SENATE FINANCE COMMITTEE
January 28, 2015
9:02 a.m.

9:02:28 AM

CALL TO ORDER

Co-Chair Kelly called the Senate Finance Committee meeting to order at 9:02 a.m.

MEMBERS PRESENT

Senator Anna MacKinnon, Co-Chair
Senator Pete Kelly, Co-Chair
Senator Peter Micciche, Vice-Chair
Senator Click Bishop
Senator Mike Dunleavy
Senator Lyman Hoffman

MEMBERS ABSENT

Senator Donny Olson

ALSO PRESENT

SARA FISHER-GOAD, EXECUTIVE DIRECTOR, Alaska Energy Authority

SUMMARY

^PRESENTATION: ALASKA ENERGY AUTHORITY

SARA FISHER-GOAD, EXECUTIVE DIRECTOR, ALASKA ENERGY AUTHORITY

9:03:30 AM

Ms. Fisher-Goad began her presentation, "Alaska Energy Authority, Senate Finance Committee: January 28, 2015." (copy on file). She presented Slide 2, "Alaska Energy Authority: Mission":

“To Reduce the Cost of Energy in Alaska”

- AEA is an independent and public corporation of the State of Alaska

- Created by the Alaska Legislature in 1976
- 44.83.070: "The purpose of the Authority is to promote, develop, and advance the general prosperity and economic welfare of the people of the state by providing a means of financing and operating power projects and facilities that recover and use waste energy and by carrying out the powers and duties assigned to it under AS 42.45."

Ms. Fisher-Goad informed the committee that many of the powers and duties relegated to the authority were assigned by the legislature under statute.

Ms. Fisher-Goad referred to Slide 3, which offered a continuum of project development. The slide listed the umbrella projects: Energy Policy and Outreach, Program Development and Project Evaluation, Operations and Project Implementation, AEA-Owned Infrastructure, and the associated sub-projects.

9:05:24 AM

Ms. Fisher-Goad noted Slide 4, "Collaboration":

Collaboration

• Alaska Wind Working Group: collaboration of government agencies, nonprofit organizations, businesses and individuals interested in identifying specific concerns and barriers to and opportunities for wind development in Alaska. About 90 participants

• AEA Regional Energy Planning: a way for Alaskans to determine their energy priorities and formulate a concrete, implementable, fundable energy plan. About 11 subgroups, 169 participants.

• Alaska Energy Efficiency Partnership: AEA-led working group led that meets quarterly to share information and capitalize on collaborative opportunities. About 40 participants.

• Alaska Wood Energy Development Task Group: was formed in 2005 to explore opportunities to increase the use of wood for energy and biofuels production in Alaska. 13 participating organizations

• Energy Ambassadors: collaboration with the U.S. Department of Energy to collectively address energy issues in Alaska, including state and federal agencies and regional partners.

• Intra-agency collaboration on energy programs
• Issue specific stakeholder groups include Power Cost Equalization, Alaska Affordable Energy Strategy, Galena Interagency Recovery Team, REAP Rural Issues Committee.

9:07:59 AM

Ms. Fisher-Goad summarized Slide 5, "Focusing on Communities":

Focusing on Communities
• Emphasizing community-based approach to projects
• Technical assistance, regional planning and project management
• Provide synergy between planning, projects and funding sources
• Assist communities to move to project ready status
• Break down internal silos

9:08:54 AM

Ms. Fisher-Goad continued to slide 6, "Power Cost Equalization":

Power Cost Equalization
• Provide economic assistance in rural Alaska where electrical rates can be 3 to 4 times higher than in urban Alaska
• PCE created at a time when State funds were used to construct major energy projects to serve urban areas (Four Dam Pool)
• PCE is a way for rural communities to also benefit from those projects
• Regulatory Commission of Alaska (RCA) sets rates, calculations based on use, costs and efficiencies
• The program reduced power costs an average of 55 percent for residential customers and community facilities up to 500 kWh per month.
• 2014 changed the regulations to include community facilities
• 192 participating communities
• AEA community assistance team helped four communities reinstate in PCE during 2014
• Only four non-participating communities

9:10:41 AM

Ms. Fisher-Goad explained the graph on Slide 7, "PCE Level Rates." She stated that the yellow represented the utility rate prior to the PCE, the blue showed the effective rate after PCE was applied. She said that the program was aiming for the base rate, which was the average between Juneau, Fairbanks, and Anchorage, roughly $14.5 cents per kilowatt hour.

