ALASKA STATE LEGISLATURE
HOUSE SPECIAL COMMITTEE ON ENERGY
February 10, 2015
10:17 a.m.

MEMBERS PRESENT

Representative Jim Colver, Co-Chair
Representative David Talerico
Representative Cathy Tilton
Representative Matt Claman
Representative Adam Wool

MEMBERS ABSENT

Representative Liz Vazquez, Co-Chair
Representative Benjamin Nageak

COMMITTEE CALENDAR

PRESENTATION(S): ALASKA POWER ASSOCIATION; ALASKA VILLAGE ELECTRIC COOPERATIVE; INSIDE PASSAGE ELECTRIC COOPERATIVE

- HEARD

PRESENTATION: ALASKA ENERGY AUTHORITY~ DEPARTMENT OF COMMERCE~ COMMUNITY & ECONOMIC DEVELOPMENT

- HEARD

HOUSE BILL NO. 58
"An Act making an entity that is exempt from federal taxation under 26 U.S.C. 501(c)(3) (Internal Revenue Code) and a federally recognized tribe eligible for a loan from the Alaska energy efficiency revolving loan fund; and relating to loans from the Alaska energy efficiency revolving loan fund."

- HEARD & HELD

PREVIOUS COMMITTEE ACTION

BILL: HB 58
SHORT TITLE: ELIGIBILITY FOR AK ENERGY EFFIC LOANS
SPONSOR(s): REPRESENTATIVE(s) KREISS-TOMKINS, MILLETT

01/21/15	(H)	PREFILE RELEASED 1/16/15
01/21/15	(H)	READ THE FIRST TIME - REFERRALS

01/21/15	(H)	ENE, L&C, FIN
02/10/15	(H)	ENE AT 10:15 AM CAPITOL 17

WITNESS REGISTER

CRYSTAL ENKVIST, Executive Director
Alaska Power Association
Anchorage, Alaska
POSITION STATEMENT: Provided a PowerPoint presentation entitled, "Electric Utility Issues: Perspectives from the Industry that Powers Alaska."

MEERA KOHLER, President and CEO
Alaska Village Electric Cooperative
Anchorage, Alaska
POSITION STATEMENT: Provided information on the Power Cost Equalization program and answered questions.

JODI MITCHELL, Chief Executive Officer
Inside Passage Electric Cooperative
Juneau, Alaska
POSITION STATEMENT: Provided information on the renewable energy grant fund and answered questions.

EMILY FORD, Public Outreach Liaison
Alaska Energy Authority
Department of Commerce, Community & Economic Development (DCCED)
Anchorage, Alaska
POSITION STATEMENT: Provided a PowerPoint presentation entitled "Alaska Energy Authority," and dated 2/10/15.

SARA FISHER-GOAD, Executive Director
Alaska Energy Authority
Department of Commerce, Community & Economic Development
Anchorage, Alaska
POSITION STATEMENT: Answered questions during the presentation by the Alaska Energy Authority, Department of Commerce, Community & Economic Development.

SEAN SKALING, Deputy Director
Rural Energy Group
Alaska Energy Authority
Department of Commerce, Community & Economic Development
Anchorage, Alaska
POSITION STATEMENT: Participated in the presentation by the Alaska Energy Authority, Department of Commerce, Community & Economic Development.

REPRESENTATIVE JONATHAN KREISS-TOMKINS
Alaska State Legislature
Juneau, Alaska
POSITION STATEMENT: Speaking as the sponsor, introduced HB 58, Version H.

ACTION NARRATIVE

10:17:23 AM

CO-CHAIR JIM COLVER called the House Special Committee on Energy meeting to order at 10:17 a.m. Representatives Talerico, Tilton, Claman, and Colver were present at the call to order. Representative Wool arrived as the meeting was in progress.

