

**ALASKA STATE LEGISLATURE
HOUSE RESOURCES STANDING COMMITTEE**

February 6, 2023

1:02 p.m.

MEMBERS PRESENT

Representative Tom McKay, Chair
Representative Kevin McCabe
Representative Josiah Patkotak
Representative George Rauscher
Representative Dan Saddler
Representative Stanley Wright
Representative Jennie Armstrong
Representative Donna Mears
Representative Maxine Dibert

MEMBERS ABSENT

All members present

COMMITTEE CALENDAR

PRESENTATION(S): 2022 COOK INLET GAS FORECAST

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

JOHN BOYLE, Commissioner
Department of Natural Resources
Anchorage, Alaska

POSITION STATEMENT: Participated in the presentation, titled
"2022 Cook Inlet gas forecast."

JHONNY MEZA, Commercial Analyst
Division of Oil and Gas
Department of Natural Resources
Anchorage, Alaska

POSITION STATEMENT: Participated in the presentation, titled
"2022 Cook Inlet gas forecast."

JOHN BURDICK, Petroleum Reservoir Engineer
Division of Oil and Gas
Department of Natural Resources

Anchorage, Alaska

POSITION STATEMENT: Participated in the presentation, titled "2022 Cook Inlet gas forecast."

JOHN CROWTHER, Deputy Commissioner

Department of Natural Resources

Anchorage, Alaska

POSITION STATEMENT: Participated in the presentation, titled "2022 Cook Inlet gas forecast."

ACTION NARRATIVE

[1:02:00 PM](#)

CHAIR TOM MCKAY called the House Resources Standing Committee meeting to order at 1:02 p.m. Representatives McKay, Saddler, Wright, Armstrong, Mears, Rauscher, McCabe, and Dibert were present at the call to order. Representative Patkotak arrived as the meeting was in progress.

PRESENTATION(S): 2022 Cook Inlet Gas Forecast

[1:03:37 PM](#)

Chair McKay announced that the only order of business would be a presentation, titled "2022 Cook Inlet Gas Forecast."

[1:04:37 PM](#)

JOHN BOYLE, Commissioner, Department of Natural Resources, participated in the presentation, titled "2022 Cook Inlet gas forecast." He began his remarks by giving a background on the history of oil and gas development in the Cook Inlet over the last 60 years. He explained that natural gas in Cook Inlet is finite and is currently nearing a point where the field may no longer be productive and suggested that it may be more economically beneficial for the state to begin importing natural gas rather than expend more resources and time on further exploration in the region.

[1:08:42 PM](#)

JHONNY MEZA, Commercial Analyst, Division of Oil and Gas, Department of Natural Resources (DNR), participated in the presentation, titled "2022 Cook Inlet gas forecast." He briefly explained the order of information that would be presented to the committee.

JOHN BURDICK, Petroleum Reservoir Engineer, Division of Oil and Gas, Department of Natural Resources, participated in the presentation, titled "2022 Cook Inlet gas forecast." He briefly explained the geology behind the current methods of oil extraction in the Cook Inlet.

MR. MEZA began the presentation via PowerPoint [hardcopy included in the committee packet], on slide 4, titled "Cook Inlet Fields Overview: Gas Production History," which displayed two graphs, one that delineated which companies extracted gas and one that specified how much gas was extracted over a certain period of time.

MR. MEZA continued to slide 5, titled "Production by Field," which displayed a spreadsheet comparing 2022 oil and gas production next to a map of the active exploration fields in Cook Inlet.

[1:12:40 PM](#)

REPRESENTATIVE SADDLER asked what the trend of oil and gas exploration in Cook Inlet has been like recently.

MR. BURDICK answered that there is development primarily on the eastern side of the Cook Inlet and explained that the Western Side of Cook Inlet has been extensively developed historically.

JOHN CROWTHER, Deputy Commissioner, Department of Natural Resources, participated in the presentation, titled "2022 Cook Inlet gas forecast." In response to Representative Saddler, he explained that the movement of development in Cook Inlet is a product of "infrastructure" and "a need and desire to explore further areas in the basin."

MR. MEZA resumed the presentation on slide 6, titled "Demand by User Type," which displayed a graph that specified Oil and Gas use by each user type in Cook Inlet.

[1:16:43 PM](#)

REPRESENTATIVE SADDLER asked about a discrepancy in the presentation regarding the import/export of liquified natural gas (LNG).

MR. MEZA replied that the current operator of the LNG facility has requested the Federal Energy Regulatory Commission (FERC) to

change its current permit to allow for the importation of LNG to Alaska.

REPRESENTATIVE ARMSTRONG asked whether the importation of LNG is necessary for Alaska.

