

**ALASKA STATE LEGISLATURE**  
**SENATE RESOURCES STANDING COMMITTEE**

March 11, 2009

3:38 p.m.

**MEMBERS PRESENT**

Senator Lesil McGuire, Co-Chair  
Senator Bill Wielechowski, Co-Chair  
Senator Charlie Huggins, Vice Chair  
Senator Hollis French  
Senator Bert Stedman  
Senator Gary Stevens  
Senator Thomas Wagoner

**MEMBERS ABSENT**

All members present

**COMMITTEE CALENDAR**

Overview: Alaska's Oil and Gas Tax Regime by Commissioner Pat Galvin, Dept. of Revenue, and Rich Ruggiero, Gaffney, Cline & Assoc., Administration Consultants

HEARD

**PREVIOUS COMMITTEE ACTION**

No previous action to consider

**WITNESS REGISTER**

COMMISSIONER PAT GALVIN

Department of Revenue (DOR)

**POSITION STATEMENT:** Presented Gas Production Tax Overview.

RICH RUGGIERO

Gaffney, Cline and Associates, Inc.

Administration Consultants

**POSITION STATEMENT:** Presented overview of ACES, Progressivity and Natural gas development.

**ACTION NARRATIVE**

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**CO-CHAIR LESIL MCGUIRE** called the Senate Resources Standing Committee meeting to order at 3:38 p.m. Present at the call to order were Senators French, Wielechowski, Wagoner, Huggins, Stedman, Stevens and McGuire.

**Overview: Alaska's Oil and Gas Tax Regime**

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COMMISSIONER PAT GALVIN, Department of Revenue (DOR), presented the Gas Production Tax Overview. He said he would focus on gas issues from large bodies of gas like that on the North Slope (ANS) and how the production tax relates to construction of the pipeline.

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COMMISSIONER GALVIN said the purpose of the overview is to demonstrate the legitimacy of the existing gas fiscal system. It is crafted to protect state revenues and to incentivize ANS gas commercialization by providing stability for the state and all the gas producers so they can have the confidence to move forward. In addition to providing that overview, he wanted to talk about how this discussion will be ongoing as they move towards the open seasons associated with the large gas pipeline.

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SENATOR STEDMAN said it appears they have agreed to disagree on the gas tax as it sits today. The PPT, which the legislature adopted under the previous administration, moved the gas equation out of the oil tax; ACES did the same thing. The administration had given him the impression that the gas tax was within ACES, but a lot of elected officials in the legislature "do not deal it like that." Since the state had no gas to sell, but had the oil, lawmakers "defaulted out" the gas but equivalency just to get the issue off the table, think that gas would come later. He didn't want the people at home to think that the legislature has not signed off on the gas structure embedded in ACES or the PPT.

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COMMISSIONER GALVIN said he understood his position, but the current system has always been for both, and it would complicate things to separate them. When the analysis was done under AGIA, it was found the current system was amenable to a variety of circumstances in the future related to oil and gas that would be favorable to both the state and the producers.

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SENATOR HUGGINS said he wasn't prepared to debate the legitimacy of the existing system. "Let's assume it's legitimate." But it's kind of like a race car, he said, and used a Nascar analogy where the same car body is used for several years, but some of the insides have been tweaked. His assumption is that this fiscal regime has some of those traits that could potentially be tweaked, because they learn of beneficial modifications over time.

He wanted to agree today on the commissioner's last bullet that said "must continue discussions." He wanted some agreed-upon marks on the timeline from the 2010 open season back to now that the legislature could count on for having discussions and making decisions.

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COMMISSIONER GALVIN agreed entirely, and since TransCanada would conclude the first open season in July 2010, and for planning purposes if they were going to entertain changes to the gas tax system prior to that, they need to be in place during the 2010 legislative session. If the administration came up with a change, "it would be incumbent on us to present it to you at the beginning of that session or prior to the beginning of that session so that you would have adequate time to review it and consider it before passing it during the session."

