

SENATE FINANCE COMMITTEE

March 4, 2013

9:03 a.m.

[9:03:22 AM](#)

CALL TO ORDER

Co-Chair Meyer called the Senate Finance Committee meeting to order at 9:03 a.m.

MEMBERS PRESENT

Senator Pete Kelly, Co-Chair  
Senator Kevin Meyer, Co-Chair  
Senator Anna Fairclough, Vice-Chair  
Senator Click Bishop  
Senator Mike Dunleavy  
Senator Lyman Hoffman  
Senator Donny Olson

MEMBERS ABSENT

None

ALSO PRESENT

Roger Marks, Legislative Consultant, Legislative Budget and Audit Committee; Senator Cathy Giessel

SUMMARY

SB 21 OIL AND GAS PRODUCTION TAX

SB 21 was HEARD and HELD in committee for further consideration.

#sb21

SENATE BILL NO. 21

"An Act relating to appropriations from taxes paid under the Alaska Net Income Tax Act; relating to the oil and gas production tax rate; relating to gas used in the state; relating to monthly installment payments of the oil and gas production tax; relating to oil and gas production tax credits for certain losses and

expenditures; relating to oil and gas production tax credit certificates; relating to nontransferable tax credits based on production; relating to the oil and gas tax credit fund; relating to annual statements by producers and explorers; relating to the determination of annual oil and gas production tax values including adjustments based on a percentage of gross value at the point of production from certain leases or properties; making conforming amendments; and providing for an effective date."

[9:04:31 AM](#)

ROGER MARKS, LEGISLATIVE CONSULTANT, LEGISLATIVE BUDGET AND AUDIT COMMITTEE, gave a brief overview of his resume and began the presentation, "Review of SB 21(RES) Presentation to Senate Finance" (copy on file).

[9:04:48 AM](#)

Mr. Marks discussed Slide 2, "Roger Marks - Background":

- **Since 2008:** Private consulting practice in Anchorage specializing in petroleum economics and taxation
  - Clients include: State of Alaska Legislature, federal government, local municipalities, University of Alaska, independent oil and gas explorer/producers, pipeline companies
- **1983-2008:** Senior petroleum economist with State of Alaska Department of Revenue Tax Division
  - Fiscal development
    - Statutory and regulatory design
    - Petroleum economic and commercial valuation of exploration, development, production, transportation, refining, marketing, taxation
    - Analysis of international competitiveness
    - Oil and gas valuation
  - North Slope gas commercialization
    - Economic valuation
    - International competitiveness
    - Pipeline financing
    - Taxation
    - Tariff design

•**1977-1983:** Petroleum economist with United States Geological Survey

-Resource evaluation of unleased acreage on Alaska federal Outer Continental Shelf

-Design of bidding systems

•**Publications on Alaska petroleum taxation:** Journal of Petroleum Technology, OPEC Review, Journal of Energy Finance and Development, Oil & Gas Financial Journal, Journal of Economic Issues, Journal of Legal Issues and Cases in Business

[9:06:09 AM](#)

Mr. Marks stated that he would offer several observations about the bill and introduce other possible approaches for the committee to consider. He spoke to Slide 3, "Approach for Evaluation":

- The interest in evaluating the production tax stems from concern over the perception of slow investment and declining production levels on the North Slope
- The international investment climate is characterized by plenty of opportunities, fluid capital, but finite capital
- Investors allocate productive resources to their most highly valued uses
- Taxes are a significant part of the cost structure and under Alaska's Clear and Equitable Share (ACES) they are relatively high
- Tax rates under ACES have made Alaska uncompetitive
- The goal is to make Alaska competitive

[9:07:59 AM](#)

Co-Chair Meyer noted that the current version of the legislation had come from the Senate Resources Committee and that the chair of that committee, Senator Giessel, was present.

[9:08:37 AM](#)

Mr. Marks explained that taxes were the price that an oil producer paid for the opportunity to develop the oil in a certain jurisdiction. He likened the structure to a market

with the sovereign jurisdictions in the role of the seller, oil companies as buyers, and the tax as the price companies paid for goods. He stressed that the state should remain competitive, while still reaping a fair share of profits.