MR. CROWTHER answered that there is a need for the capacity to "degasify" different types of natural gas in Alaska and further explained the possibility of a gas shortage in the Cook Inlet.

CHAIR MCKAY asked whether Alaska currently has a FERC permit to import LNG.

MR. MEZA replied that there is still a need for more information before a permit should be requested from FERC.

[1:22:08 PM](#)

MR. CROWTHER added that the amount of LNG Alaska would be allowed to import has already been specified and issued under a FERC permit.

MR. MEZA resumed the presentation on slide 7, titled "Cook Inlet Recovery Act and Resulting Activity," which displayed a series of bar graphs that described certain policies stimulated Oil and Gas development/exploration in the Cook Inlet Region.

[1:27:58 PM](#)

MR. MEZA continued to slide 8, titled "Local Prevailing Value vs Henry Hub," which displayed two lines of a graph on a 10-year timeline comparing gas prices in the Cook Inlet with the average price of gas in the general market.

CHAIR MCKAY asked whether the financial figures displayed are adjusted for inflation.

MR. MEZA clarified that the numbers are adjusted for inflation.

[1:29:52 PM](#)

MR. MEZA moved to slide 9, titled "Exploration & Development in Cook Inlet: Cook Inlet Future Production," which displayed a graph that made predictions of future prospects of oil and gas development in Cook Inlet and explained what made previous oil and gas explorations successful.

CHAIR MCKAY asked how often DNR was successful in finding viable wells in the Cook Inlet Region.

MR. BURDICK answered by describing exploration methods and how they've adapted as technology has changed.

[1:33:03 PM](#)

REPRESENTATIVE MCCABE asked whether there is royalty credit for new discoveries in Cook Inlet.

MR. MEZA replied that the royalty rating in Cook Inlet is 12.5 percent for the majority of leases in Cook Inlet.

REPRESENTATIVE MCCABE asked whether there are undeveloped oil and gas fields near Homer, Alaska, that have been delayed due to environmental concerns and would fall under the same royalty program as the other leases in the Cook Inlet region.

MR. MEZA answered that the could-be oil and gas developments near Homer, Alaska, would have the same royalties apply to them.

REPRESENTATIVE MCCABE asked how big the oil and gas field outside of Homer is.

[1:36:27 PM](#)

MR. BURDICK answered that DNR does not have firm estimates of the field's total size.

CHAIR MCKAY described the challenges of the development of the oil and gas fields outside of Homer, Alaska, and opined that their development would most likely require a platform to adhere to the restrictions of such development. He asked whether DNR would need help from the legislature to bring the development to fruition.

COMMISSIONER BOYLE replied that the complexity of the impending shortage natural gas in the Cook Inlet Region is in the issue of bringing more gas to the market. He said that the risks of further development in the region require more discussion before any decision is made by DNR to lease an exploration or development in the Cook Inlet region. He emphasized that the oil and gas support industry in Cook Inlet is in serious decline, which puts constraints on any further exploration or development in the region.

[1:43:42 PM](#)

REPRESENTATIVE SADDLER asked Mr. Crowther whether he thought that the Cook Inlet Recovery Act (CIRA) was successful in its legislative goals.

MR. CROWTHER replied that CIRA is an extremely complex Act and it's not clear whether or not the legislation had any impact on certain developments in the Cook Inlet Region.

[1:46:31 PM](#)

MR. BURDICK resumed the presentation on slides 10 and 11, both titled "Overview of Division of Oil & Gas Cook Inlet Studies," which each gave a chronological overview of studies in Cook Inlet that have occurred since 2009 and explained their specific impact on oil and gas development in the region.

REPRESENTATIVE ARMSTRONG asked what the term "economic to develop" means.

MR. MEZA answered that the term refers to a conceptual development of a project that would produce a return on investment for DNR.

REPRESENTATIVE MEARS asked who determines the economic viability of a proposed project.

MR. MEZA answered that DNR takes a "one-size-fits-all" approach in determining the economic viability of a proposed project.

[1:49:50 PM](#)

MR. BURDICK resumed the presentation on slide 12, titled "Current Study," which gave an overview of the current study occurring on the Cook Inlet's potential developments.

CHAIR MCKAY asked how DNR models the phenomenon of "blowdown" in its forecast of productivity of an exploration.

MR. BURDICK replied that that modeling falls outside of the current study's scope.

MR. BURDICK moved to slide 13, titled "Cook Inlet Development Well History," which displayed a graph that explained the number of wells drilled per year from 2009-2019.

