



BOARD MEETING MINUTES
Thursday, August 6, 2015
Anchorage, Alaska

1. CALL TO ORDER

Chair Dick called the meeting of the Alaska Energy Authority to order on August 6, 2015 at 10:02 am. A quorum was established.

2. ROLL CALL: BOARD MEMBERS

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

3. ROLL CALL: STAFF, PUBLIC

Staff present: Sara Fisher-Goad (AEA Executive Director), Wayne Dyok, Tom Erickson, Emily Ford, Jennifer Haldane, Michael Lamb, Betsy McGregor, Sandra Moller, Doug Ott, Sean Skaling, Janelle Sta. Cruz, Kirk Warren, and Teri Webster (AEA); and Brian Bjorkquist (Department of Law).

Others present: Sunny Morrison (Accu-Type Depositions); Elwood Brehmer (Alaska Journal of Commerce); Rich Wilson (Alaska Ratepayers); Jomo Stewart (phone) (Fairbanks Economic Development); Alan Bailey (Petroleum News); and Pat Malara (phone) (Western Cascade).

4. AGENDA APPROVAL

Chair Dick noted Ms. Fisher-Goad requested to move two items on the agenda and adding one item. The agenda would read 7A. Susitna-Watana Project Update, 7B. Bradley Lake Update, and 7C. Executive Session: Discussion of Transmission Line Disputes.

The agenda was approved as amended.

5. PRIOR MINUTES - June 25, 2015

MOTION: A motion was made by Deputy Commissioner Parady to adopt the minutes of June 25, 2015. Vice Chair Pruhs seconded the motion. Motion passed.

6. PUBLIC COMMENTS

Rich Wilson of Alaska Ratepayers said they are interested in low, stable rates for consumers, and will be active in supporting AEA in the Susitna-Watana project. He noted that large hydro will be our legacy to our grandchildren and their children.

Mr. Wilken asked about what other sorts of items Alaska Ratepayers work on. Mr. Wilson said they include finding ways of gaining consensus from the different consumers, and studying alternative and compatible projects.

Vice-Chair Pruhs asked if Alaska Ratepayers will be involved in commenting on the potential upgrades and studies regarding the intertie. Mr. Wilson agreed. He believes the transmission lines need to be improved in order to provide the most efficient distribution of the intertie with whatever future energy source is utilized.

7. NEW BUSINESS

7A. Susitna-Watana Project Update

Ms. Fisher-Goad introduced Mr. Dyok, who provided a detailed PowerPoint presentation regarding the Susitna-Watana Project Update. Ms. Fisher-Goad noted a typographical error in the hard copy of the presentation with a misplacement of the decimal point in the amount of GWh of annual energy. Mr. Dyok commented the correct number of 2800 GWh of annual energy is 50 percent of the Railbelt's energy needs. He stated Hoover Dam is a comparable project to Susitna-Watana in considering size and annual energy generation. Although slightly taller and having a greater capacity, Hoover Dam produces 4,200 GWh versus 2,800 GWh for Susitna-Watana. Mr. Dyok noted Susitna-Watana has the option in the future to add a fourth generator and to raise the dam, which would further increase the generation output closer to that of the Hoover Dam.

Mr. Dyok said AEA commissioned a study by the Department of Geologic and Geophysical Surveys (DGGS) and the University of Alaska Fairbanks of the effects of climate change and glacial melt on the Susitna-Watana project. The draft report was released last week indicating approximately 2 percent more precipitation in the basin, which will be countered by the glacier reductions. AEA believes the overall maximum change to flows in 100 years will be less than 7 percent. AEA is seeking specific clarification from DGGS.

Mr. Dyok indicated 14 of the 58 studies have been completed. Impact assessment and development of Protection, Mitigation and Enhancement Measures (PMEs) will continue as the project proceeds through licensing. Mr. Dyok explained the slide showing the map of potential impacts. The red Upper Basin from the dam and upstream is the reservoir area and will be an affected area. The major downstream affected area is between Talkeetna and the dam site shown in blue. This is the primary study focus area. The yellow area between Yentna and Talkeetna will have diminished effects, and therefore the study effort level is lesser in that area. The yellow area from the Yentna and downstream is believed to have insignificant effects.

