

**ALASKA STATE LEGISLATURE
SENATE RESOURCES STANDING COMMITTEE**

January 27, 2012

3:35 p.m.

MEMBERS PRESENT

Senator Joe Paskvan, Co-Chair
Senator Bill Wielechowski, Vice Chair - via teleconference
Senator Bert Stedman
Senator Hollis French
Senator Gary Stevens

MEMBERS ABSENT

Senator Thomas Wagoner, Co-Chair
Senator Lesil McGuire

OTHER LEGISLATORS PRESENT

Senator Cathy Giessel

COMMITTEE CALENDAR

Presentation by Bryan Butcher, Commissioner, Department Of Revenue

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

BRYAN BUTCHER, Commissioner
Department of Revenue (DOR)
Juneau, AK

POSITION STATEMENT: Presented overview of the new tax revenue management system (TRMS) information.

CODY RICE, Petroleum Economic Policy Analyst
Department of Revenue (DOR)
Anchorage, AK

POSITION STATEMENT: Answered economic policy questions relating to petroleum production.

BRUCE TANGEMAN, Deputy Commissioner
Department of Revenue (DOR)
Anchorage, AK

POSITION STATEMENT: Helped present overview of the new tax revenue management system (TRMS).

LENNY DEES, Audit Master
Department of Revenue (DOR)
Anchorage, AK

POSITION STATEMENT: Answered statistical questions about the TRMS.

ACTION NARRATIVE

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CO-CHAIR JOE PASKVAN called the Senate Resources Standing Committee meeting to order at 3:35 p.m. Present at the call to order were Senators Stedman, French and Co-Chair Paskvan. Senator Wielechowski was present via teleconference.

Presentation by Bryan Butcher, Commissioner, Department of Revenue

CO-CHAIR PASKVAN announced the presentation by Bryan Butcher on the fall DOR forecast, the new tax revenue management system (TRMS) approved in the capital budget last year, and ACES taxes.

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BRYAN BUTCHER, Commissioner, Department of Revenue (DOR), introduced other members of the department in attendance and on line. He said his presentation would be on the fall 2011 forecast, tax credits, tax revenue management system, production tax audits, staffing levels for audits, a data assessment project and regulations.

Factors that affect production forecasting fall primarily in the production and price side of things. Their petroleum economist and petroleum engineer and operators look at the geology of the area, a development plan, where they are with it and when it is expected to be completed. The commercial piece of production forecasting include: project economics for a particular field and well; oil price and market conditions, government policy, access regulation, taxation and a production profile with history.

CO-CHAIR PASKVAN said he was most intrigued by what process was used to determine the project economics, like internal rates of return (IRR) or return on investment (ROI).

COMMISSIONER BUTCHER responded that they looked at the big picture of what affects production going up or down.

CO-CHAIR PASKVAN said the reason for the meeting is to establish facts that future deliberation will be based on.

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COMMISSIONER BUTCHER said slide 5 showed the history of production from 2001 to 2011 and out to 2021. The forecast in the Revenue Sources Book (RSB) includes all three elements on the right hand side between currently producing (currently producing and the estimates into the future), under development (currently under development but not producing but expected to be producing in the near future) and under evaluation (such as Pt. Thomson, which doesn't have a date for production, but still needs to be in the forecast because there is enough industry focus on it) - the most speculative of the three.

CO-CHAIR PASKVAN asked if it would be possible to identify which projects he is referencing in the under development categories so they can better understand what the department replied upon for the forecasts.

CODY RICE, Petroleum Economic Policy Analyst, Department of Revenue (DOR), said they could see what could be done in that respect outside of the confidential limitations in AS 43.55.890 that requires aggregation of three or more producers before specific taxpayer confidential information can be released; it is almost entirely the basis of these production forecasts. Where they were able to name a project they already have in the RSB.

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SENATOR STEVENS joined the committee.

CO-CHAIR PASKVAN asked if fewer than three producers are not disclosed and more than three are.

MR. RICE answered that is correct.

CO-CHAIR PASKVAN asked where the list is in the RSB categories of under development or under evaluation.

MR. RICE answered that they don't have an actual list of three or more owners because that changes periodically. He said page 38 of the RSB has production forecast assumptions; the far right column lists a couple of projects including heavy viscous oil development at Orion, continued satellite development at Alpine, Nanuq and Alpine West fields, and continued development at Ooguruk and Nikaitchuq.

