



Alaska Energy Authority  
BOARD MEETING MINUTES  
Tuesday, December 16, 2014  
Anchorage, Alaska

**1. CALL TO ORDER**

Chair Dick called the meeting of the Alaska Energy Authority to order on December 16, 2014 at 1:50 pm. A quorum was established.

**2. ROLL CALL: BOARD**

Members present: Chair Russell Dick (Public Member); Vice-Chair Dana Pruhs (Public Member); Jon Bittner (Deputy Commissioner, Department of Commerce, Community and Economic Development (DCCED)); Crystal Nygard (Public Member); Jerry Burnett (Deputy Commissioner Department of Revenue); and Gary Wilken (Public Member).

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

Staff present: Sara Fisher-Goad (AEA Executive Director); Amy Adler, Julie Anderson, Bryan Carey, Wayne Dyok, Tom Erickson, Emily Ford, Michael Lamb, Cady Lister, Betsy McGregor, Sandra Moller, Doug Ott, Sean Skaling, Kelli Veech, Teri Webster, Shelby Weems (AEA); Nick Szymoniak (AIDEA) Brian Bjorkquist and Mary Lynn Macsalka (Department of Law);

Others present: Miranda Studstill (Accu-Type Depositions); Alex DeMorban (Alaska Dispatch Tim Bradner, Elwood Brehmer (Alaska Journal of Commerce); Phil Steyer (Chugach Electric- phone); Jason Brune, Dara Glass (CIRI); Matt Buxton (Fairbanks Daily News-Miner-phone); Sterling Gallagher (Governor's Office); Jeff Logan (Jeff Logan & Associates); Beth Stuart (KPMG); Becky Long, Mike Wood (Susitna River Coalition); Sam Snyder (Trout Unlimited); Connie J. Downing (Tyonek Native Corporation); Emily Anderson (Wild Salmon Center); Billy Anderson (Unidentified); John Walsh (Unidentified); and Erin Cosaro (Unidentified).

**4. AGENDA APPROVAL**

The agenda was approved.

**5. PRIOR MINUTES - November 6, 2014**

**MOTION: A motion was made by Vice-Chair Pruhs to adopt the minutes of November 6, 2014. Motion seconded by Mr. Bittner. Motion passed.**

## **6. PUBLIC COMMENTS**

Becky Long, of the Susitna River Coalition, expressed her frustration over the years because AEA's proper role in the dam project is to oversee the licensing process, rather than promoting the dam project. Ms. Long requested the public be informed as to how much money is left in the AEA Susitna project budget to complete licensing studies. Ms. Long stated AEA staff commented at an informational meeting in the spring and noted the Susitna dam could last 1,000 years. Ms. Long requested the basis of that statement. She cited the reservoir longevity prediction by the geomorphology team at 850 years. Ms. Long asked if large-scale reservoir dredging will occur, and if so, has it been figured into the cost of the dam.

Mike Wood, president of the board for the Susitna River Coalition, requested the executive session regarding the economics of the Susitna project be open to the public to provide information about funding. Mr. Wood inquired if there is currently a budget for clean-up on the river from the project, and the amount of funding in that clean-up budget. Mr. Wood noted there are substantial amount of contents that have been left on the river that need to be retrieved.

Chair Dick expressed his appreciation for the public comments. He advised there is a presentation today regarding the Susitna project and hopes it will provide the necessary information to the public.

Mr. Wilken asked Ms. Fisher-Goad if a clean-up budget for the Susitna project is available to send to Mr. Wood. Ms. Fisher-Goad noted a clean-up budget has not been developed and she will discuss those costs with Mr. Dyok and Ms. McGregor.

## **7. NEW BUSINESS**

### **7A. FY 2014 AEA Financial Statements - Presentation by KPMG**

Ms. Fisher-Goad invited Chief Financial Officer Michael Lamb and Beth Stuart of KPMG to present the AEA financial statements.

