ALASKA STATE LEGISLATURE
HOUSE SPECIAL COMMITTEE ON ENERGY
February 1, 2013
8:04 a.m.

MEMBERS PRESENT

Representative Doug Isaacson, Co-Chair
Representative Charisse Millett, Co-Chair
Representative Neal Foster
Representative Pete Higgins
Representative Shelley Hughes
Representative Benjamin Nageak
Representative Andrew Josephson

MEMBERS ABSENT

All members present

COMMITTEE CALENDAR

OVERVIEW (S): INTERIOR ELECTRIC SUPPLY

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

CORY BORGESON, President & CEO
Golden Valley Electric Association (GVEA)
Fairbanks, Alaska
POSITION STATEMENT: Provided a PowerPoint presentation entitled, "Interior Energy Issues," dated 2/1/13.

DAVE GARDNER, Vice President
External Affairs and Membership Services
Golden Valley Electric Association (GVEA)
Fairbanks, Alaska
POSITION STATEMENT: Answered questions during the presentation by Golden Valley Electric Association.

ACTION NARRATIVE

8:04:33 AM

CO-CHAIR DOUG ISAACSON called the House Special Committee on Energy meeting to order at 8:04 a.m. Representatives Millett, Foster, Higgins, Hughes, Josephson, Nageak, and Isaacson were present at the call to order.

OVERVIEW (S): INTERIOR ELECTRIC SUPPLY

8:05:27 AM

CO-CHAIR ISAACSON announced that the only order of business would be a presentation on the current Interior electric supply by Golden Valley Electric Association (GVEA).

8:05:38 AM

CORY BORGESON, President & CEO, GVEA, informed the committee GVEA serves the electrical needs of the Interior. The association has 34,480 members in its service territory - which covers from the Cantwell area to Clear, Nenana, and Fairbanks, and down to Delta Junction - and supplies about 44,000 meters. All of the cooperatives in the Railbelt combined serve about 250,000 members. The association has developed a very good reliability standard in spite of harsh climate conditions. Peak demands are about 220 megawatts (MW) and occur during periods of extreme weather conditions. Generation capacity is about 290 MW and GVEA generates power from a variety of sources.

8:09:00 AM

CO-CHAIR ISAACSON asked for the frequency and longevity of peak demands.

MR. BORGESON answered that in the summer the general load is about 150 MW, and most of the peak loads are in winter from October through the end of March. The Interior needs a lot of energy in the winter months for space heaters, engine block heaters, and lights, but in summer generators often sit idle so summer is a good time for maintenance. He explained that GVEA is an electric cooperative owned by its members and does not make a profit; in fact, after a period of time margins are returned to the members. This year, about $2.5 million in capital credits collected from 1987 was returned to members. Financing arrangements require GVEA to collect monies in excess of its costs to ensure it can pay all of its debt. Debt at this time is about $380 million which is necessary to support GVEA's generation and distribution system, and holds about 22 percent

equity. Slide 2 illustrated the percentages of GVEA's fuel supply that is generated by hydroelectric, coal, natural gas, oil, and wind sources. The association buys as much power as possible from Anchorage Municipal Light & Power (ML&P) and Chugach Electric Association, Inc. (Chugach Electric). In 2011, 31 percent of GVEA's power came from the Anchorage utilities over the electrical interties, but in 2012 the supply of natural gas was curtailed because there was not enough gas to allow the Anchorage utilities to sell power to GVEA. The association also produces electricity from coal and is anticipating new production from the Healy Clean Coal Plant (HCCP) beginning in 2015.

8:13:33 AM

REPRESENTATIVE HIGGINS asked for the reason behind the delay in opening HCCP.

MR. BORGESON responded the permitting caused some delay, although the consent decree for the air permits has now been signed. In addition, financing through the Rural Utilities Service (RUS), U.S. Department of Agriculture (USDA), requires a National Environmental Policy Act (NEPA) review which is expected to be completed by July 2013, and start-up will take 18 months after that. He returned attention to slide 2, noting that GVEA has diverse sources of power which allow the utility leverage with its suppliers, and gas from Cook Inlet increases leverage. The association is important to industries such as the Usibelli Coal Mine and Flint Hills Resources' North Pole Refinery. Slide 3 listed Alaska residential electric rates as follows: Fairbanks (GVEA), 20 cents; Minto (Alaska Village Electric), 22 cents with Power Cost Equalization (PCE) and 61 cents without PCE; Glennallen (Copper Valley Electric), 33 cents; Homer (Homer Electric Assn.), 16 cents; Anchorage (Chugach Electric), 13 cents.

