

**ALASKA STATE LEGISLATURE
HOUSE SPECIAL COMMITTEE ON ENERGY**

February 28, 2014
8:10 a.m.

MEMBERS PRESENT

Representative Doug Isaacson, Co-Chair
Representative Shelley Hughes

MEMBERS ABSENT

Representative Charisse Millett, Co-Chair
Representative Neal Foster
Representative Pete Higgins
Representative Benjamin Nageak
Representative Andy Josephson

COMMITTEE CALENDAR

PRESENTATION: ALASKA POWER ASSOCIATION

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

CRYSTAL ENKVIST, Director
Member & Public Relations
Alaska Power Association
Anchorage, Alaska

POSITION STATEMENT: Presented the Alaska Power Association's 2014 legislative priorities.

CLAY KOPLIN, CEO
Cordova Electric Cooperative, Inc.
Cordova, Alaska

POSITION STATEMENT: Presented the Alaska Power Association's Legislative Resolutions for 2014.

JOE GRIFFITH, General Manager
Matanuska Electric Association;
CEO, Alaska Railbelt Cooperative Transmission & Electric Company
Palmer, Alaska

POSITION STATEMENT: Provided the Alaska Power Association's capital funding requests.

ACTION NARRATIVE

[8:10:06 AM](#)

CO-CHAIR DOUG ISAACSON called the House Special Committee on Energy meeting to order at 8:10 a.m. Representatives Hughes and Isaacson were present at the call to order.

PRESENTATION: Alaska Power Association

[8:10:58 AM](#)

CO-CHAIR ISAACSON announced that the only order of business would be a presentation by the Alaska Power Association.

[8:11:24 AM](#)

CRYSTAL ENKVIST, Director, Member & Public Relations, Alaska Power Association (APA), directed attention to the PowerPoint presentation entitled, "Alaska Power Association 2014 Legislative Priorities." Prior to sharing APA's legislative priorities, she informed the committee that APA is a 62-year old trade association for the electric utility industry in Alaska. Its members are electric cooperatives, municipal-owned utilities, joint action agencies, and investor-owned utilities; the largest member is Chugach Electric Association, Inc. and the smallest member is Tanalian Electric Cooperative Inc. Furthermore, APA members span the state from Barrow to Kodiak, and from Unalaska down the Inside Passage. Regarding the development of APA's legislative priorities, Ms. Enkvist noted that although APA has a diverse electric utility membership, its members speak with one voice on issues with a statewide and a Railbelt focus. The resolution process begins with issues that are brought by APA members to its Resolutions and Government Affairs Steering Committee, which is comprised of electric utility managers and directors from rural and urban utilities. The committee then makes recommendations to the APA board of directors on legislative positions. Also, the APA Managers' Forum is a group of electric utility CEOs co-chaired by Clay Koplín of Cordova Electric Cooperative Inc. (CEC) and Brad Evans of Chugach Electric Association Inc. (Chugach), which also makes recommendations to the board. Finally, legislative resolutions are reviewed by the board and acted upon [slide 6]. Slide 7 listed APA's State Legislative Resolutions, which she

characterized as "a good combination of statewide, rural, and Railbelt-focused issues." Ms. Enkvist pointed out that because of the diversity within the membership of APA, the resolutions are not ranked by priority.

[8:16:42 AM](#)

CO-CHAIR ISAACSON recalled there have been questions about prioritization because the legislature will definitely have to prioritize projects in light of the budget cuts. He asked whether APA can determine which projects should go first of the projects "in motion" this year, or in the future, as this information from those who develop the state's resources would be helpful to legislators.

MS. ENKVIST said sure, and added that APA wants to be part of the process. The association believes the legislature's active support of its position will strengthen the electric utility industry's ability to provide safe, reliable, and affordable power to Alaskans.

