

**ALASKA STATE LEGISLATURE
SENATE RESOURCES STANDING COMMITTEE**

January 24, 2018

3:30 p.m.

MEMBERS PRESENT

Senator Cathy Giessel, Chair
Senator John Coghill, Vice Chair
Senator Natasha von Imhof
Senator Kevin Meyer
Senator Bill Wielechowski
Senator Click Bishop

MEMBERS ABSENT

Senator Bert Stedman

COMMITTEE CALENDAR

OVERVIEW: ALASKA'S OIL & GAS ROYALTY, UNITIZATION PROCESS

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

ED KING, Special Assistant to the Commissioner
Department of Natural Resources (DNR)
Juneau, Alaska

POSITION STATEMENT: Provided overview of Alaska's oil and gas royalty, unitization process.

ACTION NARRATIVE

3:30:10 PM

CHAIR CATHY GIESEL called the Senate Resources Standing Committee meeting to order at 3:30 p.m. Present at the call to order were Senators Coghill, Bishop, Wielechowski, Meyer, and Chair Giessel. Senator Stedman was excused.

Overview: Alaska's Oil & Gas Royalty, Unitization Process

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CHAIR GIESSEL announced the only order of business today was the oil and gas royalty and unitization process overview. She said Alaska was one of the nation's largest producers of crude at one point in its history. The State of Alaska has a unique subsurface mineral resource and as the land owner is receiving royalty for that. The Department of Natural Resources (DNR) is entrusted to extract the maximum value from those resources for the people of Alaska and it does that through a system of lease sales, royalty contracts, and by authorizing plans of development. Today they would hear more about that from the department.

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ED KING, Special Assistant to the Commissioner, Department of Natural Resources (DNR), Juneau, Alaska, made the disclaimer that this is an educational presentation and not necessarily instructive. He didn't want to imply that this committee doesn't know any of these things he is talking about here, but he wants to make sure the public is up to speed on some of the topics that get glossed over in other contexts.

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MR. KING said he would be talking about oil and gas contracts, leases and royalties, and how the Division of Oil and Gas (DOG) manages the state's mineral resources that it owns under the lands that were conveyed to it at statehood. The DNR manages those minerals by leasing rights to an oil and gas developer to extract those resources, bring them to market, and generate revenue from them. This is not uncommon; it happens all over the world, not only in oil and gas, but in any other business that has these kinds of contractual relationships between business entities.

He described the types of oil and gas contracts:

-Service contract: A contract that an oil owner would enter into with an oil and gas producer, like one would contract with a builder to build a house. In these cases, the resource owner maintains ownership of the resource and takes on all the risk. The contractor usually gets paid back through the sale of the oil, anyway, so there isn't necessarily a cash outlay, but the risk is born by the owner of the resource and is not shifted to the developer. This is the least common of the types of contracts, but he has heard they are becoming more popular. They can be found in places like Iraq where when one hears that Iraq

has a 99 percent government take, it is because they are only paying a major international oil company to produce its oil. The company isn't bearing any of the risk.

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SENATOR VON IMHOF joined the committee.

-Production sharing agreement/contract: Outside of the U.S. in the modern era, this is the most common type of agreement where the owner of the resource partners with an international oil company. It is very common in Eastern Europe and South America. Typically, the international oil company will front the capital and then recover it through the recovery of the resource.

-Concession agreement: In the U.S. and Canada where private individuals actually have mineral rights, this is the most common type of agreement. This is where one concedes one's rights to the royalty or the resource to another party for a period of time. Then they would be responsible for bringing the resource to production and take the risk of the costs and capital. They have ownership of the resources while it's under contract. These agreements can be structured to look very similar to production sharing agreements (PSA), but the main difference is in how the owner of the resource is defined and who bears the risks, and ultimately who gains the rewards.

MR. KING said this broad spectrum of contracts provides ways a government and oil company can interact with one another but comparing these contracts to one another can be misleading as the terms are very difficult to compare.

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MR. KING said Alaska is unique, being the sovereign owner of the resource, whereas in the Lower 48, private individuals are the owners. Alaska is also governed by a constitution that is largely developed around this private mineral interest.

