

**ALASKA STATE LEGISLATURE  
HOUSE RESOURCES STANDING COMMITTEE**

October 30, 2007

9:06 a.m.

**MEMBERS PRESENT**

Representative Carl Gatto, Co-Chair  
Representative Craig Johnson, Co-Chair  
Representative Anna Fairclough  
Representative Bob Roses  
Representative Paul Seaton  
Representative Peggy Wilson  
Representative Bryce Edgmon  
Representative David Guttenberg

**MEMBERS ABSENT**

Representative Scott Kawasaki

**OTHER LEGISLATORS PRESENT**

Representative Bob Buch  
Representative Mike Chenault  
Representative John Coghill  
Representative Les Gara  
Representative Kyle Johansen  
Representative Mike Kelly  
Senator Bert Stedman

**COMMITTEE CALENDAR**

HOUSE BILL NO. 2001

"An Act relating to the production tax on oil and gas and to conservation surcharges on oil; relating to the issuance of advisory bulletins and the disclosure of certain information relating to the production tax and the sharing between agencies of certain information relating to the production tax and to oil and gas or gas only leases; amending the State Personnel Act to place in the exempt service certain state oil and gas auditors and their immediate supervisors; establishing an oil and gas tax credit fund and authorizing payment from that fund; providing for retroactive application of certain statutory and regulatory provisions relating to the production tax on oil and gas and conservation surcharges on oil; making conforming amendments; and providing for an effective date."

- HEARD AND HELD

**PREVIOUS COMMITTEE ACTION**

BILL: HB2001

SHORT TITLE: OIL & GAS TAX AMENDMENTS

SPONSOR(S): RULES BY REQUEST OF THE GOVERNOR

10/18/07	(H)	READ THE FIRST TIME - REFERRALS
10/18/07	(H)	O&G, RES, FIN
10/19/07	(H)	O&G AT 1:30 PM HOUSE FINANCE 519
10/19/07	(H)	Heard & Held
10/19/07	(H)	MINUTE(O&G)
10/20/07	(H)	O&G AT 12:00 AM HOUSE FINANCE 519
10/20/07	(H)	Heard & Held
10/20/07	(H)	MINUTE(O&G)
10/21/07	(H)	O&G AT 1:00 PM HOUSE FINANCE 519
10/21/07	(H)	Heard & Held
10/21/07	(H)	MINUTE(O&G)
10/22/07	(H)	O&G AT 9:00 AM HOUSE FINANCE 519
10/22/07	(H)	Heard & Held
10/22/07	(H)	MINUTE(O&G)
10/23/07	(H)	O&G AT 9:00 AM HOUSE FINANCE 519
10/23/07	(H)	Heard & Held
10/23/07	(H)	MINUTE(O&G)
10/24/07	(H)	O&G AT 9:00 AM HOUSE FINANCE 519
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10/25/07	(H)	O&G AT 10:00 AM HOUSE FINANCE 519
10/25/07	(H)	Heard & Held
10/25/07	(H)	MINUTE(O&G)
10/26/07	(H)	O&G AT 10:00 AM HOUSE FINANCE 519
10/26/07	(H)	Heard & Held
10/26/07	(H)	MINUTE(O&G)
10/27/07	(H)	O&G AT 2:00 PM HOUSE FINANCE 519
10/27/07	(H)	Heard & Held
10/27/07	(H)	MINUTE(O&G)
10/28/07	(H)	O&G AT 2:00 PM HOUSE FINANCE 519
10/28/07	(H)	Moved CSHB2001(O&G) Out of Committee
10/28/07	(H)	MINUTE(O&G)
10/29/07	(H)	O&G RPT CS(O&G) NT 4DP 1NR 2AM
10/29/07	(H)	DP: SAMUELS, NEUMAN, RAMRAS, OLSON
10/29/07	(H)	NR: DOOGAN
10/29/07	(H)	AM: KAWASAKI, DAHLSTROM
10/29/07	(H)	RES AT 1:00 PM HOUSE FINANCE 519
10/29/07	(H)	Heard & Held
10/29/07	(H)	MINUTE(RES)

10/30/07 (H) RES AT 9:00 AM HOUSE FINANCE 519  
10/30/07 (H) RES AT 6:30 PM HOUSE FINANCE 519

**WITNESS REGISTER**

DAN E. DICKINSON, Consultant to  
Legislative Budget and Audit Committee  
Anchorage, Alaska

**POSITION STATEMENT:** Discussed progressivity in CSHB 2001(O&G).

PATRICK GALVIN, Commissioner  
Department of Revenue (DOR)  
Juneau, Alaska

**POSITION STATEMENT:** Provided information regarding economic issues related to tax change proposed in HB 2001.

RICH RUGGIERO  
Gaffney, Cline & Associates (GCA)  
Houston, Texas

**POSITION STATEMENT:** Presented models based on CSHB 2001(O&G) and provided information on HB 2001.

BOB GEORGE  
Gaffney, Cline & Associates (GCA)  
Houston, Texas

**POSITION STATEMENT:** Presented models based on CSHB 2001(O&G) and provided information on HB 2001.

**ACTION NARRATIVE**

**CO-CHAIR CARL GATTO** called the House Resources Standing Committee meeting to order at 9:06:00 AM. Representatives Fairclough, Edgmon, Guttenberg, Wilson, Roses, Seaton, Gatto, and Johnson were present at the call to order. Other legislators present were Buch, Chenault, Coghill, Gara, Johansen, Kelly, and Stedman.

HB2001-OIL & GAS TAX AMENDMENTS

9:06:20 AM

CO-CHAIR GATTO announced that the only order of business would be HOUSE BILL NO. 2001, "An Act relating to the production tax on oil and gas and to conservation surcharges on oil; relating to the issuance of advisory bulletins and the disclosure of certain information relating to the production tax and the

sharing between agencies of certain information relating to the production tax and to oil and gas or gas only leases; amending the State Personnel Act to place in the exempt service certain state oil and gas auditors and their immediate supervisors; establishing an oil and gas tax credit fund and authorizing payment from that fund; providing for retroactive application of certain statutory and regulatory provisions relating to the production tax on oil and gas and conservation surcharges on oil; making conforming amendments; and providing for an effective date." [Before the committee was CSHB 2001(O&G).]

9:07:55 AM

DAN E. DICKINSON, Consultant to Legislative Budget and Audit Committee, informed the committee that he would be talking about progressivity. He began by explaining that a tax is the total of its base multiplied times the rate. Progressivity, he said, is a little more complicated, because the rate recognizes how much free cash flow is being generated on the [North] Slope. He explained that rates "one" and "two" get multiplied together to produce an effective rate, and that rate gets multiplied times the base.

MR. DICKINSON directed attention to slide 2 of a PowerPoint presentation, which offers information extracted from page 13, lines 15-21, of CSHB 2001(O&G), which read as follows:

For each month for which this subsection applies, the tax is equal to .225 percent of the monthly gross value at the point of production of the taxable oil and gas multiplied by the number that represents the difference between (1) the quotient of the total monthly gross value at the point of production of the taxable oil and gas produced by the producer during that month divided by the amount of taxable oil and gas produced by the producer in BTU equivalent barrels, and (2) \$50.

MR. DICKINSON explained that slide 2 shows "the total cash being thrown off on the North Slope, after deducting transportation costs." It does not include the cost of "lifting" - the upstream costs. That amount, he said, is multiplied by the gross value expressed on a per barrel basis.

9:11:41 AM

CO-CHAIR GATTO asked if the term, "BTU equivalent barrels," is used because some oil is better than other oils.

MR. DICKINSON said that term is used primarily because there are gas and gas liquids that need to be measured on a barrel equivalent basis, but secondarily, because each barrel will be a barrel of oil despite quality differences.

[9:12:58 AM](#)

MR. DICKINSON, in response to a follow-up question from Co-Chair Gatto, said the calculation for BTU equivalents is defined clearly. He explained that the problem with the definition is, historically, there was a relationship between a British Thermal Unit (BTU) of gas and a BTU of oil - a 6:1 ratio. Currently, he said, that is no longer the case. He explained, "If oil is selling on the market at \$90, and gas is selling at \$6 or \$7, you're looking at more like a 12:1 ratio ...."

[9:14:09 AM](#)

MR. DICKINSON, in response to a request from Representative Seaton, confirmed that gas liquids are really considered to be oils, not gas. He returned to the example on slide 2 to point out that the next step would be to subtract \$50.00 from the gross value. He explained how slide 3 shows the same information in a more logical order. He stated, "The difference between this and existing law and the governor's proposal [HB 2001, as introduced] is: you then take that 6.75 percent and you multiply it times the gross value to come up with the additional dollars in tax." He continued:

In both the governor's plan and current law, both the progressivity and the base rate are all on net, so you could literally take this number and add it to the [0.00225] or add it to the 25 percent, and say, "Here's my new tax rate." But you can't do that here because the base is different.

But, I think if you put these in a different order, at least to me, it's clearer. You use ... the difference between \$50 and the gross value to generate how much progressivity you're going to look at. The statute tells you for each dollar how much rate you get, and so, you get the 6.75 and you multiply times the base to come up with the answer.

9:17:30 AM

MR. DICKINSON, in response to a question from Representative Seaton, said the phrase, "gross value to the point of production," is defined in AS 43.55.150 as: "after subtracting the actual cost of transportation." He confirmed that if assuming an Alaska North Slope (ANS) market price of [\$87 per barrel], then according to the statutory section of .150, he would subtract his transportation costs to get down to the figure of [\$80.00].

9:17:59 AM

REPRESENTATIVE GUTTENBERG noted, "On the term, 'actual costs of transportation', you've got a different rate between [Federal Energy Regulatory Commission (FERC)] and [Regulatory Commission of Alaska (RCA)]." He asked how that rate is calculated.

MR. DICKINSON responded, "For [the Trans-Alaska Pipeline System (TAPS)] it will be the rate that the barrels are shipped." He explained that the RCA looks at the barrels that are going to be delivered in the state, and the federal government regulates the rates for the barrels that are going out of state. He recollected that at one point approximately 3 percent was delivered in state and about 97 percent would be calculated at the FERC rate. He indicated that the Department of Revenue has over 100 pages of regulations interpreting the words related to "actual cost of transportation".

MR. DICKINSON directed attention to slide 4, which compares the progressivity taxes the state would receive under PPT [the petroleum production profits tax - current law], ACES [Alaska's Clear and Equitable Share - HB 2001, as introduced], and HO&G [House Special Committee on Oil and Gas substitute - CSHB 2001(O&G)]. He explained that he used in the example 244 million barrels, which is the number of taxable barrels that DOR forecast for fiscal year 2008 (FY 08). The slide shows an ANS market price of \$87, minus a \$7 cost of transportation, which equals \$80.00 gross value at the point of production (GVPP). The lifting cost for PPT and ACES is \$20, and when that amount is subtracted from the GVPP, the total production tax value is \$60.00; for HO&G the number is still at \$80. He said, "You then multiply the barrels that are taxable times the per barrel, and you come up with ... the tax base." Under the net plan - PPT and ACES - the total base is \$14,640, while under the gross plan - HO&G - the total base is \$19,520. Mr. Dickinson reviewed the numbers on the slide that are factors of the rate, which he said

is "how much you're going to change for each dollar of progressivity times the number of dollars that you're over your starting point." The result shows that the progressivity factor for PPT would be 5 percent, for ACES 6 percent, and for HO&G 6.75 percent. The resulting tax would be \$732 million, \$878 million, and \$1.3 billion, respectively.

[9:22:40 AM](#)

REPRESENTATIVE SEATON made a comment comparing the bottom line on tax. He observed that every company will pay differently regarding progressivity, because the progressivity will be calculated on each individual company-wide net.

MR. DICKINSON confirmed that is correct. He clarified, "This is the ... progressivity tax piece before the base - 22.5 or 25 percent - is added in and before the application of credit. So, this is just one tiny step out of the whole thing." He said progressivity is not symmetrical.

[9:24:16 AM](#)

REPRESENTATIVE SEATON said, "But the relationship between 50 ANS West Coast, and the 40 and 30, really is something that we're just guessing at, because ... it's all individual companies, and that can definitely change."

MR. DICKINSON said that is correct. He clarified that the \$40.00 and \$30.00 starting rate [for PPT and ACES] are both free cash flow generated after all costs have been generated, while the \$50.00 starting rate [under the HO&G plan] is a result of finding out how much is at the well head before deducting costs - "and then you subtract the 50."

[9:25:19 AM](#)

CO-CHAIR JOHNSON requested a chart be given to the committee with actual numbers on it - actual costs.

