ALASKA STATE LEGISLATURE
HOUSE RESOURCES STANDING COMMITTEE
Anchorage, Alaska
December 9, 2024
1:00 p.m.

MEMBERS PRESENT

Representative Tom McKay, Chair
Representative George Rauscher, Vice Chair (via teleconference)
Representative Thomas Baker
Representative Kevin McCabe
Representative Stanley Wright (via teleconference)
Representative Jennie Armstrong
Representative Donna Mears
Representative Maxine Dibert (via teleconference)

MEMBERS ABSENT

Representative Dan Saddler

OTHER LEGISLATORS PRESENT

Representative Cathy Tilton

COMMITTEE CALENDAR

PRESENTATION(S): SOUTHCENTRAL LNG IMPORTS UPDATE

- HEARD

PRESENTATION(S): QILAK LNG PROJECT

- HEARD

PRESENTATION(S): SUSITNA RIVER VALLEY "CLEAN COAL" PLANT

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

JOHN SIMMS, President
ENSTAR Natural Gas

Anchorage, Alaska
POSITION STATEMENT: Presented a PowerPoint, entitled "ENSTAR Cook Inlet Update," during the Southcentral LNG Imports Update.

MEAD TREADWILL, CEO
Qilak LNG
Anchorage, Alaska
POSITION STATEMENT: Co-presented a PowerPoint, entitled "Alaska's Arctic LNG Opportunity," during the Qilak LNG Project presentation.

DAVID CLARK, COO
Qilak LNG
Anchorage, Alaska
POSITION STATEMENT: Co-presented a PowerPoint, entitled "Alaska's Arctic LNG Opportunity," during the Qilak LNG Project presentation.

FRANK PASKVAN, Affiliate Professor
Institute of Northern Engineering
University of Alaska Fairbanks
Anchorage, Alaska
POSITION STATEMENT: Presented a PowerPoint, entitled "Alaska CCUS Activities and Opportunities Roadmap; Biomass-Coal Fired Power Plant Feasibility Study; ARCCS Project Status," during the Susitna River Valley "Clean Coal" Plant presentation.

ACTION NARRATIVE

1:00:29 PM

CHAIR TOM MCKAY called the House Resources Standing Committee meeting to order at 1:00 p.m. Representatives McCabe, Mears, Baker, Armstrong, Wright (via teleconference)), and McKay were present at the call to order. Representatives Rauscher (via teleconference) and Dibert (via teleconference) arrived as the meeting was in progress. Also presented was Representative Cathy Tilton.

PRESENTATION(S): Southcentral LNG Imports Update

1:03:36 PM

CHAIR MCKAY announced that the first order of business would be the Southcentral LNG Imports Update presentation.

1:04:56 PM

JOHN SIMMS, President, ENSTAR Natural Gas, presented a PowerPoint [hard copy included in the committee packet], entitled "ENSTAR Cook Inlet Update," during the Southcentral LNG Imports Update. He gave an overview of ENSTAR Natural Gas Company (ENSTAR) and its systems, including 3,249 miles of distribution pipeline and 442 miles of transmission pipeline. ENSTAR's standard of service is outlined in AS 42.05.291. In response to a question from Representative McCabe, he confirmed that gas is declining in the Cook Inlet and that a solution is needed. The region faces significant challenges that will require long-term planning and development.

1:11:11 PM

MR SIMMS resumed the presentation and acknowledged that the cost of supply is increasing. Gas from the Cook Inlet, the Trans-Alaska Pipeline System, and imported liquefied natural gas (LNG) are anticipated to be in the $12-$15 range. Wood Mackenzie found that Cook Inlet production is expected to be depleted by the mid-2030s. Exploration success in the region has been limited to a 9 percent success rate with only three commercial discoveries. He anticipated that of all the supply and market risks to the Cook Inlet, the legislature could address cost pressures as a temporary measure. He outlined the combined utilities' annual demand on the region, indicating that by 2026, there won't be enough gas to meet a "normal" scenario and by 2029, utilities will face significant challenges meeting their customers' needs. He announced that ENSTAR executed a contract with Furie Operations Alaska, LLC ("Furie") beginning in 2026 to meet that demand despite a massive development and execution risk. Top options to diversify the future gas supply include the Cook Inlet gas supply, floating storage and regasification units (FSRU), a land-based regasification terminal, and the North Slope pipeline.

1:22:38 PM

MR. SIMMS, in response to a series of questions, said deliverability is part of the gas supply challenge and storage will be a critical component for both the electric utilities and ENSTAR. He talked about the potential benefits to the Cook Inlet production if the North Slope Pipeline were to come online and the history of gas supply contracts. He summarized the Jones Act and acknowledged that acquiring a waiver to allow the use of a foreign tanker would reduce cost and provide optionality to the utilities.

