

SENATE FINANCE COMMITTEE  
February 24, 2010  
9:07 a.m.

[9:07:30 AM](#)

CALL TO ORDER

Co-Chair Stedman called the Senate Finance Committee meeting to order at 9:07 a.m.

MEMBERS PRESENT

Senator Lyman Hoffman, Co-Chair  
Senator Bert Stedman, Co-Chair  
Senator Charlie Huggins, Vice-Chair  
Senator Johnny Ellis  
Senator Dennis Egan  
Senator Donny Olson  
Senator Joe Thomas

MEMBERS ABSENT

None

ALSO PRESENT

Representative John Coghill, Senator Bill Wielechowski, Senator Joe Paskvan, Pat Galvin, Commissioner, Department of Revenue.

SUMMARY

^Gas Value under ACES Tax Provisions  
Progressivity Profitability Parity Gas

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PAT GALVIN, COMMISSIONER, DEPARTMENT OF REVENUE, introduced the overview "Progressivity Profitability Parity Gas" (Copy on File). He stated that the presentation will address the calculation of production tax from the perspective of adding gas to an existing oil stream.

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Commissioner Galvin discussed Slide 2: "Agenda"

- o How Does the Production Tax Calculation Change when Gas is Produced?
- o Brief historical background on the philosophy behind the current system
- o How does "Parity" affect the production tax calculation?
- o What is being potentially "locked in" with the AGIA Open Season?
- o Forecasting oil and gas prices 2020 to 2030
- o Policy Issues Associated with the Gas Tax

Commissioner Galvin addressed the spreadsheet on Slide 3: "Basic Oil Tax Calculation" Now What if We Added 4.5 Bcf of Gas Production?" The top of the graph illustrates the oil production beginning with the price on the market. The Arctic North Slope (ANS) price chosen was \$75. A production level intended to reflect the projected level beginning in 2020 has been reduced to approximate the time frame when the gas is arriving. The transportation cost was deducted. The value at the point of production is used to exemplify the value before the deduction of the upstream costs. The royalty is removed to arrive at the taxable barrels. The lease expenditures are deducted.

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Co-Chair Stedman why the ANS price chosen was \$75. He asked about the daily production of 500,000 barrels.

Commissioner Galvin answered that the \$75 price was used as a starting point. The number is variable and can be changed with the parity issue. The projection is 500 barrels per day for 2020. He continued to describe the graph and mentioned the production tax value (PTV) that establishes a per barrel PTV that is then used to determine the progressivity rate that then provides the base tax and the progressivity tax. He explained that 20 percent of the capital expenditure allows for the after-credit tax.

Commissioner Galvin asked now what happens if we add 4.5 billion cubic feet per day (Bcf/d) of gas production? The question was answered in Slide 4. He explained the use of the market price multiplied by the production volume, which provides the gross value at productions. The transportation cost of 4.5 Bcf/d is a high projection of the combined pipeline tariff and gas treatment plant cost. The range currently advertised as part of the Alaska pipeline project is lower, but 4.5 is used to place additional stress on the gas portion of the equation.

Co-Chair Stedman commented that the tariff protection from the gas treatment plant to the Alberta hub was 2.8-3.5, but additional tariffs were included by TransCanada to continue the movement of gas. Commissioner Galvin responded that price expectations must be compared to the transportation cost to arrive at the pricing point. If the Alberta hub is used as the pricing point, and the \$8 represents the price at the Alberta hub, 2.8-3.5 Bcf/d would arrive at the pricing point. Further transport would require a price differential to cover the additional cost.

Co-Chair Stedman asked about the \$8 dollar price. Commissioner Galvin responded that \$8 dollars is a reasonable average. All the numbers are approximations. The presentation is not intended to be precise, but instead to be illustrative of the mechanism.

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Co-Chair Stedman added that the ratio between the oil price at \$75 and the gas price at \$8 is approximately 9.4. If the gas price is moved to five this changes the price dramatically. Commissioner Galvin agreed.

Commissioner Galvin continued that following the deduction of the transportation cost, the value at the point of production for the gas is calculated. The similar gross value of the commodity is different due to the scale of operation. The value deducted comprised a larger percentage of the overall commodity value. The taxable amounts are similarly related. The costs capture the bulk on the oil side to reflect the costs associated with oil production. The numbers displayed in the spreadsheet representing the gas costs are approximations of potential incremental costs associated with gas production. He spoke to the disparity in the costs.

