ALASKA STATE LEGISLATURE
JOINT MEETING
SENATE RESOURCES STANDING COMMITTEE
HOUSE RESOURCES STANDING COMMITTEE
September 10, 2018
3:33 p.m.

MEMBERS PRESENT

SENATE RESOURCES

Senator Cathy Giessel, Chair
Senator John Coghill, Vice Chair
Senator Bert Stedman
Senator Kevin Meyer

HOUSE RESOURCES

Representative Andy Josephson, Co-Chair
Representative Geran Tarr, Co-Chair
Representative John Lincoln, Vice Chair
Representative Harriet Drummond
Representative Justin Parish
Representative Chris Birch
Representative George Rauscher

MEMBERS ABSENT

SENATE RESOURCES

Senator Natasha von Imhof
Senator Bill Wielechowski
Senator Click Bishop

HOUSE RESOURCES

Representative DeLena Johnson
Representative David Talerico
Representative Mike Chenault
Representative Chris Tuck

OTHER LEGISLATORS PRESENT

Senator Micciche

COMMITTEE CALENDAR

OVERVIEW: DEVELOPMENT IN THE NATIONAL PETROLEUM RESERVE-ALASKA (NPR-A)

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

STEVE WACHOWSKI, Senior Adviser on Alaskan Affairs
U.S. Department of Interior
Anchorage, Alaska
POSITION STATEMENT: Provided an update on how the state's resources plans for the NPR-A fit in with the President's energy dominance agenda.

MIKE NAVARRE, Commissioner
Department of Commerce, Community and Economic Development
Anchorage, Alaska
POSITION STATEMENT: Provided an overview of the NPR-A Impact Grant Program.

FAITH MARTINEAU, Executive Director
Office of Project Management and Permitting (OPMP)
Department of Natural Resources (DNR)
Anchorage, Alaska
POSITION STATEMENT: Provided an overview of OPMP's activities in the NPR-A.

JIM BECKHAM, Deputy Director
Division of Oil and Gas (DOG)
Department of Natural Resources (DNR)
POSITION STATEMENT: Provided a briefing on DOG's role in NPR-A development.

SCOTT JEPSEN, Vice President
External Affairs and Transportation
ConocoPhillips Alaska
Anchorage, Alaska
POSITION STATEMENT: Provided overview of ConocoPhillips' current production and outlook across the North Slope and NPR-A.

ACTION NARRATIVE

3:33:05 PM

CHAIR CATHY GIESSEL called the joint meeting of the Senate and House Resources Standing Committees to order at 3:33 p.m. Present at the call to order were Senators Coghill, Meyer, Stedman, and Chair Giessel.

CO-CHAIR TARR said that Representatives Birch, Drummond, Parish, Lincoln, Rauscher (online), Co-Chair Josephson and Co-Chair Tarr were present at the call to order.

CHAIR GIESSEL said Senator Micciche was also present. In the audience she also recognized former Representative Kurt Olsen and Office of Management Budget (OMB) Director Pat Pitney.

Overview: Activities in the National Petroleum Reserve-Alaska (NPR-A)

3:35:33 PM

CHAIR GIESSEL announced that this is the second hearing of today's joint meetings of the Resources Committees and the topic for this hearing is an overview of activities in the National Petroleum Reserve- Alaska (NPR-A). Over the last two years, discoveries and announcements of very large oil deposits have generated a lot of activities in and around the NPR-A. Today the committee will hear first from a member of the United States Department of Interior (USDOR), the agency that manages development in the NPR-A, and the Alaska Commissioner of the Department of Commerce, Community and Economic Development (DCCED) Mike Navarre. That department manages the special fund that collects part of the royalties from activities that occur in the NPR-A. The commissioner will acquaint this committee with that fund and what communities on the North Slope get services. Then, the Alaska Department of Natural Resources (DNR) will present the activities occurring on state land adjacent to the NPR-A and what role the state has in facilitating that development. Finally, the committee will hear from one of the companies investing and developing projects in the area and what the development plan means for the country, the state, and the communities of the North Slope.

CHAIR GIESSEL said that over the past 18 months, the U.S. federal government has been engaged in making the country energy dominant when it comes to the production of oil and gas, and the NPR-A, as its name suggests, is a federal area. She welcomed Mr. Wachowski to the table to talk about the activities occurring in this important area.

