

**ALASKA STATE LEGISLATURE**  
**HOUSE SPECIAL COMMITTEE ON ENERGY**

April 3, 2013  
8:03 a.m.

**MEMBERS PRESENT**

Representative Doug Isaacson, Co-Chair  
Representative Neal Foster  
Representative Shelley Hughes  
Representative Benjamin Nageak  
Representative Andy Josephson

**MEMBERS ABSENT**

Representative Charisse Millett, Co-Chair  
Representative Pete Higgins

**COMMITTEE CALENDAR**

OVERVIEW(S): STATE ENERGY POLICY

- HEARD

**PREVIOUS COMMITTEE ACTION**

No previous action to record

**WITNESS REGISTER**

SARA FISHER-GOAD, Executive Director  
Alaska Energy Authority (AEA)  
Department of Commerce, Community & Economic Development (DCCED)  
Anchorage, Alaska

**POSITION STATEMENT:** Provided a PowerPoint presentation entitled "Alaska Energy Authority Policy Overview," and dated 4/3/13.

GENE THERRIAULT, Deputy Director  
Statewide Energy Policy Development  
Alaska Energy Authority (AEA)  
Department of Commerce, Community & Economic Development (DCCED)  
Anchorage, Alaska

**POSITION STATEMENT:** Participated in the PowerPoint presentation by the Alaska Energy Authority.

**ACTION NARRATIVE**

[8:04:07 AM](#)

**CO-CHAIR DOUG ISAACSON** called the House Special Committee on Energy meeting to order at 8:03 a.m. Representatives Nageak, Josephson, and Isaacson were present at the call to order. Representatives Foster and Hughes arrived as the meeting was in progress.

**OVERVIEW(S): STATE ENERGY POLICY**

[8:04:35 AM](#)

CO-CHAIR ISAACSON announced that the only order of business would be a presentation by the Alaska Energy Authority (AEA) on the state's energy policy. The presentation will include an overview of energy-related activities ongoing throughout state government.

[8:06:29 AM](#)

SARA FISHER-GOAD, Executive Director, Alaska Energy Authority (AEA), Department of Commerce, Community & Economic Development, (DCCED), said she will talk about AEA's role in and perspective of the state's energy policy. She reminded the committee AEA's mission is reducing the cost of energy through four primary areas: Investing in Alaska's Energy Infrastructure; Diversifying Alaska's Energy Portfolio; Energy Planning and Policy; and Technical and Community Assistance [slide 2]. In addition, the presentation will include information about the Interior Energy Plan. Ms. Fisher-Goad assumed the committee's interest in how the state agencies work together to proceed from policy to projects. Many agencies in state government play a role, beginning with the administration and executive branch providing leadership, to financing mechanisms provided by the Alaska Industrial Development & Export Authority (AIDEA). The legislature has a role in directing AEA to policy development, and her agency has provided project evaluations on the Interior Energy Plan to its board. The board of directors has also heard various project evaluations such as an economic analysis on the introduction of a high voltage direct current (HVDC) project in Alaska. The agency also has programs and projects to manage, loans and direct grants to manage, project management, and project oversight. Through its programs, AEA has made a commitment to the legislature to provide oversight and management as an ongoing aspect of projects under construction. Ms. Fisher-Goad stressed that in addition to AIDEA, AEA has partnerships with private organizations [slide 3]. She

presented a graph that depicted public and private sector energy programs, residential programs with the Alaska Housing Finance Corporation (AHFC), loan programs, AEA assistance programs, Department of Health and Social Services (DHSS) programs, the AEA Emerging Technology program, DCCED programs for commercial loans, the AIDEA Sustainable Energy & Transmission Supply (SETS) loan program, and the Bulk Fuel and Bridge Fuel loan programs. She concluded that there are many agencies involved in programs related to in-state energy use [slide 4].

