ALASKA STATE LEGISLATURE
HOUSE COMMUNITY AND REGIONAL AFFAIRS STANDING COMMITTEE
February 17, 2011
8:06 a.m.

MEMBERS PRESENT

Representative Cathy Engstrom Munoz, Chair
Representative Neal Foster, Vice Chair
Representative Alan Austerman
Representative Alan Dick
Representative Dan Saddler
Representative Sharon Cissna (via teleconference)
Representative Berta Gardner

MEMBERS ABSENT

All members present

COMMITTEE CALENDAR

OVERVIEW: ALASKA ENERGY AUTHORITY

- 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: Presented an overview of the AEA.

JIM STRANDBERG, Project Manager
Alaska Energy Authority (AEA)
Department of Commerce, Community & Economic Development
Anchorage, Alaska
POSITION STATEMENT: During the AEA overview, answered questions.

MICHAEL HARPER, Deputy Director
Rural Energy
Alaska Energy Authority (AEA)

Department of Commerce, Community & Economic Development
Anchorage, Alaska
POSITION STATEMENT: During the AEA overview, answered questions.

CHRIS MELLO
Program Manager RPSU & BF
Alaska Energy Authority
Department of Commerce, Community & Economic Development
Anchorage, Alaska
POSITION STATEMENT: During the AEA overview, answered questions.

PETER CRIMP, Deputy Director
Alternative Energy & Energy Efficiency
Alaska Energy Authority
Department of Commerce, Community & Economic Development
Anchorage, Alaska
POSITION STATEMENT: During the AEA overview, answered questions.

ACTION NARRATIVE

8:06:01 AM

CHAIR CATHY ENGSTROM MUNOZ called the House Community and Regional Affairs Standing Committee meeting to order at 8:06 a.m. Representatives Foster, Austerman, Dick, Saddler, Gardner, Cissna (via teleconference), and Munoz were present at the call to order.

Overview: Alaska Energy Authority

8:06:16 AM

CHAIR MUNOZ announced that the only order of business would be an overview of the Alaska Energy Authority.

8:07:26 AM

SARA FISHER-GOAD, Executive Director, Alaska Energy Authority (AEA), Department of Commerce, Community & Economic Development (DCCED), began by noting other staff that are on line. She then informed the committee that she has been with AEA and the Alaska Industrial Development and Export Authority (AIDEA) for approximately 10 or 11 years. She noted that in her prior

capacity as deputy director she was the legislative liaison for AEA and AIDEA. Ms. Fisher-Goad further informed the committee that she has a Bachelor's degree from the University of Alaska Fairbanks (UAF) and a Masters from the University of Alaska Anchorage (UAA). She opined that it's going to be a challenging and exciting time to be the executive director of AEA. Ms. Fisher-Goad then turned attention to the presentation, specifically slide 2 entitled "AEA's Mission: Reduce the Cost of Energy in Alaska". The AEA manages several programs and projects. In fact, AEA has been the lead agency for statewide energy planning, developed large infrastructure, assisted rural communities, reduced energy waste and use local resources, and finance projects. She pointed out that AEA owns the Bradley Lake Hydroelectric Project and the Alaska Intertie. As some may have heard, AEA is interested in pursuing the Susitna Hydroelectric project. The Susitna Hydroelectric Project was one that had been developed in the 1980s and recently AEA received a decision document that has recommended the Susitna Low Watana Project be pursued in the Railbelt area. The assistance to rural communities has been with the power cost equalization (PCE) program, tank farm and power system construction, and training to support local operators in rural communities.

8:11:49 AM

REPRESENTATIVE DICK inquired as to the details between Susitna and Chakachamna that resulted in choosing the Susitna project.

MS. FISHER-GOAD explained that last year AEA received a $10 million appropriation to evaluate several projects, including the Susitna Hydroelectric Project and the Chakachamna Project. The appropriation legislation specified that if a project had a "fatal flaw," then the funds should be utilized for the project that made more sense. She noted that AEA has about 3,000 documents regarding all the studies performed on the Susitna Hydroelectric Project. The Chakachamna Project had significant environmental issues that would require further study, although they weren't necessarily a fatal flaw. Therefore, it became a risk analysis to determine which project made sense to move forward. To learn more about Chakachamna and its issues would require an expenditure of about $30 million. Furthermore, to address the environmental issues a significant flow reduction would be required in order to permit and license the project. Therefore, to meet the state's goal of producing 50 percent of the state's electricity with a renewable energy source by 2025, the Susitna Hydroelectric project made the most sense. She

noted that the preliminary document with the details of this choice is on AEA's website.