8:16:39 AM

CO-CHAIR ISAACSON asked what has lowered Fairbanks' rate from its previous rate of 23 cents per kilowatt hour (kWh).

MR. BORGESON said in November GVEA entered into a purchase power contract with Chugach Electric until March, 2015. This meant GVEA can rely less on diesel and drop the rates almost 3 cents per kWh.

CO-CHAIR ISAACSON surmised there will be an increase in natural gas [from Chugach Electric] for 2013.

MR. BORGESON said correct, the gas from Chugach Electric will be a two-year "bridge" to the start-up of HCCP.

8:18:47 AM

REPRESENTATIVE HUGHES asked how power from HCCP will affect the rates.

MR. BORGESON estimated the cost of power from HCCP will range from 12 cents to 14 cents per kWh due to a significant drop in the cost of production. In addition, coal production is steady, and GVEA can potentially get a 5- to 10-year contract with HCCP. In further response to Representative Hughes, he clarified that the overall cost of power will stay in the 20 cents per kWh range, which will be comparable to future Anchorage rates.

8:20:57 AM

REPRESENTATIVE HIGGINS asked whether a fuel surcharge is included.

MR. BORGESON said yes. In further response to Representative Higgins, he relayed on December 1, 2012, the rate dropped from 23 cents to 20 cents, which was an overall 11 percent reduction in the cost to members, and is based on the projected gas-fired generation from the Anchorage contract. The energy crisis in the Interior is driven mostly by the cost of space heating. Slide 4 showed in June 2012, the cost of oil in Fairbanks was $4 per gallon, and the cost of space heating in Anchorage was about one-third of the cost in the Interior. He shared a personal story of the cost of oil needed to heat his home. For example, a 3,000 square foot home is estimated to cost $6,000 per year to heat if the cost of fuel oil is $4 per gallon, and the cost of electricity is in addition to that. Similar to the situation in the villages, the cost of energy is causing people to leave the Interior. Mr. Borgeson further estimated that typical residential electrical use is 700 kWh and results in a bill of about $150 per month per household. This is affordable for most, but high electrical costs also raise the cost of goods and services such as restaurants. The recent drop in rates will save GVEA customers $34 million, which will have a positive "cascade" effect; in fact, a community's high electric costs can drive even a large and successful industry out of the community.

He encouraged the committee to consider the significant impact the cost of energy can have on growth and development.

8:27:54 AM

REPRESENTATIVE JOSEPHSON recalled his time in rural Alaska where diesel oil was used for space heating. He observed diesel heating oil is also used in Fairbanks and asked for the cost to retrofit Fairbanks to receive natural gas - if a gas pipeline were built - and what GVEA's role would be.

MR. BORGESON referred to a study by the Fairbanks North Star Borough and [Northern Economics] that estimated the cost of putting in a gas distribution system throughout the borough area would be $400 million to $600 million, although some disagree with the study. About 1,000 customers in Fairbanks already have natural gas from a small natural gas distribution system. He advised the role of GVEA is to bring natural gas to Fairbanks, and a borough utility has been formed to provide the natural gas distribution system.

REPRESENTATIVE JOSEPHSON questioned whether the cost of that investment would equal the cost of continuing to use fuel oil in a more efficient fashion.

