

Alaska Energy Authority  
**WORK SESSION FOR NEW BOARD MEMBERS**  
**February 24, 2011**  
Anchorage, Alaska

**1. CALL TO ORDER**

Chairman Felix called the meeting of the Alaska Energy Authority to order on February 24, 2011, at 10:05 a.m. A quorum was established.

**2. ROLL CALL: BOARD**

Members present in Anchorage: Acting Chair Michael T. Felix (AIDEA Board Member); Susan K. Bell (AIDEA Board Member); Bryan Butcher (AIDEA Board Member); Ronald G. Arvin (AIDEA Board Member); Robert D. Sheldon (AIDEA Board Member); Hugh S. Short (AIDEA Board Member); Gary R. Wilken (AIDEA Board Member).

**3. AGENDA APPROVAL**

The agenda was approved as presented.

**MOTION: Mr. Wilken moved to approve the agenda. Seconded by Mr. Burnett. There being no objections, the motion passed.**

**4. ROLL CALL: STAFF, PUBLIC**

Staff present in Anchorage: Shauna Howell (AEA Executive Assistant), Jim Strandberg (AEA Project Manager), Chris Mello (AEA, Program Manager RPSU & BF), Peter Crimp (AEA Deputy Director-Alternative Energy & Energy Efficiency), Mike Harper (AEA Deputy Director-Rural Energy Group), Sara Fisher-Goad (AEA Executive Director), Valorie Walker (AEA Deputy Director-Finance), Chris Anderson (AEA Deputy Director - Credit); Sandy Burrows, (AIDEA Administrative Assistant); Terri Webster (AIDEA Administrative Assistant); Judy Bradshaw (AEA Administrative Assistant); Brian Bjorkquist (Department of Law), and Paul Kendall (Public).

**5. PUBLIC COMMENTS**

Mr. Kendall expressed his concern about the secrecy of public information. If public funds are co-mingled then it is the general public's business. Concern was expressed about the attempt to call things proprietary or non-disclosure information. Terms like infrastructure, skin-in-the-game, and stakeholders are disconnecting terms that provide a lack of accountability. Infrastructure needs to be defined. We do not want investments being made in roads, because all that does is use petroleum and expend capital for temporary jobs. We need stable communities where we can raise our families. Carbon-based transportation fuels are coming to a quick end. Mr. Kendall discussed a document that he had provided to the Board earlier and

that the Anchorage Daily News and Juneau Miner refused to print regarding the pipeline. Mr. Kendall talked about his belief regarding the future of oil and gas in Alaska and the AOGCC. He said that all commerce begins with family units living in a community, and free enterprise is a conveyance of opportunity to serve that community. In closing, Mr. Kendall suggested the following people should be included in further discussions: The Alaska Railroad, Enstar, Department of Transportation, Native Villages and Native Corporations. The auto dealers should demand thousands of electric vehicles be delivered within a year. The university should be told they no longer have a fundamental obligation. We are looking for quality of life revenues but we need our communities to be stable platforms. There are many projects that need to be done, including developing waterways, to prepare us for the energy designs that will be done in the next 15 years. Concern was expressed about the lack of public participation in AIDEA and AEA meetings. The Board's priority should be life essential energies.

## **6. WORK SESSION FOR NEW BOARD MEMBERS**

- **General Introduction and History**

Ms. Fisher-Goad gave a general overview of the AEA's history, background, and programs. AEA's enabling legislation states that AEA should reduce consumer power costs and encourage long-term economic growth of the state. In 1993 and after reorganization, AIDEA's Board became AEA's Board and there was a mandate to contract with utilities. In 1999, the Department of Community and Regional Affairs (DCRA) was eliminated and the energy programs housed under DCRA were returned to AEA, which was the starting point of AEA becoming a greater organization and an energy agency again.

In response to multiple question asked by Mr. Felix, Ms. Fisher-Goad said AEA was involved with the development of construction projects from start to finish, from financing a project to owning and developing an exit strategy for a project.

- **Alternative Energy & Energy Efficiency**

Ms. Fisher-Goad said that in 2008 there was a sense of urgency around developing an energy plan for the state. There were a variety of proposals as well as discussion of what should be done with AEA. AIDEA's and AEA's Board of directors made bylaw changes that established an AEA Executive Director, independent of AIDEA. The two agencies work well together but have two separate leadership positions. AEA was able to develop an energy plan with the strong focus of one leader. AIDEA developed their Strategic Plan with an aggressive approach to carrying out their mission. At the same time, the Renewable Energy Fund was established and given to AEA to manage. In 2010 the Emerging Energy Technology Fund was established and given to AEA to manage. In 2011 the Governor's report acknowledged that AEA played a key role in planning energy infrastructure and financing. AEA's mission is to reduce the cost of energy in Alaska. We lead a statewide energy planning process and assist rural communities in the Power Cost Equalization Program. We build tank farms, power systems, and train rural residents to manage those. We have energy efficiency and renewable programs, as well as staff that manages projects and grants, and provides technical assistance to entities looking to develop projects. We finance projects through the Renewable Energy Fund and the Energy Technology Fund. Our loan programs include the Power Project Fund and the Bulk Fuel

Revolving Loan Program. We also have owned facilities, the Bradley Lake Hydro Project and the Willow-Healy Intertie.

