SENATE FINANCE COMMITTEE
March 23, 2023
9:00 a.m.

9:00:29 AM

CALL TO ORDER

Co-Chair Stedman called the Senate Finance Committee meeting to order at 9:00 a.m.

MEMBERS PRESENT

Senator Lyman Hoffman, Co-Chair
Senator Donny Olson, Co-Chair
Senator Bert Stedman, Co-Chair
Senator Click Bishop
Senator Jesse Kiehl
Senator Kelly Merrick
Senator David Wilson

MEMBERS ABSENT

None

ALSO PRESENT

Senator Cathy Giessel; John Crowther, Deputy Commissioner, Department of Natural Resources; Dan Stickel, Chief Economist, Economic Research Group, Tax Division, Department of Revenue; Owen Stephens, Commercial Analyst, Tax Division, Department of Revenue.

SUMMARY

PRESENTATION: WILLOW PROJECT UPDATE
DEPARTMENT OF NATURAL RESOURCES
DEPARTMENT OF REVENUE

Co-Chair Stedman discussed the agenda. He relayed that the committee would hear a briefing on the fiscal impacts of the Willow Project on the North Slope. He mentioned the timing of expenditures and production and the importance of cash flow. He recounted that the committee had discussed altering the timing of cash flows to enhance or constrain viability of a project. He commented that the committee did not concern itself with the federal share.

Co-Chair Stedman continued that the presentation would address the oil and gas tax structure. He commented on the complexity of the state's tax structure, which he considered to be one of the most complex on the planet. He mentioned many new members and staff that would be new to the terms and structure of the topic.

Co-Chair Stedman commented on the importance of the Willow Project for the future of the oil basin, state employment, and revenues. He mentioned the previous day's presentation that had addressed a reduction in oil price and the resultant implications. He noted that the following day the Legislative Finance Division (LFD) would present on the fiscal position of the state.

^PRESENTATION: WILLOW PROJECT UPDATE
DEPARTMENT OF NATURAL RESOURCES
DEPARTMENT OF REVENUE

9:04:42 AM

JOHN CROWTHER, DEPUTY COMMISSIONER, DEPARTMENT OF NATURAL RESOURCES, introduced himself and relayed that he would discuss some contextual information about the Willow Project, including a recently issued record of decision.

Mr. Crowther discussed a PowerPoint presentation entitled "Willow Project Update" (copy on file). He made the preliminary point that the Willow Project represented a new era in the state. He commented that the project was significant in terms of production, employment, and investment. The project was a maturation of trend, along with the Pikka Project. The projects that were full-scale new developments with a new era of potential for the state. He emphasized the scope and size of the investments.

Mr. Crowther added that the projects were not assured, and thought it would be fair to say that the projects were fragile. He noted there was ongoing litigation against the project. He noted that the final investment decision (FID) had not been made by ConocoPhillips. He mentioned logistics, timelines, and costs, which were all elements for a multi-year project such as the Willow Project.

Mr. Crowther looked at slide 2, "INTRODUCTION AND OUTLINE":

1. North Slope Units – Willow Project Location
2. Ownership/Royalty Interest on the North Slope
3. ConocoPhillips Slope-Wide Activity
4. Willow Approved Development Plan and Infrastructure
5. Willow History, Timeline, and Outlook

Mr. Crowther spoke to slide 3, "WILLOW PROJECT LOCATION," which was an overview map of the North Slope. He noted that the state units were in yellow. The other colors of the units indicated ownership. The gold or orange were state and federal leases. The green denoted fully federal leases. The pink and purple were affected by a 1991 settlement agreement by the Arctic Slope Regional Corporation (ASRC) and the state that provided some shared ownership interest in some of the leases. He noted that the red circle represented the Willow Project, which was in the Bear Tooth Unit, which was a federal unit in the Natural Petroleum Reserve-Alaska (NPRA).

9:08:49 AM

Mr. Crowther referenced slide 4, "OWNERSHIP/ROYALTY INTEREST," which showed a map with overlays. The read outline showed the coastal plain of the Alaska National Wildlife Refuge (ANWR), which was federally owned and had a 50-50 split of royalties between the state and federal government. He pointed out the red circle showing the Willow Project on the western side of the North Slope. He highlighted the outer continental shelf, which was federally managed, had no active leases, and from which the state received royalties. The gold band was near-shore federal land, which had a 12.5 percent royalty rate for leases and was managed by the federal government, and Through the Outer Continental Shelf Lands Act (OCSLA) the state received 27 percent of any revenue generated.

Mr. Crowther noted that the blue band was state-owned offshore areas with 100 percent state royalties and were managed and leased by the state. Similarly the center of the map showed state-owned land subject to 100 percent royalty share.

Mr. Crowther pointed out that there were a variety of royalty rates in the NPRA Willow project, and a 50 percent royalty share dedicated to the Impact Mitigation Fund.

9:11:23 AM

Mr. Crowther turned to slide 5, "CONOCOPHILLIPS SLOPE-WIDE ACTIVITY," which showed a map to illustrate that ConocoPhillips, the proprietor and developer of the Willow Project, had undertaken a significant amount of activity in the state. He pointed out ConocoPhillips locations.

Senator Bishop asked about the Bear 1 exploration well shown on the map on slide 5. He asked if the well was back on state land in the same formation.

Mr. Crowther did not believe there was much public statement about the project and thought it was targeting a formation in the Horseshoe Unit.

Mr. Crowther considered slide 6, which showed a map of the project approval and record of decision included in the recently issued U.S. Department of Interior document. The map showed three pads that were approved for the Bear Tooth Unit, the infrastructure associated with the approval to include an airstrip, operations center and the processing facilities approved for the Willow Project. The map showed pipelines tying into the central facilities and the ice road that would be used to complete project construction, which was shown in a dashed blue line.

Mr. Crowther displayed slide 7, "WILLOW HISTORY, TIMELINE, and OUTLOOK," and discussed the permitting history of the Willow Project. He recounted that the Integrated Activity Plan (IAP), the federal land management plan for the area, was approved in 2013. The Willow Project design under the IAP and the initial environmental impact statement (EIS) was completed in 2020. Contemporaneously, the EIS had addressed community concerns, which ConocoPhillips sought to meet by modifying the project. He mentioned the 2023 record of decision, which involved completion of a second EIS as mandated by district court remand in Alaska.

