ALASKA STATE LEGISLATURE
HOUSE RESOURCES STANDING COMMITTEE
February 27, 2017
1:00 p.m.

MEMBERS PRESENT

Representative Andy Josephson, Co-Chair
Representative Geran Tarr, Co-Chair
Representative Dean Westlake, Vice Chair
Representative Harriet Drummond
Representative Justin Parish
Representative Chris Birch
Representative DeLena Johnson
Representative George Rauscher
Representative David Talerico

MEMBERS ABSENT

Representative Mike Chenault (alternate)
Representative Chris Tuck (alternate)

OTHER LEGISLATORS PRESENT

Representative Bryce Edgmon
Senator Gary Stevens

COMMITTEE CALENDAR

PRESENTATION(S): UNITED TRIBES OF BRISTOL BAY

- HEARD

HOUSE BILL NO. 111
"An Act relating to the oil and gas production tax, tax payments, and credits; relating to interest applicable to delinquent oil and gas production tax; and providing for an effective date."

- HEARD & HELD

PREVIOUS COMMITTEE ACTION

BILL: HB 111
SHORT TITLE: OIL & GAS PRODUCTION TAX;PAYMENTS;CREDITS
SPONSOR(s): RESOURCES

02/08/17	(H)	READ THE FIRST TIME - REFERRALS
02/08/17	(H)	RES, FIN
02/08/17	(H)	TALERICO OBJECTED TO INTRODUCTION
02/08/17	(H)	INTRODUCTION RULED IN ORDER
02/08/17	(H)	SUSTAINED RULING OF CHAIR Y23 N15 E2
02/08/17	(H)	RES AT 1:00 PM BARNES 124
02/08/17	(H)	Heard & Held
02/08/17	(H)	MINUTE(RES)
02/13/17	(H)	RES AT 1:00 PM BARNES 124
02/13/17	(H)	Heard & Held
02/13/17	(H)	MINUTE(RES)
02/17/17	(H)	RES AT 1:00 PM BARNES 124
02/17/17	(H)	Heard & Held
02/17/17	(H)	MINUTE(RES)
02/20/17	(H)	RES AT 1:00 PM BARNES 124
02/20/17	(H)	Heard & Held
02/20/17	(H)	MINUTE(RES)
02/22/17	(H)	RES AT 1:00 PM BARNES 124
02/22/17	(H)	Heard & Held
02/22/17	(H)	MINUTE(RES)
02/22/17	(H)	RES AT 6:30 PM BARNES 124
02/22/17	(H)	Heard & Held
02/22/17	(H)	MINUTE(RES)
02/24/17	(H)	RES AT 1:00 PM BARNES 124
02/24/17	(H)	Heard & Held
02/24/17	(H)	MINUTE(RES)
02/27/17	(H)	RES AT 1:00 PM BARNES 124

WITNESS REGISTER

ALANNAH HURLEY, Executive Director
United Tribes of Bristol Bay
Dillingham, Alaska
POSITION STATEMENT: Provided a PowerPoint presentation entitled, "The Pebble Mine: A Decade of Deception," and answered questions.

DAVID CHAMBERS, President
Center for Science in Public Participation
Bozeman, Montana
POSITION STATEMENT: Participated in the presentation by United Tribes of Bristol Bay.

RICH RUGGIERO, Consultant
Legislative Audit and Budget Committee
Alaska State Legislature; Managing Partner
Castle Gap Advisors

Houston, Texas
POSITION STATEMENT: Provided a PowerPoint presentation entitled, "Petroleum Taxation Design," dated 2/27/17, and answered questions.

ACTION NARRATIVE

1:00:26 PM

CO-CHAIR ANDY JOSEPHSON called the House Resources Standing Committee meeting to order at 1:00 p.m. Representatives Josephson, Parish, Rauscher, Drummond, Johnson, and Westlake were present at the call to order. Representatives Talerico, Birch, and Tarr arrived as the meeting was in progress. Also present were Representative Edgmon and Senator Stevens.

