ALASKA STATE LEGISLATURE
HOUSE SPECIAL COMMITTEE ON ENERGY
January 23, 2025
1:05 p.m.

MEMBERS PRESENT

Representative Donna Mears, Co-Chair
Representative Ky Holland, Co-Chair
Representative Mia Costello
Representative Cathy Tilton
Representative Chuck Kopp
Representative George Raucher
Representative Bryce Edgmon

MEMBERS ABSENT

All members present

COMMITTEE CALENDAR

PRESENTATION(S): ALASKA ENERGY AUTHORITY (AEA) PROGRESS UPDATE

- HEARD AND HELD

PRESENTATION(S): COOK INLET UPDATE: NET PROFIT SHARING LEASING AND GAS STORAGE

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

CURTIS THAYER, Executive Director
Alaska Energy Authority
Anchorage, Alaska
POSITION STATEMENT: Presented a PowerPoint titled Alaska Energy Authority, AEA Progress Update.

JOHN CROWTHER, Deputy Commissioner
Department of Natural Resources
Anchorage, Alaska

POSITION STATEMENT: Co-presented a PowerPoint titled, Cook Inlet Update: Net Profit Share Leasing (NPSL) & Gas Storage.

DEREK NOTTINGHAM, Director
Division of Oil and Gas
Department of Natural Resources
Anchorage, Alaska
POSITION STATEMENT: Co-presented a PowerPoint titled, Cook Inlet Update: Net Profit Share Leasing (NPSL) & Gas Storage.

ACTION NARRATIVE

1:05:13 PM

CO-CHAIR DONNA MEARS called the House Special Committee on Energy meeting to order at 1:05 p.m. Representatives Edgman, Raucher, Kopp, Tilton, Costello, Holland, and Mears were present at the call to order.

PRESENTATION(S) Alaska Energy Authority (AEA) Progress Update

1:11:16 PM

CO-CHAIR MEARS announced that the first order of business would be the Alaska Energy Authority Legislative Update presentation.

1:11:18 PM

CURTIS THAYER, Executive Director, Alaska Energy Authority, presented a PowerPoint regarding the Alaska Energy Authority (AEA) [hard copy included in the committee file]. He reviewed its history, powers of authority, its primary projects, and the progress of its projects. He explained that AEA is an independent and public corporation of the state of Alaska created by AS 44.83.070 in 1976 for the purposes of financing and operating power projects and facilities in Alaska. He then discussed the board of directors, reviewing their areas of expertise. He described the powers and duties of AEA and how they apply to the design, construction, permitting, and maintenance of energy projects, among other responsibilities. He explained that AEA is broken up into a number of areas including Railbelt Energy, Power Cost Equalization (PCE), rural energy, renewable energy, energy efficiency, grants and loans, energy planning, and the Railbelt Transmission Organization (RTO). He gave specific examples from each group.

MR. THAYER pivoted to a summary of how AEA has been affected by House Bill 307, passed by the Thirty-Third Alaska State Legislature. He said it was "one of the most important pieces of legislation for the Railbelt since Alaska statehood." He provided specific examples of the resultant changes in the transmission systems, funding, cost savings, changes in operation, and how it incentivizes new energy development. He showed a map titled, "AEA Active Projects and Services."

1:20:36 PM

MR. THAYER turned to an explanation of "owned assets," concentrating specifically on Railbelt projects and clean energy projects. He emphasized that the infrastructure along the Railbelt is 60 years old and it lacks reliability and redundancy. He pointed out the amount of power needed along the Railbelt cannot be supported by the transmission system without major upgrades and gave supporting examples. He then pointed out the project upgrades and clean energy projects which are being implemented, and described their funding sources.

1:27:19 PM

MR. THAYER responded to a question by Representative Kopp, explaining that AEA would like to put the Susitna Clean Coal project in place, but studies of the proposal are waiting for funding.

1:30:36 PM

The committee took an at-ease from 1:30 p.m. to 1:34 p.m.

1:34:01 PM

MR. THAYER in response to a question by Co-chair Holland, explained that the projects listed on the map are being considered in terms of what is feasible for the Railbelt. Not all the projects will be implemented. He named several projects at different stages of development and what those projects will mean to the Railbelt. The primary project moving forward is the Dixon Diversion which is projected to be up and running by 2030. That project will displace 1.5 billion cubic feet of natural gas. The AEA is addressing what needs to be done within the transmission system to move the power and how to do it the most economically. He defined the Personal Consumption Expenditure program (PCE) and how the per kilowatt floor prices in

Anchorage, Fairbanks, and Juneau affect pricing in other parts of the state.

