ALASKA STATE LEGISLATURE
SENATE RESOURCES STANDING COMMITTEE
February 23, 2024
3:32 p.m.

DRAFT

MEMBERS PRESENT

Senator Click Bishop, Co-Chair
Senator Cathy Giessel, Co-Chair
Senator Scott Kawasaki
Senator James Kaufman
Senator Forrest Dunbar
Senator Bill Wielechowski (via teleconference)

MEMBERS ABSENT

Senator Matt Claman
Senator Forrest Dunbar

COMMITTEE CALENDAR

SENATE BILL NO. 220
"An Act relating to the Regulatory Commission of Alaska and regulation of the service of natural gas storage."

- HEARD & HELD -

PREVIOUS COMMITTEE ACTION

BILL: SB 220
SHORT TITLE: RCA REGULATE NATURAL GAS STORAGE FACILITY
SPONSOR(s): SENATOR(s) GIESSEL

02/08/24	(S)	READ THE FIRST TIME - REFERRALS
02/08/24	(S)	RES, L&C
02/19/24	(S)	RES AT 3:30 PM BUTROVICH 205
02/19/24	(S)	Heard & Held
02/19/24	(S)	MINUTE(RES)
02/23/24	(S)	RES AT 3:30 PM BUTROVICH 205

WITNESS REGISTER

TONY IZZO, CEO
Matanuska Electric Association (MEA)
Anchorage, Alaska

POSITION STATEMENT: Invited testimony for SB 220.

JOHN BOYLE, Commissioner
Department of Natural Resources (DNR)
Anchorage, Alaska
POSITION STATEMENT: Presented SB 194 on behalf of the administration.

JOHN CROWTHER, Deputy Commissioner
Department of Natural Resources (DNR)
Anchorage, Alaska
POSITION STATEMENT: Co-presented an overview of SB 194.

DEREK NOTTINGHAM, Director
Division of Oil and Gas
Department of Natural Resources (DNR)
POSITION STATEMENT: Co-presented an overview of SB 194.

ACTION NARRATIVE

3:32:35 PM
CO-CHAIR CLICK BISHOP called the Senate Resources Standing Committee meeting to order at 3:32 p.m. Present at the call to order were Senators Wielechowski, Kawasaki, Kaufman, Co-Chair Giessel, and Co-Chair Bishop.

SB 220-RCA REGULATE NATURAL GAS STORAGE FACILITY

3:33:22 PM
CO-CHAIR BISHOP announced the consideration of SENATE BILL NO. 220 "An Act relating to the Regulatory Commission of Alaska and regulation of the service of natural gas storage."

3:33:50 PM
CO-CHAIR BISHOP announced invited testimony.

3:34:10 PM
TONY IZZO, CEO, Matanuska Electric Association (MEA), Anchorage, Alaska, invited testimony for SB 220, said MEA is Alaska's oldest electric cooperative and serves the fastest growing and second largest population center in the state. He emphasized that the state is at a critical time with regard to energy. The Southcentral region recently experienced declining gas reserves coupled with colder than normal temperatures and record demand for heat and power, almost resulting in rolling blackouts. Cook Inlet has reached a point where there's no ability to secure firm gas contracts beyond the expiration of existing contracts.

However, utilities require firm gas that can be delivered for home heating and power production. Natural gas storage is a proven method by which gas volumes available during off-peak periods like the summer months can be saved, set aside, and stored for periods of higher demand. Gas storage needs will continue to increase as gas volumes decline while the future of reliable power in the Southcentral area depends upon having more storage. MEA aims to diversify its energy sources and is reviewing various options including wind, solar, nuclear, and carbon sequestration. It hopes to reach its goal of 50 percent clean energy by 2050.

3:36:25 PM
MR. IZZO said pending legislation would require high percentages of non-firm power like wind and solar. Even with aggressive legislative targets, MEA's annual gas demand would drop from 5.6 billion cubic feet per year to almost three billion cubic feet in 2040, which is approximately a 50 percent reduction. However, a substantial three billion cubic feet would still be required in a scenario that achieved 80 percent renewable power. Gas storage would allow MEA to manage a diversified mix of energy including non-firm renewables like wind and solar.

3:37:20 PM
MR. IZZO stated that as the CEO for a regulated utility, he fully supports the regulation of third-party storage. While significant gas storage exists in Cook Inlet, the majority is non-regulated. It is essentially used to meet contractual obligations by producers. He supports legislation that clarifies that any provision of third-party storage must be subject to economic regulation by the Regulatory Commission of Alaska (RCA). Having gas storage regulated by the RCA provides the necessary transparency and will ensure that rates for storage are reasonable. SB 220 is an important step to offset declining energy security.

3:38:20 PM
CO-CHAIR BISHOP asked for confirmation of his understanding that the goal of a 2 bcf reduction is targeted for 2030.