Mr. Lamb expressed his appreciation to staff for the clean audit and acknowledged their hard work with the multiple complicated project finances. Ms. Stuart echoed the comments of appreciation and noted there is much effort in completing the audit and preparing the financial statements, all under a time-sensitive deadline. KPMG issued an unmodified, clean audit opinion on AEA's financial statements. This is the best level of audit opinion that can be issued. KPMG's opinion reflects the financial information is fairly presented in accordance with the appropriate accounting standards.

Ms. Stuart noted the Audit in Accordance with OMB, Circular A-133 report was issued a clean audit opinion by KPMG. This is a grant compliance audit and is provided to the granting agencies and to the federal government through the state's grant reporting. The Bond Compliance report is provided to the bonding agency. KPMG issued a clean report. Ms. Stuart explained the letter included in the board packets from KPMG to AEA summarizes the professional responsibilities and assurances related to the conduct of the audit. There were no changes in accounting policies, no significant or unusual transactions, and no disagreements or difficulties in the audit.

Mr. Burnett requested explanation for the large increase in investment income from 2012 to 2014. Mr. Lamb explained the increase in investment income is related to the increase in the market value from the Power Cost Equalization (PCE) endowment, which are market-driven rates of return.

Vice-Chair Pruhs inquired regarding the expenditures for federal awards on page three of the compliance audit and asked if the award amount and federal expenditures total approximately \$38 million. Ms. Stuart clarified the federal expenditures are a subset of the \$32 million award amount. Vice-Chair Pruhs asked what percentage of the \$32 million was spent internally versus with contractors. Ms. Fisher-Goad believes the majority of that award amount was expended with respect to the projects. She does not have the exact percentage number today and will follow-up with the answer. Mr. Lamb stated most of the amount is used for projects and the amount used by AEA is de minimis. Ms. Fisher-Goad informed approximately 5% of the total expenditures is for staff.

Vice-Pruhs requested clarification on the process AEA follows when emergency power units are needed. Ms. Fisher-Goad explained the process depends on the type of emergency and availability. AEA has both contractors, who can dispatch quickly, as well as diesel mechanics, who work for AEA and can respond directly.

**7B. Resolution No. 2014-05: Power Project Fund loan regulations**

**MOTION: A motion was made by Vice-Chair Pruhs to approve Resolution No. 2014-05: Power Project Fund loan regulations. Motion seconded by Mr. Wilken.**

Ms. Fisher-Goad expressed her appreciation to Sean Skaling, Cady Lister, and the Department of Law's Mary Lynn Macsalka, for their work on the development of these regulations. Ms. Fisher-Goad advised these regulations clarify the deliverables required from applicants who are requesting a reduced interest rate. Other additions to the regulations include clarification of the types of projects that can request lending, establishment of a fee schedule, and the definition of an independent power producer. A table has been included showing the comments from the Alaska Power Association and the changes made with respect to those comments.

The Board had no questions regarding Resolution 2014-05.

**A roll call vote was taken and the motion was approved unanimously.**

**7C. Resolution 2014-06: Procurement regulations**

**MOTION: A motion was made by Vice-Chair Pruhs to approve Resolution No. 2014-06: Procurement regulations. Motion seconded by Mr. Wilken.**

Ms. Fisher-Goad advised the procurement regulations are for managed grants, primarily bulk fuel tank farms and powerhouses. These regulations memorialize the established procedure, which is based off of the procurement code. AEA and AIDEA share a procurement staff, managed under Mr. Lamb. The intent of these regulations is to simplify the procurement codes from three different processes to two different processes; the AIDEA procurement code and the state procurement code AS 36.30. These regulations parallel the AIDEA regulations, with minor

distinctions. The proposed regulations have been published and no comments from the public have been received.

**A roll call vote was taken and the motion was approved unanimously.**

#### **7D. Susitna-Watana program update**

Ms. Fisher-Goad invited Project Manager Mr. Dyok to assist in giving the Susitna-Watana program detailed PowerPoint presentation update. In 2011, AEA was authorized to move forward with the Susitna-Watana project after analysis of what large hydro project could best serve the Railbelt area. Susitna-Watana would serve approximately 80% of the Railbelt population, producing stable electric rates for 100-plus years and provide a building block for a healthy statewide economy. Hydro projects do very well in Alaska and Susitna-Watana supports the state's 50% renewable energy goal by 2025, while maximizing the value of Alaska's fossil fuels. A significant number of jobs would be created during the construction time of this project.