In response to Mr. Felix, Ms. Fisher-Goad said the Bradley Lake Hydro Project is managed by Homer Electric Association. The Alaska Intertie has agreements with Matanuska Electric Association and Golden Valley Electric Association to manage those projects. The utilities that benefit from these two facilities work with AEA. There is a Bradley Lake Project Management Committee (BPMC) which the Intertie is being modeled after.

In response to Mr. Felix, Ms. Fisher-Goad explained AEA's relationship with the Denali Commission, which primarily develops power systems and tank farms. AEA brings the federal money into the communities and manages the projects for them. We utilize private sector construction managers, but also have a lot of expertise within our staff. Payroll is managed through a bookkeeping firm for each of the communities. It is a paternalistic model, but one that the Denali Commission has required to protect the investments and infrastructure. We go through a business plan process. Once the project is complete and it is the responsibility of the community, assistance is still available to them. Funding flows from the Denali Commission to AEA and must follow their guidelines. The Denali Commission also works with AVEC, another senior energy partner who is in 53 villages throughout the state. The Denali Commission's grant process was reviewed. The Board talked about the Denali Commission's declining funds, what could be expected in the future, and the state's willingness to provide additional funds to continue with the powerhouse and tank farm upgrade programs.

Ms. Fisher-Goad continued by reviewing AEA's completed energy plans, which include the Alaska Energy Pathway, Rural Energy Plan (2002), Energy Policy Task Force, Rural Energy Action Council, RE Atlas of Alaska, Alaska Power Statistics, and Alaska Energy Inventory. The most recent one, the Alaska Energy Pathway, includes statewide policies to guide energy development, community and regional-scale recommendations for energy projects and financing options. The Railbelt Integrated Resource Plan, a state sponsored plan that was cooperatively produced by AEA and Railbelt Utilities, provides a preferred resource list for power generation, transmission lines, and establishes regional capital budgets for projects. The Southeast IRP is a regional energy plan for Southeast Alaska that is tailored to their needs. It is a cooperative effort between Southeast stakeholders and AEA that addresses the needs of remote communities without renewable resources through a public process to identify critical Southeast energy issues, resistive heating load growth, and the impact of electric cars.

Mr. Crimp discussed Inventory, a web-based graphic information system that provides access to information on coal, renewable energy resources, and oil and gas. The system was requested by and implemented through then-Governor Palin and is used as a planning tool for agencies, communities, and regions. We are increasing the data sets to include energy statistics, power statistics, and energy costs.

Ms. Fisher-Goad said the utilities are very concerned about the lack of good statistics. We share that concern and have been working to ensure that energy statistics are developed and maintained. We need good statistics so we can make good decisions on which projects to build. Mr. Short talked about energy in rural Alaska and questioned what the experts felt the future of diesel generation or alternative energy was in rural Alaska. Ms. Fisher-Goad said working through these types of issues was the primary duty of the Board and staff.

- **Power Cost Equalization, Bulk Fuel and RPSU**

The Power Cost Equalization Program was developed with the recognition that a good system for villages of 200 to 500 people is an energy efficient diesel system. There may be certain areas where you can do diesel displacement through a wind-diesel system or a small hydro project. The Renewable Energy Fund is working on diesel displacement and targeting high cost areas; however, there are rural areas where complicated systems cannot be installed without having people with the technical capabilities to manage them. The overall plan for Alaska is not going to be a transmission system through rural Alaska, because it would not work. However, in areas that can be regionalized, we are working on developing alternative types of projects.

Mr. Crimp felt the Board should be the catalyst for energy-related conversations in the regional plans. People are worried that energy in Anchorage will be very expensive in the next one to five years, but it has been very expensive in places like Bethel and Nome for the last 25 years. We need the people of Bethel, Nome, Kotzebue, Dillingham, and the surrounding villages to know there is an ongoing effort because there is a real sense of urgency as the viability and sustainability of communities across the state are decreasing every day due to high energy costs.

