

SENATE FINANCE COMMITTEE
March 13, 2012
9:01 a.m.

9:01:04 AM

CALL TO ORDER

Co-Chair Hoffman called the Senate Finance Committee meeting to order at 9:01 a.m.

MEMBERS PRESENT

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

MEMBERS ABSENT

None

ALSO PRESENT

Senator Joe Paskvan; Jeff Stepp, Staff, Senator Joe Paskvan; Tim Grussendorf, Staff, Senator Lyman Hoffman;

SUMMARY

SB 192 OIL AND GAS PRODUCTION TAX RATES

SB 192 was HEARD and HELD in committee for further consideration.

CSHB 307(FIN)

SUPPLEMENTAL/CAPITAL/OTHER APPROPRIATIONS

CSHB 307(FIN) was HEARD and HELD in committee for further consideration.

#hb307

CS FOR HOUSE BILL NO. 307(FIN)

"An Act making supplemental appropriations, capital appropriations, and other appropriations; amending appropriations; repealing appropriations; making appropriations to capitalize funds; and providing for an effective date."

9:01:56 AM

TIM GRUSSENDORF, STAFF, SENATOR LYMAN HOFFMAN, stated that the "fast track supplemental" had been crafted collaboratively by the Co-Chair's offices, Legislative Finance, and the administration. He noted the worksheet prepared by the Legislative Finance Division (copy on file). He explained that the items put forward by the governor had been reviewed and that all capital projects had been had removed and would be included in the Capital Budget. He shared that four capital projects had been added back into the budget; major maintenance for the Bethel campus water and sewer line repairs, the Cordova Hospital roof repair and replacement, the Anchorage/Chugiak Fire Hall replacement, and the Inter-Island Ferry Authority. Of the four, two had been at the request of the governor. He stated that operating budget items had been removed for additional vetting and could be added back into a later appropriation bill. He shared that the Operating Budget items in need of additional vetting were: \$3.4 million for Corporation Business Licensing, \$1 million in Student and School Achievement, \$250,000 for Alaska's Institute of Technology, and \$20 million for a University of Alaska legal settlement. He reiterated that none of the items had been officially excluded entirely, and would be discussed in conjunction with other appropriation bills. He relayed that the funding for the supplemental included \$57 million in unlimited general funds, \$1.2 million in designated general funds, \$6.4 million in other funds, and \$7.1 in federal funds; totaling \$71,969,800. The total was \$36 million less than had been proposed by the governor. He stated that all of the included items in the fast track supplemental had been approved by and retained the support of the administration.

9:06:16 AM

Co-Chair Hoffman noted that Senator McGuire had joined the committee.

9:06:43 AM

CSHB 307(FIN) was HEARD and HELD in committee for further consideration.

[9:06:53 AM](#)

AT EASE

[9:09:23 AM](#)

RECONVENED

#sb192

SENATE BILL NO. 192

"An Act relating to the oil and gas production tax; and providing for an effective date."

[9:09:47 AM](#)

Co-Chair Stedman noted that the committee had received SB 192 from the Senate Resources Committee for first reading. He observed that the committee was in the process of scheduling representatives from the Parnell Administration, independent contractor PFC Energy, and the 3 major oil producers in the state for testimony throughout the week. He indicated the desire to make the process transparent and understandable for the public, and that the committee would schedule time for public testimony on the legislation. He warned that the scheduling specifics were subject to change, but the general layout would remain as previously mentioned. He explained that morning committee meetings would be dedicated to oil legislation, leaving afternoon meetings open for normal finance committee business.

SENATOR JOE PASKVAN, introduced SB 192 and began a PowerPoint presentation titled "Committee Substitute for Senate Bill 192 (RES) Oil and Gas Production Tax Rates"(copy on file).

Senator Paskvan spoke to slide 2 titled "CSSB 192(RES) Overview." He stated that the presentation would reveal the following information:

- Intro: Alaska is and Owner State
- Summary of DOR Reports
- Lessons Learned
- Basic Petroleum Economics
- DOR's "Facts To Begin the Conversation"

- CSSB 192(RES): Rationale and Overview
- Optimism for Alaska's Future

[9:18:25 AM](#)

Senator Paskvan discussed slide 3 titled "Alaska is an Owner State." He quoted the preface from the book, "The Taxation of Petroleum and Minerals: Principles, Problems and Practice:

"There are few areas of economic policymaking in which the returns to good decisions are so high - and the punishment of bad decisions so cruel - as in the management of natural resource wealth."

Senator Paskvan highlighted the importance that the determinations made for the state pertaining to the oil tax issue were made substantively and not emotionally.

[9:19:28 AM](#)

Senator Paskvan continued to slide 4 titled "Alaska is an Owner State." He quoted Chapter 4, Petroleum and Fiscal Regimes: Evolution and Challenges (page 89) of the previously mentioned book:

"The central objective in designing petroleum fiscal regimes is easily stated. It is to acquire for the state in whose legal territory the resources in question lie, a fair share of the wealth accruing from the extraction of that resource, whilst encouraging investors to ensure optimal economic recovery of the hydrocarbon resources. How to achieve this balance is a subject of enduring controversy."

Senator Paskvan added that from an ownership standpoint the state had to consider the receipt of oil revenues both as a royalty share, and as a production taxing interest owner.

[9:20:28 AM](#)

Senator Paskvan discussed slides 5 and 6 titled "Alaska is an Owner State." He noted the quote on slide 5 was from the publication "Fiscal Systems for Hydrocarbons":

Chapter 5: Designing Efficient Fiscal Systems

Although the host government and the investor may share one common objective - the desire for the project to generate high levels of revenue - their other objectives are not entirely aligned:

Host Governments aim to obtain the maximum value (not volume) for their countries over time in terms of net receipts for treasury. Their goal is to maximize the wealth from their natural resources and, at the same time, attract foreign investment. Host governments also have development and socioeconomic objectives, such as job creation, transfer of technology, and development of local infrastructure.