3:35:49 PM

STEVE WACHOWSKI, Senior Adviser on Alaskan Affairs, U.S. Department of Interior, Anchorage, Alaska, provided an update on how the state's resources plans for the NPR-A fit in with the President's energy dominance agenda. There is a lot of oil in the NPR-A, he said, and they are looking for responsible ways to make those areas available for leasing for responsible energy development. Getting more throughput in the Trans Alaska Pipeline (TAPS) is a key part to the President's agenda. This will be done in partnership with the State of Alaska (SOA) and the legislature, the North Slope Borough, and local Alaska stakeholder Native corporations and tribal entities.

3:38:29 PM

He said the Department of Interior Secretary's Order 3352 issued on May 3, 2017, directed the United State Geological Survey (USGS) and the Bureau of Land Management (BLM) and their respective assistant secretaries to reassess the mineral wealth of the NPR-A and the Beaufort Sea and to strike a balance of promoting development that would protect the surface resources.

MR. WACHOWSKI explained that the BLM is charged with managing the surface and subsurface of the NPR-A. The 2013 NPR-A integrated activity plan (IAP) looked at maximizing tracts available for lease at the next lease sale on December 6, 2017 and offered all 900 available tracts on 10.3 million acres. The sale generated about $1.1 million based on seven tracts covering about 80,000 acres. ConocoPhillips was the only company to participate in that lease sale, but that wasn't a surprise as many of the areas were of low prospectivity.

Their first plan was to look at the wide range of resource management options for the entire 23 million-acre petroleum reserve and to make more acres available. They came up with two options: do another integrated action plan (IAP) or select a different alternative within the existing IAP.

The USGS is the agency charged with the mineral potential assessment in the area and using new data collected by industry and USGS teams had reassessed the Barrow Arch to show much more potential and released the results last December. They estimated a mean of 8.7 billion barrels of oil and 25 trillion cubic feet of gas, a significant increase from the 1.5 billion barrels of oil assessed in 2010. He noted that this assessment was for undiscovered technically recoverable oil and gas resources that are estimated to exist based on geological knowledge and theory, while technically recoverable resources are those that can be produced using currently available technology and industry practices. The estimates are significantly higher than previous ones mainly because two recent oil discoveries are larger than anticipated; they are the Nanushuk and Torok formations in and around the NPR-A. In summary, he said, the current USGS estimate is more than six times the previous estimate of the Central North Slope done in 2005and the NPR-A estimate done in 2010, and therefore they are looking forward to meeting the President's energy dominance strategy and putting more oil in TAPS in the future.

CHAIR GIESSEL commented that at an Anchorage meeting last November the head of USGS presented the geology of the NPR-A and ANWR, and it was very interesting information. She transitioned to the next speaker, Mr. Mike Navarre, the commissioner of the Department of Commerce, Community and Economic Development (DCCED). She said that prior to being commissioner, Mr. Navarre was the mayor of the Kenai Peninsula and before that he was a member of the House for over a decade. In these capacities, he really understands the relationship between development of a resource in one jurisdiction and allocating the benefits equitably between the state and local shareholders.

3:45:37 PM
MIKE NAVARRE, Commissioner, Department of Commerce, Community and Economic Development (DCCED), said he was pleased to give them a brief overview of the NPR-A Impact Grant Program and how it works. He found that a report goes to the legislature on an annual basis, which he would touch on in just a bit.

As a bit of background, several claims were made in the NPR-A by Standard Oil in 1917. However, Reserve 4 was established in 1923 to provide fuel for the Navy, making all claims including those by Standard Oil void. They were transferred to the Bureau of Land Management in 1976 and renamed the National Petroleum Reserve-Alaska.

This area has been home to Inupiat communities for thousands of years. The initial lease sale in 1984 generated a little under $47 million to the State of Alaska and there were no lease sales for the next 15 years. Six lease sales were conducted between

1999 and 2011 in the Northeast and Northwest Planning Areas. Leases are now scheduled to be held annually.

3:47:19 PM
MR. NAVARRE said the NPR-A is managed by the federal government and 50 percent of the funds received from sales, rentals, bonuses, and royalties on leases go to the State of Alaska. He noted at this point little if any revenue has been generated from oil fields; the bulk of them have been from rentals, bonuses, and lease sales.

He said the NPR-A is governed by federal statute 42 USC Chapter 78 and state statute AS 37.05.530 that lay out the process and regulations followed by the DCCED.

The primary objective of NPR-A impact mitigation programs is to provide eligible municipalities with grants to help mitigate significant adverse impacts related to oil and gas development within the NPR-A. "Impacts" is a broad term that means reasonably attributable to NPR-A oil and gas activities on population, employment, finances, social and political values, air and water quality, fish and wildlife habitat, the ability to provide essential public services including health care, public safety, education, transportation, utilities, and government administration, and other things of demonstrable importance to the applicant or its residents.

