

SENATE FINANCE COMMITTEE  
February 1, 2013  
9:07 a.m.

[9:07:35 AM](#)

CALL TO ORDER

Co-Chair Kelly called the Senate Finance Committee meeting to order at 9:07 a.m.

MEMBERS PRESENT

Senator Pete Kelly, Co-Chair  
Senator Kevin Meyer, Co-Chair  
Senator Anna Fairclough, Vice-Chair  
Senator Click Bishop  
Senator Mike Dunleavy  
Senator Lyman Hoffman  
Senator Donny Olson

MEMBERS ABSENT

None

ALSO PRESENT

Sarah Fisher-Goad, Executive Director, Alaska Energy Authority, Department of Commerce, Community and Economic Development; Sean Skaling, Deputy Director, Alternative Energy and Energy Efficiency, Alaska Energy Authority, Department of Commerce, Community and Economic Development.

SUMMARY

PRESENTATION: ALASKA ENERGY AUTHORITY

Sara Fisher-Goad, Executive Director, Alaska Energy Authority

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[9:08:15 AM](#)

SARAH FISHER-GOAD, EXECUTIVE DIRECTOR, ALASKA ENERGY AUTHORITY (AEA), DEPARTMENT OF COMMERCE, COMMUNITY AND ECONOMIC DEVELOPMENT (DCCED), provided a Power Point

presentation titled "Alaska Energy Authority Overview and Renewable Energy Fund Update" (copy on file). She noted that AEA had given a similar overview to the Senate Energy Committee. She pointed out a chart (copy on file) showing various state energy programs that were managed by Alaska Housing Finance Corporation (AHFC), AEA, DCCED, and a new program under the Alaska Industrial Development and Export Authority (AIDEA).

Ms. Fisher-Goad discussed AEA's mission to reduce the cost of energy through various strategies on slide 2:

- Energy Planning and Policy
- Technical and Community Assistance
- Investing in Alaska's Energy Infrastructure
- Diversifying Alaska's Energy Portfolio

Ms. Fisher-Goad expounded that AEA built energy infrastructure in rural communities and granted the finished product to the community or its utility. One of the main strategies for reducing the cost of energy was through diversification in the energy portfolio; the Renewable Energy Fund was one of the primary ways diversification was achieved.

Ms. Fisher-Goad moved to slide 3 titled "Electricity Generation by Region." The slide provided a perspective of annual generation throughout the state; most energy generation occurred in the Railbelt region, which accounted for approximately 80 percent of the state's population. She discussed electricity prices by community; the Anchorage and Railbelt areas had some of the lower energy costs, while the rest of Alaska (mostly rural and less populated) had significantly higher rates. She stated that regions of the state with access to natural gas had substantially lower heating costs than other areas.

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Ms. Fisher-Goad looked at slide 5 titled "Energy Policy Development and Coordination":

- Deputy Director for Statewide Energy Policy Development
- Serve as lead on Alaska's energy policy development
- Coordination of energy plans on statewide level

- Coordinate multi-agency efforts
- Individual project analysis and vetting
- Transmission planning
- Working with AIDEA on LNG trucking

Ms. Fisher-Goad elaborated that Gene Therriault had joined the AEA management team as the deputy director for Statewide Energy Policy Development and was leading the effort towards various policy development issues. The organization was coordinating a variety of energy plans in Alaska; it had led the effort for the Railbelt and Southeast Integrated Resources Plans and was involved in the development of various regional plans that were primarily being led by regional economic development organizations. She furthered that AEA had been working with a variety of regions to build on an energy pathway it had developed a couple of years earlier with a more regional look at energy planning.

Ms. Fisher-Goad pointed to additional information on regional energy planning on slide 6 titled "Supporting Regional Solutions." She shared that AEA was working on regional projects and transmission efforts that could help reduce the cost of energy. The effort included transmitting power from one community powerhouse to outlying communities.