[9:22:02 AM](#)

Senator Paskvan continued to slide 6, which quoted "Fiscal Systems for Hydrocarbons":

Chapter 5: Designing Efficient Fiscal Systems
(continued)

Oil companies aim to ensure that the return on capital is consistent with the risk associated with the project and with the strategic objectives of the corporation.

Senator Paskvan shared that the friction between industry and government could be found in the areas in which the two were not aligned; where host governments aimed to maximize revenue and net receipts to the treasury, goal of industry was to maximize the rate of return on investment.

[9:22:25 AM](#)

Senator Paskvan discussed slide 7 titled "Meeting the Challenge." He observed that at the time of the formation of Alaska's Constitution it had been understood that Alaska was, and would remain, a resource rich state. Bob Bartlett wrote during the Alaska Constitutional Convention:

"Where such vast resources potential exists one need not be clairvoyant to foresee an influx of interests wanting to develop these resources...

This moment will be a critical one in Alaska's future history. Development must not be confused with

exploitation at this time. The financial welfare of the future state and the well-being of its present and unborn citizens depend upon the wise administration and oversight of these developmental activities.

Two very real dangers are present. The first, and most obvious, danger is that of exploitation under the thin disguise of development. The taking of Alaska's mineral resources without leaving some reasonable return for the support of Alaska governmental services and the use of all the people of Alaska will mean a betrayal in the administration of the people's wealth.

The second danger is that outside interests, determined to stifle any development in Alaska which might compete with their activities elsewhere, will attempt to acquire great areas of Alaska's public lands in order NOT to develop them until such time as, in their omnipotence and the pursuance of their own interests, they see fit. If large areas of Alaska's patrimony are turned over to such corporations the people of Alaska may be even more the losers than if the lands had been exploited." (November 8, 1955)

Senator Paskvan relayed that policymakers should be ever vigilant as to the two aforementioned dangers when drafting any fiscal tax system.

[9:27:02 AM](#)

Senator Paskvan continued to the Department of Revenue (DOR) summary reports. He spoke to slide 9 titled "ACES Status Report: Alaska Department of Revenue (January 14, 2010)":

Letter from DOR Commissioner Galvin to Gov Parnell:

- "The ACES Status Report evaluates whether ACES is meeting its intended goals of providing a fair share of revenue to the state while encouraging investment in new oil and gas exploration and development activities."
- "The status report shows that ACES successfully allowed the state to share in the benefits of high oil prices while accommodating fluctuations in production costs and oil prices. ACES adjusted

when oil prices tumbled and kept the oil operations in Alaska highly profitable relative to other oil provinces."

- "Since ACES passed the legislature, overall spending on oil and gas activities on the North Slope has increased. However... it would be premature to attribute the increased level of oil company investment to the success of ACES."

[9:29:02 AM](#)

Senator Paskvan discussed slide 10, which provided further information on the 2010 DOR status report:

Letter from DOR Commissioner Galvin to Gov. Parnell (cont):

"Oil taxes are clearly an important factor in industry investment decisions. However, it is misleading to isolate their influence from other key factors, such as world oil prices, geologic potential, access to land, resources and markets, costs of infrastructure and support services, and the legal regulatory framework. As noted in the report, the true merit of Alaska's current fiscal system can only be determined when it is evaluated in conjunction with these other variables."

[9:29:59 AM](#)

Senator Paskvan discussed slide 11 titled "ACES Status Report: Alaska Department of Revenue (January 14, 2010)":

ACES Structure and Tax Rate (page 9-11):

"AS with any tax, ACES may be evaluated using a variety of different metrics, including 'effective,' 'nominal,' and 'marginal' tax rate comparisons. While each of these can be helpful under the appropriate circumstances, each is also subject to certain limitations. It is important when using these metrics to understand their relative value and how they reflect upon the objectives of the tax system..."

"The 'marginal tax rate' is the rate historically applied to each dollar increase in oil price...With a

net based tax system, this metric shows a company the impact of making additional investment, because each dollar they invest is 'subsidized' by the government based on the amount of marginal tax they have avoided paying on that dollar...For example, a marginal tax rate of up to 87 percent initially sounds excessive. However, at the same price level, the effective tax rate is less than 40 percent. The marginal rate of 87 percent actually represents that state's 'portion' of any new investment made at such high prices."

Senator Paskvan reiterated the importance that the differences between the tax rates be observed.

[9:31:50 AM](#)

Senator Paskvan presented slide 12, which provided the conclusion of the report:

Conclusion (page 15):

"Overall, the information reviewed by the department indicates that ACES is performing as expected when it was passed by the Legislature in 2007. The economic provisions are resulting in the revenue levels anticipated, and the investment incentives appear to distribute the increased tax burden in a fashion that continues to encourage reinvestment, through the experience with the credit program could be improved for new explorers. Challenges remain in the implementation by the department, but they are manageable and the department is positioned to meet those challenges."

[9:33:00 AM](#)

Senator Paskvan discussed slide 13 titled "Production Tax Status Report to the Legislature by DOR (January 18, 2011)":

From the Executive Summary (pages 1 -2)

- Industry Investment - Investment in the form of capital expenditures has increased in each of the four fiscal years since implementation of the net profits tax, however, it is unclear how much of

the capital expenditures were drilling or well-related and how much were maintenance or facilities-related.

- Impact on Exploration, Development, and Production - Exploration has generally increased from 2003, when the EIC credit was implemented, but has dropped off in 2010. Development continues in three relatively new North Slope projects, yet production continues to decline.
- Industry Employment and New Entrants - Industry employment rose steadily from 2006 through 2009, but dipped slightly in 2010. The number of companies filing annual tax returns doubled between 2006 and 2009, indicating interest by companies that are either new or returning to the Alaska oil and gas industry.

[9:35:09 AM](#)

Senator Paskvan continued to slide 14 titled "Production Tax Status Report to the Legislature by DOR (January 18, 2011)":

From the Executive Summary (cont.)