The next three slides provided a grant award history for FY87-FY99, FY00-FY08, and FY08-FY18. He explained that a review committee is put together that is subject to approval by the legislature that includes the DCCED and that the committee sometimes appropriates an award without really knowing how much money is going to be available.

CHAIR GIESSEL asked him to clarify that.

3:49:41 PM
MR. NAVARRE responded that deposits from the federal government in FY19 are accounted up to the end of August. Last year, deposits amounted to almost $12 million. After the end of August another $13.5 million was deposited into that fund.

MR. NAVARRE augmented his explanation with an FY20 Impact Mitigation Grant Timeline. Only six communities in the North Slope Borough are available to the application process: Nuiqsut, Wainwright, Atqasuk, Anaktuvuk Pass, and Utqiagvik. The postmark due date for completed applications is November 15, 2018. On

January 2019 the committee selections become publicly available. The legislature appropriates the funding and grant awards are made in late April 2019. But sometimes the budget has not been adopted by then, so, they don't know how much money is really available for the grants.

3:52:38 PM
Under "Resources" he listed:
-FY20 NPR-A Handbook
-FY20 NPR-A Fillable Application
-Annual (FY18) Report to Legislature, which provides history since its inception. He suggested changing that requirement to a full report every five years with annual updates, to provide more efficiency.

3:53:57 PM
REPRESENTATIVE BIRCH asked what reporting aspect he found burdensome.

COMMISSIONER NAVARRE replied that seeing how the legislature gets the annual information anyway, having annual updates with a report to the legislature every five years would be more efficient.

CO-CHAIR TARR said she assumed that the legislature appropriating funding in late April 2018 is timed with passing the budget, but in the past couple of years, the budget has been passed in something more like July, and she asked how that timeline would impact when the money gets allocated to communities. She also asked why funding was so high in the FY04-06 group of projects.

COMMISSIONER NAVARRE said lease sales almost certainly occurred in those years.

CO-CHAIR TARR asked why the lease sales in those years were much more successful than in other years.

COMMISSIONER NAVARRE responded that lease sales weren't always done on an annual basis; sometimes they would take place every certain number of years.

3:56:05 PM
SENATOR STEDMAN said both Finance Committees have an ongoing discussion on whether to line-item grants to individual communities or to keep them as one lump-sum buried in the budget, so not too many legislators even notice it. However, he

felt that they should be a line item for each community. A hot-button issue with these grants over the years is that all the state's 50 percent royalty goes to the affected communities and none of it goes to the Permanent Fund.

COMMISSIONER NAVARRE replied that some of it goes to the Permanent Fund and if money is left over at the end of the fiscal year, it goes to an education fund.

SENATOR STEDMAN asked what would happen if more development happens.

COMMISSIONER NAVARRE said he was cautious to not speculate too much on revenue from future development. A lot of factors play into projects that aren't in production yet. Greater Moose's Tooth 1 (GMT-1) is coming online this fall and will start to generate royalties, but either the federal government or the Department of Revenue (DOR) could better estimate what those impacts might be.

SENATOR STEDMAN said it would be nice if he could keep an eye on the incentives the state will potentially pay out to these areas recognizing that a good portion of these funds may not come back into the treasury to help offset those costs. We don't want to end up with a lot going out and nothing coming in.

CHAIR GIESSEL commented that the whole the rationale for having this meeting is to raise awareness of this subject.

COMMISSIONER NAVARRE added that significant policy discussions have to take place.

SENATOR STEDMAN said his understanding is that federal statute 42 ties the state's hands. Is that correct?

COMMISSIONER NAVARRE replied that there are some limitations directed by federal statute, but the state statute limits some options, also.

4:00:14 PM
CHAIR GIESSEL noted that Representative Young made a proposal for the state to receive 47 percent of the royalty and the other 3 percent would go to Native corporations. She asked the commissioner if not knowing exactly how much money is coming in was partly a factor of the fiscal years being different between the state and the federal government.

COMMISSIONER NAVARRE replied that it's also the timing of the deposits going into the fund; if they come in after August, they go into the next fiscal year. When the funds are actually paid into the fund is hard to estimate, especially for lease sales and when a field goes into production.

CHAIR GIESSEL noted that five years ago the federal government was short of cash and sequestered some mining royalties.

CO-CHAIR TARR said the original intent of this fund was to mitigate resource development to local community infrastructure, but as times goes on and infrastructure is more developed, she wondered if the impacts should be assessed in the same way and if that would change what communities would qualify.

COMMISSIONER NAVARRE said that the funding is fairly broad and subject to interpretation and some subjective analysis.