1:01:03 PM

PRESENTATION(S): UNITED TRIBES OF BRISTOL BAY

CO-CHAIR JOSEPHSON announced that the first order of business would be a presentation by United Tribes of Bristol Bay.

1:01:50 PM

ALANNAH HURLEY, Executive Director, United Tribes of Bristol Bay, informed the committee the United Tribes of Bristol Bay (UTBB) is a consortium of 14 Bristol Bay federally recognized tribal governments working together to protect the Yup'ik, Dena'ina, and Alutiq way of life. Her organization represents over 80 percent of the total population of Bristol Bay, and has been fighting to protect its homeland from a large hard rock mine that would be built on the top of the headwaters of the watershed of one of the largest sockeye salmon fisheries. Ms. Hurley said UTBB's purpose is to share its members' concerns about the potential impact of one decade of exploration work at the site of the proposed Pebble mine. Due to these concerns, in 2015 the Department of Natural Resources (DNR) was petitioned to take a closer look at the potential impact of Pebble's exploration. It was determined that DNR's level of inspection and investigation would not address local concerns, therefore UTBB sent a field team to investigate the site last summer. The results of the field study have raised issues of site contamination and the safety of the residents of Bristol Bay.

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DAVID CHAMBERS, President, Center for Science in Public Participation (CSP2), informed the committee he is a geophysicist who has worked on the environmental impacts of mining for about 25 years, after working for 15 years in the industry. United Tribes of Bristol Bay tasked CSP2 to examine the reclamation of Pebble Limited Partnership (PLP) drill holes during August, 2016. Other members of the field team included a geochemist, a pilot, and a local guide. He provided a map of the area from Bristol Bay north to the PLP prospect and mining claims [slide 1]. An additional map of the same area illustrated mining claims near the towns of Nondalton, Iliamna, and Newhalen [slide 2]. Dr. Chambers provided a topographical map indicating the location of drill borehole sites in Pebble West, which is an open pit mine, and in Pebble East, which is an underground deposit. There were over 1,300 boreholes to inspect, ranging from approximately 20 feet deep to over 6,000 feet deep. On the map, actual holes that were inspected were indicated by red dots [slide 3]. At each site, the team inspected all holes within walking distance; if a drill borehole was emanating water, water samples and soil samples were taken. The team visited 150 sites and documented 107 sites [slide 4]. Slide 5 pictured multiple drill sites on August 3, 2016, and he explained drill boreholes may be closely grouped or isolated. Dr. Chambers said problems were found in the following four general areas: 1. 17 sites had acidic soils with pH lower than 4.5; 2. artesian drill holes had elevated levels of sulfate, copper, and other heavy metals draining into ground water; 3. found were a few locations with petroleum contamination; 4. found were steel drill casings above ground that pose a safety hazard to snow machines and which are required to be cut off at or below ground level at reclamation. Of 1,355 sites, 107 were documented, and of that 44 had environmental issues - 27 with minor issues - and 36 were fully reclaimed [slide 6]. Slide 7 pictured petroleum contamination and an exposed drill pipe; slide 8 pictured an exposed drill pipe; slide 9 pictured two active monitoring wells; slide 10 pictured a hole with an artesian flow; slide 11 pictured an artesian flow, which occurs when groundwater pressurizes the hole and leaks water containing elevated levels of copper, sulfate, and other heavy metals. Slide 12 pictured an artesian flow with drill cuttings, and slide 13 pictured an artesian flow with drill mud placed to cap the hole. Dr. Chambers explained most holes leak in the spring. Slide 14 pictured a drill hole that was drilled in 2006 and with acidic soil; slide 15 pictured orange soil which had broken down and formed sulfuric acid; slide 16 pictured drill holes affecting nearby vegetation; slide 17 pictured two examples of poor waste disposal practices.