He briefed the committee that when Alaska became a state, and even pre-statehood in the 1920s when the U.S. military was converting from coal to oil, it became really important to protect its ability to provide the protection that it needed to. So, the Mineral Leasing Act of 1920 was enacted it separate the oil and gas from other minerals and required federal lands to be managed through the leasing of those oil and gas resources. After WWII, a concern arose that if the U.S. used up all its oil and gas it wouldn't be able to maintain its defense program and governments around the world started looking at other sources

for oil and gas. Lots of exploration activities went on through Europe, China, Russia, Northern Africa and the Middle East. This Mineral Leasing Act is still what is governing all the activity that is happening in Alaska. So, through the 1950s and as Alaska entered statehood in 1959, the federal government leased oil and gas rights in the Cook Inlet, specifically and the pre-statehood leasing structure was used as a template for how the state would progress after getting to statehood and writing a constitution.

Under the Mineral Leasing Act, a decision was made that revenues generated on federal leases would be divided: 50 percent to the state that owned the resource, 10 percent to the federal government, and the other 37.5-40 percent to the Reclamation Fund, a fund that was created in the early 1900s to generate infrastructure projects, like dams and irrigation to settle the western states.

When the Alaska Statehood Act was passed, the ability for Alaska to draw off that fund didn't exist. So, Alaska was given that 40 percent. When people talk about the 90 percent to Alaska on federal lands and 10 percent to the federal government, that is the evolution of events that lead to that outcome. All revenues that are generated on federal lands under federal lease go to the federal government and 90 percent gets returned to the state to be used for whatever the state deems appropriate.

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In 1959, Governor Egan questioned whether it was worth it to use the state's land selection for oil and gas lands since 90 percent of the revenues were coming to the state anyway. When Governor Hickel became the governor in 1966, he made the decision to select a lot of those lands on the North Slope. The federal lease sale model was used, and the state received \$900 million (\$5 billion in today's dollars) in its first lease sale.

MR. KING said that there are places in the National Petroleum Reserve - Alaska (NPR-A) where that 90/10 split doesn't apply and then it is a 50/50 split. The 1002 Alaska National Wildlife Refuge (ANWR) provision that just passed in a continuing resolution (CR) in Congress replaced the 90 percent provision with a 50 percent provision and the 50 percent going to the state is dedicated to the NPR-A Impact Fund. Article 8, Section 12, of the Alaska Constitution laid out in the Mineral Leasing Act provision where the state was mandated to lease its oil and gas resources, and that first sale was following that provision.

The Alaska Land Act was subsequently passed by the Alaska Legislature under AS 38.05.180, the state statute that guides all DNR's processes. It demands that the state use leasing for managing its oil and gas resources.

When the energy crisis happened in the 1970s, there was an oil embargo and prices spiked up. Those were the conditions that allowed the Trans-Alaska Pipeline System (TAPS) to be built. It happened again in 1977 as construction was just being completed. With the issues around land claims just prior to that, the state didn't have any lease sales between 1974 and 1980. So, the when Permanent Fund provision talks about the pre-1980 leases and the post-1980 leases, this is what it is referring to. And this is why the state is using leasing and not some other form of contract to manage its oil and gas resources.

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MR. KING said it's important to remember that a lease is a contract (slide 4) between the state and another party. When signing a contract, the legislature through the Alaska Lands Act gave DNR the authority to enter into these contracts. So, when DNR holds a lease sale and issues these leases, the state is entering into a contract with a producer to take possession of the oil in return for a portion of the production and many other things within the lease agreement. Importantly, it is a contract and therefore governed by contract law; it can't just be amended or changed because one party wants to.

However, the Legislature gave DNR the authority to change a contract in very specific instances. One is when a lease joins a unit. DNR also has the authority under .180(j) to reduce royalty rates in specific instances. Those are the only instances in which DNR has the authority to renegotiate a contract. Any other renegotiations must happen with the legislature's approval and neither DNR nor the lessee can do anything on their own.

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MR. KING said a lease has several important provisions (slide 5). This exclusive right for access to the resource is done for a set period of time, historically 10 years. Recently, that was reduced to seven years with an opportunity to extend for another three if a company is diligently progressing towards production.