[8:18:31 AM](#)

CLAY KOPLIN, CEO, CEC, and co-chair of the APA Manager's Forum, in response to Co-Chair Isaacson, noted that the Alaska Energy Authority (AEA) Department of Commerce, Community & Economic Development, carefully measures and communicates the successes, failures, and implementation of its programs. His intent is to give the committee a "qualitative feel" for how AEA programs work for the electric utilities and other end-users, and for their importance and effectiveness. He directed attention to the programs that are supported by APA's resolutions and which are primarily, but not exclusively, rural-focused programs [slide 9]. The first resolution was in support of the [Renewable Energy Fund Grant Recommendation Program](renewable energy fund program), which is a brick and mortar program that fits together with other programs to address different parts of the energy problem. Mr. Koplín opined the renewable energy fund program is effective, well-structured, well-governed, successful, and follows an effective process. He advised that a project can be successful in that it stays on schedule and within its scope; however, if it is not successful on the business side, such as creating jobs, improving the quality of life in a community, and supporting the economy, it is not reaching its goal. On the other hand, reducing the cost of energy just a little can mean a lot to the economy of a rural community. The structure of AEA's renewable energy fund program

and its advisory committee allows flexibility. In order for legislators to prioritize the programs to achieve the best business value, one must question how the projects and programs align with business strategies throughout the state; for example, each successful project in the renewable energy fund program reduces demand on the Power Cost Equalization (PCE) program. He cautioned against eliminating programs instead of shrinking each program somewhat, so as to keep a balance between brick and mortar projects, research and development, and PCE, where applicable.

[8:22:29 AM](#)

MR. KOPLIN described the first of two renewable energy fund projects in Cordova: Cordova received \$8 million for the Humpback Creek Hydroelectric Project which is now saving \$1 million per year on diesel and thousands of dollars on operations and maintenance costs, and bringing additional capacity and lower cost energy for the fishing industry. This change has resulted in growth for Cordova - in 2010 Cordova reported the fifth largest dollar value of seafood delivered in the U.S. - and additional raw fish tax revenues for the state.

CO-CHAIR ISAACSON surmised this is the direct result of having cheap power.

MR. KOPLIN said yes, the cheaper hydroelectric (hydro) power used by onshore processing plants turned "an economic corner" in competition with off-shore floating processors that are operating on diesel power. Sustainable business success was achieved at a rate to processors of \$0.20 per kilowatt hour.

REPRESENTATIVE HUGHES asked where Cordova ranks when comparing the cost of power with that of urban and rural areas of the state.

MR. KOPLIN estimated Cordova's residential rates are getting closer to those of larger communities because rates in Fairbanks and Homer are increasing due to the price of gas. Cordova's residential rates range from \$0.35-\$0.40 per kilowatt hour. In further response to Representative Hughes, he said Cordova cannot store water for its run-of-the-river hydro projects thus must use diesel by April of each year. He further explained that the mountain water for the hydro system does not melt until May or June.

[8:27:19 AM](#)

MR. KOPLIN stated that the second hydro project was not successful; however, the use of a high risk technology is worthy of notice. The project was organic Rankine cycle heat recovery on a diesel unit. Although there were no loads to deliver the heat to, the project is getting 5 percent extra power from a diesel generator, which is a significant boon to fuel savings. In addition, construction of the project took longer than expected and was more expensive, but he credited AEA for its intelligent use of the lessons learned. He turned to APA's resolution in support of the Emerging Energy Technology Fund (EETF), advising EETF is the high-risk piece in APA's energy portfolio [slide 10]. He said it is appropriate for the legislature to invest heavily in this fund, as Alaska faces unique and varied challenges. There was a discovery that bacteria in thermokarst lakes in the Arctic produce methane at low temperatures. This is an opportunity for a process that converts household waste to energy, thus EETF provided a grant to fund a project in Cordova in partnership with Cordova Junior/Senior High School, the University of Alaska Fairbanks (UAF), the Alaska Center for Energy and Power (ACEP), the Denali Commission, and CEC. The project determined feasibility on a commercial scale and engaged the senior high school students in a scientific study.

[8:32:43 AM](#)

REPRESENTATIVE HUGHES asked whether fish waste was utilized in the project.

MR. KOPLIN observed that Copper River salmon are high in oil content and Cordova has a fish oil plant to produce pharmaceutical grade fish oil and organic fish fertilizer from fish waste. He credited the lower cost of electricity in Cordova for the plant's success. Mr. Koplin stressed EETF brings a collaboration of the science community and private partnerships, and also brings technical expertise to rural areas, and recommended that the legislature fund the program at the level requested by AEA. The next resolution was in support of PCE, which he characterized as a survival program for communities and many rural utilities [slide 11]. He recognized the legislature's funding of PCE last year and urged for funding this year, acknowledging that CEC seeks to eliminate its dependence on the program in the future through new alternatives and solutions. Cordova Electric has reduced its use of PCE by one-half of the dollar value, even though fuel costs are six times higher, and it is producing more energy.

CO-CHAIR ISAACSON questioned whether CEC continues to meet its fixed-costs demand because of efficiencies and lower cost operations.

