

SENATE FINANCE COMMITTEE  
FOURTH SPECIAL SESSION  
October 30, 2017  
1:31 p.m.

[Note: The meeting was held in Anchorage, Alaska at the Anchorage Legislative Information Office.]

[1:31:25 PM](#)

CALL TO ORDER

Co-Chair MacKinnon called the Senate Finance Committee meeting to order at 1:31 p.m.

MEMBERS PRESENT

Senator Lyman Hoffman, Co-Chair  
Senator Anna MacKinnon, Co-Chair  
Senator Click Bishop, Vice-Chair  
Senator Gary Stevens  
Senator Donny Olson  
Senator Natasha von Imhof

MEMBERS ABSENT

Senator Peter Micciche

ALSO PRESENT

Paul Decker, Acting Director, Division of Oil and Gas, Department of Natural Resources; Ed King, Special Project Assistant, Commissioner's Office, Department of Natural Resources; Sheldon Fisher, Commissioner, Department of Revenue; Dan Stickel, Chief Economist, Economic Research Group, Tax Division, Department of Revenue; Senator Cathy Giessel.

SUMMARY

2017 FALL Production Forecast Presentation: Department of Natural Resources

2017 FALL Revenue Forecast Presentation: Department of Revenue

Co-Chair MacKinnon discussed the agenda for the day.

^2017 FALL PRODUCTION FORECAST PRESENTATION: DEPARTMENT OF  
NATURAL RESOURCES

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Co-Chair MacKinnon stated that the purpose of the presentation was to understand the fiscal gap from the administration's perspective, and to understand the revenue forecast from Department of Natural Resources (DNR).

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ED KING, SPECIAL PROJECT ASSISTANT, COMMISSIONER'S OFFICE, DEPARTMENT OF NATURAL RESOURCES, discussed the presentation, "Preliminary 2017 Fall Production Forecast" (copy on file). He stated that now the department had the official numbers from 2017, it was possible to say that there had been two years of consecutive production increases.

Mr. King turned to slide 2, "2 Years of Production Increases," which showed a bar graph. He qualified that the FY 17 production number was still preliminary and could change in the time before the Revenue Sources Book was published. He pointed out that FY 17 showed an increase of 9,000 barrels per day (bpd) production increase over FY 16; which amounted to roughly 3 million additional barrels of oil over the previous year.

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Mr. King showed slide 3, "SHORT-TERM FORECAST," which showed a line graph. Using the four months of preliminary data for the current fiscal year, it was indicated that production was on pace to beat the previous year's production numbers. He indicated that the dashed line on the graph represented DNR's twelve-month forecast, while the red dots represented preliminary numbers for production that had already occurred in the current fiscal year. He noted that the actual production numbers were tracking the forecast relatively well; indicating that the department

was looking at about 533,000 bpd for FY 18, which was a 9,000 bpd increase over the previous year.

Mr. King explained that for the four months of preliminary data, the department expected about 4,000 bpd of increased production over the previous fiscal year. Producers were expected to continue to beat the previous year's production for most of the winter months.

Mr. King displayed slide 4, "Where the Increases Came From," which showed two bar graphs entitled 'FY17 change over FY16,' and 'FY16 change over FY15.' He explained that the slide showed the increases from the previous two fiscal years, broken out by where the additional volumes of oil came from. He noted that from FY 15 to FY 16, the Colville River unit and the Prudhoe Bay unit each contributed approximately half of the increase in production. The rest of the units had been relatively flat, with only a slight increase in production from the Nikaitchuq unit. He specified that the majority of the increase in the Colville River unit could be attributed to the CD5 development, which was started in 2015 and continued to drill. The other half of the production increase (in Prudhoe Bay) was attributed to improved operator efficiency.

Mr. King continued to discuss slide 4, noting that there had also been increases from FY 16 to FY 17 throughout many of the fields; including Prudhoe Bay and Oooguruk. The increases at Oooguruk had been in part due to fracture stimulation success.

Mr. King spoke to slide 5, "Impressive Industry Performance," which showed two bar graphs entitled 'FY17 Actual Versus Trend' and 'FY 16 Actual Versus Trend.' He thought that it was impressive that the increases were over and above the downward trend that history had indicated. The slide compared the actual production numbers against what production would have been if the anticipated five percent decline would have continued. He pointed out that the production across the entire North Slope was impressive, and that the producers had beat the long-term trend of production by a large margin. He thought it was especially true of the Colville River and Prudhoe Bay; which had almost 28,000 bpd of additional production, and was the equivalent of bringing a new field online.

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PAUL DECKER, ACTING DIRECTOR, DIVISION OF OIL AND GAS, DEPARTMENT OF NATURAL RESOURCES, reviewed slide 6, "10-YEAR FORECAST." He noted that the slide was a representation of what the forecast looked like, and the department would have the actual numbers to provide when the Revenue Sources Book was printed in December. He indicated that the solid line with dots on the far left represented the actual production numbers, and it was possible to see the increase year over year. On the right of the slide, the dashed line showed the mean case forecast, and the dotted lines above and below showed the range of potential outcomes that were considered feasible. He indicated that he had included the fall forecast from the previous year (shown in small blue triangles) as a frame of reference for the graph. He explained how the forecast was incorporated into the forecast that was currently being considered.

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Senator Stevens asked about the fall 2016 forecast as shown on the graph and asked if there had been a mistake or miscalculation.

Mr. King explained that there had been a change in the forecast that was largely a product of the change in information that the department had versus what it had a year previously. He noted that the following slide would address the issue of why the forecast changed.

He showed slide 7, "Lessons Learned":

- We assumed reduced capital expenditures and rig laydowns would result in accelerated decline
- The operators outperformed expectations, doing more with less

Mr. King continued to address Senator Stevens' question, noting that when the department was putting together the forecast 12 months previously, oil prices had just fallen by about 50 percent. The prevalent news at the time was highlighting rigs being laid down and global contraction of the oil industry. At the time he had seen that companies in Alaska were pulling back on capital. Given the information that was available at the time, there had not been much optimism about the ability for the producers to increase

production, and the forecast had reflected the sentiment. With new information available, the forecast had been adjusted accordingly.

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Mr. King discussed slide 8, "Lessons Learned," which showed a bar graph which depicted the state forecast, the aggregated operator forecast, and the actual production numbers. He noted that the actual production beat not only the state forecast, but also the operator forecast. He thought the graph showed how impressive the operators had been working at a time when the forecast was pessimistic. He pointed out that the FY 18 state forecast was slightly higher than the operator forecast. He relayed that the state was optimistic that the producers would be able to continue to operate well and continue to find efficiencies.

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RECONVENED

Mr. Decker addressed slide 10, "CHANGES - FALL 2016 TO FALL 2017":

Fall 2016

- 5 yr future projects outlook
  - Beyond 5 yrs was treated as "Pot of Gold" (outside official forecast, excluded from Revenue Sources Book)
- Annualized rates without seasonal fluctuations shown
- Emphasized improving long term predictions
- Under Evaluation projects were not risked for chance of occurrence

Fall 2017

- 10 yr future projects outlook
  - Beyond 5 yrs considered (part of official forecast, included in Revenue Sources Book)
- Monthly rates with seasonal fluctuations shown
- Near term emphasis w/ attention to realistic long-range outlook
- Under Evaluation projects risked for chance of occurrence within ten year forecast window, first oil

start date, and probabilistic range in production profiles

Mr. Decker noted that the department had made an important change in 2017 - to include all projects that might make it into the forecast on a risk-weighted basis. He noted that some of the results of the change would be reflected in future slides.

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Vice-Chair Bishop asked about the matrix for 'Under Evaluation' project evaluation and wondered if it was public information that could be shared with the committee.

Mr. Decker agreed to provide the information to the committee.

Co-Chair MacKinnon asked if the near-term and long-term production forecast model was consistent with that of other regions similar to the state. She thought the slide took a different look at production. She thought there had changes to improve consistency and a better understanding of the short-term forecast.

Mr. Decker stated that the department had tried to develop its process internally without any particular canned solutions; he did not know how other jurisdictions accomplished the task. He felt the department's approach was fundamentally sound; DNR had tried to incorporate risk and uncertainties and develop everything in a probabilistic manner. He thought the division's approach to risk and uncertainty was an industry standard.