9:11:09 AM

Vice-Chair Micciche queried the base rate at which a community would be eligible for PCE.

Ms. Fisher-Goad responded that the base rate was approximately $14.5 cents. She noted that there were several communities that had costs below the base; Metlakatla, for example. She added that some North Slope communities received a borough subsidy in addition to a low amount of PCE.

9:12:12 AM

Vice-Chair Micciche wondered who has the authority to approve communities under $14.5 cents.

Ms. Fisher Goad responded that some communities were not regulated and had a Certificate of Public Convenience and Necessity (CPCN) through the Regulatory Commission of Alaska (RCA). She explained that for PCE eligible communities that were not rate regulated, the Regulatory Commission of Alaska would examine the eligible costs, similar to a tariff structure, and evaluate the community's cost based on similar criteria for fuel and non-fuel cost, as if they were regulated.

9:13:09 AM

Co-Chair Kelly wondered why Metlakatla was eligible for PCE when it had a power cost under the average of Anchorage, Fairbanks, and Juneau.

Ms. Fisher-Goad responded that Metlakatla was eligible based upon the power the community generated in 1984, if their costs were lower, they would not receive a PCE rate. She said that none of the PCE communities would receive a PCE rate that would push them below the Anchorage, Fairbanks, and Juneau base rate.

9:13:59 AM

Co-Chair MacKinnon asked why Fairbanks was being used in the calculation when the city had some of the highest energy costs.

Ms. Fisher-Goad replied that the statute required that Regulatory Commission of Alaska evaluate the floor based on Anchorage, Fairbanks, and Juneau. She clarified that it was not the entire Fairbanks-Northstar borough, rather the city of Fairbanks. She said that only 7 percent of the weighted rate was impacted by Fairbanks, the 50 percent of the floor was primarily driven by the Chugiak Electric Association.

Co-Chair Kelly interjected that the calculations were made at a time when energy was more affordable in Fairbanks.

Ms. Fisher-Goad agreed.

9:15:08 AM

Co-Chair MacKinnon that that the calculations needed to be re-examined due to the high energy costs in Fairbanks She noted that Southeast Alaska would be bringing down the average down, while Fairbanks increased it. She shared that residents of Fairbanks and rural Alaska used 50 percent of their disposable income for energy costs.

Co-Chair Kelly interjected that he had been told that a significant rate reduction could be expected in the near future.

9:16:09 AM

Senator Bishop believed that a 17 percent reduction was imminent. He supported Co-Chair MacKinnon in her suggestion to re-examine the PCE calculations.

9:16:32 AM

Vice-Chair Micciche suggested that Ms. Fisher-Goad provide the committee with the PCE formula.

Ms. Fisher-Goad replied that she would get back to the committee with the information.

9:17:17 AM

Mr. Fisher-Goad continued to Slide 8, "Regional Energy Planning":

- Energy Pathways led to regional planning
- Address unique challenges while capitalizing on regional resources
- Locally driven and community-vetted blueprint for sustainability
- Provide specific, actionable recommendations
- Identify means of providing stable and affordable electric, heat and transportation energy from renewable and fossil fuels
- Build capacity at local and regional level to enable stakeholders to continue planning process

Ms. Fisher-Goad related that a Railbelt Organized Plan and a Southeast Integrated Regional Plan had been created in order to learn how to address the unique situations in each region. She added that AEA had offered technical assistance to local stakeholders, providing guidance as to what energy plans should look like.

9:18:39 AM

Mr. Fisher-Goad summarized Slide 9, "Regional Planning Process":

- Provides consistent format for planning efforts
- Community-driven process with AEA project management and policy oversight
- Regional priorities not reliant on state funding
- Phased process:
  - Phase I: Information gathering and working draft development
  - Phase II: Stakeholder engagement and feedback
  - Phase III: Technical and economic analysis for final draft development and interface with AkAES

9:19:21 AM

Ms. Fisher-Goad turned to Slide 10, "Alaska's Energy Plans":

Alaska's Energy Plans
Completed plans
• Living documents

• Railbelt and Southeast Integrated Resources Plans

Ongoing plans:
• AEA-funded, most often working with ARDORs
• Kodiak, Northwest Arctic, Aleut, Bering Straits, Bristol Bay, Copper Valley, Yukon-Koyukuk/Upper Tanana (TCC led), Chugach

AEA Advisory Role:
• Lower Yukon-Kuskokwim (Nuvista led)
North Slope

9:20:00 AM

Ms. Fisher-Goad noted Slide 11, "Regional Planning Status," which offered the region, contractor/lead entity, and phase status of plans in the Aleutians, Bering Straits, Bristol Bay, Chugach, Copper River, Kodiak, Lower Yukon-Kuskokwim, North Slope, Northwest Arctic, and Yukon-Koyukuk/Upper Tanana. She noted that most of the regional plans were moving along nicely and it was anticipated that the plans would be complete and moving into the next planning phase of the Alaska Affordable Energy Strategy (AkAES) in summer 2015.