4:03:23 PM
CHAIR GIESSEL thanked him for his presentation and welcomed the Department of Natural Resources (DNR) to the table saying they are charged with maximizing the state's resources in a patchwork of jurisdictions and that the resources don't recognize boundaries and cross jurisdictions as in the NPR-A.

FAITH MARTINEAU, Executive Director, Office of Project Management and Permitting (OPMP), Department of Natural Resources (DNR), Anchorage, Alaska, said she would cover the state's role in NPR-A's development, the overlap of resources between state and federally managed lands, the state's support for specific projects within NPR-A and the proposed development within that federally managed area of the state. She would provide information from the perspective of the OPMP and the state's role through its Large Project Coordination Program, their participation as a cooperating agency and as regulator and resource manager from the perspective of the Division of Oil and Gas. She would also touch briefly on state support of NPR-A projects of Greater Moose's Tooth 1 & 2 and the newly proposed Willow Master Development Plan by ConocoPhillips.

MS. MARTINEAU said AS 38.05.020 (b)(9) provides the authority and duties of the DNR commissioner to lead and coordinate all matters related to the state's review and authorization of resource development projects.

4:06:17 PM

The commissioner has delegated that authority to OPMP specifically and they implement that responsibility through their Large Project Coordination Program. The model is unique to the State of Alaska; it requires an "opt in" by the project proponents and it is defined by a Memorandum of Understanding (MOU) that is developed between OPMP and the project proponent. It includes the scope of work and associated funding so that cost recovery can be accomplished for each of the different regulating agencies.

MS. MARTINEAU said this particular program has a number of benefits: it provides a streamlined regulatory process for the project proponent that otherwise is a very complicated and rigorous and provides a mechanism to the state for cost recovery for support services that are comensurate with the large development project. It also ensures the public that state agencies are maximally involved in the review and development of a proposed large project. Their existing project portfolio represents both extraction industries: oil and gas development and hardrock mining; however, NPR-A is about oil and gas development.

MS. MARTINEAU said the MOUs also establish funding and support for their participating as a cooperating agency through the federally required National Environmental Policy Act (NEPA) process, which frequently involves the development of an Environmental Impact Statement (EIS) for land use plans and large development projects. OPMP serves as the lead in these types of efforts and coordinates the state agencies' review and comment for both.

The Alaska National Interest Lands Conservation Act (ANILCA) coordination team and the federal plan review team provide the necessary technical support and expertise in order to evaluate the information contained within both land use plans and large development proposals.

4:09:34 PM
MS. MARTINEAU said the BLM manages NPR-A consistent with the existing 2012 NPR-A Integrated Activities Plan for which an Environmental Impact Statement (EIS) was developed and the corresponding record of decision, which defines areas that are available for oil and gas leasing as well as areas that are not available, related infrastructure, timing restrictions, and other stipulations and mitigation measures. The state's participation on the IAP was as a cooperating agency and provided comments on the suite of alternatives that were

developed and analyzed in EIS, any subsequent modification, further analysis, or development of a new plan that the state would participate in as a cooperating agency.

MS. MARTINEAU said OPMP has maintained an MOU with ConocoPhillips for development of GMT 1 & 2 and participated as a cooperating agency for development of an EIS for both. They are currently helping ConocoPhillips navigate the regulatory and permitting process with the state agencies for further development of that unit. (slide 6)

The Willow Master Development Plan describes the proposed development that would occur by ConocoPhillips within NPR-A and is very similar to the Alpine Satellite development, for which an EIS was prepared. It contemplates not just a gravel pad and associated infrastructure, an access road and a pipeline, but also takes an overarching look at what a greater development might look like in the Willow area, and even contemplates some areas that ConocoPhillips is still in the process of creating.

MS. MARTINEAU said BLM is currently preparing an EIS for the Willow Master Development Plan (MDP) and notice of intent went out in August. It is currently conducting scoping and collecting comments on what type of issues should be analyzed.

4:11:26 PM
JIM BECKHAM, Deputy Director, Division of Oil and Gas (DOG), Department of Natural Resources (DNR), said they have a support role in NPR-A development. They have to get the hydrocarbon resources to TAPS; basically anything west of the Coleville River is where they are going to support any development activity. That means supporting permits for rights-of-way for access to any projects to the west most likely in the form of permitting pipelines to transport oil to TAPS. They will participate in EIS drafting as they did in ANWR and authorize facilities sharing across units going west.

He said the North Slope has limited processing facilities and the department tries to minimize the footprint in their developments, so they encourage facility access and sharing where possible. Hydrocarbon transportation across state-owned and managed unit boundaries requires authorizations by the state per lease and unit. So, the division reviews any application for facility access or sharing agreement and considers any factors but principally conservation of resources, prevention of waste, and protection of all parties, including the state.