PRESENTATION(S): ALASKA POWER ASSOCIATION; ALASKA VILLAGE ELECTRIC COOPERATIVE; INSIDE PASSAGE ELECTRIC COOPERATIVE

10:17:52 AM

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

10:19:00 AM

CRYSTAL ENKVIST, Executive Director, Alaska Power Association (APA), stated her presentation would highlight three programs that have successfully lowered energy costs in Alaska: the Power Cost Equalization (PCE) program, the renewable energy grant fund, and the emerging energy technology fund (slide 2). She informed the committee APA is the statewide trade association for the electric utility industry. Members include member-owned electric cooperatives, municipal-owned utilities, joint action agencies, investor-owned utilities, and other utilities. Although having a diverse membership, APA seeks to speak with one voice before lawmakers and regulators (slide 3). The association members provide power to a majority of Alaskans, from Barrow to Kodiak, Unalaska, the Inside Passage, the Interior, Southcentral, and 56 villages in Western Alaska (slide 4). The electric generation mix in Alaska at this time is 58 percent by natural gas, 20 percent by hydroelectric (hydro), 16 percent by diesel, 5 percent by coal, and 2 percent by wind. By location, Barrow has natural gas, most other communities on the North Slope have diesel generation, the West Coast has wind and diesel, the Interior has coal, diesel, and wind, Southcentral has natural gas, hydro, and wind, Southeast has hydro, and

Kodiak has almost 100 percent renewable electric generation. She concluded that there is a diversity of fuel sources in the state for electric generation (slide 5).

10:23:38 AM

MEERA KOHLER, President and CEO, Alaska Village Electric Cooperative (AVEC), provided a brief history of her background in the industry. She informed the committee AVEC serves 56 communities spread widely across the state, the largest of which is Bethel, and all but one are remote and mostly small villages. Almost all of the communities are diesel-powered, although AVEC has recently installed wind generation, and now owns 34 wind turbines. Wind accounted for 6 percent of AVEC's gross electric generation last year. The cooperative is a major consumer of the Power Cost Equalization (PCE) program because the cost of energy in Rural Alaska is very high due to the high cost of diesel. The price of diesel has not dropped in Rural Alaska because its supply was purchased at last year's prices. She noted that residential electric rates in Rural Alaska range from $0.36 per kilowatt (kW) hour to $1.80 per kW hour, depending on the size of the community. Ms. Kohler said high cost cripples economic development and PCE only provides relief to ratepayers of about 20-28 percent of the electricity sold; all of the energy used by commercial users is purchased at full cost (slide 7). Power Cost Equalization was established in fiscal year 1985 (FY 85) when the state determined - after study - there was no alternative to diesel fuel in Rural Alaska. At the time PCE was established, all users received PCE on their first 700 kW hours; however, subsequent low oil prices led to a change in the program that eliminated commercial customers and state and federal government entities, which reduced the cost of the program by about 40 percent. Currently, PCE is funded by an annual appropriation of about $40 million, leaving 80 percent of the cost of producing energy in Rural Alaska carried by each local community. The Regulatory Commission of Alaska (RCA) allocates the amount of PCE to each community; residential consumers qualify for the first 500 kW hours used, and community facilities qualify for up to 70 kW hours per resident per month. At this time, AVEC represents about 41 percent of all PCE used in the state. To distribute PCE, local utilities post a credit to each consumer each month, and the Alaska Energy Authority (AEA), Department of Commerce, Community & Economic Development (DCCED), is billed for reimbursement. She characterized this arrangement as a "direct pass-through to the consumer" (slide 8).

10:30:56 AM

MS. KOHLER displayed a map showing PCE eligible communities, none of which are in the Railbelt because those communities receive other benefits. The cost of electricity in most of the villages on the North Slope is subsidized by the North Slope Borough (slide 9). Currently, PCE is funded by an endowment fund which was established in 2000, and capitalized with $100,000 from the Constitutional Budget Reserve (CBR) and $85 million in proceeds from the sale of the Four Dam Pool projects. Later, appropriations of $187 million and $400 million were added to the endowment fund - both payments a result of compromise funding for parity between urban and rural Alaska - and the endowment fund has grown to its current level of $950 million. The statute allows up to 7 percent of the average principal balance of the fund over the previous five years, to be appropriated for PCE; in fact, last year was the first year the endowment was sufficient to pay PCE, and the endowment should continue to be sufficient. Ms. Kohler stressed the fund is essential to the program (slide 10).