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CO-CHAIR PASKVAN asked if names of three or more producers can be disclosed or just their production totals.

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MR. RICE replied that the details of production and taxpayer particular information can only be disclosed under AS 43.55.890. Page 41 of the RSB describes fields currently under development and currently under evaluation. Under current development Nanook, Alpine West Satellites, Alpine Borealis, and Orion Satellites at Prudhoe Bay are listed. Under development drilling Liberty, Ooguruk and Nikaitchuq are listed. Ongoing development drilling at Prudhoe Bay and Kuparuk are listed. The distinction is important for the under development layers particularly in currently producing fields. There may be multiple layers within a certain field. Prudhoe Bay has both currently producing and under development fields.

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SENATOR FRENCH asked where the 1 million barrel a day aspirational goal set by the governor appears on the graph.

COMMISSIONER BUTCHER indicated that it wasn't there. What they are seeing is a snapshot of how the department sees the production forecast moving forward in the current investment environment, not what a future investment environment would look like with passage of HB 110. The governor's 1 million barrels a day is a big picture goal, and the department believes that under the current investment that wouldn't be achievable in the next decade.

SENATOR FRENCH asked where Great Bear's efforts appear.

COMMISSIONER BUTCHER replied that is not included because the first exploration well hasn't been drilled yet. It's far too premature and there are many unanswered questions.

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BRUCE TANGEMAN, Deputy Commissioner, Department of Revenue (DOR), added that Great Bear is a serious player in that both their OPEX and CAPEX were taken into account in the potential for plans going forward, but they weren't at the stage of projecting production from those potential finds.

SENATOR FRENCH asked if they have a graph of how you get to 1 million barrels a day under HB 110 and where it would come from.

COMMISSIONER BUTCHER replied no.

MR. TANGEMAN said they had some scenarios based on publically available information in House Finance last year. They weren't just throwing a dart at the wall, but it was based on certain types of fields.

CO-CHAIR PASKVAN said slide 5 shows a decline starting in 2001 for the past decade, but everyone agrees that the decline started in 1989. He asked what the reason is for the onset of the decline at Prudhoe Bay beginning in 1989.

MR. TANGEMAN answered that most fields realize a natural decline, and this decline happens to track identically with Texas' decline. He explained that it's critical to include the price of oil in looking at the decline. When oil prices started to spike in the early and mid-2000, Alaska's decline continued but Texas' flattened out and turned around; so did North Dakota and Alberta.

CO-CHAIR PASKVAN asked if the gas handling capacity as compared to the oil production capacity was a constraint on the North Slope fields since 1989 to present.

COMMISSIONER BUTCHER replied hasn't discussed that as being a hindrance to development, but DNR could better answer that.

MR. TANGEMAN added that he also looked for to hearing those answers from industry.

SENATOR STEDMAN said in the late 70s TAPS was looking at running out of oil somewhere after the turn of the century, a decade ago. Historically, it looks like the field has a normal decline curve and legislators hadn't seen advancing prices tied into alterations of the production curve in the books they have reviewed. Accountings of most projects' full cycles also indicate a rapid increase in production followed by a long tapering decline.

COMMISSIONER BUTCHER said that is true, but as they began researching other oil producing jurisdictions including Texas, it was amazing to see them flatten out and turn up when the price of oil went up to \$80-90 barrel - with the exception of the State of Alaska. Technology has some part in that, but the economics of a project at \$80 barrel is going to make many developments pencil that wouldn't pencil at \$10.

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SENATOR FRENCH asked what percentage of the new production in Texas is conventional and unconventional.

COMMISSIONER BUTCHER answered almost all of that is conventional, and the up-curve will increase as shale oil is developed.

CO-CHAIR PASKVAN said he heard at an energy conference in Austin in December that the average Texas well produces 5 barrels of oil a day, but they are stripper wells that can be turned on and off rapidly. It would make sense to him if there are 10,000 stripper wells, they could be turned on because the price is \$100 a barrel. Therefore, you have conventional oil extraction.