Mr. Marks discussed Slide 4, "Defining Fair Share: Determining a Competitive Tax Structure":

- Determine who the competition is
- Determine where Alaska should be in within that competition
- Design a system to achieve that target

Mr. Marks stated that it had been demonstrated that oil companies were willing to pay more taxes when the rewards were greater. He relayed that companies would pay more taxes in places where there was either more reserves, less risk, or lower cost. He offered that Alaska was not competitive with Kazakhstan, which had more oil at lower cost with lower risk. He believed that when looking at the competition world-wide, Alaska needed to examine places with a similar risk/reward balance.

[9:11:33 AM](#)

Mr. Marks addressed Slide 5, "Alaska Peer Group Government Take at \$110/bbl Market Price." The slide illustrated who Alaska was competing with worldwide after looking at the factors of geography, institutional environment, operating environment and geologic potential. The slide reflected total taxes as a percentage of net value; all taxes and royalties. He stated that he had researched on North America regimes (U.S. states and Canadian provinces with greater than 200,000 bbl/day production), tax and royalty regimes, arctic regimes and regimes with similar production and reserves (between 400,000 - 800,000 bbl/day production and between 2 - 6 billion bbl proved reserves). He pointed out to the committee that the graph ordered the different regimes from low government take to high government take; at 74 percent Alaska fell just below Norway, which had the highest percentage of government take. He detailed that of the 74 percent, half was production tax and the other half were royalties, property taxes and state and corporate income tax. He believed that a competitive target for \$110/bbl would be 62 percent.

[9:14:59 AM](#)

Mr. Marks addressed Slide 6, "Alaska Peer Group Government Take at \$70/bbl Market Price." He relayed that at \$70/bbl the government take under the current tax regime was at 68 percent. He said that at \$70/bbl, 65 percent would be more competitive number.

Mr. Marks discussed Slide 7, "Alaska Peer Group Government Take at \$160/bbl Market Price." He pointed out that the current government take was at 77 percent. He thought that 62 percent would be a more attractive number.

[9:15:33 AM](#)

Mr. Marks spoke to Slide 8, "Proposed Government Take to be Competitive":

- 65% take at \$70/bbl
  
- Level down to 62% take at current prices (\$110/bbl) and beyond
  
- A fairly neutral system

Mr. Marks explained that a regressive system was when the government take was high at lower prices and low at higher prices; a progressive system was where the take was low at low prices and high and at high prices and neutral systems were generally flat across the price spectrum in regard to government take. He thought that it would be necessary to determine a target number that informed where the tax system would fall.

[9:17:29 AM](#)

Mr. Marks spoke to Slide 9, "Each Percentage Point of Take is Worth a Lot of Money At \$110/bbl Each Percentage Point in Government Take Means \$142 Million Annually to Government/Producers":

- Market Price \$110/bbl
  - Costs \$29
- Net value \$81/bbl
  
- Taxable percentage .875

- Million bbls/yr (@550,000/day) 201
- One-percent .01
- TOTAL \$142 mm

Mr. Marks stressed the difference a few percentage points could make in the overall numbers; each percentage point was worth a substantial amount of money.

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Mr. Marks noted that the ten percentage points in-between Oklahoma and Alaska were equal to \$1.4 billion, which he believed illustrated the main problem with ACES.

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Mr. Marks relayed that regressive elements in ACES made it difficult to hit the financial target at low prices. He discussed Slide 10, "Regressive Elements in Fiscal System":

- Make for challenging economics at low prices, particularly for high cost fields
- Makes for challenge in designing production tax to offset effects
- Royalty
- Property Tax
- Minimum Tax

He added that a 65 percent target at low prices; even if there was zero tax, and particularly due to the royalty, would result in high government take.

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AT EASE

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RECONVENED

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Mr. Marks opined that the challenge of designing a tax system that included the regressive elements was that there

was not a single system that applied uniformly to all costs. He clarified that the royalty, property and minimum taxes would not be eliminated, but needed to be addressed.