3:38:32 PM
MR. IZZO replied that the goal was established last year and is subject to change, but the objective is to reach 50 percent clean, diversified, and carbon-free energy through any means by 2050.

3:39:07 PM

CO-CHAIR BISHOP asked if despite MEA's goals, must MEA maintain spinning reserves with base load power or hard assets that do not rely on renewable energy sources.

3:39:29 PM
MR. IZZO replied that is correct.

3:39:44 PM
CO-CHAIR BISHOP concluded invited testimony on SB 220.

3:39:50 PM
CO-CHAIR BISHOP opened public testimony; finding none, he closed public testimony.

3:40:20 PM
CO-CHAIR GIESSEL stated she was asked whether the Marathon facility and its energy storage tanks on the Kenai Peninsula would be subject to RCA regulations under SB 220. According to the Department of Law's (DOL) interpretation, Section 3 of SB 220 would give RCA jurisdiction over gas storage service in a situation where a small producer like Furie stores gas with Hilcorp. She conveyed that Mr. Izzo mentioned there is a huge amount of additional storage besides CINGSA in Cook Inlet which is held by Hilcorp. Under the first scenario, if Furie stores gas with Hilcorp, RCA's jurisdiction would extend over Hilcorp's facilities for gas storage because two different entities store gas for commercial purposes. Under the second scenario, if Marathon imported LNG and stored it in its own storage tanks and it took that gas and sold it to ENSTAR, they would not be regulated. Under the third scenario, if ENSTAR imported LNG, stored it at Marathon, and used its own gas, it would be covered under SB 220. One entity would own the gas while the other one would store it, so that would fall under this regulation.

3:43:21 PM
CO-CHAIR BISHOP held SB 220 in committee and turned the gavel over to Co-Chair Giessel.

SB 194-REDUCE ROYALTY ON COOK INLET OIL & GAS

3:43:32 PM
CO-CHAIR GIESSEL announced the consideration of SENATE BILL NO. 194 "An Act relating to temporarily reduced royalty on oil and gas from pools without previous commercial sales in the Cook Inlet sedimentary basin; and providing for an effective date."

3:44:25 PM

JOHN BOYLE, Commissioner, Department of Natural Resources (DNR), Anchorage, Alaska, said the state is facing an energy challenge in the Southcentral area that impacts the entire state. Anticipated supply is currently projected to fall under anticipated demand. As a result in upcoming years, the state is facing a delta that needs to be filled. Royalty relief is one tool DNR uses to incentivize new production in Cook Inlet. SB 194 is relatively straightforward and proposes lowering the 12.5 percent royalty rate to five percent. This would apply to already existing leases and future leases in areas where the state does not currently have existing oil and gas production. The provisions for royalty relief would only apply to new production being brought online and not to existing production, which is already committed in the energy diversification initiative. Various consultants and presenters conveyed that some of those key drivers help influence a company's decision to invest money into a prospective project. The decision to begin with royalty relief is a significant component that factors into the decision-making process on whether the economics of a commercial project merit an investment.

MR. BOYLE said by providing some measure of royalty relief, the economics could be improved to favor production. There is a myriad of complex issues that challenge Cook Inlet gas production and factors that need to be addressed, so DNR anticipates working with the committee to explore available policy options and identify the most meaningful actions the state could do to encourage production. Regardless of other technologies and diversified energy sources, the state will need to consider other sources and acknowledge the continued demand of natural gas, which is another reason to ensure a competitive environment in Cook Inlet. Although the focus is on gas and energy, SB 194 also applies to new oil production since the oil produced out of Cook Inlet is essential to Alaska. That oil is important to Marathon refiners and other applications, so incentivizing both oil and gas production is important to the state to address energy needs, continue to provide for fuel needs, and lessen the reliance on importing other fuels, which has an element of cost and risk when considering geopolitical issues that have an impact on the ability to source important resources.

3:50:17 PM
JOHN CROWTHER, Deputy Commissioner, Department of Natural Resources (DNR), Anchorage, Alaska, introduced himself.

3:50:31 PM

DEREK NOTTINGHAM, Director, Division of Oil and Gas (DOG), Department of Natural Resources (DNR), moved to slide 2 and explained the significance of Cook Inlet Gas:

[Original punctuation provided.]

WHY IS COOK INLET GAS IMPORTANT?

Natural Gas Utilities

- **Enstar** serves over 440,000 people and operates in over 25 communities throughout Southcentral Alaska
- **Interior Gas Utility (IGU)** serves over 2,400 people

Electric Utilities

- **Chugach Electric** serves over 302,000 people in Anchorage, Whittier, Girdwood, and Fairbanks
- **Matanuska Electric (MEA)** serves the Mat-Su Borough and Chugach and Eagle River, over 180,000 people
- **Homer Electric** serves nearly 36,000 people

MR. NOTTINGMHAM said about seventy percent of people in Alaska depend on natural gas. Half of the gas that comes out of Cook Inlet is contracted by ENSTAR while the other half is contracted by electric utilities to provide power.