CO-CHAIR JOSEPHSON remembered that one of the original MDPs for this area was done by Secretary Salazar in the first term of the Obama Administration and asked what he knew about the undoing of those plans and the redoing of them in a different administration.

MR. BECKHAM replied that he is not qualified to comment on that and is not involved in any of it.

MS. MARTINEAU added that Representative Josephson was probably referring to the Integrated Activity Plan (IAP) that was previously approved by Secretary Salazar, and that typically EIS modifications vary from plan to plan. Secretary's Order 3355 describes new timelines and guidance over how long the NEPA process should take and completion of an EIS from the notice of intent to the record of decision.

4:15:20 PM
CO-CHAIR TARR said that the North Slope has some issues and that commercial agreements give owner operators an advantage over new entrants because some infrastructure costs have already been paid for. Those particular commercial terms are happening outside of any involvement from the state. She asked if Mr. Beckham was saying that once some kind of agreement is reached, that that paperwork gets forwarded to the department, but they are mostly checking off requirements against the previous lease sale but not weighing in or analyzing beyond that.

MR. BECKHAM replied that was correct; the department doesn’t get involved in commercial negotiations between two parties. But once they have settled on those agreements, the department steps in to make sure that any agreement is first and foremost in the interests of the state, meaning no wasted resources, and that all involved parties are protected equally.

SENATOR MEYER remarked that the fields they are talking about today are 100 percent-owned by one company.

MR. BECKHAM replied that is true.

SENATOR MEYER reasoned that the commercial terms shouldn't hold up the permitting process on those two fields. He asked how many federal and state permits a company has to get before it can bring a field into production.

MR. BECKHAM replied that it takes quite a few permits, but he would have to get the exact answer back to him.

SENATOR MEYER asked him for suggestions on ways to expedite the permitting process while keeping it in place.

4:18:20 PM
MR. BECKHAM said he would touch on that in a little bit. He provided an example of a shared facility agreement recently approved by the division, for moving GMT 1 production through the Alpine central processing facility in the Colville River Unit (slide 9).

4:19:11 PM
Slide 10 depicted tax and royalties by region on the North Slope compiled by the Department of Revenue (DOR) and the next slides provided USGS assessments for the NPR-A. He said the Department of Interior Secretary's Order 3355 deals with permitting resource overlap. He explained that some discussions are happening within state and federal government about a program that allows the state to take over some federal permitting responsibilities if the requirements are similar for each, so they aren't both run at the same time. Some of those are well completions, well recompletions, and plugging and abandoning. The state has a robust permitting process through the Alaska Oil and Gas Conservation Commission (Alaska Oil and Gas Conservation Commission (AOGCC)) and might be able to streamline that, as well.

MR. BECKHAM explained that SO 3355 was issued with the intent of immediately improving the department's National Environmental Policy Act Review and limited EISs to 150 pages to be completed within 365 days (one year). Some EISs were taking multiple years and limiting it to one year makes all of the agencies essentially streamline their activities to coordinate in a more expeditious manner.

4:22:10 PM
REPRESENTATIVE BIRCH asked if the department has a handle on the overall plugging and abandonment piece.

MR. BECKHAM asked if he was referring to the legacy wells.

REPRESENTATIVE BIRCH replied those and other wells at some time in the future.

MR. BECKHAM said he didn't want to speak for the AOGCC, but the department does have a good handle on the requirements for plugging and abandoning wells.

4:23:40 PM
CO-CHAIR JOSEPHSON went to page 7 noting that the division has a role in permitting rights of way and the transportation of hydrocarbons and asked if it's safe to say that those permits are pro forma and asked given that its federal land, if the state could do otherwise than just grant the permits.

MR. BECKHAM replied the department doesn't have input into the permitting on NPR-A, but they have a great deal to say about how crossing rivers is done responsibly and safely. And while he likes to say their job is to get to yes, because without it there is no transportation or production, it is not an automatic yes. All the impacts and opportunities are weighed, and they try to come up with the best possible solution and get to yes, as well.

SENATOR MICCICHE said slide 8 talks about authorizations for facility access, specifically to processing facilities, and asked what factors are considered and to what degree the department is involved in trying to work out those issues.

4:25:54 PM
MR. BECKHAM answered that most of the issues deal with protection of working interests owners' rights and the state's rights after the commercial agreement has been made, which includes whether or not each working interest owner will be afforded the ability to have the benefits of the facility if another producer is using it, and the benefits to the state relating to royalty oil that comes from that unit and is processed in that facility.