Mr. Crowther discussed the development timeline going forward and noted that initialized construction and project activities were underway, and a lawsuit had been filed against the approval. The state was intervening in the matter and was in opposition to the preliminary injunction to pause project activity while litigation proceeded. The project permitting continued with state pipeline rights-of-way and other authorizations. He reiterated that the FID had not occurred yet, and ConocoPhillips announcement of

the FID was subject to its corporate policies and practices. Potential construction, pending disposition of preliminary injunction matters in the court, was expected to begin as soon as the current year and continue for a period of five to seven years.

Co-Chair Stedman mentioned the upcoming slides from the Department of Revenue (DOR).

9:15:34 AM
AT EASE

9:16:26 AM
RECONVENED

DAN STICKEL, CHIEF ECONOMIST, ECONOMIC RESEARCH GROUP, TAX DIVISION, DEPARTMENT OF REVENUE, introduced himself.

OWEN STEPHENS, COMMERCIAL ANALYST, TAX DIVISION, DEPARTMENT OF REVENUE, introduced himself.

Mr. Stickel discussed a PowerPoint presentation entitled "Willow Fiscal Analysis" (copy on file). He explained that the presentation was broken into two parts. He would address the first portion, which was intended to provide foundational information to understand the background of the state's fiscal system and some of the nuance of the production tax calculation. He considered that understanding the production tax nuance was foundational to understanding some of the Willow Project impacts and how the lease expenditures and operator investments could potentially impact the state treasury.

Mr. Stickel continued that the second part of the presentation would be addressed by Mr. Stephens and would provide a detailed fiscal analysis of the Willow Project. He referenced a white paper issued in late February, and noted that there had been refinements to the analysis in terms of assumptions of how lease expenditures would apply. The analysis had also incorporated the spring forecast.

Mr. Stickel looked at slide 2, "Acronyms":

ANS – Alaska North Slope
Bbl – Barrel
CBRF – Constitutional Budget Reserve Fund
CIT – Corporate Income Tax

DNR – Department of Natural Resources
DOR – Department of Revenue
FY – Fiscal Year
GVPP – Gross Value at Point of Production
GVR – Gross Value Reduction
NPR-A – National Petroleum Reserve Alaska
NSB – North Slope Borough
PTV – Production Tax Value
SB21 – Senate Bill 21, passed in 2013
SEIS – Supplemental Environmental Impact Statement
TAPS – Trans Alaska Pipeline System
Ths - Thousands

Mr. Stickel spoke to slide 3, "Disclaimer":

- Alaska's severance tax is one of the most complex in the world and portions are subject to interpretation and dispute.
- These numbers are rough approximations based on public data, as presented in the Spring 2023 Revenue Sources Book and other revenue forecasts.
- This presentation is solely for illustrative general purposes.
- Not an official statement as to any particular tax liability, interpretation, or treatment.
- Not tax advice or guidance.
- Some numbers may differ due to rounding.

Mr. Stickel relayed that the presentation distilled a complex system with many past changes into an easily understood analysis, and noted that some assumptions had been made. He shared that when going through the introductory information as well as Willow Project analysis, he had used aggregated data and had avoided presenting any company-specific confidential information.

Mr. Stickel referenced slide 4, "Foundational Discussion":

- Order of Operations Refresher
- Increased Investment Example
- Gross Value Reduction (GVR) Discussion and Mechanics
- Lease Expenditure Deductions

Mr. Stickel relayed that the Order of Operations presentation had been updated since he previously discussed the topic in earlier weeks.

9:20:09 AM

Mr. Stickel turned to slide 5, "Oil and Gas Revenue Sources":

- Royalty – based on gross value of production
  - Plus bonuses, rents, and interest
    - Paid to Owner of the land: State, Federal, or Private
    - Usually 12.5% or 16.67% in Alaska, but rates vary
- Corporate Income Tax – based on net income
  - Paid to State (9.4% top rate)
  - Paid to Federal (21% top rate)
  - Only C-Corporations* pay this tax
- Property Tax – based on value of oil & gas property
  - Paid to State (2% of assessed value or "20 mills")
  - Paid to Municipalities – credit offsets state tax paid
- Production Tax – based on "production tax value"
  - Paid to State – calculation to follow

* C-Corporation is a business term that is used to distinguish the type of business entity, as defined under subchapter C of the federal Internal Revenue Code.

Mr. Stickel noted that corporate income tax was complicated to estimate due to being based on world-wide net income portioned to Alaska with the company's share of production, sales, and property.

Mr. Stickel considered slide 6, "Fiscal System: Overall Order of Operations":

Royalties (State, Federal, or Private)
Property Tax
Production Tax
State Corporate Income Tax
Federal Corporate Income Tax

Mr. Stickel explained that the worldwide income for a company was after deducting royalties, production, and property tax. The federal corporate income tax allowed the state corporate income tax as a deduction.

Mr. Stickel displayed slide 7, "Production Tax "Order of Operations": FY 2024," which showed a table with an illustration of the production tax calculation in aggregate for North Slope oil. He noted that the slide was similar to what was included in Appendix B of the Revenue Sources Book (RSB). The slide had been updated with the spring forecast that had been released earlier in the week. He used FY 24 as an example and considered the $73/bbl oil price forecast, the daily production estimate of 496,000 bpd, and the $36 million in oil that was being produced each day on the North Slope. The quantity equated to about $13 billion over the course of the year, and the table contemplated how the amount was taxed and split between the different cost and profit centers.

Mr. Stickel highlighted slide 8, "Production Tax "Order of Operations": FY 2024," which showed a table with royalty and taxable barrels highlighted. The first step in the calculation was subtracting royalty to arrive at the taxable barrels amount. For FY 24, DOR estimated a little under 24,000 bpd of royalty barrels that went to the various owners of the resource, which was primarily the state but included federal and private ownership. There was about 158 million barrels of taxable production in the year, with a value of about $11.5 billion.

9:24:57 AM

Mr. Stickel looked at slide 9, "Production Tax "Order of Operations": FY 2024," which showed a table with Gross Value at Point of Production (GVPP). He described that companies subtracted transportation costs (including tankers, pipelines) from the taxable value for a deduction of a little under $10/bbl for a GVPP of about $63.39/bbl, which equated to about a $10 billion gross value slope-wide for FY 24.