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Mr. Decker displayed slide 11, "TECHNICAL PROCESS CHANGES":

- Increase understanding of tools and technique
  - Closer collaboration with software developer
  - Hindcasting exercise/sensitivities to test applicable Decline Curve Analysis regression periods
  - Steps to improve near-term accuracy
  
- Improve process efficiency:
  - Improved collaboration
  - Regular consultation with Department of Revenue

- Improve communication with clients and stakeholders

Mr. Decker noted that it was only the second time the Division of Oil and Gas had been through the process; prior to which the production forecast had been generated by a consultant hired by the Department of Revenue (DOR). He felt that the division had made significant improvements to the current forecast by implementing some small changes.

Mr. Decker continued to discuss slide 11, and relayed that the department had done a look-back at some previous forecasts and questioned how the selection of the historic decline period had impacted the decline projections. The division had made some minor adjustments that helped emphasize the near-term history as the best predictor of the near-term future. He hoped that communication with the legislature would be smoother in the current year.

Co-Chair MacKinnon considered that when the division had looked at previous forecasts it tried to apply the new formula to test different results.

Mr. Decker affirmed that the division had engaged in hindcasting, which was a way of testing the sensitivity of the model to get the best prediction of future production.

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Senator von Imhof recalled a slide that referenced operator forecasts and thought it was interesting that there were three forecasts (the department's, the operators', and the actual). She had heard it had been difficult in the past for the department to obtain comprehensive and accurate information from the operators. She discussed proprietary information from producers and wondered if Mr. Decker felt the department was getting sufficient information. She asked why the department didn't just use the operator forecast.

Mr. Decker felt that the department was receiving the information it had requested and was happy with the results of the information sharing. He felt that without incorporating certainty and developing its own methodology, the department would not have a sufficient estimate. He thought was important for the department to include its own understanding of the range of uncertainty in projects. He

qualified that some information provided by certain operators was very precise, and other operators might have a less accurate take on future performance. He thought it was a good idea to maintain an independent forecast.

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Mr. King commented that the operators provided estimates and had much more information about the reservoirs than the department. He furthered that the operators also had software, techniques and expertise to do estimates very well. He relayed that DNR had been challenged with aggregating all the different operator's information from across the North Slope to provide the legislature with a revenue estimate. He pointed out that the operators may not have consistent methods that were applied to the fields. He thought there was also a case that there were projects under development, to which operators would apply different risking methodologies and employ different assumptions for when production would come online.

Mr. King continued. He informed that the department had its own team that used production data from the Alaska Oil and Gas Conservation Commission (AOGCC) applied in a consistent method across the entire North Slope. He thought it gave credibility to the numbers if the department's estimate report was somewhat consistent to that offered by producers. If there was big disparity, there would need to be additional communication.

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Co-Chair MacKinnon reminded that the committee was having background hearings on production and revenue forecasts because in the past oil production revenue dramatically impacted conversations pertaining to the state's fiscal situation. She stated that the subject of how oil production could factor into the state's economic recovery had been the topic of multiple bills the committee had considered.

Co-Chair MacKinnon informed that Senator Olson had joined the meeting. She explained that Senator Micciche was not present due to illness.

Mr. Decker reasoned that the department liked to do its own forecast because it used public data as opposed to taxpayer

confidential information provided by operators (which the department may or may not be able to share).

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Mr. Decker spoke to slide 12, "NEAR-TERM UNCERTAINTY":

- Decline Curve Analysis weighted toward recent production history (2 to 5 yrs)
- Probabilistic range beginning from first date of forecast (previously probabilistic curves were pinned to last month of historical production)
- Full credit to planned UD production (previously we discounted nearly all UD as "within background")
  - Makes for more accurate near term production
  - Makes up for rate increases from non-drilling rate additions

Mr. Decker discussed the new practice of giving full credit to "under development" (UD) production (wells expected to yield production within the first year of forecast). He considered it to be a significant change. Previously the department had discounted most of the UD production as within the background that showed up in the decline curve analysis projections. For the short-term prediction, he thought it was important to consider the activity that was happening in the fields in the first year or two of the forecast.

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Mr. Decker reviewed slide 13, "Methodology":

- Currently producing:
  - Small uncertainty range due to established behavior of production pools
  - Quantitative probabilistic range of outcomes for CP pools
- Projects Under Development:
  - Applied quantitative probabilistic ranges using type wells
  - Some financial risk: Addressed using estimated project breakeven price and Department of Revenue oil price forecast
  - Projects detailed in plans of development or in confidential meetings with DOR

- Projects under Evaluation
  - Projects that have been announced, but are premature for sanctioning
  - Applied quantitative probabilistic ranges using type wells
  - Financial risk using project breakeven price and Department of Revenue oil price forecast
  - Other uncertainties included
    - Project chance of occurrence
    - Project timing risk

Mr. Decker clarified that 'currently producing' fields signified all the production coming from the currently producing fields and were analyzed alone to develop one category of the forecast. He explained that UD projects were expected to yield production within the first twelve months of the forecast, and DOR considered the operator's plan of development. He continued that 'under evaluation (UE) projects were expected to yield production from 2 to 10 years of the forecast.

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Mr. Decker read slide 14, "PRELIMINARY 2017 FORECAST."

Mr. Decker turned to slide 15, "FALL 2017 FORECAST RESULTS," which showed a graph entitled 'Production Forecast Range (All Alaska).' The slide showed the entire 10-year official forecast. He noted that the department had added the dark line to the left to illustrate 3.5 years of recent history. The dark blue line to the right was the mean forecast. He pointed out whiskers on the graph that showed the high and low ranges. He qualified that 80 percent of the time, the forecast was expected to be within the limit of error between the whiskers. He pointed out that the error range increased in the outlying years, as there was greater uncertainty with future projects.

Mr. Decker explained that the graph showed a much more believable and intuitive product than the department had been able to show the previous year, in part because of the seasonal adjustment that had been applied. He noted that the "saw-tooth" pattern of the line on the graph reflected wintertime efficiencies, as well as summertime downtime. He considered the junction of the line between historical data and forecast data and thought one might view the forecast

as seamless and believable. He observed that the forecast increased in the following year, and then held relatively steady. He thought the forecast was positive for Trans-Alaska Pipeline System (TAPS) longevity.

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Mr. Decker showed slide 16, "ANS Forecast by Category," which showed a graph entitled 'Total North Slope Oil Production (including NGLs).' The graph showed the forecast without seasonal adjustments and showed single point estimates over time. He explained that the dark blue portion represented existing pools. The orange band represented UD activity. The light tan at the top represented UE projects.

Vice-Chair Bishop asked for clarification on the graph on slide 16.

Mr. Decker edified that the light tan category on the graph represented projects under evaluation. He thought the slide was important as it showed that the bulk of the current forecast came from the currently producing fields.

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Mr. Decker displayed slide 17, "Currently Producing Forecast," which showed individual field's contribution to the currently producing forecast. He explained that the dark blue layer at the bottom represented the Prudhoe Bay unit, the orange layer represented the Kuparuk River field, and the tan layer of the graph represented the Colville River unit. He explained that the three portions constituted the workhorses in the currently producing fields. He stated that if the state were to stop investing (maintaining and replacing existing wells), the pools would continue declining. He thought it was good that the decline in the currently producing forecast was largely being mitigated in the long term and the near term by the UD and UE categories.

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Co-Chair Hoffman had heard of high expectations for the Point Thomson project, and thought the graph showed a steady line for its production forecast.

Mr. Decker discussed the Point Thomson project, which was a three-well gas cycling project. He recalled the expectation that it would come online at approximately 10,000 barrels of condensate per day. He knew there had been operational problems with getting production online, and it was his understanding that in the previous few months or weeks the project had come on at a fairly high and relatively steady rate. He did not believe it had reached the mark of 10,000 bpd. He qualified that the project was very different than the Point Thomson Expansion project, that would yield far more condensate in addition to gas.

Co-Chair Hoffman asked if improvements in technology could be anticipated in heavy oil.

Mr. Decker stated that in the long-term forecast in the UE sector, there was one category for heavy oil development, but it was not likely that technology would be applied to a large-scale project unless there was a significant price change.