REPRESENTATIVE DICK expressed concern with resource development in Western Alaska. He opined that he would rather consider both [projects] versus an either or situation. He also mentioned the Donlin Creek situation.

MS. FISHER-GOAD said she would be happy to discuss those issues further with Representative Dick.

8:15:38 AM

MS. FISHER-GOAD returned to her presentation and reviewed the ways in which AEA seeks to reduce energy waste and use local resources. The aforementioned is accomplished through energy efficiency, biomass, geothermal, hydroelectric, and wind projects. She noted that AEA also finances projects through the Renewable Energy Fund, Energy Tech Fund, the Bulk Fuel Revolving Loan Fund, and the Project Power Fund. She then moved on to slide 3 entitled "Statewide Energy Planning," which lists several initiatives regarding energy planning over the years. The prior executive director of AEA was instrumental in putting together the Alaska Energy Pathway, which relates local information communities can use when developing their own local resources. The Rural Energy Plan was produced in 2002. She pointed out that most recently, AEA is working on energy statistic updates in order to have good data available for communities and utilities. The AEA is committed to performing regular updates, at least every other year. The AEA has been in partnership with the Department of Natural Resources (DNR) regarding the Alaska energy inventory. The maps at the bottom of slide 3 were developed with information from DNR and AEA's staff in order to identify the location of energy resources in Alaska. Referring to slide 4 entitled "Alaska Energy Pathway," she informed the committee that AEA is reviewing regional and community planning and project development. This year the effort is to work on a regional level to help communities and the regions of the state develop projects that make sense, which are projects that develop and use local resources. She then directed attention to slide 5, which relates more details regarding the Alaska Energy Inventory. Moving on to slide 6 entitled "Regional Energy Plan," she explained that the Railbelt Integrated Resource Plan (IRP) was sponsored by the state while AEA, Railbelt utilities, and other stakeholders developed a list of projects that make sense to pursue for the Railbelt region. The IRP helps establish the estimated costs of these projects.

Ms. Fisher-Goad opined that it has been an extremely complicated effort, particularly since the utilities have come together and formed an organization for regional projects. Referring to slide 7, she informed the committee that the Southeast IRP is currently underway. Although the process is similar to that undertaken with the Railbelt, Southeast is a bit different due to the lack of [connected road] transportation in the region. The AEA is working with the Southeast Conference to help identify a regional approach in terms of projects that make sense for the Southeast region and specific communities in the region.

8:21:13 AM

REPRESENTATIVE FOSTER related his understanding that the Alaska Railbelt Cooperative Transmission and Electric Company (ARCTEC) is comprised of five of the six Railbelt utilities. He requested a general assessment of ARCTEC in terms of having one Railbelt utility not involved in the organization.

MS. FISHER-GOAD deferred to Mr. Strandberg who has been most involved with ARCTEC.

8:22:08 AM

JIM STRANDBERG, Project Manager, Alaska Energy Authority (AEA), Department of Commerce, Community & Economic Development, Municipal Light & Power (ML&P) has a business structure of a municipality; it's an enterprise organization that's part of the overall Municipality of Anchorage business. The entities in ARCTEC are electrical cooperatives that worked hard to develop an approach with which they all agreed. However, ML&P faced real limitations joining ARCTEC in terms of ML&P's tax exempt status. Mr. Strandberg related his understanding that all the utilities continue to talk and ML&P has been at the meetings, which have had a collegial atmosphere. In response to Representative Saddler, Mr. Stranberg clarified that the municipality has the ability to obtain tax exempt financing. However, one of the bond conditions is that the benefits of those funds have to flow directly to the people of the municipality. If the benefits stray from the people of the municipality, then the tax exempt status is in question.

8:24:47 AM

CHAIR MUNOZ turned attention to Southeast planning efforts and the fact that the Canadian government is moving forward with the

extension of the Northwest power line to within about 20 miles of the Alaska-Canadian border near Wrangell. She inquired as to how Mr. Strandberg foresaw the relationship with Canada.