10:34:50 AM

REPRESENTATIVE WOOL asked whether endowment funds can used to subsidize other sources of energy besides diesel fuel.

MS. KOHLER responded that PCE is available to communities that were eligible in 1984; for example, in 1984, Cordova was all diesel, but now 80 percent of its electricity is provided by hydro generation. However, Cordova is still eligible, and receives PCE, thus PCE is available to communities that have renewable energy, but is not available as a source of capital.

10:36:36 AM

JODI MITCHELL, Chief Executive Officer, Inside Passage Electric Cooperative (IPEC), introduced members of the IPEC board of directors. She expressed her support for the PCE program and for comments made by the previous speaker. She clarified that each utility has a different PCE rate based on the cost of power, thus adding renewables results in a lower amount of PCE paid by the state for a community. Ms. Mitchell directed attention to the renewable energy grant fund, created by the legislature in 2008, and which supports renewable energy projects, particularly in areas with the highest energy costs; grant applications are scored in part on the cost of energy, as well as on local median household income. Differing from PCE,

the renewable energy grant fund supports lower costs on a permanent basis, and benefits all of a community, including businesses, not just residential consumers. Administered by AEA, grants are awarded in different phases of projects such as reconnaissance, feasibility, design, and construction. She informed the committee that IPEC used the grant fund for all phases of the Gartina Falls Hydroelectric Project in Hoonah. The grant fund is a successful program that has provided a large rate of return for the state's investment (slide 12). She pointed out that Southeast Alaska is able to use hydro and a hydro project can last much longer than 30 years, although projects are scored on a term of 30 years. Since 2008, appropriations to the fund have totaled $247.5 million, matched with $152 million from other sources. She cautioned that other sources for funds are unknown, and the renewable energy grant fund is the biggest hope for Rural Alaska to reduce its use of diesel; in fact, federal funds for hydro projects are limited to existing projects because hydro is not considered renewable energy.

10:43:28 AM

CO-CHAIR COLVER questioned whether this point should be brought to the attention of U.S. Senator Lisa Murkowski.

MS. MITCHELL recalled there has been a past effort by the legislature to urge for a change by the federal government.

CO-CHAIR COLVER suggested the committee prepare a letter to Senator Lisa Murkowski.

MS. ENKVIST noted that Senator Lisa Murkowski has been working on this issue and some incremental progress has been made.

MS. MITCHELL returned attention to the renewable energy fund, noting that in 2014, the fund projects displaced close to 15 million diesel equivalent gallons. Since 2009, an estimated 347,575 metric tons of greenhouse gas emissions have been reduced. Renewable energy fund projects create local employment and local energy independence (slide 13). Ms. Mitchell urged that the legislature provide appropriations to the renewable energy grant fund at the funding levels recommended by AEA, even in light of the funding crisis. Projects recommended for funding help advance Alaska's goal of producing 50 percent of the state's power with renewable energy by 2025, especially in Rural Alaska. Ms. Mitchell expressed her support for funding $15 million in the governor's FY 16 capital budget (slide 14).

10:47:55 AM

CO-CHAIR COLVER stated his support for the program.

MS. MITCHELL then directed attention to the emerging energy technology fund which allows local scientists such as those working with the Alaska Center for Energy and Power, University of Alaska Fairbanks, to search for new alternative energy sources. Alaska is a resource-rich state, and it is important to learn how to tap its resources. The FY 16 capital budget contains $1 million for this program, which is a significant reduction, and she urged for the continuation of this level of funding (slide 15).