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DR. CHAMBERS, in response to Co-Chair Josephson, advised the post disposal of materials containing metals and acidic soil kills vegetation. In some cases, fluid on top of the drilling material that is discharged builds up layers and causes problems. In 2008, PLP began to use sumps at drill sites to catch drill material [slides 18-20]. Dr. Chambers opined the use of sumps is the best approach, although because the sumps are not lined, metals and acid leach contaminants into groundwater and "then the question would be 'Is there enough leaching to actually cause a problem?' and we just didn't have the capability to assess that problem ...." Slide 21 pictured a reclaimed drill sump after material was dug out and used to cover the trench; the vegetation on top is expected to reclaim itself in 100 years.

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MS. HURLEY restated there are scientifically verified reclamation and safety problems at the PLP site. The state permit held by PLP is a miscellaneous land use permit (MLUP) that is up for renewal in March, 2017. In November, she said, DNR took public comment on the MLUP renewal and over 1,000 comments urged DNR to hold PLP accountable "for the mess that they have left in Bristol Bay." Nunamta Aulukestai has submitted a letter to DNR outlining the potential violations of PLP's current MLUP. Further, UTBB asked DNR to include specific stipulations to PLP's MLUP renewal, including a bonding requirement. Ms. Hurley said the aforementioned report has verified the findings of local elders, fishers, and hunters who have seen impacts to their way of life; in fact, [PLP] is a foreign mining company that does not wish to be a good neighbor to the people of Bristol Bay. However, Bristol Bay is not alone in its opposition to the mine and the original 14 petitioners to DNR remain steadfast in their efforts. She noted today's hearing is the first time UTBB has been invited to speak before the legislature on this issue. Ms. Hurley said the mine does not add up scientifically, economically, or morally, and asked that DNR issue stipulations on a future MLUP, and for the legislature to ensure Bristol Bay will not see a toxic project, but that healthy salmon runs will continue to feed the hearts and souls of its Tribal communities.

REPRESENTATIVE BIRCH asked who invited UTBB to present, and whether Iliamna is a member of UTBB.

MS. HURLEY said UTBB was invited by the co-chairs, and UTBB consists of 14 tribes representing over 80 percent of the population of Bristol Bay. [Tribes listed on UTBB letterhead did not include Iliamna.]

REPRESENTATIVE BIRCH asked whether Ms. Hurley has visited the site of the Pebble mine.

MS. HURLEY said yes. In further response to Representative Birch, she said UTBB was one of the original petitioners to DNR in 2015, and has been working closely with DNR's commissioners since submitting its petition.

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REPRESENTATIVE BIRCH noted the site is on state land and asked whether UTBB has contacted the entities operating on state property with its concerns.

MS. HURLEY said UTBB has not contacted Northern Dynasty [sole owner of PLP].

REPRESENTATIVE RAUSCHER asked whether there are any documented issues that have "gone against anything the DNR has oversight on."

MS. HURLEY referred to a letter to DNR dated 11/15/16, written by Trustees for Alaska on behalf of its partner Nunamta Aulukestai that outlined violations of PLP's current MLUP.

DR. CHAMBERS added that in terms of cleaning up a site, there are issues, and said, "This is not gross environmental negligence, but it isn't good practice either."

CO-CHAIR JOSEPHSON surmised DNR's reluctance to issue a "standard-length MLUP sends a message of some sort ...."

DR. CHAMBERS, speaking from his experience with mine financial sureties, noted PLP is not required by DNR to have a financial surety attached, however, cleaning up the aforementioned sites would be expensive, and the state may be left with the expense.

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REPRESENTATIVE RAUSCHER remarked:

I'm trying to understand the DNR's oversight as opposed to what other standard are we, are we looking at this through

MS. HURLEY further explained DNR took comments in November, 2016, and announced it would take into consideration public comments, and would review the findings of the aforementioned report.

DR. CHAMBERS, in response to Representative Rauscher, opined the appropriate standard of reclamation is that shown on slide 21 - no leaking holes, standing pipes, or acidic soils - similar to those required of the oil industry.

REPRESENTATIVE PARISH asked whether the 107 inspection sites were randomly selected.

DR. CHAMBERS said no, there were two basic criteria: 1. if DNR had previously reported problems; 2. if there were possible problems at a site located near a water body.