8:30:44 AM

MR. BORGESON opined the distribution of fuel oil at this time is about as efficient as it can be. He directed attention to slide 7, which showed the Bradley Lake Hydroelectric project (Bradley Lake Hydro). The association has an interest in the Bradley Lake Hydro plant which is capable of producing 20 MW, although constraints of the intertie restrict transmission to 15 MW of power. The facility is maintained by Homer Electric Association, Inc. (HEA), and provides power to GVEA at about 6 cents per kWh. Line losses are associated with transmission over the intertie, but the facility is a very good source of energy for the Interior. Mr. Borgeson advised that there is a project underway that would divert Battle Creek and increase the flow into Bradley Lake. Bradley Lake Hydro is owned by the Alaska Energy Authority (AEA), and was completed in the early 1990s through a 50 percent grant from the legislature and 50 percent financing by the utilities. Slide 8 showed two coal plants in Healy. The 28 MW Healy Power Plant (Unit 1) was built in 1967, the fuel costs are about 6 cents per kWh, and it is a very reliable and well-maintained plant. Also pictured was the Healy Clean Coal Plant (HCCP), which is a 50 MW plant that

should be running in 2015. The two plants are connected in order for both to be run from one control center. The Alaska Industrial Development and Export Authority (AIDEA) owns HCCP, and GVEA has an agreement to purchase the plant from AIDEA. Slide 9 showed the Eva Creek Wind Project which was built with approximately $13 million from a state grant. The towers became operational in November 2012, and the 12 turbines generate a maximum of about [24] MW of power. During its operation in 2012, the turbines operated at a 53 percent capacity factor - which is a phenomenal capacity for wind - and GVEA anticipated this high generation in winter. Mr. Borgeson expressed GVEA's pride in the project, saying it was built within its budget and on time. The construction site on Eva Creek is located close to HCCP, but all of the workers and materials needed to cross the Nenana River for access. The turbine blades were delivered on the Alaska Railroad (ARR) and were constructed in Arkansas of balsa wood and fiberglass. The plant was constructed by an Alaskan crew of 205 workers, and other major components were fabricated in Korea and Germany.

A video on the construction of the Eva Creek Wind Project was viewed from 8:35 a.m. to 8:37 a.m.

8:37:59 AM

CO-CHAIR ISAACSON asked how many generators are currently producing.

MR. BORGESON responded all 12 have been commissioned and have been working. In further response, to Co-Chair Isaacson, he said each tower produces 2.2 MW; the total output anticipated is 78,000 MW hours per year.

8:38:43 AM

DAVE GARDNER, Vice President, External Affairs and Membership Services, GVEA, said the formula used to calculate output is as follows: 25 MW x 30 days x 24 hours x 56 percent capacity factor.

REPRESENTATIVE ISAACSON asked whether the performance has met the projections.

MR. BORGESON said the project is performing better than GVEA anticipated.

CO-CHAIR ISAACSON asked whether wind generation will reduce the use of heavy atmospheric gas oil (HAGO) plants.

MR. BORGESON stated there was a reduction of over one million gallons of HAGO and naphtha in 2012; in fact, most of the generation from the wind project will be used in conjunction with the North Pole Expansion Power Plant (expansion plant) which is operated on naphtha. In further response to Co-Chair Isaacson, he said the GVEA wind project is much bigger than the [Pillar Mountain Wind Farm] in Kodiak and will reduce GVEA's oil needs "significantly."

8:40:44 AM

MR. BORGESON restated that the wind generator came online at the very end of October and saved one million gallons [of oil] during two months. He explained that wind generation coming into a system requires that the system is prepared for the wind to stop. The dispatch center monitors the power that is being generated at any time and other sources of power must be standing by. For GVEA, the cheapest supplemental power would come from the expansion plant, thus there is a limit as to how much of the total power can come from wind, because it has to be "backed up." Slide 10 showed the Zehnder Power Plant located in downtown Fairbanks which has two General Electric (GE) turbines of 20 MW each. This is an older plant which generates very expensive power at 53 cents per kWh. It also creates environmental issues, and is only run for small amounts of power; however, the Zehnder plant has the capacity to start if the system is completely "blacked out." Slide 11 showed the North Pole Power Plant which was built in the early 1970s and has two 60 MW GE turbines. This plant supplies power to GVEA when power is not available from the Anchorage utilities. The turbines are very reliable, but are not the most efficient. Also in North Pole is the 60 MW expansion plant which was built in 2005 and is basically a jet engine that burns naphtha - a lighter fuel that is better for the environment. The expansion plant is the base load plant; it runs all of the time and is used to back up wind generation. Returning to wind power, he said GVEA expects wind generation to cost 12 cents per kWh and federal energy bonds keep the financing costs of wind projects low. Slide 13 showed the Delta Power Plant which was relocated to Delta Junction in 2005. It is very expensive to run - $1 per kWh - and is tested for reliability twice a year in case it is needed.