Mr. Stickel addressed slide 10, "Production Tax "Order of Operations": FY 2024," which showed a table with North Slope lease expenditures highlighted. He noted that the production tax was essentially a modified net profits tax. He described the deduction of lease expenditures, which

were subtracted in the tax calculation. A company was allowed to deduct operating and capital expenditures, with a 100 percent deduction of capital expenditures in the year incurred. He described allowable lease expenditures, which were any costs directly associated with producing oil in the unit. Deductible lease expenditures described the share of allowable lease expenditures that could be applied against gross value in the year incurred. In the example provided, there was $4.6 billion of deductible lease expenditures, and an additional $913 million in lease expenditures that were not able to be deducted, which represented investments by companies that were involved in exploration and development of new fields and not production.

Mr. Stickel advanced to slide 11, "Production Tax "Order of Operations": FY 2024," which showed a table with production tax value (PTV) highlighted. He described that the PTV was essentially the net profits of the slope and was the tax base for the tax calculation. After subtracting the deductible lease expenditures, there was a production tax value estimate of $5.4 billion in FY 24.

Mr. Stickel looked at slide 12, "Production Tax "Order of Operations": FY 2024," which showed a table with the gross minimum tax floor highlighted in yellow. He noted that there were two tax calculations that happened side by side, including the net profits tax and the gross minimum tax floor. The gross minimum tax floor was not a true tax levy but functioned like one. The minimum tax floor when oil prices averaged more than $24/bbl in a calendar year was 4 percent of gross value. For FY 24, there was an estimated $10 billion of GVPP, 4 percent minimum tax floor, which got to an approximately $400 million tax floor for the fiscal year.

9:28:53 AM

Mr. Stickel showed slide 13, "Production Tax "Order of Operations": FY 2024," which showed a table with net profits tax and GVR highlighted in yellow. He highlighted the net profits tax, which started with the production tax value. Companies were also able to subtract the gross value reduction (GVR), which was an incentive for new developments that allowed a company to subtract 20 percent or 30 percent of the gross value of production from qualifying new fields from production tax when applying the

tax rate. The deduction was for 20 percent for up to 7 years for any qualifying new field. If the field were to consist entirely of state-issued leases of greater than 12.5 percent royalty, a field could qualify for the 30 percent GVR. With regard to the Willow field, since there were federally issued leases, the potential qualification would be for a 20 percent GVR.

Mr. Stickel continued that the GVR was allowed as an offset to the production tax value before applying the 35 percent statutory tax rate, which gave a net profits tax (before credits) estimated at $1.9 billion for FY 24.

Mr. Stickel referenced slide 14, "Production Tax "Order of Operations": FY 2024," which showed a table with tax credits against liability highlighted in yellow. He described the next step as taking the higher of the net tax before credits and gross minimum tax floor, which would become the tax before credits. In FY 24, the net tax would be the higher of the two, and the $1.85 billion would be the starting point before the company would offset per-taxable-barrel credits. There was a $5 per-taxable-barrel credit for any oil that qualified for the GVR, which could be used to reduce the tax liability below the minimum tax if the company did not avail itself of any sliding scale per-taxable barrel credits, which applied to all other oil.

Mr. Stickel continued that currently most of the production on the slope for the older fields had a sliding scale between zero and $8 per-taxable-barrel of oil. The $8 credit was available when the gross value per barrel was less than $80/bbl. In FY 24, since the gross value per barrel was estimated at $63/bbl, there would be an $8 credit on the sliding scale. The sliding scale credits could not reduce below the minimum tax. In FY 24 there was a total impact of about $19 million for the GVR $5/bbl credits and about $1.1 billion for the sliding scale credits. A small amount of other credits applied against liability, which were primarily small producer credits. The tax after credits was a little over $700 million.

9:33:01 AM

Mr. Stickel turned to slide 15, "Production Tax "Order of Operations": FY 2024," which showed a table with adjustments and total tax paid highlighted in yellow. He mentioned the forecast for production tax included in the

RSB. He explained that adjustments included any prior tax payments from the previous year, a small tax on private landowner royalty, tax on North Slope gas, Cook Inlet taxes, and the nickel per barrel conservation surcharge. The adjustments added up to about $29 million to get to the $741.8 million, which represented the production tax forecast in the RSB.

Mr. Stickel considered slide 16, "Example: Company with 200,000 Barrels Per Day Taxable Production," which showed the same format as previous slides using a hypothetical producer to illustrate how increased investments would impact the tax calculation. There was an assumption of 200,000 bpd of taxable production, which was the same assumption used in the upcoming Willow Project analysis. The assumption included average North Slope lease expenditures. In the example, the company would have $4.6 billion of gross value, $2.1 billion in lease expenditures, and a production tax value of $2.5 billion. The company would be able to apply the full value of the per taxable barrel credits in the year incurred and would realize the full $5 for the GVR credits and the full $8 for the sliding scale credits. After applying the credits, the company would have a tax liability of $287 million.

Mr. Stickel continued to say that since the company was able to apply all the lease expenditures in the year incurred, there would be no carry-forwards earned.

9:35:56 AM

Mr. Stickel displayed slide 17, "Example: $200 million additional Capital Expenditure," which addressed the chart from the previous slide with the consideration of a nominal increase in expenditures. For the example, there was an extra $200 million in expenditures including some capital improvements in an existing field or some exploration. The company now had $2.3 billion in lease expenditures and had production tax value that went down from $2.5 billion to $2.3 billion. The company was still able to apply the full value of the per-taxable-barrel credits to reduce tax liability, and would get a 35 percent benefit from the additional capital expenditures. He quantified that the $200 million in extra expenditures reduced the company's tax liability in the year it was incurred by $70 million, which was a 35 percent benefit and was the marginal tax rate.

Mr. Stickel highlighted slide 18, "Example: $1 billion additional Capital Expenditure," which showed a table depicting a company that made a more substantial investment and spent an additional $1 billion. In the example, the company would have $3.1 billion in lease expenditures, would reduce the production tax value from $2.5 billion to $1.5 billion. The tax before credits on the net side was only $500 million, and the minimum tax floor would limit the company's ability to apply for taxable barrel credits. The gross minimum tax floor would be the tax liab8ility for the year.

