

ALASKA STATE LEGISLATURE
SENATE COMMUNITY AND REGIONAL AFFAIRS STANDING COMMITTEE

March 26, 2019

3:31 p.m.

MEMBERS PRESENT

Senator Click Bishop, Chair
Senator Chris Birch, Vice Chair
Senator Mia Costello
Senator Lyman Hoffman

MEMBERS ABSENT

Senator Elvi Gray-Jackson

COMMITTEE CALENDAR

PRESENTATION: POWER COST EQUALIZATION

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

MERRA KOHLER, President and CEO
Alaska Village Electric Cooperative, Inc.
Anchorage, Alaska

POSITION STATEMENT: Provided an overview of the cooperative and the Power Cost Equalization Program.

ACTION NARRATIVE

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CHAIR CLICK BISHOP called the Senate Community and Regional Affairs Standing Committee meeting to order at 3:31 p.m. Present at the call to order were Senators Costello, Birch, Hoffman, and Chair Bishop.

PRESENTATION: Power Cost Equalization

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CHAIR BISHOP announced that the committee will hear a presentation on the Power Cost Equalization (PCE) Program by Merrra Kohler from the Alaska Village Electric Cooperative (AVEC).

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MERRA KOHLER, President and CEO, Alaska Village Electric Cooperative, Inc., Anchorage, said she has been involved with the PCE Program since before its inception. She began a PowerPoint, "Power Cost Equalization, A Primer and Look Back dated March 26, 2019."

MS. KOHLER reviewed slide 2, Looking back to 1977, which read:

Almost no transmission in Alaska

- o Chugach electric owned a line (built in 1968) from the Beluga gas field to Anchorage
- o Fairbanks relied on local heavy oil and coal
- o Diesel fuel was the primary energy source elsewhere

Very little hydropower

- o Eklutna- 30 mw, serving ML&P, MEA, CEA
- o Cooper Lake -20 mw serving CEA
- o Snettisham, 52 mw, serving Juneau
- o ~20 MW of small projects scattered throughout SE Alaska

She noted that 1977 was the year the oil in the Trans-Alaska Pipeline System (TAPS) started flowing. She said that 1977 was also the year when Alaska struggled to emerge from a very vast, underserved state.

MS. KOHLER reviewed slide 3, Oil started flowing down the Pipeline, which read

The State began to spend its newfound wealth

- o A transmission line to Fairbanks was started
- o The Susitna mega-project design was started
- o A Bradley Lake project was started
- o Kodiak, Valdez, Ketchikan, Wrangell, and Petersburg began work on four hydro-projects
- o Studies were commissioned to identify projects to reduce the cost of electricity throughout Alaska

MS. KOHLER explained that once oil started flowing through TAPS, wealth started flowing into state coffers and the state started considering the primary priority of affordable energy. Without affordable energy economic development or prosperity cannot happen since everything hinges on the availability of energy. Energy studies included a Stone & Webster report that was produced in 1983, a five-volume report that continues to be a good resource for future projects that might be possible in Alaska.

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MS. KOHLER reviewed slide 4, The First Power Cost Assistance Program, which read:

- Oil prices peaked in 1979
- Diesel-fueled utilities were hit hard
- Legislature established the Power Production Cost Assistance Program in 1980 - a one year stop-gap
- In 1981, the program was amended into the Power Cost Assistance Program, which was designed to self-extinguish in five years

MS. KOHLER reviewed slide 5, And finally - PCE, which read:

- In 1984, consultants admitted defeat
 - There was no "silver bullet" for rural Alaska's electric needs
 - Small loads and small communities spread across thousands of miles could not be interconnected
- Legislature established Power Cost Equalization
 - PCA was rewritten as PCE - effective October 1984
 - Utilities using diesel to generate at least 75 % of power in calendar year 1983 were eligible
 - Cost of power was to be equalized to the average of Anchorage, Fairbanks, and Juneau \$0.0850 per kwh
 - Costs above \$0.5250 per kwh were not covered
 - All users were eligible for the first 750kwh used
 - Community facilities received PCE on 100% of their usage

MS. KOHLER specified communities that were served by the Railbelt, the Four Dam Pool, and the Copper Valley were not eligible for PCE. Any utility that was not 75 percent or more served with diesel in 1983 was not eligible, she said.

