



Alaska Energy Authority
BOARD MEETING MINUTES
Monday, October 1, 2012
Anchorage, Alaska

1. CALL TO ORDER

Vice Chair Susan Bell called the meeting of the Alaska Energy Authority to order on October 1, 2012 at 10:05 am. A quorum was established.

2. ROLL CALL: BOARD

Members present: Chair Hugh Short (Public Member); Commissioner Susan Bell (Commissioner DCCED); Deputy Commissioner Angela Rodell (Deputy Commissioner of Revenue); Ron Arvin (Public Member); Robert Sheldon (Public Member); and Gary Wilken (Public Member).

3. AGENDA APPROVAL

MOTION: Deputy Commissioner Rodell made a motion to approve the agenda. Motion seconded by Mr. Sheldon. The motion was approved unanimously.

4. ROLL CALL: STAFF, PUBLIC

Staff present in Anchorage: Sara Fisher-Goad (Executive Director, AEA); Gene Therriault (Deputy Director - Energy Policy Development, AEA); Sandra Moller (Deputy Director – Rural Energy Programs, AEA); Sean Skaling (Deputy Director – Alternative Energy & Energy Efficiency - AEA); Karsten Rodvik (Project Manager – External Affairs, AEA); Jay Drewry (Chief Procurement Officer - AEA); Kirk Warren (Project Manager, AEA); Valorie Walker (Deputy Director – Finance & Administration, AIDEA); Leona Hakala (AIDEA); Chris Anderson (Deputy Director – Commercial Finance, AIDEA); Jim Strandberg (Finance Officer – Energy Development, AIDEA); Jerry Juday (Department of Law); May Clark (AEA Executive Assistant); Sherrie Siverson (AIDEA Executive Assistant); Teri Webster (AIDEA Administrative Assistant); Sunny Morrison (Accu-Type Depositions); Donovan Walker (Accu-Type Depositions); and Tom Seville (First National Bank).

5. PUBLIC COMMENTS

There were no public comments.

6. PRIOR MINUTES

MOTION: Deputy Commissioner Rodell made a motion to approve the August 14, 2012 minutes. Motion seconded by Mr. Sheldon. The motion was approved unanimously.

7. EXECUTIVE DIRECTOR COMMENTS

7A. Program and Project Fact Sheets

Ms. Fisher-Goad said flooding in the Valley has impacted the Susitna-Watana Project, but fortunately, there was no loss of life. Two watercrafts at Fog Creek were swept downstream of

Devil's Canyon and were lost. The Swift-Water training crew was able to save some critical data and equipment, with some equipment loss. The contractors and crew assisted with the emergency response in Talkeetna. She said the geomorphology study and aerial photography work will have to be rescheduled. Mr. Dyok will provide a report to the Board with additional details as to the longer-term impacts on the river from the flooding.

Ms. Fisher-Goad announced that October is Energy Awareness Month and AEA is working with the Energy Efficiency Partnership. AEA is the organizer of the partnership and there will be many media events throughout the month with a focus on energy efficiency and conservation.

Ms. Fisher-Goad asked Mr. Therriault to speak on a potential financing plan with the Governor's office for the Fairbanks liquefied natural gas (LNG) issue.

Mr. Therriault stated the Governor issued letters to the players that are involved in the concept of liquefying natural gas on the North Slope for delivery to Interior Alaska. He said the Governor wants to meet and get collaboration among the players so that if the state chooses to back a project, they will have the information. Mr. Therriault said this is not just for the Fairbanks area, but is intended to serve a much larger geographic area.

Mr. Therriault discussed the recent legislation signed by the Governor that allowed for a storage credit for the construction of LNG storage. He stated communities along the highway system, such as Tok and Glennallen to Southeast Alaska, are watching the players in Fairbanks as they discuss the delivery price on the commodity versus buying LNG on the open market.