8:14:40 AM

GENE THERRIAULT, Deputy Director, Statewide Energy Policy Development, Alaska Energy Authority (AEA), Department of Commerce, Community & Economic Development (DCCED), informed the committee AEA seeks to ensure that state agencies follow the energy policy set by the governor and the legislature. In recent history, the renewable energy fund was established, energy-related goals were set, funding sources were established to achieve energy-related goals, and a loan program through AIDEA was established to finance energy infrastructure throughout the state. Therefore, AEA monitors progress towards the state's goals by coordinating efforts between agencies [slide 5].

CO-CHAIR ISAACSON asked how AEA works with the many private energy interests in Alaska.

MR. THERRIAULT answered there is a lot of collaboration during the administration of the renewable energy fund, and there is interaction with the Alaska Energy Efficiency Partnership group on implementing energy policy.

CO-CHAIR ISAACSON inquired as to the best way to communicate.

MR. THERRIAULT advised there is a contact person at each agency to act as a link.

8:18:05 AM

MS. FISHER-GOAD stated AEA's goal for the Statewide Energy Policy Development team is to serve as a clearinghouse and a point of contact on issues such as access to state land and state resources for energy development, and the Interior Energy Plan. For example, AEA seeks how to utilize the propane available as a byproduct of the liquefied natural gas (LNG) trucking project to reduce the cost of energy for those who will

not be connected to the natural gas distribution system. Within AEA, there are technical resources on which Mr. Therriault can draw to provide policy recommendations.

CO-CHAIR ISAACSON surmised on the propane project AEA will interact with the Denali Commission, tribal organizations, village councils, city governments, and Native corporations. He asked whether AEA has sufficient resources to coordinate multi-agencies for one project.

MS. FISHER-GOAD said the Interior Energy Plan is a good example of how AEA can draw on its internal resources. As an agency, AEA manages its resources in an efficient manner and hires effective experts from the private sector, or coordinates with other agencies. Another example is the Susitna-Watana Hydro Project, in which AEA is working closely with the Department of Natural Resources (DNR). Her agency is successful with the resources it has, and through an annual budgetary process, determines how to complete its work. Overall, AEA is successful and is not looking to expand.

CO-CHAIR ISAACSON advised this is a big task; in fact, \$1.6 billion was spent on energy projects last year. He asked whether AEA has the resources it needs to get affordable energy to Alaskans.

MS. FISHER-GOAD said what the governor has provided in the Fiscal Year 2014 (FY 14) budget is OK; however, AEA's goal is to develop a comprehensive report to the legislature in December that will reflect additional work to be done by the Statewide Energy Policy Development team in FY 15.

8:26:50 AM

MR. THERRIAULT said AEA is operating almost as a department of energy, and has cooperation from other departments and agencies due to support from the administration. When needed, expertise and resources have been provided to supplement employees from AEA and AIDEA.

MS. FISHER-GOAD displayed a map which showed AEA projects under construction in summer 2012. She said the map illustrates that state policy and funding from the legislature have been put into projects for Alaskans to help reduce the cost of energy. Illustrated were projects funded by the Renewable Energy Fund Grant program, systems upgrades, upgrades to bulk fuel systems and tank farms in rural Alaska, and energy efficiency projects.

Many projects were funded by American Recovery and Reinvestment Act of 2009 (ARRA) federal funds. The projects were spread across the state [slide 6].

REPRESENTATIVE NAGEAK asked whether AEA conducts site visits to remote areas.

MS. FISHER-GOAD said yes. As the executive director, she visited Sand Point, King Cove, and Bethel, and she stressed the importance of visiting communities to see the work that is being done. She directed attention to the state goal of 50 percent renewable electricity by 2025, noting the work accomplished through the Renewable Energy Fund and the Emerging Energy Technology Fund which leveraged federal funds from the Denali Commission to provide funding for 16 projects. There is a capital request in the FY 14 capital budget for \$2 million to continue another round of applications to the Emerging Energy Technology Fund [slide 7].

[8:32:33 AM](#)

REPRESENTATIVE NAGEAK asked how AEA evaluates projects for new technology.

MS. FISHER-GOAD explained the process for the Emerging Energy Technology Fund begins with a technical evaluation by its advisory committee, which is comprised of engineers, in order to reduce the number of applications. Afterward, AEA team members conduct a more formal process to rank the projects, taking possible sites into consideration, although site visits are not needed at that stage.