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Mr. Marks spoke the need to examine how the tax system worked with the cost spectrum on the North Slope. He referred to Slide 11, "Cost Spectrum":

- Low cost fields (existing production)
  - \$7/bbl capital; \$13/bbl operating (\$20/bbl total)
- Medium cost fields (new production from existing fields)
  - \$20/bbl capital; \$17/bbl operating (\$37/bbl total)
- High cost fields (new fields and some heavy and viscous oil)
  - \$33/bbl capital; \$21/bbl operating (\$54/bbl total)

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Mr. Marks discussed Slide 12, "Example of Royalty Regressivity":

ANS Market Price (\$/bbl) \$70.00  
Less: Transportation Costs (\$/bbl) \$9.00  
  
Gross Value (\$/bbl) \$61.00  
Less: Upstream Capital and Operating Costs (\$/bbl) \$50.00  
  
Net Value (\$/bbl) \$11.00  
  
Royalty (1/8 of Gross Value) (\$/bbl) \$7.63  
  
Royalty chews up 70% of profit before property, production and income taxes

[9:24:57 AM](#)

Mr. Marks addressed Slide 13, "Comparison of Gross, Net & Royalty Low & High Cost Fields." He related that the blue dotted line on the graph reflected the gross market value, a spectrum from \$60 to \$190/bbl. He noted the green dotted

line that represented the net-low cost, a spectrum from \$40 to \$170/bbl. The red dotted line represented net-high cost on a spectrum of \$10 to \$140/bbl. He noted that the blue line at the bottom illustrated that the royalty for both the low and high cost fields were the same.

[9:26:21 AM](#)

Mr. Marks discussed Slide 14, "CS SB 21(RES) Features":

- 35% rate applied to net (production tax) value (ptv)
- 30% gross revenue exclusion (GRE) used in computing net
- \$5/bbl credit
- If ptv is negative, the loss can be carried forward to when ptv is positive as a credit at 35% of the loss

Mr. Marks stated that the last bullet point was a provision that would allow tax payers to realize the benefit of deductions if they fit the tax floor of zero. He shared that the bill proposed that the credit be deferred, with interest, until the time of positive income.

[9:28:14 AM](#)

Mr. Marks addressed Slide 15, "How Features Operate":

- 1) GRE (CS increased from 20% to 30% for new fields)
  - Brings down tax rate more for high cost fields and more at lower prices
- 2) Per barrel credit (Introduced in CS)
  - Focuses on bringing tax rate down high cost fields at low prices
- 3) Rate (Increased from 25% to 35% in CS)
  - Moves entire curve for all fields up or down

Mr. Marks reiterated that the features were meant to work together.

[9:29:44 AM](#)

Mr. Marks spoke to Slide 16, "Overview of How Features Interact":

- Tax is higher of net and 4% of gross calculation
- There is a floor of zero on each
- The GRE is used to calculate the net; it is not used to calculate the gross minimum
- The loss carry-forward credit is applicable regardless of whether net or the gross minimum is invoked
- The \$5/bbl credit is applicable for both the net and gross minimum calculation. It can only take the tax down to zero. Any unused amounts are lost.

[9:31:26 AM](#)

Mr. Marks discussed slide 17 titled "Government Take CS SB 21 (Res)." He stated that the graph reflected a more competitive regime than ACES. He said that the bill would flatten out the taxes on the low side for high cost fields. He warned that the committee should not underappreciate the role that low tax scenarios played in corporate planning. He explained that companies performed stress tests to ensure that money was not lost at low prices. He believed that it would behoove the committee to understand how government take related to a target and how the varying takes related to each other.

[9:33:06 AM](#)

Senator Hoffman requested documentation of the current government take in dollars and how it related to the state treasury, as well as what the industry would be taking in monetarily.

Mr. Marks replied that he would provide the information in an expedient manner.

[9:33:40 AM](#)

Senator Dunleavy wondered if the frequency of changes in the state's oil tax policy had affected the investment climate.

Mr. Marks replied that fiscal stability was very important to possible investors. He believed that Texas had not had a material change to its fiscal structure in the last ten years, which was attractive to industry. He related that Norway's current structure had been in place since 1994. He

said that he could provide a general assessment within the peer group at a later date.

9:35:52 AM

Co-Chair Meyer offered that PFC might have that information readily available during the afternoon meeting.

9:36:19 AM

Mr. Marks continued to discuss Slide 17. He spoke to how the different fiscal takes related to each other and the difference between the low and high cost fields. He relayed that the difference was approximately 7 percentage points after \$110/bbl.