COMMISSIONER BUTCHER replied that could be a possibility, but most of the discussion in Texas was that different areas were having an explosion of exploration, development and production that hadn't been occurring in the west and south. Many of the stripper wells have had most of the capital investment already put in to them and would still be profitable to produce at \$30 barrel.

CO-CHAIR PASKVAN asked for the data he is referencing as far as the increases or decreases.

MR. TANGEMAN said absolutely.

SENATOR STEDMAN said they need to make sure the public understands some of these nuances when they are dealing with Texas and Oklahoma where private individuals own the subsurface rights; in Alaska the state owns all the subsurface, and it's the only state in the union like that. So, a direct correlation between Alaska and Texas and Oklahoma or even North Dakota has some logistical challenges to it, because we don't have several thousand individual people up there all owning a few acres and the subsurface under their land that they can just go put a well on.

COMMISSIONER BUTCHER said that's absolutely true. There are many situations that make Alaska different; being able to drive straight onto a drill pad and the resulting availability of labor are also big differences. That is one of the big hurdles the State of Alaska deals with; it has more estimated reserves than just about any other oil producing jurisdiction in North America, but it costs so much more to produce.

CO-CHAIR PASKVAN asked his estimates of the recovery rates in Prudhoe, Kuparuk and some of the major Alaska fields and if they had been compared to Texas, North Dakota and Oklahoma.

COMMISSIONER BUTCHER said he would get that information for him.

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SENATOR STEDMAN added that our decline looks like Norway's decline from 2.4 billion barrels to 2.1 billion barrels in 2008 to 2010 and the UK's decline from 1.5 billion to 1.3 billion barrels, and the UK North Sea has similar trends. In talking about response to the high oil prices they need to broaden their horizon out beyond the Lower 48.

MR. TANGEMAN agreed that was a good point. Perhaps they should compare the United States to Norway seeing as how they are both countries even though Alaska's reserves are so huge.

SENATOR STEDMAN said consultants would compare Alaska to other export basins.

CO-CHAIR PASKVAN said it's also important to compare fiscal systems of other countries.

COMMISSIONER BUTCHER agreed, but said it's difficult to compare Alaska's to anywhere.

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MR. TANGEMAN went to an RSB chart on slide 6 and said he felt it was important to point out the overly optimistic forecasts that have been done in the past.

CO-CHAIR PASKVAN asked if the department does a range of forecasts like the USGS does.

MR. RICE replied that the department doesn't do probabilistic forecasting in its production forecast. The reason is because they don't think it would provide lawmakers with a lot of value,

because the range would be very wide in the out-years; it could be instructive maybe one year out.

CO-CHAIR PASKVAN asked if forecasting is done in ranges of numbers.

MR. TANGEMAN replied yes; it is the important first step in this layout. They have great confidence in the currently producing number especially within the five-year window. The variable would be the capital and operating expense that would have to go into getting the oil produced.

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COMMISSIONER BUTCHER said the further out they go in analyzing each operator and well, the less accurate they become. But regardless of whom the forecaster was the department's production forecasts always end up being on the optimistic side. Year after year they end up producing less than they expect to produce.

CO-CHAIR PASKVAN asked if it takes 7 to 10 years for a well to come on line.

COMMISSIONER BUTCHER answered yes.

CO-CHAIR PASKVAN asked how many 2012 wells are anticipated to be flowing this year based on decisions made back in 2005 to 2002.

COMMISSIONER BUTCHER replied the currently producing wells are infield drilling in Kuparuk and Prudhoe. Nikaitchuq and Oooguruk have come on line in the last couple of years in that approximate timeframe.

SENATOR FRENCH said it is important to emphasize that at Kuparuk and Prudhoe you can punch a hole in the ground from an existing pad probably recompleting a well that has already been done once before and the oil can be put on line very quickly. He asked what would happen if you suddenly drilled more wells among the approximately 150 wells that are on the North Slope now. Would you get more oil or is there just not more to get there because it's a 30 year old reservoir?

COMMISSIONER BUTCHER replied it depends on the kinds of wells getting drilled and their pressures. He knows now that 8 to 8.5 bcf/day of gas is getting re-injected to keep the pressure up.

He said slide 7 was a snapshot of what 300 barrels a day would mean in terms deficits and taxes in today's numbers. It makes the governor's point about how important it is to try and flatten out our decline curve and eventually turn it around.