He said the only uncertainty is if something came to fruition before that from either the shippers or the state. However, he didn't anticipate that at this time. The most likely scenario is that they are before the legislature at the beginning of the next regular session to decide on the tax regime.

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Going back to the Nascar analogy, he noted that no further tweaks to the tax regime would be allowed after the open season. They have to make sure that decision is made prior to the open season, and right now the administration believes the current system is totally flexible enough to deal with potential outcomes. He reiterated that there will be time in the next session before the open season to deal with this issue if needed.

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SENATOR WIELECHOWSKI said he understands that TransCanada needs cost estimates by January in order to be prepared for the open season, and asked if that is a factor in his timeframe.

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COMMISSIONER GALVIN said TransCanada will most likely be submitting its open season applications to FERC in that timeframe, so they will have to have cost estimates to do that. The cost estimates will provide the opportunity if the tax system is being discussed at that time, to have the most up-to-date information. At this point, the administration hadn't received any indication that the cost estimates had changed, although he thought they may be too high.

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SENATOR WIELECHOWSKI asked if he has seen anything to indicate this is not a viable project or less viable than it was.

COMMISSIONER GALVIN replied no, because the economics of the project depend on prices 10 years out.

SENATOR STEDMAN said there was a lot of interest in getting better cost estimates before getting into the tax issue, but it's too important and complicated for the legislature to deal with in just 90 days. They modified the PPT, because it wouldn't have been good for the state otherwise.

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CO-CHAIR MCGUIRE added that her and Co-Chair Wielechowski's priority was to look at a gas tax structure at the beginning of this session, and she thought the Interim might be a good time to tackle a major change to the fiscal system. Look at what has happened in Nenana and Cook Inlet if you don't think tweaks are needed. The legislature doesn't want to be irresponsible.

COMMISSIONER GALVIN reiterated that he didn't anticipate the need for an overhaul of the tax system before an open season, and new information would have to come forward to change that opinion.

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CO-CHAIR MCGUIRE asked if she was correct in thinking that the commissioner thought it would be proper to lock-in the current tax structure for 10 years.

COMMISSIONER GALVIN indicated yes.

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RICH RUGGIERO, Gaffney Cline and Associates, Inc., Consultants for the Administration, presented the ACES (Alaska's Clear and Equitable Share) progressivity and natural gas development overview. He added that he didn't think anything was wrong with

ACES, especially in looking at natural gas. "Just the opposite. I think ACES and what was presented is exactly how it was intended to work." If you pick out one day, you could find a scenario that was alarming, but you have to remember that the gas pipeline will be 10-plus years in development, and they hope it has 50-plus years of production. So they are putting together systems that act over the long term.

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He said Gaffney Cline identified five key drivers: fields with larger profitability should be paying more taxes, investment in existing units should be encouraged, new investment outside of legacy units should be encouraged, and the tax should be built on prior tax dialogue and the tax must be durable. They support something that would encourage investment in gas as well as other "high-priced" operations such as the unconventional or heavy oil. They were clearly looking at gas at the time they were giving their input into the development of ACES.

MR. RUGGIERO said basically ACES is a production tax on producer non-reinvested cash flow. He explained that with oil, you start with a market price and deduct transportation, both TAPS and shipping to get to West Coast markets, to get the unit value. Then royalty is deducted. Then the producers can deduct their operating expenses and any and all capital expenses. This produces what is known as "producer cash flow." The production tax is calculated on whatever that cash flow is on a per barrel basis. That production tax is deductible against owed federal and state income tax. What is left is what is called "producer profit."

Gas works the same way, but instead of looking at West Coast markets for oil pricing, it looks at the AECO Hub, Chicago City Gate or some other pricing hub in the Lower 48. They would subtract transportation costs that would include pipelines and processing facilities to get the unit value. Then royalty would be subtracted along with operating and capital expenses, and then the ACES tax is calculated. That would leave the producer profit.

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SENATOR FRENCH asked when he says "processing" does he mean a gas conditioning plant on the North Slope.

MR. RUGGIERO replied that he is mainly talking about NGL processing, which usually occurs in the midstream or the downstream sectors.