9:37:25 AM

Mr. Marks spoke to Slide 18, "General Comments: Differences in Take Depending on Costs and Fields":

- Given a target take at a given price, the system should come as close as possible to hitting the target over a spectrum of costs
- Treating Different Fields Differently (No GRE for Existing Participating Areas)
  - Both existing and new production benefit from existing and new investment.
  - Existing fields may contain costly isolated targets in existing participating areas.
  - The system is efficient when the highest valued resources get produced. The tax system should not distort this; it should not favor investing in certain cost fields over others.
  - Differential treatment could cause unwanted shifts in investment.

Mr. Marks offered the economic limit factor (ELF) as an example of a tax system that resulted in differential treatment that caused unwanted shifts in investment. He relayed that in 1989 ELF was altered so that large fields had high tax rates and low fields had low tax rates, which caused an immediate shift in investment from high tax to low tax fields. He said that this caused production to decline on the high tax fields and increase on low tax fields, but the high tax field decline was significant. He

expressed concern that different tax rates for different fields would cause an unwanted shift in investment.

[9:40:43 AM](#)

Senator Hoffman pointed out that in the later years of the ELF regime the tax rates had shifted drastically downward for Kuparuk.

Mr. Marks replied in the affirmative. He noted that the Kuparuk field was an unusual case. He shared that in 1996 Kuparuk had a high ELF, and the tax rate was based both on average well productivity and field size; if less than 300/bbl were produced then no tax was paid. He furthered that Kuparuk's average well productivity was not much more than 300/bbl. He said that in the last years of ELF, if a company made investment to increase production it would increase production on every single barrel in the field and that that increase in tax contributed to the new barrels, which in turn had a very high tax rate. As a result, the production on Kuparuk declined to below 300/bbl resulting in no tax.

[9:42:41 AM](#)

Senator Hoffman inquired how many years Kuparuk had no tax, and whether having no tax had stimulated investment.

Mr. Marks replied that it did not stimulate investment because the marginal tax on increased production under ELF was too high. He said that the rate at Kuparuk had been zero during the last two years of ELF.

[9:43:24 AM](#)

Senator Hoffman asked why no investments had occurred even though Kuparuk was the second largest field on the North Slope.

Mr. Marks replied that during the ELF era oil prices were much lower than present. He contested that the reason no investments occurred at Kuparuk during the latter years of ELF was because of the way the tax structure worked; if new barrels were produced the tax rate for every barrel in the field increased. He reiterated that the increased tax, attributable to the new barrels, made for a high tax rate and poor economics.

[9:44:54 AM](#)

Mr. Marks noted that Slide 13 reflected the royalty distortion, or how much the royalty eroded the net value at low prices.

Mr. Marks spoke to Slide 19, "Specific Comments on Features":

- Gross Revenue Exclusion and \$5/bbl Credit
  - Same for all cost structures - unconnected to actual production costs
  - Has different effects at low prices depending on cost structure
  - Unaffected* by investment
  - \$5/bbl credit: Lose some of it at low prices if at \$0 tax floor
  
- 20% Capital Credit (**Revoked in Original Bill and CS**)
  - Explicitly related to actual costs
  - Automatic adjustment to different cost structures: low credit if low costs; high credit if high costs
  - Affected* by investment
  - Do not lose it at low prices
  - Boost to net present value and rate of return

[9:45:13 AM](#)

Mr. Marks continued to discuss Slide 19. He suggested that the committee consider retaining the 20 percent capital credit. He understood that there could be concern surrounding the cash-flow associated with the credit, and the exploration credits as well, but that targeted capital credits could be beneficial.

[9:49:55 AM](#)

Senator Hoffman pointed out to the committee that retaining the 20 percent capital credit could cost the state nearly \$1 billion, which was why it had been excluded from the legislation. He believed that by accepting Mr. Marks's recommendation on capital credits could result in complications with operating costs for the state of Alaska over the next ten years.

[9:50:50 AM](#)

Co-Chair Meyer hoped that a plan could be developed that increased investment and maximized the state's return. He offered that the current capital credit did not target production and that Mr. Marks was suggesting that the capital credit would only apply to companies that were drilling wells. He said that industry would not drill wells if they had no intention to produce. He believed that the numbers needed to be examined to determine the potential impact to the state. He understood that the capital credit under discussion was similar to an "uplift credit" used in Norway.