Mr. Stickel continued that in the example, the company would no longer be able to benefit from the $5 per taxable barrel for a GVR production, and it would only be able to use $4.73/bbl of the $8 sliding scale credit to reduce tax liability. Once the company hit the minimum tax floor, there was no additional benefit for lease expenditures. The extra $1 billion in spending ended up reducing the company's taxes by $101 million, which was only a 10 percent benefit for the additional investment. Once a company was paying under the minimum tax floor, as long as there was a positive production tax value a producer could not earn a carry-forward for the lease expenditures and additional expenditures were of no value in tax calculation.

9:39:00 AM

Mr. Stickel looked at slide 19, "Example: $2 billion additional Capital Expenditure." He commented that the peak spending year in the Willow analysis was a little over $2 billion. He described that the company in the example had $4.1 billion of lease expenditures and a production tax value of only $516 million for the year. The company would be at the minimum tax floor before application of any tax credits and would not use any sliding scale tax credits. In the example, since sliding scale tax credits could not be used, it was possible to use the $5/bbl tax credits for the GVR-eligible production to go below the minimum tax floor. He noted that the $26 million in credits came back into the calculation for a total tax after credits of $160 million, which was slightly below the minimum tax floor. He noted that the additional $2 billion in additional spending reduced taxes by a total of $127 million for a 6 percent benefit.

Co-Chair Stedman asked about the benefit percent.

Mr. Stickel answered that there was a 6 percent benefit, which was very different than the 35 percent benefit from a smaller capital investment.

Mr. Stickel addressed slide 20, "Example: $3 billion additional Capital Expenditure," which considered the same scenario as previously slides with additional spending. He noted that a similar concept would apply if oil prices were to come in a little bit lower. The PTV was being lowered, either by a decrease in price versus forecast, or an increase in expenditure. In the example, the company had $5.1 billion of lease expenditures, which would completely offset the gross value of oil produced in the year and would reduce the PTV to zero with $484 million of lease expenditures remaining. The $484 million would become a carry-forward, which could be used to offset taxes in a future year. The $484 million would be ring-fenced by lease or property, and could not be used unless the lease or property was into production in the future.

Mr. Stickel continued that the minimum tax floor in the example did apply, so the company would not be able to use any sliding scale tax credits but would be able to use the $5/bbl tax credits for GVR-eligible production to offset the minimum tax. The company would pay the same $160 million tax after credits in the prior example. The $3 billion in additional expenditures would reduce the taxes by $127 million for a 4 percent reduction in taxes paid from the $3 billion in investment. The company would also earn a carry-forward for the $484 million loss, which could potentially add up to a 10 percent benefit for the additional spending.

9:43:06 AM

Senator Kiehl asked about Mr. Stickel's assertion that the carry-forward would be ring-fenced. He thought the fence might be bigger.

Mr. Stickel explained that when looking at the North Slope for tax calculation purposes, there was a slope-wide ring fence. A company would calculate its North Slope taxes based on all its production and spending on the slope. A smaller ring fence on the North Slope was when there was a

carry-forward annual loss. The losses were ring-fenced by lease or property. The carry forward was tracked by each individual lease or property and could not be used until the lease or property was in production.

Senator Kiehl asked if what was being described was or was not a carry-forward annual loss.

Mr. Stickel explained that the example was that the company spent $3 billion of additional capital beyond what was planned. The capital expenditures were incorporated into lease expenditure deductions in calculating PTV until it hit zero. Once a company had applied as much as it could deduct, if there were additional lease expenditures it would become a carry-forward.

Senator Kiehl asked if the ring-fencing in the example was for the unit or for the slope.

Mr. Stickel explained that if a carry-forward was earned, it was ring-fenced by lease or property, which was essentially by unit.

Co-Chair Stedman asked the ring-fence would apply to the project if the example happened to be Willow or another new prospect, and there was $3 billion in additional expenditures.

Mr. Stickel answered affirmatively. He qualified that there would be no ring-fencing as long as a company had a positive production tax value. He continued that if a company had a zero PTV and had additional lease expenditures or oil prices turned down for a net operating loss (NOL), the additional lease expenditures beyond PTV would be ring-fenced by lease or property.

9:46:14 AM

Co-Chair Stedman asked about aggregated values in the RSB. He assumed that DOR had to look at each field and do multiple analyses to provide a comingled data set. He asked how the legislature would know if the state was going forward or backwards and wondered how to determine what situations were taking place. He pondered how to make accurate policy conclusions with aggregated data.

Mr. Stickel relayed that speaking to the revenue forecast qualitatively, there were some NOLs that had been generated, in particular in 2020 when there were some very low oil prices. He considered the carry-forwards that currently existed, which were almost entirely due to companies making investments in new production and were not current taxpayers. He explained that the department was tracking the data by company and by project and assumed that companies would apply the carry-forwards when it benefit them to do so. The fiscal impact of carry-forwards was baked into the forecast and much of it was towards the end of the 10-year forecast period and beyond.

Mr. Stickel advanced to slide 21, "Lease Expenditures Example: Takeaways":

- If company is above minimum tax floor, modest increases in investment benefit at 35% marginal tax rate.
- Once company reaches minimum tax floor, the benefit of increased investment is much lower.
- Once company reaches a net operating loss, some benefit of increased investment returns, in the form of a carried-forward loss.
- Benefit of spending will also vary based on oil prices.
    - A low oil price scenario is very similar to a high investment scenario.
- The changing benefits are a source of uncertainty to company making investment decisions, and to state revenue forecasting.
- This analysis is relevant to discussions of Willow because the field would require massive additional investment.

Mr. Stickel described that there was a situation that he termed a "donut hole," in which a company benefitted from spending above the minimum floor, and it benefited from being in a NOL situation but did not benefit from incremental spending while paying the minimum tax. He commented that the difference in how spending was treated for tax purposes made it difficult to model and forecast for projects like Willow. It also made it difficult to assess the impact to the state treasury, and created uncertainty for a company in understanding the benefits of the investments it was making.