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Commissioner Galvin continued with the production tax value for oil and gas, which is represented on the next line. Because there is a larger volume of gas on the Barrel of Oil Equivalent (BOE), the BOE value is lower for gas than oil. The spread sheet illustrates that the oil alone results in a progressivity tax rate of 5 percent. The BOE for gas is less than the \$30 cut off point resulting in no progressivity. The combined column in the graph shows the combination of oil and gas and provides a combined value used to establish the progressivity rate for the combined stream. The combined tax after credits in the provided example equaled \$2.4 billion. He pointed out that the combined total does not equal the result of adding the two together as separate streams.

Co-Chair Stedman asked about the difference. Commissioner Galvin responded approximately \$400 million.

Commissioner Galvin posed the question, "was this expected when ACES was crafted?"

Co-Chair Stedman wished to address the BTU equivalency issue. He requested an explanation. Commissioner Galvin explained that the production tax is based on the BOE. Equivalentents between gas and a barrel of oil are represented by the energy value of the two commodities. The intent was to replicate the ultimate value of the two. To compare gas and oil on energy basis appears to provide a method to convert in a way that reflects the primary purpose of generating energy. Observing the market price does not always correspond as the value equivalent is a six to one ratio. Through trade the value comparison alters from six to one frequently. As the price changes, the relative profitability alters the effect.

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Co-Chair Stedman pointed out that the price range does not reflect a six to one energy equivalency when analyzing the market value price.

Commissioner Galvin added that establishing the parity level depends on the point of reference. The price

relationship can range within an eight to one or ten to one ratio.

Co-Chair Hoffman pointed out that oil is taxed on the price of oil and gas is taxed on the BTU equivalent to the price of oil and not on the price of gas.

Commissioner Galvin pointed out that gas is taxed on the price of gas. The blending of the two is at a BTU equivalent. The BTU is a constant while the price of gas varies.

Co-Chair Hoffman added that gas is equivalent to the BTU of oil. Commissioner Galvin agreed. The effect of the blending is based upon the heating value. Co-Chair Hoffman added that the price of gas varies, but the price of oil is based on the dollar value, which depends on market conditions.

Senator Olson asked how many other countries or states use the BTU method of taxing for production. Commissioner Galvin responded that some jurisdictions use separate methodologies and others use combined. Generally the BTU equivalent base is the industry standard.

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Senator Thomas commented that the price ratios are nine to one. He wished to view some alternative ratios to allow comparison.

Co-Chair Stedman asked to know the royalty share of the shown \$1.7 billion from gas. Commissioner Galvin noted that the royalty in the example provided is already taken prior to the \$1.7 billion tax value.

Co-Chair Stedman pointed out the basic component of royalty and the production sharing arrangement. If the value to the state is eroded, he believed that is a significant percentage of the gas.

Commissioner Galvin agreed and noted that this example does not represent an erosion of value. The slide provides an example of combined tax to provide value to the state of \$2.4 billion in addition to \$2.2 billion of royalty for the combined value of the two streams. Just as the state provides a similar effect for heavy oil or new production that reduces the value of the taxpayers' current oil

production, it is intended to be an incentive for that additional investment because of the value gained from the additional gas stream.

Co-Chair Stedman disagreed and stated that the policy was the leftover portion of gas and oil taxation that was embedded in the original Petroleum Production Tax (PPT). The policy was never addressed by the legislature.

Commissioner Galvin clarified his point. When he discusses the crafting of ACES, he is speaking of the administration's proposal. He explained that he did not intend to impute on the legislatures expectations or intentions. The dynamic described is the same type of uplift for heavy oil and marginal oil field development. The policy is intended to be a positive incentive for producers to commit to the gas line project. The policy must be viewed in the context of the gasline economic analysis.

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Commissioner Galvin addressed Slide 8: "Goals for Fiscal Design." He noted that past presentations communicated that beyond the individual projects, the economic effect of the project reduces the existing tax burden on the existing production. The increased production is beneficial to the state in addition to the bottom line tax revenue.

Co-Chair Stedman commented that the initial program under Governor Palin was to lower progressivity. He recalled that the legislature took action to raise the progressivity.