- Use and Expansion of Tax Credits - The amount of credits used has increased annually since 2006 and we expect the trend to continue as new credit programs were added in the 2010 legislative session.
- Tax Administration and Compliance - The department continues to write regulations for the new tax system, and the first audits under the net profits tax have been completed. The department has, however, been hampered in its tax reporting and compliance efforts by the lack of a centralized database to house and manage the large volumes of oil and gas data it receives.
- Conclusions and Recommendations - Based on the multiple changes to the tax laws over the past few years, drawing any conclusion about their effect on Alaska's investment climate is

difficult. However, what is clear is that production continues to decline. The state should continue to monitor its competitiveness with other oil and gas jurisdictions worldwide and be prepared to change its tax structure as needed.

[9:38:05 AM](#)

Senator Paskvan discussed slide 15 titled "Production Tax Status Report to the Legislature by DOR (January 18, 2011)":

Conclusion and Recommendations (page 14-15):

"A government's fiscal regime is just one element for oil and gas companies to consider when weighing options for where to invest. Many other elements, such as resource risk, political risk, environmental factors, and availability of labor and equipment, also play a part in companies' decisions about where to invest. It is very difficult to separate these factors in order to determine the extent to which a government's fiscal system influences investment choices.

While it is untenable to blame a tax system for the lack of industry investment, it is equally untenable to claim that the tax system is the reason for increased activity or investment occurs. The past three years have seen dramatic swings in oil prices from a high of \$134 per barrel to a low of \$38 per barrel just 6 months later. An economic recession stifled investment and business activity in the United States and much of the developed world for over a year. The economic activity of the past three years may not have been the best benchmark by which to judge the impact of a tax system..

...State officials should continue to monitor the state's competitiveness in oil and gas opportunities, and be prepared to modify it as the need arises."

Senator Paskvan stressed that in neither the report from DOR directly to Governor Parnell, or directly to the Legislature, did not explicitly state that ACES was broken.

9:40:27 AM

Senator Paskvan directed attention to slide 16, which illustrated that the DOR report on the status of ACES was released to the legislature on January, 18, 2011. He pointed out that HB 110 was introduced on the House side that same day. The Senate companion, SB 49, was introduced on January 19, 2011. He felt that the timing for the reports from DOR and the introduction of the production tax legislation was significant.

9:41:10 AM

Senator Paskvan continued with the "Lessons Learned" section of the presentation.

9:41:30 AM

Senator Paskvan spoke to slide 18 titled "Comprehensive Plan and Feasibility Study by FAST Enterprises, LLC (October, 2012)":

Excerpts from the Executive Summary

The Alaska Department of Revenue's Tax Division (DOR/TAX) relies on a patchwork of 17 automated systems and over 100 manual "side-systems" to administer 22 tax programs.

- DOR/TAX manages over \$3 billion in Oil and Gas Tax revenue using an eclectic mix of home-grown side-systems that include multiple databases and unsecured, unstable spreadsheets stretched well beyond their intended use. Storing sensitive taxpayer information in these databases and spreadsheets poses a high security risk.
- The 17 systems used to administer different taxes and functions have been pieced together over the past 15 years without integration or an overall architecture. The systems do not scale to meet current needs and are inflexible and difficult to maintain. Since the initial development of the systems, many tax laws have changed and the systems have not changed accordingly.

Senator Paskvan felt it was important to highlight the internal issues that state government and state policymakers faced.

[9:43:12 AM](#)

Senator Paskvan continued to slide 19 titled "Comprehensive Plan and Feasibility Study by FAST Enterprises, LLC (October, 2012)":

Excerpts from the Executive Summary (continued)

- DOR/TAX employees spend a higher proportion of their time compiling, organizing, and reconciling data than actually auditing, examining, analyzing, forecasting, or managing tax programs.
- The limitations and inflexibility of existing systems impose a burden on taxpayers. Current reporting processes are inefficient and ineffective, and create unnecessary work and cost. As one taxpayer stated, "the Tax Division's inefficiency makes taxpayer interaction with the division inefficient."
- DOR/TAX cannot easily produce reports by the legislature and policymakers because the current systems prevent timely, complete, and correct extraction of data. Reports can be inaccurate and misleading due to incorrect and incomplete data and human error.

Senator Paskvan stressed that the October 2010 study indicated that the current tax system should be approached with a high level of skepticism.

[9:45:46 AM](#)

Senator Paskvan spoke to slide 20 titled "Department of Revenue Additional Information":

Single Audit of the State of Alaska (Feb 28, 2011)

- Recommendation: "DOR's commissioner should ensure staff within its Tax Division implement controls to improve the auditing of oil and gas severance tax revenues."

- Legislative Audit's Current Position:
"Significant control deficiencies continued over the auditing of oil and gas severance tax revenues in FY10. A loss of experienced audit staff during FY10 compounded the struggles that the audit section was already experiencing."

Decision Following Trial De Novo: 2007, 2008, and 2009 Assessed Valuations of the Trans-Alaska Pipeline System (December 30, 2011)

- "The Department's Production Forecasts and Reserves Estimates are Unreliable" (page 170)

Senator Paskvan believed that the conclusion handed down by the court should cause policymakers to consider whether the information received by the department was fundamentally valid. He added that the court had also concluded that DOR's system was broken and headed in the wrong direction.

[9:46:45 AM](#)

Senator Paskvan continued to slide 21 titled, "U.S. Energy Tax Policy (2011) (Chapter 9) State Tax Policy and Oil Production: The Role of the Severance Tax and Credits for Drilling Expenses." He explained that chapter 9 of the publication "U.S. Energy Tax Policy" addressed the role of severance tax and credits for drilling expenses:

Introduction

"Although most energy-producing states have levied taxes on the value of oil, natural gas, and coal production for many years, changes in these taxes have become headline news as state governments grapple with budget shortfalls brought about by the current recession. For instance, Alaska has increased the severance tax on the value of its oil production and attempted to simulate future production by allowing a credit against this tax for expenditures on capital items, including drilling rigs, infrastructure, exploration, and facility expansion (Alaska Department of Revenue 2008)."