SENATOR FRENCH recalled from a lengthy period of time the legislature spent in working out the ACES tax that they put the point of production for gas downstream of a gas conditioning plant on the North Slope.

MR. RUGGIERO responded, "For the purposes of ACES, you're correct. A gas treatment plant is downstream of the point of production, which means it is not deductible as an expense." Everything upstream of the point of production is considered a lease expenditure, which means it is deductible. So, downstream costs become incremental as opposed to capital costs.

He said that ACES is a combined tax; so you would add the combined oil and gas net values to come up with a production weighted average, and that's the value upon which the actual production tax would be calculated and paid. The available cash flow up to \$30/barrel is taxed at a flat 25 percent base tax rate; above \$30, a progressivity factor kicks in. ACES has two progressivity factors; the first one runs from \$30/barrel cash flow up to \$92.50/barrel with a rate of .4 percent tax increase for every dollar of cash flow above \$30.

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Why was \$92.50/barrel picked? It's because the math shows you'll end up right at 50 percent production tax at \$92.50/barrel cash flow. A second progressivity factor of .1 percent for every \$1/barrel of cash flow comes into play above the \$92.50.

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SENATOR FRENCH said to plug in the same idea on gas prices requires you to know what the current ratio is between the two commodities, and asked what Mr. Ruggiero considers the base-case ratio to be for gas for that progressivity range.

MR. RUGGIERO said he would get into the issue of gas/oil parity later. He didn't have that particular graph, but he had some slides that show what the tax picture could look like with the combined expected ANS gas production and the oil production.

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MR. RUGGIERO said if one accepts that thermal parity is 6:1, if he had a stand-alone gas project, then the base rate of 25 percent would be applicable for cash flow equal to \$5/mmbtu. That would be the equivalent of the \$30 kick-off point. Progressivity would kick in all the way up to roughly \$16/mmbtu, which would be plus or minus the equivalent of the \$92.50.

SENATOR FRENCH said that was helpful, because there will be people who are not combined oil and gas producers on the North Slope, at least they hope that is the case.

CO-CHAIR MCGUIRE said the thermal parity discussion is good, and she asked him to reconsider presenting them in a separate light for future considerations.

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MR. RUGGIERO showed a chart of the distribution of costs for a \$75/barrel of ANS oil. After everything was deducted, \$17/barrel was left for the producers.

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SENATOR HUGGINS asked what would happen to this percentage if the federal government allowed credit for state taxes.

MR. RUGGIERO said he hadn't run that scenario. But, he looked at details of President Obama's 2010 budget that had a manufacturing credit of an estimated \$13 billion over the 10-year planning horizon. However, that was not about state production taxes, but rather a manufacturing credit for multiple industries. The President wanted to repeal the energy industry's eligibility for that credit mainly in refineries because they are so old, and he wanted to encourage more creation of products in the U.S. The tax in President Obama's plan that would impact the state is the immediate deductibility of intangible drilling costs, which would go from being expensed to being depreciated over a seven-year period.

SENATOR HUGGINS said they know one thing - that the U.S. has about \$14 trillion in debt, and the feds would be looking for revenue. "I say to you there is an eligibility factor and I would appreciate your running the numbers so we could see what the impact would be."

MR. RUGGIERO said he would run that.

COMMISSIONER GALVIN clarified - assuming the federal government doesn't allow the companies to deduct the income taxes from their federal income taxes, what would be the resulting distribution.

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SENATOR STEDMAN asked him to do a distribution for other prices like down to \$50/barrel as well.

COMMISSIONER GALVIN said it's important to get perspective on how ACES works with regard to high and low prices; with today's prices in the \$40-range ACES is bringing in less revenue than the ELF tax did. So, they have just described a system that has less government take at the low end - to keep the companies investing - and more at the high end.

SENATOR STEDMAN said he wanted that quantified.

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COMMISSIONER GALVIN said the cross-over point between ELF and ACES is \$50-\$55/barrel.

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MR. RUGGIERO said one of the other topics they talked about during the ACES special session was the issue between absolute rates and marginal rates.