MR. STRANDBERG confirmed that [AEA] does want to keep communication open with Canada. In fact, there are colleagues with whom AEA has maintained contact with over the last three years. The concept of the potential for importing energy has been discussed by those in Southeast. The entities with which AEA has had contact are BC Hydro's business development group and Power X, which is BC Hydro's power marketing entity. Furthermore, AEA has maintained a close connection with the Alaska-Canada Energy Coalition (ACE Coalition) in Southeast Alaska.

CHAIR MUNOZ inquired as to the rate on the Canada side.

MR. STRANDBERG answered that there are various rates. He offered to obtain the specific rate of the power being bought and purchased by Power X.

CHAIR MUNOZ related her understanding that the rate on the Canada side is quite low. She acknowledged the export potential, but suggested there could be the opportunity for import potential as well as the ensuing development.

MR. STRANDBERG noted that the aforementioned has been part of the Southeast IRP process to actively evaluate the impacts of an electrical intertie with Canada's system and the ability to import inexpensive energy into the region for the benefit of the ratepayers.

8:27:28 AM

MS. FISHER-GOAD, returning to her presentation, told the committee that AEA's regional efforts also include working with the University of Alaska and the Denali Commission to coordinate support. The current focus is on the Yukon-Kuskokwim Delta and the Interior. With the development of the Energy Pathway, AEA doesn't want to have a plan that isn't used. The desire is to continue to provide the technical assistance for local communities and regions with respect to how to take a plan and develop the projects. Referring to slide 9 entitled "Infrastructure and Large Projects," Ms. Fisher-Goad explained that the Bradley Lake Hydro Project is a great model project. The state contributed approximately 50 percent of the costs to build the project, which produces 10 percent of the energy in

the Railbelt area. Furthermore, the Bradley Lake Hydro Project is currently the low cost energy producer. Although the Susitna Project financing will definitely garner discussion, the [Bradley Lake Hydro Project] concept of state ownership and utilities paying a portion of the cost through a power sales agreement is a valid model to use. There are some things that could be done in the 1980s that couldn't be today. However, she pointed out that although the bonds for the [Bradley Lake Hydro Project] will be paid in about 10 years, the utilities are obligated to continue to pay the state for another 20 years in roughly the amount of the debt service. "It's somewhat of a recoupment of the capital contributions that the state put in up front, receiving that on the backend of the project," she said. She then turned to the Alaska Intertie, which is wholly owned by the state through AEA and is operated by the Railbelt utilities. Currently, the Alaska Intertie agreement is under renegotiation. She clarified that the Alaska Intertie wasn't financed by debt, but rather through cash capital appropriations. The Alaska Intertie is the way in which the Interior and the Golden Valley Electric Association (GVEA) receives Bradley Lake Hydro power.

8:31:02 AM

REPRESENTATIVE FOSTER related his understanding that the financing of the Bradley Lake Hydro Project was 50 percent from the state and the remaining 50 percent from the ratepayers. He inquired as to how the state contribution was funded.

MS. FISHER-GOAD related that there were a series of appropriations that AEA received to move forward with the construction of the Bradley Lake Hydro Project. She noted that arbitrage earnings on bonds were used to help pay for construction. However, the aforementioned is no longer available due to tax code changes in 1986. At the point the Bradley Lake Hydro Project was going to be funded by bonds, power sales agreements were developed with the utilities in order to have the revenue to pay for the project. She related her understanding that they're general obligations of AEA with a moral obligation of the state. Still, [per] the power sales agreement, the utilities pay for the debt service of the bonds. The debt service amounts to about $12 million annually. She noted that AEA's preliminary decision document includes a detailed description of the concepts that could be used with the large Bradley Lake Project as well as limitations by which [the Bradley Lake Hydro Project model] may not work. In further response to Representative Foster, she agreed to provide the aforementioned document.

8:34:21 AM

MS. FISHER-GOAD, in response to Representative Saddler, clarified that for the Bradley Lake Hydro Project the state paid 50 percent through appropriations to AEA and the remaining 50 percent was through bonds paid for by the utilities. She noted that the earlier mentioned document includes a schedule with regard to the state's contributions and the debt service.