The lease terms provide three important revenue terms; one is a royalty, which is a reservation of part of the state's interest in the resources. When the resources are produced, the lease allows a company to sell those resources for their own benefit,

but whatever the royalty rate is that is reserved for the state. The minimum royalty allowed is 12.5 percent or one-eighth. When the barrels are produced and brought to market, the state has the right to that one-eighth of that production.

There is also a rental payment for each of the 10 years, even if oil isn't produced. This ensures that the state is getting some revenues from the contracts the state enters.

The third revenue term is a "bonus bid," which is an upfront payment that a company will provide to the state for the right to enter into a contract.

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Lease interests can be transferred or reassigned with department approval. Whatever the primary term is that is how long a company has to get the lease into production. If they get into production, they are allowed to maintain that lease as long as they are producing.

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Leases are issued annually on an areawide basis (slide 6). Only lands owned by the state are leased, about 105 million acres. All other acres are federal or Native Corporation lands, and a few homesteads (owned prior to statehood). The Bureau of Land Management (BLM) leases federal lands.

SENATOR BISHOP asked him to clarify what he just said about private lands.

MR. KING said that the Alaska Native Claims Settlement Act (ANCSA) gave 40 million acres to the Native corporations and those are considered private lands. A very small sub-set of people were land owners in Alaska before statehood and they do, in fact, own the mineral rights. Those are also private lands. However, when he says, "private lands," he is typically talking about Native corporation lands.

SENATOR BISHOP said he believes some production is coming off some of those lands.

MR. KING said yes, in Cook Inlet.

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He said the federal waters around the state are managed by the Bureau of Ocean and Energy Management (BOEM) that conducts its own lease sales. Those are not within the state's borders, but

the production can flow through the state borders, so the state is still interested in those lease sales in the Chukchi and Beaufort Seas and Cook Inlet. BLM and BOEM are both subdivisions of the Department of Interior.

State land leases are carried out by DNR, specifically through the Division of Oil and Gas (DOG) leasing section, which prepares and evaluates lease sales, and issues the leases. They get support from the Resource Evaluation and Commercial sections within the DOG. These people have a high degree of education in either geology, geophysics, petroleum engineering, economics, finance, and things like that. They make sure that the bid terms in the lease sale are generating the maximum benefit for the state.

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MR. KING said the department doesn't always just lease lands. There are areas where the resource potential is less known and in those situations, they can issue an exploration license. Then a company can go out and have exclusive rights to explore for resources in that area. If a company has success, that license can be converted into a lease.

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He said leasing in Alaska has evolved a lot since the first sales in the late 60s. Now the department just provides an areawide lease sale every December. An area might be the whole North Slope or the Beaufort Sea (slide 7). Effectively, this means that all the state lands included in the sale are available for bid. A big production is made out of opening all the bids in the Dena'ina Center in December and reading them aloud. The department makes sure the bidders are qualified and the highest bidder is awarded the lease.

AS 38.05.180 also authorizes special lease sales for tracts of land with different bid terms. It could be a six-year primary term and drilling a well within the first three years, for example. Currently, the department is evaluating whether it wants to hold a special lease sale next summer.

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SENATOR VON IMHOF asked if he is allowed to indicate what the special lease sale might be.

MR. KING replied that broadly the department received some seismic tax credit data that has just been made public, and some of the lands under that data are unleased lands. So, they

thought they would pull those lands out from the areawide and conduct a special lease sale to see if there is additional interest given the additional information. It's on the North Slope.

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CHAIR GIESSEL asked if DNR is charging a fee for access to the seismic information that is being released now.

MR. KING answered yes; a regulation change implemented a fee and the department has collected \$140,000 with another \$100,000 coming soon. The DNR anticipates \$300,000 I receipts this year from the seismic data sales.

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MR. KING proceeded to discuss royalties and bonus bids saying it is very difficult to evaluate competing bids on a tract of land, because of multiple terms that can be altered. So, instead, everything is held constant except for one term, and the bidders can bid that one term. The division can choose which term to bid; it can be the royalty rate, the bonus bid or some other term. This is what "bid variable" refers to. In modern times, the bonus bid is almost always the bid variable.

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SENATOR WIELECHOWSKI asked what the average price is per acre.