MR. DICKINSON said he would do that. He returned to the PowerPoint presentation, directing attention to slide 5. He said .25 percent is multiplied times the monthly production tax value of the taxable oil and gas, and that is multiplied by the price index. The price index is defined as the number derived from subtracting \$40.00 from "the number that is equal to the quotient of the total monthly production tax value of the taxable oil and gas produced by the producer during that month

... divided by the total amount of the taxable oil and gas produced by the [producer] during that month, in BTU equivalent barrels".

[9:27:00 AM](#)

MR. DICKINSON turned to slide 6, which shows progressivity studies from 10/28/07 and assumes \$7 downstream and \$20 upstream costs. It shows how many dollars will be generated prior to credits for the three aforementioned plans. He indicated that there are many ways to look at [progressivity], and they all have the same end result.

REPRESENTATIVE SEATON asked if PPT and ACES would perform better than the HO&G plan if it were the PPT that was first constructed.

MR. DICKINSON said perhaps, but he would have to check the figures.

REPRESENTATIVE SEATON said that information would be helpful.

[9:30:46 AM](#)

MR. DICKINSON, in response to a question from Representative Fairclough, noted that the subject of allowable lease expenditure can be found in [AS 43.55.165], while adjustments to those expenditures can be found in [AS 43.55.170]. In further response to Representative Fairclough, Mr. Dickinson said that under the net structure of the governor's proposal, everything is on a cash basis, how it is financed does not matter, and interest is not a deductible expense.

[Co-Chair Gatto passed the gavel over to Co-Chair Johnson.]

[9:32:13 AM](#)

REPRESENTATIVE FAIRCLOUGH clarified that she wants to know: "Will we drive people to actually buy assets to create a secondary market that can be resold, that they take the allowable cost because of the slope of the progressivity?" She added, "I'm just wondering how our language reacts to that."

MR. DICKINSON responded:

One of the things in [AS 43.55.170] is if people start buying and selling assets, then they've got to

subtract the cost, and the whole thing carries through. An attempt was made to not create incentives for that kind of behavior. I mean, the whole reason we're here is we believe taxes affect behavior, and clearly at the margin you asked the tax department how something is affected, but usually ... they're the last people you ask ....

[9:33:12 AM](#)

REPRESENTATIVE SEATON said he is not seeing information pertaining to reduction in liability to the state. In all three of the aforementioned plans, he noted, the progressivity is limited to 25 percent of the cost; however, ACES and PPT are based on net. He asked Mr. Dickinson if he agrees with the following scenario:

So, if a company invests a billion dollars, and we're at the max on progressivity at 25 percent, and if we had, let's say under ACES we're 25 percent. That means ... that billion dollars is totally deductible, and the state ends up kicking in \$500 million, plus the credits and everything else. And if you had 20 percent credit, you'd (indisc.) \$200 million. ... So, basically, we are up there in that respect, and yet, with [the HO&G plan] what they have done is said, "Progressivity - nondeductible," so our liability would be the 25 percent under ACES, plus the ... credits. So, we don't take on another 25 percent of the total cost as liability.

MR. DICKINSON said Representative Seaton is correct in his analysis and has identified "one of the shortcomings of the gross." He continued:

The notion is that someone making those investments receives less benefit if part of the tax is based on gross. If it's based on net, ... they receive the full benefit. ... The point is the state is trying to encourage those investments; it's trying to set its tax rate so that someone making those investments is paying less [and] someone not making those investments is paying more. And going to the gross essentially ignores that piece of it.

[9:35:36 AM](#)

REPRESENTATIVE SEATON suggested that the problem lies in how much risk the state should take. He offered an example.

MR. DICKINSON concurred. He said the state "take" number will represent "how much of any dollar of investment the state is underwriting ... if everything is on net."

[9:36:46 AM](#)

REPRESENTATIVE SEATON asked if it is advisable for the state to take 79.5 percent - if at the high prices where progressivity kicks in the state should assume the liability for "additional deductibility."

MR. DICKINSON said he thinks the theory behind having a gross that comes in above \$50 is based on the idea that projects below that are in the investment range. He continued:

You're going to make sure that you're not creating poor incentives there. And then, as you go above, ... a truly free cash flow's being thrown off; you're taxing on a basis that doesn't recognize those earlier investments. Clearly, you never want to be in a position where a company, by making a dollar investment is getting \$1.10 in tax breaks. You don't want to be in a position where you harvest the tax system.

MR. DICKINSON said there will be debate on this issue and, ultimately, the legislature will have to make a judgment call to discern where "gold plating" would start.

[9:38:58 AM](#)

REPRESENTATIVE SEATON stated his concern is that at the net cap of 25 percent, companies could dump in a large amount of capital during a spike in prices, which would mean the state would be paying a huge amount. Then, he said, prices ameliorate by the time "the taxing comes down," which means taxing at the base rate. That would mean [the state] would not "even get to recover it on the other end." He offered further details. In response to Mr. Dickinson, he added, "So, although we've dumped in and had deductibility for the progressivity, we might well in the end, with long-term projections of oil prices, ... not receive any of the tax benefit from that at that time on that production."

MR. DICKINSON said it may seem counter intuitive, but the more the state is taking in a true net system, the more it is underwriting the company's investments.

[9:42:33 AM](#)

REPRESENTATIVE SEATON clarified:

The problem is you've invested when progressivity was maxed out at 25 percent, so you've written off and you paid for an additional 25 percent of the cost. And yet, when prices ameliorate to a long-term average, you're only going to tax at the base rate, not at the progressivity rate, because ... as you say, it's on an instantaneous, cash-flow basis. The net present value of that investment deduction that we allow is huge compared to the future tax rate, if tax rates have ameliorated.

REPRESENTATIVE SEATON said he would like Mr. Dickinson to consider the risk potential that the state would have in that kind of situation if the progressivity is on the net and offer feedback to the committee.

MR. DICKINSON pointed out that other projects will balance out the effects of price changes. One of the aspects of making the capital investments deductible upfront is an accelerated appreciation, he said.

[9:44:00 AM](#)

REPRESENTATIVE ROSES said he hopes what Representative Seaton is describing will happen. He explained:

Because if they're investing enough money to prevent having to pay the progressivity, if prices do fall, they're going to be bringing more barrels on, so we're going to be taxing at the 22.5 percent on a whole lot more volume than we would have been if it had not been for that investment as a result of trying to offset that progressivity. Is that correct?

MR. DICKINSON said yes, theoretically.

[9:44:47 AM](#)

REPRESENTATIVE GUTTENBERG said so much of this issue of progressivity and tax rate is about trying to second guess behavior. He questioned who benefits from the HO&G plan - whether it is the big investor in capital with high operating costs or the producer with low operating costs.

MR. DICKINSON responded that the producer that would benefit would be the one whose costs are lower than 20, while "the person who would ... receive a benefit from it, who would rather be under net, is someone whose costs are above 20." He said the problem with the gross is that if there is a single gross rate, the person making more investments will be relatively overtaxed, while the person making fewer investments will be relatively undertaxed. In response to Representative Guttenberg, he said everyone is faced with this fact.

REPRESENTATIVE GUTTENBERG spoke of finding a balance between the base tax rate and progressivity.

[9:46:28 AM](#)

REPRESENTATIVE WILSON asked whether it is possible that a company would spend excessively on a borderline field, knowing that there would be a deduction offered by the state.

MR. DICKINSON replied that ultimately the state would be trusting that the professional geologists hired by the oil companies would be trying to make a profit for those companies. He said the state does not want a tax system that defeats the goal of encouraging development of resources.

[9:48:29 AM](#)

REPRESENTATIVE ROSES observed that under the HO&G bill, there would be "a gross on the front end," which is the royalty tax, then the base tax, which is net, and then the progressivity factor, "which is another gross."

MR. DICKINSON confirmed that is correct. He added:

But one of the things I do want to contrast it with [is that] under the governor's proposal, there's sort of a gross at the low dollar end and a gross at the high dollar end. Under all these systems, yeah, the 12.5 percent comes off the top; the state's getting their royalty anyway. So, I think it's a fair way of characterizing it.

9:50:20 AM

REPRESENTATIVE FAIRCLOUGH recollected that the committee had requested information from the administration the prior day and she asked if there had been a response.

PATRICK GALVIN, Commissioner, Department of Revenue (DOR), said he had not received a list of questions.

REPRESENTATIVE FAIRCLOUGH reviewed the questions that had been asked, along with the names of those who had made the requests. She explained that she has taken it upon herself to keep a list of the queries as a means of keeping track of when they get answered. She explained that answers have not always been forthcoming from those who had been asked.

COMMISSIONER GALVIN shared his understanding that the department has responded to all questions it has received.

9:53:27 AM

CO-CHAIR JOHNSON offered his understanding that it is incumbent upon the testifier to provide any information requested by the committee; however, he offered to provide a list for Commissioner Galvin.

COMMISSIONER GALVIN said the department will take responsibility for ensuring that it responds. He reiterated that he had not been aware of any outstanding requests.

CO-CHAIR JOHNSON said he will have the House Special Committee on Oil and Gas staff review requests by examining the minutes.

9:54:54 AM

REPRESENTATIVE GUTTENBERG asked whether the administration has been communicating with bargaining units. He said he would appreciate knowing what the results of any such communication have been. He explained, "Because the auditor in that situation is taking up a lot of our time, and people in the know tell me this is a simple answer and it would solve all of our problems."

COMMISSIONER GALVIN indicated that there is a basic disagreement between the Department of Administration and the auditors as to whether a simple answer is possible. The bargaining unit says it is more than willing to negotiate a reclassification into

existing agreements, while the administration says there is no classification system in the agreements to reclassify.

9:57:00 AM

REPRESENTATIVE GUTTENBERG suggested that the Department of Administration may think that the best place for bargaining to happen is at the legislature's table, but that he does not agree.

COMMISSIONER GALVIN said the issue was addressed in a Senate Judiciary Standing Committee meeting, because the chair of the committee had orchestrated the discussion. If the chair of the House Resources Standing Committee wants to address the issue "in that form," he said he would be happy to bring the Department of Administration to the table.

REPRESENTATIVE GUTTENBERG explained that the issue is broad at this point and he wants to see only the key points brought before the legislature.

CO-CHAIR JOHNSON said he would like to proceed with the presentation and come back to that question.

9:58:32 AM

COMMISSIONER GALVIN said he would provide information on the proposed tax change and look at the impact the tax code would have on investment. He said the department has recently provided information to the legislature regarding the economic challenges of new fields and the advantages of net based tax in encouraging those investments while still bringing in revenue for the state. He said today he will discuss those factors in relation to the legacy field investment.

COMMISSIONER GALVIN related that the process is two-fold. First is the reinvestment to get oil out of existing pools. One investment decision is to go into "harvest mode" and allow the decline curve to go down at a steep rate. Another decision would be to put more money into the legacy fields and "bring that decline rate up." He said one question is how to look at the alternatives and evaluate the impact that the proposed tax choice could have on them. Commissioner Galvin said he invited a representative from Gaffney, Cline & Associates (GCA) to not only look at the issue from a theoretical standpoint, but to study the numbers that were provided last week by the [oil]

companies and determine how they reflect the actual decisions that are being made now.

COMMISSIONER GALVIN said there will also be discussion regarding the difference between net-based and gross-based progressivity and how the two would impact new field investment within the legacy fields and how the difference in those two systems can impact the decision making and "potentially incentivize additional investment in the new fields."

COMMISSIONER GALVIN mentioned Mr. Dickinson's slides and a chart comparing ACES and the HO&G version. The combined total for deductions for operating and capital expenditures were, a year ago, predicted to be at \$7 per barrel, and currently the number is at \$14 per barrel. He recollected that Mr. Dickinson had chosen \$20 per barrel as a "nice round number." Commissioner Galvin stated that he thinks it is important that accurate numbers are used to make a comparison.

[10:03:14 AM](#)

CO-CHAIR JOHNSON told Commissioner Galvin that the committee did request that the real numbers be reported.

COMMISSIONER GALVIN recollected that Representative Seaton had asked for an explanation related to the difference between the gross-based and net-based [progressivity] and whether a field with a smaller margin would still be paying the same amount under the gross. He said the answer was lost in the explanation, but it is: yes, the amount would not change. He stated, "An operator who had a lower cost - and therefore a higher margin - would ..., in comparison, be potentially ... better off, as it were, under the gross, because that margin isn't going to be recognized in that progressivity factor."