[9:50:50 AM](#)

Senator Paskvan explained slide 22 titled "State Tax Policy and Oil Production: The Role of the Severance Tax and Credits for Drilling Expenses" which presented questions about the effects of state energy taxes:

- Do state taxes tilt the time path of energy production to the present or to the future?
- Do upstream subsidies for exploration and development work together with downstream taxes on production to influence the levels and time paths of production and tax collections?
- What are the implications of these for the long-term sustainable use of nonrenewable natural resources?

Senator Paskvan noted that the tilt of taxes to the past or future, could manipulate the production process in a way that could be detrimental to the state.

[9:51:55 AM](#)

Senator Paskvan discussed slide 23 titled "State Tax Policy and Oil Production: The Role of the Severance Tax and Credits for Drilling Expenses":

Key Finding #1:

- "Oil production is closely linked to the size of the reserve base and is relatively insensitive to changes in oil prices. This outcome, which is broadly consistent with experience in the U.S. oil industry over the past 50 years, leads to the conclusion that the severance tax has little effect on production levels (p.306)."

[9:52:58 AM](#)

Senator Paskvan spoke to slide 24 titled "State Tax Policy and Oil Production: The Role of the Severance Tax and Credits for Drilling Expenses":

Key Finding #2:

- "The simulations suggest that a drilling expense credit may cost more than the incremental severance tax revenue obtained, although such credits may be worthwhile concessions if a state's objective is to generate greater support for increasing the severance tax rate (p.307)."

[9:54:04 AM](#)

Senator Paskvan continued to slide 25 titled "Additional Research":

"Effectiveness of Severance Tax Incentives in the U.S. Oil Industry" (Mitch Kunce, International Tax and Public Finance, 2003)

- "In general, results show that severance tax rate cuts substantially reduce state tax revenue collected, but yield moderate to little change in oil drilling and production activity. This outcome suggests that states should be wary of arguments asserting that large swings in oil field activity can be obtained from changes in severance tax rates."

Senator Paskvan thought that the finding was an appropriate guiding consideration when discussing changes in the oil tax structure.

[9:55:24 AM](#)

Senator Paskvan spoke to slide 26 titled "Additional Research":

"State Taxation, Exploration, and Production in the U.S. Oil Industry" (Mitch Kunce et al, Nov 26, 2001)

- "Results of this study suggest that oil production is highly inelastic with respect to changes in production taxes."

[9:55:47 AM](#)

Senator Paskvan discussed slide 27 titled "Gas and Water Handling Constraints." The slide offered a transition in topic to the issue of gas and water handling constraints:

Gas and Water Handling Constraints

"While new oil is an issue in maintaining production levels, there are also issues at existing fields, where [Dudley] Platt said facilities expansion may be needed. he said that the large facilities are 'maxed out on how much gas they can handle and they're getting close to being maxed out on how much water they can handle...If they don't expand their facilities to handle that, the oil production will continue to go down.'" ("Alaska Oil Forecast Shaky" By Kristen Nelson, Petroleum News - Week of November 18, 2007)

Senator Paskvan believed that the quote spoke to the question of why wells couldn't be easily expanded or dug deeper.

[9:58:10 AM](#)

Senator Paskvan explained slide 28 titled "Gas and Water Handling Constraints":

North Slope of Alaska Facility Sharing Study
Prepared for Division of Oil and Gas, Alaska
Department of Natural Resources By Petrotechnical
Resources Alaska, May, 2004.

"The North Slope processing facilities have specific design capacity limits, indicating the amount of oil, water and gas which can be handled by the facility. If the handling capacity of one of these streams is reached for a given facility, it limits the overall production output from that facility. While some facilities may be producing below capacity for oil, they are often limited due to capacity constraints on total water production or gas production."

[10:00:08 AM](#)

Senator Paskvan discussed slide 29 titled "Gas and Water Handling Constraints":

1989 Revenue Sources Book
Alaska Department of Revenue

"The vast majority of Alaska production will continue to come from the now declining Prudhoe Bay field...The decline in Prudhoe Bay production is now expected to be much more rapid than assumed in our Spring forecast. This reflects a more serious gas handling constraint. As more and more gas is produced with each barrel of oil, the amount of gas which must be re-injected back into the Prudhoe Bay field had increased substantially. Since it is anticipated that there will need to be more production downtime due to field and TAPS maintenance, the gas handling constraint will limit the ability to keep average annual oil production from falling. Installation of additional gas handling equipment, GHAX1 (gas handling and expansion 1), is scheduled to start late in 1990. A second expansion is in the planning stages. Once in place, the ability to re-inject up to 5.1bcf/day of gas production will slow the rate of decline in oil production."

[10:02:21 AM](#)

Senator Paskvan continued to slide 30 titled "Gas and Water Handling Constraints":

A Production Optimization System for Western Prudhoe Bay Field, Alaska
By D.A. Barnes, K. Humphrey, and L. Muellenberg of BPX America

Paper prepared for presentation at the 65th Annual Technical Conference and Exhibition of the Society of Petroleum Engineers held in New Orleans, LA, Sept 23-26, 1990.

"For almost a decade the Prudhoe Bay field on the North Slope of Alaska has produced at a yearly average offtake rate of 1.5 million stock tank barrels of oil per day. As the reservoir depletes and field gas-oil ratios (GORs) increase, gas handling constraints make it difficult to achieve oil rate targets."

[10:03:34 AM](#)

Senator Paskvan discussed the slide on page 31 titled "Gas and Water Handling Constraints":

Prudhoe Bay: Development History and Future Potential
By D.J. Szabo, BP Exploration (Alaska) Inc. and K.O.
Meyers, ARCO Oil and Gas

Paper prepared for presentation at the SPE 1993
Western Regional Meeting, Anchorage, AK, 26-28 May
1993.

"Prudhoe Bay is seen by many as a mature oil field on
an inevitable and irreversible decline...The field's oil
production capacity dropped below 1.5 MMSTB/D in 1988
officially signaling the start of decline. The onset
of decline was a direct result of limited gas handling
capacity as opposed to limited oil production
capacity."

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Senator Paskvan explained that the focus on the water
handling constraints was the result of information gathered
about throughput. He believed that understanding the
history of the declining throughput in the North Slope was
necessary for public understanding of the relationship
between engineering issues, treatment facilities and
throughput.