9:49:53 AM

Mr. Stickel looked at slide 22, "Gross Value Reduction":

- Gross Value Reduction (GVR) is an incentive program for new fields.
- Available for the first seven years of production and ends early if ANS prices average over $70 per barrel for any three years.
- Allows companies to exclude 20% or 30% of the gross value from the net production tax calculation.
- In lieu of sliding scale Non-GVR Per-Taxable Barrel Credit, qualifying production receives a flat $5 GVR Per-Taxable-Barrel Credit.
- The $5 GVR Per-Taxable-Barrel Credit can be applied to reduce tax liability below the minimum tax floor, assuming that the producer does not apply any sliding scale Non-GVR Per-Taxable Barrel Credits.
- GVR is relevant to discussions of Willow because the field would likely qualify for this benefit in early years of production.

Mr. Stickel relayed that he had been asked to provide some information about how GVR worked, and the slide had been presented in the past. He cited that the GVR was part of SB 21 tax reform that was passed in 2014.

Mr. Stickel spoke to slide 23, "Why Allow Lease Expenditure Deductions?":

- Oil and gas exploration and development are high-risk, capital intensive activities. There is no guarantee of success.
- Cost recovery is critical for company investment decisions.
- Deductions that allow companies to continue work even when unsuccessful, make exploration and development much less risky.
- Alaska’s net tax system balances lower state take early in field life, with higher state take later in field life.
- Cost recovery is an integral part of a net tax system.
- Slope-wide “ring fence” encourages reinvestment of profits in Alaska.

- Lease expenditure deductions and GVR were designed to help companies recover costs quickly, improving project economics.
- Gross minimum tax floor ensures a minimum level of state revenue regardless of investments or oil price.

Mr. Stickel relayed that he had been asked to address why lease expenditures were allowed to be deductible. He explained that Alaska's current tax system had several pieces that actively supported cost recovery.

Mr. Stephens referenced slide 24, "Willow Project Analysis":

- Analysis Updates
- Description and Assumptions
- Revenue Analysis
- Uncertainty
- Spring Forecast Comparison
- Conclusions
- Appendix:

1. Sensitivity Analyses
2. Local Cash Flows

9:54:20 AM

Mr. Stephens turned to slide 25, "Typical Oil Field Development," which showed a flow chart. He emphasized that finding and developing an oil and gas field was heavily capital intensive, with very large upfront costs before receiving any revenue. He noted that reaching production could take decades. He noted that the monetary amounts reflected how much could be spent to explore for and develop an oil field to production for something comparable to the Willow Project. He identified progress on the project with the first leases in 1999, exploration around 2016, and potentially reaching major startup development in 2023. He considered a most likely first production date of 2029, which was estimated from public information.

Mr. Stephens considered slide 26, "Analysis Description":

Goal is to demonstrate fiscal impact of Willow Field development.

- Department of Revenue (DOR) Lifecycle Model allows detailed financial analysis of a single oil development project.

- Forecasts revenue to state, municipality, impacted communities, federal government, and producer
- Results in nominal dollars
- Deterministic analysis, not probabilistic, using a single set of assumptions

- Uses publicly available data only, no taxpayer confidential data.
  - Willow federal Supplemental Environmental Impact Statement (SEIS) (February 2023)
  - Spring 2023 Forecast by DOR (March 2023)
  - Use of confidential data could materially change analysis results

Mr. Stephens displayed slide 27, "Analysis Updates":

Four component updates from February 2023 analysis:

1. Spring 2023 forecast for oil prices and transportation costs
   - Previously used Fall 2022 forecast
2. Producer receives benefit of lease expenditure deductions only as far as minimum tax floor
   - Previously producer received benefit of all lease expenditure deductions
3. Zero impact on State Corporate Income Tax prior to production
   - Previously included negative impact on state corporate income
4. North Slope-wide state benefit from pipeline tariff now also includes feeder pipelines (Alpine and Kuparuk)
   - Previously only included Trans-Alaska Pipeline (TAPS)

9:58:05 AM

Co-Chair Stedman asked Mr. Stephens to repeat the information regarding the Alpine and Kuparuk pipelines.

Mr. Stephens relayed he would address the topic in more detail later in the presentation and explained that initially the Department of Natural Resources (DNR) had modelled decreased costs to producers including only the Trans-Alaska Pipeline System (TAPS). The new analysis included the Alpine and Kuparuk feeder pipelines.

Mr. Stephens highlighted slide 28, "Oil Production":

- Unrisked oil production profile for 3-drill pad development
    - Profile supplied by ConocoPhillips for SEIS
    - As approved by Record of Decision from US Department of Interior, Mar 2023
    - Assume first oil FY 2029
    - 613 million barrels total production to FY 2053
    - Peak production 183,000 barrels per day in FY 2030
- Represents a normal oil field production profile
    - High early production, with gradual decline as reservoir pressure decreases and/or water production rate increases
    - Further drilling during production could reduce decline, but general shape would remain

Mr. Stephens noted that all years being discussed would be in fiscal years. He used the example that FY 24 would extend from July 1, 2023 to the end of June in 2024.

Mr. Stephens looked at slide 29, "Lease Expenditures":

- Composed of capital expenditures and operating expenditures
- Capital Expenditures estimated from ConocoPhillips public statements
- $10.3 billion total, timing fitted to expected employment
- Operating Expenditures from SEIS estimate (by Northern Economics)
- $6.1 billion total

Mr. Stephens observed the graph showed peak production in 2028.

Mr. Stephens addressed slide 30, "Oil Prices”:

- Department of Revenue Spring 2023 Oil Price Forecast
- Derived from oil futures market, increasing with inflation for years where futures unavailable
- Update from February 2023 white paper, which used Fall 2022 forecast
- Spring 2023 price forecast lower than Fall 2022 by $5 to $8 per barrel

10:02:12 AM

Mr. Stephens advanced to slide 31, "Transportation (Netback) Costs":

- Increased flow through Trans-Alaska Pipeline (TAPS) and feeder pipelines (Alpine and Kuparuk) expected to reduce pipeline tariffs
- Reduced pipeline tariff would benefit all North Slope fields
    - Analysis includes resulting increase in state production tax and state royalty
    - Does not include secondary benefit of lower costs increasing investment elsewhere on North Slope

Mr. Stephens noted that DNR had used the spring 2023 forecast for the net-back costs, which was shown by the green line on the chart. The blue line removed the impact of the Willow Project, and the red line was what was expected to come out of using the Willow Project production profile in the analysis. He noted that the cost to operate a pipeline was passed on to producers through tariffs, so the more oil that flowed through the pipeline, the less that was paid per-barrel. The revised transportation costs were included in the Willow Project analysis.