MR. KING replied that it depends on the lease and how much is known about the potential in the area. Leases in North Dakota in 2003, for instance, would only get \$25/acre, but as soon as the shale revolution started and the resource became known, there was a lot of competition around getting into those leases and it drove the bid variables up to thousands of dollars. In Alaska, something similar happened: in the early lease sale there was a lot of uncertainty around the potential. After the first Prudhoe Bay State Well No. 1 was drilled in 1968 and success was had, the next lease sale brought in \$900 million worth of bids.

Generally speaking, the value of the resource increases with proximity to infrastructure and what is known about a formation structure. If not much is known and it is a ways from infrastructure, the bid is usually minimum.

SENATOR WIELECHOWSKI asked how much that is.

MR. KING answered \$25/acre.

SENATOR WIELECHOWSKI said he just wanted to know an average for Alaska leases versus North Dakota or Texas.

MR. KING said he didn't have that figure off the top of his head, but he would get it.

CHAIR GIESSEL asked if Mental Health Trust (MHT) lands are managed through DNR and if they have the same terms.

MR. KING replied that the trust is managed through the Department of Revenue (DOR). The trust received a land allotment, which is managed by the Trust Land Office, and that is housed within DNR, but it conducts its own land disposals. DNR provides the trust's procurement and support.

SENATOR BISHOP said he thought DGF funds were provided to fund a position in DNR.

MR. KING said balancing the bonus bid versus the royalty rate is a delicate matter, because the royalty is only paid if one gets to production. So, the higher royalty rate only makes sense if one actually gets to production. When a company is deciding on how much it wants to pay for a lease, it takes into account what it knows about the resource and what potential economic gain it can get from it. The higher the royalty rate is the less value the lease has and the lower the bonus bid is.

SENATOR BISHOP commented that the companies are making a mini-RIK/RIV decision inside the bonus bid.

MR. KING agreed that the company makes the decision on how much it is willing to pay for the lease.

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He explained that prior to 1980, all leases were for a fixed-rate and under a DL-1 lease. Leases are contracts and endure as long as one has production. So, even though they had only a 10-year primary term, about 300 leases that were issued before 1980 are still producing oil today.

During the 1980s, a lot of countries started to move towards production sharing agreements; the federal law and Alaska's Constitution still ruled here. The federal government experimented with new ways to issue lease terms and one of them was a "net profit share lease (NPSL)," which turns into something very similar to a production sharing agreement, even though the construct and specific legal situation is different.

The state had one lease sale where the NPSL was the bid variable. Twenty-four of the NPSLs are still active today.

Another way the federal government and the state were both experimenting with lease terms was through a sliding scale where the royalty rate would change based on some factor: the rate of production or the price of oil, for instance. Today, all North Slope leases are issued at a fixed one-sixth rate and competitors are allowed to compete using the bonus bid as the variable.

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SENATOR WIELECHOWSKI asked what percent of produced oil pays the higher one-sixth royalty.

MR. KING answered about 70 percent of the oil is still from the DL-1 leases that were issued in the 60s and early 70s with a 12.5 royalty rate.

SENATOR WIELECHOWSKI recalled SB 21 (passed in 2013) had provision that said companies that paid this 16.67 percent royalty actually paid lower production taxes. Is that correct?

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MR. KING answered yes; a provision in SB 21, AS 43.05.160(g), allowed for an additional gross revenue exclusion, so 10 percent of gross value was removed from the taxable income. However, no leases qualify for that provision today. Only three units may qualify in the future and those are in question.

SENATOR WIELECHOWSKI asked if the 12.5 percent royalty mostly applies to the legacy fields.

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MR. KING answered yes.

SENATOR WIELECHOWSKI said he was trying for a fair comparison with Texas and the consultants said the average royalty rate on private lands there is about 25 percent.

MR. KING answered the royalty owners have been able to leverage higher rates there, because there is a lot less uncertainty around whether the resource exists and whether it's producing. It is true that a new lease that is less than 10 years old in North Dakota or Texas probably has a much higher rate, in the 20-25 percent range.

SENATOR WIELECHOWSKI asked if he would agree that Prudhoe Bay is the largest oil field in North American.

MR. KING answered yes, and the state would be getting a much larger share of the revenues if it had any land to lease there now.

SENATOR WIELECHOWSKI said companies in Texas and North Dakota are fracking and getting all they can out of the fields and then moving on to new fields and that have a 25-percent royalty rate. He asked him to look into that.