8:35:03 AM

REPRESENTATIVE DICK directed attention to slide 8, and inquired as to the details regarding AEA's regional energy plans focus on the Yukon-Kuskokwim Delta.

8:35:34 AM

MICHAEL HARPER, Deputy Director, Rural Energy, Alaska Energy Authority (AEA), Department of Commerce, Community & Economic Development, said that AEA has worked with the major stakeholders in the region, including the Association of Village Council Presidents (AVCP), AVCP Housing, Yukon-Kuskokwim Health Corporation, Calista Corporation, and Alaska Village Electric Cooperative, Inc. (AVEC). He noted that AVEC is the major utility in the region as it serves 23 of the 56 villages in the region. Mr. Harper then explained that [AEA's] notion is to review other reports that the legislature has already funded. There are at least 15 such energy reports, the list for which he offered to provide to the committee. Those reports discuss ways in which to produce less expensive power. He informed the committee that there is a large hydro power potential in Chikumunik, which is located above the lakes in the Bristol Bay area and within 110 or so miles of Bethel. There have been studies on the potential at Chikumunik, including a recent study from Montgomery Watson. The potential at Chikumunik would power Bethel and the surrounding 15 communities. Although AEA is pursuing the Chikumunik potential, more resources are necessary to ensure the information is up to date.

8:38:11 AM

REPRESENTATIVE DICK inquired as to whether anything is being done for the mid Yukon region, such as for Galena or Kaltag.

MR. HARPER replied yes, and informed the committee that AEA has partnered with the University of Alaska Fairbanks Alaska Center

for Energy and Power (ACEP) for the last two years to develop an [energy] plan for the Interior. He explained that AEA provided funds through ACEP that has partnered with the Tanana Chiefs Conference (TCC) to begin the planning for alternative and renewable energy sources in the Interior. There are biomass possibilities in the Interior, such as the Tok project that he said holds great promise. Wind energy is very limited in the Interior as hydro seems as well, but heat recovery systems may be beneficial, he related.

8:39:37 AM

REPRESENTATIVE FOSTER related his understanding that Mr. Harper mentioned hydro in Representative Dick's area. He then asked if there's a summary sheet regarding hydro in more Arctic environments.

MR. HARPER offered to research that. He noted that AEA has good reports regarding the Yukon-Kuskokwim Delta, but there aren't similar reports for the Northwest area. However, he noted that AEA has received a letter from Kawerak, Inc., and there is the desire to move forward with regional energy planning in the Northwest and Nome areas.

8:40:39 AM

MS. FISHER-GOAD, referring to slide 11 entitled "Infrastructure and Large Projects," informed the committee that the Susitna - Watana site is expected to generate 50 percent of the Railbelt energy. At this point, there would seem to be a minimal fisheries impact and it would provide a long-term stable price of energy for the Railbelt area. She then turned attention to slide 12 entitled "Rural Energy Construction." She related that since 2000 AEA has partnered with the Denali Commission initially to fund the construction of bulk fuel tank farms. Rural communities need a year's supply of fuel delivered because there typically isn't a delivery system that allows the delivery of a monthly or daily supply as is the case in larger communities. Therefore, tank farms are necessary. Many years ago the Environmental Protection Agency (EPA) and the U.S. Coast Guard were concerned with the state of the tank farms and there was concern with regard to possible fuel spills. The Denali Commission was funded to lead [an upgrade of the bulk fuel tank farms and rural power systems] and AEA became the primary partner. The AEA spent hundreds of millions of federal funds in rural Alaska to upgrade tank farm projects. To date, 67 bulk fuel tank farm projects competed, another 9 projects are in

progress, and 29 projects remain. The Denali Commission requires sustainability criteria in order to ensure a community will be able to maintain the infrastructure. Of those 29 projects remaining, typically there may not be the capability for communities to move up the list and construct a project. To date, 48 rural power projects have been completed. The powerhouses include the electrical distribution and there are integrated systems to ensure there is heat recovery capability. Depending upon the community, there is integration with hydroelectric. Currently, 16 of the aforementioned projects are underway and 45 remain.

8:44:29 AM

REPRESENTATIVE DICK inquired as to who owns the bulk fuel tank farm projects once completed.

MR. HARPER explained that AEA works with those in the community, including a utility or small cooperative, schools, and the village/city council. The goal is to form a cooperative of sorts to operate the bulk fuel tank farm once it's constructed.