CO-CHAIR COLVER asked whether there is sufficient earnings from the PCE endowment fund to offer help to schools.

MS. KOHLER advised that up to $65 million from the endowment fund could be made available for other programs such as schools or commercial users; however, school funding comes from the state thus "it would essentially be money out of one pocket into another pocket." Instead, she said the expansion of PCE should be to small commercial users and to increase the number of eligible hours.

MS. MITCHELL agreed.

CO-CHAIR COLVER observed the principal balance of the PCE endowment fund is at about $959 million, and expenditures are currently about $45 million.

10:52:06 AM

MS. KOHLER explained the fund is just now at the point where it will generate $44-$45 million. Although many believe allowing up to 7 percent from the principal balance is not sustainable, she opined that 6 percent is sustainable, and about $50 million could come out of the PCE endowment fund.

CO-CHAIR COLVER assumed the PCE reimbursement is a proportional reimbursement depending on the total amount appropriated out of the fund each year.

10:53:26 AM

MS. KOHLER advised that PCE has been fully funded for the last several years; however, there is a directive in the statute that says if funds are insufficient, the PCE rate would be prorated by the Regulatory Commission of Alaska (RCA). She recalled that in the 1990s and early 2000s reimbursement was lower. In further response to Co-Chair Colver, she said:

> [PCE] is a set amount per kilowatt hour based upon the individual community's cost experience. So, for example, in one of our villages, if our cost of power is 50 cents a kilowatt hour, what will happen is that, this is not the rate, this is the cost, if we're selling it for 53 cents a kilowatt hour and our costs are 15 cents a kilowatt hour, then the RCA subtracts first the base rate, and the base cost is the average cost of power in Anchorage, Fairbanks, or Juneau, and currently that's at about 14 and one-half cents, so that comes off the top, and then off the remaining balance - say its 50 cents minus 15 cents - that's 35 cents, that's then multiplied by 95 percent, and that is the PCE rate. So the consumer will then get that PCE rate on all of their consumption, as long as it's under 500 kilowatt hours. If they use more than 500 kilowatt hours, then all the additional kilowatt hours are at full cost.

MS. KOHLER continued to explain that the average residential consumption is about 300 kW hours per month, but the hours fluctuate between winter and summer, thus some users exceed 500 kW hours in winter.

10:57:09 AM

CO-CHAIR COLVER asked whether there are hurdles to converting the diesel generators used by AVEC utilities to another source of fuel.

MS. KOHLER opined most diesel-fired generators can accept another liquid, such as propane, for a portion of fuel; however, the efficiency of the diesel generator is reduced. Also, storage is a problem because propane must be stored under pressure, and a gallon of propane has two-thirds of the British thermal unit (Btu) value of diesel fuel. An advantage is that propane and liquefied natural gas (LNG) are easier to handle.

CO-CHAIR COLVER referred to a proposal to ship international standards organization (ISO) tanks by rail and barge, and then

use the ISO tanks for storage. He expressed his interest in this method as an alternative to diesel for long-term use in Rural Alaska. The question is what to use for long-term sources of power, and how to make a transition from diesel; the private sector will respond with products that make economic sense in Rural Alaska. He also questioned whether the existing assets can be converted to use alternative fuels without significant capital investment.

MS. KOHLER stated AVEC welcomes an alternative to its reliance on diesel. Minto, a village on the road system, could be used to test an alternative fuel source. Furthermore, she said she is in strong support of the construction of electrical transmission to interconnect the state, which is critically needed in the Railbelt and across the state. Electrical interconnection would supply the energy needed to prevent shipping the state's natural resources outside, and would enhance Alaska's economy "across the board."

11:01:38 AM

The committee took an at ease from 11:01 a.m. to 11:03 a.m.

PRESENTATION: ALASKA ENERGY AUTHORITY, DEPARTMENT OF COMMERCE, COMMUNITY & ECONOMIC DEVELOPMENT

11:03:05 AM

CO-CHAIR COLVER announced that the next order of business would be a presentation by the Alaska Energy Authority, Department of Commerce, Community & Economic Development.