3:52:00 PM
MR. NOTTINGHAM moved to slide 3 and provided an overview of Cook Inlet basin:

[Original punctuation provided.]

COOK INLET OVERVIEW

Cook Inlet is a large mature oil and gas basin

- Has produced over 1.4 billion barrels of oil and 12 trillion cubic feet of gas
- 26 producing fields operated by 8 different companies
- There are over 200 oil and gas leases in Cook inlet

Gas production has been declining since 1990

- Peak gas production in 1990 was over 850,000 thousand cubic feet per day

- Current production is just over 200,000 thousand cubic feet per day

Cook Inlet gas provides heat and electricity to 70 percent of Alaskans

MR. NOTTINGHAM said Cook Inlet produced 1.4 billion barrels of oil and 12 trillion cubic feet of gas since the late 1950s, including 26 producing fields operated by eight companies. The green shaded areas on the map on the right side of the page indicate gas production. He noted that current production has significantly declined since 1990.

3:53:26 PM
MR. NOTTINGHAM moved to slide 4 and detailed Cook Inlet leases:

[Original punctuation provided.]

COOK INLET LEASES

What is a State of Alaska Oil and Gas Lease?

- A lease is a tract of land designated for oil and gas exploration
- Leases are offered at lease sales or through exploration licenses
- Primary lease terms are between five and ten years
- Commercial production extends the lease beyond the primary term

What is an Oil and Gas Unit?

- Leases are combined to form a unit for the protection of all parties
- Facilitates joint development, conserve natural resources, and avoid waste
- Unit agreement is developed between the lessees and the State
- Requires the development of a plan of development/exploration (POD/POE) along with other reporting requirements
- Requires the operator to act as a prudent operator while developing the unit

3:55:23 PM
SENATOR KAWASAKI asked about general lease term requirements to satisfy the terms of commercial production.

3:55:44 PM

MR. NOTTINGHAM replied that in general, the lease terms are between a five-to-ten-year timeframe. Recently, DNR has offered an eight-year lease with the option to extend it to ten years. The lessee is required to pay rent on that lease as well as a bonus to bid on it upfront. They are also required to fulfill exploration activities. If oil or gas are found in commercial quantities, the lessee is required to put it on production. If production is not done within that timeframe, the lease is returned to the state and can be offered for sale.

3:56:59 PM
SENATOR KAWASAKI asked if a lessee or operator could drill for oil and gas then harvest and stockpile the resource.

3:57:31 PM
MR. CROWTHER replied no and said there is an iterative process the state goes through to manage, encourage, and sometimes compel or respond to a failure to produce from a lease or unit. Individual leases are treated as a unit in the course of development. When a project begins and operators acquire leases for a potential unit, they provide exploration plans to DNR that prove they will drill wells. DNR's process requires the operator to identify the geological location of where that production can be allocated to. If subsequent wells are not drilled that identify, expand, or appropriately manage that development, DNR requires the operator to fulfill their lease terms or risk losing future leases. There is a very complex suite of regulations that covers that. In the event an operator obtained leases, was granted a unit, drilled a well or two, and never pursued further development, DNR could take actions to reduce the size of the unit, remove leases from it, and offer it up for sale.

3:59:22 PM
SENATOR KAWASAKI asked if any current Cook Inlet leases are not being developed or are in jeopardy of having leases being taken back or reissued by the state.

3:59:37 PM
MR. CROWTHER replied that it is difficult to provide a decisive answer since each lease unit is at a different stage. Some have been in production between a decade and over a half-century, while others are new and have yet to see that initial exploration. A variety of units have seen attempts to expand development, including the Cosmopolitan Unit. DNR is focusing on bringing that unit as well as the Kitchen Lights Unit (KLU) into

full production. Given the large size of KLU, it is important to ensure a plan is in place for continued activity.

4:01:04 PM
SENATOR KAWASAKI clarified that he wanted to know the status of current leases. He stated it sounds like the price of Cook Inlet gas is at an all-time high development should be taking place. He expressed hope that developers who do not meet the lease requirements be held to the terms of the lease.

4:02:00 PM
MR. NOTTINGHAM moved to slide 5 and spoke to Cook Inlet geology:

[Original punctuation provided.]