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MS. KOHLER reviewed slide 6, Enter the PCE Endowment Fund, which read:

- Established in FY00 via HB 446
 - 15 years of underfunding (FY92-FY07)
- Invested to achieve 7% return
- \$100 M from CBR in FY01
- \$84 M from sale of the Four Dam Pool hydros in FY02
- \$182.7 M in FY07
- \$400 Min FY12
- Revised target of 5% return in FY16
- After PCE, returns fund Municipal Assistance, Renewable Energy Grants

MS. KOHLER explained that the PCE Endowment Fund was formed out of a quid pro quo for programs that already existed. PCE was funded with 60 percent of the receipts from the Four Dam Pool Project when the state decided to divest those projects back to the communities that were served by them, which was in 2000 and 2001. She said that the total investment for the Four Dam Project was \$450 million. However, the hydroelectric projects were sold to the communities for \$74 million for less than 20 cents on the dollar, which is why a \$100 million Constitutional Budget Reserve (CBR) match was used as the first deposit into the PCE Endowment Fund.

She noted that there were two additional deposits into the PCE Endowment Fund, adding that Senator Hoffman can explain the reasoning to what the quid pro quo was for the two deposits. The deposits were based on a rural-urban consensus priority for rural communities, a total of \$740 million was deposited into the endowment fund.

MS. KOHLER explained the way the PCE Endowment Fund works is that the average value of the preceding three fiscal years will determine the amount that can be spun off for PCE. The initial amount was 7 percent of earnings, but it changed to 5 percent in

2015. She said clever language was included in the change for the endowment fund that benefited the entire state:

70 % of the remaining balance can then be appropriated to pay for, first, municipal assistance of up to \$30 million, and then if there is anything left over it goes to the Renewable Energy Grant Fund, which also benefits the entire state.

She summarized that in FY 2017, \$30 million was spun off for municipal assistance [;is another \$15 million into the Renewable Energy Grant Fund. In FY 2018 there will be enough funds to pay for municipal assistance, but a pittance for the Renewable Energy Fund.

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MS. KOHLER reviewed slide 7, The Situation from 1985-2017, which read:

- The floor has been raised 124% to \$0.1902
- The ceiling was raised from \$0.5250 to \$1.00
- Eligible electricity has been reduced 1/3 to 500 kwh
- 6,000+ commercial customers no longer get PCE
- Fuel cost up 127% but efficiency is also up 32%
 - Fuel cost per kwh went from \$0.1033 to \$0.1875
- Non-fuel costs per kwh are up 31%
 - \$.141 in '85 to \$.184 in '17
- Current funding (\$28 million) is at 100% level
- PCE cost in FY86 \$17.8 million
- PCE cost in FY17 \$26.1 million

MS. KOHLER provided additional details on the PCE Program as follows:

- The floor is the minimum that every utility or the consumer must pay.
- The ceiling is the cost to operate a utility. The first \$1.00 is covered.
- Only the first meter is eligible for consumer assistance. Specifically, only one home is eligible if an individual owns multiple homes.
- All commercial users were taken off the PCE program in 1999.

- Schools, federal buildings, and state operated buildings are not eligible for PCE.
- The number of eligible PCE users has gone down dramatically.
- Fuel cost is up.
 - In 1985 the average cost of a gallon of fuel was \$1.17.
 - The most recent average cost of a gallon of fuel year is \$2.56, a 127 % increase.
- Efficiency has grown at a very dramatic pace.
 - In 1985, 10kwh was sold per gallon in the PCE communities.
 - Today, 13kwh is sold per gallon.
- Non-fuel costs have gone up 31 % on average per kwh.
- Current funding is \$28 million.
 - The highest was \$41 million in 2009, the year after very high fuel costs when PCE funding was a much higher need.
- Total spent on PCE was just under \$18 million in FY1986 and \$26 million in FY2017.