[10:13:35 AM](#)

Senator Paskvan discussed slide 32 titled "Gas and Water
Handling Constraints":

Prudhoe Bay Field: Facility Consolidations Pave the
Way for an Economic Future
By K.D. Eager, BP Exploration; M.D. Briscoe, ARCO
Alaska; R.A. Bolduc, Exxon

Paper prepared for presentation at the 1998 SPE Annual
Technical Conference and Exhibition held in New
Orleans, LA, 27-30 Sept 1998.

"The Prudhoe Bay Field on Alaska's North Slope has
produced for twenty-one years. Prudhoe's gas and water
production rates are at historic highs, but the oil

production rate has declined to less than one-half of the peak rate achieved in the 1980s. As a result, significant excess oil treating capacity exists, with water and gas handling capacity constraining the current oil production rate. The owners of the Prudhoe Bay Unit developed a major facility consolidation plan in 1997 designed to rationalize this excess oil treating capacity while preserving existing gas and water handling capacity. The reconfigured facilities are expected to provide sufficient capacity at a lower cost to accommodate projected oil, water and gas production rates over the remaining life of the Prudhoe Bay Field."

[10:16:48 AM](#)

Senator Paskvan continued to slide 33 titled "Gas and Water Handling Constraints":

Prudhoe Bay Field: Facility Consolidations Pave the Way for an Economic Future
By K.D. Eager, BP Exploration; M.D. Briscoe, ARCO Alaska; R.A. Bolduc, Exxon

Paper prepared for presentation at the 1998 SPE Annual Technical Conference and Exhibition held in New Orleans, LA, 27-30 Sept 1998.

(Continued)

"Oil production rates are projected to continue to decline in the future. In developing the field development and management plans for 2000 and beyond, the PBU Working Interest Owners recognize the need to reduce lifting cost commensurate with the decline in oil production to maintain an economic asset for as long as possible. The Prudhoe Bay Facility Optimization Project will play an important role in achieving reduced lifting costs."

[10:17:36 AM](#)

Senator Paskvan discussed slide 34 titled "Gas and Water Handling Constraints":

Optimization of Production from Mature Fields

By P. Wang & K. Aziz of Stanford University and M.L. Litvak of BP, USA 17th World Petroleum Congress, September 1-5, 2002, Rio de Janeiro, Brazil

"Oil production in the Prudhoe Bay and Kuparuk River fields is constrained by the gas handling limits of the surface facilities."

2003 Oil and Gas Report (for the period ending December 31, 2002)

Alaska Department of Natural Resources (Tom Irwin, Commissioner)

Division of Oil and Gas (Mark Myers, Director)

"From the beginning of Prudhoe Bay production, dissolved gas and water were separated from the crude oil and injected back into the reservoir. Over time the reservoir's proportion of both gas-and-water to oil increased. Eventually, oil production was constrained by the rate at which the separating plants could process gas and water."

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JEFF STEPP, STAFF, SENATOR JOE PASKVAN, interjected that one of the key points to the "Optimization of Production from Mature Fields" article was cost reduction. He pointed out that the language was not about "increased" production, but "optimized" production in a mature field. He offered to provide the complete article to the committee upon request.

[10:19:52 AM](#)

Senator Paskvan spoke to slide 35 titled "Gas and Water Handling Constraints." The slide detailed the following question and answer session:

Q: Does DNR agree that oil throughput at Prudhoe Bay is constrained by the ability of field operators to process and re-inject associated natural gas?

A: Yes, gas processing is a significant constraint in Prudhoe Bay. While new wells could be drilled with lower GOR's, other high GOR wells have to be shut-in because of the gas processing limitation.

Q: As of the early 1990's, does DNR agree that Prudhoe Bay was past the point where well drilling could stave off a falling oil rate?

A: Yes. The Prudhoe Bay Unit WIO had a very aggressive drilling program in 1986-1992. In addition, a major gas handling expansion (GHX-1) occurred in the late 1980s which helped stem decline. Significant delay in the production plateau would have been difficult.

(Source: Memo from DNR to Senator Paskvan re: "Responses to the 30 questions from September 22, 2011" (January 17, 2012)).

[10:22:03 AM](#)

Senator Paskvan discussed slides 36 - 39 titled "Overview of the Gleason Decision":

- Market Structure
- The Life of TAPS
- Access To Information

Senator Paskvan relayed that the PowerPoint presented by Robin Brena, as well as the Gleason Decision had been included in committee packets (copy on file)[Secretary note: Both the Brena presentation and the Gleason report can be found on BASIS and in the SB 192 binders located in the Senate Finance Committee Room].

Senator Paskvan shared that the big three oil companies (Exxon, BP, and ConocoPhillips) had market dominance in the Central North Slope to the extent that it was no longer a free market. He said that due to the passage of PPT and ACES the state had observed an increased interest of other companies, but that there were still barriers, particularly in the area of treatment facility access.

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Mr. Stepp added that in 2003 the Murkowski Administration had established the goal of increasing production 3 percent per year. The director of the Division of Oil and Gas at the time, Mark Meyers, prepared a white paper titled, "Meeting the Governor's Goal: Increasing Oil and Gas Production by Three Percent Per Year." The paper identified the problem with the market structure on the North Slope:

"Mergers and market concentration on the North Slope have created a non-competitive environment in which three majors have a near monopoly that gives them a large competitive advantage in exploration, development, production, and transportation. It is this uneven playing field that has raised the barrier to new entrants, from smaller independents through large integrated majors. As long as these majors invested sufficient capital for exploration and development activities, the State accepted the consequences of the oligopoly. Since the existing majors no longer are willing to invest sufficient resources on exploration or development, the State must look elsewhere. The State must look beyond the existing majors to the new wave of independents and remaining majors. This situation parallels the experience in other oil and gas basins worldwide, several of which have successfully made this transition."