COOK INLET GEOLOGY

Two Sources of Gas In Cook Inlet Basin

1. Biogenic gas from coals
2. Oil migrated from source rocks, creating associated gas

MR. NOTTINGHAM explained that the image illustrates the left side of Cook Inlet and the Alaskan Range mountains on the eastern side of the Kenai Peninsula. The shades of green indicate the presence of sand deposits, gas, and deeper oil, which have accumulated over time to form a fairway. This accumulation is influenced by tectonic activity. On the right, the image shows a stratigraphic section that has developed over time, primarily from oil found deep within Jurassic and Cretaceous sands. Oil is also visible in areas corresponding to the Cenozoic Tertiary eras. Additionally, gas deposits are evident in the sterling Beluga sands, primarily composed of biogenetic gas produced by decomposed bug remains that are primarily comprised of methane. The oils have migrated upwards from deep source rocks. While many of the deeper sands are tightly formed, they become more permeable as they move towards shallower sands. It is the shallow permeable sands that yielded most of the 1.4 billion barrels of produced oil.

4:04:03 PM
CO-CHAIR GIESSEL said she appreciated these diagrams that dispel the myth of gas being extracted from caverns.

4:04:21 PM

SENATOR KAWASAKI asked if gas used in oil basins to increase production would be subject to SB 194 or a 12.5 percent royalty rate.

4:05:07 PM
MR. NOTTINGHAM replied he believes that gas used for EOR purposes that stays within a unit would not be subjected to SB 194 since it is not subject to a royalty-bearing event. The only field in Cook Inlet that uses gas cycling is Swanson River and that gas stays within that unit and is managed at the federal level.

4:06:10 PM
MR. NOTTINGHAM moved to slide 6 and spoke to undiscovered oil and gas resources:

[Original punctuation provided.]

COOK INLET EXPLORATION & DEVELOPMENT: UNDISCOVERED RESOURCES

Undiscovered, Technically Recoverable Oil & Gas (U.S. Geological Survey 2011):

- mean conventional oil 599 million barrels of oil
- mean conventional gas 13.7 trillion cubic feet
- mean unconventional gas 5.3 trillion cubic feet

Undiscovered, Technically Recoverable Gas:

- 1.2 trillion cubic feet additional mean resource assessed in the federal Southern Cook Inlet Outer Continental Shelf area (Bureau of Ocean Energy Management 2011)

- Governor's Legislation targets making these prospects more economic for development

MR. NOTTINGHAM said this slide demonstrates undiscovered resources outside of existing units. The map on the left side of the page represents Cook Inlet lands as far south as Homer and as far north Talkeetna. The outline in red represents the potential for full-bed gas. The other outlines represent the potential for different oil and gas plays through the stratigraphic cross section. He said it conveys there is a huge amount of undiscovered gas in Cook Inlet and the lion's share of it is not on existing leases or units.

4:08:24 PM

CO-CHAIR GIESSEL noted that USGS does not comment on the cost of accessing those undiscovered resources.

4:08:34 PM
MR. NOTTINGHAM replied that is correct. He stated "technically recoverable" translates to gas extraction opportunities that have been demonstrated elsewhere in the world. However, it does not mean applying it in Cook Inlet will be commercial.

4:09:13 PM
MR. NOTTINGHAM moved to slide 7 that showcases a graph of Cook Inlet production history over time. In the late 1950s to early 1960s, oil production reached over 200,000 barrels per day. He stated peak gas production occurred in 1990 at 853,476 mcf/d. Water production came from water flood breaking through in the oil reservoirs and is how pressure is maintained. It is an enhanced recovery technique that has been widely applied in Cook Inlet. Production has declined to around 200 million cubic feet.

4:10:17 PM
SENATOR KAWASAKI said in 2012 or 2013, it appears there was more gas produced in that year. He referred to the Cook Inlet Recovery Act (CIRA) and Cook Inlet Natural Gas Storage Act (CINGSA) that preceded it. Two major developments were made where the state lost revenue in hopes of producing more gas. He asked why these approaches increased production for one year only.

4:11:04 PM
MR. NOTTINGHAM replied he is unsure but would report back to the committee. The impact is subtle on the actions taken to improve gas production in Cook Inlet. He stated the graph demonstrates a change in the trajectory.

4:11:58 PM
MR. NOTTINGHAM moved to slide 8 and spoke to the history of gas production from 2000 to 2023. He said the main point of the graphic on the left is to demonstrate state-owned oil and gas leases and the companies that left Cook Inlet. Currently, Hilcorp and several small producers make up Cook Inlet producers and leaseholders. The graphic on the right shows where that production comes from. He stated that big fields have declined significantly and another big field was not brought online, so although there was incremental change through CIRA, no major discovery came online.

4:13:38 PM

CO-CHAIR GIESSEL said a lot of money was spent on CIRA and the state subsequently had to pull back cash credits offered. While there were some results, many companies left Cook Inlet.

4:14:08 PM
MR. NOTTINGHAM moved to slide 9 and described Cook Inlet production field history. He said about 68 bcf of gas was produced out of Cook Inlet last year. The lion's share of that came from leases that Hilcorp operates. About 90 percent of the production is operated by Hilcorp, which owns about 80 percent. Around nine thousand barrels per day come from Cook Inlet.