REPRESENTATIVE PARISH questioned whether there could be similar petroleum contamination or acidic soil conditions occurring naturally.

DR. CHAMBERS said the soil is uncharacteristically acidic; in fact, normal soil sampling revealed a pH within a 6-7.5 range. In further response to Representative Parish, he explained pH is a logarithmic scale, so a pH of 6 is ten times as acidic as a pH of 7. He added that petroleum contamination was not seen by the team.

REPRESENTATIVE WESTLAKE observed the survey found findings in four general areas, and asked whether the report includes a control sample.

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DR. CHAMBERS said yes.

MS. HURLEY pointed out the five specific stipulations UTBB and others have asked DNR to place on the renewed MLUP are included in the letter from UTBB to DNR dated 11/31/16, and found in the committee packet.

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REPRESENTATIVE DRUMMOND further questioned how sites were chosen.

DR. CHAMBERS restated the two criteria, and added that the sites were targeted and were not a random selection, thus CSP2 did not extrapolate its findings to the total number of all sites.

REPRESENTATIVE DRUMMOND asked for an estimate of the cost of inspecting all of the sites.

DR. CHAMBERS estimated several hundred thousand dollars. In further response to Representative Drummond, he opined DNR ultimately has to inspect all of the sites because it has been shown that not all are appropriately reclaimed. In further response to Representative Drummond, he stated in general, the requirements for reclamation and for financial assurance on the oil industry are much more strict than on the mining industry, and pointed out mines have no catastrophic financial surety required for a large mine; for example, in British Columbia, Canada, there was no financial assurance required for the tailings dam that failed at Mount Polley in 2014, although financial surety is required of the oil pipeline industry and the oil tanker shipping industry.

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REPRESENTATIVE DRUMMOND said she was not sure whether adequate financial assurance was required of the oil and gas industry in Alaska.

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REPRESENTATIVE JOHNSON asked whether there are violations of the permit which DNR has not addressed.

MS. HURLEY returned attention to the letter dated 11/15/16 written by [Trustees for Alaska on behalf of] Numata Aulukestai that outlined current violations, citing law, and based on the findings of the report, which was provided in the committee packet. In further response to Representative Johnson, she said UTBB would like the committee to support the stipulations that UTBB requested DNR include on the renewed MLUP.

1:40:08 PM

CO-CHAIR TARR acknowledged UTBB's request and advised the stipulations have been submitted to the committee for review.

REPRESENTATIVE TALERICO asked whether there is a requirement for reclamation bonding for operating a mine, but not during the exploration phase.

DR. CHAMBERS said yes.

CO-CHAIR JOSEPHSON said this is a significant environmental and divisive issue for the state.

REPRESENTATIVE BIRCH questioned when the committee will hear testimony from DNR on the assertions raised by the presentation. He noted it is important to have participation from DNR because it is responsible for oversight of state lands that are subject to mineral claims.

CO-CHAIR TARR agreed, and advised the commissioner [of DNR] is available for visits to legislators' offices to talk about the MLUP until the committee has time [to hear further testimony on this issue].

REPRESENTATIVE BIRCH restated the committee's responsibility to provide fair and equal time for all parties in order to hear all sides of the issue.

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The committee took an at-ease from 1:43 p.m. to 1:45 p.m.

[CO-CHAIR JOSEPHSON passed the gavel to Co-Chair Tarr.]

HB 111-OIL & GAS PRODUCTION TAX;PAYMENTS;CREDITS

1:45:38 PM

CO-CHAIR TARR announced that the final only order of business would be HOUSE BILL NO. 111, "An Act relating to the oil and gas production tax, tax payments, and credits; relating to interest applicable to delinquent oil and gas production tax; and providing for an effective date."

CO-CHAIR TARR made announcements.