REPRESENTATIVE DICK related that he has heard concerns from private enterprises in communities that feel as if they're competing against federal dollars.

MR. HARPER said that it's not AEA's intent to put a private business out of business, and therefore AEA takes great efforts to avoid such. He offered to speak with Representative Dick regarding any problems.

8:46:48 AM

REPRESENTATIVE CISSNA asked if there has been any cost analysis regarding what's occurring in smaller communities. Many of the smaller communities she has visited have energy systems that are far too complex for the locals to operate and thus have very little oversight of the equipment. She related her observation that there have been large expenditures on the infrastructure in communities. Furthermore, review of the health costs in these communities illustrates a disconnect between what's really happening in communities in terms of the large amount of funds going in for diesel requirements and not enough help to the community to start private [energy] businesses. She questioned whether there is a way to rank communities by their real needs today and not think big for those small communities.

MR. HARPER agreed that these systems aren't simple to operate, but pointed out that AEA has a good cadre of utility managers for communities with a population of 50 residents. He acknowledged that there won't always be a well trained operator in every instance. However, there is a training program that AEA has operated for over a decade. Usually the Vocational Training Center in Seward is used to train the bulk fuel tank operators as well as the power plant operators and now the renewable energy operators to operate the systems in a manner that will sustain the community. Renewable energy systems, such as wind turbines, are being utilized and they're not simple systems to manage. He informed the committee that AVEC and Kotzebue Electric have been in business for about 10-15 years and are the pioneers with this. Still, the transition from wind to diesel is not a simple operation. The AEA is continuing to work on that. Mr. Harper opined that the AVEC model works well for the 53 communities, which have populations of 1,000 or so, for which it provides power. Although AVEC isn't involved in the smaller communities that have 50 or so residents, smaller cooperatives are able to operate in a sustainable fashion. He highlighted the Middle Kuskokwim Electric Cooperative with Sleetmute, Stony River, and three small communities as it's able to operate systems in a sustainable fashion, although the costs are higher.

8:53:01 AM

REPRESENTATIVE GARDNER related her understanding that the state has addressed [upgrades] for about two-thirds of the state's tank farms. She asked if the tank farms that haven't yet been addressed are more complex or more costly.

MS. FISHER-GOAD explained that over 10 years ago, AEA and the Denali Commission developed a deficiency list that ranked the projects worst to best. She noted that there is a directive from the Denali Commission that specifies when there is a problem with a particular project, then AEA would move down the list. At the peak of using federal funds, there would be a certain number in design, a certain number in final design, and a certain number under construction. She likened the aforementioned to a pipeline that fed the projects. [Some of the problems] that would cause a project to stall could be contamination or land ownership issues. Of the projects remaining on the list, she requested that staff describe those.

8:55:26 AM

CHRIS MELLO, Program Manager RPSU & BF, Alaska Energy Authority, Department of Commerce, Community & Economic Development, informed the committee that in terms of bulk fuel the remaining communities on the list were unable to get the stakeholders to come to an agreement. There has to be a clear grantee and operator. Although some communities require tank farms, the village council and village corporation can't come to an agreement. Since a business plan and the participation of the grantee and stakeholders in that business plan is required, when they are unwilling to do so the project can't move forward. There are some communities that simply aren't interested in participating in this program. In other communities there isn't a clear grantee as some communities don't have the infrastructure and aren't capable of legally entering into a grant. Mr. Mello related that there are many communities in the queue that are waiting for funds. In fact, AEA is currently working with Alakanuk, which is the first AVEC village in which AEA has agreed to construct a tank farm. The expected date of completion of a tank farm in Alakanuk is 2012. With regard to the rural power systems upgrade (RPSU) programs there are a number of projects in which the grantees are moving forward very well, although much of it is a matter of the availability of funding. Currently, AEA is working in Angoon and Ruby. In some cases, there are communities that don't pass due diligence and may have problems with the Internal Revenue Service (IRS) and/or bulk fuel loans, and may be unwilling/unable to participate in the business plan.

8:57:52 AM

REPRESENTATIVE SADDLER inquired as the longevity of the bulk fuel tank farms and the rural power systems.