MR. KOPLIN explained that CEC has kept its rates from rising in accordance with the agreement for a state grant that funds will benefit consumers when possible. In some areas, rates are up because of investments in infrastructure that were needed to keep up with the growth in the processing industry, but for the most part, CEC is using less diesel fuel. Furthermore, the PCE formula is such that CEC now qualifies for less funding.

CO-CHAIR ISAACSON related that some APA members have a harder time meeting their fixed-cost obligations as a result of the reductions in PCE.

[8:37:18 AM](#)

MR. KOPLIN agreed the reduction in PCE puts pressure on utility rates. The goal of AEA and its programs is to reduce the cost of energy, and PCE is part, but not all, of the solution.

CO-CHAIR ISAACSON asked how the more successful utilities help out other members of APA that are less successful.

MR. KOPLIN responded that APA uses key networks such as AEA, the Denali Commission, and the Alaska Village Electric Cooperative (AVEC) to share information with rural communities that do not have the expertise to own and operate their electric systems in the most efficient manner. In addition, these umbrella organizations spread information statewide.

MS. ENKVIST interjected that the APA Manager's Forum, which is composed of member utilities' managers from around the state, meets frequently and shares information, support, and sometimes equipment.

MR. KOPLIN turned attention to the resolution in support of the state funding match for the Denali Commission [slide 12]. The Denali Commission is an entity with a focus on building rural infrastructure such as improvements to tank farms to prevent further site contamination. A high level of federal funding from previous years is no longer available, but priority projects needing over \$400 million have been identified. As cost-saving measures, the Denali Commission, AEA, and AVEC have shared administrative and other resources, and he urged for the

state to demonstrate its commitment to the program by providing funds matching the remaining federal funding.

8:43:16 AM

REPRESENTATIVE HUGHES inquired as to the amount of federal funding the Denali Commission has received over the years.

8:43:24 AM

MR. KOPLIN answered that the Denali Commission has received \$500 million to date; this year's federal funding is \$13 million thus a [200 percent] match is \$26 million from the state. He restated that the administration process is complete on the identified projects. In response to Representative Hughes, he said the state has contributed very little, but he was unsure of the amount.

CO-CHAIR ISAACSON pointed out the resolution seeks a match of 200 percent.

MR. KOPLIN related APA's view that unless the state provides matching funds, the federal funding will continue to shrink.

CO-CHAIR ISAACSON raised the possibility that PCE may have \$56 million in its endowment, but only need \$44 million. If that is so, he asked whether the excess should be placed toward inflation-proofing PCE, or toward [the Denali Commission match].

MR. KOPLIN referred to the situation with the Alaska Public Employees' Retirement System and the Alaska Teachers' Retirement System: skimming the earnings from a fund does not assure the long-term viability of that fund.

CO-CHAIR ISAACSON suggested the answer is to move all of the communities to success.

REPRESENTATIVE HUGHES inquired as to why Mr. Koplin believes the federal money will stop coming eventually.

MR. KOPLIN said he has heard this anecdotally within the APA network. The Denali Commission funding is discretionary.

REPRESENTATIVE HUGHES sought confirmation on the federal funding situation, perhaps from the Alaska Congressional Delegation.

CO-CHAIR ISAACSON will confirm and report to the committee.

[8:47:36 AM](#)

JOE GRIFFITH, General Manager, Matanuska Electric Association (MEA); CEO, Alaska Railbelt Cooperative Transmission & Electric Company (ARCTEC), first responded to Co-Chair Isaacson's earlier question, confirming for the committee that the Railbelt has a mutual aid system through ARCTEC; in fact, ARCTEC is creating a listing of the material and equipment available at the various utilities. He then directed attention to the resolution to create an energy policy [implementation plan] for the state [slide 13]. The closest the state has to an energy policy implementation plan is the renewable standard [passed in the 26th Alaska State Legislature]. Mr. Griffith said MEA believes an energy policy implementation plan follows the policy, although "one would hope those operate in lock-step." He stressed that the industry needs financial support, beginning with transmission in the Railbelt and statewide, because it is hard to show a profit on a transmission facility, with the exception of the Bradley Lake Hydroelectric Project, where inexpensive power is delivered to big users. On the generation side, the Railbelt utilities have invested over \$1 billion, and state funds for the transmission system are now needed.

CO-CHAIR ISAACSON mentioned that there is related proposed legislation [HB 340] sponsored by Co-Chair Millett that is scheduled for a hearing 3/19/14.