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Ms. Fisher-Goad looked at infrastructure and large projects on slide 7 including Bradley Lake hydroelectric, Alaska Intertie, and Susitna-Watana hydroelectric. She detailed that the Susitna-Watana hydroelectric project had been authorized two years earlier under SB 42, which had allowed AEA to move forward on owning and operating the project. She relayed that AEA had built the Four Dam Pool projects that were now owned by local utilities: Terror Lake is owned by the Kodiak Electric Association; Solomon Gulch is owned by Copper Valley Electric Association; and the Southeast Alaska Power Agency owns Swan Lake and Tyee that serve Ketchikan, Wrangell, and Petersburg. She shared that the Larson Bay hydroelectric project that had been built and owned by AEA was now in local control.

Ms. Fisher-Goad communicated that AEA's rural energy emphasis had been on bulk fuel storage facilities and rural power system upgrades (slide 8 titled "Rural Energy"). She

relayed that Denali Commission funds had primarily financed projects that had been built in the past 12 years; the program had been federally driven, but state capital project funds had been allocated to continue the program for the construction of power systems and tank farms. She explained that projects were overseen by AEA and granted to communities. The organization also provided ongoing circuit rider technical assistance for maintenance and the integration of renewable resources into the systems. She pointed to an effort to ensure there was an ability to introduce wind and have effective wind diesel systems in communities.

Ms. Fisher-Goad reported that AEA's Technical Assistance program had been increased in the past year; two additional positions had been created to help advance projects in rural communities and to develop projects that could qualify for the Renewable Energy Fund.

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Ms. Fisher-Goad continued to discuss rural energy on slide 9. The Power Cost Equalization (PCE) program was state funded and served rural communities where electrical rates were three to four times higher than in urban Alaska. The Regulatory Commission of Alaska (RCA) was responsible for setting rates and AEA was responsible for managing funds and making payments to utilities. She detailed that the program had been developed in the mid-1980s (around the same time as the Four Dam Pool projects); it was an effective way to provide assistance to small communities with high cost diesel driven systems, whereas large infrastructure projects may not be economic. The program paid for a portion of utility bills for residential customers and for community facilities. She relayed that the PCE Endowment had a current balance of \$788 million; PCE payments were approximately \$40 million.

Senator Hoffman asked if the expected rate of return for the PCE fund was in legislation. He believed the rate was high. Ms. Fisher-Goad replied in the affirmative. The fund was statutorily required to earn 7 percent over time.

Senator Hoffman was concerned that the expected rate of return required AEA to take on additional risk that could potentially have high and low years. He asserted that the

rate of return should be between 4.5 percent and 5 percent. He believed the issue needed to be addressed.

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Co-Chair Kelly asked if Senator Hoffman believed the legislature needed to appropriate funds to account for the years of low investment return in the PCE fund.

Senator Hoffman clarified that he believed the statutory rate of return needed to be modified. He opined that a \$400 million appropriation the legislature had made two years earlier would adequately address the low [years]. The statutory modification would change the investment strategy to make it more realistic with current markets.

Vice-Chair Fairclough agreed that the rate of return created an incentive for higher risk projects. She wondered whether the legislature should allow the PCE fund to be invested similarly to the Permanent Fund instead of requiring a specific rate of return. She opined that depending on the size of the fund that it was nice to have a diversified portfolio with some investments in higher risk areas. She supported a change to the statute and believed it should be flexible instead of a set 4 percent or other required return.

Senator Hoffman agreed that flexibility would be the best approach given that markets did change over time.

Co-Chair Kelly would talk to Co-Chair Meyer about the issue, but he was happy to have a committee bill sponsored if Senator Hoffman drafted the legislation.

Senator Olson asked how decreased interest rates of 4.5 to 5 percent would impact the PCE payout.

Ms. Fisher-Goad replied that the investment strategy in statute operated differently than the program payout. She explained that the Department of Revenue (DOR) is the fiduciary of the fund. She was happy to work with DOR to determine the impacts of different investment strategies. She furthered that the PCE fund was statutorily required to earn 7 percent over time, but the payout process was a three-year monthly average market value of up to 7 percent over time. She explained that FY 14 was the first time the \$400 million cash injection (from the prior year) would

impact the funds available for the program. The legislature had fully funded the PCE program for many years; it had been a substantial amount of time since the payout of the program needed to be prorated. The payout continued to be a mixture of general fund and endowment funds. She specified that of the \$400 million for program management and payout, \$7 million would come from general funds. She reiterated that the payout and change to investment strategy was a different equation that the legislature looked at annually.