11:03:11 AM

EMILY FORD, Public Outreach Liaison, Alaska Energy Authority (AEA), Department of Commerce, Community & Economic Development (DCCED), provided a PowerPoint presentation entitled "Alaska Energy Authority," and dated 2/10/15.

11:03:37 AM

SARA FISHER-GOAD, Executive Director, AEA, DCCED, said she was interested in hearing about AEA programs from the perspective of participants such as the Alaska Power Association (APA), and noted the benefits to legislators hearing this information as well. She informed the committee that the mission of AEA is to reduce the cost of energy in Alaska. The authority is an

independent corporation of the state created in 1976; subsequently, there have been adjustments to AEA's power and authority, and many of the programs under discussion have been assigned by the legislature under AS 42.45 (slide 2).

11:05:14 AM

MS. FORD advised that AEA administers the Power Cost Equalization (PCE), AEA, DCCED, program, the Regulatory Commission of Alaska (RCA) regulates the program, and the fund is managed by the Department of Revenue (DOR). She noted AEA's community assistance staff has been working with DCCED, local governments, and RCA to qualify more communities for PCE by assisting their utilities with AEA's reporting requirements. At this time the number of participating communities is 192 (slide 4). She directed attention to a graph which illustrated the average rate of power in Anchorage, Fairbanks, and Juneau, the rates paid without PCE, and the rates paid post-PCE (slide 5). She noted that the four communities with the highest energy costs all have very low populations and are in remote areas; Adak is also affected by a loss of a military presence. She highlighted AEA's regional energy plan efforts that began in 2008 after the publication of the Energy Pathways document, which revealed the importance of a regional focus on energy issues. Regional planning seeks to capitalize on local resources, address local challenges, create a locally-driven and community-vetted blueprint for sustainability, and provide specific and actionable recommendations (slide 6). She acknowledged the support of the Southeast Conference in regional planning efforts. Energy regions closely follow Alaska Native Claims Settlement Act (ANCSA) boundaries, and plans have been completed for the Railbelt and Southeast Integrated Resources. She characterized these plans as living documents that are under continuing review. Ongoing plans are implemented by the local Alaska Regional Organization (ARDOR), Division of Economic Development, DCCED, and in the Upper Tanana Yukon-Koyukuk region, AEA is partnering with the Tanana Chiefs Conference (TCC). The plans should be completed by July, and will include community and regional priorities. In addition, AEA holds an advisory role in the Lower Yukon-Kuskokwim and North Slope plans (slide 7). Ms. Ford stated that Senate Bill 138 [passed in the 28th Alaska State Legislature] included a provision for AEA to conduct the Alaska affordable energy strategy ["strategy"] due 1/1/17 on how to deliver more affordable energy to areas in the state that would not be served by a natural gas pipeline (slide 8). She pointed out how the plans and strategy differ: the regional plans are independent of state funding; the strategy is

asking how to deliver affordable energy when a gas line is generating significant revenues for the state.

11:09:53 AM

MS. FORD advised that currently communities fall into four quadrants of access to energy resources for electricity: natural gas/renewables; no natural gas/renewables; no natural gas/no renewables; natural gas/no renewables. The largest quadrant falls into the no access to natural gas or renewables quadrant (slide 9). The division of access to energy resources for heat is similar (slide 10). She continued to explain that the strategy explores how to move a community from one quadrant to another; once the drivers of cost are identified, the tools to reduce costs will also be identified (slide 11). Alaska Energy Authority's energy efficiency and conservation efforts are focused on commercial buildings, rural public buildings, industrial facilities, and electrical efficiency; furthermore, AEA leads the Alaska Energy Efficiency Partnership which comprises of stakeholders, state entities, federal partners, nonprofits, and regional utilities. She pointed out that measures implemented by the Alaska commercial energy audit program produce a 30 percent immediate savings (slide 12). Found in the committee packet are AEA's annual report and the renewable energy fund status. Highlighted in the annual report is "revisiting Nightmute." Five years ago, energy efficiency measures were simultaneously deployed in the community of Nightmute by multiple state, regional, and private sector entities. Measures included weatherization, upgrades to buildings and commercial building lighting. Interested parties, along with Nuvista Electric Cooperative and the Cold Climate Housing Research Center were brought back to together to explore whether this model was effective. After five years the village store estimated a savings of $11,000 per year and the community was engaged in the process. Nightmute was able to extend some of the programs, although there is a need for continued and ongoing education regarding the maintenance of facilities (slide 13).