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His graph showed the effect of encouraging investment by indicating what would happen if an additional \$1/barrel of cash flow would be made as capital investment in Alaska or what the additional tax would be if profitability increased by that same amount. Depending on the starting point, those numbers ranged as high as 82 percent. If you took the additional investment tax credit of 20 percent, you could get to the point where both the state and the federal governments were contributing close to the full dollar for every dollar invested by the oil companies if they happened to be averaging \$92.50/barrel of oil equivalent. The impact of combining gas (with less cash flow per barrel) with the oil (that would have very high cash flow per barrel) is that you might find that a bit of subsidy is needed to cause that investment to happen.

MR. RUGGIERO explained that part of putting ACES together was looking at the fact that other players were developing in existing units that had much lower-dollar value per unit. The one thing they wanted to make sure for the state is that a tax regime did not get put in place that would significantly discourage investment in those types of operations.

They also did graphs showing that as multiple fields come on, the net effective tax rate could be even lower than the base tax rate of 25 percent. That occurs in the combining process when moving down the marginal curve; the progressivity gives them a slight difference from just straight numerical averaging.

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CO-CHAIR WIELECHOWSKI asked how other countries deal with this issue. Do they decouple oil and gas taxes? Is our structure similar to other countries'?

MR. RUGGIERO replied some countries have the same tax structure; some have different. Some countries have "ring fencing" as a whole country (which in essence is what ACES does), and sometimes they allow ring fencing by individual field. In this case, oil and gas might not be able to be combined because they come from two separate fields. The UK used to have a somewhat similar production tax, and they used to ring fence by field; so it was kind of hard to offset field A versus field B.

CO-CHAIR WIELECHOWSKI asked if Alaska ring fenced its legacy fields to encourage production of fields and putting gas into the gas pipeline.

MR. RUGGIERO answered that the current system and all its incentives is a very workable fiscal system. Once you start separating the two, you start getting into predicting the future and having to come up with fairly strong beliefs in what certain parameters will be cost and revenue wise in order to set a very specific tax structure for a very specific project.

CO-CHAIR WIELECHOWSKI asked how difficult it would be to administer two different accounting systems.

MR. RUGGIERO said it would be like opening Pandora's Box. Some people say it would be pretty simple to do and there are simple ways to separate gas costs from oil costs, but each and every one of those simplistic methods comes with quite a bit of compromise that would mean either a gain or a loss for one party or the other. Being very exact for gas or oil uses can create an excessive administrative burden.

COMMISSIONER GALVIN added in the context of ACES they discussed gross tax versus net. One of the distinctions that was made is that a gross tax requires a lot of assumptions and if those are wrong, then the tax could be wildly off; it would either under-tax or discourage investment. The simple way to administer the two taxes would be to create a formula-based separation of costs between the two by establishing a proxy number for what the actual costs will be.

On the net-based side, he said, they were concerned about creating the ability to game the system and the ability to move costs around in order to maximize revenue to the tax payer and minimize their tax obligations. And just allowing them to report expenses creates an accounting nightmare of trying to "chase down" whether those costs were properly allocated.

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SENATOR STEDMAN asked for a list of different basins around the world that use a combined oil and gas tax system and combined with separate progressivities for both oil and gas.

MR. RUGGIERO said he could do that, but they would also find that some countries have different generations of deals. Even some new projects are under old arrangements. Some countries use multiple ways of taxing.

SENATOR STEDMAN said that hopefully they won't end up re-debating the gross versus net since the state has concluded it's in the net regime.

COMMISSIONER GALVIN said he wasn't insinuating that Alaska go to a gross tax system other than to say if you separate oil from gas, you have to come up with a way to allocate the costs between the two.

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MR. RUGGIERO said in figuring out how big a subsidy would have to be in combining a high-cash flow field with a low-value field, they need to know the capital costs of a project going in and compare them to a range of expectations, and some things haven't been considered. For instance, there may be some loss of existing production by lowering reservoir pressure to produce and sell gas. But, on the other hand, lives of fields and/or facilities may be extended by being able to operate fields to much lower rates on the liquids. Also, people have to be very careful that they don't look at a single day or year snapshots to get a picture of exactly how ACES would work for a gas project, because they can be misleading. You have to look over the life of the project for an accurate picture, which is what Black and Veatch did - and they used the provisions in ACES - with the same base rates, the same kick off points, and the same progressivity.