[8:51:53 AM](#)

MR. GRIFFITH added that the proposed legislation addresses the independent system operator (ISO) concept for the Railbelt. Returning to the resolution, he said it also urges funding for fuel development and storage which is in response to the recent near-crisis shortage in the natural gas supply to the Railbelt. He explained that 80 percent of natural gas is generated and there was insufficient storage to carry the Railbelt load. The Railbelt utilities were nearly at the point of importing liquefied natural gas (LNG) from Canada when Hilcorp LLC was able to produce more gas from Cook Inlet - at a realistic price - at least through March, 2018. There was also a legal question that was resolved by the Attorney General of Alaska. The supply situation was further supported by the Cook Inlet Natural Gas Storage Alaska (CINGSA) facility which is owned by ENSTAR Natural Gas Company and supplies gas to the utilities when needed. Mr. Griffith reiterated that the PCE [formula] is based partially on costs in the Railbelt, and increasing costs there

will affect utilities all over the state. He turned to the resolution supporting capital funding for energy projects and informed the committee that ARCTEC has requested state funding for major energy projects because utilities large and small are in need of capital [slide 14]. He acknowledged that the Power Project Loan Fund through AEA provides some funding, and the Sustainable Energy Transmission System and Supply (SETS) Development Program through the Alaska Industrial Development and Export Authority (AIDEA) was funded with \$250 million; however, the most recent estimate to fix the Railbelt Transmission System was \$900 million, the MEA natural gas power plant under construction at Eklutna is costing \$315 million, and the costs are overtaking to the industry. Mr. Griffith opined it is easy for the state to back up the utilities' debt which would allow the industry to achieve better terms and access to funding.

[8:56:15 AM](#)

CO-CHAIR ISAACSON asked for the particulars of the Power Project Loan Fund.

MR. GRIFFITH explained the Power Project Loan Fund only funds projects costing less than \$5 million; a loan amount above that requires legislative approval. The program will fund feasibility studies with good terms, but it is underfunded.

MR. KOPLIN expressed his belief that the fund has a \$2 million-\$3 million balance.

MR. GRIFFITH, in further response to Co-Chair Isaacson, said for projects over \$5 million, it can be easier to get a grant than to get multiple loans. The existing Power Project Loan Fund works when funding direct loans to villages for small projects, but that was not the original intent.

CO-CHAIR ISAACSON surmised if the program were capitalized at a higher level, the loan fund would be useful since the state is unable to fund all of the requested grants. Loan funds are preferable because the pool of money will be replaced and available for other projects - the day of grants has passed, yet the infrastructure is needed.

REPRESENTATIVE HUGHES asked whether there is an annual deposit made to the Power Project Loan Fund.

[9:00:01 AM](#)

MR. GRIFFITH recalled the capitalization was from a single deposit. He agreed loans make sense, but if a loan program is undercapitalized the first project uses the balance; originally the SETS revolving fund was intended to hold \$1 billion thus at \$250 million it is underutilized as well. The state's ability to guarantee loans, such as was done for Bradley Lake Hydroelectric, is sufficient for investment bankers to respond. Mr. Griffith opined capitalization of the loan funds, and how and who uses the funds, would fall under the state's energy policy. He directed attention to the resolution supporting construction of a natural gas pipeline, saying that electric generation for half of the [population] is from of natural gas [slide 15]. On the other hand, the state's energy policy must also address the cost of fuel in rural areas. Bringing North Slope gas to market will begin to solve the problem; however, there must be a market bigger than the Railbelt utilities for gas coming from a pipeline. If there is not an export market for reasonable quantities of natural gas, the gas needs to be processed into LNG in a plant that is currently "locked up" by ConocoPhillips Alaska, Inc. Finally, the resolution supports the use of Alaska royalty natural gas in communities along the pipeline route, and he referred to a ruling from the Attorney General of Alaska that this would qualify as "the highest and best use for the state."

[9:05:49 AM](#)

CO-CHAIR ISAACSON provided his interpretation of Article 8 of the Alaska State Constitution, and said the law states there can be a negotiated contract with gas utilities to purchase gas at a subsidized rate. As a result, there would be less money going to the state treasury but the [savings from the lower cost of energy] going to the community would allow the economy to grow and wealth to be created by private investment rather than by the state's "bankrupt philosophy, and that's bankrupting us to this day."