1:47:10 PM

RICHARD RUGGIERO, Consultant, Legislative Audit and Budget Committee, Alaska State Legislature; Managing Partner, Castle

Gap Advisors, provided a PowerPoint presentation entitled, "Petroleum Taxation Design," dated 2/27/17. He summarized from an earlier presentation to the House Resources Standing Committee entitled, "Developing Petroleum Fiscal Policy" provided at the meeting of 2/20/17, restating the following key points: there is constant change in the industry, including government terms; governments often make corrections to a near-term issue which jeopardizes long-term goals; increase in government take is a reduction in value for industry; a historical perspective and transparency create better tax systems; new players should be encouraged; regime to regime comparisons should be questioned; countries have different needs [slide 3]. Slide 4 illustrated petroleum taxation change charts, and he acknowledged many governments change their fiscal systems in response to the volatility in oil prices, as was presented in previous testimony by the Alaska Oil and Gas Association (AOGA). The charts identified the many governments that increased their take during rising oil prices, and that during periods of rapid decline in oil price, governments lowered take and created incentives.

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REPRESENTATIVE BIRCH pointed out when oil was plummeting in value, Alaska was the only regime that increased government take. His stated the distinction between the two slides [presented by Mr. Ruggiero and AOGA] is his concern that Alaska will not be competitive if it tries "to squeeze more revenue out of, out of an already struggling industry."

MR. RUGGIERO agreed.

REPRESENTATIVE RAUSCHER questioned whether the information on the aforementioned charts indicated if any of the many changes in fiscal policy were successful, for example, the changes made by Russia.

MR. RUGGIERO observed the United Kingdom has made significant changes in response to high and low oil prices; however, other countries react in an incremental way. In Russia, the government has taken over a working ownership interest from multinational companies that had started or developed fields. In further response to Representative Rauscher, he said some changes are working, and countries have gained investment and development. However, sometimes a successful policy is unique, and he gave an example of a Southeast Asia country that needed a source for natural gas.

REPRESENTATIVE JOHNSON understood the charts on slide 4 intend to give a sense of the inconsistencies in Alaska's oil tax policy. However, she pointed out that from January 15 all of the changes [to other regimes] are consistently to fiscal incentives, because oil prices are going down, and when oil prices go up, they are consistently increasing taxes. Representative Johnson concluded Alaska is one of the latest - and may be the only - regime to increase government take.

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MR. RUGGIERO agreed the charts indicate that in periods of very low prices most, if not all, governments change to more favorable terms. Whether a system should be changed at a certain point lies with the legislature, and the information provided is to inform its decision.

REPRESENTATIVE TALERICO noted the regime comparisons are usually between Alaska and sovereign nations; however, as a state, Alaska has to also contend with federal take, as other states must, and as do Canada and Alberta. The U.S. tax rate does not change often, and he questioned whether there are comparisons with other states.

MR. RUGGIERO pointed out the charts include U.S. Gulf of Mexico, which are federal waters, and where changes in royalty rates and in lease payments in the last decade have occurred. Further, in most of the Lower 48, the acreage involved in oil production garners private royalty, such as in Texas, where new land leases are approximately one-quarter royalty and above, thus the payment for the acreage goes to a private mineral holder. He explained comparing operator take to "government" take is really comparing operator take to "non-operator" take, because some of the take goes to private holders of the mineral rights. Mr. Ruggiero directed attention to slide 5, and summarized "takeaways" as follows: there is no ideal structure and many are unique, however, some aspects are more successful; regimes seek to produce a level playing field; all systems have biases. He then listed long-term strategic petroleum taxation design goals for Alaska as follows [slide 7]: keep oil flowing through the Trans-Alaska Pipeline System (TAPS); encourage the exploration and development of new fields; encourage new operators; understand and capture value from existing fields; create more durability to the taxation system. Further, Alaska has high potential and prospectivity but will always be a higher-cost area for the exploration, discovery, and production of oil [slide 7].

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REPRESENTATIVE RAUSCHER opined the state always intends for "long-term strategic goals for Alaska," and always enters into agreements projecting a long period of stability, "and then, couple years later, we're rewriting it."