Mr. Dyok assured the Board and public this presentation covers project economics and financing. He stated that project economics is not the purpose of the executive session. Mr. Dyok reviewed the multiple milestones completed in 2014. Some of the licensing milestones included filing the formidable Initial Study Report (ISR) document on June 3rd. The ISR included results from the 51 studies conducted in 2013. Fourteen intensive stakeholder meetings have been held since June, and more will be scheduled. Thirty-two technical memorandums have been submitted to the Federal Energy Regulatory Commission (FERC). This valuable information is published on the website and is available for use.

Mr. Dyok noted a tremendous amount of data has been collected which advances the state of science for agencies to better manage the resources. The field work this summer was safe and effective, with more than 200 people in the field. There was one recordable incident this year. Thirteen FERC-approved studies were completed in 2014. Mr. Dyok explained caribou and moose studies are important elements of the study program and the radio tagging program being conducted by the Alaska Department of Fish and Game (ADF&G) on behalf of AEA has contributed to the understanding of population use and movement in Game Management Unit 13E. The intensive eagle nesting studies provide better understanding of regional population trends. The U.S. Fish and Wildlife Service recently requested this information for use on another project.

The FERC-approved study plan requiring information on the fisheries has contributed to the successful use of innovative study methods including use of screw traps, Passive Integrated Transponder (PIT) tag arrays, radio-telemetry, and winter sampling of fish to better understand nighttime behavior and under ice behavior. The work completed this year confirms the utility and the value of the data compiled in the 1980's. Although the population numbers have changed, the fish are using the same habitats. Chinook salmon remain the only documented anadromous fish above Devils Canyon. The water chemistry, river system, bird migration and breeding distribution, are all consistent with the '80's data.

Mr. Dyok indicated that ongoing studies have confirmed that there would be insignificant project impacts to water quality, geomorphology and ice below the Yentna River confluence. No further modeling below the Yentna River confluence is proposed. During ice formation in the lower

river, project flows will be in the natural range of flows. Thus project flow will not affect ice formation downstream of the Yentna River confluence. As flows decrease through the winter period, there is a natural sag in the ice cover. During project operations the ice sag will be less than what occurs during the winter but not as much as during natural conditions. This is because the flows will decrease in the lower reaches below the flows during ice formation. There will be minor impacts on the main channel geomorphology in the Middle River. This is the area that will primarily be influenced by the project.

Mr. Dyok explained the slide showing the Susitna River contributes 16% of the average annual flow at Susitna Station. The illustrations shows there is a greater tributary flow as the river proceeds downstream, thereby reducing the effects of the project. The Susitna River upstream of Watana Dam contributes only 1% of the gravel load annually. However, in the reach between Gold Creek and Sunshine, 70 percent of the tributary bedload contribution is gravel, which is preferable for anadromous fish spawning. During project operations, the river will become clearer downstream of the dam to the Chulitna confluence, which provides a potential improvement to the fishery. Mr. Dyok noted, of the 622 Chinook salmon that were tagged at Curry in 2014, 11 made it into Devils Canyon, two got upstream of Devils Canyon, and one made it above the project site.

Didson sonar units placed on both sides of the river counted 24 Chinook salmon over 50 centimeters in length that made it upstream of the dam site in 2014. Over 92% of the fish tagged in 2012, 2013, and 2014, spawned in tributaries, not in the mainstem. Mr. Dyok stated in 2013, less than .5% of the estimated 90,000 Chinook salmon passing upstream of the Yentna River spawned in the mainstem. The historical distribution and 2013 Chinook salmon spawning distribution within the Susitna River basin are very similar. The Chulitna River basin numbers are higher and the Deshka River basin numbers are lower. The historical distribution and 2013 Coho salmon spawning distribution within the Susitna River basin follow similar patterns.

