little different.

4:00:52 PM
MR. MAYER said he would be happy to do that. He said slide 7 uses a 10 percent gross tax and a 25 percent net tax to illustrate the math involved. He explained that an effective tax rate is a net concept (how much of the profit is being taken through the tax system), and a 25 percent flat net taxes the gross value of the sale, not anything connected to the actual profit or economic value being created. Because it is a fixed amount, a flat rate represents an ever greater share of a shrinking barrel as prices go down and results in a very regressive curve that quickly gets very high when prices are low.

A 10 percent gross tax might represent barely 12 or 15 percent of the profits at the highest prices, but quickly becomes 100 percent of the profits at a $50-or-so barrel, and from that point very quickly goes reaches infinity, because at some point one gets to where there is no more profit and any fixed share of nothing is nothing.

4:02:39 PM
The basic idea is that there are key advantages to both gross and net taxes, and Alaska has a hybrid of both, and there are certain tensions that come with having that, Mr. Mayer said.

He explained that gross taxes are much less volatile, precisely because they are regressive in the same way that most of Alaska's revenue is coming from the royalty. Because they take much more of the pie when times are hardest, they provide a lot of relative revenue stability to the state, and they are very simple and easy to administer. Unlike the world of profit-based taxes where one sees years of audit backlog trying to figure out all the costs that went in and assessing exactly how much profit was made, the state only needs to know two data points to administer a gross tax system: how much was produced and how much it sold for. The disadvantages are: because it is high government take at low prices and low government take at high prices that means over the course of the economic cycle, when

times are good, the state is probably not taking near as much as it could, but it also distorts and dis-incentivizes marginal investments. That could be because in the same way it is regressive with the relative price, it is regressive with regard to costs. The most difficult fields to produce have the highest government take, and in many cases, that means that fields that are expensive and difficult to produce - but that might be economic other than for the incidence of this tax - become no longer economic, because the take on them is so high.

MR. MAYER said companies are not drilling in North Dakota at the moment, and the reason is that North Dakota has a very regressive system that takes a huge amount at these sorts of prices and much less at higher prices. It's very hard to want to be reinvesting in those sorts of places when prices are what they are now, because there is simply no profit to be made.

SENATOR STEDMAN noted that Texas and Oklahoma have private land ownership and Alaska has a state-owned resource. He would be very surprised if a farmer would want to produce his 20 percent royalty at $39 a barrel. That would have an impact on production, also.

MR. MAYER said certainly the royalty in the majority of cases in those jurisdictions are privately held, but from a company's perspective in terms of assessing an investment decision, it doesn't matter whether the royalty is privately or publically held in so far as it's all cash that goes to someone that is not you.

SENATOR STEDMAN clarified that his point was that a private royalty owner would be a lot less excited about pumping oil at $39 a barrel than at $79 a barrel and would probably be more reluctant to reduce royalties rather just leave the oil in the ground and wait. The actions from the landowners are different from the State of Alaska as a sovereign, because its structure is different.

MR. MAYER said that net taxes are much more volatile and harder to administer, because auditors are needed to, but the great advantages are a much more efficient system. If structured well, it is much less distorting for marginal investments on expensive fields allowing investment to keep going when times are harder and it enables investment across the commodity cycle.

4:07:18 PM

In particular, he explained, net profit taxes (slide 8) are frequently structured, as the State of Alaska's is, not as taxes on income but as taxes on cash flow. The key thing to understand is that for the first three years of a new development one might see three years of capital investment before any production actually occurs. After the start of production, revenues occur and operating costs are deducted against those, but the bulk of that capital spending is happening up front before any actual revenues occur. In a pure cash-flow world that means three years of negative cash flow, and then subsequent years of positive cash flow. In a world of income accounting, all the upfront capital expenditure would be capitalized at the start of production and only recognized through the tax system in the form of depreciation (allowing a portion of that to be taken as an expense steadily over time).

Whereas the idea behind a cash flow tax is to say over time the same expenses are recognized but capital spending is seen as a cash cost when it occurs rather than being depreciated over time. The idea behind that is to maximize the efficiency of the tax system in terms of minimizing the distorting impact on investment, and the way to be least distorting on investment is for the tax to look as much as possible like an equity participation in a project. Equity participation means putting up some of the initial capital and then taking some out from the resulting cash flow. The basic idea behind any cash flow net profit tax is to look exactly like that. The simplest example would be like the one on slide 8 where 25 percent of the upfront capital is in the form of negative tax credit (NOL, for instance), and then 25 percent of the cash flow is taken through the tax system later on. It's important to understand that distinction when people bring up different companies and the profits or losses that they report are all about income. Almost all companies that are reinvesting in Alaska at the moment, spending actual capital, are cash negative in this environment.