Mr. Therriault stated AEA personnel have traveled to Fairbanks and completed feasibility work for the Governor. He said Fairbanks Natural Gas and Golden Valley Electric Association (GVEA)/Flint Hills Resources still have competing proposals in the Fairbanks area. Mr. Therriault stated there was a meeting at the North Pole City Council this past Tuesday and there will be a meeting at the Fairbanks Borough Assembly on Thursday discussing whether the local governmental entities should create a municipally sponsored utility that could be a player in potentially receiving grants from the Legislature or participating in loan financing by the state through AIDEA and AEA. At this point, the proposal is for the cities of Fairbanks and North Pole to divest themselves of their utility powers and pass them over to the Fairbanks North Star Borough. Mr. Therriault stated the local assemblies will have to make these decisions and the state government is not going to advise on these issues.

Mr. Wilken asked Mr. Therriault to explain the ways AIDEA and AEA may be involved in the Fairbanks related issues. Mr. Therriault stated there are five different cost blocks in developing a project that will bring the gas molecule from the North Slope into the Interior market: 1) the cost of the commodity of gas and the state has no involvement in this; 2) the infrastructure to convert the gas to a liquid form. The debt associated with building these plants has to attach itself to the product and this is an area where the state potentially can impact the price of the commodity through capital grants; 3) the transportation cost into the community and the state would probably not have any effect on this; 4) the storage vessel and re-gas facility in the community. The state passed storage credit legislation last year where the state indicated a willingness to share in that cost; and, 5) the distribution system for the end consumer. This is an area where the state may be able to assist on long-term financing for the large capital costs.

Mr. Wilken requested Mr. Therriault discuss his knowledge of the Governor's letter to the four players and their response. Mr. Therriault stated the Governor drafted a letter and asked for AEA involvement in the drafting of the language and who it should be sent to. Mr. Therriault stated the letter was sent to Fairbanks Natural Gas, GVEA, Flint Hills Resources and Fairbanks Economic Development Corporation (FEDCO). He said the state decided not to include local officials due to

local elections being held and the Assembly membership will change and North Pole will elect a new mayor in two weeks. The newly-elected officials will be aware of the next meetings. Mr. Therriault stated since the letter has been distributed, he has heard a number of positive comments appreciating the Governor's willingness to help and to set up a meeting, or a series of meetings, for the players to collaborate. Mr. Wilken asked if the Governor's letter requested top level meetings in Anchorage in mid-October. Mr. Therriault stated the meetings could be held in Anchorage or in Juneau and left that decision up to the players, but requested the meetings begin in mid-October.

Mr. Wilken thanked Mr. Therriault for his briefing. He said he would like to learn more about this subject. He urged the Board not to give up on Cook Inlet because they are looking for gas. He said the projects should not expect any handouts from AIDEA or AEA, and they should be supported by a robust business plan.

Mr. Arvin asked Mr. Therriault to explain his views on how on the energy crisis in rural Alaska benefits from this program or if it is strictly for the Interior and Fairbanks area.

Mr. Therriault stated there were areas outside the core of the Fairbanks North Star Borough that entered into the debate in Juneau and helped to get the storage credit legislation passed last year. He said Alaska Power & Telephone (AP&T) has indicated they are interested in the resource.

Mr. Therriault stated two percent of the gas stream on the North Slope is propane, which is not a large volume, but is a propane stream that could be available to the greater North Star Borough or for communities on the road system. He said he knew of rural communities who were interested if the resource becomes available. Mr. Therriault stated people will figure out creative ways to get access if it is economical and lowers the cost of energy.

Mr. Arvin asked if propane and LNG modules could be brought to the villages, would the state participate and help with the conversion from diesel. He asked if there was discussion on a program to convert community centers, public facilities and residences.

Mr. Therriault stated that has not been part of the discussion at this point and the project has to first work for the core of Interior Alaska on the road system. He said there is a second tier of utilization of the resource if it becomes available.

Ms. Fisher-Goad stated there is a significant amount of regional planning beyond the Railbelt and Southeast. She said AEA is looking at a holistic approach for the region with respect to other fuel sources that could be available to the smaller communities.

Mr. Therriault said the focus in rural Alaska has been on the propane side. He stated the Alaska Oil & Gas Conservation Commission (AOGCC) responded to a request to look at whether propane was being handled properly on the North Slope or whether it was being wasted. He said AOGCC rendered an opinion in September the most valuable use for propane at this time is as a component of an injectant used in the oil fields.