Ms. Fisher-Goad said the pending legislation deals with how AEA should be structured to work on, and hopefully solve, these complex problems. In addition to working on projects in the Railbelt, AEA also has a statewide perspective.

Mr. Felix felt there were two sets of problems: 1) lowering the cost of energy where you can take advantage of scale and 2) energy problems outside of those areas where you cannot easily build transmission facilities. He questioned if there were new technologies that would address those problems.

Mr. Mello said that in Bush Alaska 93 percent of all power generated is diesel, 6 percent is hydro, and less than 1 percent is wind. The hydro potential in western Alaska is very limited due to its flat terrain and freezing winters. Areas that have hydro power potential generally have lower fuel costs. What we can do right now is help the villages conserve diesel. In Akiak, they generate eight to nine kilowatt hours per gallon of diesel. After a new power plant is built, we can increase that to about 14 to 14.5 kilowatt hours, which is a 40 percent increase in fuel efficiency. We also install heat recovery systems that can displace about \$100,000 worth of diesel. This is off-the-shelf technology that can be done right now. There have been many improvements and we are currently working with the villages to conserve diesel by preventing leaks and spills, so 10 percent of their annual inventory is not lost. Another aspect we are working on is developing business plans so the community understands that the tank farms are capital assets. If you have affordable fuel, dependable power, and a decent business model then you have the beginnings of economic development.

Mr. Kendall, a member of the public, discussed several ideas that he felt the Board should be considering. He felt the problem with a vast sector of society was a no-can-do attitude. He noted that 98 percent of the villages were near some body of water, yet the water was not utilized as an energy source, which continues the mindset of leaning on diesel and carbon-based energy -- Alaska cannot afford this.

Mr. Felix said it was not the Board's role to design power systems for Alaska. The question was whether we are looking for solutions outside of diesel. Commissioner Bell said staff explained what they are currently doing in terms of the existing systems, which includes training and ensuring facilities are as efficient as possible. We need to look at the Renewable Energy Fund and the Emerging Energy Technology Fund and do what we can to ensure they have adequate resources in staffing, financing and collaboration.

Mr. Arvin discussed two potential projects. One was specialized boilers in the Kuskokwim and Yukon drainages. The idea was to plant fast growing, wood species that would be harvested on a cyclic basis and used to run the boilers year round. The main target was providing energy for community facilities, but it would overlap into residential heat generation. The other was an initiative in Galena regarding long-term nuclear cells that would generate large quantities of energy.

Ms. Fisher-Goad continued her presentation. The Railbelt Integrated Resource Plan, a state sponsored plan cooperatively produced by AEA and Railbelt utilities, recently completed a list of projects that would make sense for Southeast Alaska.

Mr. Strandberg discussed a previous congressional appropriation of \$387 million to create a backbone throughout Southeast Alaska that would connect all of the communities through an intertie. We realized after three studies that some Southeast Alaska communities such as Angoon, Kake or Hoonah, were not large enough to make an intertie economically feasible. Under the regional planning process, we are looking at those communities and the possibility of the solution residing in new technologies like LED lighting or pelletized wood fuel. Mr. Strandberg said the same problem may exist in Southwest Alaska. The cost of power in various communities in rural Alaska was discussed. The regional planning process focuses on communities having a difficult time, and out-of-the-box solutions that could help them. A key part is assessment of new technologies that could be used in the region such as LED street lights or smart-grid concepts. We must consider the technology, the load forecasts, and the financing approaches that could be used to develop projects.

*Recess from 11:07 a.m. to 11:21 a.m.*

Mr. Felix called the meeting back to order at 11:21 a.m.

- **Operations**

Ms. Fisher-Goad reviewed rural energy construction projects. We have completed 67 bulk fuel tank farm projects; nine are currently in process, and 29 projects remaining. There have been 48 rural power system projects completed, 16 currently in process, and 45 projects remaining. Before and after photographs of bulk fuel and rural power system upgrades were reviewed. We do remote monitoring and real time technical support which dramatically reduces travel costs. Staff is readily accessible to provide information to managers and operators. The Power Cost Equalization Program (PCE) provides a state subsidy to rural Alaska residents, but not for commercial businesses or schools. There have been concerns about how much of a school's budget goes to fuel costs so we provide assistance to schools primarily through energy efficiency programs. The lower cost energy enhances the quality of life, standard of living, and

economic strength in the communities. The average cost of electricity for rural residents is three to four times that of urban areas. Rural energy training courses include power plant operators, advanced power plant operators, bulk fuel operators -- bookkeepers and managers -- electrical utility managers and bookkeepers, and hydro operators. We have several upcoming conferences on wind-diesel and wood energy as well as the Rural Energy Conference, September 27-29 in Juneau. Board members are encouraged to attend the conferences. The Energy Efficiency Program (EEP) received \$9 million of the stimulus funds to provide block grants for small communities to develop energy efficiency measures. The funding, purpose, and distribution of the EEP were further discussed.