MR. THERRIAULT added that the state goal encourages residents to look at what energy source is available to them locally; however, small utilities may not have the funds necessary to explore and evaluate local sources. Through these funds, the state shares the expense and the risk of evaluating renewable sources such as wind. Also, with emerging technology, determining whether a proposal has application in a rural setting is very expensive and risky, so state funding is necessary.

REPRESENTATIVE NAGEAK asked whether the evaluation process includes a review of the capability of the existing power system.

MR. THERRIAULT said yes. For example, during the grant process, the existing distribution system is part of the evaluation of a project.

[8:37:24 AM](#)

CO-CHAIR ISAACSON referred to the proposed propane project in the Interior, and noted that recent investments have been made in oil infrastructure. He asked how AEA will evaluate the cost to communities to prepare for a propane distribution system, and who will get "new" state funds.

[8:38:22 AM](#)

MS. FISHER-GOAD advised AEA is evaluating costs on this topic as part of the Interior Energy Plan, rural energy programs, and proposed energy infrastructure. Members of the AEA rural energy team will develop a model on the costs and source of funding to provide infrastructure. The SETS funding program will allow AIDEA to manage loans so that entities can "cost-share" projects, in addition to the loans the legislature can provide. There is conditional language that limits state funding to 50 percent of the total project cost on projects that AEA manages. As an aside, she said the Renewable Energy Fund advisory committee is meeting on 4/4/13 in Juneau and invited the committee to attend.

REPRESENTATIVE NAGEAK asked about the length of the vetting process on new, emerging technology.

[8:42:37 AM](#)

MS. FISHER-GOAD answered that the process is an extensive, two-phase process, followed by an appeal period after each decision. First, there is a "statutory construct," followed by regulations for the project, and a final opportunity for appeal.

REPRESENTATIVE NAGEAK clarified that his question is whether AEA can test a system to ensure it will not break down in rural areas; for example, wind or geothermal technology.

MS. FISHER-GOAD opined hydroelectric (hydro) structures typically have a 50-year life and provide long-term, stable power. Wind projects are expected to last 20 years to 30 years.

MR. THERRIAULT added that a grant application has to show that the proposed project using new technology will have a useful

application in Alaska within five years. He pointed out that the intent of House Bill 306 was that the power project fund will serve as the main source of state assistance for energy projects. Following that, the legislature established the SETS loan program to underpin state investment in energy infrastructure, and limited the state's participation to 50 percent. Mr. Therriault said AEA interprets these legislative actions to mean that limited funds will still be available in the event of declining state budgets.

[8:47:53 AM](#)

MS. FISHER-GOAD directed attention to the state's energy efficiency goal of improving energy efficiency 15 percent by 2020. Her agency works in partnership with the Alaska Housing Finance Corporation (AHFC) on residential homes, public buildings, and commercial buildings. There is a focus by AEA on commercial buildings, rural public buildings, industrial facilities and the supply-side efficiency of power systems. Coordination of state agencies is provided by AEA [slide 8].

REPRESENTATIVE HUGHES inquired as to how the 15 percent is applied.

MS. FISHER-GOAD responded that the goal is to achieve a 15 percent reduction in usage.

CO-CHAIR ISAACSON asked how AEA will ensure the increase in efficiency is spread across the state, so that the benefits will reach all communities.

MS. FISHER-GOAD pointed out the previously displayed map of construction projects shows the projects that are underway throughout the state. The Village End Use Efficiency Measures (VEUEM) program targets small rural communities, and industrial facilities - such as fish processing - are assisted through the Industrial Energy Audit of Seafood Processing Plants. She said AEA and AHFC seek to ensure that assistance and funding are accessible to all regions and entities in the state.

[8:52:08 AM](#)

CO-CHAIR ISAACSON surmised AEA participates in loans to achieve energy goals; however, other programs such as the Rural Alaska Community Action Program, Inc. (RurAL CAP), administer grants to help efficiency and local employment. He asked how AEA works with different organizations.