9:20:47 AM

Ms. Fisher-Goad turned to Slide 12, "Relationship between Planning Efforts," which offered a Venn diagram showing that the Regional Energy Plan and the AkAES sharing technical and economic analysis.

9:21:09 AM

Ms. Fisher-Goad moved to Slide 13, "Senate Bill 138":

Senate Bill 138

Alaska Affordable Energy Strategy

Plan and recommendations to the Legislature on infrastructure needed to deliver affordable energy to areas in the state that do not have direct access to a North Slope natural gas pipeline.

Due: January 1, 2017

Ms. Fisher-Goad she stated that the authority had worked to assure that the regional plans included community and regional priorities that were not necessarily tied to whether the state would be funding the projects.

9:22:59 AM

Ms. Fisher-Goad presented Slide 14, "Electricity". She state that AEA had attempted to categorize how various regions were receiving electricity and heat. The slide contained a map portraying the current use of natural gas and renewable energy for electric, and included the following informational key:

Electricity

4 Quadrants based on
Access to Energy Resources:

1. Natural Gas/Renewables
2. No Natural Gas/Renewables
3. No Natural Gas/No Renewables
4. Natural Gas/No Renewables

9:24:52 AM

Ms. Fisher-Goad presented Slide 15, "Heat". The slide contained a map of current use of natural gas and renewable energy for heat, and included the following informational key:

Heat

4 Quadrants based on
Access to Energy Resources:

1. Natural Gas/Renewables
2. No Natural Gas/Renewables
3. No Natural Gas/No Renewables
4. Natural Gas/No

Renewables

Ms. Fisher-Goad noted that there were many small, rural communities that had no natural gas and no renewables.

9:25:31 AM

Ms. Fisher-Goad continued to Slide 16, "Cost-Effective Strategies To Improve Energy Affordability". She shared that the id would be ideal to move from the no gas, no renewable quadrant to a potentially renewable situation. The slide hypothesized that a wind project provide electricity or heat to areas in need.

9:25:58 AM

Senator Bishop asked whether it was a certainty that the areas on Slides 15 and 16 were areas of no gas and no renewables.

Ms. Fisher-Goad responded that the goal of the slides was to categorize what people were currently using, with the hope of finding potential renewables or developing gas in those areas in the future.

9:27:03 AM

Ms. Fisher-Goad summarized Slide 17, "Strategies for More Affordable Energy," and noted that energy efficiency as a strategy could be used in any region. The slide detailed various strategies to assist communities:

- Evaluate communities individually on ability to cost-effectively access to renewable energy or natural gas.
- Provide funding mechanisms, assistance, and other changes to promote cost-effective measures in communities.

9:28:34 AM

Ms. Fisher-Goad stated that the affordable energy strategy should fulfill what the legislature expected in the 2017 report. She noted that AEA's goal was to ensure that there were no unintended consequences caused by the report and that the report had public support. She thought that the Southeast Integrated Resource Plan had offered learning

experience; the recommendations on developing biomass had seen a lot of support, but when the plan was first developed, biomass development had not been embraced by the region. She hoped that lessons learned through the development of certain plans would help people to understand what the affordable energy plan would entail.

She moved to Slide 18 reviewed slide 19, "Renewable Energy Grant Fund":

Renewable Energy Grant Fund

- Displaces volatile-priced fossil fuels through hydroelectric, wind, biomass, heat recovery, heat pumps, solar and transmission of renewables
- Earned national recognition for excellence from the Clean Energy States Alliance
- In 2013 13 million gallons of diesel and natural gas equivalent were displaced
- Capitalizes on local energy resources
- Benefits businesses not eligible for PCE
- Expands Alaska's renewable energy knowledge base
- Overall Program Benefit Cost Ratio: 2.8 (Based on first 44 projects in operation)

9:32:30 AM

Senator Hoffman noted that much of the displaced diesel in his district was going toward wind power, which was being used for electricity, and the result was an insignificant decrease in the cost of energy. He commented that the driving goal should be instituting programs that actually reduce the cost of energy for the people of Alaska.