Mr. Crimp explained that the funding was distributed through city and/or tribal governments. After recognizing that some of the smaller communities did not have the capability of managing grant funds, an option for contractors to go in and do the work under the auspices of AEA was provided. The contractors coordinate with the communities to determine which facilities need to be address. Other communities choose to manage the grant money themselves. Ms. Fisher-Goad explained how the federal money runs through the state. Alaska Housing Finance Corporation (AHFC) receives the federal monies and we partner with them on how the money is distributed. The majority of 2009 funding stayed with AHFC to develop a revolving fund loan program for community facilities and schools throughout the state. Mr. Burnett continued to talk about the revolving fund loan programs. Some local governments do not have the administrative capability to borrow and pay back money which is why the program was developed. We have programs for the more sophisticated communities, but the ongoing question will be if we doing enough for the smaller communities. Ms. Fisher-Goad said AEA was in most of these communities dealing with tank farms, powerhouse systems, or other systems. Mr. Crimp said AHFC provides low cost financing for the larger communities. The Denali Commission has funded AEA projects to increase the community energy efficiency, which generally costs about \$60,000 for smaller communities and \$100,000 for larger communities. AEA works very closely with AHFC because they do the work for the residential side. The Energy Rebate Program has been highly successful and about seven million gallons of fuel has been saved so far.

Ms. Fisher-Goad discussed renewable energy. There are many statewide programs in a variety of energy sources including biomass, combined heat and power, geothermal, hydro, ocean/river, and wind. Last year, the Legislature adopted the goal of 50 percent of Alaska's electricity being provided by renewable resources by 2025.

The Board talked about enforcement of the goal and the milestones AEA needed to set to meet. Mr. Strandberg pointed out that it may not be economically feasible for communities without renewable energy resources to reach 50 percent by 2025, but it might be feasible for a region. Ms. Fisher-Goad pointed out that the overall mission of AEA was to reduce the cost of power, not diversifying energy resources which could change in the future. The Legislature wants to ensure that our programs are reducing costs for ratepayers. Mr. Felix felt reduced power costs and diversification as well as alternative energy sources needed to be pursued. The biggest concern is it may not be timely enough if there is a worldwide energy crisis. Mr. Arvin questioned if the percentages would be met if Susitna were turned on and Beluga and ML&P's natural gas was turned off. After the Board talked about alternative energy sources and energy needs within the regions, it was noted this item would be further discussed later in the meeting. Mr. Short said the energy decisions made today will determine whether smaller rural Alaska communities prosper or disappear. AEA Board members have the responsibility to ask the

tough questions regarding energy. Ms. Fisher-Goad said it was beneficial to know what to concentrate on. The current legislation we are proposing is not just about the Railbelt region, but we are emphasizing that AEA should be the financing agency for energy projects on a statewide basis. Our programs are stable, and we are looking at what needs to be addressed in rural Alaska. In the Governor's budget, we have proposals to increase funding for our training and technical assistance programs. The Board should know that we are very sensitive to our statewide process. Mr. Strandberg reiterated that the goal is to reduce the reliance on fossil fuels, but also to lower the cost of energy for the communities. In response to Mr. Short's question regarding Fairbanks fuel, Mr. Wilken said the bullet line should not be built unless you are willing to subsidize it for many years. I do not consider this a rural versus urban issue. The census data coming out will show which villages are growing and those shrinking. Those that are growing are near resource development. If the Susitna project is built, it will generate 1,000 megawatts of replacement power. Beluga's power will suddenly become cheaper, providing more discretionary spending money to drive the economy. The Susitna project has the potential of lowering power costs for 70 percent of Alaska. We need to become a business friendly state by developing our resources so we can grow. We start the process but not at the expense of rural Alaska. We need to ensure that the work we are doing benefits the majority of Alaska as well as rural Alaska.

Ms. Fisher-Goad stated the Renewable Energy Fund is our primary program to develop renewable projects. The seven-member advisory committee, which was reviewed in relation to urban and rural representation, helps us develop our methods and project selections. Mr. Crimp is developing a list of projects that have the best chance of being constructed and will be available at future meetings. Unlike AIDEA, AEA is a granting agency. Although the applicants build the projects we are available to act as the project manager if necessary. This program will sunset in 2013, but we expect a legislatively driven proposal to extend the program with some possible changes. Pie charts on the allocation of project funding and estimated fuel savings per year were reviewed.