4:14:59 PM
CO-CHAIR GIESSEL said she appreciated the quantified breakdown of the various fields on slide 9.

4:15:23 PM
MR. NOTTINGHAM moved to slide 10 and explained gas storage:

[Original punctuation provided.]

GAS STORAGE

What is gas storage?

- Gas can be stored by re-injecting it in subsurface reservoirs and re-producing when it is needed, although it comes with costs and operational demands.
- It is used within a year to mitigate the fact that demand is much higher in the winter than the summer, but it is best to produce from fields at a relatively steady rate. Production over the summer months can be "saved up" for cold winter days.
- Storage is critical, as peak winter demand already requires more gas than is deliverable from producing reservoirs.
- Gas storage can also be used across multiple years.

There are currently four active gas storage pools

- CINGSA – Established in 2011, gas storage capacity 18 bcf , operated by CINGSA (an RCA regulated utility)
- Kenai Gas Pool 6 – Established in 2006, gas storage capacity 50 bcf, operated by Hilcorp

- Pretty Creek - Established in 2005, gas storage capacity 3 bcf, operated by Hilcorp
- Swanson River (Federal) - Established in 2001, gas storage capacity 3.4 bcf, operated by Hilcorp

4:15:52 PM
CO-CHAIR GIESSEL asked him to elaborate on CINGSA's sand production during the recent cold snap.

4:16:17 PM
MR. NOTTINGHAM replied that he is unsure of specifics. In a general sense, when a well produces, it does not have a downhole mechanism to control sand as a gravel pact does. Over time through pressure cycles and drawing down the well, the sand may become unconsolidated, sluff into the well, and create obstacles for well production. When possible, sand can be cleaned out to restore production or install completion equipment that mitigates sand production in the future.

4:17:27 PM
MR. NOTTINGHAM moved to slide 11 and detailed Cook Inlet gas demand:

[Original punctuation provided.]

COOK INLET GAS DEMAND

Kenai LNG Plant

- Nikiski liquified natural gas (LNG) facility is operated by Trans-Foreland Pipeline Co. LLC - which is a subsidiary of Marathon Petroleum
- Last exported LNG was 2015
- Department of Energy (DOE) authorization for exporting LNG expired in 2018
- Dec. 2020 Federal Energy Regulatory Commission (FERC) approved LNG imports to this facility an annual capacity up to 1.8 billion cubic feet (bcf) per year

Nutrien Fertilizer Plant

- Second largest ammonia/urea plant in U.S.
- Shut down and mothballed in 2007, however Nutrien maintains permits and remains interested in reopening the plant
- Gas prices relative to Lower 48 makes economics difficult
- Potential source for blue hydrogen/blue ammonia

MR. NOTTINGHAM said one of the main components is outlined under bullet point 2 of the Nutrien Fertilizer Plant section. By 2007, the unit was offline. Kenai LNG went offline in the mid-2010s, so the industrial baseload has weaned Cook Inlet for various reasons. Currently, power, heat, and some oil and gas operations make up the 70 bcf of annual gas that is demanded out of Cook Inlet.

4:18:25 PM
MR. NOTTINGHAM moved to slide 12 and spoke to the 2022 Cook Inlet forecast:

[Original punctuation provided.]

DNR 2022 COOK INLET FORECAST

Purpose of the 2022 Cook Inlet Gas Forecast:

- Independent analysis to provide information on gas supply issues in the Cook Inlet
- Also provides production information for the Department of Revenue's revenue forecast

Methodology:

- Utilized public production data to assess Units producing gas in the Cook Inlet
- Generally accepted petroleum engineering practices used to develop projections
- Standardized set of economic limits were used for each Unit 12

Key Assumptions:

- Assumes 15 development wells per year until 2030, and no new wells beyond that
- Assumes gas price is flat at 70 BCF, with escalation for inflation. Does not forecast market changes responding to supply/demand
- Does not include contribution from non-producing known prospects and does not forecast likelihood of their development
- Forecasted volumes do not account for gas produced from gas storage

MR. NOTTINGHAM said in response to Hilcorp informing the utilities that it was going to meet its contractual obligations but could no longer be the swing producer in Cook Inlet, DNR sought to understand and develop a forecast. At the end of 2022, the forecast was presented to various legislative committees.

Publicly available data was used to steer clear of confidentiality issues. Operators' plans and known prospects in Cook Inlet helped develop the assumption of 15 development wells per year until 2030.

4:20:40 PM
MR. NOTTINGHAM moved to slide 13 and said the blue bars demonstrate existing wells that are online today but are on the decline. The orange bars represent the 15 development wells. In 2027, there were significant gaps between supply and demand in Cook Inlet. He emphasized the importance of establishing the 15 annual development wells and continuous drilling to continue providing gas and meet future demand.