MR. RUGGIERO said his presentation addresses how unintended consequences and results occur, and whether there are ways to include in legislation procedures that "stand the test of time." For example, modeling can be too simplistic, and may not include some of the factors that will change in the future, which skews the results.

REPRESENTATIVE BIRCH recalled last year there was a welcome uptick in production that appeared to be the result of the stability provided by Senate Bill 21 [passed in the Twenty-Eighth Alaska State Legislature]; he questioned why the state would make changes to a successful tax structure.

MR. RUGGIERO pointed out there are aspects to Alaska's current tax structure that will lead to unintended consequences when circumstances change, for example, the minimum tax.

REPRESENTATIVE BIRCH pointed out HB 111 raises an additional $300 million in state revenue, which is a massive tax increase on industry.

MR. RUGGIERO said he had not reviewed "the numbers" on HB 111, but at this time is providing to the committee helpful background information based on his extensive experience in this regard.

REPRESENTATIVE BIRCH characterized Alaska's Clear and Equitable Share (ACES) [passed in the Twenty-Fifth Alaska State Legislature], with progressivity that raised a lot of money, as "terrible from an investment standpoint," and asked whether it was successful.

MR. RUGGIERO stressed there is a long lead time between spending and production, thus data is not available to indicate whether the additional production now generated is because of spending attributed to ACES, or spending attributed to Senate Bill 21. However, "a bit" of the spending and arresting of the decline is as a result of spending after ACES, along with increased employment. He acknowledged the very high progressivity rate in ACES led to difficulty, but there were positive aspects also.

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REPRESENTATIVE DRUMMOND asked whether insufficient data regarding ACES and Senate Bill 21 is due to a lack of transparency.

MR. RUGGIERO explained it is known how much money was spent but it is unknown what the money was spent on, "and so we can't tie the correlation between where the production comes from and then when the money was spent on that production, or on the wells and facilities in order to get there." In further response to Representative Drummond, he said yes, because [the legislature] doesn't have the information and can't make a correlation.

MR. RUGGIERO directed attention to slide 8 that listed short-term goals at a time when profits are low; for example, keeping industry activity high and encouraging operators to continue doing business, and offering incentives for new investment without putting the state in a "cash-reimbursement position."

REPRESENTATIVE JOHNSON inquired as to how a tax increase in HB 111 will help increase production.

MR. RUGGIERO responded:

> I have had some dialogue in talking with people about it. I am not an advocate of putting a heavy burden onto the oil companies at a time when there's no profit in the system.

REPRESENTATIVE JOHNSON expressed her understanding the presentation is "an interpretation of HB 111, that's being offered to address these issues, and I don't know exactly how [it] ... actually address[es] the issues ... put before us."

CO-CHAIR TARR said the committee would return to Representative Johnson's question.

MR. RUGGIERO continued to a comparison of Alaska's petroleum taxation terms to those in the Lower 48 [slide 10]:

- Royalty: The royalty charged in Alaska is in line with that of older leases in the Lower 48, many of which are one-eighth royalty. Alaska is more favorable when compared to new royalty rates, which are at a 20 percent minimum in Texas; new private leases average around 20 percent, depending on the location of the land. In addition to higher royalty, many new leases have a "drill or drop" provision which escalates fees to force activity, thus an oil company faces a deadline and may drill an uneconomic well just to hold on to its lease.

- Effective tax rate: Under Senate Bill 21, Alaska has one of the lower tax rates and competes mainly against severance tax rates.

- Credits: Alaska's exploration and production credits are very unique and valuable to the industry as they serve to overcome the additional risk associated with the state's environment and long lead time.

- Unique aspects: Different taxation for location, substantial and stackable credits, and monthly taxation are unique to Alaska.

MR. RUGGIERO, speaking from his experience working in the oil industry, said when projects are considered, fiscal terms have to meet certain criteria, but most attention is centered on relative risk; in fact, a project may advance with a higher non-operator take if risks can be mitigated.

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REPRESENTATIVE BIRCH referred to information previously provided to the committee indicating HB 111 "shows a $300 million increase in taxes. ... I'm concerned that that is not stable, that that is actually a pretty significant increase."