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Senator Olson asked how a change in statute [to the PCE fund required rate of return] would impact the end users. Ms. Fisher-Goad responded that the amount required to fund the program would remain the same. A revision may just change the mix of how the program was funded.

Co-Chair Kelly acknowledged that Senator Dunleavy joined the meeting.

Co-Chair Meyer asked when the PCE fund would be self-sufficient and no longer dependent on general fund appropriations. Ms. Fisher-Goad replied that based on current projections the endowment would be able to fully fund the PCE program in FY 16. She referred to the three-year cycle and stated that depending on earnings for the last year it could be the coming year; however, the impact would be seen in FY 16.

Vice-Chair Fairclough observed that a substantial loss could occur if investors were pushed to make riskier investments in a volatile market (because of the 7 percent required rate of return), which would require the use of more general funds. She stated that there was a way to secure a flat payout if necessary. Under the current model more or less could be provided once the fund became whole. She wondered if the RCA rates were included in the Alaska electricity prices shown by community on slide 4. She remarked that the graph was helpful because it communicated the magnitude of energy costs for families in many areas of the state. She asked whether PCE was reflected in the graph.

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Ms. Fisher-Goad believed that energy costs on slide 4 did not factor in the PCE program. She noted that the PCE program only impacted about one-third of the kilowatt hours in eligible communities for a portion of residents' electricity bills and community facilities. The program did not cover anything above 500 kilowatt hours and did not include commercial customers.

Co-Chair Kelly acknowledged that Senator Bishop joined the meeting.

Ms. Fisher-Goad discussed the Power Project Fund on slide 10 titled "AEA Programs." The program offered lower interest loans for the development of small-scale power facilities; it also funded bulk fuel storage facilities and renewable energy projects. She relayed that half of the fund's \$35 million was currently in an application process. Pending applications included a wind diesel system for the City of Saint George and the Reynolds Creek hydroelectric project for Haida Energy. The fund required legislative approval for any projects receiving state assistance above \$5 million. For example, legislative approval would be required if an entity received grant for \$4 million and requested a \$2 million loan.

Ms. Fisher-Goad introduced her colleague Sean Skaling and asked him to continue the presentation.

Senator Hoffman acknowledged Ms. Fisher-Goad for her remarkable job during AEA's first five years. He noted that in the prior year the legislature had extended the program for 10 years.

[9:30:11 AM](#)

SEAN SKALING, DEPUTY DIRECTOR, ALTERNATIVE ENERGY AND ENERGY EFFICIENCY, ALASKA ENERGY AUTHORITY, DEPARTMENT OF COMMERCE, COMMUNITY AND ECONOMIC DEVELOPMENT, addressed energy efficiency and conservation on slide 11. He explained that the program worked to address energy efficiency in existing facilities before building new facilities. The program had a state goal of improving energy efficiency 15 percent by 2020 (set by the legislature several years back); AEA had the goal in mind as it analyzed opportunities for areas of the greatest impact. He pointed to significant programs including the Alaska Energy Efficiency Partnership and its website; the

partnership included many agencies that were led by AEA and AHFC. The program's focus was to encourage individuals to increase efficiency. He highlighted that the Alaska Commercial Energy Audit Program was for privately owned commercial buildings. He stated that AEA coordinated with AHFC on its programs to provide services to all sectors including commercial, public, and small-scale industrial buildings through the Village Energy Efficiency Program. The commercial program provided an energy audit and customers were responsible for implementing measures themselves; whereas, the village program provided a full-service audit and efficiency work.