[10:04:40 AM](#)

CO-CHAIR JOHNSON asked, "Along those same lines, would that not encourage that individual with lower costs to possibly invest more?"

COMMISSIONER GALVIN answered no. He said more detail on that issue would be forthcoming.

[10:06:02 AM](#)

COMMISSIONER GALVIN, in response to Representative Seaton, said:

When we came forward with the ACES proposal, we had what I would refer to as the three primary components. ... You had the gross-based floor, you had the base-net tax, and you had the progressivity. And within that, what we recognized was the gross tax floor was intended to provide protection for the state on the low end, and that was coupled with the ... primary base that provided the flexibility for balancing investment opportunities and the state revenue.

When we got to progressivity, it was primarily to accentuate the value of the net, and that it was to encourage or to provide the state with a higher revenue at the higher prices, while also, being based upon the net, have the impact that it has a greater ... impact on the highly profitable fields as opposed to the new, more challenged fields. And ... we were trying to recognize, on the progressivity, the same intent of having the impact felt by the fields that basically could handle it better and still keep that incentive in place.

What we recognize in the discussion that's taken place since the session has begun - and I think the House CS is an indication of that - is that within the legislative body, there seems to be a greater focus on that upside. ... A lot of the companies talk about their investment decisions and how the floor had a negative impact on that [and] has caused, I think, a lot of the folks in the building to say, "Okay, let's move away from worrying so much about capturing the value for the state, protecting the state, on that low end, and recognize the state's going to take on some of the risk there. Let's look at the upside." And we can appreciate that. ... I mean, that's your role as the ones who set the tax policy. If that's the direction you're going to go, then we highly encourage you to make sure that that upside is truly captured in an appropriate way. And so, we still very much support the 25 percent base tax rate, and we believe that if you're going to move away from the gross tax floor - which we still believe has value to the state - ... then make sure that you capture that upside in a bigger way by trading that off.

And the discussion that you're going to have today is: If you're going to capture the upside, know the impact that you're going to have when you make the choice between ... a gross-based progressivity and a net-based one.

[10:09:54 AM](#)

RICH RUGGIERO, Gaffney, Cline & Associates (GCA), presented models based on CSHB 2001(O&G). He explained that his firm is not necessarily in the position to support the administration. He told the committee that he would also talk about issues that oil companies face. He said his firm would like to test the recommendations that are coming out of both houses and from the governor against "more real life scenarios," and to challenge them with multiple moving parts. He talked about changes in oil price and cost structure in the future. He said GCA will not be giving specific numbers that show exactly how much money the state would make, but it will show what it believes the industry presented and is making. He remarked that nobody has shown the legislature how "when the state take changes, how the oil company take is changing." This is equally as important for the legislature to look at, he said, in order to make an assessment as to what is equitable and fair to share.

[Co-Chair Johnson returned the gavel to Co-Chair Gatto.]

[10:14:09 AM](#)

MR. RUGGIERO began his PowerPoint presentation. Slide 2 covers the topics to be addressed: the risk of raising state revenue share on existing producing reservoirs, goals for the fiscal system, and a bird's-eye view of the structure of the fiscal system. He highlighted slide 4, which asks, "Where is the tipping point?" He said the state needs to figure out a balance between earning revenue and keeping the companies interested in continuing their work in the state.

[10:19:14 AM](#)

MR. RUGGIERO used the analogy of Rock, Paper, Scissors, wherein rock is prospectivity and trumps scissors, which is the fiscal system, scissors cuts paper, which is profit, and paper, which buys reserves, covers rock, which he explained is developing reserves. Another issue to keep in mind, he said, is that at one point in time, companies felt that it was cheaper to buy barrels of gas than to drill to find oil. Taxes, he said, are

just one part of the process of deciding whether or not to invest in one project or area versus another.

MR. RUGGIERO said GCA will "roll all this together" in an attempt to look at the information from the state's perspective. He mentioned past presentations and the necessity to read between the lines. He stated, "There is significant upside to reduce the ... natural decline in your legacy reservoirs." He said GCA will illustrate why it thinks the economics of reinvestment in the legacy fields is "extremely profitable."

10:25:29 AM

MR. RUGGIERO, in response to a question from Co-Chair Gatto, said the natural decline in the legacy fields is 15 percent a year, but new technologies have come forth that allow companies to sweep the reservoir and "pull" more of the oil that is in it. In response to a follow-up question from Co-Chair Gatto, he offered his understanding that if a field is allowed to "follow its natural decline," it could be possible to return to that field to drill, but the start-up cost would be tremendous and the amount that would come out would not be substantial. He concurred with Co-Chair Gatto that it is crucial that the state prevent companies from packing up and going home due to decline.

10:28:21 AM

MR. RUGGIERO said slide 7 shows an excerpt from a letter from the Alaska Oil and Gas Association (AOGA), which proffers that the fiscal system chosen must recognize the current and near-term importance of improving production from existing fields. In the letter, Mr. Ruggiero said, AOGA noted that North Slope field life could be extended up to another 25 years with continued investment (slide 8). Slide 8 also shows that oil companies achieved 70,000 barrels per day of additional production from the 2006 drilling program in Prudhoe Bay.

MR. RUGGIERO referred to a chart on slide 9, which shows a five-year running summary of the infill drilling program for BP Exploration (Alaska) Inc. (BP). The summary concludes that at the beginning of 2007, over half the production from the field is a result of the sustaining investment or reinvestment in the legacy fields. He said the chart could be interpreted as showing either a declining return per dollar or a higher production cost per barrel. He said GCA asked, "How can we ground truth that? Is that sounding like that's about right?"

MR. RUGGIERO highlighted information on slide 10, which shows that it is getting more expensive to develop a barrel of reserves. He said BP has invested approximately \$19 billion overall to produce approximately 9.5 billion barrels; to date the finding and development cost has been about \$2. He said the Prudhoe/Kuparuk upside shows that "moving forward," the cost to find a barrel will increase to \$3.5, then \$7.7, then \$12. The slide also shows Pioneer's view of average finding and development costs for the Lower 48 is \$14, which is a blended rate derived from the smallest to the largest operations. He stated, "The good news about Prudhoe and Kuparuk is they don't have to find it. They know it's there; they've got a model that says it's there. It's about applying the technology, and it's about using the outputs of their model to do the best that they can to extract what they know to be there."

[10:33:20 AM](#)

MR. RUGGIERO, regarding slide 11, said a five-year drilling program was formulated which shows that every dollar of drilling spent will mean an expenditure of three times that amount. He explained, "So, whatever my drilling cost is for the development well, I've got to spend a like amount on injection wells and injection facilities, and I've got to spend another like amount on additional surface facilities in order to move that to market." The slide shows a bar chart for the drilling capex for the years 2002-2006, and a bar chart for the capex for the drilling program which reflects the 300 percent for added facilities and injection. Annual investments for the drilling program are in the range of \$700-\$800 million a year. He said that seems to be consistent with the amount of capital that has been reported to have been spent in the area. He said GCA digitized the data and produced a graph on slide 12, which shows incremental production. He directed attention to the point on the graph at which there was new oil in 2003 as a result of the new program of 2002. The ensuing programs of 2003 and 2004 brought more oil. There is a significant jump in oil production shown on the graph between 2005 and 2006, after which begins a natural field decline of about 15 percent. He said GCA stressed the production even further, to 25 percent, "to make sure that we didn't put more barrels into the program than they had stated were being developed with that drilling program." As shown on slide 13, he noted that BP was in a net investing position from 2002-2004, came into a net positive cash position by 2005, and by the end of 2007 will have earned roughly a 50 percent rate of return on the drilling program.

MR. RUGGIERO moved to slide 14 which shows BP's net present value (NPV) for Prudhoe Bay. He said the model reflects royalty, production tax, property tax, and corporate tax - full-cycle economics. By 2011, the NPV to the oil companies is over \$3.5 billion for the program.

[10:38:38 AM](#)

MR. RUGGIERO, in response to a question from Representative Wilson, said the slides in his presentation are based on the current tax, which is PPT.

REPRESENTATIVE ROSES reflected that businesses naturally increase in profit over time, but in his business as a landlord, no one had any sympathy for him during his first 15 years when times were lean.

MR. RUGGIERO talked about the varying degrees of profit, from breaking even to "obscene," and the need to make a decision as to what is fair and when that changes to an obscene level of profit.

[10:41:35 AM](#)

BOB GEORGE, Gaffney, Cline & Associates (GCA), said he thinks the rate of return speaks to the issue of how quickly a company gets its money back.

REPRESENTATIVE ROSES said his idea of what is obscene is probably different from that of others because of his own experience in weathering hard times.

[10:42:52 AM](#)

CO-CHAIR GATTO posited that if a company takes six years to get \$4 billion of investment back, but subsequently makes \$4 billion each year following, then that is a pretty good return.

MR. RUGGIERO questioned how it would be viewed if a landlord was able to cover the cost of an apartment building or house from the very beginning. He said GCA will be able to show that each of the drilling programs has less than a one-year payout. The NPV slide shows that the company has made three and one half times above what it has invested.

REPRESENTATIVE ROSES remarked that if he had recouped his costs in months instead of years, he would have owned many more apartment complexes.

[10:44:57 AM](#)

CO-CHAIR JOHNSON asked what kind of production and pricing assumptions are made in the models.

MR. RUGGIERO reviewed that GCA used a 25 percent decline rate. He explained the reason for doing so was because GCA did not want to "put more barrels into the economics than [had been] developed with respect to each of those drilling programs." When GCA used the natural decline, it came up with a figure of 40 percent more barrels being developed than [BP] said it actually had developed. He said, "We didn't want to put up good numbers and then have somebody come back and say, 'But you put in too much oil, that's not fair.'" Regarding pricing assumptions, he explained that the pricing in the models is the actual price as realized for 2002 through 2006, for ANS North Slope. Beyond 2006, a \$70 price is taken out "flat."

[10:47:40 AM](#)

MR. RUGGIERO, in response to Representative Guttenberg, said GCA ran the drilling program and the economics associated with it as "incremental above whatever they had otherwise." The incremental revenue does not suffer any fixed costs. He continued with his presentation, and highlighted the information on slide 15, entitled, "Robust drilling program." The slide shows that the program remains profitable with a capex at 300 percent, and opex at 200 percent, a 25 percent discount rate, \$50 ANS, and high progressivity.

MR. RUGGIERO recognized that the legislature is attempting to make some difficult decisions in a short period of time. He said GCA's desire is to provide a model to the legislature, allow it to ask "what if?" questions, and to have those "what ifs" tested. He said it is possible to take out specific years to look at individual years. He offered an example.

[10:55:52 AM](#)

MR. RUGGIERO, in response to Representative Roses, clarified that his example is a "PPT/ACES-type, total net calculation, other than the royalty, which is a gross tax." In response to Representative Guttenberg, he clarified that in his example, he

took the progressivity from .2 to .5. He added that what he should do for a fair comparison is take the cost back down to 100 percent. He said the progressivity lowered the NPV from approximately \$3.5 billion to \$2.5 billion. He stated his belief that the fact that there is a steep progressivity and taxing happens when the margin or profits are high would not influence the decision on whether or not to continue the drilling program.

[10:56:06 AM](#)

REPRESENTATIVE WILSON asked if putting the opex and capex down to zero in the model would "give us a little bit of an idea of what the oil and gas one is."

MR. GEORGE responded, "If that's what you want in there, yes, we'd need to check that that particular feature is in there, because I don't think it is at the moment - if you're talking about the House [Special Committee on] Oil and Gas gross."

REPRESENTATIVE WILSON said she would like to play with the numbers for all the plans.

MR. RUGGIERO told Representative Wilson that this information only looks at reported results of the infield drilling program. He said he would highly recommend against taking results from this example and "extrapolate it to Alaska." He said this model can give insight into the financial health of "this type of investment in this particular field."

[10:58:27 AM](#)

CO-CHAIR GATTO asked for clarification.

MR. RUGGIERO warned, "The minute you get into something that looks like it's starting to fit, then the other ... 'what abouts' come out: What about heavy oil? What about gas? What about new development? ... We're going to try and address a number of those as we go through today."

[10:59:19 AM](#)

REPRESENTATIVE SEATON asked Mr. Ruggiero if he would show the tax rate under PPT and ACES before moving on to the rest of his presentation.