9:33:52 AM

Vice-Chair Micciche asked whether PCE could be used when moving from diesel to an alternative like wind power.

Ms. Fisher-Goad replied that one-third of the energy of PCE eligible communities was eligible for PCE. She said that a renewable energy source would impact 100 percent of the kilowatt hours generated in the community; 60 percent of the kilowatt hours would receive the direct benefit of the diesel displacement. She said that the State of Alaska benefited from the savings advantages of the renewable

energy fund through the reduction of the PCE program draw. She furthered that the strength of the renewable project was the two-thirds of kilowatt hours that were not covered under the PCE program. She noted that schools were not covered under the PCE program. If there were a renewable project in a community, a school would receive the direct benefit by the cost going down and the diesel being displaced. She stated that she could provide further information to the committee on the overlap of PCE and renewables.

9:36:53 AM

Vice-Chair Micciche understood that theoretically a community could enjoy the benefits of a renewable energy project and individual energy costs could go up.

Ms. Fisher-Goad replied that the issue was that the costs would not go down.

Vice-Chair Micciche asked where renewable energy had replaced natural gas in a way that would reduce space heating costs.

Ms. Fisher Goad thought that the project that had the most impact was a solid waste project through Anchorage Municipal Light and Power (ML&P).

9:38:11 AM

Co-Chair MacKinnon noted that she and Senator Hoffman served on the Advisory Board for the Renewable Energy Grant Fund.

9:38:32 AM

Ms. Fisher-Goad presented Slide 19, "REF Grant and Funding Summary":

Applications Received - 732
Applications Funded - 277
Grants Currently in Place - 122
Amount Requested[1] ($M) - $1,442.3
AEA Recommended ($M) - $398.3
Appropriated ($M)[2] - $247.5
Cash Disbursed ($M) - $163.3
Match Budgeted ($M)[3] - $152.1

1. Total grant amount requested by all applicants.
2. $12.8 Million was re-appropriated from earlier rounds for use in Round IV ($10M) and Round VII ($2.8M).
3. Represents only amounts recorded in the grant document and does not capture all other funding.

Ms. Fisher-Goad showed Slide 20, "Renewable Energy Fund Projects, Rounds I - VII," which detailed the distribution of the projects and where the resourced lie in the state.

9:39:37 AM

Ms. Fisher-Goad presented Slide 21, and noted there were three primary statutory requirements for the program: the most weight was focused on the high-cost areas of the state, AEA was required to have a regional spread throughout the state, and there had to be significant weight for match provided to a project. She noted that over the years Southeast Alaska had benefited well from the program, which was due to having large biomass and hydro resources. She added that when the advisory committee met in January 2014, they had asked that the project list be reviewed; specifically, the cost of energy in communities and the possibility of capping projects at a different level than what had been traditionally done. She said that the list would be examined taking into consideration the three requirements and advisory committee recommendations.

9:41:59 AM

Ms. Fisher-Goad turned to Slide 22, "Heating Degree Days," which offered a map color coding the heating degree days in the state. She noted that there were significant temperature differences throughout the state on any given day. She said that heating degree days were used to evaluate the comprehensive cost of energy throughout the state.

9:43:22 AM

Co-Chair Kelly asked for an explanation of the formula used to discern heating degree days.

Ms. Fisher-Goad replied that she would provide the information to the committee at a future date.

9:45:01 AM

Senator Dunleavy asked if AEA was getting any "push-back" from the federal government or the Environmental Protection Agency (EPA) regarding any of the fuel sources out lined in the presentation. He wondered whether AEA was being encouraged to use any particular fuel sources.

Ms. Fisher-Goad responded that the EPA 111D (targeted to reduce emissions) had been targeted to the Railbelt areas of the state, the biggest issues was the use of coal for electricity. She noted that federal intervention depended on project-by-project development. The state was focused on the development of wind while the rest of the country was focused on solar energy; the state did not have the ability to maintain significant solar development in the state. She relayed that she could not point to specific push-back, but different regulatory hurdles existed for all projects. She relayed that AEA had a good working relationship with the United State Forest Service to develop small biomass projects through the wind working group.