Commissioner Galvin acknowledged that the presentation referenced was a method of explaining what happened when the progressivity was increased from .2 to .4. Increasing the progressivity had the advantage of increasing the state's take on the upside and reducing the take on the downside, and also increased the effect on current production when new and less profitable production is introduced.

Co-Chair Stedman requested a slow and careful presentation of the issue due to its importance. He hoped for updated slides for the Gaffney Cline presentation.

Commissioner Galvin admitted that he was unaware of the said presentation. He offered to provide the needed information at a later date.

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Senator Thomas referred to Slide 8, which was based on past discussions that were still accurate and relevant. Commissioner Galvin noted that different issues are raised beyond those encompassing the gas tax. He explained that the more aggressive the progressivity, the greater the impact on the effective rate change and the relation between the combined and the stand alone rate.

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Commissioner Galvin addressed Slide 12: "How Parity affects Calculations" The following graphs were utilized to isolate one variable, allowing the rest of the calculation to remain the same. When the one variable is moved the bottom line in the calculation is altered. He pointed out Slide 14 where \$100 is used allowing for a 12.5 to 1 ratio. The slide does not alter the gas, but the oil side reaches \$4 billion in total after tax credits. The combined amount is now barely equivalent. The affect of a twelve to one price with assumptions result in the combined oil and gas production tax being similar to the individual oil tax. He noted that the state continued receiving royalty payments for the oil and the gas in addition to the tax revenue, which is not affected by the dynamic.

Co-Chair Stedman voiced concern about the lower combined total for gas and oil versus that of oil alone. He opined that a lack of gas revenue other than royalties was a serious issue. Commissioner Galvin explained that it depends upon the expectation of the parity and the value of the overall stream of adding the gas to the state's portfolio. The production tax is only one component of the relationship. He expected the economics of the gas pipeline and its effects on the state cash flow to be discussed regarding the state take of the gas revenue stream. The current system provides a fair distribution of the revenue between the state and the companies when gas is produced.

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Co-Chair Stedman commented on the parity issue of 12.5, when gas is \$8 and oil is \$100. He mentioned the forecast by the United States Department of Energy of \$110 to \$125 per barrel of oil. The offset may be greater than this.

Commissioner Galvin moved on to Slide 17 illustrating \$120 per barrel. He commented on the 15 to 1 ratio between the oil and the gas price. He noted that the state now has less production tax revenue as a result of the combination than if the gas was not factored in.

Co-Chair Stedman noted that the Alberta Hub price noted in the TransCanada presentation is close to the \$8 dollar range. He pointed out the \$2 billion offset. He opined that the offset erases the gas revenue of \$1.1 billion. He asked to know the remainder of the royalty share if the negative \$2 billion was taken against the gas as the royalty calculation is absent from the graph. Commissioner Galvin responded that given the \$900 million reduction in production tax compares to the additional royalty received on the gas and the reduction would be greater than the additional royalty on the gas.

Co-Chair Stedman opined that the current structure negates all of the production gas revenue and takes the royalty portion. Without the gas line, the treasury would increase by \$1 billion each year. He asked why the state would choose the presented structure. Commissioner Galvin answered that the state's fiscal system for gas production will be evaluated by the producers and enables them to make a decision about participating in the project. The state is taking responsibility for the price risk and is in the exchange of values.

Senator Thomas noted the reliance on the difference between the price of gas and the price of oil. He commented on the lack of clarity regarding oil and gas regulation. He pointed out that no one can predict the future difference between oil and gas prices.

Commissioner Galvin agreed that the big issue is the establishment of the gas in the fiscal system. The issue combines matters of cash flow sharing and the relative risks born by the state and producer. He questioned whether the state would participate in the project with the likelihood of significantly high revenue and the possibility of little or no revenue. If the state chooses

to shear off the risk of little to no revenue, the producers will expect less likelihood of high revenue. There is tradeoff between the cash flow and the risk. Less risk leads to greater certainty, but less reward in the investment world.

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Co-Chair Stedman stated that the United States Department of Energy's outlook forecasts the parity for 2020 and 2030. The parity is not a calculated anomaly that will never happen.

Co-Chair Hoffman noted that oil is declining. He noted the presented scenarios for 2020. He asked to see the scenarios for the future decades as well. He wondered if the current structure would sustain the state beyond 2020.