8:47:45 AM

MR. BORGESON advised that GVEA also purchases power from the 25 MW Aurora Energy coal plant located on the Chena River. The Aurora plant is very reliable and has benefited from many upgrades.

CO-CHAIR ISAACSON asked whether power is available for purchase from U.S. Army Post Fort Wainwright (Fort Wainwright), Eielson Air Force Base (AFB), or Clear Air Force Station.

MR. BORGESON said the system is not designed to purchase power from Fort Wainwright or Eielson AFB; however, there is a wheeling tariff that allows for sharing of electrical lines, and GVEA is buying some power from Fort Wainwright at this time.

MR. GARDNER clarified that the plants at Fort Wainwright and Eielson AFB are heat-generating plants and electricity is a byproduct. On a cold winter day they may have some excess power, and should their power fail GVEA could send them power, but not heat.

CO-CHAIR ISAACSON relayed that the leadership at Eielson AFB has recently expressed frustration that they must purchase electricity "but are only able to sell it back at a higher amount, so it isn't economic for them to do it, and they've been frustrated because they insist that their costs could be lowered and we could have lower utility rates at times ...." He asked Mr. Borgeson to "renew that conversation with them ... maybe they have more electricity capability - spin - than we're giving them credit in this testimony."

MR. GARDNER said they would get back to the committee with further information.

8:50:47 AM

REPRESENTATIVE HIGGINS commented that Clear Air Force Station power plant has "been dumping extra juice in the ground for years."

MR. BORGESON informed the committee that Clear Air Force Station recently expressed interest in connecting to GVEA's grid. They also solicited requests for proposals to lease, sell, or transfer their approximately 20 MW coal plant because they only need 4 MW of power. This is very inefficient and GVEA looked at the possibility of taking over the plant, as did Doyon Utilities and Aurora Energy; however, the plant was offered with no

environmental permits and experience shows that is a major problem. Furthermore, the stability of the turbines is questionable and there is also the question of how much power "we could bring over the interties coming into Fairbanks." After due consideration, there was no interest in the Clear Air Force Station plant. In further response to Representative Higgins, Mr. Borgeson said the Alaska Intertie was built in the 1980s and the Northern Intertie was built in the 1990s.

8:55:12 AM

REPRESENTATIVE HIGGINS understood there are problems with the interties and asked if that is because of the technology at the time.

MR. BORGESON opined the Northern Intertie was built to accommodate HCCP and it has sufficient capacity for that. In fact, when HCCP comes online there will be sufficient capacity for power generation in the Interior, but much of it is based on oil-fired generation. If oil were $10 per barrel, there would be very cheap power. Furthermore, it is important to have the capacity for generation within the system in case an intertie fails. He returned attention to slide 16, emphasizing the importance of power purchases, and reiterating the contract with Chugach Electric will save members $32 million to $34 million in 2013, and possibly more in 2014, although future savings are always relative to the price of oil.

CO-CHAIR ISAACSON asked for more information on the limits of the intertie.

MR. BORGESON explained GVEA is limited to about 77 MW of power transmission over the intertie. An additional constraint on the Alaska Intertie is that it is operated at 138 kilovolt (KV) which means "we [have] got a big power cord but in the middle there is a smaller extension cord that just can't bring that much power over it." The power from Bradley Lake Hydro to Fairbanks is 15 MW to 20 MW, which limits the amount of power that can be purchased from Chugach Electric/Matanuska Electric Association, Inc. (MEA) to 60 MW, thus additional power must be purchased from the south. Slide 16 showed the Aurora Energy coal plant which dispatches power at 5.8 cents per kWh under contract.

9:00:05 AM

A video on dispatching power was viewed from 9:00 a.m. to 9:04 a.m.

9:04:10 AM

MR. BORGESON pointed out dispatching power is an important part of GVEA's responsibilities. In hindsight, building more coal power plants and a bigger intertie may have been prudent, but GVEA must use the facilities it has as efficiently as possible. Slide 18 explained GVEA's electric bills have three components: the fuel and purchase power charge of 10.802 cents per kWh; the utility charge of 9.597 cents per kWh; and the customer charge of $17.50 per month.