A Board of Consultants was established and added to the project a couple of years ago to provide recommendations on the dam configuration and engineering design. MWH is the engineering consultant. The Board of Consultants has endorsed the concept of a roller compacted concrete dam and the dam configuration. The 2014 drilling at the dam site confirmed no active faults were at the dam site. All of the geotechnical information available is being utilized as part of the engineering design. There are 61 years of historic flows record that have been used to develop the annual energy estimate, resulting in 2,800 gigawatt hours of mean annual energy. The development of the voluminous engineering feasibility report is ongoing and should be available for distribution in the middle of January.

MWH produced an economic analysis, which included a project cost range, with a cost mean of \$5.7 billion, and a spread of a minimum of \$4.46 billion to a maximum of \$6.80 billion. The cost estimates will increase each year because of inflation since the costs are indexed to the current year (e.g., 2014). Much of the increase of the cost estimate change from January 2013 to July 2014 was due to inflation. Part of the increase was due to licensing, and the majority of the increase was due to construction costs associated to adjustments in the design of the dam. Construction costs may decrease after the geotechnical work and optimization is completed.

Mr. Dyok noted a comparison of economics includes reviewing alternative scenarios with the project and without the project. A scenario without the project includes gas-fired generation and the main driver of this is the cost of the fuel. There are many levels of cost for in-state natural gas; the low range, which is the oversupply of Cook Inlet natural gas, the base Cook Inlet price from Alaska Center for Energy and Power and AEA's Renewable Energy Fund (REF) pricing, the Alaska LNG in-state costs from the Department of Revenue's pricing analysis and the Department of Energy's mid oil price forecast, and the high range price analysis forecast. The graph on slide 23 shows the natural gas price forecast and range over the next 40 years.

Mr. Lamb explained many discussions with financial advisor PFM have occurred regarding how to finance this five-generation, 100-year project, how to spread the costs equitably among the generations, where the money comes from, and where the risks are. PFM has developed the matrix shown on slide 24 describing three funding purposes over three time periods; the licensing and design from 2010 to 2018, the construction and program costs from 2019 to 2023, and the construction and program costs from 2023 to 2028. This cost matrix show costs in 2014 dollars. The numbers later in the presentation presume the timeline and are inflation-adjusted for the year. Mr. Lamb stated the presumption is the state will upfront the funding for the licensing and design timeframe of the project. The numbers presented for this project have the state being paid back its upfront money, but the financial terms have not been determined.

Mr. Lamb reviewed the program cost timeframe of 2023 to 2028 and presumes federal Rural Utilities Service (RUS) low interest funding with a 35-year debt service stream. The main financing question is referred to as the "donut hole," which is the timeframe from 2019 to 2023. PFM compares three financing options; 1) AEA revenue bonds and RUS financing at \$0.074/kWh 50-year average, 2) all financing with AEA revenue bonds at \$0.083/kWh 50-year average, and 3) state loans and RUS financing, similar to the Bradley Lake model, at \$0.041/kWh 50-year average. The essence of the differences in the finance scenarios is the cost of financing. The challenge is getting the longest term financing at the lowest interest rate.

Ms. Fisher-Goad advised a significant amount of environmental work has occurred in preparation for upcoming milestones. Follow-up ISR meetings are scheduled in January. The meeting summaries are scheduled to be filed with FERC. The project will take additional investment to complete licensing. Pursuit of the data and information needed to file a license application is ongoing.

Chair Dick expressed his appreciation to the presenters and noted this is the first time the Board has seen this amount and depth of information.

Mr. Wilken asked how much of the \$530 million for licensing and design has been appropriated to date. Ms. Fisher-Goad stated \$192 million has been appropriated and was focused mostly on the environmental work to get the licensing. The engineering work that has been completed also supports the license, but is not the detailed engineering design. Mr. Wilken asked if he understands correctly that in order to get through 2023, with upfront financing plus the "donut hole," the project needs \$2.8 billion. Mr. Lamb agreed approximately \$2.8 billion or \$2.9 billion is needed through 2023. Mr. Wilken asked if he understands correctly, the project could ask the Legislature for a state loan of \$2.8 billion with an inflation-proof interest rate of 2%, have the cost of energy average around 6.5 cents, and the loan gets repaid. Mr. Lamb noted the essence of

Mr. Wilken's understanding is correct. The numbers are in the general ballpark, but the specific numbers will have to be determined by PFM.