1:39:27 PM

MR. THAYER presented a video titled, "Bradley Lake Hydroelectric Project."

1:42:11 PM

MR. THAYER followed the Bradley Lake video presentation with information concerning the Dixon Diversion project which would divert water to Bradley Lake from the Martin River which is fed by the rapidly receding Dixon Glacier. The diversion project would increase Bradley Lake's energy production by 50 percent.

1:43:51 PM

MR. THAYER presented a video titled, "Proposed Dixon Diversion Project, The Bradley Lake Hydroelectric Project."

1:46:38 PM

MR. THAYER continued his presentation regarding the Dixon Diversion by pointing out a line item in the governor's budget which would allow AEA to complete environmental studies and designs. He described the project as being "shovel ready" and discussed funding sources, potential tax credits, and possible matching funds. He explained that the overall cost of the Dixon Diversion project will be $342 million dollars with the earliest projected date of 2029. He also provided updates to the Sterling to Quartz transmission lines and the Grid Resilience and Innovation Partnerships (GRIP).

1:50:15 PM

MR. THAYER presented a video titled, "Hi-Voltage Direct Current (HVDC) Submarine Cable Transmission Line Project" about the transmission lines between Homer and Anchorage, Alaska.

1:53:15 PM

MR. THAYER emphasized that these three projects represent over a billion dollars' worth of construction in Southcentral Alaska, creating a very beneficial economic impact. The GRIP project is in the engineering and scheduling phase with a projected completion date of 2031. He turned his focus to a description

of the Alaska Intertie, the status of several permits, and how the battery storage systems assist in stabilization.

1:58:11 PM

MR. THAYER reviewed the power cost equalization (PCE) explaining eligibility for the program and describing it as a means for lowering the cost of the significantly higher rural electrical services. The PCE was established in 1985 to help rural communities meet energy needs and is funded by an endowment managed by the permanent fund. He then shifted focus to deferred maintenance costs, bulk fuel upgrades, and AEA's system upgrades to aging infrastructure, providing examples such as the relocation of a bulk fuel system in danger of falling into a river. He described the Circuit Rider Program which provides training and assistance with electrical emergencies throughout Alaska. In 2023 the four circuit rider employees visited 350 communities.

2:04:22 PM

MR. THAYER showed a video about AEA'S inventory and assessment of rural community power which is done to prioritize needs and to guide limited resources where they are most needed.

2:07:22 PM

REPRESENTATIVE KOPP commented on unmet deferred maintenance costs throughout Alaska including the university system. He suggested that the legislature seriously consider 30-year GEO bonds for upgrades to avoid potential catastrophic events.

MR. THAYER noted that recent federal funds increased AEA's budget, but Alaska's power houses and bulk fuel infrastructure did not qualify for the funds. Renewable projects did qualify and helped displace fossil fuel, but when temperatures are 50 degrees below zero, rural communities need diesel powerhouses.

2:11:11 PM

The committee took an at-ease from 2:11 pm to 2:16 pm.

PRESENTATION(S): Cook Inlet Update: Net Profit Share Leasing and Gas Storage

2:16:56 PM

CO-CHAIR MEARS announced that the next order of business would be the Legislative and Executive Support of Cook Inlet natural presentation.

2:17:23 PM

JOHN CROWTHER, Deputy Commissioner, Department of Natural Resources, co-presented a PowerPoint titled, "Cook Inlet Update: Net Profit Share Leasing and Gas Storage" [hard copy included in the committee file]. He explained that the Department of Natural Resources (DNR) focuses on Alaska's natural resources as they apply to energy and to the Railbelt. The department has been a long-standing active manager of state leases in the Cook Inlet area. Currently there is a need for additional natural gas production in Cook Inlet as a bridge to long-term energy solutions. Governor Dunleavy has encouraged the department to use existing authorities to unlock natural gas resources in the inlet. He said the purpose of the presentation was to update the committee on the status of projects in Cook Inlet, recent activity, development plans, and some of the department's analysis of specific production scenarios.