9:48:26 AM

Senator Dunleavy suggested that if it were not for fear of push back from the federal government, the state would utilize more of its coal for cheaper energy.

Ms. Fisher-Goad responded that diesel has been used effectively in rural Alaska. She said that she did not think that coal would be utilized more in rural communities because diesel had already proved effective. She shared that AEA had been looking into combined heat and power, with respect to whether coal could be a source of energy. She stated that the coal would still need to be shipped into the smaller rural communities and that the factors against coal development were economic rather than federal regulation.

Senator Dunleavy queried whether more coal would be used in the Railbelt if it were not for federal considerations.

Ms. Fisher-Goad deferred to Golden Valley Electric Association concerning the hurdles faced by the Railbelt.

9:51:49 AM

Co-Chair Kelly interjected that it could be shown that in Fairbanks, federal interference resulted in the burning of more coal, while simultaneously restricting the burning of coal in certain areas. He offered that the University power plant was at under 25 megawatts in order to avoid applying for a federal permit. He argued that the power plant could have been built larger, and served a larger area, but was limited due to permitting. He asserted that one big coal plant could provide energy to the entire Interior of Alaska were it not for "goofy" rules.

9:52:59 AM

Senator Dunleavy encouraged AEA to consider using coal to provide energy for the state. He worried that the idea of using coal was losing ground in the state.

Co-Chair Kelly added that the coal power plant that would be built at the University would have lower particulate production than gas.

9:54:39 AM

Co-Chair MacKinnon spoke of the use of coal at Eielson Airforce Base. She said that federal government regulation required that additives be added to the coal products that were burned in an effort to reduce particulate matter. She opined that that the addition of the chemicals was raising the price of coal usage at those facilities. She suggested that the additives were not helping reduce particulate matter in the environment.

9:55:44 AM

Ms. Fisher-Goad assured the committee that, if there was a desire and an effort to make sure that coal was used as a resource, AEA wanted to work with regions to bring local priorities to fruition. She noted that the coal would be a local resource that would be used for local needs.

9:56:50 AM

Ms. Fisher-Goad moved to Slide 23, "Renewable Energy Fund Round VIII Draft Recommended Projects," and explained that there was a regional/statewide mix of projects that AEA had recommended for funding.

9:57:27 AM

Ms. Fisher-Goad continued to Slide 24, "Emerging Energy Technology Fund":

Emerging Energy Technology Fund

- Provides funds for projects that can demonstrate commercial viability within 5 years
- Includes renewable and alternative energy, storage and transmission
- Nearly $11 million provided to 20 projects
- Projects in Juneau, Fairbanks, Kodiak, Delta Junction,
- Nenana, Nikiski, Igiugig, Tuntutuliak, Kwigllingok and
- Kotzebue
- Program extended to 2020
- Fills an energy development void by providing infusion of capital to spur private investment in emerging technology
- Synergy between state and business community
- Supports a growing Alaska energy industry
- ORPC Turbine in the Kvichak River
- Partner with ACEP on data collection

9:59:22 AM

Ms. Fisher-Goad summarized Slide 25, "EETF: Project Highlight":

EETF: Project Highlight
Ultra-Efficient Generators and Diesel Electric Propulsion (Kodiak)

- Technology aims to provide more efficient diesel power generation
- Can be used in marine propulsion and stationary powerhouses
- Power dense motor and inverter/controller invented by operators of a machining and fabricating shop in Kodiak
- Commercial availability anticipated at project’s end

9:59:59 AM

Ms. Fisher-Goad noted Slide 26, "Energy Spotlight on Alaska," which showed national publications that had discussed the energy issues of Alaska.

10:01:05 AM

Ms. Fisher-Goad presented Slide 27, "Energy Efficiency and Conservation":

Energy Efficiency and Conservation
State goal to reduce per capita energy use by 15% by 2020

- AEA's focus: commercial buildings, rural public buildings, industrial facilities and electrical efficiency
- Statewide outreach and education AKEnergyEfficiency.org
- Coordination between State agencies
- Results:
- $1,534,062 and 282,938 diesel equivalent gallons in projected savings
- Average immediate savings of implemented efficiency measures: $0.29 cents/ $1 invested, 300% ROI after 10 years
- Alaska Commercial Energy Audit Program measures produce
- 30% savings with 6.2 year simple payback

10:02:12 AM

Ms. Fisher-Goad noted slide 28, "Village Energy Efficiency Program":

Village Energy Efficiency Program

- Provides grant funding for small, high-energy cost communities to implement energy efficiency and conservation measures in the public buildings and facilities.
- Eligible applicants include:
  - Municipalities, cities, school districts, unincorporated villages, Alaska Native regional and village corporations, tribal consortiums, regional housing authorities, traditional councils
- 2013: Seven projects received $1,381,000

- Projects include retrofitting lights, replacing outdated
- HVAC equipment and boilers, improving insulation and building siding and replacing windows.