The Board questioned why more communities did not fund projects. Ms. Fisher-Goad explained that changing the cost from fuel to debt service is not the Legislature's intent rather it is cost reductions. The Board discussed projects like the Anchorage landfill gas project and the Chena geo-power project in relation to the percentage of funds spent on feasibility studies (about 20 percent) versus the actual project.

In response to Mr. Wilken's question on whether there was a rate base and a requirement to set aside money for depreciation and maintenance on projects after the state withdraws, Mr. Crimp explained that independent power producers, who can receive funds to install power plants, have to sell 100 percent of their energy to the public. We cap the tariffs that they can receive based on return equity, operation and maintenance costs, and debt service, such that they cannot be unduly enriched using state funds. Mr. Strandberg further explained the program, which is a cooperative approach between the RCA and AEA. There are independent analysts on each project that set the rate cap over the life of the project. Under conventional rate making rules, grants are termed contributions in aid of construction and are not allowed in the rate base; therefore, the company cannot collect on the rate base and no benefits are extended to the shareholders on state money. In response to Mr. Wilken, Mr. Strandberg said that the agency does not move money to a project until there is a power sales agreement that confirms the flow of benefits. We prefer the power sales agreement to be long-term and one that cannot

be easily changed. There is no money set aside to police the projects in the future. The majority of the private companies are subject to RCA jurisdiction which reviews and approves any changes to the power sales agreement. The Board discussed AVEC, a cooperative that is not presently regulated by the RCA. The Board continued to talk about projects that have received and/or may receive grant funding.

In response to Mr. Sheldon, Mr. Bjorkquist explained that under PURPA, legislation enacted in 1978 to promote alternative energy, a qualifying facility has the right to sell power to a utility at the utility's avoided cost. PURPA allows an independent power producer (IPP) to sell wind power or other alternative energy constructed with grants at the full diesel cost. What an independent power producer can charge for power is limited by grant conditions that specify that the lower cost power has to benefit the ratepayers. Mr. Sheldon said IPPs should be encouraged if the goal was truly putting a distributed power architecture in place. The message he got from the previous discussion was, "utilities good, private industry bad." Mr. Sheldon asked for verification on how benefits do not flow from the IPPs to the ratepayer. Mr. Strandberg explained that in rural communities the avoided cost of power is very high. If we buy down the cost of a project, particularly a renewable energy project, allow the private power companies to interconnect with the existing utility under PURPA rules and be paid the avoided cost, then the ratepayer would receive no benefits from the investment. Mr. Sheldon disagreed with Mr. Strandberg's answer and felt that the benefit would be the multiple sources of power.

Mr. Felix said the point of the grant was to ensure the benefits flow to the ratepayers as opposed to the shareholders of a company. Mr. Sheldon said there were other indirect benefits that were not being considered. The avoided cost argument has been used for two decades to keep IPPs out of the Railbelt area. Mr. Sheldon said he disagreed and felt AEA should allow some of these things to go forward on an experimental basis. Ms. Fisher-Goad agreed that there should be further discussion on where IPPs fit into the electricity market in Alaska. However, AEA receives a significant amount of state money to issue grants. The Legislature did not restrict independent power producers from being potential grant applicants, but the issue is our responsibility as a state agency to make sure that the grant funds are being used for a public purpose and not enriching a private company. Mr. Short said other states have provided state tax credits. There is a 30 percent state tax credit for solar and wind projects as well as a 30 percent federal tax credit which is 60 percent of the overall cost of the project and attracts investors. We do not have that process in Alaska. We need to discuss a strategy to incentivize private capital coming in as opposed to just giving out grants. Mr. Sheldon further discussed IPPs. Before we use terms like "unduly enriched," we need to establish the actual baseline which can only be done by trying some of these projects on a pilot basis. Not necessarily by awarding them grants, but by lending them our legitimacy under the auspices of the grant program to help them work with the RCA and other groups that have successfully kept them out of the market. The Board further discussed the issue of IPPs in relation to encouraging renewable energy projects.

Mr. Sheldon questioned why 100 percent of the power had to be sold in the market when this often renders a potential project as too risky due to uncertainty surrounding successfully bringing generation online. Ms. Fisher-Goad said it all tied back to maximizing the public benefit for public dollars. We have talked about tax incentives and other incentives. IPPs are treated just like non-profit utilities or municipalities in that we require them to show us the public benefit derived from the public money. Mr. Wilken felt more time needed to be spent on this issue.

House Bill 152, which was groundbreaking legislation, is up for reauthorization and any changes, specifically concerns about eligible participants, should be clarified. After further discussing the issue, Mr. Felix suggested continuing the House Bill 152 discussion at the next meeting.