MR. GARDNER clarified that the major components of the customer charge are the fixed costs of reading meters and providing customer service that are not affected by the cost or the amount of fuel used.

MR. BORGESON added that these charges are regulated by the Regulatory Commission of Alaska (RCA) and utility charges are filed for review every six months. The association seeks to reduce the utility charge cost, but resisting reductions in training cost ensures that GVEA follows best business practices and maintains reliability and customer service.

REPRESENTATIVE HIGGINS asked whether the [fuel and purchased power] cost is the cost to generate energy and the utility charge is the cost of personnel.

MR. BORGESON clarified that the fuel and purchase power charge is the cost of fuel, whether it is coal, fuel oil, or energy over the intertie. The utility charge is the cost of operating the plant, personnel, salaries, depreciation, and interest. In further response to Representative Higgins, he said the customer charge is applied to the cost of "being hooked to our system."

9:09:46 AM

REPRESENTATIVE HIGGINS observed these are one-time expenses.

MR. GARDNER added that the customer charge includes routine maintenance on the line such as replacing transformers and lines, and upgrades.

MR. BORGESON further explained that RCA looks at the rate design and allocates the right charges. The customer charge of $17.50

is the residential charge and small businesses and large industrial customers pay more because it is based on the concept of "cost causer-cost payer."

CO-CHAIR MILLETT asked for the average percentage of line loss through transmission.

MR. BORGESON estimated a 12 percent line loss, depending on the source of the power.

9:12:38 AM

CO-CHAIR MILLETT relayed that AEA said the average loss is about 27 percent, which points out the need to upgrade transmission, especially to accommodate sources of renewable energy such as wind power. She then asked what GVEA has done for energy efficiency within its commercial and residential base.

MR. BORGESON relayed that energy conservation programs are very important to GVEA and its members. The association has spent $300,000 to deliver energy conservation programs to its members and available grants through AEA are used to maximize benefits. A new campaign, "the Power to Use Less," encourages members to be more efficient and upgrade appliances. Other programs are "Energy$ense," "Home$ense," and "Business$ense" energy audits which use demand-side management. He assured the committee that GVEA does not raise rates if energy consumption goes down. Also, GVEA has begun to track members' savings after energy audits.

9:16:20 AM

CO-CHAIR MILLETT asked whether GVEA has recommendations to the legislature on transmission upgrades and, if so, who should bear the cost.

MR. BORGESON advised the Railbelt transmission lines are not robust enough to be reliable. A study commissioned by AEA and issued 11/12/12, known as the "Burlingame" study, estimated upgrading the lines in order to meet the needs of the Railbelt will cost from $800 million to $1 billion. In addition, the current condition of the intertie constrains the amount of power that can be transmitted from Bradley Lake Hydro. A group of the Railbelt utilities, the Alaska Railbelt Cooperative Transmission and Electric Company (ARCTEC) will make proposals to the legislature on the work that is needed, however, the utilities do not feel all of the cost can be passed on to the ratepayers.

He recalled that the state paid 50 percent of the cost of Bradley Lake Hydro. The cost of energy will affect economic growth in Fairbanks and Anchorage as it has been doing in the villages for a long time, and the state must decide whether the investment is worthy. The Railbelt utilities are now speaking with a united voice through ARCTEC.

9:19:44 AM

CO-CHAIR MILLETT asked whether it is reasonable, or best for consumers, to have six utilities in a small state that are each planning different generation projects, especially if the state is obligated to pay for the transmission power. Each of the utilities wants support from the legislature, and she suggested that one large cooperative utility company would better manage generation and transmission than six independent utilities.

MR. BORGESON relayed that combining generation has been discussed by ARCTEC, especially since AEA is now owning projects and "acting like another utility." In fact, the number of utilities in the Railbelt is growing. Although there are economic models that would save money by consolidating, there are concerns about locating all of the power generation in one geographic area. He expressed his belief that competition will lead to lower prices, but that the utilities should be open to the model that best serves the Railbelt.