SENATOR WIELECHOWSKI said comparing prolific fields like Prudhoe Bay and Kuparuk, the first and second largest fields in North America versus a prolific field in the Permian Basin for instance, they are paying a 25 percent royalty down there and a 12.5 percent royalty here. So, they are paying twice as much in royalty there than they are here. Is that correct?

MR. KING answered yes. He reiterated that when these leases were issued the knowledge of the prolific nature of those resources was not known. Because they are contracts that endure as long as the oil is being produced, the state does not have discretion to now change them. If we were able to go back knowing what we know now and issue those leases today, we would get much higher rates.

CHAIR GIESSEL said the Pikka Unit is above the 16.6 percent royalty line and will have the higher royalty rate and asked if there are unleased areas around it, since a highly prospective layer has been identified across this area. She asked what the chances of the state increasing the royalty rate above the 16.6 percent are.

MR. KING answered those leases were issued before the resources were known, but it was a result of leasing those lands that we now know about those resources, so we can't change those rates. The Pikka Unit has a higher royalty rate and when it goes into production it will pay more revenues to the state. There is very little unleased acreage in the area, but the Nanushuk formation looks like it's trending to the West, and what has been seen recently is even across the federal lands, in the NPR-A, that trend looks like it will continue. So, there is a lot of interest there. The Horseshoe well was drilled a year ago and had good results, so it looks like that trend will continue.

CHAIR GIESSEL followed up that the head guy from United States Geologic Survey (USGS) presented in Anchorage in November and talked about that stratigraphic layer going eastward, as well.

MR. KING responded that their packets have a tract map of the last lease sale and it indicates a few purple boxes that were unleased acreage when the lease sale was held. Even if the trend does extend to the east, a lot of those lands have already been leased. Hopefully, the lessees are in a position that they can locate those resources and develop them. But it is not as likely that we will generate higher rates of royalty as a result of the new information.

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SENATOR WIELECHOWSKI asked if there are any efforts in DNR to take advantage of the world market, which is seeing these much higher royalty rates, or is the state sticking with the 16.67 percent rate it currently has.

MR. KING answered when the department issues lease sales they are being issued at the 16.67 percent rate. If more was known about the resource, they would be able to charge a higher royalty rate, but until then there is a lot of uncertainty. Pushing the royalty rate up too high introduces the risk of not getting a lessee. The other side of that coin is even if they royalty rate is lower than other areas, if there is a well-known resource under it, there should be competition around that resource and the state should get a higher bonus bid. So, charging a lower royalty rate is not necessarily injuring the state, because it is still getting an increase in revenue.

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SENATOR WIELECHOWSKI said he would disagree because the rest of the U.S. is getting an average of 25 percent and Alaska is just getting 16.67 percent, and from prolific fields.

The country of Norway, for example, actually goes out and does the seismic themselves and gets the data back. They make all that seismic information public and that drives up the interest in the field. Is there any talk in DNR about doing that in Alaska?

MR. KING replied that he would have to choose his words carefully, because while being an employee of the administration he has personal opinions, as well, but yes DNR has had conversations on how to maximize the value of the resource. One way that might happen is making sure to use the seismic data it

has collected over the last 10-or-so-years and making it publicly available to generate as much interest as possible and higher bonus bids. The option for the legislature to appropriate money to the Division of Geological and Geographical Surveys (DGGs) to go out and procure the state's own seismic is within its purview and the department would support that. "We can't make that decision ourselves."

SENATOR WIELECHOWSKI said yes you can. You can come to the legislature say this is something we need to do. Can they expect that from the administration or is it simply not interested in pursuing it?

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MR. KING replied that they haven't introduced any legislation that looks like that.

SENATOR VON IMHOF asked if a bonus payment is one-time and royalty is on an annual basis.

MR. KING answered yes, but the royalty is based on the amount of production and is paid monthly.

SENATOR VON IMHOF mused that it appears that the state has seismic data that it is selling, and that it has seen it prior to selling it. She wondered if the state would ever incorporate that information in the upcoming special lease sales that he mentioned earlier.

She also can't help but muse that while other states have higher royalty payments, they also have other attributes that Alaska doesn't have, like easy access to the resource and a nicer climate in which to work.