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Senator Hoffman observed that the state would not get more production without exploration. He thought that the state could encourage exploration, but the success of exploratory wells provided no guarantee that the state would find oil that would lead to production. He stressed that although the state wanted more production it was necessary to first encourage more exploration.

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Co-Chair Meyer thought that the majority of the known oil in the legacy fields was hard to get to. He opined that, theoretically, targeting wells in the legacy fields should lead to more production, but acknowledged that exploration was needed as well.

[9:54:09 AM](#)

Vice-Chair Fairclough stated that if the state was looking for immediately returns on its investment, a reflective look needed to be taken at the recovery rate in Prudhoe Bay. She believed that more exploration could lead to more oil in the pipe for the long-term. She added that in the short-term the legacy fields were Alaska best opportunity in regard to immediate oil in the pipe.

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Senator Dunleavy inquired if there had been any study regarding how the fiscal/spending policies at the state level affected the investment psychology of corporations.

Mr. Marks responded that in the affirmative. He said that that 90 percent of Alaska's general fund revenue came from the oil industry. He believed that the state could benefit from a diversified tax base. He furthered that there could be any number of reasons why there would be no investment response even if the state passed a "perfect" tax. He stated that the bill had taken progressivity off the table. He related that progressivity provided certainty and that oil companies hated uncertainty; some of the corporations would prefer, particularly in more volatile countries, to negotiate a progressive system to protect against price increases. He stressed that corporations viewed large tax increases as a confiscation of assets.

[10:01:57 AM](#)

Co-Chair Meyer requested a response regarding the targeted capital credits versus the GRE and how the state could limit the impact to the state treasury.

Mr. Marks replied that the targeted tax credit was preferable because they provided incentive to invest and the credit was directly related to the cost of production. He offered that, if the concern was that the credits were being currently used for activities that were not related directly to oil production, the targeted tax credit would be an improvement over the GRE or no credit at all.

[10:04:08 AM](#)

Senator Olson inquired if Norway had a GRE element in its tax structure.

Mr. Marks replied no. He furthered that Norway did not have a royalty tax. He noted that the reason Norway had a higher take than Alaska was because producers in Norway were more protective on the low side of oil prices.

[10:04:42 AM](#)

Mr. Marks discussed Slide 20, "How Much of \$5 Credit Used", which reflected how of the non-transferable \$5 credit was used for different cost fields. He noted that low-cost fields received the \$5 credit at all prices because they never hit the floor, but the medium cost fields received less than the full \$5 because they hit the floor at \$90 ANS market price.

[10:05:47 AM](#)

Mr. Marks spoke to Slide 21, "Cash Flow Comparison - Value of 30 percent GRE & \$5 Credit vs. 20 percent Capital Credit Mid Cost Fields", which reflected what the \$5 credit and the GRE were worth together, as opposed to a 20 percent capital credit, for a mid-cost field. He explained that the 20 percent capital credit was the same regardless of oil price because it was based on spending, but the GRE and the \$5 credit was significantly higher.

[10:06:52 AM](#)

Senator Hoffman requested a figure of what the projections on slides 20 and 21 would cost the state treasury.

Mr. Marks responded that he could provide the information.

[10:07:54 AM](#)

Mr. Marks spoke to Slide 22, "Government Take - 40 percent Rate/ 30 percent GRE All Fields/ \$5/bbl Credit." Mr. Marks offered that the slide illustrated the state having the goal of a 62 percent take with similar tax rates across the entire spectrum of costs.

[10:08:32 AM](#)

Mr. Marks discussed Slide 23, "Government Take - 23 percent Rate/ 20 percent Capital Credit." He stated that this scenario brought down the low and mid-cost fields at lower prices. He noted that the credit was reflective of actual costs.

[10:10:21 AM](#)

Mr. Marks looked at Slide 24, "Government Take - 26 percent Rate/ 20 percent Capital Credit/ 5 percent GRE All Fields/ \$2/bbl Credit." He said that the scenario incorporated all of the discussed features. He explained that the curve reflected a slow, downward slant based on the higher oil prices. He relayed that the royalty still had an effect at high costs and that the GRE was able to level the curve at higher prices.