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MR. RUGGIERO said even though he said they shouldn't use a single-year snapshot that is what he was going to do now. A

question came up about oil/gas parity and what that might mean to Alaska gas going down to the Lower 48. On average, a barrel of oil contains as much heating value as 6,000/cf of gas. Since each cf of gas has about 1000/btus, then a barrel of oil is equivalent to 6/mmbtus of gas. If gas were to be priced at parity, you would take the oil price and divide it by six. So if oil in the market today was \$60/barrel, gas priced at parity to that oil would be \$10/mmbtu.

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SENATOR FRENCH asked if mmbtu translates into the valuation they are more commonly used to using, which is dollars per thousand standard cubic feet.

MR. RUGGIERO replied that markets today are actually priced in dollars per mmbtu. FERC has mandated that at their level all contracts are in dollars/mmbtu. The problem is that gas in the U.S. sells at anywhere from 900 btu/cf up to 12-1300 btu/cf. A lot of the early gaming in the system happened when people priced their gas on cf versus mmbtus. There is even something called "wet" versus "dry" gas and high and low heating values. So some standardization has occurred, and the prices they will see quoted at different markets around NYMEX or Henry Hub are in dollars/mmbtu.

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CO-CHAIR WIELECHOWSKI said if the U.S. adopts the Kyoto Treaty that the carbon tax would increase the cost of a barrel of oil, which would then increase the ratio.

MR. RUGGIERO responded that thinking had not been built into his presentation today.

CO-CHAIR WIELECHOWSKI said he would be interested in seeing a model of that possibility.

COMMISSIONER GALVIN said they had commissioned Black & Veatch to do a separate study of looking at various nation-wide economic impacts associated with the potential gas line, which includes looking at issues associated with supply and demand. So, they will have information on the potential impact of a carbon tax on both the gas market and the pipeline.

MR. RUGGIERO added during the AGIA discussion they heard about Asian LNG pricing at near parity to oil. Many European long-term gas contracts have oil in the formula that calculates the price of gas at any time. Some of those are current as in the current

gas price based on current oil; some of those have as much as a three-month lag. But when LNG dried up coming to the U.S. it was because in those other markets gas was selling at a 6:1 parity basically to the price of oil in those markets.

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So, if 6:1 is thermal parity, gas has traded at parity very rarely over the last 14 years. Parity above 6 could be described as gas trading at a discount to oil, and work that was done as part of AGIA suggested they would see gas trade in the U.S. at an 8:1 ratio instead of 6:1.

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SENATOR STEDMAN asked isn't the LNG market just evolving into a world-wide market and wouldn't that have an impact on the parity issue?

MR. RUGGIERO replied yes; the LNG market used to be a very contractual point-to-point market with very little trading variability, but it has developed over the last few years into much more of an openly tradable market. The biggest indicator is that in 2008 the U.S. had one quarter of the cargoes it had in the peak year. The U.S. is running on average 8:1 or 10-11:1 over the last two years while Europe and Asia is running at 6:1. For that kind of difference, those cargoes will go to the markets that are paying the higher price. That shows the volatility of the market.

Several consultants have said the U.S. is going to become a market of last resort and even given the economic conditions that exist today, most of the pundits are predicting an extra 100 cargoes coming into the U.S. Those extra cargoes this year will still not make 2009 the peak year for importing LNG into the U.S.

SENATOR STEDMAN said it has been pointed out in looking at the entire cycle on the tax regime that taxes are calculated on a monthly basis, and there may a string of several months that would be problematic for the treasury because of the wide difference in prices of oil and gas.

MR. RUGGIERO said his understanding is that taxes are calculated to pay monthly, but trued up annually.