4:21:43 PM
MR. NOTTINGHAM moved to slide 14:

[Original punctuation provided.]

2022 FORECAST VS ACTUALS

Key Differences from Actuals

- Wells Drilled:
  18 development wells were drilled in 2022 vs DNR-assumed 15 development wells
- Routine Field Events:
  Well Maintenance (i.e., tubing replacements, casing repairs, etc.)
  Well Enhancements (i.e., perforations, stimulations, etc.)
  Facility Turnaround Events (i.e., compressor & separator maintenance, infrastructure repairs, etc.)

MR. NOTTINGHAM added that development is on track with the forecast. He said the green line represents actual production while the blue and gray line represents the forecast.

4:22:16 PM
MR. NOTTINGHAM moved to slide 15 and listed 2023 development well activity:

[Original punctuation provided.]

2023 DEVELOPMENT WELL ACTIVITY

Well Activity

- **17** gas development wells have been drilled and completed during calendar year 2023:
  - North Cook Inlet Unit x3
  - Lewis River Unit x1
  - North Trading Bay Unit x1
  - Swanson River Unit x3
  - Beluga River Unit x5
  - Lewis River Unit x1
  - Ninilchik Unit x3
- **1** development well is currently being drilled in Kenai Unit
- **1** development well drilling permit is currently approved for Beluga River Unit

Production

Major Field Contributors (through November 2023):

- Ninilchik ~21.8 percent
- North Cook Inlet ~18.8 percent
- Beluga River ~18.5 percent
- All other gas fields represent less than 10 percent each

The above percentages are based on gas volumes for sale, and discounts gas produced from storage as well as gas reinjected for EOR purposes.

4:22:52 PM
CO-CHAIR GIESSEL asked if all 17 wells are operated by Hilcorp.

4:23:00 PM
MR. NOTTINGHAM replied that is correct.

4:23:04 PM
CO-CHAIR GIESSEL asked for information on the one development well currently being drilled in the Kenai Unit.

4:23:16 PM
MR. NOTTINGHAM replied that all 17 development wells have been drilled and completed. In the Kenai Unit, there was another development well drilled for a total of 18 development wells completed in 2023. Also, the Baluga River Unit had one development well permitted.

4:23:46 PM
CO-CHAIR GIESSEL asked if the two additional wells are operated by Hilcorp.

4:23:51 PM
MR. NOTTINGHAM replied that is correct.

4:23:58 PM
CO-CHAIR BISHOP referred to slide 13 and asked if years 2020, 2027, 2028, and 2029 are looking for 10, 15, and 20 bcf of replacement to reach demand.

4:24:17 PM
MR. NOTTINGHAM replied that is correct. He said it's a needed increase of about 5 bcf in 2027, 15 bcf in 2028, and 20 bcf in 2029.

4:24:32 PM
CO-CHAIR BISHOP observed the these are the deficits after including the 15 annual development wells.

4:24:36 PM
MR. NOTTINGHAM replied that is correct.

4:24:40 PM
CO-CHAIR BISHOP emphasized that this is a real situation.

4:24:50 PM
CO-CHAIR GIESSEL commented that she thought Senator Bishop's question might ask about the projected costs for the additional wells.

4:24:50 PM
CO-CHAIR BISHOP said Co-Chair Giessel could ask the question.

4:25:12 PM
CO-CHAIR GIESSEL asked if the economical evaluation is available.

4:25:16 PM
MR. NOTTINGHAM asked if the question is about the cost of a well.

4:25:21 PM
CO-CHAIR GIESSEL clarified that the question is about projecting the five additional bcf in 2027 at what cost. She asked if the calculations came from DNR or a consultant.

4:25:46 PM

MR. NOTTINGHAM replied that utilities and ENSTAR have not done an economic analysis of the various options they have for economical gas. DNR did not complete that analysis.

4:25:59 PM
MR. NOTTINGHAM moved to slide 16 and shared Cook Inlet lease sale results from 2023:

[Original punctuation provided.]

COOK INLET 2023 LEASE SALE RESULTS

New, competitive lease terms offered:

- Net profit share as the bid variable
- Fixed per-acre cash bonus
- No royalty—percentage of net profits owed to the State after recovering capital investments and operating costs to bring production online

Six tracts received bids

- Three from Hilcorp Alaska LLC
- Three from Hex LLC

Net profit share rate bids: 5.7 percent - 11 percent

Cash bonus revenue: About $600,000

Acres receiving bids: About 15,000 acres

MR. NOTTINGHAM added that the net profit share only kicks in when the project achieves payout. It allows the lessee time to locate the gas, drill wells, and get the production online and achieve economic payout before the state starts receiving the net profit share. He said these are good terms for the lessee. The bids provided insight on Cook Inlet interest and indicate there is not a large group of interested investors.