4:10:31 PM
MR. MAYER said it is useful to come back to the core idea behind Alaska's tax system, which has steadily gotten more complicated. It's easiest to understand the components by going back to where it all began: in 2006 with a paper by Dr. Pedro van Muers that proposed a net profit based production tax of a flat 25 percent that would have two credits: the 20 percent capital credit and a 25 percent net operating loss credit (NOL) - the NOL to be the same as the 25 percent tax rate, the idea being to allow the tax to go negative those years of negative cash flow. In other words, the state contributes 25 percent of the costs of

investment and then takes 25 percent of the cash that is generated.

The 20 percent capital credit was an additional way of creating - instead of the flat neutral 25 percent tax rate - a progressive structure. The impact of that 20 percent capital credit comes close to a 25 percent tax rate at the highest prices, but steadily as prices go down, the tax rate would bend along with it and eventually become zero. He said if one plots the effective tax rate of 12.5 percent royalty it creates a sort of symmetry that ends up with a fairly flat tax rate across a wide range of prices.

4:12:39 PM
MR. MAYER said Dr. van Muers' paper proposed credits that would be tradeable but not reimbursable from the treasury, the idea being a producer with no liability could sell the credit to someone with a liability. This means, effectively, there would be a statewide floor of zero, because the credits could only be taken against a liability, there would not be a possibility for the credits to take the liabilities below zero.

SENATOR STEDMAN remarked that Alaska has an imbalance of a 35 percent NOL credit and no corresponding 35 percent tax. It is a statutory 35 percent tax, but mathematically, due to the per-barrel credit, there is no effective means of achieving that 35 percent numeric.

4:14:51 PM
MR. MAYER said the mechanism for that balancing is the sliding per-barrel credit under SB 21. Referring to slide 10, he said the basic idea of the NOL credit is to equalize the impact of the tax system between producers that have a liability versus new developers that don't yet have one. Instead of allowing them to carry expenses forward and deduct them against future revenues, the credit just pays them now. They would not deduct them in the future and therefore pay more taxes then.

4:18:04 PM
MR. MAYER said that slide 11 showed how ACES added an additional progressive component to the basic tax structure in the form of a tax rate that could steadily increase as the price goes up. So, the total tax rate could approach 40 to 50 percent or higher instead of 25 percent. The progressivity structure meant very high marginal tax rates, and that is because the actual tax rate itself was based on the so-called production tax value per barrel. This meant that instead of the previous system where

government take was essentially a flat 45 percent in all cases, a new developer with no liability would receive 45 percent support through the combination of the NOL credit and the 20 percent capital credit, but a developer with substantial tax liability might have 80 to 100 percent effective support, because of facing a marginal tax rate up in the 80s combined with 20 percent capital credit. The amount of support was very unpredictable for everyone. It meant the state brought in huge amounts of revenue to the treasury when prices were high and spending was low, but it also meant that in periods of low prices and high spending there was major risk that the state would have to pay out a large percentage of cash both in terms of foregone revenues in the tax system and then in terms of credits.

4:20:21 PM
SENATOR STEDMAN recalled under both regimes the concept was to try to make reinvestment in Alaska more attractive than sending the cash back to the home office and trying to get the industry out of "harvest mode."

4:21:13 PM
MR. MAYER said the way the 4 percent gross floor works is to first decide if the net profit tax one is paying is greater or less than 4 percent of the gross (the regressive element that gets steadily bigger as prices get lower). It seemed that when that calculation was done it really had no impact. That is because capital credits were applied after. So, as long as one had any baseline level of capital spending, that flow was never binding. Therefore, the effective tax rate still comes down to 0 percent at the $60 or so price range. So, there was really no hard binding gross floor under ACES.

4:22:15 PM
The core changes in SB 21 (comparison on slide 12) were no more 20 percent capital credit, a higher nominal rate of 35 percent tax, and a sliding $0-8 per-barrel credit for oil production that acts similarly to progressivity (under ACES) to create an overall progressive curve.

SB 21 has a slightly lower tax rate at last year's prices, but there are two key differences. SB 21 has a much lower rate when prices are highest and it also has a harder binding gross floor, because it essentially said if there is no more capital credit and you can do the calculation of this sliding per-barrel credit that can reduce your taxes steadily more as prices go down, but comparing it to a gross system is done after the $1 per-barrel

credit is applied. So, the $1 per-barrel credit can never take you down below the 4 percent gross floor. Then the tax rate comes down to just under 10 percent of the net at around $75 a barrel of oil, but then very quickly starts to go up again, because at that point, one is no longer being taxed on a net basis. One is being taxed on a gross basis at 4 percent of gross revenues, and that very quickly takes up ever more until again once the price goes down to about $50 a barrel the tax rate quickly becomes 100 percent in net terms.