10:03:09 AM

Ms. Fisher-Goad stated that AEA wanted to make energy efficiency a cornerstone of the affordable energy strategy. She explained Slide 29, "Revisiting Nightmute":

Revisiting Nightmute

- Revisited Nightmute as a collaborative model
- Multiple state partners, regional organizations, the city of Nightmute and private sector
- Multiple energy efficiency efforts simultaneously implemented in the community in 2009
- After five years:
  - the average house and community building cut energy use in half
  - projected annual fuel savings to the village store alone were estimated at $10,639
  - community lighting upgrades resulted in more than
  - $14,000 in annual estimated savings
  - total annual energy savings for the community was calculated around $75,000.

Ms. Fisher-Goad revealed that waiting five years to revisit the community was too long; the visit should have been made one or two years into the process to determine how the retrofits were being maintained. She felt that the overall results had been positive. She shared that having many agencies come into a community all at once had been overwhelming and had spread the community thin. She said that this would be considered in future endeavors.

10:06:36 AM

Senator Hoffman noted that $75,000 might not seem like much money over 10 years. He requested a description of the size of the community of Nightmute.
Ms. Fisher-Goad believed that the community consisted of under 200 people.

10:07:17 AM

Co-Chair MacKinnon asked how many communities were close to Nightmute, but not connected by road.

Ms. Fisher-Goad responded that she did not currently have that information. She added that AEA's goal in doing coal retrofits was to maximize efficiency through the systematic review of nearby communities.

10:08:29 AM

Co-Chair MacKinnon noted her appreciation of the community of Nightmute, but that a connection of a one mile road would have provided benefit to two other villages.

10:09:13 AM

Ms. Fisher-Goad commented that part of the regional planning had considered the economy of scale of regional transition lines to be able to connect smaller communities to a large powerhouse in another community.

10:09:49 AM

Ms. Fisher-Goad moved to Slide 30, "Bulk Fuel and Rural Power System Upgrades":

Bulk Fuel and Rural Power System Upgrades

- Help utilities improve efficiency, safety and reliability of power systems
  - Promote local hire and training
- Completed about $340 million in rural bulk fuel and rural power system upgrade projects since 2000, in partnership with Denali Commission
- Circuit Rider program provides mechanical training
  - 28 circuit rider visits to communities and approximately
  - 3,300 phone assistance instances
- Emergency response stabilizes power during lights out or near-emergency situations
  - Four emergencies in calendar year 2014
- Looking at training models to increase local capacity

Ms. Fisher-Goad stated that even with the integration of renewable resources in a community, a strong powerhouse and

stable electrical system were necessary in order to integrate renewables into the system.

10:12:00 AM

Senator Bishop was glad to hear that AEA was working with Alaska Vocational Technical Center (AVTEC). He added that the systems were only as good as the people trained to keep them running and in good condition.

10:12:39 AM

Ms. Fisher-Goad explained Slide 31, "RPSU Savings to Communities," and noted that RPSU and bulk fuel projects had been funded with grant funds since 2000. She highlighted that the slide illustrated what the cost would be to debt-finance the projects. She said that there would be an increased cost to communities of $.19 per kilowatt hour, on top of the rate that they were currently paying, if they were funded in a debt service fashion.

10:14:03 AM

Ms. Fisher-Goad moved to Slide 32, "Susitna-Watana Hydro":

Susitna-Watana Hydro

- **Safe and Effective Field Work**
  - Data collection complete for 13 FERC-approved studies
  - Advancing the state of science for agencies to better manage resources
- **Filed the Initial Study Report with FERC**
- **Report to the Legislature Distributed Jan. 20**
- **Data Collection and Findings Similar to**
- **1980s effort**
  - Fish distribution
  - Geomorphically stable river system
  - Bird migration and breeding

10:16:01 AM
Senator Bishop queried the relationship between AEA and Alaska Native corporations on the hydro project.