MR. RUGGIERO answered:

I think ... we'd have to go back and forth to get the exact numbers on there, but you see it made a slight change in the overall NPV of the program to the oil companies, which means that the inverse of that would be a change to both the federal and the state take on the other side. But, if we really want to go there, what you have is ... at the 25 percent base and a .2 progressivity, you've got \$11.1 billion as a state. If I ..., in comparison, take this back down to 22.5 [and] take this back up to .25, the 11.1 is now [\$10.9 billion]. Again, ... as you can see, this model didn't carry it out to full abandonment, and there would be additional time and monies that would come into that, which you could do.

[11:00:54 AM](#)

MR. RUGGIERO talked about the need to get more oil out of existing reservoirs in the near and medium term, and that the heavy oil and gas would come over the longer term. He said GCA built a generic model, seen on slide 18 entitled, "North Slope Potential," which shows decline rates, produced barrels, industrial investment, and abandonment rate. The latter, he said, is 250,000 barrels per day. "We tried to match everything up so it would fit," he said.

[11:03:22 AM](#)

MR. GEORGE, in response to a question from Co-Chair Gatto regarding the abandonment rate, said during testimony in the past, a number was used that was between 200,000 to 300,000. He added, "There was also a mathematical issue that when you start at today's production rate of plus or minus 750,000 a day and decline those rates and achieve those produced barrels, you have to abandon at something like 250,000 a day, or, if you abandon at lower than that, you get more barrels than are sitting in there. So, it seemed consistent with that number."

[11:03:40 AM](#)

MR. RUGGIERO turned to slide 19 entitled, "Production Drives Revenue" under PPT. He said GCA ran the numbers at approximately \$80 per barrel (bbl) West Texas Intermediate (WTI) or \$70/bbl North Slope (NS). The figures on the slide look at the oil company's "NPV10" and "NPV0" - the latter is undiscounted and represents the total take. Also shown is how

much is made per barrel on an undiscounted basis. On the 15 percent decline, he reported, the NPV10, above investment and opex, is in the range of \$15-\$20 billion. He said that is based on the \$5 billion and the 1.3 billion barrels associated with it. Adding another \$20 billion in to the capex and another 2.6 billion barrels of produced oil into the model, he said, the NPV10 comes up into the \$30-\$40 billion dollar range. On an undiscounted basis, he added, that is \$55-\$75 billion of cash flow and \$14-\$19 dollars made per barrel. On a discounted basis, he said, [the NPV10] is only \$35-\$45 billion, mainly because most of the barrels produced incrementally in going to the 3 percent decline from a 6 percent decline are "far out into the future," thus the discounting is not that significant. Where the difference really shows, he noted, is when the figures do not take into account time value and do not discount the numbers at all. In that scenario, he said, there is a 50 percent or more increase in the undiscounted NPV - going from \$90-\$125 billion.

MR. RUGGIERO directed attention to slide 20 entitled, "North Slope Abandonment". When GCA took the abandonment level down incrementally from 250,000 barrels of oil per day, to 200,000, to 150,000, to 100,000, the result showed that there are even more reserves that can be developed. He stated his understanding of outside testimony that there are limiting factors, and one such factor is a mechanical limit on TAPS of 300,000 barrels a day. He said one possibility is to encourage investment in and around existing reservoirs, because the barrels that are developed are "more barrels down that maintain the rate in the pipeline above the minimum level that they have." The more additional production that is brought in and the longer the pipeline runs, the lower the abandonment rate can be run on the existing fields. He said additional investment - even if the state picks up a portion of it - creates a "double multiplier effect," and existing reservoirs may not have to be abandoned as soon as they would be otherwise.

[11:08:15 AM](#)

MR. GEORGE clarified that the figure of [7.7 billion barrels abandonment rate, shown under the 3 percent scenario on slide 20] does not include the heavy oil reservoirs. He said the slide shows a simplified assumption, but it illustrates the effect of maintaining the life of the slope in general.

[11:09:23 AM](#)

MR. RUGGIERO stated that under filing rules, oil companies must show reasonable certainty regarding future spending in order to book reserves. There is pressure within the market place to declare proved reserves as soon as feasible, he noted. If a company does book the reserves at the aforementioned 3 or 6 percent scenario, and it does not invest, that would require significant "write-down." He continued:

To the extent that they haven't yet booked the reserves between the natural decline of 15 and the 6 ... or 3 percent decline, then ... besides the economic upside of the value to be generated, there is also significant upside in ... call it the shareholder and the analyst community of them being able to book those reserves and show their ability to replace that which they are producing. So, there's other strong drivers that get associated with this program that will inform the oil companies in the decisions that they're making.

[11:11:18 AM](#)

Mr. GEORGE, in response to a question from Representative Wilson, explained that when a reserve is booked it means a reserve is embedded and the overall company reserve number is reported to the U.S. Securities and Exchange Commission (SEC). Under SEC regulation, he related, there must be reasonable certainty that the barrels will be produced in the future. Oil companies will also carry other barrels called "reserves," but not "proved reserves," that they expect will ultimately produce, but which have not been booked for SEC purposes because some of the tests related to rules for required recognition for those barrels have not yet been met. He noted that ConocoPhillips Alaska, Inc. breaks out Alaska as a separate reporting entity, but most companies do not.

[11:12:32 AM](#)

REPRESENTATIVE WILSON asked, "So, Alaska can't necessarily know if they're talking about our area or some area in the Gulf of Mexico or something?"

MR. GEORGE confirmed that it is not possible to look at what is called "the 10K" from SEC reporting and separate out the information pertaining to Alaska. However, he said, many countries require that reserves of individual field be reported to the host government state and put into the public domain.

[11:13:21 AM](#)

REPRESENTATIVE SEATON asked whether there is any public source which would list whether or not reserves had been booked at the 3 or 6 percent decline.

MR. GEORGE said he does not know. He proffered that in the case of a small company with a small interest in a big field, it may be possible to get at the information through a person who acts as a conduit to that information.

[11:14:13 AM](#)

CO-CHAIR GATTO asked if it is permissible to book reserves in politically unstable countries.

MR. GEORGE said Iran would be one such country and companies do have involvement there; however, he said he does not know "what they do." He said there are a number of tests that have to be met.

[11:15:20 AM](#)

MR. GEORGE, in response to a question from Co-Chair Gatto regarding Saudi Arabia, said none of the companies would be booking reserves there, because "they don't have oil interests." He said if a company thinks there is a reasonable likelihood that in a couple of years it would not be producing, then the company would have to say, "It doesn't meet a reasonable certainty test." In response to a question from Co-Chair Gatto regarding terrorism, Mr. George said, "If you thought you were going to have to suspend operations in the country and go away, and it was uncertain - yes, you would have a 'write-down.' And you do see write-downs occurring for a variety of reasons each year."

MR. RUGGIERO announced that the first portion of the PowerPoint presentation was complete.

[11:17:44 AM](#)

CO-CHAIR JOHNSON noted that the models done by GCA were done using PPT, and he asked if GCA would be providing models on the HO&G and ACES plans.

MR. RUGGIERO said the slides related to the Prudhoe Bay drilling program were set on the PPT rates; however, any variation of a pure net system with a base rate and progressivity factor can be run on the same model. The next portion of the PowerPoint presentation, he related, would show the impact of additional investment within aggregated units and what the impacts of high- and low-margin fields would be. That would also be done on a net basis, he added.

[11:19:25 AM](#)

CO-CHAIR JOHNSON asked if it would be possible to "have access to that model" in order work the numbers independently.

MR. GEORGE responded, "I'm sure something can be arranged again with the global health warnings." That said, he indicated that still to come is general information related to the gross progressivity structure of the HO&G plan.

The committee took an at-ease from 11:20 a.m. to 12:20 p.m.

[12:11:23 PM](#)

MR. RUGGIERO returned to the GCA PowerPoint presentation. He offered a recap of the earlier portion. He recalled that Representative Wilson had asked a question regarding wells that are drilled laterally, and she had not yet received a full answer. He explained that the vertical hole - called the "mother bore" - costs approximately \$5 million, while three "laterals" off of it each cost \$1 million. Each lateral is the equivalent of an existing vertical well. Since more producing wells from that mother bore is the result, the cost actually goes down.

[12:13:31 PM](#)

REPRESENTATIVE FAIRCLOUGH asked for confirmation that an oil company would not be allowed to deduct increased costs for drilling lateral wells - that those costs are not being duplicated in expenses being recorded against capital credits.

MR. RUGGIERO said he does not know the answer.

MR. DICKINSON stated that there is a specific stipulation that a cost can receive a credit only once, but what ever the percentage of the credit, it is applied to the total project.

REPRESENTATIVE GUTTENBERG stated that there are major economic advantages to lateral drilling, because the infrastructure is already in place. He added, "The capex is not there, so, they get a little credit for a well, and it's gravy."

[12:17:31 PM](#)

MR. RUGGIERO continued his presentation. He stated that GCA did not come to Alaska with a preconceived notion of what Alaska should do. He directed attention to slide 23, entitled, "Goals for Fiscal Design," which, based on hearings, discussions, and feedback shows that the legislature would like to see fields with larger profitability pay more taxes, while encouraging reinvestment in producing assets and investment in new developments - both conventional and unconventional, such as heavy oil.

[12:20:45 PM](#)

MR. RUGGIERO, in response to a question from Co-Chair Gatto, said technology should not be looked upon as a means to rescue Alaska, but as a way to help the state "extract in a profitable fashion the resources that it has in the ground much more effectively than it could without that technology."

[12:21:20 PM](#)

CO-CHAIR GATTO observed that extracting sandy, heavy oil with buckets rather than a pipe in the ground will be difficult. He said that he is hopeful that the predictions of getting to the heavy oil in the future are accurate; however, he said he is not "putting a big investment in it."

MR. RUGGIERO responded:

The one thing I've always liked is the industry has risen to the occasion .... Every time there's many who believe we're running out of oil and we're running out of energy, along does come the innovation that is the result of a lot of money and time spent by the oil companies and the associate service companies to just improve the way business is done. So, I'm not sure we're quite running out.

MR. RUGGIERO said regardless of whether more oil can be extracted from existing fields, it is important to encourage investment in existing units. He spoke of volumes that are

decreasing in TAPS. He said the heavy oils will need to be blended with lighter oil in order to help produce it. The longer the light oil reservoirs can be kept alive, the more likely it will be that the heavy oil reservoirs will be developed and the better the longevity will be in those reservoirs.

MR. RUGGIERO, returning to slide 23, noted that GCA perceived that another wish of the legislature is to encourage new investment outside of the legacy units, which can also encourage "new players" to get involved. Furthermore, the legislature has indicated that it would like durability and stability. The challenge regarding durability, he said, is that no one believes anything related to oil will stay the same in the future.

[12:26:00 PM](#)

REPRESENTATIVE GUTTENBERG, regarding encouraging investment in existing units, noted that there are other restrictions in play outside existing fields, which are: facilities, access, and tariffs. He asked if GCA has looked at and addressed those issues or has just done economic models for costs.

MR. RUGGIERO replied that GCA has specifically not studied nor offered any recommendations on facilities in Alaska. Based on other jurisdictions in which GCA has worked, he said, in modern times the governments have played a much more active role in ensuring that the right commercial transaction takes place between the players in order to get access to infrastructure. He stated that access to existing facilities should be considered by the legislature. He explained, "Because if it becomes too costly, then the new players will put in new facilities, and, depending on the tax structure that you have, you as the State of Alaska will be paying a portion of those new facilities."

[12:28:00 PM](#)

REPRESENTATIVE SEATON asked where windfall profits shows in the list on slide 23.

MR. RUGGIERO offered his understanding that windfall profits would be captured under the first goal: "Fields with larger profitability should be paying more taxes."

MR. RUGGIERO noted that the final goal is that the legislature would build upon prior tax dialogue; it would use the

information it gained through its work on PPT, while still accomplishing the aforementioned goals.

12:29:42 PM

MR. RUGGIERO highlighted information from slide 24, regarding encouraging new investment. He stated that Alaska, through PPT, has some aspects that make it one of the best regimes for new or existing players to explore. The PPT offers investment credit. To the extent that a new entrant has no existing tax base, that entrant is able, in the year following, to turn whatever its investments were into net operating loss credits, and then receive cash back on that. The PPT allows a lower tax rate to be paid when a company's margin is lower. Mr. Ruggiero talked about higher costs due to being distant from infrastructure, dealing with heavy oil, or because there is more cost to get gas out of the ground versus oil. He said the question to ask is whether the base rate is low enough and whether the starting rate is at the right level to attract the desired investment. He pointed out that although the extraction of heavy oil and gas are "a few years out," those making the decision on whether or not to invest are running their models now. The answers to the questions are not simple, he said, but overall, in encouraging new investment, GCA says Alaska scores high.