MR. GRIFFITH turned to a resolution supporting utility efforts to create a unified transmission system for the Railbelt [slide 16]. He explained that APA supports the efforts by the utilities to follow an independent system operator (ISO) [which manages transmission and coordinates the spot market] and Transco [which owns the transmission and controls the system] concept for the Railbelt. At this time the two biggest utilities in the state, Chugach and MEA, are seeking the means

to make this happen. Anchorage Municipal Light and Power (ML&P) has been invited to participate. He remarked:

And in that case then you would define the independent system operator that ran the whole transmission system, and you would define custody transfer points somewhere on the Kenai and probably Healy, up north, so north of the range does their own load balancing and dispatching - south of some point on Kenai, either Quartz Creek or Soldotna, Homer does its own, the rest of us all fall under one Transco/ISO concept. And ... the bill dropped in by Senator Micciche and by Representative Millet does that, and it brings a study forward that would answer the questions that many of the agencies, most particularly the Regulatory Commission of Alaska, who has no real idea how they might be tasked to support that at this point.

MR. GRIFFITH stressed that the Railbelt does not have a robust grid; in fact, \$250 million will be saved each year if upgrades are made so that the transmission system can use economic dispatch. Even a "small fix" results in substantial savings to members and fosters economic development, such as happened in Cordova.

[9:09:54 AM](#)

CO-CHAIR ISAACSON asked whether a \$250 million per annum savings on a \$904 million investment is "bankable" through private financing.

MR. GRIFFITH cautioned that the limiting factors are the balance sheets of the utilities; at this time, each utility has reached its debt limits due to the construction of generation upgrades which have cost \$1.2 billion. Without the ability to shoulder additional debt the utilities are "hamstrung." In response to Co-Chair Isaacson, he said the hope is that with a large grant the ISO/Transco entity can take care of the system and build the improvements. Although AEA has reported that the utilities can obtain financing with their [future] savings, he opined that is "hopeless" without the ability to take on extra debt. Mr. Griffith then turned to the resolution in support of using the Bradley Lake [Hydroelectric] Model for financing state-owned hydroelectric projects [slide 17]. Originally, the project at Bradley Lake began with a 50 percent equity contribution from the state and 50 percent debt to the utilities through state-issued bonds. Throughout the lifetime of the project, the

utilities pay the same amount for power: approximately \$50 per megawatt hour. He characterized the project at Bradley Lake as a "screaming success," and urged for the use of this financing model again. Although hampered by extremely high project costs, the public-private partnership concept works.

9:13:18 AM

MR. GRIFFITH directed attention to the resolution in support of legislation to address metals theft. Because the cost of copper is high, copper theft has increased and the losses and damages are passed on to members. The Associated General Contractors organization is also in support of this legislation. In response to Representative Hughes, he said the copper is sold through scrap dealers; the legislation under consideration allows for the tracking of copper or other unique metals that are marketed through scrap dealers.

MR. KOPLIN pointed out that underground cable cost \$3 per foot or \$7,500 per reel.

MR. GRIFFITH said he was aware of five or six thefts this past year; at MEA, there were three instances. In response to Co-Chair Isaacson, he explained that the proposed legislation will require a track on the affected metals.

9:19:00 AM

CO-CHAIR ISAACSON reviewed the following APA resolutions that request full state funding: the Renewable Energy Fund; the Emerging Energy Technology Fund; Power Cost Equalization; 200 percent state matching funds to the Denali Commission; transmission lines; metal theft; the Power Project Loan Fund; and the Sustainable Energy Transmission System and Supply.

MR. GRIFFITH added the University of Alaska Fairbanks (UAF) power plant.

CO-CHAIR ISAACSON related a constraint on the UAF power plant is that the federal government will not allow coal plants to exceed their current permit, although there is pending legislation encouraging the governor to examine this situation. As a matter of fact, if the UAF coal plant were built at a sufficient size, it would displace diesel fuel and would also provide excess generation for other purposes. He confirmed that the legislature seeks to fund the project, which is a combined heat and power plant. Co-Chair Isaacson urged for long-term

solutions to the search for electricity because with enough inexpensive electricity, Alaska can attract domestic businesses such as the computer industry. He closed, "When we own the resource, we set the price; therefore, we set the market conditions, and we must start thinking that way, and that'll help us to figure out how we fund all of these different funds that have been created."

[9:25:26 AM](#)

ADJOURNMENT

There being no further business before the committee, the House Special Committee on Energy meeting was adjourned at 9:25 a.m.