[10:29:06 AM](#)

Senator Paskvan addressed slide 38 titled " Overview of the Gleason Decision," which addressed the life of TAPS. He stated that one of the unanimous pieces of information received in the Senate Resource Committee was that fields matured under the concept of a "hyperbolic curve." He explained that all of the Alaska North Slope basins were experiencing a hyperbolic curve decline and were entering into a flattening period that would last many years. He cited the Brena PowerPoint, page 39, which stressed the importance of examining the value of the reserves; the current value of the reserves was greater than any other time in history. He said that at \$100 per barrel, the 7 billion barrels of proven reserves would result in a \$700 billion dollar profit. He asserted that it was a fiction that TAPS was facing an imminent shutdown.

[10:31:34 AM](#)

Co-Chair Stedman clarified that a shut-down did not infer to a mechanical shut down, but rather the amount of oil remaining in the basin that would not come down the pipeline.

[10:31:39 AM](#)

Senator Paskvan stated that the Gleason Decision determined the estimated life of the proven reserves that were

technically, economically and legally deliverable into the TAPS system. He stated that the decision was a conservative one; based only on proven oil reserves as required by statute. The decision did not include conventional oil (not yet discovered), heavy oil, shale oil, ANWAR, National Petroleum Reserve-Alaska (NPRA), Chukchi or Beaufort, and Point Thomson. He reiterated that the Gleason determination of 7 to 8 billion barrels of proven reserves was very conservative. He expressed concern that inconsistent information had come from DNR, AOGC, and internal oil industry sources. While industry information was publicly available, it was unreliable. He noted that the court had been forced to subpoena industry to gain access to documents concerning proven reserves and production forecasting. He discussed the issue of low flow studies. He cited a 2005 JTG study that indicated that production would eventually slow down to 135,000 barrels per day (page 65 of the BRENA Report.) He shared that the determination made by Judge Gleason was that the TAPS system would stay in operation through 2065. He cited pages 56 and 57 of the BRENA Report which contained a graph that addressed that as oil prices increased, the concept of economically recoverable oil increased; every 10 dollar increase in the price of a barrel of crude resulted in a 5.5 year increase in the economic life of the TAPS structure.

[10:36:57 AM](#)

Senator Paskvan discussed slide 39 titled "Overview of the Gleason Decision: Access To Information." He reiterated the challenge of gathering substantive information from industry without a subpoena.

[10:37:43 AM](#)

Senator Paskvan explained slide 41 titled "Expanded Basic Petroleum Economics: Course Level - Basic":

About the Course:

- Could you answer the following three questions for your next project:
 - ✓ What will it cost?
 - ✓ What is it worth?
 - ✓ Will it earn sufficient profit?

- Before undertaking any project, these questions should be answered.

He believed that the legislature was consistent in examining the first question, but that all three questions should be examined in order to create a comprehensive fiscal system.

[10:39:28 AM](#)

Senator Paskvan discussed slide 42 titled "Example":

- Estimates of drilling cost per well range from \$132,907 in Kansas, where wells tend to be shallow, to \$3,881,600 in Alaska, where the drilling experience is very different as compared to the lower 48 states.
- Marginal reserve additions from drilling range from 11,051 barrels per well in Kansas to 177,067 barrels per well in Alaska.
- Thus, while drilling a well in Alaska is markedly more expensive than Kansas, Alaska experiences a greater payoff from these more costly exploration and development efforts.

He said that while the drilling costs in Alaska were more expensive, but yielded a higher return.

[10:40:14 AM](#)

Senator Paskvan spoke to slide 43 titled "Will it earn sufficient profit?" He discussed what the split between the state, the federal government, and investors:

"Oil Industry Profitability in Alaska 1969 through 1987"

The oil industry received an estimated \$42.6 billion in profit from production and transportation activities in Alaska from 1969 through 1987...Alaska North Slope (ANS) production contributed \$29.1 billion to profit, with \$27.8 billion of this amount attributable to Prudhoe Bay and \$1.3 billion attributable to Kaparuk. TAPS provided \$12.4 billion. Production in Alaska other than ANS production added \$1.1 billion in profit.

Shares. The \$42.6 billion in after-tax profit that accrued to the oil industry compares to \$29.3 billion in State of Alaska receipts from oil industry activities during this period. During the same period, Federal government receipts were \$25.8 billion from these activities (page I and II).

(Source: "Oil Industry Profitability in Alaska 1969 through 1987," Prepared for the Department of Revenue, State of Alaska, by Edward Deakin, Distinguished Enterprise Professor and Director, Institute of Petroleum Accounting, University of North Texas, March 15, 1989.)

[10:41:29 AM](#)

Senator Paskvan discussed slide 44 titled "Will it earn sufficient profit?" He stated that in 1989 a report concluded that production profits do not stop at Alaska's boundaries:

"Oil Industry Profitability in Alaska 1969 through 1987"

Additional Benefits of ANS Oil

ANS Producers receive profits from Alaska Oil outside of Alaska which provides an additional bonus beyond what it would cost if they had to purchase imported oil. An additional profit of approximately \$0.7 billion went to the producers through the operation of the U.S. Department of Energy crude oil entitlement program. Producers are believed to earn additional profit through the refining of ANS crude because, among other things, they have access to a secure source of crude oil. If they did not have the ANS crude, it would be necessary for them to acquire crude from foreign sources.

Others estimate that profits on tanker operations and the trans-Panama shipment activities added between \$.25 and \$1.00 profit per barrel of ANS crude produced. These additional profits would have been received on the nearly 6 billion barrels of ANS production. These added profits are not included on the \$42.6 billion of total oil industry profit on Alaska covered in this report (page 13).

These downstream profit issues are beyond the scope of this project. They do indicate, however, that the producer's economic benefits of Alaska oil production extended beyond the profit obtained within the boundaries of the State of Alaska (p.T-70).

(Source: "Oil Industry Profitability in Alaska 1969 through 1987," Prepared for the Department of Revenue, State of Alaska, by Edward Deakin, Distinguished Enterprise Professor and Director, Institute of Petroleum Accounting, University of North Texas, March 15, 1989.)