12:32:56 PM

MR. RUGGIERO referred to slide 25 and said there are two pieces to the fiscal design challenge: the take and the give back. The take is what either the government or the oil companies take from existing operations. Today, production revenues and profits are being taxed, based on investments 5 to 20 years ago, while tax credits are being given for investments today which may not realize any production and/or revenue for another three or four years. The challenge, he said, is to figure out how to get a system correct that taxes both the past and future at the same time. He said price, production, and cost are "moving parts." He explained:

When you start getting into systems where we start talking about unit value, the unit value can change, even if costs are flat, because the production rate in a given area goes up or down, so the unit cost goes up or down. And you can have price moving but cost and production not, and that, indeed, impacts the margin, and there should be a commensurate reaction with that impact. Best example is: ... Over the last three or

four years, we've seen oil go from \$25-\$30 to \$90, and yes, we've seen 100 percent cost inflation. ... You can have 200 percent cost inflation at that level, but when you got prices that are at \$90 in the market, it seems to mask that a bit. ... The real challenge is how to balance all that out.

MR. RUGGIERO, regarding giving back, said the question for the state is how much it should give back to encourage reinvestment in the legacy units. As shown on slide 26, Mr. Ruggiero emphasized that "price does not equal margin." He said the two need to be separated. Any net system, such as PPT and ACES, works off of margin, whereas the gross tax, as proposed by HO&G works off of price.

[12:36:42 PM](#)

MR. RUGGIERO directed attention to slide 27, regarding price versus margin. The slide shows a "graduated bar that goes from zero to 70," which is the market price of the product. The next bar over has a \$10 cost added on, so reading across from the first bar's \$50 price line to the second bar is the equivalent of a \$40 margin, he said. That same line moving over to the next bar is a \$30 margin when the cost is at \$20. Eventually, he noted, the bar to the far right shows a cost of \$50 a barrel to produce, which means there is a zero margin. He explained that this wide variance in margin can occur for several reasons. First, it can happen over time through natural decline; "as the barrels go down, the unit cost per barrel goes up." Eventually, over time, what might be perceived as a \$40 windfall profit today, can equal no profit in a few year's time, he said. He continued:

Another way to view this is: these could be representative of different developments. What you might have on the second ladder with the \$10 barrel cost are existing reservoirs. What you have at the \$20 barrel cost is new light oil development. And what you have at the \$50 a barrel cost is heavy oil and gas development. ... At a given price, any individual operator, any individual project, can be at different points on the margin curve.

[12:39:08 PM](#)

CO-CHAIR JOHNSON said he would like to see illustrated the importance of keeping production up and the investment of doing it.

MR. RUGGIERO said that is what is intended by the notation of "Time - Natural Decline" in the lower left corner of slide 27. He stated, "Even if all other things remain equal, just the passage of time and natural decline of fields will cause that margin to decrease at a given price. And you're right, you need to keep the production up so that we can keep the margin up and get the cost covered."

MR. RUGGIERO directed attention to slide 28, which starts with "margin" and compares it to "price." In the illustration, the margin was kept at \$40. Legacy fields make \$40 pre-tax profit at a \$60 price. A new development doesn't hit that \$40 margin until the market price is \$70 a barrel. A heavy oil development hits the \$40 margin only when the price is \$80. Finally, gas does not hit the \$40 margin until it reaches \$100 a barrel.

[12:42:25 PM](#)

MR. RUGGIERO turned to slide 29, entitled, "Pulled Into a single mechanism." The left side of the slide shows the base tax rate, while the right side shows the maximum tax rate. The line for PPT shows that the maximum rate would be between \$150 and \$200 a barrel. ACES, he noted, would start at a slightly higher rate, but with a lower progressivity factor, the maximum rate would be \$180 to \$280 a barrel. [The green line on the slide] shows a much more progressive system, he said. It would start out at a base rate, and it has a varying progressivity that gets it to the maximum rate sooner, but "tops out as it goes across."

MR. RUGGIERO listed goals: to encourage investment in new fields; to encourage investment in the higher cost per barrel fields, such as heavy oil fields; to encourage the development of the gas business. All those factors, he said, keep the petroleum business in Alaska going. Price in the market can be high, but when margins are low for any number of factors, the tax paid on the margin must be reasonable in order to attract investors. He said, "A highly progressive system basically says if you're taking very high margins, and you're not reinvesting in the state, then there's going to be a very high tax rate. You're going to get to whatever you want to call your maximum rate faster."

[12:45:54 PM](#)

CO-CHAIR JOHNSON asked whether Mr. Ruggiero is presenting a new concept that is supported by the administration or is simply throwing ideas out. If the former, he said he would like to see confirmation from the commissioner that the concept is supported.

MR. RUGGIERO, in response to Co-Chair Gatto, said the green line on the slide is "based on everything we've seen" - it is formulated by using the goals that GCA has heard the State of Alaska list.

CO-CHAIR GATTO observed that slide 29 has no numbers along its coordinates; therefore, it illustrates a "projection, not a plan."

[12:48:16 PM](#)

REPRESENTATIVE ROSES observed that [the green line] starts out at a lower base tax rate, with incremental increases in the progressivity percentage, and reaches a maximum rate that is higher than that of the PPT.

MR. RUGGIERO said that is a fair assessment.

[12:49:13 PM](#)

MR. RUGGIERO, in response to Co-Chair Gatto, explained that the orange oval encapsulating the peak of the green line's rise to its maximum rate, and labeled "existing," indicates that the existing fields in production are at a high margin today. He said:

And so, this would be achieving goal number one on the list of goals, which is: when there is a significantly high margin, ... that's when the state's rate should be at its highest.

... We do believe that somewhere before \$150 to \$250 oil, and somewhere before a \$140 margin, or a \$125 margin, the state should be maxing out on what it had before as its highest rate on its production tax.

[12:50:11 PM](#)

REPRESENTATIVE ROSES said:

So then, in those incremental increases in the progressivity, based on what you're talking about with a margin, then that would necessitate that that progressivity be built on net in order to get to that margin, as opposed to gross, which is on the price.

MR. RUGGIERO answered that's exactly correct.

[12:50:46 PM](#)

REPRESENTATIVE FAIRCLOUGH said a constituent heard Representative Doogan on the radio saying that the system is broken. She said Representative Doogan has a list of ten assumptions that need to be made in order to believe in a net profit tax. She offered her understanding that there is no certainty in cost, production, or price per barrel of oil. Because of those variables, she said Representative Doogan is pointing to different criteria in the models that are being presented to the committee that are broken. She said she does not believe things are broken, but that there is a daily variable in price because of many costs. She stated, And every day, as [the Department of] Revenue tries to project, they are basing all of their projections on differences."

[12:53:37 PM](#)

CO-CHAIR GATTO said point four of Representative Doogan's ten points is, "You know how each of the oil companies operating in Alaska makes its investment decisions." Co-Chair Gatto said the industry makes that decision based on numbers. Some companies have been willing to share those numbers with the legislature, and some have refused. Estimates are made when numbers are not revealed, and hopefully those estimates are high.

REPRESENTATIVE SEATON said, "That representation is not far off from what the committee passed out as saying that we wanted to get the state's equal share through the production tax at about \$110 dollars."

[12:56:54 PM](#)

REPRESENTATIVE WILSON asked Mr. Ruggiero if he could superimpose the HO&G plan onto slide 29 to be able to make comparisons.

MR. RUGGIERO responded that in order to do that he would need to account for all the variables and add a line for gross. Depending on the variables picked, he said, any net system only

crosses a gross system at one point; other than that they diverge from each other. He explained, "That's why I started with 'price does not equal margin.'" The gross system starts with a price and ignores margin. Superimposing that plan on the slide would be "a misrepresentation of true comparison between the regimes." In response to a follow-up question from Representative Wilson, he clarified:

This is based on margin, which is a surrogate for profit. The House suggestion is a tax based on the price in the market, regardless of the margin or the profit being made. It's just based on the price.

[12:59:32 PM](#)

CO-CHAIR JOHNSON asked again whether the green line plan is one that is supported by the administration.

COMMISSIONER GALVIN clarified that the numbers in the presentation are not indicative of a particular proposal, nor are they a reflection of a starting rate, a certain progressivity, or a certain cap rate. The presenters' purpose primarily is to discuss progressivity based on margin versus price. The way that the presentation depicts this is to show that any starting point can be chosen, progressivity can be chosen at a certain rate, and a cap can be chosen at a certain point. He stated:

If you're going to be talking about a tax program that does not have a floor, then we believe it would be appropriate to then have a steeper progressivity to get it more on the high side. We still believe that the starting rate should be 25 percent; that's the rate that we believe is appropriate as a starting rate across all the fields. And that's the numbers that we presented last week, in terms of the impact on the ... various fields that we were looking at. ... And those were based upon stress prices and low prices and investment decision making. When you start looking at revenue generation, and you're going to drop off the floor, then we think that you need to be talking about a higher progressivity. And that's why they're talking here about if you're going to go for that, then we agree with the concept that it should be based upon the margin, as opposed to the gross, in order to provide the disparity between or appropriately

allocate it between the high margin fields and the low margin fields.

1:02:13 PM

CO-CHAIR JOHNSON asked whether the administration would be supportive of a plan wherein progressivity is based upon margin, but with a lower tax rate.

COMMISSIONER GALVIN replied that the administration believes that the base rate should be 25 percent. In response to a follow-up question from Co-Chair Johnson, he said even without a floor, the prices can drop low; therefore the base rate that is used at the beginning will remain the base rate. He reiterated that the base rate of 25 percent is "the appropriate place to start," regardless of progressivity.

1:04:04 PM

CO-CHAIR JOHNSON asked whether Commissioner Galvin is at odds with the consultants who "brought this forward."

COMMISSIONER GALVIN said he does not think the consultants are recommending a particular rate, but rather have provided the information for demonstration purposes.

1:04:44 PM

CO-CHAIR JOHNSON said, "So, the fact that it starts off lower is just (indisc. -- overlapping voices)."

COMMISSIONER GALVIN said, "They're just showing that you can do any of these variables. ... They could flip this around so that the base rate started in between those two lines, and so, they were just picking one to show that there's a choice to be made at each one of these different places."

CO-CHAIR JOHNSON said that was not the answer he was hoping for.

1:04:52 PM

REPRESENTATIVE GUTTENBERG said theoretical models predict behavior. He referred to the aforementioned topic of tipping points. He said the governor realizes that the state does not have the full history of behavior and predictions of the industry from the past 30 years. Without that information, the models available are not as accurate. Regarding the green line

on slide 27, he said, "If you change the behavior by starting off with a lower base rate ... and give credits at that lower base rate for return on investment, then you're going to have a steeper curve, and you should be taking a more progressive tax rate when it gets up there." In response to Co-Chair Johnson's comment, he said, "I think that's all we're seeing, giving us more tools to make decisions, because that's all we have is theory."

COMMISSIONER GALVIN asked the committee to recognize that it is still only part of the way through the presentation; there is still more information to come that addresses the behavioral aspects and "how this is intended to fall into a full package."

[1:07:34 PM](#)

REPRESENTATIVE ROSES recalled that variables and factors that can change so rapidly are one of the reasons that [Mr. Ruggiero] thinks margin is a better approach. He stated, "But in terms of forecasting, you're not any better off, because ... the difference between the price and the cost is what gives you margin."

MR. RUGGIERO said that is correct; in the calculation of the net process, it is the unit cost or cost per barrel relative to the market price.

[1:08:10 PM](#)

REPRESENTATIVE ROSES concluded that the margin approach would not be more accurate than the other approach.

MR. RUGGIERO replied:

This doesn't increase accuracy, but I think Representative Guttenberg hit the nail on the head when he said you haven't in the past had the data. That if you had the data that other governments have for their oil and gas operation, regardless of whether you're gross or net, you would be able to be more accurate in your predictions, because you would have known history upon which to build, to trend, to find relationships to then be able to better predict the future and to understand what outside factors influence those costs or those barrels or those dollars in the market, and be able to see that coming - to be able to more timely adjust forecasts and

predictions. But without the data - yes, you're shooting a bit in the dark.

1:09:23 PM

REPRESENTATIVE ROSES, regarding the prior comment that the system is broken, used an analogy of an old truck to illustrate that the PPT is not broken but needs work; it is not efficient but can be tuned. He said he sees the goal as to improve what the state has, not to fix something that is broken.