*Recess from 12:46 p.m. to 1:18 p.m.*

Mr. Felix called the meeting back to order and noted that since Mr. Bjorkquist would have to leave shortly, infrastructure and large projects would be discussed ahead of schedule.

- **Owned Facilities**

Ms. Fisher-Goad reviewed the Bradley Lake Hydroelectric project, which produces 10 percent of the energy in the Railbelt and is currently the low cost energy producer. We have been using the Bradley project loosely as a model when discussing another large hydroelectric project. The state contributed 50 percent of the capital needed to build the project. The power sales agreement requires the Railbelt utilities involved in the project to pay the state about \$12 million a year for 20 years, the amount equal to the debt service, to build up a fund for additional power projects for the Railbelt area. The Alaska Intertie is the other AEA owned asset. The project was not funded by debt, but capital appropriations from the Legislature. It is operated by the Railbelt utilities. The Alaska Intertie Agreement is presently under renegotiation with the utilities. The overall intent of the renegotiation is to develop a model that is similar to the Bradley Lake BPMC model for the management of the asset.

- **Intertie Agreement**

Mr. Bjorkquist explained the history, process and reasons why the Alaska Intertie Agreement needed to be renegotiated. The problems included repairs were not being done and certain agreement provisions were not being followed. In 2000 and earlier, AEA's Board decided it would be best if AEA got out of the energy generation business and tried to get the utilities to step-up and agree to take responsibility and control. The solution is somewhere in between: the utilities will make management decisions and AEA will have more of an oversight responsibility. We are very close to having an agreement in place that everyone will agree to. In response to several questions, the following information was provided: AEA would continue to own the 170-mile transmission line asset which was further described. In addition, another 25 miles of MEA-owned transmission lines are incorporated under the Alaska Intertie Agreement. Mr. Strandberg disclosed that members of AT&T have proposed to AEA that they take over communications. As part of this process, the utilities will be negotiating a new agreement amongst themselves, which will not be part of the Alaska Intertie Agreement. The Intertie Management Committee, the new entity that will manage AEA and the utilities, will sign on for purposes of operating the Alaska Intertie. Mr. Strandberg pointed out that the Alaska Intertie is a state-owned asset very important to all the utilities in the region. It is important to remember that there are also potential IPPs that could evolve and interconnect. A lot of work needs to be done at the technical level, as well as building trust between the different parts of the industry. The asset does not have any outstanding debt so the tariffs are set on predicted use by the utilities and an operating budget that has no debt component. The resulting tariff and cost of moving power is very low, which is a benefit to both the utilities and the region. The operation of the Alaska Intertie was reviewed. Golden Valley operates the system from the north, ML&P operates the system from the south,

and Chugach Electric maintains the relays and substation components. There is a lot of cooperation that allowed this important asset to occur. The only reliability rules in the system reside in the addendum to the Alaska Intertie Agreement, which is signed by the utilities and not AEA. The economics of the Alaska Intertie was discussed. The Department of Defense has expressed an interest, through Doyon Utilities, in gaining access to the Alaska Intertie and they have agreed to participate in these negotiations. Other entities that may want to connect to the Alaska Intertie in the future were discussed.

Ms. Fisher-Goad discussed the Susitna Hydroelectric Project which would allow the state to reach its 50 percent goal, have minimal impacts on fisheries, and provide long-term and stable energy prices. After a \$10 million appropriation was allocated to review two projects, it was determined the Susitna project should move forward. The Board talked about Susitna's projected capacity and the potential of increasing the project if there is more demand in the future. Mr. Strandberg said there was an excessive amount of generation being planned and designed. Eventually the Beluga power plant will be retired. Homer Electric is developing significant gas-fired generation and MEA is looking into it. Chugach Electric is developing its south Anchorage plant which will replace the Beluga power plant, and mesh with the development of the Susitna project. Mr. Wilken compared it to building a freeway that would be full as soon as the ribbon was cut and suggested that 600 megawatts may not be large enough. The Board questioned if other projects such as the Fire Island Wind Farm would be stopped if the Susitna Hydropower Project went forward. Mr. Strandberg felt that private developer projects that produced economical power should remain on the table.

Ms. Fisher-Goad reviewed the estimated timeline for licensing, FERC processing, construction, and the startup of Susitna, for a total of 11 years until the startup. She said the Legislature had questions regarding RCA oversight. AEA is currently exempt from RCA oversight and it makes sense to continue that exemption although there has been some push back from the Legislature as to whether that is appropriate. If we move forward with this project through the power sales agreement, the RCA would have oversight of the power sales agreement that would be developed and executed between AEA and the utilities. FERC oversight versus RCA oversight and their different licensing procedures were discussed.