Ms. Fisher-Goad responded that that relationship was quite good. She added that the team from AEA met regularly with

the village corporations to discuss the status of the project.

Co-Chair Kelly corrected his earlier statement that there were 12 coal power plants in Fairbanks, he qualified that he had meant 12 in Interior Alaska, and added that the figure was actually lower than 12. He surmised that the number was closer to 8.

10:17:34 AM

Ms. Fisher-Goad presented Slide 33, "Chinook Salmon and Devils Canyon," which provided information concerning tagged Chinook salmon and Devils Canyon:

Chinook Salmon and Devils Canyon

- Salmon spawn in tributaries and off-channel habitats
- Chinook salmon only anadromous fish documented above Devils Canyon
  - Less than half of a percent of the total Susitna River Chinook escapement
- 97 to 99% of tagged Chinook spawned in the tributaries
- 93 to 97% of Coho tagged in the Lower River spawned in tributaries

She stated that the tagged Chinook were spawning in the tributaries. She stressed that a significant portion of the funding AEA received from the state had gone toward the environmental effort and putting together a good license application.

10:19:01 AM

Ms. Fisher-Goad summarized Slide 34, "Engineering and Costs":

Engineering and Costs

- Board of Consultants endorsed Roller Compacted Concrete and dam configuration
- 2014 drilling confirmed no active faults found at the proposed dam site
- Mean annual energy- 2,800 gigawatt hours
- Most probable cost $5.65 billion (range $5 to 6.2 billion)

- Combination of debt financing options can provide 50-year average wholesale power at about 7 cents per kilowatt hour
- Cost of power would equal natural gas within 9 years

Ms. Fisher-Goad shared that AEA had seen a confirmation of what had been assumed when the legislature passed authorization for AEA to move forward with the project.

10:20:51 AM

Vice-Chair Micciche queried the seasonal fluctuation of gigawatt hours.

Ms. Fisher-Goad said she could get back to the committee on the projected seasonal fluctuation modeled on the operational cost.

10:21:15 AM

Senator Bishop asked what the metered price of energy would be as a result of the hydro plant.

Ms. Fisher-Goad replied that, assuming the plant followed the Bradley Lake model, the wholesale cost would be $.7 per kilowatt hour, but would change depending on the mix of utilities involved. She furthered that the cost in Fairbanks would be different from the cost in Anchorage.

10:22:09 AM

Senator Bishop stated that the information was important to the discussion.

Ms. Fisher-Goad offered to provide a more detailed response at a later date.

10:22:41 AM

Ms. Fisher-Goad explained Slide 35, "AEA Budget Summary," and noted that the Operating Budget for AEA was still the Work-In-Progress budget that had been released on December 15, 1014. She noted that some of the previously mentioned programs were embedded in the Capital Budget. She pointed out that there were a bulk fuel tank farm and several powerhouses that were slated for funding in the Governor's Budget. She added that money for the Emerging Energy

Technology Fund and Electrical Emergencies Response were listed in the summary, as well as $2.2 million for the Alternative Energy and Energy Efficiency Programs.

10:24:06 AM

Senator Dunleavy said that there were "stranded areas of energy" in his district. He asked whether an attempt would be made to utilize interties in order to make use the stranded energy in the Railbelt and reduce costs for all involved.

Ms. Fisher-Goad responded that AEA had commissioned an energy study focused on how to strengthen the transmission system throughout the Railbelt. She offered that former Senator Gene Therriault, Deputy Director, Statewide Energy Policy Development, Alaska Energy Authority, Department of Commerce, Community and Economic Development was in the gallery for further questions on the issue.

Senator Dunleavy he believed that the issue should be explored. He requested the PFM financial report, the MWH Global cost report, the AECOM cost report, and the Independent Feasibility report. He asked whether AEA had responded to criticism of their fish study from the National Marine Fisheries, and whether the response could be made available to the committee. He noted that any other fish study reports that had been done should be shared with the committee. He wondered whether the reports could be posted online for the public.

Ms. Fisher-Goad replied that several of the reports referenced by Senator Dunleavy had already been made available to the committee. She noted that Administrative Order 271 had suspended project activity, which had stalled the filing of some Federal Energy Regulatory Commission (FERC) reports. She assured the committee that copies of whatever reports were available would be provided to the committee.

#
ADJOURNMENT
10:29:14 AM

The meeting was adjourned at 10:29 a.m.