CO-CHAIR GATTO said although there is no data going back 30 years, there are annual reports submitted to the SEC. He quoted one company in a report as referring to "our enormously profitable Alaskan operation." He said he knows that whatever the average is that companies make worldwide, that average is higher in Alaska. He said the system is not broken without data; the state needs to discover, as best it can, "the most reasonable input we have and that we can make."

1:12:33 PM

REPRESENTATIVE SEATON said there have been comments made that progressivity based on the gross could not be plotted on "this" diagram; however, he noted that Mr. Dickinson had plotted progressivity against net. He asked if it would be easy to plot keying the progressivity to a \$30 or \$40 margin, taxed on the gross, to escape the liability of the state "for adding another 25 percent into the ... cost on those higher ends," rather than keying the gross progressivity to the trigger point at "WTI 50."

MR. RUGGIERO responded:

If you actually triggered a gross tax to a net profit, you just put a dress on the guy. I mean, it's still a net profit, because ... that's what it becomes. And ... that's all this is suggesting. Any of the lines that you pick here is, in your words, a gross tax on a net profit. Once you calculate that net, you have a net tax system. And now, to the plot that [Mr. Dickinson] put forward, if you notice, it's at a single price; it's at a single production level; it's at a single cost structure. And his assumption in there: you may have one field that's \$20 a barrel; you may have eight different fields that average \$20 a barrel. But the decisions you're going to make if you've got eight fields, where one of them's averaging

a cost of five [and] another one's averaging a cost of \$40 - that gross versus that net's going to have an impact on how you operate and on your thinking about whether or not you're going to do any further investment in that \$40 versus the \$5 field on cost. So, when I said, you've got ... [to account for all the variables], that's exactly what [Mr. Dickinson] did, is he fixed all those variables and gave you representation at one point in time. And as you saw: net crossed gross once.

[1:15:17 PM](#)

REPRESENTATIVE SEATON said he wants to ensure that the problem of increasing the state's liability is addressed. He said taking more money on the high end and doubling the state's risk on the high end are two different issues. He said he would like Mr. Ruggiero to address that topic as he continues his presentation.

REPRESENTATIVE ROSES asked if the marginal approach necessitates that each well be analyzed independently as opposed the average that is proposed in [HB 2001].

MR. RUGGIERO replied that Mr. George will address the issue in the ensuing portion of the presentation.

[1:17:11 PM](#)

MR. GEORGE offered his presentation, which begins with slide 30, "The Net Tax Story." He asked the committee to bear in mind that the numbers used in the slides are illustrative.

COMMISSIONER GALVIN clarified that GCA had to choose one net progressivity to use as an example, and it decided to use the progressivity that exists in current law, as opposed to the one that is in "one version of a bill versus another." He reemphasized that the model used is not the administration's new proposal.

[1:20:43 PM](#)

MR. GEORGE said he has heard PPT spoken of as a tax on net profits. He said it is "sort of that." The PPT plan contains a progressivity feature that increases tax rate and profitability of a barrel, but it is ring fenced so that that profit per barrel that is the basis of calculating the rate is reflective

of a company's entire portfolio. He added, "This is not ring fenced on a field by field basis for calculation, but it has impacts on a field by field basis."

MR. GEORGE, regarding slide [33], stated:

I've kind of started out with ... the end game, and then try and work back to the beginning, as to how we might get there with an example, and what actually might sit inside that ... end game. And ... in this particular [example] I said okay, let's start with West Coast price of \$80 a barrel. And within that entire ... portfolio, there is \$18 of what everyone's calling costs, and I'll talk a little bit more as we go forward as to what ... really is that number, although it is referred to as cost by everybody. And then we have a ... profit per barrel ... of \$52.

And if you take that \$52, and you go to the PPT structure that's in there, you would end up with a 25.5 percent PPT rate that would be applicable to that profit in there, ... and that will vary up and down, along the blue line, until \$40 a barrel of margin, and then up the green line as that ... profitability increases. And I haven't taken it out to the ultimate maximum that ... it could reach out there.

... One other feature that perhaps comes out of that single point formulation is that it implies that this net system taxes all fields at a single rate - at whatever it happens to be .... I would say it doesn't, and I think you certainly can show that it actually taxes different fields or reservoirs or reservoirs based on their individual profitability, except you don't quite see it because of the way that ... it's put together.

MR. GEORGE said his presentation attempts to show the gradual building up of a portfolio within a company, while tying that into the decision-making process for investments, which he said is incremental each time. He began with a portfolio of one investment [shown on slide 36] of \$200,000, with a net margin of \$65 dollars a barrel. In that scenario, the PPT rate would be 28.4 percent. Mr. George added another field to the portfolio [shown on slide 37], which added 50,000 barrels a day. The new field has a net margin of \$61, but the two added together, with their differing levels of production, equal an average net

margin of \$64.20. The PPT rate on these fields combined would be 28.2 percent.

[1:26:21 PM](#)

MR. GEORGE pointed out that [as shown on Slide 38] the 28.2 percent is not being paid on each field, because while paying the original 28.4 percent on the existing reservoirs, a lower rate of 27.5 percent is being paid on the new investment. Mr. George skipped over to an illustration of a portfolio with four investment decisions [shown on slide 43]. He noted that the net margins decrease with each investment. He explained that may have happened because it is physically more expensive to produce or because the company gets less per unit for heavier oil. The progressivity feature, he relayed, actually lowers the marginal rate for each more challenged project [shown on slide 44]. While the company may be paying a blended rate of 26.9 percent, it is still paying the 28.4 percent on its existing investment, an effective rate of 27.4 on its first incremental investment, 24.2 percent on the third investment, and - on the fourth and most challenged investment in the portfolio - is paying 18.9 percent, which is slightly below the minimum rate. He clarified:

As we go forward in time and we start adding in the more challenged investment opportunities, so the average rate will go down. But really I'm still paying the high rate on the more profitable parts, but an even lower rate on the newer parts.

MR. GEORGE said when companies make investment decisions they do not just run a consolidated cash flow. They will question what would happen if they do nothing and what would happen if the investment decision is made. He stressed the importance of looking at "the difference in outcome" rather than the "stand alone calculation." He said that is imperative when dealing with a progressive tax that ring fences everything together.

[1:31:41 PM](#)

CO-CHAIR GATTO said this scenario sounds similar to federal income taxes, where a person may question whether it is worthwhile earning more and having his/her taxes increase at a marginal rate.

MR. GEORGE agreed that the situation is similar, in terms of the marginal rate. He added:

I think that the illustration is that with the expectation here that every investment you make going forward is going to be slightly tougher, at least in the cost side - and of course we don't know exactly how price will develop as well, and so how the margin will go - but at least an expectation that it'll get tougher. As you make those investment decisions in the tougher ones, actually your marginal rate is lowered, not increased.

[1:32:27 PM](#)

MR. GEORGE continued to the impact of capital investment and covered information on several slides. He said PPT is based not on profit per barrel, but on net cash flow per barrel after capital investment. He continued:

You have a portfolio ..., and before you make any capital investment decisions, you know you're going to be ... paying so much tax in total, based on that portfolio. You then have a choice: Okay, now I'm going to make some capital investment decisions, and that's going to alter things, and how will it alter them? And because of the way this ... tax works, at the first level you have an operating margin ..., and then you add something called costs, but it's actually a reinvestment rate; it's an amount of capital based on your production today.

... I said we had a profit per barrel of \$52 after ... \$10 of transportation and quality adjustments and \$18 dollars of costs in there. And, ... based on the previous slides, the ... blended tax rate payable was going to be a little shy of 27 percent - not the 25.5 percent I had in there - because I had left at that point something out of the ... story, and I hadn't got to this point yet. But if ... I did nothing more with my portfolio at the beginning of a year, I made no capital investments, then 26.9 percent is the rate that I would pay on there. So, I said, "Okay, let me make a decision that I'm going to spend this year \$800 million." And ... it's that decision to spend \$800 million that will drop my rate to 25.5 percent, and the question is: How do we get to that?

Well, let's go back again to the portfolio that I have in there. ... In this particular example is producing 350,000 barrels a day: 200,000 out of one ... set of investments and reservoirs, and 50,000 each out of ... separate reservoir investments .... And I'm looking at spending \$800 million on ... adding A, B, and C, and whatever else to the right, here. But that represents \$6.26 per barrel of my existing portfolio - not [what] I'm going to get out in the future - but \$6.26 against my production today. So, what happens here is that that \$6.26 goes into that \$18 that is deducted in calculating my ... 25.5 percent blended rate .... I had \$11 of ... lifting costs and operating costs out in the field, but for the purposes of tax, I'm allowed to deduct a further \$6.26, and they're all lumped together and called costs. And together would tell me my costs ... for the purposes of the definition of the tax: \$18, and that's how I get my rate.

[1:36:55 PM](#)

MR. GEORGE continued:

By reducing my rate now, across the portfolio that averages 26.9 percent, but is actually ... 28.4 [percent] on my existing reservoirs, down to ... 18.9 percent on my ... most marginal investments in there. By adding that additional ... \$6.26 of capital, I've reduced the rate across the portfolio to 25.5 percent. Put another way: I have spent \$800 million in capital; I've reduced my tax bill and got a sum of money back. That sum of money, in this particular example, is 38.6 percent of the \$800 million I spent. That 38.6 will vary; it ... depends on what my blend of my portfolio is and how much I'm spending. But in this particular example, it's 38.6 percent, and that's before investment credits in this case.

CO-CHAIR GATTO asked whether Mr. George is speaking only of state tax in this example, not property or federal tax.

[1:38:23 PM](#)

MR. GEORGE answered that's correct. In response to Representative Seaton, he said:

Prior to making this investment, I would have been paying tax at the 26.9 percent rate, and you may think on the flip side the state's picking up 26.9 percent of my investment. Because that investment decision is actually altering the rate, the state picks up a higher proportion in this ... particular example - about 39 percent of the PPT, before I make all the other bits of what's picked up by the feds and the state on corporate income tax, and the effect this reduction has on increasing those taxes as well.

MR. GEORGE returned to his presentation:

If these were four individual fields in there, in this case we'd be paying a little bit over \$2 billion in PPT, as individual properties. When you combine them, there is a slight benefit to that, because you lower the overall rate. And the fact that the number comes out at 2,000 for the blended is just pure ... coincidence .... So, again, before I make my investment decision in this case, I would be faced with a tax bill of \$2 billion. I spend my \$800 million, and that has an effect of lowering my tax rate ... of 39.6 percent. Or, put another way, I reduce my tax bill by \$309 million. And I can look at that \$309 million as coming out in two ways: On the one hand, I previously had a tax rate of ... 26.9 percent, and the state was going to pay 26.9 percent of that; but I also lowered my tax rate, so it pays a further proportion. And in this case, that allocation and the way I've done the allocation and prioritized them is: there was \$215 million reduction in tax due to just the investment, and there's a further \$94 million reduction in the tax due to the change in rate that's come in here.

MR. GEORGE said there is a further reduction with investment credits. In the model, the state offers 20 percent of what the company spends, which equals \$160 million. He continued:

The overall effect is that ... I started out with the prospect of paying \$200 million in here. By spending that money, the state has reduced that tax bill considerably ..., so that my net cost in there is about \$330 million.

MR. GEORGE said the two sides of the issue are deciding an appropriate rate for the state to offer, while considering the incentive and helpfulness of a credit to a company. He said capital costs come out against today's production and profitability, while what gets deducted in the future is a company's operating expenses, because the capital tends to be "front-end loaded." He continued:

Mostly, I view this as: I assist the investment decision in this by reducing the ... net amount of capital that has to be paid in there, and thereafter, the tax that flows through is more based on the operating margin going forward. And that will be a function of the underlying costs in there, the quality of the product that's sold in the market, and the price of the tracts, ... and where prices go in the future. And as those prices rise or fall, ... so the amount of tax levied on this particular investment will vary going forward ....

[1:44:00 PM](#)

MR. GEORGE stated:

So, when you actually roll all that together ... with the investment credits in there, ... the effective tax rate is lowered ..., in this particular example [on slide 58], down to about 23 percent, and ... you'd get 58.6 percent being paid of the \$800 million, by the state. Now, that 58.6 percent has further consequences, because the first step is recaptured in income tax, but ... the investment also becomes ... a deduction for income tax, as well.

MR. GEORGE, in response to a question from Representative Seaton, confirmed that the capital credit is not being used to reduce the tax credit.