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Mr. Decker spoke to slide 18, "WHERE WILL THE NEW OIL COME FROM?" The slide showed a graph of a ten-year forecast period entitled, 'All UE Projects-Risked for occurrence, timing and scale.' He explained that the slide showed a diagram of what the UE projects looked like under the ten-year forecast. He qualified that the projects had been risked for the chance of even occurring within a ten-year window; and were also risked for the uncertainty of what year oil production would start, and the level of performance. He suggested that viewers conceive of the graph as a best estimate of how the entire new oil portfolio would perform over time. He cautioned against looking at individual projects' magnitude in isolation as discreet scenarios.

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Mr. King discussed slide 19, "HOW SHOULD WE INTERPRET THIS FORECAST?":

- There's a lot to be excited about
  - but there is still a lot of uncertainty in future projects

- The forecast is a probability weighted average of many possible outcomes
  - It is not a prediction of exactly which scenario will come to be
- Each year in the forecast is it's own best estimate
  - The year to year changes are not actually predictions of decline rates

Mr. King thought the slide spoke for itself.

Co-Chair MacKinnon stated that the committee had been presented with a great deal of seismic data the previous year. She wondered if the state was working its way through the data to understand if there was anything of value.

Mr. Decker stated that the tax credit seismic data program was one that his section in the Division of Oil and Gas Resource Evaluation had a lot of responsibility for. The first tax credits had been implemented in 2003. The previous 5 to 7 years, the division had been busy working on ensuring that the incoming data met expectations. The department had released some data the previous year and had recently received regulatory go-ahead to distribute more data (with the caveat that some administrative costs could be recouped). The department would be releasing more data in the following months and expected that operators would be very interested in updating information and using it to develop exploration prospects.

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Co-Chair MacKinnon asked if the state had paid for the tax credits associated with the data that was going to be released.

Mr. Decker stated that the question would be best addressed to the Department of Revenue.

Senator Stevens asked about Mr. Decker's reference to no longer using consultants. He wondered how many people were required to do the work, and if he was satisfied with the number of employees tasked with the work in the division.

Mr. Decker answered in the affirmative. He stated that there was a small group of individuals that spent a lot of time on the forecast. He listed the following positions: a commercial analyst, two reservoir engineers, and two

geologists (including himself). Others from the Division of Oil and Gas, especially from the commercial section, would weigh in on the forecast and provide important information. He thought that the forecast product was considerably better than what was provided the previous year and thought the group had been naïve about how the product would be used and scrutinized. He felt like there had been significant improvements in the current year and hoped the rest of the forecast team felt the same way.

Senator Stevens wondered if a consultant could do a better job than the division.

Mr. Decker thought that consultants could potentially do a better job, but qualified that he had not seen previous projects conducted by the consultants with the sort of probabilistic handling of uncertainty used by the division. He considered the practice to be an industry standard technique. He thought it was important to have quantitative sideboards on any estimate as important as the forecast.

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Co-Chair MacKinnon thanked the testifiers. She commented on the importance of the information presented. She warned that the numbers presented were subject to change as the department refined the forecast. She remarked on the compressed time frame in which the numbers were requested and delivered and advised the data would be refined over time.

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^2017 FALL REVENUE FORECAST PRESENTATION: DEPARTMENT OF REVENUE

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Co-Chair MacKinnon commented that the purpose of the forthcoming presentation from the Department of Revenue (DOR) was to further understand the revenue that was coming into the state. She reiterated that current information on oil and gas revenue was important to understand when

considering proposed taxes. The Senate was trying to understand the gap in potential revenue coming into the state. She reminded that oil and gas revenue constituted a huge portion of the state's revenue. She mentioned oil and gas tax legislation discussed by the Senate over the previous four years. The Senate requested the commissioner of DOR to provide price and production numbers prior to introducing the budget. She reiterated that the numbers were subject to change.

SHELDON FISHER, COMMISSIONER, DEPARTMENT OF REVENUE, appreciated the opportunity to present to the committee. He discussed the presentation, "Preliminary Fall 2017 Revenue Forecast Presentation," (copy on file).

Commissioner Fisher turned to slide 2, "FORECASTING METHODS: Timeline":

- December 2016: Fall 2016 forecast and Revenue Sources Book
- Early April 2017: Spring 2017 forecast
- Late April 2017: Spring 2017 Alternative Scenario
  - 4% Production Decline Scenario, Letter to Co-Chairs
  - Used in modeling by Department of Revenue, Office of Management and Budget, and Legislative Finance
- October 2017: Preliminary Fall 2017 forecast
  - non-standard, provided to assist special session
- December 2017: Final Fall 2017 forecast and Revenue Sources Book
- March or April 2018: Spring 2018 forecast

Commissioner Fisher explained that historically DOR had issued a forecast in the fall (generally in December), and then updated the forecast in the spring. In the current year there had been a couple of changes to the forecast. The department and the legislature had realized that the spring forecast (issued in April) was too pessimistic, as it had predicted that oil would decline too rapidly. In late April, the department had revised the forecast upward, and reduced the rate at which the oil was predicted to decline. The alternative scenario was offered for consideration and had become the foundation for most discussions for the previous six months. He stated that he

would discuss how the alternative scenario varied from the official forecast.

Commissioner Fisher continued that the fall forecast being presented was another deviation from the norm and was available because of the nature of the special session. He affirmed that the department would be issuing a regular fall forecast and Revenue Sources Book in December, as well as a revised forecast in the spring.

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Commissioner Fisher showed slide 3, "FORECASTING METHODS: Introduction":

- All data is based on the DOR Fall 2017 Preliminary Forecast.
- This is a preliminary forecast and some numbers will change before the final submittal in December.
- Changes to unrestricted revenue between the preliminary and final forecast are expected to be less than \$100 million in any given year.

Note: This is a forecast. All figures and narratives in this document that are not based on events that have already occurred, constitute forecasts or "forward-looking statements." These numbers are projections based on assumptions regarding uncertain future events and the responses to those events. Such figures are subject to uncertainties and actual results will differ, potentially materially, from those anticipated.

Commissioner Fisher commented that the department had about three days between the time it received the production forecast from DNR and when it finished its work on the forecast. He had demanded an accelerated timeframe. He expected there to be revisions. He did not expect to see revenue change in the forecast by more than \$100 million in any given year.

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Commissioner Fisher displayed slide 4, "FORECASTING METHODS: What Do We Forecast at DOR?":

- We directly forecast Petroleum Revenue

- o Accounted for 65% of state unrestricted revenue in FY 2017
- o Projected to be 70-72% in FY 2018 and FY 2019
- o Includes severance taxes, royalties, corporate income tax, and all other revenue from oil companies
- We directly forecast Non-Petroleum Revenue
- We use Alaska Permanent Fund Corporation and Treasury Division forecasts for Investment Revenue
- We use the Federal Revenue authorized for spending as the forecast
  - o It is typically 20%-30% more than actually gets spent
- Compile all of these into Revenue Sources Book once the forecasts are finalized.

Commissioner Fisher stated that typically the department used the total authorized federal revenue in the forecast for consistency purposes, although it was typically not all spent.

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Commissioner Fisher read slide 5, "Fall 2017 Preliminary Petroleum Revenue Forecast."

Commissioner Fisher spoke to slide 6, "PETROLEUM REVENUE FORECAST: Factors":

Four Factors for Petroleum Revenue Forecast

1. Production
2. Price
3. Costs
  - Capital Expenditures
  - Operating Expenditures
  - Transportation Costs
4. Credits

Commissioner Fisher stated that the department had moderated its future oil price expectations compared to the prior forecast.

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Commissioner Fisher read slide 7, "Fall 2017 Preliminary Production Forecast."

Commissioner Fisher turned to slide 8, "PRODUCTION FORECAST: ANS History and Forecast by Pool," which showed a pictorial graph representation of oil production. He pointed out that the dotted line denoted the present time. He pointed out that the existing fields continued to decline, although at a slower rate than predicted in the past. The sliver of pink to the right of the dotted line represented new fields that would come on line, that while moderate would provide an uplift to the decline and help stabilize revenues.