1:32:02 PM

MR. SIMMS gave his final thoughts on slide 11, emphasizing that storage is a key component of any project. He questioned both the legislature's and the utilities' role in the energy future of Alaska. In response to a series of follow-up questions, he said challenges surrounding permitting and deciphering who is liable for cost overruns are risks that need to be mitigated. He detailed the status of the wells at the Cook Inlet Natural Gas Storage Alaska (CINGSA); Furie's efforts to deter LNG importation; and the challenges of reaching out to an LNG Canada project.

PRESENTATION(S): Qilak LNG Project

1:48:15 PM

CHAIR MCKAY announced that the next order of business would be the Qilak LNG Project presentation.

1:48:48 PM

MEAD TREADWILL, CEO, Qilak LNG, presented a PowerPoint, entitled "Alaska's Arctic LNG Opportunity," dated 12/9/24, which gave a project description, an update on Qilak LNG, and suggestions on how the State of Alaska can help. The North Slope is home to significant trapped natural gas resources. Based on Russia's Arctic success, Qilak LNG signed a heads of agreement (HoA) with ExxonMobil Corporation in 2019 to produce a feasibility study for the supply of gas for 20 years at Point Thompson, which has proven gas reserves of at least 6 trillion cubic feet (Tcf). Qilak LNG has also begun discussions with the Northwest Territories (NWT) government and producers on the Mackenzie River Delta who completed a PFS for a similar concept. By taking the pipeline out of the equation, the capital expenditure ("CapEx") would be reduced to increase competitiveness in the marketplace. Russia began reliably shipping LNG through the Arctic in 2017. He detailed the Yamal Project, which was completed using modules delivered from Asia via the Bering Strait and plans to expand using the same near-shore concept as Qilak LNG. He discussed the next generation icebreaking tankers that would be used and plans to export LNG from Alaska's North Slope to Asia; the cost advantage of Qilak's geographic position; and its favorable cost structure with unique commercial constructs.

2:04:12 PM

DAVID CLARK, COO, Qilak LNG, continued the presentation on slide 20 to discuss environmental, social, and corporate governance and emphasized that Qilak is committed to reducing greenhouse gas emissions by using gas a bridge fuel. In addition, all CO2 removed from feed gas will be sequestered using the latest in technology and carbon accounting.

MR. TREADWILL continued the presentation by outlining Qilak's projected timeline with a target completion date of 2031 and reviewing the market strategy. He discussed Qilak's position in the market, emphasizing that strategic and financial partners are ready to join, but the risk of feasibility and permits is an issue. He estimated the cost of finishing feasibility at $12 million and expressed confidence in the project considering the solid commercial negotiations with the North Slope producers and the state as a royalty owner, as well as the buyers with regard to front-end engineering design (FEED). He said the big difference between converting a shipyard versus building a pipeline is the lower risk. Qilak is interested in working with the North Slope Borough on a number of issues and ensuring that the project is not in conflict with subsistence whaling. He concluded the presentation by outlining the following ways the State of Alaska could help:

- **Support Federal Reforms:**
  - Offshore permitting path with MARAD
  - Eliminate repetitive DOE export licenses; license already granted for Pt Thomson
- **Clarify State Support in the Marketplace:**
  - Qilak LNG founded as markets pushed back on AKLNG
  - Backstop de-risking for all projects, if for one.
  - AEA study re-do on gas to Alaskans
- **Summary:**
  - Don’t put all eggs in one basket.

MR. TREADWILL, in response to a series of question about transporting LNG from Qilak to Fairbanks and subsistence whaling, referenced Harvest's LNG project in Prudhoe Bay that delivers LNG to Fairbanks in addition to a small gas pipeline that connects to several pump stations. Alternatively, he said Qilak may use gas fired power rather than a pipeline and advised the legislature and state agencies to consider the possibility of exporting power with fiber optics in addition to pipeline

transportation. He cited a Coast Guard study on port access routing and talked about the noise generated from an icebreaking operation which is disruptive to marine mammals, suggesting that slowing the speed of travel may mitigate disturbance. Furthermore, he touted the remote sensing technologies that assist in avoiding impact to animals. In response to a question from Representative Mears, he acknowledged that a backstop would be helpful. He explained that strategic and financial investors are ready to take the market risk and understand the technical risk. In Alaska, he added, the risk is the permitting process. He emphasized the importance of paying attention to Russia, a country that's become a huge factor in the Arctic and an untrustworthy partner for Alaska's Asian customers.

PRESENTATION(S): Susitna River Valley "Clean Coal" Plant

2:38:41 PM

CHAIR MCKAY announced that the final order of business would be the Susitna River Valley "Clean Coal" Plant presentation.