4:24:15 PM
SENATOR STEDMAN said the Senate never reviewed a $0 to $8 sliding scale. The Senate bill used $5 per barrel when it was sent over to the House and at some point, a sliding scale is needed for DOR to hold a taxpayer in the minimum tax range. And a "hardened floor" just doesn't exist; it is a mathematical equation to take credits against. He thinks of it as a gross tax calculation of 4 percent and then take whatever you can against it.

MR. MAYER added that the only thing you can take against it - unlike previous times when the entire capital credits could be counted and it really had no effect - is NOL credit, which only applies literally when one has no profit at all. The reason this curve goes up dramatically is you can only plot the lines in terms of effective tax rates as long as there is actually profit to tax. Below the point of $46 barrel there is no longer any profit to tax, the point at which you have on one hand an infinite tax rate and also the point at which the NOL credit kicks in for the first time and starts to take you from that 4 percent of gross down to zero.

SENATOR STEDMAN pointed out that the GVR $5 per-barrel credit, the small producer credit, and starting in FY15 with a large enough Net Operating Loss (NOL) credit, can all be taken against the floor.

4:26:17 PM
MR. MAYER said slide 12 looks at the world of "new oil" that is eligible for gross value reduction, which at the moment makes up "a very, very, small sliver of the total pie," and "old oil" under SB 21, and the only thing that can be taken as a credit against the hard floor is the NOL credit. The floor for old oil is a very hard floor right up until the point that there is no profit whatsoever. At that point it starts coming down because of the operation of the NOL credit. It's important to keep in mind through the entire history of tax regimes in Alaska there

has been an understanding of this problem of gross taxes being highly regressive. Under the economic limit factor (ELF) the idea was understanding those problems and needing a formula that would steadily reduce the tax burden when there is no more profit to tax, and it worked for a little while, and then it stopped working. Under ACES the gross floor was put in and clearly it never actually applied. But the idea - based on cost assumptions that existed back then that are very different than today's cost assumptions - there would be a 4 percent floor in a certain range of prices below $25 per barrel. Then it went to a 2 percent floor and then no floor at all at lower prices.

MR. MAYER thought it was a very intentional move to have the NOL credit, to say once one was eligible for a NOL credit, by definition one has no profit. In circumstances, the state is not sure it wants the full 4 percent gross floor to apply. Reasonable people can differ as to whether that is the right policy call or not, but that is the right context for thinking about that debate.

SENATOR STEDMAN said he should have parsed it more clearly, because he was looking at oil in the aggregate and Mr. Mayer was talking about old oil. He thought there had been a lot of confusion in the building in the last several years about the floor. A lot of people were shocked that it could be pierced so easily.

CHAIR GIESSEL said the point that Mr. Mayer made was if one takes net operating losses, one has no profit. Consequently, it's rather difficult to say one owes a tax in a system based on net profits.

4:29:55 PM
MR. MAYER said slide 13 is about new oil. It is eligible for the GVR, the idea being to create a lower effective tax rate for new fields. People in Alaska tried to do that in the past, but it was very hard to see how that would work, precisely because the entire system is set up is to have no "ring fencing." It's a net tax system where one thinks about costs and revenues and subtracts one from the other and doesn't try to get down to the level of saying these costs are associated with a particular field. This system treats the North Slope as a whole and the idea behind the gross value reduction was to say if we want to have a lower effective tax rate on some production and not others, the only way to do that is by concentrating on the revenue side of the equation. So, because they wanted to reduce the tax rate but can't change it from 35 percent for everybody,

they created "this fiction" that says you had X in revenues and we're going to pretend you had X minus 20 percent. Having that fiction allows the tax rate to be reduced, which turned out to be a substantial reduction in the overall effective tax rate on new oil.

The other difference, as Senator Stedman pointed out, is that to be eligible for GVR (a very small portion of the total production), the gross floor is calculated first and then the $1 per-barrel credit is applied afterwards. So, it's a fixed $5 per-barrel credit rather than the sliding one, and it doesn't get as big. The idea was to not put the burden of the regressive gross floor on activities they are trying to incentivize. The idea was to create an overall tax system that was effectively neutral at between 60 and 65 percent across a really wide range of prices.

CHAIR GIESSEL asked if he would be available to continue on Monday. Mr. Mayer said he could make that work.

4:33:47 PM
Chair Giessel adjourned the Senate Resources Standing Committee at 4:33 p.m.