[1:45:08 PM](#)

MR. GEORGE, regarding slide 59, stated that PPT is really a tax on net cash flow per barrel, as opposed to profit per barrel. Put another way, he said, PPT is a tax on the net revenues that "have not reinvested." He continued:

So, ... you come back to some of the issues that were done before in terms of incentivizing: the

reinvestment of capital as opposed to the export of capital .... It plays to that aspect of ... box ticking. ... Although you see the headlines of \$18 of costs in there, that actually is not \$18 to run the fields; that is ... "X" dollars to run the fields and another number that is a proportion between the amount of money you're investing and the amount you're producing today - but for tomorrow's production shoved into today. And it's ... a basket of fruit rather than ... any one number in there.

1:46:48 PM

REPRESENTATIVE SEATON asked:

If we're seeing an effect of a deductibility of ... 26 percent ... when the tax rate was there actually yielding an effective tax reduction of 38 percent, if we get to the equal share where we're talking - under ACES - 50 percent, what ... would be the effective tax lowering amount of ... this?

REPRESENTATIVE SEATON said it is clear that [the state] will be paying "50 percent of it," which he said was scary enough, but now "27 or 28 percent really represents 30 percent." He asked, "What would we be looking at when we reach the point of ... the equal share of the maximum tax rate? Does it still have that same effect?"

MR. GEORGE answered yes. He said if nothing else is done, as the system sits, the result can be fairly high deductible rates, particularly if the investment credit is left in place at those rates. He said that is an issue that may need review.

1:49:20 PM

MR. RUGGIERO added that as progressivity is increased, so is the state's participation in ongoing investment. Historically, he noted, the number of dollars of investment, upon which the state would be participating, pales in comparison to the dollars of net cash flow. If the state moves to a point where it participates "to a lower percentage in the investment," then it would also be participating to a much lower percentage in a much larger cash flow. He relayed, "And you'll only get to that maximum number when you're all the way at whatever you deemed to be the maximum margin at that point in time where that rate becomes applicable." Mr. Ruggiero said he understands

Representative Seaton's concern that the state may pay a big investment and find later that prices may not be good; however, he pointed out that at the same time, the state would be getting the rate of take on whatever profits are being made at the time, which is a much larger number.

[1:50:32 PM](#)

REPRESENTATIVE SEATON referred back to the green line [on slide 33] and the steepness of the progressivity curve. He mentioned PPT and a high margin. He observed:

If we were ... kind of getting close to that max, it seems like the application of this would drop ... the return to us by a long ways, because of the steepness of the curve. If, under this example, ... we're talking about going from ... 26 percent to 38 percent just by dropping the tax rate, if we were in a point where we were having fairly steep progressivity, the loss of dollars ... would be something that would be very significant, as I see it.

REPRESENTATIVE SEATON asked if he is correct in his assumption.

MR. RUGGIERO echoed Mr. George's comment that the state should consider what position it would be in if it does not have high progressivity. The answer, he said, is that the state would not get the extra income from the profits being made at that point. He stated, "If you go to a higher progressive system, you're in a net gain position. Even if your share of one of those investments goes bad, you're still way ahead of where you are with today's system."

[1:52:26 PM](#)

MR. GEORGE added that by increasing the progressivity, the state may add another \$500 million in taxes, for example, and the companies would invest an additional \$300, whereby the state would pay them back \$250 million of that. In that case, the state would still be "ahead in the game," even though the investment portion of that scenario shows that the state would be paying a high proportion. He warned that although it is important to isolate each issue in order to understand "the inner workings of the thing," it is also important to look at the big picture. He said the decision making is not all intuitive.

[1:53:27 PM](#)

REPRESENTATIVE WILSON asked if she is correct in assuming that the larger companies with the legacy fields would benefit more than smaller companies from progressivity, because those larger companies would be able to acquire more wells to bring down the percentage.

MR. RUGGIERO said that is basically correct. He reiterated that one of the top goals is for the state to set up a structure such that when companies are making profits at a very high margin, the state will get its fair share. However, the very mechanism that generates those profits for you at that margin, is also the built-in incentive "to reinvest those and to bring on the lower profitability projects and prospects within that defined unit."

MR. GEORGE reiterated that he looks at PPT as a tax on exported cash flow, not a tax entirely on profitability, because the exported cash flow can be affected by investment decisions.

REPRESENTATIVE GUTTENBERG observed that in the PPT the exported cash flow is being taxed; therefore, if the companies are not exporting and are reinvesting, "they're being rewarded here." As a result, he said, theoretically production goes up and everyone gets increases value, as long as the companies export their profits, which is what is being taxed.

MR. GEORGE said that is a fair characterization.

CO-CHAIR GATTO said, "So, if they export their profits to the United Kingdom (UK), and they get taxed on their profits at the UK, they get to make a decision as to whether or not they should reinvest here and ship less money to the UK to pay less tax, and use the savings - pass it back on to the customer, which is us."

[1:56:28 PM](#)

MR. GEORGE responded:

I think it goes to Alaska making a decision as to how it wants to effect the decisions with respect to Alaska. And once the money is ... back in treasury in any ... company, ... some will go to share holders, some will be retained in increased prices, some will be invested in another country which has a different regime, and ... we'll benefit accordingly from it. So, you're looking at ... what do you want to do to

create the right level of incentives - not too much, not too little - to get them to invest in the opportunities that are here that are unavailable to them.

CO-CHAIR GATTO expressed the ongoing desire to make balanced decisions.

1:57:46 PM

REPRESENTATIVE SEATON asked whether there is another factor involved. He clarified that he would like to know if, when discussing the creation of a model tax and maximum progressivity, consideration is being given regarding a reasonable limit "on the upper end of what we should do."

MR. GEORGE reiterated that the purpose of [the presentation] is to illustrate mechanisms rather than to recommend any particular rate. He said there will be a point at which there either are no more projects physically or capital. He continued:

And, yes, if you ... place too much in those - as was kind of a gold plating question - but you distort investment decisions at the other end that they ordinarily might not make, just because you've made it cheap to make them. There are benefits to that, of course, but nevertheless, ... you start to go into the ... territory where you obviously don't want people pocketing a dollar for every dollar they invest and getting the benefits of those come back, as well, because that's not too good either.

2:00:07 PM

REPRESENTATIVE FAIRCLOUGH directed attention to [slides 23 and 24] and said that while they illustrate the key components of the fiscal plan, each legislator may place different weighted averages for each of the different points. She said she hopes "it's all about production." Alaska's future, she said, is based on how many barrels of oil are actually produced now as a bridge to reaching a gas development or some other large resource development that would bring revenue into the state. For the benefit of the listening public, she stated:

Our goal here is to balance an investment in a fiscal policy and that taxing structure that fairly encourages development, fairly values Alaska's

resource and what's coming out of the ground in oil, and brings back to us in a monetized way, those resources for the people of Alaska.

CO-CHAIR JOHNSON said the state's investment will lead to jobs for Alaskans; money out of the state's treasury goes to the private sector payroll, which he said is a different way to redistribute the wealth, and which he supports.

[2:03:56 PM](#)

REPRESENTATIVE SEATON said one of the problems under the current system [PPT] and "that is not taken care of in ACES is that unfortunately the capital investments that are allowed to be deducted and taken on credits don't have to be in Alaska." He said he hopes the legislature will address this issue to ensure that, as much as possible, the capital does actually generate jobs in Alaska for Alaskans.

CO-CHAIR JOHNSON noted that even though the capital may not be spent in Alaska, the end result of the capital dollars the state is investing in turns into jobs and production.

[2:05:15 PM](#)

REPRESENTATIVE EDGMON stated his understanding that Alaska is unique, in that it offers tax credits and incentives for reinvestment.

MR. GEORGE responded that Norway writes a check to new entrants to cover the tax part of the investment in exploration. He added, "If you don't have a tax base already, you can't actually get a check back, as you can under the Alaska system." In terms of level of participation, Alaska is high on the royalty scale. The economics of projects will reflect in the lower rate of taxes, he said.

[2:08:14 PM](#)

CO-CHAIR GATTO noted that Norway has 10 times Alaska's population and generates 10 times the revenue. He asked if that makes Norway better off with its off-shore drilling, or if their oil is in decline as well.

MR. GEORGE estimated that Norway is producing between 2.5-3.0 million barrels a day in oil, and that number is declining after peaking at about 3.2 million barrels a day. The country also

produces a large amount of gas, he said. The high revenue comes from a high level of production. Norway has always been a "high state take" country, he said, but it is also a big co-investor in projects going forward - both privately and through its fiscal system. In response to a comment from Co-Chair Gatto, he said he thinks it would be reasonable to characterize Norway as a country that plans around issues of development and takes management of the industry to heart. He offered further details.

[2:11:35 PM](#)

CO-CHAIR GATTO inquired whether Norway has done anything resembling a permanent fund.

COMMISSIONER GALVIN said that one of the things about ACES is that it is about investing Alaska's oil revenue back into the field as well as investing in the state's future by saving. Norway has an equivalent to [Alaska's] Permanent Fund that has a balance in the hundreds of billions of dollars as opposed to Alaska's balance of \$40 billion. In further response to Co-Chair Gatto, Commissioner Galvin agreed that Norway has 10 times the population of Alaska. He also noted that Norway is further along on the curve of gas development than is Alaska.

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REPRESENTATIVE GUTTENBERG said it sounds like Norway has more control over its oil patch than does Alaska. He asked what the "high government take" in Norway is.

MR. GEORGE responded that the "Norwegian system is 78 percent tax, although there is a 30 percent uplift on capital investment against 50 of that 78 percent in their royalty." In further response to Representative Guttenberg, Mr. George agreed that, historically, Norway played a larger partnership role in development. Statoil was Norway's state oil company, he said, which is now partly privatized but was previously entirely the state and was a partner in pretty much everything. "Statoil is still the dominant player on the Norwegian part of the North Sea," he said. They also have a direct interest through a company called "Petoro," (ph) but it used to be what was called the state's "direct financial interest" and they were a working interest partner which was a fund that received a budget each year. This resulted in a very significant portfolio being built up, he said.

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REPRESENTATIVE GUTTENBERG commented that it is interesting to note that Norway's high government take has played a significant part in development and how that development is done. Norway obviously takes the position that this is being done for the best interests of its people, he said, and the industry is not leaving Norway.

CO-CHAIR GATTO noted that Norway has a system of "cradle to grave security" that allows citizens to simply go to college or obtain medical benefits, but the country is not without some costly social ills such as alcoholism. He surmised that some of the reasons for a high government take relate to high government expenses.

MR. GEORGE said this would be true, but that there is also the issue of political philosophy.

CO-CHAIR GATTO stated that Norway is a good comparison because it is at the same latitude and has similar issues to Alaska. It is interesting to see whether increased investment has helped or hurt.

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REPRESENTATIVE FAIRCLOUGH pointed out that Norway is a country and Alaska is a state and the producers in the state are subject to multiple levels of jurisdiction. What is lacking in the comparison with Norway, she said, is that the federal government is taking an extraction of profits from the producers operating in Alaska.

CO-CHAIR GATTO inquired whether Norway actually has a permanent fund dividend or just a permanent fund and is that available.

MR. GEORGE said he did not know, but that the objective of putting money in is to pay it out whether it is in pensions or other liabilities. In further response to Co-Chair Gatto, Mr. George confirmed that Norway's taxes as a country are high.

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REPRESENTATIVE SEATON referred to the issue of the fairness of only a 20 percent net operating loss (NOL) credit carry forward when the tax rate is 22.5 percent. He noted that the credits generated by the legacy fields can result in an effective

reduction of 35-38 percent and not just the 22.5 percent, but that there has been no discussion about the fairness of this. He inquired whether there is anything that addresses this disparity between the legacy fields and the other fields.

MR. RUGGIERO responded that the issue of tax credits for investment is a "dark corner" as far as what that impact is and how it is. Philosophically speaking, at a very high marginal rate, the need for the credits is not necessary for the investment, he said. The need for the credits is greatest when the margin is low or there is no income at all. Depending on the starting rate, progressivity, and the rest, there may be pieces of the overall package that can be used differentially to create a more level playing field and to create more fairness.

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REPRESENTATIVE SEATON asked whether he is correct in understanding that when a NOL is sold as a credit to another company, it would be applied as a credit and there would be no capital deduction applied against the company's costs, so the company would not be able to reduce its effective tax rate like it does with its own costs.

COMMISSIONER GALVIN responded that the distinction being made by Representative Seaton is that an incumbent having production can take that NOL for a particular project and slide it over, thereby reducing the incumbent's current [tax] bill by whatever its effective tax rate is at that particular time. Someone that is high on the high margin may get a higher value out of that because of the features just described, he said, and that was one of the things that was indicated as an incentive for that type of investment. New companies coming into Alaska have no existing production against which to transfer the NOL. To protect these new companies and ensure that their starting point is not below the others, there is a mechanism within PPT that would still exist in some form within ACES that allows these new companies to carry over the credit to the following year. When they credit the amount, the percentage of the value is the rate described by Representative Seaton. It is not based upon a margin because the new companies have no margin yet.