SENATOR MICCICHE asked if the department is involved at all, is it an entity-to-entity negotiation, or does the department become more involved if a development would be very beneficial to the state rather than a marginal development.

MR. BECKHAM replied that the department doesn't get involved in commercial negotiations between unit operators whether it is a big or a little project.

4:27:15 PM
CHAIR GIESSEL thanked the presenters and invited ConocoPhillips to provide its presentation. She said ConocoPhillips is developing the Willow prospect, the subject of this presentation.

SCOTT JEPSEN, Vice President, External Affairs and Transportation, ConocoPhillips Alaska, Anchorage, Alaska, said he would talk about ConocoPhillips' robust production outlook in the NPR-A and across the North Slope. He would also review their exploration programs and talk about what he considers to be a renaissance of investment on the North Slope and would conclude with some higher-level observations and challenges going forward.

Slide 3 delineated North Slope state and federal units. He said ConocoPhillips has a 36 percent working interest in the Prudhoe Bay Unit that is operated by BP. The Kuparuk River Unit is west of that and ConocoPhillips's working interest is 55 percent, however they have recently agreed to acquire BP's 39 percent interest and at closing, ConocoPhillips will own about 95 percent. The NPR-A boundary is further west and ConocoPhillips has an interest in the Colville River Unit where the Alpine field is located. They have two developments in the Greater Moose's Tooth Unit and the Willow prospect located in the Bear Tooth Unit.

MR. JEPSEN said that earlier this year ConocoPhillips acquired Anadarko's working interest in the Colville river Unit as well as all the jointly held acreage in NPR-A, so now they essentially have about 100 percent working interest in the NPR-A and the Colville River Unit.

Back in 2013, ConocoPhillips had an uncompetitive tax structure, a high cost of supply (which meant they were investing their monies elsewhere), a declining production profile in Alaska, limited investment and a focus on Lower 48 unconventionals.

4:32:15 PM

Today their profile, even without their BP and Anadarko acquisitions, has changed substantially. In 2028 they are predicting having 100,000 barrels a day higher production than today. What changed? One of the things that changed is that SB 21 improved their fiscal framework, technological advancements and innovations helped target new and bypassed resources, and cost of supply was reduced; they made a comprehensive effort to capture value from core fields and infrastructure and the renewed focus on exploration has yielded early success.

MR. JEPSEN said slide 6 used the categories of exploration, project inventory, development programs, lowering base decline and identifying opportunities to sustain cost of supply reductions to illustrate the drivers. The most technological improvement came in the area of drilling that made a significant difference in terms of what and how much can be developed. Slide 7 mapped their North Slope pipeline projects.

4:37:04 PM
He said they see big upside in exploration (slide 7), but a lot of work still needs to be done to better understand the ultimate production profile, but they have found some very substantial resources. GMT 1 will have first oil in this year's fourth quarter; their estimation is around 30,000 barrels a day with a value of $1 billion. There were about 700 workers during the two construction seasons.

GMT 2 is similar to GMT 1 in scope except that it will have more wells, which means it will be more expensive. They estimate about 38,000 barrels a day at peak with a value of $1.5 billion.

MR. JEPSEN said that ConocoPhillips is using their extended reach drilling rig in the Fiord West accumulation, an area they couldn't figure out a way to develop economically before. But with this rig they can now drill from the existing CD 2 drill site. Permitting will always be a challenge because Fiord West is on the coastline with its sensitive wetlands.

4:39:07 PM
Last, the Willow Discovery in the Bear Tooth Unit will be developed much like the Alpine Field. They estimate thousands of jobs during construction and several hundred permanent jobs when it comes on stream.

CO-CHAIR JOSEPHSON asked if the legislature should expect this new production to supplant existing production or add to it.

MR. JEPSEN answered that it will be additive.

4:39:57 PM
MR. JEPSEN explained that they drilled three wells inside the Willow Discovery in the north and West Willow 1, a separate accumulation, and have positive results in all of them (slide 8). They have had three different well tests, about 37 miles of ice roads and five different ice pads.

ConocoPhillips also did some exploration on Stoney Hill in the Narwhal Trend down to the south, which is a little bit further from infrastructure. The two different tests were successful. They also drilled and tested the Putu well, which is about three miles from the village of Nuiqsut. Now they are trying to figure out how best to develop these. They will all require additional appraisal and analysis. Putu has an advantage in the sense that it is within the Colville River Unit and is closer to facilities; and the base plan there is to bring the production back into the Alpine facilities. They estimate that 100 to 315 billion barrels of resource was discovered in this exploration program.