Co-Chair Stedman asked about the difficulty of estimating production numbers in the later years with such high transportation costs and lower production volume.

Mr. Stephens referred to the production profile.

Mr. Stickel noted that DOR considered a 20-year production outlook that was provided by DNR. Beyond the outlook there was an extrapolation of existing decline curves. In addition to seeing the inflation on transportation costs, the underlying assumption included inflation on oil prices.

Mr. Stephens looked at slide 32, "Fiscal Assumptions":

- Current state and federal tax laws (March 2023)
- Gross Value Reduction (GVR) at 20%, with no producing area qualifying separately for GVR later in field life
- State Corporate Income Tax rate 4.25% (typical North Slope producer)

- Impact only after start of production
- Producer able to deduct lease expenditures incurred at Willow against production elsewhere on North Slope, but benefit of those expenditures is limited by the minimum tax floor, until entering a net operating loss
  - Assume producer's North Slope production of 228,000 barrels per day (200,000 barrels per day after royalty) and at constant level in future
  - Assume lease expenditures of $24.50 per barrel (real) for producer's other fields on North Slope, based on value for typical North Slope producer
  - Use of taxpayer confidential data could materially change analysis results

10:06:27 AM

Senator Kiehl asked Mr. Stephens to address why he was not modeling corporate income tax until production started.

Mr. Stephens deferred the question to Mr. Stickel.

Mr. Stickel spoke to the assumption of a corporate income tax rate during construction. He explained that the 4.25 percent assumption was based on an average effective rate for companies that paid corporate income tax, which looked at producing companies and what was paid during construction. He noted that during construction, any spending would be able to offset worldwide taxable income, and there would be an applicable depreciation schedule. The expenditures would not offset the worldwide income entirely in the year earned, and there would also be some impacts on the statewide apportionment factor. He mentioned some scenarios and identified that the amount would be closer to zero than 4.25 percent, so it was removed from the analysis. He summarized that the amount had a fairly small overall impact.

Mr. Stephens spoke to slide 33, "Revenue Categories":

- State Revenue
  - Production Tax
  - State Corporate Income Tax
  - State Share of Property Tax
  - Pipeline benefit to State
- Impacted Community Revenue
  - Royalty share to Impacted Communities (50%)

- North Slope Borough (NSB) Revenue
    - NSB Share of Property Tax
- Federal Revenue
    - Federal Share of Royalty (50%)
    - Federal Corporate Income Tax
- Producer Revenue
    - Company Profit

Mr. Stephens reminded that royalties were shared 50-50 between impacted communities and the federal government, and property tax was shared between the North Slope Borough and the state, with just over 10 percent going to the state.

Co-Chair Stedman asked about the 50-50 split for royalty share. He thought impacted communities had the first call on royalties.

Mr. Stephens relayed that royalty was initially paid to the federal government and was returned to the state for distribution to impacted communities. Impacted communities could request grants, which were administered by the Department of Commerce, Community and Economic Development.

Co-Chair Stedman relayed that the legislature appropriated the funds in the capital budget after requests from the communities. He noted that some years there was just one line item in the budget, and some years the amount was listed by community. He recalled any of the grant requests came in January or February.

10:10:37 AM

Mr. Stephens referenced slide 34, "Annual Revenue by Category," which showed a graph of annual revenues. He focused on the production stage of FY 29 onward. He highlighted that revenue of all types remained strong from production startup to the end of the 30-year analysis period, in particular royalty and production tax. Revenues gradually declined as production declined. The interaction between lease expenditures, GVR, and tax credit caused some big variation in production tax in the state benefit from pipeline tariffs, much in the which was incremental increases in production tax.

Co-Chair Stedman asked why the graph was not flat or another shape.

Mr. Stephens explained that the shape of the graph showed that upfront there were observable high capital costs of pre-production, which was impacting the decrease in revenue. He noted that early on in production, state revenue was reduced to some extent by deduction of lease expenditures. State revenue increased as the lease deductions were decreased. There was a gradual decline due to the decline in production towards the end of field life as modelled to 2053. He noted it was possible that production could extend beyond the point of the model.

Co-Chair Stedman noted that annual revenue followed production, and asked why the annual revenue was not horizontal instead of having big hump in the graph.

Mr. Stephens explained that generally speaking, oil production was high early on and then declined.

Co-Chair Stedman asked "why?"

Mr. Stephens explained that there was a gradual decrease in reservoir pressure, or a gradual increase of water influx into the wells so each well would produce less on a year by year basis.

Co-Chair Stedman asked if the change had anything to do with the time-value of money.

Mr. Stephens thought that generally speaking, the answer was "no."

Co-Chair Stedman asserted that generally speaking, the answer was "yes," since the time-value of money was critical, and one wanted as much production in the beginning before the economics changed. He mentioned moving money to make marginal projects positive if possible, and taking care not to incentivize projects that were already profitable. He noted that many people in the building had not seen the information, and that a gas curve looked more horizontal relative to the graph on the slide. He emphasized the importance of the time value of money.

Mr. Stephens discussed the drilling of the field and getting oil as soon as possible.

Co-Chair Stedman stressed the need for explaining information in a basic way. He thought there would be questions pertaining to why there was so much production in the beginning versus the end of an oil field, and why gas was not taken off in the beginning.

10:15:37 AM

Mr. Stephens turned to slide 35, "State Revenue – First Ten Years," which showed a graph of state revenues before and just after production started. The columns showed state revenue from the analysis, and the dashed line showed state revenue if the producer were to remain above the minimum tax floor. He noted that the chart indicated that FY 24 was the pre-production year where lease expenditures were low enough to stay above minimum tax floor. As the forecast oil price decreased, there was a point in FY 28 in which the producer was already at the minimum tax floor with no benefit from lease deductions. Total preproduction impact on state revenue was $360 million, less than one-fifth the amount of if the minimum tax floor was a consideration.

Co-Chair Stedman thought the graph was substantially different than the initial report. He noted that Mr. Stephens had mentioned that there had been updates to the report.

Mr. Stephens agreed. He noted that the previous report from last month had contained a simplifying assumption that the producer would see the benefit of all lease expenditures, which would affect state revenue and was reflected in the dashed line. He explained that the average of $380 million per year in pre-production was a larger number and would have a significant impact in state revenue. The change in the oil price forecast also affected how much impact was seen from lease expenditure deductions.