2:20:39 PM

DEREK NOTTINGHAM, Director, Division of Oil and Gas, Department of Natural Resources, addressed the question of why Cook Inlet gas is so important, and showed Slides 2 and 3. He explained it was the feedstock for the utilities that supply heat and electricity to the Anchorage bowl and some parts of Fairbanks. He described how Enstar, Interior Gas Utility, Chugach Electric, Matanuska Electric, and Homer Electric provide gas and electricity to Southcentral and the Railbelt which affects approximately 500,000 people. He provided an overview of Cook Inlet as a producing region, beginning as an oil producing region and transitioning to gas production. He described oil and gas leases and how they function, noting that gas production in the inlet has been declining since 1990. The department manages the units and oversees plans of development and reporting requirements.

2:26:56 PM

MR. CROWTHER, in response to a question by Representative Costello, explained that the plans of development are public documents. He referred to Slides 3 and 4, describing the historical background of the leases including longstanding Cook Inlet legacy fields which have been in production for up to 50

years. He reminded the committee the governor directed the department to use current authorities to best utilize legacy fields; to bring known resources into production; and to promote new exploration in the inlet. He moved to Slide 5 describing "Net Profit Share Leases" and how they work. He said the bidding process has not been dramatically successful, but the department will continue to market and advocate for these leases.

2:29:34 PM

MR. NOTTINGHAM moved to Slide 6, the Cook Inlet leasing map, and pointed out the location of specific leasing units. He then defined net profit share leasing (NPSL) as leases with no royalty terms, fixed per-acre cash bonuses, and variable profit share percentages with the net-profit share being paid to the state after capital investments and operating costs for bringing production online. This type of lease results in an earlier cost recovery for the operator.

MR. CROWTHER explained that companies spend tens to hundreds of million dollars to develop a site. During this time, they are not producing any oil or gas and, therefore, not making any money. Royalties must be paid from the time development starts, but with the NPSL, companies can pay their development costs before they start paying the state. On the North Slope, profit share bids were often 50 percent. By contrast, there were just a few bidders for the Cook Inlet gas leases, and they were often near the minimum of 5 percent.

2:33:43 PM

CO-CHAIR HOLLAND posed a series of questions about royalties and net profits, specifically focusing on how options are prioritized in order to best benefit the consumer and Alaskans. He asked, "Which is better for Alaska: Consumers paying the higher price, but we get a royalty amount, or consumers paying the lower amount, but we [Alaskans] don't get the royalty?"

MR. CROWTHER responded that the question goes to the core of the policies the legislature must consider. He said the department takes its responsibility seriously in order to maximize development royalties which lead to revenue for the state. The rate is set for existing royalties, but under the scenario of net profit share leases, if a project moves forward with gas development and potential gas sales, it can be done at a market-clearing rate that benefits the consumers. In a pending royalty

modification under a separate authority, the department looked closely at whether the modification would lead to more royalties as well as whether it would potentially increase the available supply at a competitive cost. He pointed out that consumer cost would be one of the cornerstone considerations.

MR. NOTTINGHAM referred to the 2023 and 2024 Cook Inlet NPSL sales results shown on Slide 6. He moved to Slide 7 describing seismic surveys of Cook Inlet which are now available to the public.

MR. CROWTHER pointed out that the process for releasing seismic data has become more efficient, so it is more readily available.

MR. NOTTINGHAM moved to Slide 8 which explains gas storage, how it works, and why it is important to consumers. He showed Slides 9 and 10 which illustrated how gas storage works and where Cook Inlet's gas storage facilities are located.

2:48:15 PM

CO-CHAIR MEARS commented on how gas storage applies to renewable energy. She pointed out that gas provides a buffer, so renewables such as solar can be used to produce electricity, and gas that is stored can be used for heating in the winter rather than being used for producing electricity. This expands opportunities beyond natural gas, allowing a more complex energy system.

CO-CHAIR HOLLAND noted that gas storage is for natural gas, but it could also be used for hydrogen storage and carbon capture. He asked how DNR is planning to manage these potential storage structures as new assets and revenue sources.

MR. CROWTHER replied that question goes to the core responsibility of DNR to assess the relative value of uses to maximize benefits for the public. Natural gas storage needs are currently critical, so the reservoirs that are geologically and structurally appropriate for storage should be used for that purpose. The previous legislature passed provisions so a lessee can store a third party's gas as well as its own gas under the terms of the lease. He also discussed that companies are working on potential agreements for carbon capture and hydrogen storage.

2:54:00 PM

ADJOURNMENT

There being no further business before the committee, the House Special Committee on Energy meeting was adjourned at 2:54 p.m.