4:43:28 PM
When ConocoPhillips first announced Willow they estimated about 300 million barrels of resource and now with the additional information they are estimating 400-750 million barrels of oil. Their compressed seismic imaging (CSI) technology is proprietary; it allows them to shoot four times as much for the same dollar amount in the same timeframe and get a better image, a very helpful gamechanger for them.

West Willow 1 will be tied back into facilities at Willow, but additional testing has to be done to understand it. Slide 11 laid out ConocoPhillips's development plans. They are hoping for a record of decision on the GMT 2 EIS in October, which will position them for a final investment decision (FID) later this year. Assuming that goes forward, they would build a road from GMT 2 over to the Willow Central Facilities, so it would be connected by road back to the Alpine Central Facilities.

They are planning on using a sea lift, because that is typically the way to keep development on the North Slope efficient. The sea lift would land the modules on a temporary gravel island north of Atiguru Point and in the winter time an ice road will be built down to various locations indicated on the map.

MR. JEPSEN said the main plan for recovery is water flood and a enriched gas mixture process. The plan is to take seawater from the Kuparuk sea water treatment plant with a connection happening somewhere down around Central Production Facility 2 in the southwest corner of the Kuparuk River field. And build a pipeline over to Willow. They currently bring sea water from STP (Alpine Field), but more pipeline capacity is needed to bring enough to do the waterflood for Willow.

They will use a portion of indigenous natural gas liquids from production at Willow alternately with the enriched gas as a miscible injective to increase production. This is the technology they use in all of their core fields of Prudhoe Bay, Kuparuk, and Alpine.

MR. JEPSEN pointed out that the farther west they go the harder it is to find gravel, but whatever they find will lower costs for development at Willow. He summarized that over the next four to five years, ConocoPhillips will work on trying to understand the right size for this facility. They talk about a nominal 100,000 barrels a day, but exploration and delineation will reveal more detail. They expect to spend $2-3 billion within 4-5 years to get first production on stream and then another $2-3 billion to fully develop the field. They expect FID in 2021 and first oil in the 2024-25 timeframe.

Slide 13 graphed the Willow EIS schedule for getting the record of decision. The process has started; the scoping period has been extended to September 20 and the schedule is to have it done in a year (August 2019).

MR. JEPSEN said that concludes some of the newer term stuff up to Willow. Now he would talk about additional exploration. For late 2018/19, 6-8 wells are planned with 9 tests in a two-week program. They are doing an exploration prospect that will be drilled off of an existing Kuparuk drill site in the fourth quarter this year. The Putu play will be drilled off the CD 4 site. Hopefully, both will be done by the end of the year.

For the exploration season Mr. Jepsen said ConocoPhillips wants to focus on Willow and will be doing some horizontal wells up there to better understand what productivity might look like and the type of wells that could be used to develop it. They will drill some vertical wells, test communications between wells and do additional delineation, as well. The well will be to test formations they have found to better understand their feasibility. How much they get done depends on how fast it goes and things like weather.

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The other questions is what ConocoPhillips is going to do with rest of the "blobs" up there. A "blob" is an oil accumulation that geologists and geophysicists put on a map. Orangish blobs are exploration prospects. To date they have only tested about 75 percent of their prospect inventory and so their goal in 2029-plus timeframe is to focus on testing the remaining accumulations. Mr. Jepsen said it is "fairly rare" for ConocoPhillips to publicly share what all of their exploration prospects look like, but they have a lot of acreage and a lot of upside and want to show that.

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MR. JEPSEN said he next wanted to share some information that is very rarely pulled together on what he calls the North Slope Renaissance for investment. ConocoPhillips is doing things up there, but other operators are, too. All the various projects add up to around $13 billion in capital over the last 7-8 years and hundreds of thousands of new barrels of oil production have come online. To give them some idea of the scale of investment that is going on on the North Slope, he said these other projects include:
- The Liberty Project on the eastern North Slope by Hilcorp and BP - 55,000 barrels a day and a $1 billion in investment.
-Oil Search/Repsol/Armstrong at the Pikka Prospect talk about rates as high as 100,000 barrels a day and their current base plan is to build their own separate production facilities which would be in the same investment arena he talked about for West Willow" $3-4 billion.
-ENI is doing exploration and picked up some acreage south of the Prudhoe Bay fields.
-Brooks Range will hopefully have production this year.

This investment is one of the bigger untold stories. These projects aren't just prospects on paper; these are actually prospects that people are fishing through the permitting system and have a high probability of going forward. The core fields are Kuparuk, Prudhoe Bay, and Alpine; they are the hearts and lungs of the North Slope and must be kept healthy. The farther one gets from them the farther away they move from making sense.