Co-Chair Stedman appreciated the refinement. He noted that in FY 24, there was a negative $141 million in total state revenue. He thought Mr. Stickel had factored the change into the spring forecast.

Mr. Stickel explained that the spring forecast included the Willow Project on a risked basis, and the impacts on the spring forecast would be a little lower than shown on the slide.

Co-Chair Stedman asked if the presenters would discuss the risking methodology. He thought the committee should discuss the topic.

Mr. Stephens affirmed that he would discuss risking in later slides.

10:19:54 AM

Senator Kiehl thought the price of oil was so volatile that it would be good to see how the numbers changed with higher and lower oil prices than were represented on the slide.

Mr. Stephens relayed that he would address Senator Kiehl's question at a later slide.

Co-Chair Olson asked to discuss the difference between the $72 million and the $380 million on the prior analysis from February. He asked what would happen to the chart if the price of oil spiked and the numbers moved away from the minimum tax floor.

Mr. Stephens explained that he would address the second part of Co-Chair Olson's question when there were slides pertaining to oil price. He explained that when spending increased, eventually there was a stage where the producer could not use the expenses to deduct against taxes.

10:21:44 AM

Mr. Stephens considered slide 36, "Annual and Cumulative Cash Flow," which showed a graph entitled 'Undiscounted Cash Flows,' which combined and grouped some of the revenues by recipient, with the addition of a cumulative line for each recipient. He spoke to state revenue and noted that the state hit "break even" in 2030, and under the current assumptions had a cumulative 30-year revenue of $6.3 billion. There was also expectation of billions in cumulative revenue for local communities on the North Slope, the federal government, and the producer.

Co-Chair Stedman asked when the state would break even with cash flow, not counting the royalties that did not get to the treasury.

Mr. Stephens noted that the 2030 number excluded royalties and only included production tax, property tax, state

corporate income tax, and the state's tariff pipeline benefits.

Senator Bishop asked if Co-Chair Stedman had indicated 2030 was the "break even" period.

Mr. Stephens affirmed that 2030 was the break-even point.

Co-Chair Stedman thought the previous report had indicated 2040, and commented on the substantial change in the estimated period in which the state would start to receive net positive cash flow.

Mr. Stephens displayed slide 37, "Net Present Value":

- Net Present Value includes the time value of money
- State revenue 30-year net present value over $1 billion, going NPV positive in FY 2031

Mr. Stephens explained that net present value represented total revenue but included the time value of money. He noted that the NPV number gave more importance to the negative numbers.

Co-Chair Stedman asked if Mr. Stephens was counting negative cash flow when looking at the state's NPV. He asked what discount he used for the state.

Mr. Stephens affirmed that DNR used the negative cashflow as part of the calculation. In order to be consistent, all of the discount rates were at 10 percent.

Co-Chair Stedman thought normally the state used a rate substantially lower than 10 percent.

Co-Chair Stedman asked if Mr. Stephens had run any sensitivity tests. He thought it was obviously positive for the producer or it would not do the project.

Mr. Stephens affirmed that DNR could run different discount rates as requested.

10:26:23 AM

Mr. Stephens highlighted slide 38, "Uncertainty":

- Significant uncertainty in assumptions, elevated above typical levels:
    - Project risk and timing – environmental groups currently suing to prevent field development
    - Oil and gas industry costs – inflation, supply chain disruption, labor disruption, and increasing industry development activity
    - Oil price – higher volatility from Russian invasion of Ukraine and Covid-19 pandemic, greater impact on production tax from oil prices near to $70 (threshold for 3 years or 7 years of Gross Value Reduction (GVR) eligibility)
    - Oil production rates and reserves – more uncertain prior to development
- Available benefit of lease expenditure deductions depends on oil prices, and on production rates and producer's lease expenditures elsewhere on the North Slope
    - Additional project uncertainty from producer's other fields

Co-Chair Stedman understood that the financial industry wanted to see projects positive at a break-even price around $60/bbl. He asked about the break-even price for the Willow Project.

Mr. Stephens noted that there would be a couple of slides addressing oil price sensitivities.

Co-Chair Stedman asked Mr. Stephens to address the shut-down price. He referenced the Federal Reserve Board Bank in Dallas, Texas; and mentioned presentations with break-even and shut-down prices for different basins.

Mr. Stephens looked at slide 39, "Conclusions":

- Willow project development as modeled would lead to billions of dollars of revenue to:
    - State of Alaska
    - Impacted Communities
    - North Slope Borough
    - Federal Government
    - Producer
- Benefit to state of increased employment not modeled but also expected to be significant and material

Co-Chair Stedman thought it would be advantageous to see dollar amounts associated with the different revenue areas listed on the slide.

Mr. Stephens believed that the numbers were not included in the presentation but offered to provide the numbers quickly.

Co-Chair Stedman thought it would be good for the public to be aware of the revenue amounts, which he thought was in the billions.

Mr. Stephens agreed.

10:31:06 AM

Mr. Stephens looked at slide 42, "Spring Forecast Comparison":

Spring Production Forecast with Three Cases:

1. Willow (Risked) – current Spring 2023 forecast
    - Risks chance of occurrence, reducing forecast production
    - Risks project timing, delaying forecast production
    - Peak production lower, and outside 10-year forecast window

2. Willow (Unrisked)
    - Single deterministic case, assuming project as presented in this analysis
    - Peak production of 183,000 barrels per day in FY 2030

3. No Willow

- Base Production Data from State Forecast
    - 2023 to 2032 Official forecast, provided by DNR
    - 2033 to 2042 Continued for an additional 10 years by DNR
    - 2043 to 2053 Long-term forecast – extrapolation by DOR, for illustrative purposes only

Senator Kiehl asked if Mr. Stephens could discuss the aggregate reduction in barrels produced in the risked scenario.

Mr. Stephens relayed that to some extent the slide showed the information, but he did not have a precise figure to offer.

Co-Chair Stedman asked Mr. Stephens to get back to the committee with the information. He discussed the process for following up with information with the committee.