MR. MELLO responded that the bulk fuel facilities are designed for a 40-year life cycle. When this program began, the emphasis was to reach compliance with the Oil Pollution Act of 1990. Although the aforementioned didn't particularly resonate with members of the community, U.S. Senator Ted Stevens called for sustainability and thus he called for the development of business plans. When AEA worked with the communities on the business plans, there was a change in the attitude. The communities started to view the tank farm as a community asset rather than a project. The business plan can be as simple as two bank accounts: an O&M account and a repair & replacement (R&R) account, which is funded by a surcharge on the throughput of the fuel in a particular facility. Communities contribute to the R&R account monthly and it helps pay for large ticket items,

such as painting the facility or new fencing. Most of the communities are fairly loyal to the [R&R account], which extends the life of the facilities. He highlighted that there has been an increase in the level of best business practices in these communities. Therefore, AEA is fairly optimistic that these facilities will be able to exist for their useful life. He also highlighted that communities are beginning to understand that these tank farms aren't just a place where they store fuel but also a tool along with best businesses practices that will enable these communities to manage their bulk fuel inventory to the greatest economic advantage. The aforementioned, he remarked, is a huge step forward.

9:00:06 AM

REPRESENTATIVE DICK said that he is trying to reconcile the reality in communities with this [program]. He recalled a community in which the state fire marshal closed the local fuel vendor until the tanks met state requirements. That fuel vendor couldn't sell fuel to cover his operating costs, much less to obtain the funds to bring his tank farm into compliance. He inquired as to what could've been done in that situation.

MR. MELLO explained that the fuel vendors in the communities are not the grantees, rather the grantee is usually the village council. However, all the stakeholders are included in the facility and participate in the same business plan. Therefore, a fuel vendor that's located in a community that's unable or unwilling to participate in the program leaves AEA with little it can do. He clarified that AEA doesn't enter communities and select one stakeholder and build a bulk fuel facility for that vendor as it doesn't meet the economies of scale, rather AEA [works] for the entire community. He acknowledged that there are communities in Representative Dick's district that are in the above discussed category, AEA can continue conversations with these communities and the potential grantees regarding what's necessary to come together on a project. In some communities, AEA hasn't success with the aforementioned.

9:03:38 AM

CHAIR MUNOZ mentioned that today there is an energy conference at Centennial Hall in Juneau. She then requested more in depth information on the Susitna Hydro and Chakachamna projects.

[Chair Munoz passed the gavel to Vice Chair Foster.]

9:04:25 AM

MS. FISHER-GOAD, returning to her presentation and slide 13, provided the committee with an example of the bulk fuel upgrades done in Ruby. She then directed attention to slide 14, which highlights the rural power system upgrades of Tuluksak.

9:05:12 AM

VICE CHAIR FOSTER inquired as to the details of the R&R account and the effectiveness of it.

MR. HARPER said that upon the creation of the Denali Commission in 2000 or so, [the R&R account] was clearly addressed in order to avoid an unsustainable project. A business plan that was developed with the community and all the major stakeholders was required. Funds were to be established in order to prepare for future major repairs. Mr. Harper related that AEA is glad these business plans were required at the beginning of the process because it's coming to the fore at this point, particularly as community leaders change over time. For the most part, the process is working well, he stated. In response to Representative Saddler, Mr. Harper confirmed that theoretically, the [R&R account] funds would be used to replace the facility when necessary. However, he acknowledged that it might not cover the entire cost of replacement.

9:09:25 AM

REPRESENTATIVE CISSNA pointed out that although there is concern with regard to sustainability, most of the facilities and equipment the state is placing in rural Alaska are fueled by diesel. Even Anchorage is becoming more dependent on natural gas, yet questions remain about the long-term success of natural gas. She recalled that in community council meetings [in Anchorage] the natural gas folks said that other forms of renewable energy couldn't be considered because the equipment in homes makes it economically dangerous to go to any other form of energy. She then recalled that in the past these smaller communities used biomass for thousands of years, but then there was a shift to petroleum, specifically diesel. Representative Cissna opined that the rural and urban worlds don't match [in terms of energy]. Therefore, she indicated the need to review more appropriate alternatives versus making people dependent on one form of energy.