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SENATOR MEYER said he was going to say the same thing. It's hard to compare Alaska to the Lower 48 where one can work all year round and can produce oil quicker and cheaper. There is obviously less risk, because you know the oil is there. Where as in Alaska millions of dollars have been spent on dry holes.

SENATOR WIELECHOWSKI countered that Alaska is one of the most profitable places, on a per barrel basis, in the world compared to North Dakota and Texas. When ConocoPhillips' SEC filings have come out over the last several years, he has asked for the numbers, and on a per barrel basis Alaska is one of the most profitable places in the world, if not the most profitable. The

same filings indicate ConocoPhillips made hundreds of millions of dollars here and lost a billion down in the Lower 48 over the last few years. Comparing it to North Dakota and Texas, even breaking out the oil, Alaska is so much more profitable even though the climate is tougher and it's harder to do business. He asked Mr. King, "Do you disagree? Is that contrary to what your figures show?"

MR. KING said he needs to be careful, because any information that is provided to DNR that is associated with the proprietary rights of a company is confidential. He could say that one big difference in Alaska versus another region in the U.S. like a Bakken or Eagleford-type play, those plays require a lot of upfront capital and have a short life. Whereas a conventional oil play that was more typical in the 60s and 70s required a large upfront capital investment but then had a long life. So, the billions of dollars that were spent to develop and prepare Prudhoe Bay for production were spent and recovered over the last 40 years. There is an important difference between when these different capital expenditures are recovered. So, recovering one's investment right away versus over time can be misleading.

SENATOR WIELECHOWSKI said since Senate Bill 21 passed, oil production is up about 10,000 barrels, but Texas that has a royalty rate twice as much and taxes twice as much, their production has increased to 2 million barrels a day. North Dakota, which has a royalty rate twice as big as ours and a tax rate twice as much as ours has increased its production by 500,000 barrels a day. "Would you say that is something we should look at when evaluating our tax and royalty structure?"

MR. KING replied that in these mostly political conversations, he would as an economist suggest they do look at those numbers and all the other factors that impact the economics of a project. But looking at just a tax rate or any individual metric out of context will always lead you down a path that might not be completely accurate in the holistic view. "If you already know the outcome you are looking for, it's very easy to find data to support whatever decision you want to make," he said, because it is a complex system and there is no right or easy answer.

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SENATOR BISHOP commented that production in the Lower 48 just goes to show what easy access will do for an oil field. On that

point, he would like to see how many companies in the Lower 48 went bankrupt in the last four years over the low price.

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MR. KING said collecting seismic information can be done through a permit; it doesn't require a lease (slide 10). If you do have a lease, you are called a lessee or working interest owner (WIO) and are required to submit a "plan of operations." A working interest owner has voting rights, contributes capital, and gets a share of the revenues.

He said that all the permitting and the work that needs to be done on the surface is done by the permitting section of the DOG. When WIOs find a resource, sometimes it extends beyond their lease borders. So, often several leases overlay the same reservoir. Early in oil and gas law there was the "rule of capture:" you stuck a straw in the ground along with your neighbor who was also tapping that same reservoir and sucked as hard as you could. More recently they have allowed for those leases to join one another and be managed as a single lease. So, there aren't competing property rights amongst lease holders. A lease combined into a jointly managed agreement is called a unit. A single unit operating agreement provides for management of all the leases. Unitization provides for economic efficiencies and avoids waste. If everyone is in a rush to get as much out as they can as fast as they can, it can damage the reservoir and leave the resource in the ground. The lease remains in effect as long as it is in the unit. The DOG has a Units Section that manages and ensures that the agreements are being abided by. They also have support from the Resource Evaluation and Commercial Sections to make sure that the plans of development and activities that are happening within the unit are in the best interest of the state.

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Generally, a unit has a five-year initial term (slide 12). If the unit doesn't get to production within those five years, the unit terminates. If they do start drilling wells, then the unit can endure and get production, which is what the state is after. When a resource is found under the ground, a "participating area (PA)" is created. Ten years after the unit is created the division has an opportunity to "contract the unit," which means taking out leases in the unit that don't look like they are going to contribute production.