Ms. Fisher-Goad said AEA expects to receive further comments regarding a push to study more of the lower river. Because of the diminished impact of the Susitna-Watana project on the lower river, AEA believes it is important to get enough information to make good decisions about

licensing, and not to study for study's sake. AEA is sensitive to focussing on the study areas of importance, concentrated in the middle blue area.

Deputy Commissioner Parady asked for a ratio of the change in the flow caused by the dam compared to the mainstem flow. Mr. Dyok explained a specific ratio is difficult to calculate because the flow changes throughout the year. Mr. Dyok indicated an average of 2,000 cfs occurs in the winter time at the dam, and will increase to an average of 8,000 cfs. Mr. Dyok stated in the summer time, the average at Gold Creek is around 23,000 cfs and will go to an amount that will be negotiated, and could be approximately 10,000 to 13,000 cfs.

Mr. Wilken asked with whom those negotiations will occur. Mr. Dyok explained FERC will make the ultimate decision. AEA intends to negotiate PME's with the resource agencies, including Alaska Department of Fish & Game (ADF&G), Fish and Wildlife Service (USFWS), National Marine Fisheries Service, and Department of Natural Resources. Modeling work will continue and will be the basis for much of the negotiations.

Deputy Commissioner Burnett inquired what natural gas assumptions were used in the calculated \$11.2 billion in energy savings during the first 50 years. Mr. Dyok noted the natural gas price assumptions used were from the Alaska Center for Energy and Power (ACEP) July 2014 mid-level forecast for LNG and Cook Inlet gas.

Mr. Wilken asked if the energy savings slide is indicating if the Susitna-Watana dam was in place today, the energy savings to the Railbelt consumers would be \$224 million a year. Mr. Dyok agreed that would be about the average annual savings in today's dollars.

Vice-Chair Pruhs inquired over what time period the 1,300 average annual jobs during construction will occur. Mr. Dyok indicated the construction period is eight years. Vice-Chair Pruhs noted the project cost is estimated at \$5.6 billion, and \$3.4 billion of that is shown as local spending. He requested additional information regarding the remaining \$2.2 billion. Mr. Dyok explained other costs would include the assumption of importing six million cubic yards of cement and other out of state spending. Vice-Chair Pruhs requested the detailed list of the breakdown of the \$3.4 billion in local spending, and the breakdown of the \$5.6 billion total cost be provided. Mr. Dyok stated the report from Northern Economics will be made available to the Board and placed on the AEA website. The direct detail of expenses are listed in the MWH Engineering Feasibility report released in January.

Deputy Commissioner Parady commented the \$3.4 billion in local spending indicated in the presentation represents a multiplier effect from the project and is not \$3.4 billion of the \$5.6 billion total project cost estimate. Mr. Dyok stated he will discuss this point with Northern Economics for clarification.

Vice-Chair Pruhs requested to know the amount of the total \$5.6 billion anticipated to be spent locally, and a description of those expenditures. Mr. Dyok agreed to provide that information. Vice-Chair Pruhs asked if the \$5.6 billion cost number is a conservative estimate. Mr. Dyok explained the base estimate was generated by the engineering consultant in 2014 dollars, and he believes the variable contingency is approximately 15 percent. The financial costs use an annual

multiplier of approximately 2.5 percent for inflation, which adds \$150 million each year. The capital costs do not use annual multiplier. Mr. Dyok stated the best case scenario, based upon the administrative order, is to begin construction in 2021.

Deputy Commissioner Parady requested further explanation of the Rural Utility Services (RUS) loan. Mr. Dyok stated RUS indicated 50 percent of the project would qualify for an RUS loan. RUS loans typically have a term of 30 years, and project completion must occur within five years from the first RUS fund withdrawal. The current total RUS rates are approximately 3 percent.

Ms. Fisher-Goad discussed the primary goal of AEA is to develop the highest quality project and environmental program in order to submit the best license application possible. Approximately \$105 million of additional work needs to be completed for the license application.

Mr. Wilken asked when the chosen route is shown. Mr. Dyok indicated the proposed route has not been selected and will be included in the license application. FERC and the Corps of Engineers will ultimately make the route determination. Ms. Fisher-Goad stated it would be helpful to have a stakeholder process specific to the routes in order to promote discussion and consensus regarding the proposed routes.