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Mr. Skaling moved to slide 12 titled "Energy Efficiency and Conservation." He shared that AEA's efficiency and conservation programs had touched 132 communities and 419 buildings (20,000 commercial buildings existed throughout the state); the website [www.akenergyefficiencymap.org](http://www.akenergyefficiencymap.org) provided a visual and detail of activity throughout Alaska. Federal stimulus funding was responsible for much of the progress and had produced great results; on average for every \$1.00 invested there was a \$0.29 immediate energy savings (a 300 percent return on investment after 10 years). He noted that many of the efficiency measures implemented would last longer than 10 years (especially those in rural Alaska). Additionally, the Alaska Commercial Energy Audit Program measures showed a 30 percent to 33 percent savings potential; the measures comfortably paid for themselves. He added that deeper measures could be taken, but 30 percent was a good number.

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Mr. Skaling addressed slide 13 titled "Community Highlight: Emmonak." Emmonak had received a whole-village retrofit through the Village Energy Efficiency Program and the stimulus funded Energy Efficiency and Conservation Block Grant Program. The improvements were responsible for \$90,000 in annual savings; 27 percent of savings came from efforts to reduce electricity consumption. He reported that the return on investment was not as high as the 300 percent average because deeper repairs had been needed on a couple of the community's buildings; he pointed to a before and after picture of boilers in one of the buildings. He added that local labor was another foundation of the programs.

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Vice-Chair Fairclough queried whether trained labor forces were available in small communities for maintenance on current units. Mr. Skaling confirmed that AEA and AHFC had done a significant amount of training since 2008. He furthered the number of energy auditors for the commercial energy audit program had increased from between 3 and 5 to 50. He stressed that work forces had been trained. He pointed to one contractor who was good at training local staff (on lighting retrofits in particular); the skills could then be applied to other buildings.

Vice-Chair Fairclough asked whether there was labor available in Emmonak to address regular maintenance needs. Mr. Skaling replied that the issue was an ongoing challenge. He shared that local employees had been trained side-by-side with the installation contractors, but an additional need still existed; AEA, AIDEA, and the Denali Commission were all looking for ways to further enhance training.

Co-Chair Kelly asked Senator Bishop (former Department of Labor and Workforce Development (DLWD) commissioner) about programs offered by the University of Alaska and other organizations that were doing building and power plant maintenance in rural Alaska.

[9:38:15 AM](#)

Senator Bishop answered that DWLD had worked with AEA, AHFC, the Denali Commission, and the Homebuilders Association; DWLD had received a \$3.6 million federal energy grant and other funds for energy efficiency trainings throughout the state. He pointed to an Alaska Vocational Technical Center (AVTEC) onsite wind turbine that had been integrated into the diesel program; students were trained in Seward for local knowledge. He noted that the boiler shown on slide 13 was state-of-the-art and it was not possible to train someone completely from the get-go; the maintenance skills could be learned over time.

[9:40:40 AM](#)

Vice-chair Fairclough questioned whether units placed in rural communities were standardized to make it easier for a

person to train local individuals throughout Alaska; thereby ensuring that smaller communities could use the product. She stressed that servicepersons were easier to come by for state-of-the-art products in an urban areas than in small communities. She wondered if using the same units throughout rural Alaska was one of criteria for investing in small communities in order to make maintenance easier to manage.

Senator Bishop commented that some villages could not afford to operate a "washateria" after they had been built. He stressed the importance of taking a local community's expertise, size, and needs into consideration when a washateria was built to ensure the community could afford to operate it.

Mr. Skaling replied to a question by Vice-Chair Fairclough. He stated that simpler systems were being installed and AEA was clear with contractors that the systems were important for consistency and easy maintenance. Additionally, many of the same systems were being installed (e.g. Toyostoves); seeing the same equipment time after time made it easier to maintain and made it possible to use parts from one unit on another. He highlighted an effort called the Rural Alaska Maintenance Program (RAMP). He detailed that the program took community maintenance needs into account for numerous facilities (e.g. schools, public buildings, power houses, water systems). The effort was to create different tiers of employees that would work on all of the equipment in various areas. He communicated that various challenges existed, but a training module was currently being set up that considered different levels of experience (there could be a level one employee in a village and a level two employee in a hub community who could perform deeper maintenance).