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Commissioner Fisher showed slide 9, "PRODUCTION FORECAST: ANS by Case." He explained that there was a range of possibilities shown on the slide. The high case (P10) was intended to represent the 10 percent likelihood that oil production would be that level or higher. The 90 percent case (P90) represented that there was a 90 percent likelihood that production would be that level or higher. The official forecast (at P50) represented a 50 percent likelihood.

Commissioner Fisher displayed slide 10, "PRODUCTION FORECAST: ANS Details," which showed a table entitled, 'Preliminary Fall 2017 ANS Oil Production Forecast.' He thought the numbers on the table were consistent and underlie the charts that the committee saw on the DNR presentation earlier in the meeting. He qualified that the numbers were from North Slope production only, and did not include numbers from Cook Inlet, which were a smaller percentage with less change from the prior forecast. For 2018 there was a forecast of a little over 530,000/bbl. He pointed out that there was a modest decline, until 2024 when there was an increase or flat trend. He reiterated that there was a leveling off of production compared to the forecast a year previously.

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Commissioner Fisher reviewed slide 11, "PRODUCTION FORECAST: ANS Comparison to Prior Forecast," which showed a graph. He explained that the orange line represented the official spring forecast that came out in early April 2017. The graph showed a fairly steep decline in the first year of about 12 percent, and then a levelling off. The grey line represented the alternative scenario that was

described earlier, which had a 4 percent decline rather than the steep 12 percent decline. The heavy blue line presented the forecast as presented by DNR earlier in the day. He thought it was worth noting that in the out years the impact of the new forecast was greater.

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Commissioner Fisher spoke to slide 12, "PRODUCTION FORECAST: NPR-A Update":

- Alaska's share of revenues fund the Alaska Impact Grant Program
- Forecasted volumes from Moose's Tooth (GMT1 & GMT2) and Willow

Source: Department of Revenue and Department of Natural Resources; NPR-A = National Petroleum Reserve - Alaska; GMT = Greater Moose's Tooth Royalty Revenue and Volumes from NPRA

Commissioner Fisher explained that the state received a share of the federal royalty from the National Petroleum Reserve - Alaska (NPR-A), as well as some production tax, corporate income tax, and property tax; but did not get a state royalty.

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Commissioner Fisher turned to slide 14, "PRICE FORECAST: Historical ANS West Coast, West Texas Intermediate (WTI) and Brent Crude Prices 2009+," which showed a line graph. He informed that the department had gone through its fall pricing exercise. He reiterated that the department had done some moderating of expectations during the out years. The graph showed other benchmarks that were used elsewhere in the world: West Texas Intermediate (WTI), which referenced the price of oil in the Texan Basin; and the Brent (worldwide pricing).

Commissioner Fisher continued discussing slide 14, noting the wide range of numbers. He stated that there was a number of factors that drove the figures, and although there were differences, the figures generally moved together.

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Commissioner Fisher showed slide 15, "PRICE FORECAST: Historical ANS West Coast Price 2016+," which showed a line graph over a narrower period of time from June, 2016 to October, 2017. He pointed out a lesser degree of variability in the price than the previous slide. He expected there would be an interesting question pertaining to the current price of oil, which was meaningfully higher than what the DOR forecast had predicted. He explained that the department started its day with consideration of the futures forecast, and then later in the day considered the prior day closing analysis.

Commissioner Fisher continued discussing slide 15, stating that even though pricing in the current market was above \$60/bbl, the futures market was closer to the \$54/bbl range, which was what the department had predicted for the coming year. He thought the forecast was very consistent with other pricing forecasts in the immediate few years. He added that if there was a dramatic movement in the world markets, the department may choose to revisit the forecast. He felt comfortable with the current forecast.

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Commissioner Fisher displayed slide 16, "PRICE FORECAST: Key Drivers":

- Supply, Demand and Spare Capacity in FY 2018
  - Global Supply - 99.08 million barrels per day
  - Global Demand - 99.05 million barrels per day
  - Supply / Demand roughly in balance
- Current Events
  - Supply and demand balancing out
  - OPEC and Russia are maintaining decreased production until at least March 2018
  - Compliance with this cut has been relatively high
  - Recent unrest in the Middle East due to the Kurdish independence vote may disrupt supply

Commissioner Fisher shared that there was an expectation that there would continue to be discipline in terms of production from Russia and Saudi Arabia.

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Commissioner Fisher reviewed slide 17, "PRICE FORECAST: Impact of Spare Capacity," which showed a graph entitled 'World Liquid Fuels Production and Consumption Balance.' The orange line represented demand, and the blue line represented production. He informed that when the green bars fell below the mid-point, it indicated demand was greater than supply and there was upward pressure on price. When the green bars were above the line, it was a period in which the supply was greater than demand and there was downward price pressure. He pointed out a balance between the two price drivers looking forward to 2018.

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Commissioner Fisher spoke to slide 18, "PRICE FORECAST: Base Price Method":

- Price forecast is based on Fall 2017 forecasting session held on October 9th
- Participants gave 10th, 50th, and 90th percentile paths
- Average of these paths used to derive distribution of possible prices
- Base case is the median of the distribution

Commissioner Fisher detailed that the participants assembled for the forecast included economists from the Institute of Social and Economic Research (ISER), individuals from the Legislative Finance Division, staff from DOR, and a number of people from the community. Experts presented information about the direction of the market, and how they predicted drivers that underlie potential oil price for the future. Different percentile pathways were considered (P10/P50/P90) and provided to the forecast team.

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Commissioner Fisher discussed slide 19, "PRICE FORECAST: Nominal ANS Price Distribution," which was a graph reflecting the analysis from the department to predict a set of alternatives with predictive expectations. The numbers were reflected in nominal dollars. The graph showed that oil price was forecast as largely unchanged for FY 18, was approximately \$56/bbl in FY 19, and grew close to \$80/bbl in FY 28. He thought it was worth noting that in

real dollar terms, the predictive forecast would show oil price rising to about \$60/bbl.

Co-Chair MacKinnon asked why the forecast did not use industry price averages that were already compiled elsewhere.

Commissioner Fisher informed that there was no single industry average, but rather a variety of benchmarks to choose from. He thought it was apparent that the DOR forecast was closely in line with the industry price averages. He stated that each source had different characteristics that made it valuable and influential.

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Commissioner Fisher addressed slide 20, "PRICE FORECAST: Historical ANS West Coast Price FY Oil Price Bands (Annual Average and Fall 2017 Forecast)." He noted that the solid black lines on the left-hand side showed the range of pricing during the time period indicated. The grey bar that intersected the bars represented the average price. The right-hand side of the graph which showed the forecast represented the P90 and P10 values, with the grey lines predicting the average price predicted (as well as the price reflected in DOR's model).

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Commissioner Fisher showed slide 21, "PRICE FORECAST: Consensus View of Wide Distribution," which showed a graph produced by the Energy Information Agency (EIA). The slide was produced by the Energy Information Agency (EIC) and showed its prediction in red. The green represented the New York Mercantile Exchange (NYMEX), which was in essence the futures market. He explained that EIA considered futures market pricing and showed 95 percent confidence intervals as shown by the dotted lines on the graph.

[2:48:56 PM](#)

Commissioner Fisher reviewed slide 22, "PRICE FORECAST: Brent Forecasts Comparison to DOR ANS Forecast." The dotted black line represented DOR's forecast price. The blue line represented the analysts. The green line represented the EIA price forecast. He noted that the jump that was observable in January 2019 was somewhat reflective of a

stale price. He detailed that EIA had not updated the graph since January 2017, while the lower portion of the green line had been updated continuously.

Commissioner Fisher continued discussing slide 22. He commented that experts had considered the NYMEX pricing to be a strong predictor in the near term, but the further out it went the less accurate it became. There was not a very strong correlation between the future pricing and what had happened historically. Alternatively, the blue line represented what the analysts predicted; which also had varied from what the futures had predicted. He thought that the department was in a tight range with other predictive models and had been relatively well served by its process of forecasting pricing.

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Co-Chair MacKinnon asked if EIA was a federal agency.

Commissioner Fisher answered in the affirmative.

Commissioner Fisher displayed slide 23, "PRICE FORECAST: ANS Comparison to Prior Forecast." The slide showed a comparison; with the orange line representing the pricing present in the spring 2017 forecast. He reiterated that there was a spring forecast and additionally an alternative scenario, and the pricing had not changed between the two. The blue line showed how pricing had been revised in the most current exercise.