CO-CHAIR MILLETT observed the situation also creates conflicts between legislative districts when utilities are requesting upgrades or subsidies. It is important that ARCTEC address transmission line power loss, but generation "drives the cost of energy in the Railbelt, and if we could get to a consensus through the utilities on a master plan for generation ... and do what's best for the Railbelt as a whole ...." She appealed to ARCTEC for unity.

9:25:10 AM

REPRESENTATIVE JOSEPHSON asked Mr. Borgeson to explain why a utility would charge more when a customer uses less energy.

MR. BORGESON said the utility charge is about 10 cents per kWh and is spread over one billion kWh. If there are less hourly charges, but the same overhead cost, the utility charge must go up, thus when members use less electricity GVEA must find a way to cut fixed costs.

REPRESENTATIVE FOSTER inquired how the cost of transmission line upgrades would affect rates to customers.

MR. BORGESON did not know. He offered to provide an estimate at a later time.

REPRESENTATIVE FOSTER acknowledged that would be a complex calculation.

REPRESENTATIVE NAGEAK concurred with the suggestion that the Railbelt utilities could be combined. He recalled residents in Barrow at one time were members of GVEA, and utilities can reach far if they wish to do so. There are many sources of power and super utilities could link three or four regions of the state.

9:30:29 AM

MR. BORGESON pointed out that the Alaska Village Electric Cooperative Inc. (AVEC) is one organization that successfully serves 53 villages. One issue to be discussed by a combined utility is whether there would be a postage stamp cost rate.

CO-CHAIR MILLETT understood there is a new utility in Fairbanks.

MR. BORGESON advised that the Fairbanks North Star Borough (FNSB) formed the Interior Alaska Natural Gas Utility (IANGU) to act as a gas distribution system only. He directed attention to slide 19, which listed some "solutions" and to slide 20, which was a map listing the sources of generation by region as follows: in Southeast, hydro and fuel oil; in the Bush, fuel oil and wind; and in the Railbelt, natural gas, hydro, fuel oil, coal, and wind. Slide 21 was an overview of the Railbelt's six distribution utilities, and he noted that GVEA and Chugach Electric are unique in that they generate, transmit, and distribute power. A few cooperatives are generation and transmission (G&T) utilities, but most electric cooperatives are distribution cooperatives only. The Railbelt has interconnection from Homer to Fairbanks and three primary generating utilities at this time; however in January 2014, HEA will begin generation and in January 2015, MEA will begin generation. Slide 22 was a map of the Alaska Intertie which was built in the 1980s and connected the Interior to Southcentral by a line 177 miles long from Willow to Healy. It is owned by AEA, and sections are operated and maintained by GVEA and MEA. In the 1990s Bradley Lake Hydro and the Bradley transmission lines were added, and in the 2000s the Northern Intertie from Healy and a battery energy storage system (BESS) were added in

Fairbanks. The storage system is the size of a football field and is capable of providing 37 MW of power for 12 minutes, which is enough time to take a load when a unit goes down. Although the batteries are not designed to back up wind generation, feasibility studies are underway to do so. Today, there is a dual line from the Healy Unit 1 power plant which provides reliability and is also capable of carrying future generation from HCCP to Fairbanks. Mr. Borgeson advised the Alaska Intertie illustrated on slide 25 needs to be upgraded. The Burlingame study estimated building a second line will cost $200 million and is necessary to carry power from the proposed Susitna-Watana Hydroelectric Project (Susitna-Watana Hydro), which is projected to generate 600 MW. He cautioned, "The problem is, there is going to have to be [a] significant amount of intertie upgrades to make Susitna work. So, it's tied to a big hydro project like that, and it's tied to a sharing of utilities and resources across the Railbelt - that the interties [must] be upgraded."

9:37:44 AM

CO-CHAIR ISAACSON asked for the location of the section of the intertie that is the limiting factor.

MR. BORGESON said there are parts of the line near Homer and Bradley Lake that are not robust. The largest problem section is the Alaska Intertie, but to handle growth and generation from Susitna-Watana Hydro, sections going south need to be upgraded as well.