MS. FISHER-GOAD advised the Alaska Energy Efficiency Partnership consists of many entities, including Rural CAP, that are involved in energy efficiency efforts. In addition, AEA has granted pass through ARRA funds to entities such as the Renewable Energy Alaska Project (REAP). She said many other organizations are working diligently towards the energy efficiency goal. The Alaska Energy Efficiency Partnership serves as a clearinghouse and meets quarterly to discuss the variety of programs and funding sources that are available. The coordination between AEA and AHFC has been successful for many years. Turning to rural energy infrastructure, she gave the example of St. George as a community that applied for a Renewable Energy Fund Grant for a wind system that was partially funded by the Denali Commission. As the project was assessed, it was apparent the powerhouse was in need of significant upgrades before electricity generated by wind could be integrated into the system. At this time, AEA is working with the community to rebuild its powerhouse, although at the time the grant was denied, community members were very unhappy because they were ready to proceed with economic development plans for the community [slide 9].

[8:57:49 AM](#)

MR. THERRIAULT recalled that at the time the renewable energy fund was established, the cost of power was rising and assistance was needed, but individual legislators were not always able to determine the needs of a community in their district. The renewable energy fund enables AEA to plan with a community and develop the proper path to a solution.

MS. FISHER-GOAD informed the committee AEA supports regional solutions and regional energy planning. Alaska is a very large state with diverse resources and has no one answer for power generation. A regional planning effort is necessary and AEA seeks to help develop regional plans, provide technical assistance, and assist in developing financing options for projects. The Railbelt Integrated Resources Plan and the Southeast Integrated Resources Plan have led to large projects [slide 10]. She provided a map of energy regions and Alaska Native Claims Settlement Act (ANCSA) boundaries, and a list of current regional plan contracts [slides 11 and 12]. An FY 14 capital request has been submitted to continue with regional planning efforts.

CO-CHAIR ISAACSON asked if AEA or regional leaders initiate the beginning of a regional plan; in fact, a regional plan supported by AEA may call for the consolidation of utilities, but may meet with resistance. He provided an example.

[9:04:23 AM](#)

MR. THERRIAULT said whether regional leaders approach AEA or not, AEA's interest is for a discussion about energy to take place at the regional level. He noted that some geographic areas have a regional hub community, and smaller areas may not, but to be successful the community must embrace the regional plan. The agency looks for a local contractor to coordinate between villages, and identify potential resources to develop and share within geographic areas or sub-regions. He pointed out that almost all of the state is involved in energy planning at this time, albeit at different stages.

CO-CHAIR ISAACSON opined community resources must be combined to be efficient.

MR. THERRIAULT advised that there is a small team within AEA that is able to determine whether excess power can be economically transported between villages.

[9:09:17 AM](#)

REPRESENTATIVE HUGHES expressed her concern that statewide energy planning and policy is not AEA's main priority. She agreed that regional planning and statewide goals for efficiency and renewables are important, but stressed that there needs to be an overall plan for the future beyond 2020, and for the future demand for power in 50 years. Representative Hughes opined the state will continue to stifle economic development without affordable energy and energy infrastructure across the state.

MS. FISHER-GOAD pointed out that the state's larger projects will be discussed later in the presentation. She restated AEA's mission is to reduce the cost of energy for Alaskans and energy planning and policy is one of the four primary areas to achieve its mission. Legislation does not necessarily develop in "a nice linear fashion;" in fact, legislation creating the renewable energy fund program preceded that for energy planning and policy, and may have provided impetus for the formulation of planning and policy. She acknowledged there has been recognition that AEA's leadership role is to pull all the pieces

together. The Susitna-Watana Hydro Project is an example of looking at the long-term diversification of the state's energy portfolio.

[9:15:39 AM](#)

REPRESENTATIVE HUGHES urged for AEA - in its leadership role - to ensure that its tasks are in the "right order," with an energy plan at the top. With an energy plan, AEA's many programs and large budget will be better understood by leaders of industry.