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DAN STICKEL, CHIEF ECONOMIST, ECONOMIC RESEARCH GROUP, TAX DIVISION, DEPARTMENT OF REVENUE, informed that he would discuss the remaining two major factors of the petroleum revenue forecast: company costs, and tax credits. He would also address slides that summarized the revenue forecast and make some comparisons to the previous forecast.

Mr. Stickel spoke to slide 25, " COST FORECAST: North Slope Capital Lease Expenditures," which showed the cost forecast for North Slope capital expenditures compared to the

previous forecast. He conveyed that the department received cost forecasts with a five-year time horizon, submitted by the operators of the units twice per year; which were a primary source of the department's cost forecast information. Additionally, DOR looked at planned development and various public information. There had been a change in the cost forecast, and there were two components. For the legacy fields and existing production, operators had largely reduced expenditures across the board.

Mr. Stickel continued discussing slide 25, observing that the portion of the graph in which the blue line (fall 2017 forecast) rose above the orange line (spring 2017 forecast) represented the addition of capital expenditures for new fields that were coming online.

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Co-Chair MacKinnon referred to oil and gas tax credits, and asked how the department considered investment, tax credits, and the different scenario for production. She thought there was a new dynamic happening and wondered how payment of tax credits was affecting investment.

Mr. Stickel stated that the department was working closely with DNR throughout the production forecast process. When DOR incorporated new fields into the cost forecast, it looked at the chance of occurrence that DNR assigned to the fields. He gave an example in which DOR valued a new project at \$1 billion to bring online and DNR assigned a 20 percent probability for the project; DOR would include \$200 million of the development cost into the forecast. He addressed tax credits and noted that there had been a drop in spending. There was approximately \$4 billion in capital expenditures on the North Slope in FY 15. The department had met with companies and tried to glean what was driving the change in behavior. The department had heard consistently that state policy as well as oil price had influenced negative cost pressure.

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Co-Chair MacKinnon referenced the governor's vetoes of a Senate proposal to pay more tax credits, as well as the decline in capital lease expenditures as shown on slide 25. She asked about tax credits owed by the state.

Commissioner Fisher stated that a future slide would address the matter and would reflect that credits would be payed off more quickly and at higher levels than prior forecasts had shown. He pointed out that the governor's budget proposal, despite the vetoes, had included paying off credits in a faster manner than the statutory minimum. He thought that the department understood that there was a need to pay off the credits, and looked forward to working with the legislature to find a way to do so quickly as well as provide the capital that producers needed to develop and grow.

Co-Chair MacKinnon referred to companies that had gone bankrupt, and other companies that had contacted legislators regarding finances. She wanted a definitive answer as to whether the state owed the credits, and whether it would pay the credits. She understood that there was not an established timeline.

Commissioner Fisher stated that the administration acknowledged that the state owed the credits, and it was more a question of the rate at which the credits would be paid. He thought if it was possible to complete the special session and deal with some of the bigger blocks associated with funding state government, there would be an opportunity to deal with other issues such as tax credits.

Co-Chair MacKinnon stated that the Senate had proposed paying a third of owed tax credits the previous year, but was not able to get the other body in agreement. She thought perhaps the legislature would reach accord the following year. She was encouraged to hear that there might be a way to provide more certainty to the oil and gas industry.

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Mr. Stickel informed that there would be additional slides that would address the tax credit issue. He discussed slide 26, "COST FORECAST: North Slope Operating Lease Expenditures." He stated that the slide reflected the ongoing cost to maintain the fields on the North Slope. He discussed continued pressure on bringing down operating expenditures. He asserted that companies were doing everything possible to make the current oil price level work on the North Slope. He pointed out a 5 percent to 10

percent reduction in expected operating costs for legacy fields. In the time frame from 2022 through 2023, there was a bump up in expected operating expenditures. He reiterated that the department had incorporated the cost of operating some of the new fields that were added to the forecast.

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Mr. Stickel showed slide 28, "Statutory Credit Appropriation: Methodology":

- DOR calculates statutory credit appropriation based on production tax levied under AS 43.55.011, before subtracting any credits against liability.

AS 43.55.028.

- (b) The oil and gas tax credit fund consists of
- (1) money appropriated to the fund, including any appropriation of the percentage provided under (c) of this section of all revenue from taxes levied by AS 43.55.011 that is not required to be deposited in the constitutional budget reserve fund established in art. IX, sec. 17(a), Constitution of the State of Alaska; and
  - (2) earnings on the fund.
- (c) The applicable percentage for a fiscal year under (b)(1) of this section is determined with reference to the average price or value forecast by the department for Alaska North Slope oil sold or otherwise disposed of on the United States West Coast during the fiscal year for which the appropriation of revenue from taxes levied by AS 43.55.011 is made. If that forecast is
- (1) \$60 a barrel or higher, the applicable percentage is 10 percent;
  - (2) less than \$60 a barrel, the applicable percentage is 15 percent.

Mr. Stickel discussed the methodology of how DOR came up with the statutory credit appropriation. He noted that the legislature had phased out a lot of the tax credits that were eligible for state purchase. There was still an outstanding balance for the credits that were accrued, and there were still some credits coming in the current year and the following year. He explained that there was statutory language that provided some guidance as to how to appropriate money to pay off the balance.

Mr. Stickel continued discussing slide 28, and referenced AS 43.58, which pertained to the oil and gas tax credit fund. He thought the most important aspect of the topic was the interpretation that the department had been using to calculate the statutory appropriation. He clarified that there was a 35 percent net tax before any taxable per-barrel credits.

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Mr. Stickel reviewed slide 29, "Illustration of Tax and Credit Calculations," which showed an example of how production tax was calculated, and how the statutory appropriation was estimated. The example came from the spring 2017 official forecast. He observed that there had been an estimated market price of \$60/bbl, about 140 million taxable barrels, and \$5.6 billion in costs; which gave an estimated production tax value of \$1.4 billion. When the 35 percent net tax rate was applied, the tax (before applying any credits) was estimated at \$490 million. The statutory multiplier was 10 percent, and the estimated statutory appropriation for FY 19 was approximately \$49 million at the time of the spring forecast.

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Co-Chair MacKinnon pondered that if calculations were based on predictions, the administration was in control of the amount.

Mr. Stickel stated that Co-Chair MacKinnon was correct in that the statute referenced the forecast price by DOR. He continued that the provision of the appropriation to the tax credit fund did not factor into the price forecast.

Commissioner Fisher stated that there had been no discussion about the value of credits and what was paid and unpaid as the department considered pricing in the exercise. He thought that lowering the price forecast had the counter-intuitive result of increasing the amount of credit that would be paid.

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Mr. Stickel displayed slide 30, "Illustration of Tax and Credit Calculations." He explained that the slide showed

the same calculation of FY 19 production tax and estimated statutory appropriation as the previous slide, but using the preliminary fall forecast rather than the official spring forecast. He noted that the illustration decreased the price from \$60/bbl to \$56/bbl and had increased the number of barrels (due to the higher production forecast). Estimated company spending had come down quite a bit. The net result of the differences was an estimated production tax value of \$3.3 billion for FY 19. When the statutory 35 percent tax rate was applied, there was a production tax value (before credits) of \$1.15 billion. Since the forecast market price was below \$60/bbl, the multiplier for determining the statutory appropriation was 15 percent, and there was an estimated appropriation of \$172.5 million (for North Slope), which combined with Cook Inlet totaled \$175 million.

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Mr. Stickel reviewed slide 31, "FY 2019 Statutory Credit Appropriation":

Key Changes Spring to Preliminary Fall:

- Production forecast increased
  - 29 million more taxable barrels
  - \$800 million more gross value
- Cost forecast decreased
  - \$1.1 billion less deductible costs
- Tax before credits increased
  - \$1.9 billion more profit x 35% = \$660 million
- Different Statutory Appropriation Multiplier
  - Appropriation is 15% of tax before credits when price forecast <\$60, 10% when price forecast is \$60+

Mr. Stickel specified that under the current preliminary fall forecast, there was an estimated greater than \$100 million under the statutory appropriation calculation for all years of the forecast.