Mr. Wilken asked if the Bradley Lake project had a zero-percent loan. Ms. Fisher-Goad agreed. Mr. Wilken asked Mr. Burnett if a zero-percent loan is a hit to the general fund. Mr. Burnett stated without knowing the source of funding, he cannot speculate from where the reduction in revenue would come.

Vice-Chair Pruhs asked if there is an internal oversight or third-party oversight in the licensing effort to ensure what is submitted is the most economical and best path forward. Mr. Dyok explained an amendment would have to be sought if there is a significant design change to the license. Adjustments in the design, as part of the optimization, are standard practice.

Mr. Wilken asked if a 2,800 gigawatt-hour plant is the same as 600 megawatts. Mr. Dyok stated the capacity of the project in this optimization provides the same amount of energy while reducing the size of the units.

**MOTION: A motion was made by Vice-Chair Pruhs to go into Executive Session to discuss confidential deliberations and process matters related to confidential attorney/client discussions of licensing strategies regarding the Susitna-Watana Hydro Project and also to discuss the Executive Director's annual review. Motion seconded by Mr. Bittner. The motion was approved.**

**7E. Executive Session - Executive Director's annual review & Susitna strategy 3:29 pm.**

The Board reconvened its regular meeting at 4:23 pm.

Chair Dick advised no formal action was taken during executive session.

## **8. DIRECTOR COMMENTS**

### **8A. Program Fact Sheets Updates**

Ms. Fisher-Goad reported the quarterly update of the program fact sheets are included in the Board packets. She advised the REF is part of the operating budget. There is a fund transfer from general funds to the REF of \$15 million. Ms. Fisher-Goad noted 66 applications have been received, of which 34 are recommended for funding, totaling approximately \$19 million. Most of the projects are in pursuit of design funds. Some of the projects are in pursuit of construction funds. A handful of the 32 applications not recommended have filed for the appeals process.

Ms. Fisher-Goad advised 277 applications have been funded overall, totaling approximately \$250 million. In 2013, 13 million gallons of diesel fuel has been saved from 36 projects in operation. There are currently 53 projects in operation. She is proud of the work being completed and looks forward to 2015.

**8B. Next regularly scheduled meeting, Wednesday, January 14, 2015**

Chair Dick noted Ms. Fisher-Goad may be on teleconference for the next meeting. Ms. Fisher-Goad informed additional program updates will be provided at the next meeting.

## 9. BOARD COMMENTS

Mr. Wilken expressed his appreciation to Ms. Fisher-Goad and Mr. Dyok for their presentation, especially the financial information. Mr. Wilken noted he is the Susitna-Watana project's biggest supporter in at least one way. Mr. Wilken commented his daughter is a member of the Susitna River Coalition. He receives their newsletters and appreciates their passion. He believes more facts and less emotion should be communicated.

Mr. Wilken requested information about the PCE endowment. He asked Ms. Fisher-Goad to provide, 1) a snapshot of the PCE endowment fund investment today, 2) the status of PCE over-funding or under-funding in the FY 16 budget, and 3) the amount of draws for the last couple of years. Ms. Fisher-Goad stated the current market value of the PCE fund is approximately \$950 million. Approximately \$56 million is currently available for the program, based on 7% of the three-year monthly average market value. The program is estimated to cost about \$43 million. No general funds are anticipated to be used for this current fiscal year nor for FY 16. The fund is very well endowed. Mr. Burnett advised the Treasury Division website at Department of Revenue has a good layout of how the PCE fund works.

Chair Dick commented much time can be spent focused on the larger projects and he does not want to lose sight of the smaller programs that have significant meaning and value to the rural communities. He expressed appreciation to Ms. Fisher-Goad for reviewing all of the programs with the Board.

## 10. ADJOURNMENT

There being no further business of the Board, the AEA meeting adjourned at 4:30 pm.

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