11:14:32 AM

MS. FORD turned to AEA's bulk fuel and rural power system upgrade (RPSU) programs. In 2000, the Denali Commission provided funding for both programs; however, Denali Commission funding is declining and AEA is completing the programs. Related to these programs are the Circuit Rider program which provides mechanical and trouble-shooting training to rural

powerhouse operators, and the emergency response program, which provides assistance to a community that has lost power, or is near a lights-out situation (slide 14). The RPSU program is a grant to communities, and AEA found that if a small community needs to debt finance an upgrade to its powerhouse, its electric rate will increase by $0.19 per kilowatt (kW) hour, thus providing grants for upgrades reduces the cost of energy for communities (slide 15). She turned to AEA's emerging energy technology fund (EETF) and noted that the fund fills a critical void in technology; the fund supports projects that have a reasonable expectation of commercial success within five years. Projects include renewables, fossil fuels, efficiency measures, and new and existing technologies. Two rounds of solicitations have occurred, the first round for $4.5 million in state funds and $4.5 million in Denali Commission funds, and the second round for $2.0 million. Interest was particularly focused on three hydrokinetic projects that were tested this summer (slide 16).

11:17:19 AM

CO-CHAIR COLVER asked whether there were any positive results from the hydrokinetic tests.

MS. FORD deferred to Mr. Skaling.

11:17:49 AM

SEAN SKALING, Deputy Director, Rural Energy Group, Alaska Energy Group, Department of Commerce, Community & Economic Development (DCCED), answered that there were three successful deployments, and their challenges were in design, implementation, testing moorings, and deploying and retrieving successfully. Two of the devices will be deployed next summer for more testing, although the projects are not yet economically competitive. He advised the purpose of the program was to help emerging technologies advance to commercialization.

CO-CHAIR COLVER surmised submerged designs are not effected by ice and drifting logs.

MR. SKALING said two designs are mounted on the bottom and one is surface-mounted on a barge. Testing was done on the Kvichcak River because the water is very clean with little debris. Other testing is being done on the Nenana River. In further response to Co-Chair Colver, he said ground source heat is being successfully deployed in Fairbanks to determine how the soil

temperature is affected. Generally, ground source heat works best in locations with low electric cost and high heating fuel costs.

CO-CHAIR COLVER suggested in Southeast.

MR. SKALING said yes. He added that baseboard heating uses one unit of energy and produces one unit of heat; ground source heat uses one unit of energy and generally produces two or three units of heat.

REPRESENTATIVE WOOL knows of heat pumps installed in Fairbanks with success.

MR. SKALING said he was interested in the data.

REPRESENTATIVE WOOL understood power output by river turbines is fairly low for the complexity of the apparatus.

11:22:47 AM

MR. SKALING responded that the Ocean Renewable Power Company (ORPC) turbine in the Kvichak River has an output of about 50 kW, thus the community would need two devices to supply a load that averages 200-250 kW per year. He added that some deployments have been improved since tested last summer.

11:23:55 AM

MS. FORD continued with the presentation, noting that the Susitna-Watana Hydro project is in the process of Federal Energy Regulatory Commission (FERC) licensing, although the schedule is in abeyance at this time. The project as proposed would provide 50 percent of the Railbelt electricity load and is located at River Mile 189 on the Susitna River. Initial data has shown that the project could provide wholesale power at a 50-year average rate of $0.06 per kW hour (slide 17).