MR. THERRIAULT pointed out that AEA's top goal of reducing the cost of energy is established in statute, as are further directives from the legislature. He acknowledged AEA has many programs and part of his responsibility is to interact with all of the program managers and ensure that programs are successfully implemented and measured. Because of rising energy costs, the legislature responded to its constituency with the passage of the renewable energy fund, which led to long discussions with residents to address the geographic diversity of the regions and sub-regions of the state. At that point, goals and plans were established for regions and sub-regions, and it was recognized that one plan would not work. In addition, the programs needed to be tailored for the different regions and sub-regions throughout the state, and he said due to the distribution of resources, one plan that is "workable in all of the state," is probably near to impossible.

[9:21:07 AM](#)

REPRESENTATIVE HUGHES understood the regional differences of the state. She asked whether leaders of industry were included in the abovementioned discussions, and whether the discussions should be revived for further development of an energy plan.

MR. THERRIAULT was unsure of all of the participants, however, legislators and regional leaders were included.

MS. FISHER-GOAD said representatives of the utilities participated, as did members of the Alaska Power Association, the Alaska Village Electric Cooperative, and AEA. She recalled that previously the House and Senate sought to consolidate and combine energy-related bills in an effort to "coalesce this into one packet of energy legislation." Through a unique process, the House led the effort on policy development, and the Senate addressed the development of related programs.

[9:25:54 AM](#)

CO-CHAIR ISAACSON urged new members of the committee to review past energy-related legislation.

REPRESENTATIVE HUGHES was not convinced that a plan exists or that industry was involved.

REPRESENTATIVE NAGEAK cautioned that there is much work ahead to lower costs for the entire state, encourage economic opportunities, provide access for rural areas to a regional center, and provide road access for the rest of the state.

CO-CHAIR ISAACSON agreed that transportation corridors for roads and pipelines are necessary to connect communities to each other and to markets. He stressed that along with projects that will impact 80 percent of the state, there also must be support for micro projects that will help areas that are removed geographically.

[9:31:03 AM](#)

MS. FISHER-GOAD turned attention to the Susitna-Watana Hydro Project, noting that this project will benefit 80 percent of the state's population, but does not compete with a natural gas pipeline because the pipeline will provide North Slope natural gas for heat, and the Susitna-Watana Hydro Project is an effort to diversify the state's electrical generation portfolio, provide a long-term source of clean energy, and promote the integration of variable power sources [slide 13]. She acknowledged HVDC technology may be utilized for a transmission system for the Railbelt in order to "unconstrain" the transmission system from Bradley Lake Hydroelectric, regardless of whether Susitna-Watana Hydro is completed. Furthermore, AEA has analyzed HVDC because of its potential use in remote applications; however, there has not been much support from local utilities. Regarding road corridors, she advised AIDEA is looking at a road project in Ambler. She indicated that AEA will respond to the committee's questions about the size of the Susitna-Watana Hydro Project and the cost of expansion.

[9:36:01 AM](#)

REPRESENTATIVE HUGHES has heard some residents support the construction of a natural gas pipeline instead of a dam. She

referred to published data that electricity from the dam will not be cheaper than that from natural gas for 12 years.

MS. FISHER-GOAD said that AEA compared the cost of gas to hydro once the hydro project is producing and the cost of production is inflation-proof. This comparison is available in AEA's annual report.

MR. THERRIAULT emphasized that hydro brings price stability to a power distribution system and although gas may be cheaper initially, hydro will be cheaper 20 years or 100 years from now. The investment in a renewable source of hydro power is multigenerational. However, the use of power from Susitna-Watana Hydro for space heat is not expected to be economic, thus natural gas will continue to play an important role.