Mr. Bjorkquist explained that FERC exclusively licenses hydroelectric projects. Their licensing manual suggests that they look at development aspects of a dam versus non-development aspects. They evaluate whether to license a project based on a full range of all the public interests from environmental to the cost of power. FERC monitors and enforces compliance with the license conditions throughout the life of the license as well as maintains jurisdiction over amendments to the license. The license conditions encompass things like environment and water flow issues that increase the cost of what would otherwise be the lowest cost power. The FERC license covers the entire waterways, a little bit of land around the waterways, and the transmission line to get from the power station to connect to the distribution utility or the distribution grid. The RCA does not have jurisdiction over AEA, but they do have jurisdiction over the utilities and the power sales agreement. FERC's involvement lasts through decommissioning and removal of the dam. The Bradley Lake project, which was a FERC licensed project and used to establish the timeline for the Susitna project, was discussed. The Board talked about whether the timeline could be reduced to less than six and a half years. Mr. Arvin felt it was his duty to say that the regulatory process was laughable, especially when compared to China. Mr. Wilken felt it was likely that several groups would oppose the project

including the environmental community, and under the current administration, the EPA and the Interior Department, which could lengthen the timeline. On the bright side, we could utilize the template created by Senator Stevens and the Pipeline Act of 2004, which was granted expedited permitting and FERC oversight jurisdiction.

Ms. Fisher-Goad talked about the steps necessary to move the Susitna project forward. Before the project goes forward, there are still studies to be done to see if there are better alternatives, if it will produce the power needed, and if it is economical. Commissioner Bell asked about the Board's role in the legislation. Ms. Fisher-Goad discussed the legislation which will broaden in scope to include AEA owning new projects. As discussed earlier, we have a statewide presence and there are other areas of the state where it makes sense to do state agency-owned projects. The Board should start thinking about the criteria for AEA owning new projects. The old AEA statutes have criteria that could be looked at. AIDEA's Development Finance Program has legislative approval to issue bonds for owning a project if AEA's financial feasibility determines it makes sense. Those could be models and tools with respect to developing the criteria for determining where projects should be built on a statewide basis. The Senate Resources Committee produced a bill that stripped it down to us just moving forward with the Susitna project. After explaining to the Senate that although the Susitna project will be beneficial for years to come, there are also other things that the agency should be doing -- there were three changes proposed to the original legislation as provided in the work draft distributed to the Board. In the work draft, AEA would lose the ability to adopt our own procurement codes, subsidiary corporations would be restricted, and distributions of the Alaska Renewable Energy Fund would require a legislative appropriation. AEA is primarily funded with appropriations. We are subject to the Executive Budget Act for both operating and capital. AEA has a \$45 million operating budget, which was briefly reviewed. AEA does not have a lot of general fund flexibility as we have a very specific direction from the Legislature. I believe it is important for the Legislature to hear from the Board members as to their view of AEA being the energy agency for the state.

- **Operations (continued)**

Ms. Fisher-Goad returned to the discussion of the Emerging Energy Technology Fund which is a new program that AEA is managing. Mr. Crimp said the objective of the program is to promote the expansion of energy sources available to Alaskans. The total funding is \$4.8 million and comes from AEA and the Denali Commission. The purpose is to identify and demonstrate technologies that appear to have commercial viability. Funding applications for technology commercialization projects are due March 17, 2011. New technology can include fossil, energy efficiency, renewable, or anything else. In response to Mr. Felix saying he was struggling with the term "emerging energy technology," Mr. Crimp provided several examples including a pellet fiber boiler at the SeaAlaska building in Juneau and a hydro-kinetic device that generates power with the current of a stream. Commissioner Bell noted that some of the technology was already invented, but had to be scaled to fit Alaska's population, weather, or other issues. Mr. Crimp said the program was structured based on the U.S. Department of Energy's Technology Readiness Assistance Debt Program. The application process and the advisory committee, who are all engineers and will review the applications for the Emerging Energy Technology Fund, were discussed. The maximum the program will fund is \$750,000, anyone with a business license can apply, and the first award should be before July 1. The program and its intent, which is to fund demonstration projects, were further discussed. Mr. Felix said new technologies could

not be commercialized for \$4.8 million. Mr. Mello discussed the difficulty of integrating intermittent energy, such as wind technology, with diesel and felt a grant of this size would help. Mr. Crimp said he shared Mr. Felix's concerns. Staff has researched similar programs and tried to set up the program to ensure that the technology being used has already been substantially moved forward. The Board further discussed kinds of projects the program would include and the deliverables that could be expected. The cost to administer the program is not included in the \$4.8 million of grant money. Mr. Sheldon felt this was a good program that should probably receive more funding. Ms. Fisher-Goad explained that AEA is a state corporation subject to the Executive Budget Act and the Governor's budget process. The Board needs to define what they want AEA to advocate for, through the Governor's budget process, for inclusion in the next budget. The Board further discussed the Emerging Energy Technology Fund.