Chair Short asked Mr. Therriault what the timeline is for this plan. Mr. Therriault stated Fairbanks Natural Gas and GVEA indicate the earliest they could be delivering the commodity is 2015. He said it would be difficult to deliver by that date because the big components of a production plant have a fairly long lead time of 18 months and if the companies wait until April 2013 or even July 2013 to see what level of participation the state may have that could impact the economics of the project, which pushes the timeline out further.

Chair Short asked what is Fairbanks Natural Gas' core penetration percent. Mr. Therriault stated the service district is the city limits of Fairbanks and they serve 1,100 customers, both residential and

industrial. He thinks the potential is 8,000 or 9,000, which is a fairly small portion within their existing service territory.

Ms. Fisher-Goad suggested discussing the High Voltage Direct Current (HVDC) proposal. She said they have been working on the evaluation of the HVDC proposal from the Slope. She stated they have identified additional analysis that needs to be completed.

Mr. Therriault asked Mr. Warren to comment as well because he attended the training on this recently. Mr. Therriault stated there are a number of areas across the world where HVDC transmission of power has been utilized, but it is primarily used for the delivery of very large amounts of power from point A to point B. He suggested AEA evaluate whether this technology would make economic sense to deliver off the North Slope into the Railbelt and whether the power could also be used in a village setting.

Mr. Warren stated some of the bigger concerns that were raised at the training were the various technologies that are being conceptually looked at. HVDC has line current commutation (LCC) and voltage source commutation (VSC). Nowhere in the world has the LCC and the VSC technologies been implemented together and that is a concern for how it is proposed to be dispatched in Alaska. Another concern is the cost to change the infrastructure for all of the utility companies in Alaska, and that there are only three vendors in the world for this technology. Spare parts need to be built into the system because there are no spare parts available which would cost between \$50 M and \$100 M. There is also no workforce available in the United States to handle the operation and maintenance issues of an HVDC line.

Mr. Sheldon asked if there was workforce for the installations already in place in the United States. Mr. Warren said there is no workforce for the various technologies. VSC is a fairly new technology, but some people are trained. Mr. Sheldon encouraged AEA to take a closer look at this technology, especially with what Fortum, a Scandinavian company, is doing with it. He said this is a very tightly controlled technology, as there is a lot of money to be made if they can actually perform like they say they can; and he is interested in learning more about co-development between broadband in addition to power. He noted AIDEA has officially announced a predevelopment agreement with Arctic Slope Regional Corporation to review port sites with various coal companies, such as Western Arctic Coal. Mr. Sheldon stated those loads, combined with the Ambler district loads, might have us proceed in a different direction than what is being suggested.

Ms. Fisher-Goad said we want to make sure as the HVDC proposal has been suggested as the answer to electrify all of Alaska, we need to look at these issues and make a fair comparison of the different processes. She stated AEA has some of the expertise to fully evaluate and analyze the projects.

Chair Short asked Ms. Fisher-Goad how this proposal integrates with the regional plans as a viable alternative to locally generated power. Ms. Fisher-Goad stated we were approached by the Pebble Partnership as to how this could fit into the regional energy picture if the mine is developed. This would not necessarily be a solution to a small community with 200 to 500 people. She stated the larger loads of 150 to over 400 megawatts needed for Donlin and Pebble Mine are potential game changers in any type of a proposal where there can be partnership and community benefit based upon the development. Ms. Fisher-Goad stated these are very complicated issues and are not easy questions to answer. She said an energy efficient diesel system is still one of the most reliable ways for power to be delivered to many rural communities. She said it is important to incorporate renewable energy sources to the communities where it makes sense.

Chair Short thanked the Governor and Mr. Therriault for the holistic approach they have taken in Fairbanks by naming the five areas and listing the areas where the state could be involved. He

stated this is a big step in getting the players to collaborate. Chair Short said another area to look at beyond Fairbanks, is the HVDC, large-scale mines and larger communities. Chair Short said his controversial statement is that we can't save every community in Alaska. It is just not possible, but there are certain regions of the state that are regional hubs, such as Kotzebue, Nome, Bethel and Dillingham, if those are coupled with large-scale mining and other resource development, there may be viable applications for the transfer of huge amounts of energy to those areas that save the economies, the culture and the people in that area. Chair Short suggested continuing the discussion on how the Board can be the catalyst to get the players around the table, including Donlin Creek, Pebble Mine, Nova Gold, and Western Arctic Coal, and how they can work together to present an economically feasible plan that serves the need to create jobs in Alaska and benefit the local communities.