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MS. KOHLER reviewed slide 8, Program changes since FY86, which showed a table with the following information:

- Population served:
 - 1986: 62,042
 - 2000: 77,625
 - 2017: 83,850
- Total sales (gigawatt hours (GWh))
 - 1986: 225 GWh
 - 2000: 391 GWh
 - 2017: 463 GWh
- Eligible sales
 - 1986: 108
 - 2000: 116
 - 2017: 133
- Percentage eligible
 - 1986: 48%
 - 2000: 30%
 - 2017: 29%
- Average fuel cost (per gallon)
 - 1986: \$1.17
 - 2000: \$1.10
 - 2017: \$2.66

- Fuel consumed
 - 1986: 21 million gallons
 - 2000: 28 million gallons
 - 2017: 29 million gallons
- Fuel cost
 - 1986: \$23 million
 - 2000: \$30 million
 - 2017: \$77 million
- Non-fuel cost
 - 1986: \$32 million
 - 2000: \$42 million
 - 2017: \$85 million
- Total utility cost
 - 1986: \$55 million
 - 2000: \$72 million
 - 2017: \$162 million
- Total PC
 - 1986: \$17.8 million
 - 2000: \$14.4 million
 - 2017: \$26.1 million
- Percentage of total costs
 - 1986: 32%
 - 2000: 20%
 - 2017: 16%

MS. KOHLER referred to the percentage of total costs and noted that 32 percent of total costs were covered by PCE in 1986, but only 16 percent in 2017. Sixteen percent PCE coverage in 2017 means 84 percent of the cost of generating electricity in PCE communities is borne by the local communities, she said.

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MS. KOHLER reviewed slide 9, About AVEC, which read:

- 58 villages (recently added Yakutat, Bethel)
- 32,000 population
 - 38 % of PCE population served
 - 41 % of total PCE disbursed
 - Shageluk (smallest) 77
 - Bethel (largest) 6,224
 - Anchorage 294,356
- 92 % Alaska native.

She provided additional details on AVEC as follows:

- Cooperative was incorporated in 1967.
- 2019 is the 50th anniversary for the cooperative's first annual meeting.
- Smaller AVEC communities are typically higher PCE per capita recipients due to poor economies of scale.
- Half a dozen AVEC communities have populations that are less than 100 residents.
- Bethel and Yakutat are recent additions to AVEC:
 - Bethel was acquired in 2014.
 - Yakutat was acquired in 2017.
- In addition to Yakutat, AVEC has Southeast Alaska presence:
 - Angoon was an early member:
 - Inside Passage Electric Cooperative was turned over to Angoon that also helped energize four additional communities.
- AVEC is almost entirely Alaska native population.

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MS. KOHLER reviewed slide 10, which showed a map of the AVEC villages, noting that communities are located from: Kivalina, the farthest north village, to Old Harbor on Kodiak Island, 824 miles to the south; and Gambell, farthest west, to Yakutat, over 1,000 miles to the east.

MS. KOHLER reviewed slide 11, AVEC System Statistics, which read:

- 50 power plants
- 13 wind systems serving 20 villages
- 170+diesel generators
- 500+ fuel tanks
- 8.5 million gallons fuel burned

She said AVEC recently installed two wind systems, 900 kilowatt (kW) machines, in Bethel and St. Mary's. The two wind systems added five communities to the number of villages that are receiving electricity from wind. She noted that AVEC also owns two tugs and barges, the only utility in the world that owns its own water borne vessels to deliver fuel to its communities.

MS. KOHLER reviewed slide 12, 2018 Overview, which read:

- 11,400 Services - residential and commercial
- 118 million kWh sales

- \$52.4 million revenues
- \$28.1 million total fuel cost
- \$25.4 million non-fuel cost
- \$0.44 - total revenue per kWh
- 397kwh - average residential usage per month
- \$0.48 - residential revenue per kWh
- PCE: \$10.7 million
 - 21% of revenue, 41% of total PCE disbursed

MS. KOHLER explained that to put the 118 million kwh sales for AVEC in perspective, Chugiak Electric sells 15 times the amount of power; however, AVEC is proud of what it does for not very much.

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CHAIR BISHOP asked what life would look like if PCE were to go away.