4:28:44 PM
MR. NOTTINGHAM moved to slide 17 and compared existing oil and gas royalty statutes of new leases and existing leases in terms of no production and mature production. He expressed that AS 38.05.180(f)(4) is restrictive and scarcely used. He said he does not believe any producers in Cook Inlet applied for the AS 38.05.180(j) modification.

4:32:20 PM

MR. NOTTINGHAM moved to slide 18 and explained why SB 194 is necessary:

[Original punctuation provided.]

SB 194: WHY IT IS NECESSARY

Why this legislation is necessary

- Alaskans need access to reliable, affordable energy
- Nearly 70 percent of Alaskans use Cook Inlet natural gas for heating, energy, and electricity generation
- Cook Inlet gas supplies are forecasted to drop below demand in coming years unless new sources are brought online
- There are several significant known natural gas fields in Cook Inlet that are not seeing development under the status quo
- Policies and actions to support future development need to be taken today
- More competitive development terms will increase total recovery and utilization of Alaska's natural resources, which otherwise may not be developed or generate revenue for the State
- Alaska should use all the local natural gas resources available as we work on long-term energy solutions for the Railbelt

MR. NOTTINGHAM said Cook Inlet is part of the overall solution and this acts as a bridge to a longer-term solution.

4:34:07 PM
CO-CHAIR GIESSEL inquired about any specific field locations SB 194 would help develop under the status quo.

4:34:27 PM
MR. NOTTINGHAM mentioned specific field locations in focus. He said there are smaller developments that would be impacted.

4:34:51 PM
CO-CHAIR BISHOP asked what the runway would look like if the two pools on slide 13 were in production, so the committee can make an informed economic decision for long-term plans.

4:35:31 PM

MR. NOTTINGHAM replied he would follow up with the committee with an answer.

4:35:35 PM
CO-CHAIR GIESSEL said the long-term is key. In 2013, CIRA was a short-term solution and Alaska couldn't afford the cash credits. The legislature does not want to make the same mistake.

4:36:10 PM
MR. NOTTINGHAM moved to slide 19 and explained the effects of SB 194:

[Original punctuation provided.]

SB 194: EFFECTS

What the bill does

- Grants a reduced royalty of five percent for the first ten years of production from pools in Cook Inlet that have not previously been produced for commercial sale
- Includes known resources that are not yet in production and resources that could be discovered through further exploration
- Applies to any state land in Cook Inlet, whether or not in existing fields, units, or leases
- Does not reduce royalties for pools presently in commercial production

4:37:09 PM
MR. NOTTINGHAM moved to slide 20 and explained qualifying production under SB 194:

[Original punctuation provided.]

SB 194: QUALIFYING PRODUCTION

AS 38.05.180(f)(5) is amended to read:
"[T]he lessee of all or part of an oil or gas pool in the Cook Inlet sedimentary basin that, subject to determination by the commissioner, has not previously produced for commercial sale oil or gas shall pay a royalty of five percent on oil or gas produced for sale from that pool for 10 years following the date on which the production for commercial sale commences;"

4:38:00 PM
SENATOR KAWASAKI said AS 38.05.180(f)(5) used to have a qualifier that was just subject to the first 25 million barrels and 35 million cubic feet of gas produced. He asked for an opinion on why it was previously included.

4:38:27 PM
MR. CROWTHER replied he is unaware of the exact policy rationale. The perception is that the six identified fields at the time were known resources that needed development to build revenue and gas supply. The state wanted to encourage field startup and the initial capital investment while recognizing that the state would revert back to its status quo royalty. One reason volume metric limitations are excluded from SB 194 is because DNR wants all that volume to be produced to get those additional resources to market. At the time of investment, they focused on encouraging investment, field startup, and production.

4:39:34 PM
SENATOR KAWASAKI asked if volume metric field requirements produced the anticipated results that were sought in AS 38.05.180.

4:39:54 PM
MR. CROWTHER said the best thing to do is identify start-up times for the six fields. He offered to return to the committee with this information. He noted several of the fields are still in production today.

4:40:25 PM
MR. NOTTINGHAM continued reading slide 20:

[Original punctuation provided.]

What "has not previously produced for commercial sale oil or gas" means:

- Production from wells or sidetracks drilled after the effective date of this legislation that would not have otherwise been produced from existing wells
- "[S]ubject to determination by the commissioner" means DNR considers if the source of oil and gas has produced in the past, proximity to existing wells, drainage area of existing wells, and timeframe for recovery from existing wells

- Examples of qualifying production:
  - A newly-drilled well or sidetrack from the edge of an existing or previously-producing development
  - A new well or sidetrack from an unproduced accumulation of oil and gas
- The lessee or lessees shall jointly or separately apply for reduction in royalty for one or more wells with each application
- Data and interpretations will be supplied with the application, and DNR may request further data and interpretations
- A well or accumulation may be determined to receive reduced royalties before a well is drilled when supported by data and interpretations

4:41:55 PM
CO-CHAIR BISHOP asked if AS 38.05.180(f)(5) would be part of the economic incentive to take on the endeavor.