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The units have to do plans of exploration (POE) as well as plans of development (POD), which happen every year. It's typically includes things like how many wells are being drilled and facility improvements to make sure the resource is being optimized. The Resource Evaluation Team and the Commercial Team look at those PODs and make sure they are consistent with prudent operations of management of the land and optimization of the resource. If the plans are deficient, they are asked to amend them before they can be approved. If a unit doesn't have an active plan of development, then it can be terminated. The plan of development is an appendix to the unit agreement and a unit without a unit agreement has no effect, so the unit can be terminated.

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DNR uses the term "participating area" (slide 14) to refer to a reservoir, a pool, or field, which all have different aspects. A PA is an area of land that has a resource that is technically and economically viable to produce.

Within a unit each of the leases are converted to "tracts within a unit," which are given a factor percentage, allocating the resource back to the leases. So, within a unit one lease might be 12.5 percent, another lease might be 16.67 percent, and another lease might be an NPSL. It is important to know when the oil comes out of ground where it came from for the state to get the right amount of royalty.

MR. KING explained that when the unit is first formed, and the participating area is first approved, the department doesn't always know what the subsurface looks like. So, they might create a tract factor based on aerial extents. When it starts producing oil, models can be run to better understand what is happening. Then they can reallocate what the tract factors should be. This is called a "redetermination." This is reaa;y important when a unit has either multiple owners or multiple royalty rates.

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He said a lease is based on surface acreage and that line goes all the way through the core of the earth. The PA is one layer of rock, so it is possible for a lease to have participation from multiple PAs. So, the tracts have to be allocated based on each PA. A single lease can have contributions from multiple PAs.

He said the department wants to make sure the state gets all it is due, so they have an accounting and audit section. As the companies are producing they provide reports to the division. The accounting makes sure those reports are complete and accurate. The lessee is responsible for maintaining books, and the state has the right to audit them.

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CHAIR GIESSEL asked how the Alaska Oil and Gas Conservation Commission (AOGCC) participates in the process.

MR. KING replied that AOGCC's interest is in the subsurface and making sure that the resources are protected and not wasted. DNR is the owner and manager of the resource, so they have a relationship.

SENATOR BISHOP said AOGCC annually pulls a "prover ball" out at Pump Station 1 and measures it, because that is where the barrels flowing down TAPS are counted.

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MR. KING said there have been questions about what a Net Profit Share Lease (NPSL) is and that 24 of them are still in effect today. An NPSL is just like a regular lease: it has a royalty term, a bonus bid, and a rental payment, but it has an additional term. An example might be a lease that has one-eighth royalty plus 30 percent of net profits. When they "reach payout," recovering all their development costs, is when the state starts getting the NPSL payments, as well.

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The department doesn't have to worry about allocating costs when an entire unit is an NPSL, but the allocation becomes very important when there is only one lease within the unit, and one or two staff are dedicated to managing the monthly NPSL reports.

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DNR has authority from the legislature to reduce royalty rates only in very specific instances, either when a producing field gets to the end of its life and produces a lot more water than oil or when a marginal project needs an adjustment to tip it into production. He explained that at some point the 12.5 percent royalty becomes more burdensome than the value of the resource. So, in those situations DNR is allowed to reduce the royalty rate as low as 3 percent. Another way they are allowed to reduce the royalty rate is if the shut-in actually did happen, to encourage them to put it back into production.

Finally, the DNR is allowed to reduce the royalty rate at the front end of a project in order to tip a marginally economic project into development. Usually those terms are front-loaded to last a year or two and once production starts the original lease terms will be reinstated.

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CHAIR GIESSEL asked where they have given royalty relief.

MR. KING replied that DNR has two royalty relief provisions in Oooguruk and Nikiatchuq. A third royalty relief was issued in the Nuna development, which is also part of the Oooguruk Unit. It expired before it reached production. So, they are expecting when an investment decision is made, they will most likely ask for that relief, again. Then it will have to be re-evaluated. The legislature through statute also reduced royalty in Cook Inlet.

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SENATOR MEYER asked if the operators of those fields he just mentioned are Caelus or Eni.

MR. KING replied that Eni is the operator at Nikiatchuq and Caelus is the operator at Oooguruk.

SENATOR BISHOP commented that the Nuna rate modification also had an Alaska-hire provision.