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Mr. Stickel spoke to slide 32, "CREDITS FORECAST: Compared with Production Tax," which displayed a chart showing production tax before and after credits against tax liability. The grey bars showed net fiscal impact of repurchased credits by the state. He pointed out that for

FY 19, if one just examined the net rate before applying credits against liability, there was about \$1.2 billion in tax before credits. With the taxable per-barrel credits the amount was closer to \$300 million, and about \$175 million estimated for the statutory appropriation, leaving a net of about \$125 million for FY 19.

Co-Chair MacKinnon asked if it was fair to say that the 35 percent tax rate, in combination with the tax credits per barrel, was a mechanism to create slight progressivity in the overall model.

Mr. Stickel stated that adding a slightly progressive element was part of the justification for going to the per taxable barrel credit. He stated that another justification was to directly incentivize production, as opposed to the previous system which directly incentivized spending.

[3:10:41 PM](#)

Mr. Stickel discussed slide 33, "CREDITS FORECAST: Compared with Unrestricted Petroleum Revenue," which looked at all unrestricted petroleum revenue, and included the unrestricted portion of royalty as well as corporate income tax and property tax. He pointed out that even after accounting for all the tax credits paid through appropriation, the state still got well over \$1 billion in unrestricted revenue net from the industry. If you counted the restricted revenue that flowed to the Permanent Fund and the Public School Trust Fund, there was about \$1.7 billion in FY 19; after which the amount increased.

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Mr. Stickel turned to slide 34, "CREDITS FORECAST: Outstanding Tax Credit Obligations," which showed a bar graph. The blue bars showed the outstanding balance of tax credit obligations; and the grey bars showed the estimated statutory appropriation for FY 19 and beyond, as well as the actual appropriation that was made by the legislature for FY 17 and FY 18. The chart showed how the estimated balance of tax credits would change over time under the forecast if the full statutory appropriation was made each year.

Mr. Stickel continued discussing slide 34, noting that legislative action in 2016 and 2017 with HB 247 and HB 111

phased out the earning of new credits over time. He stated that there was an estimated \$118 million in new credits that would come on to the books in FY 19. Although the credits had been phased out, if there was a delay in companies submitting returns there would be a delay in review and approval of credits by the department. There was an estimated \$175 million to be paid, which would leave a balance of \$679 million at the end of FY 19.

Vice-Chair Bishop asked about credits under review and assumed that DOR as well as DNR had to review the credits.

Mr. Stickel affirmed that it was necessary to have both departments review for certain exploration credits.

Co-Chair MacKinnon asked if the state had paid off the credits for entities that had provided seismic data that would be released.

Mr. Stickel stated that the appropriation for repurchase of tax credits was sufficient to cover all outstanding tax credits through FY 16 and stated that the answer to her question was "most likely."

Mr. Stickel continued to discuss slide 34 and stated that the slide showed that assuming the state made the statutory appropriation as calculated, the scenario would potentially pay off the entire balance of outstanding tax credits by FY 25. He thought the appropriation in the final year would be in the \$90 million range.

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Co-Chair Hoffman asked if Mr. Stickel was testifying that it was the intent of the administration to fund the statutory amount.

Commissioner Fisher answered in the negative. He thought the administration was trying to articulate what the statutory minimum was. He stated that he was trying not to make policy decisions as to what the governor may or may not choose to do and how he may or may not construct his budget. He furthered that he was trying to articulate what a steady state budget would be. In the past, the state had paid the statutory minimum, and that was what was reflected in the forecast.

Mr. Stickel showed slide 36, "FORECAST CHANGE: FY 2017 Forecast vs Actuals":

- About \$125 million of "miss" due to transfers to the CBRF from General Fund - prior-year adjustments
  - Mineral revenue as a result of termination (settlement, etc.) of administrative proceeding or litigation is deposited to CBRF per Alaska Constitution article IX, §17
- Remaining \$170 million of "miss" due to Corporate Income Tax forecast - primarily oil & gas

Mr. Stickel acknowledged that the department had missed the forecast for FY 17 by about \$300 million. He discussed two major issues listed on the slide. He detailed that the Legislative Audit Division had identified numerous transactions of revenue received in previous fiscal years and accounted for as general fund revenue, but should have got to the Constitutional Budget Reserve (CBR). An accounting an approximate \$125 million adjustment for the revenues was made in FY 17. He informed that additional slides would address corporate income tax specifically.

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Mr. Stickel looked at slide 37, "FORECAST CHANGE: Production Tax Revenue Highlights":

- Oil price forecasts decreased slightly from spring forecast
  - Long-term prices (FY2022+) now expected to settle around \$60 real
- Oil production forecast methods
  - Forecast process by technical experts at DNR improved from last year.
  - Long term forecasts have stabilized.
- Unrestricted revenue forecast increased somewhat mostly due to higher oil production forecast
- Lease expenditures expected to fluctuate over the forecast period due to forecasted new production: Companies have cut costs for existing fields but new fields will add costs
- Companies cited Alaska investment instability and uncertainty regarding the state fiscal system, as factors impacting decision making

Mr. Stickel detailed that the forecast saw oil production as more stable, which was a change from a consistent decrease in previous forecasts. He highlighted the fact that there was still uncertainty surrounding the revenue forecasts.

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Vice-Chair Bishop commented on slide 37. He emphasized the last bullet of the slide as the most important part of the presentation. He thought the administration and the legislature needed to send the correct signals to companies.

Co-Chair MacKinnon referenced bills that took away cashable credits and other credits.

[3:20:19 PM](#)

Mr. Stickel reviewed slide 38, "FORECAST CHANGE: Comparison from Spring 2017 Forecasts for FY 20," which showed a comparison showing the revised fall forecast for FY 18 in two ways. The slide compared the forecast with the 4 percent decline scenario, as well as with the official spring 2017 forecast. He pointed out that the price was unchanged for FY 18, and production was up from both previous forecasts. Costs were down from both previous forecasts, and the result was a slight increase in the forecast. He continued that the official spring forecast had a \$70 million decrease in the FY 18 forecast versus the 4 percent decline scenario. He stated that the reason for the decrease had entirely to do with the reduced forecast for corporate income tax.

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Mr. Stickel showed slide 39, "FORECAST CHANGE: Comparison from Spring 2017 Forecasts for FY 2019." The slide was a similar comparison to the previous slide, but looking at the forecast for FY 19, which was the budget year that would be before the legislature the following session. Compared to the previous forecast's production, expectations had been increased. Expectations for oil price and company spending had been decreased. The revenue forecast was a little higher than the previous official forecast, and a little lower than the 4 percent decline

scenario. He cited that corporate income tax was a factor of the reduction.

Mr. Stickel turned to slide 41, "REVENUE FORECAST: 2017 to 2019 Totals," which showed a table that showed all revenues to the state for FY 17 and forecast for FY 18 and FY 19. The table included Unrestricted General Fund (UGF) revenue forecast, which was typically the subject of most of the budget discussions. The table also showed designated funds in three different categories used in the budget process.

Mr. Stickel continued to discuss slide 41. He observed that unrestricted revenue was expected to rebound from the FY 17 levels, which had to do with FY 17 being a low-revenue year. He qualified that FY 17 marked the lowest unrestricted revenue the state had since 1999. He pointed out a decrease in total revenue from FY 17, from a little over \$12 billion to approximately \$10.6 billion. The reason for the decrease in total revenue had to do with expected moderation of investment returns. He mentioned over 12 percent Permanent Fund return in FY 17, and the expectation for the return to go back to more historically normal 6 to 7 percent annual return in the future.

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Mr. Stickel spoke to slide 42, "REVENUE FORECAST: By Spending Category;" which looked at total revenue with a ten-year history, a ten-year forecast, and consideration all state revenue sources. The slide showed that historically oil revenue was the largest source of revenue in the state, but going forward the largest source would be investment revenue. Investment revenue would be followed by federal funds, petroleum revenue, and non-petroleum revenues in order of amount.

Mr. Stickel looked at slide 43, "REVENUE FORECAST: 2017 to 2019 Petroleum Unrestricted Revenue," which showed data table. He commented that royalty was the biggest share of unrestricted petroleum revenues and was expected to continue to provide over half of the petroleum unrestricted revenues going forward. He expected modest increases in production tax, as price and production were both increasing. He also expected a bounce-back to a corporate income tax that had a positive UGF revenue impact to the state.