CO-CHAIR TARR clarified Representative Birch was referring to a fiscal note, "and those are the numbers for 2025, so the actual fiscal note for the bill, as it stands in this current fiscal year, is $45 million."

MR. RUGGIERO advised an increase can be seen as stable - if it occurs at the right time - or unstable, relative to those who are impacted. He cautioned against looking at situations in isolation.

REPRESENTATIVE BIRCH, referring to a statement on slide 11, questioned whether stability of the petroleum tax is a good thing.

MR. RUGGIERO responded that "you've got a certain increase in one spot, but you may have also at the same time enacted other incentives, other credits, other things that would actually draw people in." He urged for the committee to look at the totality of the circumstances. Mr. Ruggiero directed attention to slide 13, and in response to an earlier question from Representative Rauscher, said governments do believe in their legislation at the time of enactment; however, the future brings unintended results due to changing prices and unpredictable variables. Further, interdependencies of variables are often ignored for modeling simplicity. Self-correcting systems attempt to avoid unintended consequences; one approach to petroleum taxation theory is that operators recover their cost and a fair return, with the government to receive the remainder. However, in reality, an attempt to approach taxation design from this direction and to determine the operator's fair share, returns all parties to the ongoing to debate on what is fair, which remains an unanswered question. Mr. Ruggiero further explained self-correcting mechanisms have been developed because governments are setting a tax rate prospectively, and the future is unknown. Therefore, self-correcting mechanisms allow governments and operators to make appropriate adjustments such as project profitability, and fixed, bracketed, and S curve metrics [slide 14].

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REPRESENTATIVE BIRCH returned attention to slide 14 and asked whether it was the government's role to decide what a fair return is for a business in the United States.

MR. RUGGIERO clarified he is presenting theories of costs and of economic rent; the theory of economic rent is that government, as the steward of the resource, should receive economic rent, which is everything that is in excess of the company's return of its cost and a return on its costs. He said, "The whole bit about putting together petroleum taxation systems is governments deciding what their fair share is, oil companies battling and trying to achieve the best return that they can on their resources, and trying to find that point where you can make them both work."

REPRESENTATIVE BIRCH opined the risk is made by an investor during exploration and development, and decisions are made in response to their return [on investment]. He said he struggled to accept that the government would be metering out a fair return on investment for any business.

MR. RUGGIERO noted that when many countries set a windfall profits tax on a typical project they are setting a cap on what producers will make; in addition, many governments are using risk service contracts which have defined caps and rates of return so that governments set an expected range of profits, and the range of profits is known to the oil company.

REPRESENTATIVE JOHNSON asked whether petroleum taxation theory is a field of study.

MR. RUGGIERO explained the aforementioned theory applies for all extractive industries in which the government is the owner of an asset and hires a private company to develop its asset. The theory of economic rent is that whoever develops on behalf of the state should recover their costs and a fair return, and the government gets the rest as the owner of the resource. He returned to options for Alaska and suggested adopting a self-correcting system that would remove much of the complexity of the current tax system, and some of the unintended results. Firstly, in order to create durability, the state needs to retain its net based system which is based on margin and not on price; in fact, fixing a system on price is "setting yourself up for some of these unintended consequences or ... if you don't make changes, then people are going to pick up their toys and go home." Also, a system based on margin and profit will demonstrate to producers there will be sharing on the low end, and on the high end, as well [slide 15]. Slide 16 illustrated an example of an unintended consequence: The intent at the time of the legislation was that there was to be no tax when the companies were losing money, however, there has been a $25 shift in cost, and thus companies have an additional burden of a gross tax when they are losing money [slides 16 and 17].