2:40:27 PM

FRANK PASKVAN, Affiliate Professor, Institute of Northern Engineering, University of Alaska Fairbanks, presented a PowerPoint [hard copy included in the committee packet], entitled "Alaska CCUS Activities and Opportunities Roadmap; Biomass-Coal Fired Power Plant Feasibility Study; ARCCS Project Status," dated 12/9/24. The carbon capture, utilization, and storage (CCUS) workgroup's mission is to accelerate commercial carbon capture projects in Alaska to attract new investments and create options to decarbonize activities vital to the state's economy. He played a video that defined carbon capture and storage (CCS) and shared the following reasons for implementing CCUS:

- World faces dual challenge of increasing energy demand and risks of climate change
- IPCC finds the cost for clean energy security globally more than doubles without CCUS 1
- Also removes other pollutants
- CO2 Use (CCUS) like agriculture can make electricity net-zero emissions, supports food and energy security
- Coal with CCS can be
    - Cleaner than Natural Gas
    - Cleaner than Wind with Natural Gas Peakers

MR. PASKVAN outlined the INE's history with CCS and shared a roadmap of opportunities and needs on the North Slope which is advantaged by low-cost natural gas, the Interior with its existing coal plant infrastructure, and Southcentral and its proximity to port and potential for import. He summarized the following CCUS activities in Alaska:

Regulatory
•AOGCC seeking Class VI injection well primacy from EPA –SB48 May 2023
•DNR public comment period open for carbon storage leasing regulations –HB50 July 2024

Federal Funding Awards
•DNR: $1M carbon storage geologic database –public outreach partners: UAF-ACEP and ARE
•UAF-INE: $11M Alaska Railbelt Carbon Capture and Sequestration (ARCCS) CarbonSAFE Phase II storage assessment with EERC and ARI * Evaluates CCS from new biomass-coal power plant and two natural gas CEA power plants
•ASRC Energy Services (AES), Santos, and Repsol: $3M Direct Air Capture Pre-Feasibility Study
•AES and Santos: $62M North to the Future CCS Hub CarbonSAFE Phase III subsurface site characterization and permitting for potential North Slope project site

Additional Studies
•US DOE & Japan METI: cross border CCS import to Alaska feasibility study
•Hilcorp, Sumitomo, and K Line signed joint study agreement for CCS feasibility in Alaska

MR. PASKVAN shared an analysis of the Railbelt power system, emphasizing that coal is the lowest cost fuel at approximately $4 per Metric Million British Thermal Unit (MMBtu). The United States has 27 percent of the world's coal with half of that based in Alaska. With CCUS, it could be one of the cleanest sources of energy available.

2:59:51 PM

MR. PASKVAN, in response to a series of questions, outlined the attractiveness of biomass and coal-fired power with CCS, as it could provide affordable energy that's reliable, clean, and secure. He added that with the addition of the waste CO2 and

waste heat made available by such a project, local food security could be enhanced and energy security risk could be lowered.

3:06:01 PM

MR. PASKVAN continued the presentation with a review of the Alaska Railbelt Carbon Capture and Storage (ARCCS) project and a status update. ARCCS is assessing carbon storage hub capacity by evaluating a 20-mile radius around Beluga River Gas Fiel, nearby gas fields, and underlying saline aquifers using U.S. Department of Energy (DOE) CarbonSAFE Phase II framework. The two potential sources of CO2 under evaluation are a new Terra energy Center biomass-coal power plant and two Chugach Electric natural gas power plants in Anchorage. The project is funded by DOE and the State of Alaska, and the anticipated end date is September 2026. He described the following anticipated community benefits:

- If CO2storage volume confirmed, anticipated ARCCS benefits include:
- Supports decarbonizing existing natural gas power plants
- Supports developing potentially lower cost Railbelt energy with long term coal reserves, improves energy stability, and reduces future Railbelt power price increases
- Provides Statewide rural communities benefits through Alaska Power Cost Equalization by enabling lower cost Railbelt energy investments
- Provides jobs in construction, operations, technical, and management in CO2economy
- Encourages students to follow a STEM Education path, preparing themselves to address challenges to improve energy efficiency and economic and environmental benefits

3:10:12 PM

MR. PASKVAN, in response to a series of questions from members, compared ARCCS to Petra Nova and Boundary Dam, adding that it's not uncommon for new projects to address operating issues and instabilities and, as time moves on, to make process modifications and improve efficiency. He shared that Petra Nova was operating and performing to expectations and plans to restart after its purchase by a Japanese investor now that the price of oil has stabilized, making a high-cost oil recovery project attractive again. He reported that ARCCS anticipates a

2030 deliverable if power purchase agreements move quickly in the first quarter of 2025. The expected lifespan is 30 years based on assumptions in the feasibility and demonstrated track records of long-term operations from coal fired power plants.

3:20:57 PM

ADJOURNMENT

There being no further business before the committee, the House Resources Standing Committee meeting was adjourned at 3:21 p.m.