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Mr. Stickel discussed slide 44, "REVENUE FORECAST: 2017 to 2019 Non-Petroleum Unrestricted Revenue," which showed a table and considered the non-petroleum side of UGF revenues. He expected that the non-petroleum revenues would account for a quarter to one-third of unrestricted revenues going forward; which became a more significant share than in the higher oil price environment of the past. He highlighted that FY 17 was a lower than expected year on the non-petroleum corporate income tax. He expected the amount to bounce back in FY 18 or FY 19.

Co-Chair MacKinnon asked about the governor's proposed budget from the previous year. She mentioned the motor fuels tax and thought the administration had spent the funds before there was policy in place. She wondered if the legislature would see the same occurrence in the following year's proposed budget, or if the policy discussion would lead the conversation.

Commissioner Fisher did not have a response. He understood the concern expressed by Co-Chair MacKinnon and avowed to communicate the information. He stated that there were current policy discussions that would ultimately reflect in the budget.

Co-Chair MacKinnon stated that in previous years the Senate had faced policy decisions being included in the budget and then not implemented by the legislature, resulting in a revenue shortfall or additional spending. She thought it was helpful for the budget to reflect actual revenues rather than policy incorporated with revenues.

[3:27:44 PM](#)

Senator von Imhof referred to investment revenue, which had not always been included with other revenue in past budgets. She asked for a comment on using investment earnings.

Commissioner Fisher thought that the governor had been fairly transparent for some time that the administration believed it could not solve the state's fiscal challenge without using Permanent Fund investment income. He referred to a chart from the presentation that showed that investment income had become the largest single source of

revenue for the state. He thought the two bills that included a Percent of Market Value (POMV) payout had relatively modest differences. He viewed that investment income would need to be part of the ultimate fiscal solution for the state.

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Mr. Stickel looked at slide 41, which broke out revenues into four broad categories. The investment revenue that was shown under the UGF revenue category was a small amount and represented earnings on the available balance of the GF and was truly unrestricted revenue. He stated that the majority of the investment revenue was shown as "Other Restricted Revenue," which was consistent with past practice and assumed no POMV plan. He stated that the matter had been discussed and the department determined it would not show the funds as unrestricted revenue in the Revenue Sources Book until the legislature had passed a plan to start using the revenue.

Co-Chair MacKinnon stated that the courts had interpreted that the funds were unrestricted revenue, which was somewhat in conflict with how the administration was operating. She explained that there was a lawsuit.

Mr. Stickel explained that there were various ways in which things were shown in the budget process, and DOR did its best to have the Revenue Sources Book and the way it presented the revenue forecast be consistent with the conventions used in the budget process by the Office of Management and Budget (OMB) and the Legislative Finance Division (LFD). He furthered that the department had an alternative way of looking at the revenue forecast, called "Revenue Subject to Current Year Appropriation," and a subsequent slide would address the concept. The slide would look at all revenue that was technically available for appropriation by the legislature.

Co-Chair MacKinnon referred to hundreds of millions of dollars in tax credits outside the oil and gas industry that had not been touched; and wondered if the administration would be advancing any policy discussions or legislation that would change the tax credits. She explained that in order to obtain additional investment or additional job opportunity the state had offered tax credits for different industries in order to reinvest the

funds back into the industries. She gave mining and fishing as industry examples of foregone revenue in the form of tax credits.

Commissioner Fisher had not looked at doing so but was happy to work with legislators on this issue.

[3:33:49 PM](#)

Co-Chair MacKinnon thought it was a difficult discussion. She stated that there had been books issued on the subject. She thought the fishing industry was a beneficiary of tax credits. She thought it was hard to make money fishing when most licenses were held by out-of-state owners. She thought a huge benefit of tax credits was going to out-of-state owners and wondered when the topic would be addressed. She referenced elimination of oil and gas cash credits and other credits. She thought the matter deserved scrutiny. She mentioned free hunting and fishing licenses for resident seniors. She stated there was a report on indirect tax expenditures online with LFD.

Co-Chair Hoffman thought it was interesting to observe that investment revenue was the state's largest revenue source. He knew Vice-Chair Bishop had stated many times that the CBR had dwindled. He asked about the current balance of the Earnings Reserve Account (ERA).

Commissioner Fisher thought the CBR was approximately \$2.2 billion and estimated that the ERA was approximately \$13 billion.

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Co-Chair Hoffman outlined a concern that the Permanent Fund itself was healthy. He thought the thought it might be difficult given the magnitude of the deficit the state was facing.

Commissioner Fisher echoed the comments of Co-Chair Hoffman and thought one of the most important decisions the administration and legislature had to make was to develop a long-term sustainable draw from the ERA that was consistent with the way the fund had been treated historically so it would be available for future generations. He thought it would be a challenge given the fiscal gap.

Co-Chair MacKinnon corrected her earlier statement regarding the age for free hunting and fishing licenses. The qualifying age was 60 rather than 65.

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Mr. Stickel returned to slide 44 and looked at non-petroleum unrestricted revenue for FY 17, FY 18, and FY 19. He stated that beginning in FY 18, the motor fuel tax was moved from UGF to DGF. Following policy discussions in the previous session, LFD had looked at existing statute and made a determination that DOR had been incorrectly classifying the motor fuel revenues as UGF. Subsequently LFD had proposed moving the motor fuel tax revenues to designated restricted funds. He continued that OMB had been in agreement with the change, and the department had followed the change in the presentation for consistency purposes. He expressed a willingness to show the revenue differently if desired. He noted that the detailed tables in the revenue forecast would show the funds broken out separately as DGF revenue.

Co-Chair MacKinnon referred to consistency and thought that what he described was inconsistent from the previous year, and also represented a reduction in UGF spend that could be misinterpreted.

Mr. Stickel acknowledged that there would be a reduction shown in UGF between FY 17 and FY 18, and stated that the department would include footnotes and narrative explaining the change in the revenue forecast document. He stated that the department had aimed to be consistent with the documents that would be put forward in the budget process.

Co-Chair MacKinnon asked Mr. Stickel to provide an example, and an explanation about the reason for the change.

Mr. Stickel understood that there had been a reinterpretation of existing statute. He stated that LFD had provided a document that explained the justification for the change. He was happy to provide the document for the committee's consideration.

Co-Chair MacKinnon expressed the desire to see the explanatory document and referenced her past discontent with a previous reinterpretation of payment of tax credits.

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Mr. Stickel continued to discuss slide 44 and mentioned the mining license tax. He continued that FY 17 was a relatively strong year, and there was a nice jump in mining license tax revenue into the \$40 million range as there had been more profitability in the mining sector. He discussed investment revenue (unrestricted investment revenue on the GF and other non-segregated balances) and noted that the treasury division was expecting that over time the interest rates would normalize and go back to a more historical level of returns as opposed to the very low rates of return the state had seen on safe investments over the past couple of years.

Co-Chair MacKinnon asked the commissioner to convey to OMB Director Pat Pitney (who would be presenting to the committee later in the week) that it would be helpful to know what the funds from the motor fuel tax reinterpretation was designated for and how it would be accounted for. She asked if there was a policy decision that needed clarification. She thought the funds should be used for the federal matching funds, so the state could leverage the tax funds at a 10 to 1 ratio to ensure state infrastructure was being kept at the highest and best use possible. She considered whether it was necessary to follow up with a private meeting in order to more fully understand the administration's direction on the matter.

Commissioner Fisher stated that he would make sure that the administration was prepared to discuss the matter the following day when Director Pitney was in committee.