MR. BURDICK continued to slide 14, titled "Modelling the Economic Limit for Each Field: Structure of the Model," which explained how the DNR creates its economic model for each proposed exploration or development of oil and gas in Cook Inlet.

[1:56:05 PM](#)

MR. BURDICK moved to slide 15, titled "Forecast Untruncated High-Mid-Low-Mean Streams," which displayed a graph that compared forecasts of daily gas usage in thousand cubic feet per day.

MR. CROWTHER touched on slide 16, titled "Forecast Truncated High-Mid-Low Mean Streams."

MR. BURDICK continued to slide 17, titled "Forecast vs Actuals," which displayed a graph that compared different outlooks on annual billion of cubic feet (bcf) of gas used versus the actual amount of bcf of gas used in a period from 2021-2022.

[2:00:19 PM](#)

MR. BURDICK moved to slide 18, titled "Forecast-Annualized Gas Volume (Untruncated)," which displayed a series of bar graphs that each conveyed separate forecasts of annual gas usage in bcf with a line drawn across the graph to convey the average demand of gas in bcf.

MR. MEZA continued to slide 19, titled "Forecast-Annualized Gas Volume (Truncated)," which displayed a truncated version of the graph shown on slide 18.

[2:02:36 PM](#)

REPRESENTATIVE SADDLER asked about the terms used in slide 19.

MR. MEZA explained that the slide reflects the economic principle that a producer may maintain its production if it recovers its production cost through revenues.

MR. CROWTHER added that an assumption is made that gas prices would remain static to current prices, subject to any inflationary increases.

REPRESENTATIVE RAUSCHER asked how renewable energy would affect the supply of natural gas available to the Cook Inlet Region.

MR. CROWTHER replied that the studies shown on the previous slides do not take into account any different energy sources.

REPRESENTATIVE ARMSTRONG asked whether DNR has done any modeling or compiled any information on how renewables might supplement natural gas.

MR. CROWTHER said that such a proposed model is beyond the scope of DNR.

[2:07:20 PM](#)

REPRESENTATIVE MEARS asked for clarification as to who manages the energy supply of the Cook Inlet.

CHAIR MCKAY echoed Representative Mear's question and asked for more information regarding the variety of energy production in Alaska.

COMMISSIONER BOYLE responded that the governor has a task force that is currently studying available low-cost energy options for Alaskans and gave a few examples of such low-cost energy options.

MR. BURDICK moved to slide 20, titled "Forecast Proved Developed & Proved Undeveloped," which displayed a graph that compared the forecast of projects in the Cook Inlet Region that are predicted to be developed versus projects that are predicted to not come to fruition.

MR. MEZA continued to slide 21, titled "Forecast Proved Developed & Proved Undeveloped," which displayed a graph similar to the graph shown on slide 20.

REPRESENTATIVE ARMSTRONG asked whether further gas exploration is economically viable.

MR. CROWTHER explained that the depiction of 2041 production on slide 21 is merely a reflection of the 2022 production and usage study of the Cook Inlet Region.

[2:14:50 PM](#)

MR. BURDICK concluded the presentation on slide 22, titled "Division of Oil & Gas Studies Compared," which displayed a graph that compared the amount of gas produced during a year in

bcf versus the amount of estimated gas in Cook Inlet reserves that same year.

[2:17:23 PM](#)

CHAIR MCKAY asked about recent lease sales in the Cook Inlet Region to Hilcorp Inc.

MR. CROWTHER explained which areas of Cook Inlet were acquired under leases by DNR.

REPRESENTATIVE SADDLER asked for confirmation of his understanding that economic limitations are hindering further development of natural gas in the Cook Inlet Region.

COMMISSIONER BOYLE confirmed that is correct and emphasized that the biggest challenge for a company wanting to develop gas in the Cook Inlet Region is the fixed demand of the region. He said that this fixed demand doesn't incentivize economic growth.

[2:21:44 PM](#)

REPRESENTATIVE ARMSTRONG asked how much gas would need to be produced to make gas export economically viable.

COMMISSIONER BOYLE said that the most important factor to LNG export is the need for a large quantity of gas and said that there must be a competitive cost to supply LNG to a given consumer.

[2:25:39 PM](#)

REPRESENTATIVE DIBERT asked whether DNR has received any public input regarding the impending natural gas shortage in the Cook Inlet Region.

MR. CROWTHER replied that DNR has not received many comments since its initial announcement a week prior to the current committee meeting.

REPRESENTATIVE MCCABE commented that natural gas has purposes beyond heating someone's home and thanked the presenters for their time.

[2:28:28 PM](#)

ADJOURNMENT

There being no further business before the committee, the House Resources Standing Committee meeting was adjourned at 2:28 p.m.