CO-CHAIR PASKVAN asked if he is using the current tax law.

COMMISSIONER BUTCHER answered yes.

CO-CHAIR PASKVAN asked him to do a snapshot of the same information applying HB 110.

COMMISSIONER BUTCHER said he would do that.

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SENATOR STEDMAN asked how far into the future the 300,000 barrels was targeted.

COMMISSIONER BUTCHER replied this discussion first started as a result of Alyeska's study this summer and realizing some difficulties in oil flowing down the pipeline, which at the time was roughly 300,000 to 350,000 barrels. This snapshot intended to show how important oil and gas production is to the state.

SENATOR STEDMAN said he wanted to be careful to not push alarm bells that aren't needed to be pushed. When the legislature did the original PPT they put in a 20 percent capital credit to help offset the cost of heavy oil and to try to get a response out of the legacy fields to increase production. So, this situation has been getting addressed there as well as under ACES a couple of years later.

He said he couldn't imagine a scenario where the State of Alaska would just sit back and watch a decline happen without doing anything. There was a similar situation in Cook Inlet and they spent almost every winter here having meetings on Cook Inlet changing its fiscal structure with ring fencing and credits, trying to get more gas and oil production. And it appears to be working.

SENATOR STEDMAN said he wanted the folks at home to realize that when they walk through these assumptions, the legislature's job is see that some of these things never materialize. He emphasized, "No is going to sit around and watch billions and billions of barrels being stranded in the Arctic. It's just not going to happen."

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MR. TANGEMAN said that is true, but it is critical to look at projections and consider the trends.

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COMMISSIONER BUTCHER said the department always seems to forecast more production than really occurs and they are trying to come up with more accurate numbers. In that regard, the department has created standardized reporting forms and is digging into specific well and field data more and focusing closely on the decline curves for all of the operating wells.

CO-CHAIR PASKVAN asked how the big three oil companies perform their internal production forecasting. He understood that they use a field by field analysis as compared to well by well.

MR. RICE answered that their forecasting depends on the company and the field. Different companies do things differently in the same field, and do everything from rough estimates based on publicly available information for fields they don't have well data on to sophisticated 3D reservoir models that cost multi-millions of dollars, using super computers and teams of engineers. But even at the most sophisticated level the 3D models have information on individual wells that can be aggregated for a field.

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COMMISSIONER BUTCHER said slide 10 was the price forecast, and the chief economist used to do it, but there were many questions as to where it came from and how it got there. So, Cambridge Energy Research was hired to give a different view of what the potential price was. Then three or four years ago the department began to approach it differently by getting more experts' reviews. This year there was a tremendous number of conversations about the difference between West Texas Intermediate (WTI) and Alaska North Slope crude (ANS), because ANS that had traditionally been a couple dollars a barrel under WTI flipped 18 months ago.

SENATOR FRENCH remarked that it would be worth getting the commissioner on record about the persistent price differential Alaska enjoys over WTI and how long he expects it to persist.

COMMISSIONER BUTCHER replied that it occurred about 18 months ago and peaked at about \$28 in mid-September; experts had different reasons as to why. In general they thought there was a regional glut of oil and not enough pipelines to get it to the

Gulf to affect the price. So WTI would move up to a far greater degree than ANS would move down. What occurred is that it came much closer much faster than they thought it was going to and got as close as \$4, but now it has begun to widen to as much as \$12. They still don't know why.

MR. TANGEMAN added in the fall, discussions were happening down south about how to build more pipelines and the reversal of pipelines that had an immediate effect as well.

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COMMISSIONER BUTCHER went to slide 11 that showed a breakdown of FY12 and FY13 estimates of unrestricted revenue forecast; it indicated that the production tax is half of what the state brings in in FY13 and two-thirds in FY12, royalty is a little less than one quarter, a much smaller amount for corporate income tax, then non-oil revenue and a very small amount for property tax.

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SENATOR STEDMAN noted that it's confusing when some presentations are in total revenue and some are in unrestricted general funds. He clarified that unrestricted general funds are just of interest to the Finance Committee and its budgeting.

COMMISSIONER BUTCHER added that a good example of what would not be included here would be tuition for the University of Alaska, which is income coming in for the state, but it's not unrestricted; it's used specifically for the University of Alaska. There are many other areas like that in looking at the total state budget.