Commissioner Galvin agreed to provide the information. He pointed out that with the gas production comes more oil production. He explained that oil projections without a gas line are different. Regarding the state's ability to sustain revenue needs, he noted that the high parity situations will sustain the state, without the maximum amount of revenue. To maximize the revenue without the gas line is also difficult.

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Co-Chair Stedman pointed out that the ability to extract oil becomes more difficult once gas is produced. Alaska does not currently have a gas line because the field required pressurization for decades after opening Prudhoe and Kuparuk. He commented on the advantages of retaining pressure on the oil fields. He recognized the overall value of the basin in harvesting gas and oil.

Commissioner Galvin moved onto Slide 18: "How does Parity affect State revenues coming from an AGIA gasline." He explained that the chart uses a 25 year cash flow associated with a gas line to the state using production profiles with and without a gas line. The chart does not show the revenue generated in the different scenarios, but is intended to provide a sensitivity picture of the potential state revenue. He discussed the 12:1 ratio presented in the chart. If the parities are anticipated when the sanctioning decision for the project takes place

and the price of gas is expected to be no greater than five dollars, the project will not go forward.

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Co-Chair Stedman noted many of the presented analysis use sixty dollars per barrel of oil. The rough parity relationship from the United States Department of Energy is 16:1. He encouraged caution about narrowing the range when an analysis is observed or presented.

Commissioner Galvin wished to acknowledge that the market for oil and gas are connected. A long term dislocation between oil and gas lead to the expectation that behavior will change among the consumer who will move to the lower cost commodity. In many instances, if a broad price disparity exists, the market will react.

Co-Chair Stedman explained that the great anticipated parity makes him uncomfortable. Commissioner Galvin suggested that the entire revenue stream generated by the project be viewed by the chairman.

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Commissioner Galvin detailed Slide 20: "Gas Tax Policy Issues"

- What cash flow does the state expect from the gasline?
- What price risk is the state willing to accept?
- Is the state willing to accept the risk of periods where the oil and gas tax revenue is less than oil alone?
- What is the cash flow sharing and risk sharing between the Producers and the State?

Co-Chair Stedman shared an example from a conference he attended in London. He advocated for cash flow in the early part of the economic cycle. He expressed concern about the state's fiscal system.

Commissioner Galvin pointed out that additional evaluation and analysis is necessary prior to determining the parameters of the state's fiscal system.

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Commissioner Galvin moved on to Slide 21: "Issues Surrounding Gas Tax Discussion at this Time"

- Entering two open seasons for the gas pipeline
  - Likely to result in Producers continuing to claim changes in the fiscal system are necessary
- Full commitments to ship gas (i.e. project sanction) not expected until 2014
- Stakeholders will continue to discuss:
  - Necessary Producer cash flow from gas development,
  - Relative risks borne by the Producers and the State,
  - Amount of Fiscal Predictability the Producers need

Co-Chair Stedman wished for an explanation of the project sanction. Commissioner Galvin responded that firm commitments from the producers must be made to finance the project. The pipeline sponsor must make a decision about whether to move forward with construction. The events will take place after the project secures a certificate. The project costs and schedule will be further refined and more certain. The events will take place around 2014.

Co-Chair Stedman asked if the sanction determines whether or not the project will go forward.

Commissioner Galvin pointed out that ultimately the legislature will determine the state's position on the parameters of gas taxes.

Co-Chair Stedman pointed out the significance of May 1st.

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Commissioner Galvin asked what is locked in with the Alaska Gasline Inducement Act (AGIA) open season.

Co-Chair Stedman noted that the AGIA draft regulations came out Friday. Commissioner Galvin clarified that two different sets of regulations were released, one two weeks ago and one on Friday.

Co-Chair Stedman commented that new information might require increased detail. Commissioner Galvin agreed and

admitted that his presentation contained only a high level view of the components of the parity issue.

Commissioner Galvin described Slide 23: "What kind of shipping commitments quality shippers for AGIA Tax and Royalty Inducements?"

For gas to qualify for the tax and royalty inducements, "producer-shippers" and "shippers buying from producers" must meet this requirement under AS 43.90.300:

"Must commit to acquire firm transportation capacity in the first binding open season"

Co-Chair Stedman noted the binding open season deadline of December 2010.