MS. FISHER-GOAD related that in terms of rural communities and the renewable energy grant recommendation program, AEA's primary measure for these projects is diesel replacement. She opined that through biomass, energy efficiency, and renewable energy projects AEA is experiencing a significant reduction of diesel being imported into communities. Furthermore, AEA is reviewing local long-term solutions for communities to meet their long-term energy needs. She opined, however, that it will always be a combination or energy sources in which communities aren't completely independent of diesel.

9:13:51 AM

MS. FISHER-GOAD reviewed AEA's capital request of $10 million of state funds, of which $6 million would be used for power system upgrades, $3 million for bulk fuel upgrades, and $1 million for a continuation of the agency's regional planning efforts for energy projects and planning. Although since the creation of the Denali Commission there has been a reduction in federal funds, there has been a commitment from the state to place more funds toward these projects in order to make progress with the deficiency lists and address the rural energy infrastructure needs. Returning to the presentation, Ms. Fisher-Goad turned attention to slide 15 entitled "Technical Assistance." She highlighted that when AEA installs a new system, it also installs a remote monitoring system and Supervisory Control And Data Acquisition (SCADA) system. The aforementioned allows AEA's technical staff in Anchorage to help troubleshoot with the local operator. If an onsite visit is necessary, then AEA staff would be informed with regard to how the plant is run. Moving on to slide 16 she informed the committee that the PCE Program is an approximately $32 million grant program that AEA operates in conjunction with the Regulatory Commission of Alaska (RCA). The RCA establishes the PCE rate, AEA manages the funds and issues the grants to the communities based upon the PCE level. The PCE Program is available for community facilities and residents in PCE eligible communities. She explained that AEA reimburses the utilities up to 500 kilowatt hours per residential customer per month, whereas the amount of reimbursed funds for the community facilities is based upon a calculation of the number of kilowatt hours and the community's population. The low cost energy enhances the life of rural residents, who face some very high costs in these small communities. In fact, with and without PCE the costs are still significantly higher than more urban areas of the state. Referring to slide 17, Ms. Fisher-Goad informed the committee that AEA offer various training opportunities. As mentioned earlier, AEA partners with

the Department of Labor & Workforce Development (DLWD) and AVTEC to help communities send their power plant operators to Seward for hands on training with the systems and the generators. Onsite training is also provided. She noted that the operating budget includes a request for $200,000 of state funds since the long-time Denali Commission training funds are no longer available. Therefore, the funding request is to maintain a quality training program. She then noted that AEA is involved in various conferences, including the Wind-Diesel Conference in Girdwood and the Wood Energy Conference in Fairbanks. With regard to wood energy for heat, AEA would like to continue to focus more on heat issues since AEA believes it has a relatively good handle on electricity with the power house and PCE in terms of good energy efficient systems. However, heating issues are more complicated and they usually aren't a centralized system. She then informed the committee that over the last several years AEA in coordination with the University of Alaska Fairbanks has sponsored the Rural Energy Conference, which will be held in Juneau this September. Moving on to slide 18, she highlighted the state's efficiency and conservation goal of up to 15 percent by 2020. The AEA manages the Energy Efficiency (EE) Conservation Block Grants, which is a $9 million federal stimulus fund project. The AEA has developed the Commercial Audit Program, which has received good feedback from the businesses that have applied for that program. The AEA has also developed the Industrial Audit Program, which is currently focusing on the fish processors. She then told the committee that AEA heads up an EE Conservation Working Group, which is a partnership of 20 plus organizations. The aforementioned allows AEA to organize with some of the nonprofits, the communities, and the utilities in order to achieve a comprehensive energy efficiency effort. Directing attention to the map on slide 19, she pointed out that it illustrates where much of the funds for the Energy Efficiency Conservation Block Grants (EECBG) are utilized as well as highlights the Village End-Use Efficiency Program (VEEP) projects. She noted that some communities receive both EECBG and VEEP funds. The average payback for these efficiency upgrades is about three years and the savings reach about $3 million per year throughout the state.

9:20:27 AM

REPRESENTATIVE GARDNER asked if the block grants are only available for private homes not businesses.

MS. FISHER-GOAD clarified that these are actually community block grants, a block of American Recovery and Reinvestment Act

of 2009 (ARRA) funds. The community received an amount based on the size of the community and then there was a block of funds that were to be distributed to the smaller communities. She further clarified that this isn't residential assistance but rather municipal and community assistance. Each community applied for a grant and developed a plan for what it would use the money.