7B. Bradley Lake Update

Ms. Fisher-Goad reviewed the Bradley Lake Hydroelectric Project, located 27 miles southeast of Homer. This asset is owned by AEA and operated by Homer Electric Association (HEA). Bradley is managed by the Bradley Lake Project Management Committee (BPMC), comprised of a representative from Golden Valley Electric Association (GVEA), Matanuska Electric Association (MEA), Chugach Electric Association (CEA), Anchorage Municipal Light & Power (ML&P), City of Seward, Homer Electric Association (HEA), and AEA.

Bradley has a capacity of 380 GWh, which is between 5 to 10 percent of the Railbelt demand per year. The FERC license was received in 1985, and the commercial operation occurred in 1991. The cost, at that time, was \$328 million, with the State of Alaska paying approximately half of those capital costs up front, and AEA has outstanding revenue bonds. The utilities are responsible for the revenue bonds, and when the bonds are paid off in 2021, the utilities are required to pay the State of Alaska \$12.5 million a year for the life of the project. Those funds are anticipated to go into the State of Alaska Railbelt Energy Fund, managed by the Department of Revenue.

Chair Pruhs requested comparison numbers for hydro versus natural gas in Southcentral. Ms. Fisher-Goad agreed, and noted the cost of coal generation in Fairbanks is comparable to the .4 cents per kWh.

Mr. Wilken commented the take or pay contracts entered in 1991 for Bradley were at .7 cents per kWh. This has decreased to .4 cents kWh.

Ms. Fisher-Goad discussed the non-organic debris impacting the fishwater valves and HEA's proposed work for the spring of 2016. The minimum flow deviation amendment is expiring in September, and an extension request to FERC should be submitted next month. A FERC-required five-year dam safety inspection will occur in 2016. A management audit will occur this fall.

Ms. Fisher-Goad reported on the license amendment to divert Battle Creek water into the project. The current estimated cost of construction is about \$49 million, and will produce additional energy of 37,000 MWhs annually. Comments from ADF&G and USFWS have been received. AEA's responses to the comments are being developed and will be submitted this month. January 2016 is the earliest FERC could approve the license amendment. BPMC will then have to decide on long-term funding, with the earliest construction date being 2017.

Mr. Wilken suggests that AEA consider having the press join Ms. Fisher-Goad or staff while they visit the Bradley Lake project. Mr. Wilken believes there are similarities between the Susitna-Watana project and the Bradley Lake project that would provide beneficial background information for the interested members of the press. Chair Dick agreed. Ms. Fisher-Goad noted AEA is open to making those types of opportunities available.

MOTION: Vice-Chair Pruhs made a motion to go into Executive Session to discuss matters associated with transmission line disputes. Motion seconded by Ms. Nygard. Motion Passed.

**7C. Executive Session: 11:09 am.
Discussion of Transmission Line Disputes**

The Board reconvened its regular meeting at 12:10 pm. Chair Dick advised no formal actions were taken during executive session.

8. DIRECTOR COMMENTS

8A. Next regularly scheduled meeting Thursday, September 24, 2015.

Ms. Fisher-Goad advised Senator Murkowski and FERC Chairman Mr. Bay will be providing keynote speeches at the NHA regional meeting in Alaska August 18-20, with introductory comments by Mayor Berkowitz.

The Arctic Energy Summit will be held in Fairbanks on September 28-30. Several AEA staff members will be involved in making presentations or chairing panels. Board members interested in attending either event should contact Ms. Fisher-Goad or Ms. Webster for registration.

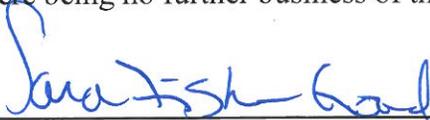
9. BOARD COMMENTS

Chair Dick reminded Ms. Fisher-Goad to provide members with the Northern Economics report and the MWH detailed report.

Deputy Commissioner Parady complimented Ms. Fisher-Goad on her job in working with the Governor's Office and the Office of Management and Budget in the context of the Administrative Order 271 to clarify the directions to AEA, thus preserving the ability to work on accessing the previously appropriated, but unencumbered \$6.6 million funds.

10. ADJOURNMENT

There being no further business of the Board, the AEA meeting adjourned at 12:12 pm.



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