*Break from 2:57 p.m. to 3:08 p.m.*

Mr. Felix called the meeting back to order at 3:08 p.m.

Ms. Fisher-Goad reviewed the AEA loan programs. The Bulk Fuel Revolving Loan Fund provides low-cost loans to rural communities to purchase a year's worth of bulk fuel. The loan amounts, interest rates, and payback requirements were discussed. There are about 50 to 55 loans each year. The default rates on the loans were discussed. There are currently no 90-day delinquencies and the program is very healthy. Communities that do not qualify for this loan do have programs through other entities that they can utilize.

Ms. Fisher-Goad discussed the Power Project Fund which provides loans to local utilities and governments, or independent power producers, for the development or upgrade of electric power facilities including conservation, bulk fuel storage, and waste energy conservation. Loans from the fund can be used to finance all phases of project development from feasibility studies, licensing and permitting, design and engineering, to construction and expansion. Any loan more than \$2 million would be to the Board for approval, and any loan more than \$5 million needs legislative approval. If this program is going to be a source of funding for renewable or traditional energy projects, it will need to go through some changes which were discussed. The portfolio was \$24 million when it was purchased by AIDEA on September 30, 2010, with an approximate \$3 million differential since it was based on a present-value computation. The fund currently has a healthy cash balance. The Board discussed the sale of the portfolio to AIDEA, interest rates, and AEA's ability to charge a lower-interest rate for certain projects. The Board discussed the relationship between the programs. Mr. Crimp said his staff included nine specialists in different areas, all of which were aware of state and federal financing programs and could help people select the appropriate program for their project.

Ms. Fisher-Goad talked about AEA's website, which currently contains a large amount of information. Staff is currently working with a consultant to improve the website. Mr. Short felt both AEA's and AIDEA's website needed to be improved because it is difficult to figure out what programs are offered. The Board further discussed the website and what they should include.

The floor was opened to questions and/or comments. In response to Mr. Wilken, Mr. Strandberg talked about a Fairbanks project that he felt was a valid project, although there have been concerns about the cost of the high voltage. In response to Mr. Short, Mr. Strandberg reported on the ACE Conference in Juneau. Mr. Strandberg said the message he delivered to them is

that AEA is generally supportive of private sector economic development projects and will help wherever we can. He said he invited them to bring their business cases to us for review. Mr. Arvin talked about the Susitna project. The Matanuska-Susitna Borough has an over 50 megawatt power generation ordinance that includes hydro power. The ordinance needs to be reviewed and possibly amended to exclude hydro power.

## 7. DIRECTOR'S COMMENTS

- Next regularly scheduled board meeting is Wednesday, March 2, 2011

Ms. Fisher-Goad thanked everyone for their participation and said she was looking forward to working with the Board. Anyone interested in testifying on House Bill 103 or Senate Bill 42 should contact Ms. Fisher-Goad.

After Ms. Fisher-Goad asked the Board about the level of information they wanted to receive, Mr. Felix suggested a one-page weekly or semi-monthly e-mail to the Board on issues of interest, and to which they could submit responses. The objective is to avoid receiving information for the first time at Board meetings. A well-managed Board is a happy Board.

## 8. BOARD COMMENTS

In response to Mr. Arvin's question regarding Healy clean coal, Mr. Felix said there would be a briefing on the topic, in executive session, in the future. Mr. Arvin said he requested a legal finding from the Borough's legal department regarding possible overlaps between his duties at the Borough and as a Board member. He would also like to talk to someone at AEA about the issue. Mr. Felix said he would need to speak with Mr. Bjorkquist.

Mr. Wilken said he enjoyed the meeting. With so many exciting things happening, this seems like a good Board to be on for the next couple of years.

Mr. Short thanked Mr. Felix for his leadership and staff for their assistance.

Commissioner Bell said she was thankful that everyone was able to get together for the meeting.

Mr. Felix thanked all of the members for serving on AEA's Board of Directors. After discussing his transfer to Dallas, Texas and his desire to ensure the Board continued running smoothly, Mr. Felix said he would continue to participate in meetings either in person or via teleconference until the Board was ready to elect a new Chairman at which time he would leave.

## 9. ADJOURNMENT

There being no objection, the meeting was adjourned at 3:50 p.m.



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Sara Fisher-Goad, Executive Director/Secretary  
Alaska Energy Authority