REPRESENTATIVE GARDNER asked if AEA has discussed the fact that small business owners also want access to the energy efficiency programs the state is offering.

MS. FISHER-GOAD answered that AEA has worked with DCCED regarding some type of loan program for businesses. The audit program AEA offers is a good start in terms of knowing who is interested in the program updates. She related that AEA believes there is a gap in the services to commercial entities, and therefore it's something that AEA is interested in pursuing. The Sustainable Energy Act that passed in 2010 included a loan fund that was retooled to be commercial assistance for alternative energy and energy efficiency. The governor's energy report identifies this matter as something that AEA should do. Although AEA is interested in working on this program, other items, such as the block grants from ARRA funds, are more of a priority due to time constraints. Ms. Fisher-Goad further related that AEA has determined that [a commercial energy efficiency] program is more appropriate as an AEA loan program rather than a program within the Division of Commerce.

9:23:46 AM

MS. FISHER-GOAD, returning to her presentation, moved on to slide 20 entitled "Renewable Energy Goal: 50% by 2025". She reviewed the various statewide programs and told the committee that AEA can fund, through the Renewable Energy Fund, the following: permitting, project financing, and project management. Turning to slide 21, she reminded the committee of the 2008 passage of House Bill 152, which included specific selection criteria regarding concentrating the funds in high cost areas, matching funds, and a statewide balance for the funds available. There is an advisory committee that helps develop the program and make recommendations regarding where the funds should go. She highlighted that $150 million has been appropriated for the first three rounds. For round 4, AEA recommends approximately $37 million worth of projects. With regard to the Renewable Energy Fund funding, the pie chart on slide 22 illustrates the various funding for the various

renewable energy sources. She pointed out that much of the funding is going toward wind and hydro projects. The graph on slide 23 relates the estimated cumulative fuel savings for the renewable energy funded projects. For rounds 1-3, the estimated fuel savings is about 6 million gallons of diesel per year, which would seem to be a good measure. Ms. Fisher-Goad then turned to slide 24 "Emerging Energy Technology Fund," which was AEA's newest initiative and it was also in the 2010 sustainable energy act. The emerging energy doesn't only include renewable resources as it includes oil and gas. The goal is to expand energy sources available to Alaskans, she stated. There is $4.8 million available and proposals are due March 2nd. The advisory committee established for emerging energy technology is a technical advisory committee, which will be intimately involved in making recommendations regarding which projects should be pursued. Ms. Fisher-Goad then pointed out that the next few slides provide examples of projects that are on line and include information regarding fuel displacement. She emphasized that information is important as is continuing to work with grantees, even after a project is constructed, in order to ensure that projects are successful and there are returns. Furthermore, this information is helpful in terms of determining what projects to fund in the future.

9:28:25 AM

VICE CHAIR FOSTER suggested that the remainder of the slides could be reviewed when Ms. Fisher-Goad returns to review the Susitna versus Chakachamna projects.

9:28:56 AM

MS. FISHER-GOAD then quickly reviewed slides 25-34, which relate the grant, total project cost, capacity, and fuel displaced for various projects.

9:29:25 AM

VICE CHAIR FOSTER inquired as to the reason the Denali solar thermal project didn't result in the expected fuel savings.

9:29:44 AM

PETER CRIMP, Deputy Director, Alternative Energy & Energy Efficiency, Alaska Energy Authority, Department of Commerce, Community & Economic Development, answered that there seem to be problems with distribution for the Denali Solar Thermal project.

Therefore, it could be a need to technically work out the bugs. Mr. Crimp clarified that AEA isn't saying that the Denali Solar Thermal project is a bad project but rather merely relating the statistics. The AEA is working with GVEA to determine the problem.

9:30:24 AM

MS. FISHER-GOAD, in closing, mentioned that Mr. Harper has decided to retire the end of April and she wanted to publicly recognize his work and thank him. She characterized his retirement as a loss to the agency.

9:32:02 AM

REPRESENTATIVE GARDNER, for response at the next hearing, inquired as to why the wind turbines on St. Paul Island haven't been used.

9:32:29 AM

ADJOURNMENT

There being no further business before the committee, the House Community and Regional Affairs Standing Committee meeting was adjourned at 9:32 a.m.