[10:11:47 AM](#)

Mr. Marks discussed Slide 25, "Progressivity?":

- Can use a progressive structure to flatten out the curve at both ends and make a neutral system, which aligns interests
- Or can make a progressive system
  - Pros (if not excessive)
    - Protects producers interests at low costs
    - Protects state's interests at high costs
    - May be necessary for fiscal stability
  - Cons
    - Only works if balanced at low and high prices
    - With inherent regressive elements may be difficult to achieve, or can only achieve modestly
    - Many jurisdictions in the peer group do not have progressivity

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Senator Hoffman wondered if projections using the current tax structure could be compared to the schedules in the presentation.

[10:13:47 AM](#)

Mr. Marks replied in the affirmative.

[10:14:28 AM](#)

Senator Bishop clarified that Senator Hoffman wanted to see ACES compared with the government take scenarios in the presentation.

[10:14:47 AM](#)

Mr. Marks discussed Slide 26, "Example: Government Take under Bracketed Progressivity - Base Rate of 20 percent up to \$60 Net/ Brackets up to 50 percent at \$160 Net/ Includes 20 percent Capital Credit." He recommended against the progressivity structure under ACES. He offered that the example system reflected on the slide would be more attractive to industry.

[10:15:46 AM](#)

Mr. Marks spoke to Slide 27, "Other Issue: Section 10":

- Defers loss carry-forward credits until positive income
- Would eliminate loss carry-forward credit for unsuccessful explorer with no other nexus in state
- May discourage new entrants

[10:16:43 AM](#)

Mr. Marks discussed Slide 28 titled "Other Issues: Section 25":

- Eliminates loss carry-forward credits for exploration expenses
- Explorers with offsetting income can still realize benefit of deduction; those without offsetting income will not
- Disparate treatment
- Also, suppose a producer has \$100 in gross value. Suppose exploration expenses are \$90. And suppose non-exploration expenses are \$80. If they deduct the exploration expenses first, they will have \$10. Then they can deduct the \$80 non-exploration expense from the \$10. This will give them \$70 in losses they can use for the loss carry-forward credit.

But, if they deduct the \$80 non-exploration first, they will have \$20. Under the amendment they would only be able to deduct \$20 of the exploration expense.

So there needs to be something about the order in which costs are deducted.

[10:19:21 AM](#)

Co-Chair Meyer appreciated that Mr. Marks was offering alternatives. He noted that the capital cost credits had been expensive and had not had the intended effect.

Senator Dunleavy requested a list of the countries that Alaska's tax structure was competing with, and a breakdown

of the economic diversification of those countries. He also wondered about the effects of an income tax in those countries.

[10:21:53 AM](#)

Co-Chair Meyer highlighted that there were factors at play that were not under the state's control, particularly accessibility and weather. He stressed that the state was interested in being attractive not competitive.

[10:22:38 AM](#)

Senator Olson asked whether the state would lose \$1 billion due to the 20 percent capital credit.

Mr. Marks relied that some of the credit were capital credits and some were exploration credits. He referred the question to DOR.

Senator Olson hypothesized that the figure was accurate. He queried a recommendation, outside of the GRE, for the state to rectify such a sizeable deficit to the treasury.

Mr. Marks replied that the GRE was an innovative device, but that it also involved cash flow out. He shared that the amount of activity that resulted from the capital credits had been disappointing. He believed that all of the features needed to be examined holistically.

[10:25:20 AM](#)

Senator Olson inquired if Mr. Marks had a suggestion to rectify the projected deficit.

Mr. Marks related that the best way to deal with the deficit was to have a good tax structure.

[10:26:14 AM](#)

Senator Bishop understood that Alaska had changed its tax rate historically very seven years since 1977. He noted that the easy oil was gone and that as the state moved forward a stable tax structure was a necessity. He surmised that the state should reconsider looking at progressivity in order to quell the possibility of creating a new tax structure if oil reached \$200/bbl.

Mr. Marks replied in the affirmative.

[10:27:58 AM](#)

SB 21 was HEARD and HELD in committee for further consideration.

[10:28:48 AM](#)

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ADJOURNMENT

The meeting was adjourned at 10:29 a.m.