CO-CHAIR COLVER understood that the budget request to proceed to FERC licensing is $100 million, and there are existing funds of $25 million. He asked for the work schedule for the upcoming summer using the remaining funds.

MS. FISHER-GOAD answered in response to [Office of the Governor Administrative Order. No. 271, signed by Governor Bill Walker 12/26/14], AEA has currently encumbered funds for the completion of reports from data collected during the past field season. At

this point, AEA is continuing to evaluate the project's licensing options, in consultation with FERC. The intent is to ensure that AEA preserves the investment the state has already made, and has opportunities for licensing in the future. She confirmed that AEA has estimated that $100 million is needed to complete the study plan; however, the schedule is suspended until all of the options are considered. Ms. Fisher-Goad advised that minimal to no field work would be done this season.

CO-CHAIR COLVER referred to fisheries research on the Susitna River drainages, and asked whether the field research was completed. He expressed his concern over different efforts ongoing in the Susitna drainage: Alaska Department of Fish & Game (ADF&G); Susitna-Watana Hydro; and others, all looking at salmon habitat, the distribution of species, and production levels.

11:27:51 AM

MS. FISHER-GOAD stated that AEA has not completed its field work for a license application to FERC. It is known that the work that has been done is valuable to ADF&G for its efforts to manage the fisheries and resources in the area. The two agencies have sought to prevent a duplication of effort; in fact, ADF&G has been the lead agency on some of the fisheries research for the project. Additional funding is needed to complete the field work.

CO-CHAIR COLVER requested that AEA provide a spreadsheet of all of the reports, project work status, coordinating agencies, and the scope of the research plan regarding fisheries in the drainage, in addition to points of contact and managers of the data. He expressed his concern that if the project is "winding down," there may be a loss of data related to the restoration of the stocks in the drainage.

MS. FISHER-GOAD agreed, and further advised that "a lot of that information has been submitted in our admin. order response, that has been posted on the [Office of Management & Budget, Office of the Governor] web page."

CO-CHAIR COLVER restated his concern.

11:31:19 AM

MR. SKALING directed attention to the renewable energy grant fund, which helps achieve the state's goal of 50 percent

renewable electricity by 2025, provides a vetting mechanism for the legislature including technical and economic evaluations, and capitalizes on local energy resources. He stressed that the program has expanded the knowledge base of renewable energy in Alaska; in fact, state employees, communities, and contractors have been on a strong learning curve for seven or eight years. In addition, the program provides local employment and the resulting savings in energy costs are disbursed to local communities, utilities, and businesses, also reducing state expenses by benefitting schools and PCE. For example, the program funded the Coffman Cove School Garn boiler system (slide 18). The grant fund has a strong emphasis on areas with high energy costs, as well as on ensuring regional balance in the distribution of funds and benefits. Eligible applicants include utilities, local governments, tribal councils, and Independent Power Producers (IPPs); eligible projects include wind, hydroelectric (hydro), biomass, heat recovery, heat pumps, geothermal, solar, wave, tidal, river hydrokinetic, landfill gas, local natural gas, and the transmission of renewables (slide 19). For the first time the "Checklist for Successful Applications" was posted with the application form on the AEA web site. The following was a list of some of the fund's achievements: AEA and Kodiak Electric Association received national recognition by the Clean Energy States Alliance; 15 million gallons of diesel were displaced in 2014; overall program benefit cost ratio of 2.8 (slide 20). The following was a summary of the program: 277 applications have been funded, representing 38 percent of the applications received and approximately 200 projects; 125 grants are in place; appropriated funding in the amount of $247.5 million (slide 21).

11:37:16 AM

MR. SKALING illustrated the location and resource type of projects that have been funded (slide 22), and illustrated the percent of funding allocated for each type of resource, noting that about 70 percent is wind and hydro (slide 23).