MS. KOHLER replied that life would be very bleak. She said to put not having PCE in perspective, in one average AVEC village, PCE pays 50 percent of the residential users' electric bills. Running one electric heater for three or four hours translates into an additional \$350 a month on an electrical bill.

She explained that energy represents an enormous component of the disposable income that an AVEC household has. The average household income in an AVEC community is about \$21,000 with 70 percent living below the poverty line, about a third of what the average income is in urban Alaska. AVEC communities are not cash economies and having to come up with extra cash to pay for a higher electric bill would cripple households and impact municipal facilities.

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SENATOR HOFFMAN asked Ms. Kohler to give committee members a better idea of what 500 kilowatts pays for.

MS. KOHLER answered that the average residential consumption for AVEC consumers is 397 kWh. Subsistence harvesting is stored in freezers and using freezers accounts for 60 percent of electrical usage. Lighting accounts for 20 percent of electrical usage, but the use of heat tape for water and sewer pipes increases electrical consumption. There is not much that can be done to curb electric usage in residential homes in rural Alaska, but the 500 kWh ceiling from PCE is a good deterrent.

SENATOR HOFFMAN asked what the average consumption is in Anchorage, Fairbanks, and Juneau.

MS. KOHLER answered that the average consumption in Anchorage is 650 kWh a month with higher consumption in Fairbanks and lower in Juneau. Rural households use half to 60 percent as much as an urban household.

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SENATOR COSTELLO asked if there was ever a conversation about having PCE cover schools.

MS. KOHLER explained that the issue with PCE for schools or any other facilities that are paid for by the government is that coverage equates to taking money out of one pocket and putting it in another. Adding schools to PCE would substantially drive up the program's cost and the beneficiary in the end would be the state's funding formula. In AVEC communities, schools typically represent 30 percent or more of all electricity sales in a community.

SENATOR COSTELLO explained that she is interested in parsing out the foundation formula to identify energy and building costs to provide transparency in what dollars are getting to the classroom for education.

MS. KOHLER replied that based on her experience, 70 percent of education appropriations should go into the classroom; however, in school districts with high operation costs, achieving 70 percent is not possible when keeping the lights on and warming buildings puts a drain on funds.

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SENATOR BIRCH asked what percent of AVEC communities are supported by renewable energy.

MS. KOHLER answered that wind-diesel projects were tested in Kotzebue and Wales in the late 1990s and an aggressive wind program started in 2003. However, renewable energy is capital intensive and expensive. A typical 100kW wind turbine costs \$1 million installed and two 900kW turbines that AVEC installed last year were \$6 million. Installing wind turbines in rural Alaska is expensive due to challenging geographic conditions, transportation costs, and moving heavy equipment logistics. Still, AVEC owns 36 wind turbines, she said.

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SENATOR BIRCH asked if AVEC has an opportunity to weigh in on energy generation and infrastructure.

MS. KOHLER answered that AVEC is part of the discussion every time something happens. The challenge for AVEC communities is size since these communities are so small plus their energy demands are so small that it becomes economically difficult to put together a capital project.

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MS. KOHLER reviewed slide 13, Question 1: Does PCE Reduce Rural Power Cost to Urban Levels?"

Residential Power Cost per 2017 PCE Report

- Chugach Electric Anchorage; .1991
- Golden Valley Fairbanks; .2411
- AEL&P: Juneau .1189
- Kodiak Electric Kodiak .1530
- Kotzebue Electric Kotzebue .1939*
- AVEC 56 Villages .2300*
- Bettles Bettles .3167*
- MKEC 5 Villages; .4158*
- Napakiak Napakiak .4888*

*after PCE

MS. KOHLER summarized that PCE does not bring power costs down to Anchorage levels, but PCE gets rural Alaska close.

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MS. KOHLER reviewed slide 14, Cost of 700 Residential kwh as follows:

- Anchorage \$139.37
- Fairbanks \$168.77
- Juneau \$83.23
- Kodiak \$107.10
- Kotzebue \$173.23*
- AVEC Village \$219.00*
- Bettles \$296.27*

- MKEC \$421.12*
- Napakiak \$409.40*

MS. KOHLER reviewed slide 15, "Question 2: Who gets PCE?"