Mr. Stephens relayed that he had been asked to discuss the revenue impacts of the Willow Project, which was not possible in quantitative numbers. He explained that in the main Willow analysis, one could see less than $400 million pre-production negative impact to the state, and post-production a $1.3 billion positive state impact over the ten-year period. He noted that the graph on the slide showed that risking reduced and delayed the impact of the Willow Project on the production forecast. The impact on the revenue forecast was similar. There was still an expectation of modest revenue reduction during construction and a significant positive after, but peak production was pushed beyond the ten-year window.

10:35:56 AM

Mr. Stephens showed slide 43, "Oil Price Sensitivities," which showed two charts addressing four additional scenarios beyond the spring forecast, and the spring forecast was also shown on the slide. The scenarios included $60, $70, $80, and $90 per barrel starting in 2024 and increasing with inflation at 2.5 percent. He noted that the minimum tax floor materially impacted the analysis during the construction period.

Mr. Stephens pointed out that the left-hand chart showed all state revenues combined for the Willow analysis. The minimum tax floor partly shielded state revenue from the impact of low oil prices or higher levels of company investment. The minimum tax floor reduced benefit to companies making investments, especially at lower oil prices. Also on the chart it was possible to deduce that the producer gained more benefit from lease deductions with higher oil prices. He thought that while it was true, the deduction could be misleading.

Mr. Stephens addressed the chart on the right-hand side of slide 43, which focused on production tax but extended the analysis to a typical producer on the whole of the North

Slope. The main takeaway from the chart was that higher oil prices were still providing more state revenue despite the increased lease deductions.

10:39:59 AM

Co-Chair Stedman referenced the chart on the left, and thought it looked like the $90/bbl line looked similar to the original presentation. He asked if it was a coincidence.

Mr. Stephens noted that the $90/oil price was reflected in the top line on the graph. He explained that when a producer was at or near the minimum tax in the production period, you would expect there to be slight differences. In the 2027 to 2028 period, the spring forecast and the $60, $70, and $80/bbl lines were very close to each other.

Co-Chair Stedman clarified that he was referring to the chart on the left, which showed Willow only.

Mr. Stephens affirmed that having a raised oil price would allow a producer to see the benefit of deducting more lease expenditures than otherwise. Equally, the right hand chart showed that the overall benefit from oil price was such that there was still more oil revenue at $90/bbl in 2028 than one would at a lower price.

Co-Chair Stedman expressed understanding. He thought it looked like the chart on the left was fairly similar to Mr. Stephens' other report, considering the negative impacts.

Mr. Stephens thought Co-Chair Stedman's comment was fair and noted that the dashed line on the previous slide was even more negative than at the $90/bbl price.

Mr. Stickel added that in the February analysis, there had been a simplifying assumption that the minimum tax would not limit the ability to deduct lease expenditures. He had shown in introductory slides that the $90/bbl scenario assumed that the company was far enough above the minimum tax in order to apply most of the lease expenditures in reducing the tax liability. Under the spring forecast in 2028, the company was already assumed to be at the minimum tax, so in the new analysis, the company received no benefit for the $2.1 billion in spending made in 2020. It was also the case for the $60/bbl scenario. In the higher

priced oil scenarios, the companies were higher than the minimum tax and were able to apply progressively more of the lease expenditures and getting down to the minimum tax. He added that in the report released in February (which would be updated with new assumptions) there was an assumption that companies could apply all lease expenditures without bumping up against the minimum tax.

Co-Chair Stedman thought it would be a good idea to reprint the report and update it, as documents circulated around the building for years. He thought the report was a good exercise but thought an updated version would be helpful.

10:43:05 AM

Senator Kiehl thought the chart on the right included all the assumptions from the chart on the left.

Mr. Stephens answered "yes" and asked Senator Kiehl to bear in mind that the chart on the left was all state revenues, and the chart on the right was only production tax.

Senator Kiehl considered risks and benefits and thought that the optimal situation for the state treasury was moderate oil prices now and higher oil prices after 2028. He thought that the reverse would make the analysis look very different.

Mr. Stephens agreed and offered to model the scenario if it was of interest.

Mr. Stephens referenced slide 44, "Oil Price Sensitivities":

- Production Tax and State Corporate Income Tax vary strongly with oil price
- Property tax and pipeline tariff benefit show less variation
- Total undiscounted state revenue and Net Present Value to State remain material at all modeled oil prices

Mr. Stephens observed that the chart on the right-hand side of the slide showed the production tax as the biggest contributor to state revenues at all modeled oil prices. The other revenue sources were smaller and less varied. He noted that the table at the bottom of the slide showed how

NPV to the state remained material at all modeled oil prices ranging from $1.8 billion at $60/bbl up to $3.2 billion at $90/bbl.

Co-Chair Stedman referenced the price of oil being at $40/bbl, and thought it was good to remind the committee that things change over time.

Mr. Stephens relayed that DNR could address any alternative oil price model.

10:45:56 AM

Mr. Stephens showed slide 45, "Appendix: Local Cash Flows."

Mr. Stephens considered slide 46, "Annual and Cumulative Cash Flow – Local Only," which looked at royalty share for impacted communities, and the property tax received by the North Slope Borough. Over $3 billion was expected to go to impacted communities, and over $1 billion to NSB property taxes, with no negative impact expected.

Mr. Stephens displayed slide 47, "Local Annual and Cumulative Cash Flow – First Ten Years," which showed a table. He made note of positive financial impact in the first five years from rents for the impacted communities, as well as property tax for the borough.

Co-Chair Stedman thanked the testifiers and staff that assisted in assembling the information for the presentation. He was glad that the initial report was simplified, and looked forward to an update. He thought Mr. Stickel could differentiate the impact of expansion in new areas when reviewing new year's revenue forecast. He reiterated his question about the break-even and shut-down price for the Willow Project.

Mr. Stickel agreed to get back to the committee with the information.

Co-Chair Stedman referenced the Federal Reserve Board and cited information on the Permian Basin. He thought the information on Alaska should be available.

Co-Chair Stedman expressed appreciation for the presenters.

Co-Chair Stedman discussed the agenda for the following day, which would include a fiscal summary update from the Legislative Finance Division. The report would include the current budget, other amendments, and expenditures such as capital budget items. The presentation would also include discussion of the Permanent Fund Dividend.

#
ADJOURNMENT
10:51:12 AM

The meeting was adjourned at 10:51 a.m.