[9:44:09 AM](#)

Co-Chair Kelly asked how much the University of Alaska was helping with training.

Ms. Fisher-Goad replied that the training projects for bulk fuel and renewable energy were primarily with DWLD through the use of AVTEC facilities and itinerant trainings in communities. She relayed that AEA worked with the Alaska Center for Energy and Power related to the Emerging Energy Technology Program (EETF). The university was not

significantly involved in the training program. She listed other partnerships including the Denali Commission that was heading the RAMP effort with the Alaska Native Tribal Health Consortium. She furthered that the Alaska Village Electric Cooperative had also been involved in discussions related to increased regional-led training efforts. She had been collaborating with Sandra Moller, Deputy Director of Rural Energy on the 2013 goal towards cost effectiveness and providing the largest possible impact. She referred to power plant trainings in Seward and shared that AEA was looking at different ways to deliver training including ensuring that system operators worked closely with AEA and its contractors to build the systems. She relayed that AEA was looking at a couple of pilot programs that would bring individuals to Anchorage to help with the construction of power houses.

Co-Chair Kelly recommended that AEA talk with Fred Villa at the university. He relayed that AVTEC and DLWD did a good job; however, the entities did not have assets in multiple communities like the university. He detailed that the university made a shift towards workforce development in the early 2000s specifically for rural Alaska. He pointed to a past virtual welder training program as an example of innovative training. He elaborated that there were people who were breaking down barriers for training that allowed delivery to rural Alaska. He believed there were individuals on the cutting edge in relation to training at the university.

[9:47:24 AM](#)

Senator Hoffman wondered if the circuit rider technical assistance program was adequately staffed. He communicated that the program had helped save very costly infrastructure projects. He believed that communities took more pride in facilities when they took part in the construction and subsequently took better care of the product.

Ms. Fisher-Goad replied that additional staff and funding obtained the prior year had provided AEA with the ability to offer a very effective circuit rider program. She expounded that AEA incorporated a training element into its community visits to ensure that workers understood the equipment and could work with AEA on operation and maintenance.

Co-Chair Kelly asked whether the circuit rider program needed additional funding. Ms. Fisher-Goad answered that FY 13 and FY 14 funding was sufficient. She noted that AEA was grateful for the significant funding increase provided in FY 13.

[9:50:19 AM](#)

Mr. Skaling conveyed that AEA published an annual energy statistics report (slide 14) that summarized the electricity generation throughout the state. He highlighted that the Emerging Energy Technology Fund was created by SB 220 in 2010; \$8.9 million was available (funds were split evenly between the Denali Commission the state). He detailed that 16 projects had been selected for funding in the first round that was currently beginning. The goal was to provide a stepping stone to renewable energy and efficiency with potentially breakthrough technologies that may have a significant future impact in Alaska. The projects were required to be commercially viable within five years, were spread throughout the state, and varied from simple (e.g. exhaust thimbles) to complex (e.g. airborne wind generators).

Mr. Skaling directed attention to the Renewable Energy Fund on slide 15. He shared that he had just begun leading the program through the round six recommendations. He stated that the program had good staff and that projects were thoroughly vetted. The program had approved 227 projects and had allocated \$202.5 million. There were approximately 75 projects under construction and roughly 80 grants were in the construction phase. He noted that applicants were required to present project feasibility studies prior to construction approval.

Co-Chair Kelly pointed to time constraints and asked AEA to continue the presentation at a later time.

Senator Hoffman asked about the governor's goals for renewable energy and how much progress had been made towards those goals.

Mr. Skaling replied that the governor and legislature had set a goal for 50 percent renewable energy for electric by 2025. Hydroelectric energy currently accounted for 22 percent and changed from year to year. He shared that the last couple of months represented a breakthrough year with

some large wind projects contributing roughly 2 percent. He concluded that renewable energy currently accounted for approximately 20 percent to 24 percent [of total electricity generation].

Co-Chair Kelly communicated that he wanted AEA to finish its presentation at a later date.

9:55:20 AM

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RECONVENED

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ADJOURNMENT

10:46:13 AM

The meeting was adjourned at 10:46 a.m.