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MR. RUGGIERO, referring to changes that can result in an unintended consequence, provided a chart that showed the total average cost of production has increased from $17.34 per barrel in 2007 to $35.64 per barrel in 2016 [slide 18]. Slide 19 illustrated another possible unintended consequence of Alaska's current tax structure, and he explained:

> If at any point, if your effective tax rate is the same as the tax rate at which your NOLs are converted to a credit, you're in a[n] equal situation whether I get an NOL carry forward or I get the tax credit. ... We'll leave the time value out on it right now. However, if you're ... giving credits at 35 percent and your effective tax rate is only 10, that credit is actually shielding three and [one]-half times the margin than the loss that created that tax credit. And that has to do with the differential between the rate at which the NOLs converted to a credit and then the rate at which their future revenues are taxed at when they use those credits.

CO-CHAIR TARR advised the committee will have further discussion related to effective tax rates and NOLs.

MR. RUGGIERO said his first option for the committee's consideration is to continue with the net tax system - outside of royalty - and ensure mechanisms of the system are not tied to price but to margins, and to include a low base rate with bracketed progressivity, which be a system that would eliminate features such as gross value reduction (GVR) and per barrel credits. He stressed that a net system requires the state to become an indirect investor in every project, because it allows income to be offset by costs. The second option is for the use of carry forward losses instead of cashable credits, so that the state invests indirectly and after the project is online through taxes not paid. Also as an indirect investor, the state must insure costs are reasonable, and that there is no duplication of facilities. Further, the state must continue to offer top quartile, or decile, exploration and investment incentives to ensure further activity, and allow certain conditional cashable credits. Mr. Ruggiero further suggested an uplift factor to compensate for the time value of money, and that credits or uplift should be tied to a minimum level of data transparency [slide 21].

2:50:16 PM

CO-CHAIR TARR asked for an example of "uplift to account for the time value of money."

MR. RUGGIERO explained some countries offer an annual uplift on any unused losses or NOLs; for example, in a year NOLs or losses are not used, they are increased by 10 percent, so when the operator eventually uses the credit or loss, it has a value similar to if it had been cashed or used immediately against current income. This type of uplift can be open-ended or extend for a set length of time. Other regimes use a mechanism that provides a one-time, lump-sum, 100 percent uplift, which creates an incentive to expedite a development by a certain date. Mr. Ruggiero returned attention to a gross versus a net system and restated his next option, which is to retain the net system. However, he advised keeping royalty along with the net system because worldwide, all regimes where petroleum revenues represent a large portion of the treasury include royalty in their fiscal systems, even though royalty may have been eliminated in regimes where petroleum revenues are a small part of total revenue. Because Alaska is predominately funded by petroleum, the state should retain royalty [slide 22]. Net systems have options for rates, and he suggested the best option for Alaska would be a net system with bracketed steps, based on increased profitability per barrel: at high profits per barrel, "you can step up your tax, when the profit per barrel is very low, that's when you start from a low tax" [slide 23]. Mr. Ruggiero reviewed a net system with stepped or bracketed progressivity that is based on margin or profit and not on oil price, and which will adjust as costs and inflation "[go] up and down with respect to the oil patch." For a successful system, the state must determine the starting tax rate, the number of steps, and how broad the change in state take is between steps. He reminded the committee that every dollar of profit not taken as state take remains subject to state and federal corporate income tax [slide 24]. Although not a recommendation, slide 25 illustrated how a bracketed net tax functions - without accommodations for GVR or per barrel credits - and he provided an explanation. Slide 26 illustrated an example of the self-correcting nature of the aforementioned tax system, and he provided an explanation. He said working models of a net based bracketed system, relative credits, and effective tax rates will be presented at the meeting of [2/27/17 at 7:00 p.m.] [slide 27]. Mr. Ruggiero concluded his options for the committee to consider are as follows [slide 28]:

- retain a net tax system that has self-correcting mechanisms and is based on taxing on profitability
- simplify as much as possible
- utilize a system that ensures operators can recover all of their costs
- allow NOLs to carry forward and be recovered from production-based income

- provide uplift for the time value of money.

[HB 111 was held over.]

3:03:45 PM

ADJOURNMENT

There being no further business before the committee, the House Resources Standing Committee meeting was adjourned at 3:03 p.m.