[10:42:19 AM](#)

Senator Paskvan continued to slide 45 titled "Will it earn sufficient profit?" The slide discussed the hourly profit rate:

"Oil Industry Profitability in Alaska 1969 through 1987"

Hourly Profit Rate

"Looking at these profits as an hourly earning number may bring the amounts into better perspective. After-tax profits have been earned by the producers at the rate of \$463,144 per hour, twenty-four hours per day for each day of the first ten and one-half years of ANS Production (page 19)."

(Source: "Oil Industry Profitability in Alaska 1969 through 1987," Prepared for the Department of Revenue, State of Alaska, by Edward Deakin, Distinguished Enterprise Professor and Director, Institute of Petroleum Accounting, University of North Texas, March 15, 1989.)

[10:42:43 AM](#)

Senator Paskvan discussed slide 46 titled "Will it earn sufficient profit", which contained a letter from the Chief Executive of BP:

Lord John Browne, Chief Executive, BP
Address to shareholders (April 15, 2004)

"In periods of high oil prices such as the one we find ourselves in today, the group generates significant 'Excess free cash flow' after capital expenditure and dividends. Rather than using this cash to reduce debt...we are committing to return...100 percent of this excess free cash flow to our investors for as long as oil prices remain above \$20 a barrel, all other things being appropriate (Sarah Takes on Big Oil, page 16)."

[10:43:56 AM](#)

Senator Paskvan continued to slide 47 titled "Will it earn sufficient profit?" He noted that the slide harkened to an earlier slide discussing the harvest mode analysis that had risen out of the 1997 plan:

"Alaska's role in BP's portfolio is to provide a stable production base and cash flow to fuel growth elsewhere in the business while improving margins and returns."

Senator Paskvan pointed out to the committee that the information on the slide was consistent with the analysis of Pedro Van Meurs. He believed that the statements should be viewed pragmatically. He continued with the slide:

Sidenote:

"Over the past three years the TAPS Owners and Alyeska have studied a number of potential business efficiency opportunities...Preliminary engineering studies have also confirmed electrifying and automating all 4 pump stations will allow Alyeska to eliminate over 285 full time positions, many of those in field locations where wage and locations premiums are very high. Currently, remote crews at these pump stations require expensive catering, transportation and other costly support service systems. Eliminating these positions translates to an annualized expense savings improvement of over \$41mm gross (+16mm net BP) by 2007 over APSC 2003 Base O&M."

(Source: BP, Alaska Business Unit, Mid-Stream Alaska, Trans-Alaska Pipeline Pump Station Electrification, 2004, Page 13)

[10:46:02 AM](#)

Mr. Stepp pointed out that both the Senate Resources Committee and the Senate Finance Committee would be subject to a series of bar graphs, but indicated that the statistical graphs did not tell the whole story. For example, when the committee saw graphs pertaining to unemployment levels on the North Slope decisions designed to increase business efficiency, such as the one found on slide 47, were not represented and needed to be considered.

[10:47:30 AM](#)

Senator Paskvan continued with his presentation and spoke to slide 48 titled "Will it earn sufficient profit?" The slide was intended to provide perspective on profits under ACES:

Gene Therriault,
Senior Policy Advisor on In-State Energy, Parnell
Administration
Email Correspondence, August 2, 2010

"Major producers like ConocoPhillips and BP have reported strong profits from their Alaskan operations under the ACES system. For example, in 2009, ConocoPhillips' Alaska activity accounted for 12 percent of its worldwide production but 29 percent of its corporate profits. In addition, the August 1, 2010 edition of Petroleum News recently detailed ConocoPhillips current year earnings and concluded that "ConocoPhillips' exploration and production activities continue to be more profitable in Alaska than across the Lower 48."

Senator Paskvan reiterated that at the time of the correspondence there was nothing to indicate that ACES was "broken."

[10:48:31 AM](#)

Senator Paskvan discussed slide 49 titled "Will it earn sufficient profit?" The slide highlighted the correlation between the BP Prudhoe Bay Royalty Trust and the profits from the operation on the central North Slope:

BP Prudhoe Bay Royalty Trust (BPT)

"In the past 10 years, BPT has earned a total return of 2,246 percent. A \$5,000 investment just 10 years ago would be worth \$117,400 right now...To give you an idea of how strong a return that is, integrated oil giant Chevron returned 231 percent over that same period. That would have turned \$5,000 into \$16,550. Not bad, but nowhere near what BP Prudhoe Bay Royalty Trust did."

"And those royalties are on top of capital gains. BPT's share price gained 667 percent during the past 10 years thanks to rising oil prices, while Chevron's stock price went up only 137 percent."

"The thing is, BPT not only beat Chevron...it beat out just about every major oil company over the same period. And that's only part of the equation. Go back a few more years, and the major oil and gas companies aren't even in BPT's league."

"BPT has generated total returns of 5,089 percent since 1990 -- beating the "big" names in the oil and gas industry. Chevron...Exxon...Shell...you name it."

(Source: Seeking Alpha website, "BP Prudhoe Bay Royalty Trust: Why Worry about This High Yielder?," January 25, 2102)

[10:49:32 AM](#)

Senator McGuire highlighted that the perspective being presented to the committee was that of Senator Paskvan. She felt that there were other reliable documents available that would provide fodder for a counter position. She noted that that same website attributed to slide 49 also stated that the BPT was a short term, overvalued opportunity. She believed that a presentation could be put together showing a different perspective, yet using the same website. She noted that some industry experts believed that ACES was a highly penalizing tax regime.

Co-Chair Stedman reminded the committee that there were many available websites, providing many opinions on the issue of traded securities. He believed that the fact remained that the value of the BPT had increased over time.

[10:51:49 AM](#)

Senator McGuire agreed. She suggested that offering many opinions for discussion could be helpful. She hoped that more opinions, dialogue and facts could be brought into the committee for future discussions. She stressed that it was the work of the committee to determine the right tax regime based on a variety of factor and opinions.

Co-Chair Stedman pointed out the presentation was the first of many. He thought that some of the issues raised in resources might not surface in finance. He said that if it could be reasonable concluded that there were sufficient resources in the Arctic to facilitate the operation of TAPS beyond the next 20 years; the committee would work under that assumption. He asserted that the committee would be diligent in providing factual information for the purpose of discussion at the table, and for the public. He strongly railed against delivering misinformation to the public.