Commissioner Galvin discussed Slide 24: "Definition of Key Terms"

- Precedent Agreement (PA): Establishes general terms of transportation service the conditions under which shipper will be obligated to acquire transportation capacity on the project (via TSA). Also specifies when the shipper and transporter are relieved of those obligations (i.e. conditions).
- Transportation Services Agreement (TSA): Entered when conditions of the PA are met; shipper is then unconditionally obligated to pay for transportation and the transporter to construct the project.

Commissioner Galvin explained that the precedent agreement must be entered into by December 31, 2010 as a result of the initial open season. The precedent agreement governs the extent to which the shippers are obligated to pay those development costs during the development time.

Commissioner Galvin continued that the shipper and the pipeline will enter a transportation services agreement in 2014.

Commissioner Galvin commented that under the proposed AGIA regulations currently out for public comment, a bid must be submitted for firm capacity during the initial open season which must result in a precedent agreement within 180 days of the close of the open season. The process must lead to

an executed transportation services agreement. Capacity that qualifies for the AGIA upstream inducements affects the production tax exemption. The production tax exemption states that if the production tax is changed between now and the time of gas production, an exemption is awarded that is equal to the gas production tax less the production tax in place at the time of the open season. The exemption is good for ten years following the beginning of gas production and applied only to the volumes of gas transmitted through the capacity that qualified for the AGIA inducement.

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Commissioner Galvin addressed Slide 27: "Identifying gas production tax"

- Current Production Tax is calculated on combined oil and gas production, with combined oil and gas lease expenditures, so we need to attribute a "gas production tax" value.
- Under proposed 15.AAX 90.220, to attribute "gas production tax," we use the ratio of the gross value of AGIA gas at the point of production divided by the combined gross value of the oil and all gas at the point of production. This ratio is multiplied by the combined oil and all gas production tax liability.

Commissioner Galvin detailed Slide 28: "Gas Tax Exemption Mathematics" He explained that the AGIA Gas Value Ratio of the gross value at Point of Production divided by the combined oil and gas gross value at the Point of Production multiplied by combined oil and gas production tax liability under the system in effect May 1, 2010, equals the gas production tax liability. He described the mathematical formula on Slide 28.

Co-Chair Stedman noted that Slide 29 exhibits prices close to the forecast by the United States Department of Energy. He pointed out that the parity issue is in effect today and is not a hypothetical issue.

Commissioner Galvin visited Slide 29 and noted that the each individual tax payer will undergo the same process.

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Co-Chair Stedman asked about the timeframe for the calculation. Commissioner Galvin did not know, but would respond later.

Commissioner Galvin explained that the formula looks at the ratio or the percentage of the value of gas against the overall value. The percentage is then multiplied by the combined production tax obligation resulting in a production tax attributed to gas under the proposed regulation.

Commissioner Galvin explained the calculations on Slides 31 and 32.

Co-Chair Stedman commented on the amounts collected using the formula. He asked how much cash would be on the table. Commissioner Galvin answered that the amount depends on the legislature and the tax system. If nothing is done to the tax system then \$5.5 will be the amount. If the tax system is altered, the amounts will differ. If the gas production tax is increased and exceeds \$1.1 billion, then an exemption would be awarded.

Co-Chair Stedman complimented the department on the formula for gas and oil. He asked if Commissioner Galvin would apply the formula with a fifty percent allocation.

Commissioner Galvin commented that the regulations accommodate a past tax consideration. He noted that the allocation of credits was not taken into account.

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Co-Chair Stedman asked to know the cash flow position of the state if regulations take effect in the way that they were written. Commissioner Galvin responded that following May 1st if the legislature decided to "ring fence" gas to separate the gas and oil. The end result is that the state brings in \$7.5 billion without exemption.

Co-Chair Stedman asked for an estimate assuming no changes to statute. Commissioner Galvin answered that the regulations do not establish the funds going to the treasury. If the legislature chooses not to change the current production tax, then the end result is the \$5.5 billion. If the legislature chooses to do something

different with oil and gas taxes, the effect of the regulation will be that the gas tax cannot exceed \$1.19 billion. The state will receive the \$6.4 billion for oil and the \$1.1 billion for gas.

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ADJOURNMENT

The meeting was adjourned at 10:48 AM.