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MR. KING said the Commercial Team does an economic analysis (slide 18). One of their other functions is to make the decision on whether they want the royalty in kind (RIK) or in value (RIV). The state has the right to either receive barrels of oil or receive the cash equivalent of those barrels. An analysis is done looking for buyers and if a buyer is found that would generate more revenue to the state than what the operator is getting at that production area, they enter into a contract. That tends to be the case with oil, because transportation deductions are allowed back to the wellhead and that is the rate the state uses to calculate the value of the oil. By taking physical possession of that oil and not have to pay the shipping cost, the state can usually generate a little bit extra revenue. This is what the state team does when they talk to in-state refiners. DNR's negotiating team is responsible for those negotiations.

MR. KING said the value of the oil depends on where it was produced in the state. Slide 20 displayed a list of price differences in transportation costs with all else constant.

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SENATOR WIELECHOWSKI said the total numbers for NPR-A and ANWR are the same and asked why the unrestricted general fund (UGF) number is so different for those two.

MR. KING answered a provision in the NPR-A restricts all revenue to the state to the NPR-A Impact Fund. The continuing resolution that allowed a lease sale in ANWR didn't include the language that would restrict those funds. So, the 50 percent of the federal take that is shared with the state would flow to the General Fund and to the Permanent Fund.

SENATOR WIELECHOWSKI said a lot of his constituents want to know what the federal royalty rates are in ANWR.

MR. KING answered that 50 percent of the proceeds from the lease sale that will happen in ANWR will flow to the state. Of that, half goes to the general fund and half would go to the Permanent Fund with the caveat that one half of one percent of that GF money has to flow to the Public-School Trust Fund.

SENATOR WIELECHOWSKI asked why half goes to Permanent Fund in that case instead of 25 percent.

MR. KING replied because the leases are after 1980, a statutory provision requires a 50 percent contribution.

SENATOR WIELECHOWSKI asked if the state would get half of the bonus lease, which it could be billions!

MR. KING responded that they hope it will be.

SENATOR WIELECHOWSKI asked if the federal royalty rate is 12.5 percent.

MR. KING said he would have to double-check.

SENATOR WIELECHOWSKI asked if the state gets half of the federal royalty rate.

MR. KING answered yes. The company pays its royalty to the BLM and then BLM cuts the state a check for half of what they received.

SENATOR WIELECHOWSKI asked if they have the same provision the state has to deduct transportation costs from the royalty.

MR. KING answered yes. He wanted to illustrate that where the oil comes from really does matter in terms of revenue to the state, because areas that are further away from TAPS require more transportation and areas that are more isolated require more costs. Additional factors will complicate this a little bit more.

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SENATOR WIELECHOWSKI asked if he had a sense of the timeline for the ANWR lease sale.

MR. KING answered they hope to have it together for next year, but they have four years to get the first sale.

SENATOR WIELECHOWSKI asked if it would have to go through the NEPA process.

MR. KING replied that no infrastructure is being developed, so there is no actual project that would need to go through the NEPA process right now. Once oil is discovered and someone wants to develop it, going through NEPA is likely.

SENATOR COGHILL commented that the original agreement at statehood was the 90/10 split for ANWR and that has been a point of contention. Many feel that Congress unilaterally changed it. But that is probably the deal that got it passed. He commented we can't change it, but it seems like they can.

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SENATOR MEYER listed seven operators: Savant, Eni, Caelus, Hilcorp, BP, ConocoPhillips, and ExxonMobil.

MR. KING added Glacier is the operator at the Badami unit, not Savant any more.

SENATOR MEYER said it seems like we're making progress in attracting smaller companies to Cook Inlet and the North Slope. The number of operators has doubled. But it's still not the most profitable and easy place to make money. If that was the case, there are thousands of oil companies worldwide and they are all

in it to make money, and the state wouldn't have to offer tax credits if it was that lucrative.

MR. KING added that Brooks Range Petroleum is an operator of the Mustang Unit and they are not in production. Armstrong operates the Pikka Unit.

SENATOR MEYER said he was referring to producing companies.

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CHAIR GIESSEL thanked Mr. King for his presentation and finding no further business, adjourned the Senate Resources Standing Committee meeting at 4:58 p.m.