CO-CHAIR ISAACSON surmised there are 70 MW to 80 MW of transmission capacity on the Alaska Intertie, 170 MW capacity on the line to Fairbanks, and then to Anchorage and Kenai there is "a mixture of 200 MW capacity down to 70 MW."

MR. GARDNER explained that actually there is less than 170 MW, but the two lines were built to accommodate power from HCCP to Fairbanks. In further response to Co-Chair Isaacson, he said there are sections of the line from Bradley Lake that are "robust enough, and there are certain areas that are ... in need of some upgrading," as referenced by the Burlingame study. He pointed out that certain sections of the second intertie between Healy and North Pole were built to 230 KV capacity which - with the installation of new transformers and instrumentation - can be increased.

9:41:21 AM

REPRESENTATIVE JOSEPHSON observed the governor has recommended tens of millions of dollars more for the Susitna-Watana Project, the interties are insufficient, and a natural gas distribution system in Fairbanks will cost over $1 billion. He questioned the wisdom of constructing a dam, when the necessary infrastructure is so costly.

MR. BORGESON opined the complexity of the situation has meant that utilities and legislators "don't know which way to go." Adding to that complexity is the proposed Alaska Stand Alone Pipeline (ASAP) which could deliver power to rural areas as well. New technology and fuel costs make the future unknown. He has heard that Susitna-Watana Hydro is important because it will be a resource long into the future, whereas the cost and availability of oil and gas from the North Slope are uncertain. Mr. Borgeson said he is unsure, but assured the committee he and the board at GVEA are listening, planning, and strategizing, and are making investments as best they can.

9:45:05 AM

CO-CHAIR MILLETT recalled the legislature commissioned the Alaska Railbelt Electrical Grid (REGA) study published in 2008 that recommended four options, none of which have been implemented by the utilities. She asked whether legislative or gubernatorial action is needed to find solutions and force the utilities to agree.

MR. BORGESON observed that no other state has taken on the role of a utility, although no other state is like Alaska. He acknowledged that this is the time for action, decision-making, and consensus-building.

9:47:27 AM

CO-CHAIR ISAACSON recognized that capacity restraints on the interties affect the ability to generate low-cost fuel, and short-term, system-wide improvements are expensive. The legislature must set priorities and decide whether to fund projects on a regional basis or on a statewide utility basis.

MR. BORGESON turned to one of the solutions on slide 19: trucking natural gas to Fairbanks through the LNG process. This proposal would benefit GVEA and would save money for space heating costs. In fact, if the cost could be kept in the range of $13 to $14 per million cubic feet (MMcf) of natural gas, GVEA

will save $26 million per year. Although the plan is expensive and holds many assumptions and risks, GVEA is working on the project and has secured a gas contract and a site in North Pole at which to locate a regasification facility in partnership with AIDEA. He then restated GVEA's efforts to restart HCCP by 2015: entered in a negotiated settlement with EPA regarding the air quality permit; expects to have workers in the plant in July or August 2013; and will build a warehouse this year. The Alaska Industrial Development and Export Authority will sell GVEA the plant for $50 million and will loan GVEA $45 million for the restart. The air quality permit requires the installation of a selective catalytic reduction (SCR) system at a cost of $40 million, and the cost of the restart is $26 million. Improvements to Unit 1 are also required, which will result in the best environmental technology possible, and the costs of the improvements are still cheaper than oil-fired generation. As an aside, Mr. Borgeson relayed that HCCP was built with $117 million in federal funds and $130 million from AIDEA, for a total cost approaching $300 million.

9:54:29 AM

A video on HCCP was viewed from 9:54 a.m. to 9:57 a.m.

9:58:08 AM

REPRESENTATIVE HIGGINS stated Fairbanks proper has 32,000 residents and 110,000 residents live in the surrounding area. Within that area, there are 10 power plants, which leads to the perception that GVEA and the other utilities do not work together toward the common goal of reducing energy costs. He suggested that the power plant at Clear Air Force Station should have been connected to the electrical grid 10 years ago, and he encouraged GVEA to work with every entity that wants to put energy on the grid to correct this public perception.

10:00:27 AM

ADJOURNMENT

There being no further business before the committee, the House Special Committee on Energy meeting was adjourned at 10:00 a.m.