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Slide 16, the last of the deck, showed ConocoPhillips's production profile. Five years ago, they were looking at potentially 100,000 barrels of oil to where they are today, and they have discovered 500 million barrels of oil since 2016 with 75 percent of their prospects being already tested. The transformation has been driven by technology, tax reform, and a focus on reducing costs.

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In order to stay competitive, ConocoPhillips Alaska has to keep its fiscal plan in place, he said again. If any costs go up, that makes them less competitive. If the fish habitat ballot measure passes, that will be a "big drag" on development, because it lays out a lot of mitigation and creates uncertainty as to how fish habitat permits will be managed. He stated that the North Slope already follows a tremendous amount of science-based regulations and they don't have an issue with fish habitat permits.

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SENATOR MEYER asked if Alaska can assume, since it has the highest unemployment rate in the nation, that jobs will grow correspondingly with ConocoPhillips's investments outlined on slide 15.

MR. JEPSEN replied that he can't speak to Alaska's overall employment, but ConocoPhillips adds about one job per economic multiplier factor of 20 and projects like Willow, Liberty, and Pikka are going to add permanent jobs. So, there should definitely be job growth in the oil industry.

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CO-CHAIR TARR said she has tempered optimism, because Caelus and Hilcorp, for instance, have stalled because of unresolved issues related to tax credits, and the Mustang development was supposed to be online prior to the price crash but is now on hold until the price recovers. However, the Oil-Search/Repsol/Armstrong project is a bright spot because of their collaboration. She sees one strong company that looks like it has several potential projects over the next several years but a lot less optimism around some of the other activities relating to the tax structure. Previously, the credits were a way to attract explorers and new entrants and that has now gone away, but not in a way that was resolved and those unresolved tax credit issues call into question just how long those companies will be in Alaska. So, Alaska could end up in the same place it was before with a few strong companies on the North Slope.

MR. JEPSEN responded that what the state did this year to try to resolve the tax credit problem will help some of the situations she talked about, but Oil-Search just spent $50 million to acquire 50 percent of Armstrong's interest, so they are pretty serious. He hadn't heard BP and Hilcorp say too much about being dependent on tax credits to develop the Liberty prospect. Those are the big hitters. With regards to Caelus, something will happen with that, although he understands the uncertainty.

Companies are investing a lot of money right now, he said, and they wouldn't be doing that if they didn't have a reasonable expectation that they can get through the permitting process and actively move towards development. But, he said, "Alaska takes deep pockets." ConocoPhillips is exploring in the NPR-A, but it can be 10 years before they make a discovery and have Willow on stream; they have spent $3 billion-plus on GMT 1&2 drill sites, and once they make a decision to move forward, they will spend

$400-600 million more before getting first oil. So, he thinks it's unrealistic to expect small operators to come up here. They should encourage larger companies, because that's where the staying power resides, really. He added that ConocoPhillips is working closely with Brooks Range to try to help them come on stream this year.

CO-CHAIR TARR said at the beginning of this calendar year, people were very cautious about price saying that it wouldn't go above $60 for the foreseeable future, and for months now it has been above $70 and even up to $80, and she asked what price outlook ConocoPhillips is modeling around.

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MR. JEPSEN replied that they have taken a different approach and instead of getting hung up on exactly what the price will be, they model around what the price could fall to. Their goal is to have their projects make economic sense with cost of supply at $40/barrel. They just haven't been successful at predicting price and want to be able to survive another price crash.

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REPRESENTATIVE BIRCH commended him for a "great briefing" and his candor in setting out ConocoPhillips' targets. It's very encouraging to believe that there is another 30-40 years of life in TAPS based on their prospects. He asked how the Brooks Range project is functioning in terms of integration between facilities.

MR. JEPSEN responded that he doesn't speak for Brooks Range, but they are looking at bringing in a facility that will process their crude for the first stage of production. So, they will be shipping pipeline quality crude through the current pipeline.

SENATOR MICCICHE said he feels encouraged by his projections and asked if this level of activity is relatively unprecedented or if it is comparable to the Prudhoe Bay/Kuparuk heydays.

MR. JEPSEN replied that this level of activity on the North Slope hasn't been seen in decades.

SENATOR STEDMAN remarked that one must be fearless to be external affairs vice president for over a decade and asked if it's true he had hand-fed a brown bear.

MR. JEPSEN answered that it's true he was licked by a brown bear.

[5:06:21 PM]

CHAIR GIESSEL, finding no further questions, thanked everyone for coming, and adjourned the joint meeting of the Senate and House Resources Committees at 5:06 p.m.