REPRESENTATIVE WOOL observed that the .5 percentage of funding for solar projects seemed very low.

MR. SKALING advised that solar projects are very small projects with low cost and low generation. He noted that the grant program is focused on regional equity and illustrated the funding by region (slide 24). A chart showed the number of grants, total amounts, and percentages by region (slide 25). Turning to fuel savings, he remarked:

> In the early years, as we were getting through the early phases, and construction and getting on to construction, it took some time for the projects to develop, and now they are really producing a lot of energy, and expected to continue to grow.

MR. SKALING expected the 2014 annualized number of gallons of displaced diesel to grow to just under 15 million gallons (slide 26). He explained that $100 million in funds from the renewable energy fund and $200 million from other sources were used to build the first 44 projects, which have now generated $900 million in net present value (NPV) lifecycle benefits resulting in a benefit/cost ratio of 2.8. The life of a project was estimated to be 20 years for wind and biomass projects, and 50 years for hydro projects (slide 27). This year, AEA recommended 40 projects at a cost of $28.3 million; however, to comply with the governor's budget, AEA chose 34 projects with funding caps: 18 heat projects for $5.1 million, and 16 standard projects for $9.8 million (slides 28-32). Reviewing two past projects, he observed that there has been tremendous growth in the understanding of biomass and how generating energy from biomass creates jobs to harvest local material. The community of Thorne Bay installed a biomass boiler which heats its school and a greenhouse. The school provides vegetables for school lunches and sells excess produce as part of its curriculum (slide 33). In Unalakleet, a renewable energy fund wind project installed six 100 kilowatt wind turbines that are now performing well for the community (slide 34). Mr. Skaling closed, noting that a status report summary, project evaluation summaries, and the status of past projects are also available on AEA's web site (slide 35).

11:44:01 AM

The committee took an at ease from ll:44 a.m. to 11:46 a.m.

HB 58-ELIGIBILITY FOR AK ENERGY EFFIC LOANS

11:46:41 AM

CO-CHAIR COLVER announced that the final order of business would be HOUSE BILL NO. 58, "An Act making an entity that is exempt from federal taxation under 26 U.S.C. 501(c)(3) (Internal Revenue Code) and a federally recognized tribe eligible for a loan from the Alaska energy efficiency revolving loan fund; and

relating to loans from the Alaska energy efficiency revolving loan fund."

11:47:01 AM

The committee took a brief at ease.

11:47:15 AM

REPRESENTATIVE TALERICO moved to adopt the proposed committee substitute (CS) for HB 58, labeled 29-LS0254\H, Nauman, 1/27/15, as the working document. There being no objection, Version H was before the committee.

11:47:48 AM

REPRESENTATIVE JONATHAN KREISS-TOMKINS, Alaska State Legislature, speaking as the sponsor, introduced HB 58, Version H. He informed the committee the bill concerns the Alaska energy efficiency revolving loan fund (AEERLP), which - since its creation in 2010 - has not been used, despite its capitalization potential of $250 million. The goal of the fund was to make buildings in Alaska more energy efficient, and HB 58 would create more value for an existing fund. Research revealed that one reason AEERLP has not been utilized was that grants were previously available, which is no longer the case. The bill allows nonprofits and tribes to access the fund, in addition to public entities such as school districts and municipalities, and thus would create more interest in the fund.

REPRESENTATIVE TALERICO thanked Representative Kreiss-Tomkins for sponsoring the bill.

CO-CHAIR COLVER surmised HB 58 opens the loan fund to nonprofits and federally-recognized tribes and Native organizations.

REPRESENTATIVE KREISS-TOMKINS said correct.

CO-CHAIR COLVER opened public testimony on HB 58. After ascertaining no one wished to testify, public testimony was closed.

11:51:07 AM

HB 58 was held over.

11:51:50 AM

ADJOURNMENT

There being no further business before the committee, the House Special Committee on Energy meeting was adjourned at 11:51 a.m.