MR. TANGEMAN added that in general there are several different ways to look at the revenue pie in the RSB and shifted the presentation to production tax credits and introduced Mr. Dees.

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LENNY DEES, Audit Master, Department of Revenue (DOR), said slide 13 showed production tax liabilities from 2008 to 2012. He said the 2011 tax credits are pending true-up that happens in March and the 2012 number is an estimate of what they anticipate will be applied through the end of June. Since PPT and ACES, almost \$2.5 billion has been applied against production tax liabilities and applications for transferable tax credit claims of \$1.7 billion have received through the end of December 2011 [slide 15].

SENATOR STEDMAN referred to slide 13 that showed a total of about \$400 million in credits in 2012 and recalled that was the number in their budget documents, but slide 14 shows \$118.4 with a footnote through December 2011 and asked why the discrepancy.

MR. DEES replied slide 13 only talks about tax credits that have been applied by company against their tax liabilities - not necessarily inclusive of the transferable tax credit certificate. The information on slide 14 is primarily the explorers, the companies that are not yet producing who don't have a tax liability. They are the ones who are applying for tax credit certificates and will be converting them to cash, for the most part. Slide 15 shows the actual credits that have been issued by year. The first line shows that Alaska has issued \$1.5 billion worth of credits of the \$1.7 billion requested on the previous slide. Of the \$1.5 billion, the state has actually paid out about \$1.3 billion in refunds. The other \$400,000 is what the state would pay out in cash during FY2012.

SENATOR STEDMAN asked if their expectations for 2012 are on track with their expectations from a year ago when \$63 million of the \$863 million in credits was targeted at Cook Inlet.

MR. DEES replied yes. The Cook Inlet jack up rig credit was included even though it will not come to fruition because of the delays.

CO-CHAIR PASKVAN referred to slide 13 and asked if the credit structures for these years comes to about \$4.5 billion.

MR. DEES answered no. The \$3.5 billion is what has been applied against tax liabilities and that would be added to the top line on slide 15 which is the certificates that have been issued, for a total of \$3.9 billion. Slide 15 shows \$132 million in credits have already been issued through the end of FY2012, and they anticipate getting a lot more applications between now and the end of the fiscal year.

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MR. TANGEMAN said the number in the budget is \$400 million; these figures are "actual" through December 2011.

MR. DEES said slide 17 shows the total amount of credits to have either been issued, are available to be redeemed, or have been applied against production tax liability is about \$3.9 billion.

SENATOR STEDMAN asked him to estimate 2012 through the end of the fiscal year.

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MR. DEES replied the \$400 million is the FY2012 final estimate and that is what is shown in the RSB on page 31. The credits that will be issued between now and the end of the year will include the \$133 million plus what they anticipate will come in. It's difficult to estimate, but they use two or three of the past years' activity to estimate that it could be somewhere in the neighborhood of \$300 to \$400 million (credits claimed on application and issued as a tax credit certificate redeemable for cash).

CO-CHAIR PASKVAN said ultimately the point is that the north of \$4 billion figure is Alaska's investment in the North Slope development and FY13 anticipates Alaska's investment will be in the range of \$875 million using the current credit structure.

SENATOR STEDMAN asked if it had made any difference that the state had put in \$4.1 billion for this fiscal year.

COMMISSIONER BUTCHER replied the companies should be able to give him a good idea of what has been spent and potentially what the difference is between the decline they had seen and the decline they could have potentially seen. That is why the DOR developed a data assessment project to figure out more specifically where the money was going. Almost all of the companies gave them a five-year look-back that got down a little more into what the spending was on.

SENATOR STEDMAN said they have the credits, but they also have the ability to write off 100 percent of CAPEX and he asked the department to provide an estimate of what that is.

MR. TANGEMAN said that is a good point and is one of the benefits of working under the net tax system.

SENATOR STEDMAN said the question isn't really what the capital expenditure is, but what the monetary value is of being able to immediately write off CAPEX in one or two years and how it benefits the whole package of the state's fiscal structure.

COMMISSIONER BUTCHER responded that he would put that together for him.

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CO-CHAIR PASKVAN thanked the presenters and adjourned the meeting at 4:57 p.m.