[10:53:46 AM](#)

Senator McGuire reiterated that the senator was laying out one perspective that did not reflect the consensus of the committee as a whole.

Co-Chair Stedman declared that the documents currently at the table had been presented in resources and were part of the public domain. He regarded that each member held strong opinions on the matter. He believed that the documents before the committee provided useful, factual information.

[10:51:38 AM](#)

Senator Paskvan explained slide 50 titled "Will it earn sufficient profit?," which provided a chart illustrating how BPT had trounced the major players in the oil industry.

Senator Paskvan continued to slide 52 titled "Department Of Revenue's Facts to Begin the Conversation":

- Oil Prices Began to Climb to All-Time Highs Starting Mid-2000s
- TAPS Throughput Continues Steady Decline
- Other Oil Producing Regions Enjoying Production and Employment Booms
- Competition is High - Many Other Areas To Invest Around the World

(Source: Senate Resources Committee (February 10, 2012))

[10:55:38 AM](#)

Senator Paskvan discussed slide 53 titled "Oil Prices Began to Climb to All-Time Highs Starting Mid-2000s":

Chapter 7: Evaluating fiscal regimes for resource projects: An example from oil development

"The unprecedented rise in the internationally traded prices of crude oil and natural gas (petroleum) between 2003 and 2008, and the sudden fall after July of 2008, have concentrated attention once again on how petroleum revenues are shared between owners of the resource in the ground (usually governments) and the companies that extract the petroleum (page 187)."

(Source: The Taxation of Petroleum and Minerals: Principles, Problems and Practice)

[10:56:38 AM](#)

Senator Paskvan addressed slide 54, which spoke to fiscal regimes in a volatile oil price era:

Fiscal Regimes in a Volatile Oil Price Era: What Options Exist for Balancing the Interest of the Resource Country and Investor Company?

By Humphrey Onyeukwu, SPE, Centre for Energy, Petroleum, Mineral Law and Policy, University of Dundee

Paper presented at the CPS/SPE International Oil and Gas Conference, Beijing, China, June 2010

"The challenge of a fiscal policy in a volatile price oil era is ensuring a high share of value is secured for the Government. At the same time, the fiscal policy strives to encourage the exploration of these valuable resources without harming the commercial interest of the oil companies. Price volatility fundamentally alters the sharing formula; it is therefore imperative for a correct balance to be achieved between the competing state interests and the oil companies. The question becomes how equilibrium

can be achieved in a petroleum fiscal system design, which guarantees a suitable government take and avoids the negative effect of instability and re-negotiation of fiscal terms."

[10:57:49 AM](#)

Senator Paskvan spoke to slide 55 titled "TAPS Throughput Continues Steady Decline":

Revenue Source Book (October, 1988)
Alaska Department of Revenue

"It is important to emphasize that the North Slope producers, while not agreeing on the exact date, have concluded that North Slope production will commence to decline in either FY89 or FY90."

[10:58:22 AM](#)

Senator Paskvan discussed slide 56 titled "TAPS Throughput Continues Steady Decline":

Revenue Source Book (Fall 1989)
Alaska Department of Revenue

"The fall in oil production means that the inevitable decline in the huge Prudhoe Bay field had started sooner than we predicted...This forecast assumes that production from the Prudhoe Bay field will continue to fall steadily, and will drop to less than half its present level in less than 10 years."

"Some observers may believe that exploration will discover another Prudhoe Bay. Prudhoe Bay is the largest oil field in North America, and finding such a 'supergiant' is extremely rare."

"The State of Alaska is standing on a precipice. Only a combination of budget cuts, more efficient programs, and new revenues will keep that State from falling a long way..."

"The decline in production for the Prudhoe Bay field is a central issue for Alaska...The decline in Prudhoe Bay production is now expected to be much more rapid than assumed in our Spring forecast."

Senator Paskvan recommended that the committee should look to the value of the state's resources and not only the rates of decline.

[10:59:57 AM](#)

Senator Paskvan continued to slide 57:

Revenue Sources Book (Spring 1992)
Alaska Department of Revenue

"The long-term revenue outlook is dominated by the depletion of petroleum reserves of the Prudhoe Bay oil field...Despite the start of the irreversible decline at the Prudhoe Bay field this year, continued success in reservoir management in all fields will hold statewide production decline throughout fiscal year 1995 to less than 9 percent total (3 percent per year)."

[11:00:28 AM](#)

Senator Paskvan addressed slide 58:

Revenue Sources Book (Spring 1994)
Alaska Department of Revenue

"The Prudhoe Bay field, which accounts for two-thirds of Alaska statewide production, is in irreversible decline."

Senator Paskvan noted that DOR has been aware of the production decline for well over a decade.

[11:00:39 AM](#)

Senator Paskvan spoke to slide 59:

With Prudhoe Bay in Decline, What's Next for Alaska?
By James M. Davis (Senior Vice President for Exploration and Land) & Jerry R. Pollock (Manager, Prudhoe Bay Engineering) of ARCO Alaska, Inc.

Oil and Gas Journal, August 3, 1992

"By any definition, Prudhoe Bay is declining and will continue to decline..."

"To accountants, Prudhoe decline began during 1998 when the field was no longer able to make its maximum allowable rate of 1.5 million b/d of oil. To engineers, the decline began long before that...

"Unfortunately, adding more wells can't keep the oil production rate up forever. We're already past the point where drilling can stave off a falling oil rate. Oil reserves are finite..."

"As the field matures, the production facilities reach their maximum capacities to handle produced water and gas. Wells with falling oil rates and increasing produced water and gas volumes have to be shut-in. Total field production drops."

Senator Paskvan stressed that the decline was an engineering issue.

Co-Chair Stedman interjected that due to time constraints the presentation would be continued during the afternoon meeting.

SB 192 was HEARD and HELD in committee for further consideration.

ADJOURNMENT

[11:02:54 AM](#)

The meeting was adjourned at 11:02 AM.