[9:40:08 AM](#)

MS. FISHER-GOAD turned attention to the Interior Energy Plan, which is a predecessor to a gas pipeline and provides an opportunity to market North Slope natural gas and propane prior to the construction of a gas pipeline. The financing package brings customers and private entities together and with AIDEA and private partners taking an equity ownership of a liquefaction plant on the North Slope. She stressed that this is a financing package, not a grant package, which will allow the Interior region, with the assistance of the state, to achieve savings in residential and commercial heating, and to address air quality issues in the Fairbanks area [slide 14]. The project goals of the Interior Energy Plan are: provide the lowest cost energy to the Interior as soon as possible; develop a distribution system that will be served by the pipeline; and utilize private sector mechanisms as much as possible [slide 15]. The proponents of the plan are working with AIDEA's technical team and other potential partners. The financing package is: \$150 million AIDEA bonds; \$50 million general fund (GF) appropriation to AIDEA; and \$125 million SETS capitalization [slide 16]. She offered to provide further information on the future plans to provide propane to regions of the Interior which will not be served by the distribution system. The Interior Energy Plan is very important because about a 50 percent reduction in cost for home heating is expected for residents [slide 17].

REPRESENTATIVE FOSTER asked for more information on the propane distribution system to rural areas after LNG is trucked to Fairbanks from the North Slope. He inquired as to whether

current planning includes the distribution of propane to rural parts of the state.

[9:45:24 AM](#)

MS. FISHER-GOAD explained the economic analysis of the Interior Energy Plan is driven by trucking LNG to Fairbanks for storage and delivery in the Fairbanks area. However, AEA seeks to capitalize on the propane byproduct of the LNG system. Emerging energy technology suggests that LNG can be stored and shipped in ISO (intermodal) containers, but "that's definitely something much further down the line." The present focus is on the distribution system that will be served by the trucking scheme and that will eventually be served by a pipeline.

CO-CHAIR ISAACSON observed the present plan estimates a cost of \$1 billion just for the Fairbanks and North Pole distribution area without any funds for transportation along the river system or up the coast.

MR. THERRIAULT pointed out the ultimate build-out hoped for by the Fairbanks North Star Borough is also in excess of the present finance plan. In response to Representative Foster, he stated that the economics of delivering propane or LNG on the road system are very different than delivery on the river system. Coastal communities are interested in barge deliveries of propane; however, AEA must consider that the economics of each sub-region are different.

[9:50:41 AM](#)

REPRESENTATIVE FOSTER cautioned that five years down the road, additional funding for a rural distribution system may be difficult after 80 percent to 90 percent of the population in the Interior is taken care of, and there is no "urgency."

MS. FISHER-GOAD assured the committee AEA is committed to its rural energy infrastructure program that will continue to provide maximum access, and to ensure that natural gas and propane can fit into rural plans for future projects. In addition, regional energy plans and contractors are working to incorporate the use of natural gas and propane in regions outside of the Interior Energy Plan. Ms. Fisher-Goad closed, saying that AEA has many energy policy issues on which to work and will continue to report to the committee on developments [slide 18].

[9:53:50 AM](#)

MR. THERRIAULT stated that one of two access issues before AEA is access to timber as a fuel source. Residents in the Interior are interested in long-term access to volumes of timber resources on state land for a source of fuel. The agency wants to ensure that regulations and statutes are in place - not only to cut dimensional lumber - but also to allow for contracts to utilize timber as a source for energy. Another access question arises when a potential renewable source of energy is located on state land, or if state land must be crossed to transmit power. For instance, the Nuvista Light & Power Chikuminuk Lake Hydroelectric and Alternative Energy Project needs access to Wood-Tikchik State Park for research, and near Haines, the Connelly Lake Hydroelectric Project requires access to the Alaska Chilkat Bald Eagle Preserve. Mr. Therriault advised that the legislative intent at the time these geographic areas were designated must be revisited to determine whether to grant access to state land for the development of resources and for the transmission of power. An additional issue in Southeast is whether sources of power near Ketchikan can be developed by the private sector and transmitted on the power grid. This question is also raised in the Railbelt, where there are potential sources of renewable power that could be developed by the private sector and integrated into the Railbelt transmission grid. The final issue is the duplication of utilities in the Railbelt.

[10:00:17 AM](#)

#### **ADJOURNMENT**

There being no further business before the committee, the House Special Committee on Energy meeting was adjourned at 10:00 a.m.