Ms. Fisher-Goad stated we are close to finalizing the published list of grants for the Emerging Energy Technology Fund. The appeal process is ongoing. She said AEA was well received during the recent Southeast Conference Annual Meeting and that AEA continues to develop community technical assistance and outreach.

7B. Next regularly scheduled meeting – October 30, 2012

8. BOARD COMMENTS

Mr. Wilken stated he appreciated spending the time and money on the helicopter trip during the Susitna-Watana site visit and meeting in Talkeetna. He suggested the Board members take the Mahay's river boat trip to Devil's Canyon. Mr. Wilken said he is not backing off the Susitna-Watana project one kilowatt, but did come to appreciate what the river is and means to the folks that he spoke to.

Deputy Commissioner Rodell thanked Mr. Therriault for his comments today and that we can get natural gas to Fairbanks, but then Fairbanks has to figure out what to do with it. She asked if there could be one meeting for November/December rather than two meetings because of the holidays and other scheduling conflicts.

Mr. Sheldon asked if there could be a brief update on the Alternative Energy & Energy Efficiency (AEEE) Program fact sheet. Ms. Fisher-Goad said AEA is coordinating with AHFC to make sure everyone understands the Energy Efficiency definition and goals. She said those that support development in the State of Alaska want to see industrial development use increase, which means there is economic activity in the state. Ms. Fisher-Goad said she would get Mr. Sheldon additional information. Mr. Sheldon suggested updates could be placed on the AK Energy Efficiency Map site. Ms. Fisher-Goad stated the plan is get specific information as well as community and statewide information. Mr. Sheldon wanted to discuss the ocean and river programs for the state. He stated there has been a decline recently in potential projects that could be due to the restricted habitat for the Beluga whales and he asked if that is a potential fatal flaw in a lot of the tidal developments in the Cook Inlet area. Ms. Fisher-Goad stated she would have to get back with him on the details of that, but she said they are working with NOAA on the mapping of the Cook Inlet region. She said one of the projects was moved to a non-sensitive area. She stated she would get more information from the project manager.

Mr. Sheldon stated he may have misstated how the dollar value is determined for the Power Cost Equalization Program. He said it is 7% of the fund's three-year monthly average market value that is made available and he appreciates that clarification.

Ms. Fisher-Goad said the \$400 M that was capitalized in the endowment is working through the program and in FY14, the PCE endowment amount available is over \$30 M.

Mr. Arvin stated he appreciated the questions Mr. Wilken asked of Mr. Therriault today. He stated AEA's public outreach to the Matanuska-Susitna Borough with respect to Susitna-Watana is going very well and he encouraged AEA to continue public outreach because it is effective and thanked AEA for their work. Mr. Arvin requested more information regarding the Renewable Energy Fund. He stated it is important for the Board, from a financial oversight responsibility, to have an opportunity to ask more questions and get more information on those projects. He requested Ms. Fisher-Goad to provide an email with that information or make it part of the public record for the next agenda. Ms. Fisher-Goad stated she can provide a full overview of the Renewable Energy Fund program. Mr. Arvin said he doesn't want to bog down the agenda and suggested the REF information in the form of a letter.

Chair Short said he tries to manage the requests from Board members and staff regarding the scheduling of meetings. Deputy Commissioner Rodell stated the December 6 meeting is scheduled on the same day as the Retirement Board meeting and so she and Commissioner Butcher will not be available, but Deputy Commissioner Tangeman is available. She stated it would be helpful to select a specific day of the week to hold meetings to make planning easier. Ms. Siverson stated they try to schedule the meetings on Thursdays.

Chair Short congratulated Mr. Wilken, Mr. Sheldon and Mr. Hughes on their reappointment to the Board. Chair Short expressed his appreciation for the Talkeetna site visit and meeting going so well and being able to hear the community concerns.

9. ADJOURNMENT

There being no further business of the Board, the AEA meeting adjourned at 11:29 a.m.



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