4:42:12 PM
MR. NOTTINGHAM replied yes and said it is part of the economic incentive. It is critical for some producers in Cook Inlet to know they will receive the benefits before they consider investing. If producers believe they will need to generate or acquire a significant amount of data and go through a time-consuming process through the state, it creates uncertainty. Having the royalty reduction up front is important.

4:43:02 PM
CO-CHAIR BISHOP commented that the benefits help with small business financing.

4:43:13 PM
MR. NOTTINGHAM stated that is correct.

4:43:16 PM
CO-CHAIR GIESSEL asked whether it is similar to the cash credits that the legislature promised, which drew investment from large creditors like Bank of America and others.

4:43:37 PM
MR. NOTTINGHAM replied that the five percent royalty benefit is not an upfront cash payout and would require ground production. That is the distinction of the cash credit program. The royalty reduction incentivizes getting the production online.

4:44:08 PM
CO-CHAIR GIESSEL said it would apply to new gas or oil for ten years and seems similar to the gross value reduction offered on the North Slope for new oil for seven years.

4:44:31 PM
MR. NOTTINGHAM replied that it did apply to the North Slope Oil and Gas Production tax, which was a reduction for the first seven years on a per-barrel basis from certain qualifying fields. This would apply to the royalty, so it is a benefit off of the gross value for 10 years.

4:45:29 PM
MR. NOTTINGHAM moved to slide 21 and presented the sectional summary:

[Original punctuation provided.]

SB 194: SECTIONAL SUMMARY

- **Section 1:** Amends AS 38.05.180(f)(5). The original statute granted a five-percent royalty rate for oil or gas for the first ten years but was limited to six Cook Inlet fields discovered before 1988 and provided a deadline of January 1, 2004, for start of production (in AS 38.05.180(dd)).

  This amendment modifies the program to include new production in Cook Inlet, regardless of discovery date, and removes limits on eligible volumes of oil or gas during the ten-year period of reduced royalty. Eligibility is subject to determination by the Department of Natural Resources (DNR) commissioner, rather than being automatic.

- **Section 2:** Repeals the following statutes:

  AS 31.05.030(i):
  This section relates to the powers and duties of the Alaska Oil and Gas Conservation Commission (AOGCC) and the paragraph outlines the procedure for approving plans of development by the AOGCC. This statute is no longer necessary because the Department of Natural Resources, not the AOGCC,

is the agency that administers and approves plans of development.

AS 38.05.180(dd):
This section relates to the State of Alaska's oil and gas and gas only leasing policies. Paragraph (dd) established a deadline for start of production under the unamended AS 38.05.180(f)(5) and is no longer appropriate.

- **Section 3:** The legislation takes effect immediately under AS 01.10.070(c).

4:47:22 PM
CO-CHAIR GIESSEL asked if DNR has had any indication this would be helpful to producers.

4:47:33 PM
MR. NOTTINGHAM replied that DNR has had conversations with lessees that indicated it would be helpful. It may not be the key to fully unlocking things but would be beneficial since it removes an upfront cost in gas and oil production and helps achieve the rate of return that investors need to see.

4:48:17 PM
CO-CHAIR GIESSEL acknowledged this was discussed during conversations about the North Slope and while rewriting those tax policies. It is important they realize fully repaying the cost of development as soon as possible. She asked what the state defers in revenue.

4:48:56 PM
MR. CROWTHER replied that DNR has a variety of hypothetical field developments and general amalgamated information about history revenue trends and revenue associated with the total return of the state. He offered to deliver this information to the committee. In addition to the direct benefits of receiving some royalty, the associated economic security benefits are significant.

4:49:38 PM
CO-CHAIR GIESSEL agreed that the legislature honing in on some of the cost could ripple out to a much larger impact on the entire economy. That is the driving motivation as the state loses its working-age population, which is impacting the economy significantly. She noted the fiscal note is zero and the narrative discusses it being indeterminate.

4:50:23 PM
SENATOR KAWASAKI said he reviewed USGS data that was presented over the past 60 years in the Cook Inlet-Anchorage region. Eight trillion cubic feet of gas was utilized. He said he understands there is only an estimate of undiscovered gas that is not technically or economically recoverable. Somewhere between five and 40 trillion cubic feet still exist, which is generations of potential gas in Cook Inlet. The need is immediate. He appreciated Co-Chair Giessel's question about costs, deferred revenue, and what is lost.

4:51:55 PM
CO-CHAIR GIESSEL held SB 194 in committee.

4:52:18 PM
There being no further business to come before the committee, Co-Chair Giessel adjourned the Senate Resources Standing Committee meeting at 4:52 p.m.