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REPRESENTATIVE SEATON surmised that in the instances when tax credits are traded to an incumbent or legacy field, there would be no cost reduction - only the tax rate value could be applied.

COMMISSIONER GALVIN said right. "It would only be transferable at the dollar value and the dollar value would be after the effect of this marginal effect and so it's not going to change that."

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CO-CHAIR JOHNSON cited the [10/22/07] testimony of Ken Thompson of Brooks Range Petroleum where Alaska's government take was compared to other states as follows: Louisiana 57 percent, Gulf of Mexico 45 percent, Texas 53 percent, New Mexico 53 percent, Oklahoma 53 percent, California 53 percent, Colorado 51 percent, and Wyoming 52 percent. Co-Chair Johnson said he thought Alaska was in the 60 percent range. He said comparison should be made to other states under the same government as Alaska, not to other countries. He asked whether the witnesses agreed with these percentages and whether Alaska is that much higher on total government take.

MR. GEORGE replied that he has not personally checked the accuracy of the percentages in Mr. Thompson's testimony, but that he believed they are probably accurate for what they are. They tell a story, he said, but not the entire story in terms of take. He said he is trying to avoid using the word government take because in states like Texas the vast majority is federal offshore and very limited onshore state lands and waters as well as private royalties. Royalty rates on new leases on private leases are rising as the market is rising, he said. So, yes, those percentages might be a reflection of the state position in state water leases, but bonuses must be added to that. He referred to Mr. Ruggiero's slide on the last federal government Gulf of Mexico lease that showed a bonus payment of \$2.9 billion. This is another form of government take, he said, but it is not added into that percentage basis because it is too hard to correlate.

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CO-CHAIR JOHNSON inquired whether there is a way to get the entire picture for all government and private take. He said he is tired of Alaska being compared to Norway and other countries.

MR. RUGGIERO stated that the question is whether to look at old leases or new leases. A lot of the old leases are one-eighth or 12.5 percent royalties. He said GCA has worked projects recently where the royalties associated with small equity

investment trying to get listed on exchanges is as high as 37.5 percent or three-eighths. So, there is a transition compared to what happened 30-50 years ago when life-of-lease holdings were negotiated and the royalty is fixed. Additionally, Alaska has good rock - for example, the incremental 4-5 billion barrels of recovery by arresting the decline rate. Outside of deep water in the Gulf of Mexico, he said, there is no comparison of finding a billion barrel project in any of the other states just mentioned. In further response to Co-Chair Johnson, he said the accuracy of the 45 percent government take cited for the Gulf of Mexico depends upon whether it is shallow or deep water because there are two different royalties.

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COMMISSIONER GALVIN said when doing these comparisons it is important to recognize that there is no state take for the Gulf of Mexico. There is only federal government corporate income tax and federal royalty which is very low because of the royalty relief that was provided in order to incentivize that development. He said he would provide a case study to the committee that compares Alaska to the Gulf of Mexico.

CO-CHAIR JOHNSON stated that it is important to eliminate comparisons because they are always discounted by someone else. He said he just wants to focus on Alaska.

COMMISSIONER GALVIN agreed with Co-Chair Johnson. He said he believes that government take is the least useful tool in doing an analysis. There are so many different variables with so much subjectivity that it does not provide useful information for making policy-based decisions. This is why, he said, he asked GCA to address only the issues relating to Alaska.

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REPRESENTATIVE FAIRCLOUGH thanked the administration for providing the different perspectives on all the points of view in order to help the legislature make a decision on taxation. The legislature's job is to balance the different interests and this is not a science that can be modeled in its entirety, she said. She reiterated her belief that the system is not broken, it is just different people's perspectives regarding what is best for all of Alaska.

CO-CHAIR GATTO said he likes to explore all of the issues as well as look at comparisons. He wants to get as much

information as possible and hear as many points of view as possible in order to make decision, he said.

REPRESENTATIVE EDGMON noted that he has a list of terms of art: political stability, fiscal stability, government take, fair, profitability. He said he just added comparability to the list because he thinks it is important to have some benchmarks against which to base decisions.

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MR. GEORGE continued his presentation. The PPT sets a 22.5 percent base tax rate that increases by .25 percent for every dollar that net cash flow per barrel exceeds \$40. The amendment by HO&G maintains the 22.5 percent base rate, but adds a separate tax of .225 percent for every dollar that the gross value at the point of production exceeds \$50. This is applied to the gross value at the point of production. So, the amendment has a different way of calculating the rate and a different base to which it is applied. He compared the tax rate by field within a company as affected by portfolio blending under the PPT progressivity and under the HO&G progressivity. He noted that the bent red line on slide 62 shows how the progressivity works to produce a lower effective tax rate on lower margin developments under PPT. On slide 63, the bent red line remains in the same position, thus showing that under [CSHB 2001(O&G)] the bulk of the progressivity burden is being borne by the lower margin fields, not the higher margin fields. To give examples in dollar terms, Mr. George referred to slides 64 and 65. Under the PPT progressivity, he explained, the example portfolio would pay a tax of \$1.5 billion at \$80 ANS West Coast price; it would be \$2 billion before the capital investment was made. Under the HO&G CS, he continued, the same portfolio would pay a higher tax of \$1.7 billion; it would be \$2.07 billion before the capital investment was made. Thus, [under CSHB 2001(O&G)], the state would only co-invest to the tune of 22.5 percent plus the 20 percent tax credit, rather than the higher levels that would otherwise be seen. To conclude, he noted the following: A net tax on the margin is a tax on the retained cash flow and not just a tax on simple profitability. The corporate ring fence for production tax allows the effective rate to vary between more and less profitable fields. More aggressive net progressivity provides a greater differentiation on the effective rate than simple gross progressivity. Taxes are lower at low margins and higher at high margins.

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MR. RUGGIERO noted that progressivity added to the net function of PPT or ACES is more responsive to the different types of individual fields that may be brought forward as investments. As seen in the examples, the less profitable field paid differentially much more tax under a gross tax than under a net tax. Outside a ring fence family, or outside of a company that has a very profitable existing production, a new high dollar development with a \$60 cost would be taxed under a gross progressivity as though the costs did not exceed \$50. The examples show that there are cases where a gross tax can differentially harm the additional investments that the state is trying to encourage, he said. Using net with progressivity when margins are high results in the state receiving a large fair share. At the same time, it provides the incentive to keep the money invested in the state and in Alaska's petroleum industry because of the state's role as a partner in that investment. The net is self-adjusting, said Mr. Ruggiero. It self-adjusts whether the portfolio is inside a ring fence or a stand-alone project by a new entrant. Because it self-adjusts, he continued, no predictions on the margins at today's or tomorrow's prices are necessary - companies will pay a tax based on the margin that they are actually making on their operations. A properly designed net system with aggressive progressivity can achieve all of the state's four goals: taxing higher profitability at higher progressive rates, inducing or encouraging investment in legacy areas, encouraging investment outside legacy areas, and durability.

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CO-CHAIR GATTO proffered that establishing the structure just described may be the win-win situation that both the state and industry are looking for because it would provide certainty as well as durability.

MR. RUGGIERO responded that this gets closer to aligning the state's interest with the oil companies' investment decision making. When margins are low the state take is low and the state participates in bringing on low margin developments because of what it means down the pipeline, in jobs, and other things. At the same time, when margins are extremely high, it is still easy for the oil companies to make their economic hurdles with the state taking a higher share.

CO-CHAIR GATTO commented that if the state becomes a good steward of its money, then when margins are low it won't make much of a difference.

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REPRESENTATIVE ROSES summarized his understanding of what is being said: A net, rather than a gross, progressivity would offset the HO&G progressivity from being borne by the lower margin fields. A higher base tax with a net progressivity would allow the state to capture a higher percentage on the legacy fields. Under a net tax the state will pay a larger share in future investments because of the tax offsets, whereas under a gross progressivity the burden would fall on the oil companies to pay a higher share because the state is not offsetting those values against the progressivity. Thus, to maximize the state's potential, the base tax rate is raised and there is an aggressive net progressivity. By doing this, GCA believes that a "wonderful investment climate" will be created that will provide the state the greatest opportunity to capture great production values and [generate] greater production levels in the future.

MR. GEORGE said he thought that was reasonable. He pointed out that although the progressivity is seen as a single number such as a tax rate of a certain percent, it is actually taxing individual components at a rate commensurate with rational profitability. The state is thus providing more assistance to those that need it and taking more away from those that do not need it. The state will get more investment over the longer run, he said. Investment is also helped by the tax benefit that is being received and this is likely to drive more investment; the issue is how far the state wants to go in assisting that.

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REPRESENTATIVE ROSES referred to the earlier discussion about basing [the tax] on the margin model as opposed to the profit or the cash flow model. For companies with more than one field, does this not necessitate that each well be assessed independently as opposed to an average, he asked.

MR. GEORGE replied that the companies making investment decisions based on this [tax] structure will know what is being layered in through that investment decision. From legal and administrative standpoints the tax is ring fenced around the individual investment. From an economic standpoint a company

can isolate that effect and make a decision based on what the net effect of that investment will be after the adjustments to tax rates that it may cause.

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REPRESENTATIVE ROSES said he was not talking about decision making within the companies, but rather decision making by the legislature and how to build a system on margins. The closest thing to building a formula based on the margin of each individual field would be to have a net base tax and a net progressivity, he surmised.

COMMISSIONER GALVIN responded that DOR will set up the system so that it is based on a certain rate on the margin for that taxpayer. The taxpayer will blend all of its fields together and tell DOR the total result. The taxpayer will break it down on a field-by-field, well-by-well basis and look at how that is going to affect their blended response to the state, he said. The state determines what across-the-board level is fair and appropriate and does not have to set an individual rate per well as would have to be done to replicate this under a gross tax. Because [the net tax] is self-adjusting, it adjusts according to the taxpayer's investment options and the taxpayer will make a decision based on how the single [tax] system affects that individual decision, he advised.

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CO-CHAIR JOHNSON said he was hoping what the committee had just seen was a new way to do tax on margins, but that it is actually nothing new and is only a way to justify a tax increase under ACES. Will there be something new that will allow taxation on margins, he asked.

COMMISSIONER GALVIN stated that a rate based upon the net base and a progressivity set upon the margin or cash flow are the basis for PPT [current law] and ACES [HB 2001, as introduced]. That is not the basis for CSHB 2001(O&G) which is before the committee. What he and GCA are identifying, he said, is the value of having [the tax] based upon the margin and the flexibility that is provided in terms of how to set the rate. "In the end, you are right, this is a recognition that the basic structure of ACES without the floor is sound economic policy, ... but it is different than the CS," he said. "... It is also recognition that if you are going to drop out the floor, ... then we believe that in the exchange of values ... we better

protect ourselves on the high end in a more aggressive way than what ACES proposed."

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REPRESENTATIVE SEATON talked about the actual deduction for capital costs being higher than the calculated deduction. For example, the tax deduction might be 25 percent, but the effective deduction is 38 percent because of the change in the tax rate that those costs account for. The gross was a way to protect the state from leaving excessive money on the table, he opined. However, after listening to the presentation, he said he is inclined to consider keying the progressivity at a higher slope if the floor is dropped off and protecting the state by disallowing deduction of the progressivity portion.

COMMISSIONER GALVIN stated that while the presentation talked about companies that have a high margin field that are looking at other investment decisions and how to blend them together, there are also companies that only have one low margin field. The question is whether to have a progressivity based upon a gross value that would add the same rate increase to each one of these, or whether to have a progressivity based upon the margin so that it would only affect those that have the higher margins to start with. That is a separate issue from whether the value of credits is affected by the progressivity scale, he said.

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REPRESENTATIVE SEATON noted that when PPT was being considered, what was looked at was the application of this onto a single field and whether the 25 percent tax reduction as well as the credits were a reasonable assessment. What was not considered was that companies with a suite of options would be able to reduce their tax rates through the application of the deductibility along with receiving credits for investments. "I don't think that we should consider that as being the baseline structure that we are coming from because we didn't realize it," he said.

[HB 2001 was held over.]

#### **ADJOURNMENT**

There being no further business before the committee, the House Resources Standing Committee meeting was adjourned at 3:05 p.m.