COMMISSIONER GALVIN agreed and said in the end the question is will they bring in sufficient revenue for what they intended when putting the tax in place. It's important to keep that in

mind when looking at these slides. They need to ask if the total context is sustainable or cyclical.

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SENATOR STEDMAN said there is a reasonable probability in 20 years that will be the world we're in. He assured them that a lot of people would be concerned with 9-10 months of a decline in gas revenue because of the progressivity dilution. He doesn't want to go back to the public to say we're virtually giving our gas away - if it's one month or six months. "We need to fix it." This is one of the major issues facing the state.

COMMISSIONER GALVIN agreed that they need that discussion, but the question is that the state has to maximize revenue while also maximizing an incentive for investment. Those need to stay balanced, and the current regime incentivizes the investment necessary to develop the gas resource while providing the state with significant upside while recognizing there will also be instances where it provides a benefit to the companies to have the system stable.

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MR. RUGGIERO said that concerns were raised about the validity of ACES for long-term gas development. So, using a 13:1 model, he looked back 14 years to see where that had existed for a period of one month and found that it had several times - for a total of six months. The state never had a year when that type of gas to oil pricing was actually seen.

That brings them to the question of the subsidy, he said, and whether it's a smart thing to combine the two in one fiscal regime. So, he put together a number of charts across a range of values.

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SENATOR STEDMAN went back to slide 15 and said his understanding of the model is that it is extremely simplistic. He stated that more work needs to be done in advancing this model in complexity to get a better idea of what they are dealing with. He wanted more discussion on the \$100-world when progressivity kicks in and the 20 percent credit, for instance keeping in the mind the intent is to get more exploration and development.

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SENATOR WAGONER said the independent explorers and drillers like the 20 percent credit. It allows them to do drilling that they

not have been able to do otherwise when they're "sitting on top of a 50/50 play."

SENATOR STEDMAN agreed that it works for the small producers and probably the big producers as well. The credit alone is a huge incentive.

COMMISSIONER GALVIN agreed, also saying the value of the tax system is in the combination of the two. He elaborated:

But, the other side is that it's important for folks to understand that it is the same dynamic that provides what we see as a valuable incentive for investment in stressed fields, heavy oil projects that are marginal in terms of their individual economics and providing an incentive for them to be added to the stream of existing production that causes the effect that you see. If we showed the effect of incremental investment in a new heavy oil field, and adding that production, we could show it along the same chart [slide 15] where you'd have the incremental expected tax on one, the incremental expected tax on the other and it's going to be more than what the combined expected tax would reveal. It's a factor of the state choosing to create a system that incentivizes particular behavior. In this case the particular behavior that we're trying to incentivize is the commercialization of our gas, and not necessarily maximize our recovery of taxes under the gas production scenario.

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MR. RUGGIERO said the system kicked in the way it was intended when prices went up. But likewise, as prices have come down, unlike a gross tax, the tax has come down as well, which provides help to the producers to keep what they have on stream and producing.

COMMISSIONER GALVIN said one of the difficulties about going into ACES was that they changed the system a very short period of time after a previous major change, and that did impact the state's reputation as a tax regime in terms of stability. For that reason, as they move towards considering other changes, there is a certain threshold of demonstrated need that would have to be met in order to justify another change. "Just to acknowledge that we want to keep stability as our overall theme."

SENATOR STEDMAN wanted a 30-second blurb on what his firm is doing in response to concerns an LB&A consultant brought up.

MR. RUGGIERO said they are building something that can look at a range of assumptions so the state can be prepared when the latest numbers start popping out.

CO-CHAIR MCGUIRE said this committee would be interested in any information he could share under their agreement.

COMMISSIONER GALVIN commented, "There isn't a tremendous amount of information that's provided to us that is not shared." A lot of folks in the energy sector see a direction towards gas that is irreversible, and that will result in a high natural gas price in the long term. "But it's getting us from here to there that is expected to take the significant dip in price - excess supply, use of storage and those sorts of things." In the end, he said, the gasline project is based on long-term prices, not short term prices.

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CO-CHAIR MCGUIRE thanked them for their time and adjourned the meeting at 5:15 p.m.