[3:43:58 PM](#)

Mr. Stickel looked at slide 45, "REVENUE FORECAST: Petroleum Corporate Income Tax":

- Challenging to forecast in changing price environment
  - Based on U.S. or worldwide profitability, apportioned to Alaska.
- Estimated payments lower than expected (FY17 ~ \$95 million)
  - Expecting a rebound as companies return to profitability
- Refunds higher than expected (FY17 ~\$93 million)

- o Partially due to Net Operating Loss carry-backs (FY17 ~\$51 million)
- o Expecting smaller impact going forward (if price remains stable)
- CBRF movement of funds in FY 2017 (FY17 ~\$62 million)
  - o In consultation with Legislative Audit
  - o Did not impact cash received but did impact general fund / CBRF split

Mr. Stickel stated that the department had missed on the forecast for FY 17. He stated that forecasting corporate income tax had been a challenge with the changing price environment as oil prices had gone from over \$100/bbl down to the \$30/bbl level before slowly increasing over the previous two years. The slide identified three reasons for the department's inaccuracy with regard to the forecast of petroleum corporate income tax. He informed that there was a similar effect (to a lesser extent) for the non-petroleum corporate income tax.

[3:46:42 PM](#)

Mr. Stickel reviewed slide 46, "REVENUE FORECAST: Corporate Income Tax," which showed an illustration of petroleum and general corporate income tax revenues. He pointed out that that for petroleum corporate income tax revenues the state received negative net revenues in FY 16 and FY 17; which he considered an offset to extra revenue the state received in some of the previous years. He expected corporate income tax revenue would balance out at the \$150 to \$200 million per year range for the next two years. The general corporate income tax was forecast to increase to approximately \$150 million in FY 18. The state had received over \$40 million in estimated vernal corporate income tax payments in the first quarter of the year.

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Mr. Stickel showed slide 47, "REVENUE FORECAST: Revenue Available for Appropriation":

- Useful for outside analysts not familiar with Alaska's budget conventions
- Better reflects ability of state to meet its obligations

- o Alaska has a budget framework that restricts certain revenue based on constitution, statute, of customary practice
- o The ability of the state to meet its obligations is not fully reflected by the General Fund Unrestricted Revenue category
- All revenues subject to appropriation for any purpose can be used by the legislature to fund government services or obligations, including:
  - o Constitutional Budget Reserve Fund
  - o Earnings Reserve of the Permanent Fund

Mr. Stickel informed that slide 47 and slide 48 would focus on revenue available for current-year appropriation. The slides would show revenue without the customary restrictions and budgetary conventions used in the rest of the Revenue Sources Book, while looking at how much was technically available for the legislature to appropriate for any purpose. He informed that the department had started the format a couple of years previously, largely in response to entities outside Alaska (i.e. federal entities, private entities, or rating agencies) that were considering the state's budget documents and trying to make sense of the its ability to meet obligations.

Mr. Stickel showed slide 48, "REVENUE FORECAST: 2017 to 2019 Available for Appropriation," which showed revenue available for current year appropriation for FY 17, as well as the forecast for FY 18 and FY 19. The slide considered all unrestricted revenues and added the portion of royalties beyond the 25 percent constitutional minimum that went to the Permanent Fund. He noted that some leases had a 50 percent share, and some leases had a 25 percent share; while the average going to the Permanent Fund was about 31 percent of royalties. The additional 6 percent was considered available for appropriation. He thought it should be noted that the realized earnings of the Permanent Fund were a little higher than what would be available in a sustainable draw scenario. All told, the state had a little over \$6 billion per year that was technically available for appropriation by the legislature.

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Co-Chair MacKinnon asked if the total was outside of the federal appropriation.

Mr. Stickel answered in the affirmative and stated that DOR considered that federal appropriations typically had specific uses and therefore were not considered available for any purpose.

Co-Chair MacKinnon thought sometimes Alaskans were receiving a distorted message about growth in government. She referenced leveraging federal dollars in the form of healthcare aid and federal highway projects; which might give the perception of a growing budget. She used the example of spending Department of Fish and Game, which leveraged Pittman-Robertson funds. She thought it was important to understand that the legislature had tried to leverage as much funding as possible to fill the holes in past budgets.

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Commissioner Fisher spoke to slide 49, "WRAP-UP: Changes to 10-Year Unrestricted Revenue Outlook," which would provide a view of how the revenue forecast compared to prior years. He thought there had been confusion about the official spring forecast and the 4 percent decline. He drew attention to the top box on the slide, which indicated that the official spring forecast had a 12 percent decline in FY 18. It was possible to observe the decline diminish over time as shown on the slide. He noted that the spring forecast "alternative scenario" declined 4 percent, then stayed at 4 percent throughout the time period on the slide. The result was that the alternative scenario offered more revenue to the state than the official forecast. He informed that the 4 percent decline scenario had been used by OMB and LFD for most of the modelling done in the past 6 to 9 months.

Commissioner Fisher continued to discuss slide 49 and compared the department's current forecast against the official forecast; where it was possible to see the current forecast showed growth in every period. He noted that the alternative scenario showed a modest decline in revenue was predicted for FY 18 and FY 19, compared to what was predicted previously. Moving out to years FY 25, FY 26, and FY 27 it was possible to see meaningful additional revenue.

Commissioner Fisher turned to slide 50, "WRAP-UP: Big Picture Takeaways for Forecast Period":

- Oil Prices for FY19+ decreased for the forecast period
  - Current prices trending slightly higher than forecasted price for FY 2018
- Oil Production is forecasted to be steady
  - Includes some new fields on a risked basis.
  - Current production on track with forecast so far for FY 2018
- Petroleum Revenue represents 65 - 74% of our unrestricted revenues over the forecast period
- Unrestricted revenue changes (vs Spring 2017, 4% decline scenario)
  - FY 2018-2019 forecasts decreased
  - FY 2020-2024 forecasts increased by <\$100 million per year
- Structural budget deficit remains

Commissioner Fisher considered that the structural deficit would continue until late in the ten-year period that was being discussed.

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Co-Chair MacKinnon thanked the testifiers for their comments.

Senator Olson referenced slide 42 and pondered the increased investment income. He assumed the increase was partly because of stock market growth. He thought there would be a correction in the market in the next few years, and he wondered if the department had a plan. He referenced a loss of state funds in the past due the lack of ability to transfer funds at the appropriate time.

Commissioner Fisher thought many people agreed with Senator Olson's assessment that there was likely to be a market correction. He thought the presentation on the following day by OMB Director Pitney would include information on historical market variability and the impact on investment revenues to the state, particularly on the POMV model that had been discussed. He expected that Permanent Fund Director Angela Rodell (scheduled to present to the

committee later in the week) could elucidate the matter further as well.

Commissioner Fisher continued to address the question regarding whether the state should de-risk its portfolio to anticipate the market correction. He thought most market experts would say that trying to time the market was counterproductive, and the ability to forecast a market correction was exceedingly difficult. He thought history would show that those funds that maintained steady asset allocation through a market correction performed better than those that attempted to time the market with withdrawals and deposits.

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Senator Olson asked if there was a plan in place to deal with the eventuality of a market correction and even lower investment revenues.

Commissioner Fisher emphasized that the administration believed additional revenue was important, and that the state needed to diversify its revenue sources. He commented that Alaska had dramatically more volatility in its state revenue than any other state because it relied on sources of revenue that had a fair amount of instability. He thought having the tax revenue as a source of additional revenue was an important component. He stated that the proposal the governor had put forward for additional taxes did not completely fill the fiscal gap. He asserted that many had expressed a desire to see additional budget cuts, and he thought the administration recognized there was still work to be done in that regard. He furthered that the administration looked forward to engagement on a variety of topics, including healthcare.

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Senator Stevens wanted a better understanding of the CBR. He referenced past large withdrawals and wondered if the funds were owed back to the fund and needed to be returned.

Co-Chair MacKinnon stated that the withdrawn funds were owed back to the CBR, and over the course of 2007 until 2012 (during high oil prices) the chair of the Senate Finance Committee had returned the funds to the fund. There was no provision in state statute as to when the funds

needed to be paid. There was an obligation to each legislative body to return the money back to the CBR, which had a higher threshold for access.

Senator Stevens thought the debt to the CBR was an obligation not unlike the oil tax credits, which had a schedule and were a debt.

Commissioner Fisher agreed.

Co-Chair MacKinnon thanked the administration. She appreciated the advanced push that yielded a preliminary revenue forecast. She commented on the length of the presentation. She considered that the commissioner had made a concerted effort to talk with the committee and follow up with questions.

Co-Chair MacKinnon discussed the schedule for the week.

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ADJOURNMENT

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The meeting was adjourned at 4:03 p.m.