- Every residential consumer
 - Only one meter per consumer
 - Only the first 500 kWh
- Community Facilities
 - Up to 70 kWh/resident per month
 - Streetlights
 - Washeterias
 - Water and sewer facilities
 - Community buildings

She summarized that some communities exceed the PCE cap. Selawik is a community that exceeds its cap during the winter due to the use of electric heat tape for water and sewer pipes. She added that most clinics are eligible for PCE. She said that getting community facilities certified for PCE is always a battle.

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SENATOR HOFFMAN asked if teachers and other professionals who come into the AVEC villages as renters are eligible for PCE.

MS. KOHLER answered that if the electric bill is under the teacher's name, the individual is considered a resident and would be eligible for PCE.

MS. KOHLER reviewed slide 16, Question 3: Who doesn't get PCE? which read:

- Schools
- State facilities
- Federal facilities
- Commercial consumers
- Consumers with seriously delinquent accounts

She said PCE consumers paying their electric bill is in statute in order to receive PCE. AVEC does not have customers not getting PCE due to delinquency because AVEC cuts off customers that are delinquent. She noted that there are some communities where only 70 to 80 percent of electricity billables is collected. AVEC writes off less than 0.0050 percent due to bill delinquency.

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MS. KOHLER reviewed slide 17, Question 4: How does PCE work? which read:

- Utility applies to the Regulatory Commission of Alaska (RCA) to participate
- Utility submits detailed cost and operational data
- RCA determines eligible costs and computes PCE by rate class
- Utility bills customers per normal tariff rates
- Utility applies PCE credit based upon actual consumption (subject to kWh limit)
- Consumer is responsible to pay bill after PCE credit
- Utility bills State, Alaska Energy Authority (AEA), for all PCE credited
- Utility provides AEA with detailed billing records
- Utility files annual update of costs with RCA, per schedule established by RCA

MS. KOHLER reviewed slide 18, Question 5: Doesn't PCE discourage conservation and innovation?

- Only 29% of all electricity sold in eligible communities receives PCE
- But the smaller the community, the more kWh that are eligible (because of minimal commercial usage)
 - Akiachak 46%
 - Aniak 37%
 - AVEC 48%
 - Cordova 28%
 - Kotzebue 27%
 - Napakiak 72% (School is on own generation)
 - Tanana 38%

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SENATOR BIRCH asked how widespread the PCE communities were throughout Alaska.

MS. KOHLER answered that the PCE Program is implemented throughout the state. She reiterated that the communities in the

Railbelt system are not eligible. The North Slope Borough is technically eligible for PCE, but the borough subsidizes the electricity and fuel oil for its seven villages. The North Slope village rate is \$0.1500 per kWh, even though their costs are similar to AVEC communities whose rates run about \$0.5000 per kWh. The North Slope Borough does not get PCE because the rate is lower than the cost.

MS. KOHLER reviewed slide 19, Question 6, Doesn't Most of PCE go to Overheads?

FY17 Program Statistics

Fuel Costs	\$76,759,457
Non-Fuel Costs	\$85,141,895
Total Electricity Cost	\$161,901,352
Total PCE Disbursed	\$26,099,807
Percent of Fuel Costs	34%
Percent of Total Costs	16%

MS. KOHLER specified that PCE communities have costs for operation, but not for overhead because the costs are separated into fuel costs and non-fuel costs. She added that a large gap exists between the total costs and the percentage that PCE applies to.

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MS. KOHLER reviewed slide 20, Question 7, What are Overheads?

Overheads are all non-fuel costs

- Operating and maintaining power plants
- Operating and maintaining tank farms
- Operating and maintaining distribution lines
- Connecting customers, billing, collections
- Administration, accounting, engineering, warehouse
- Insurance, depreciation, cost of long-term debt
- Taxes and miscellaneous

She said overhead costs represent a very large part of non-fuel costs.

MS. KOHLER reviewed slide 21, AVEC's Non-fuel Costs - 2017:

Generation operation and maintenance	11.5
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Distribution operations and maintenance	1.5
Customer accounts	1.7
Administration, insurance	3.7
Depreciation	3.7
Interest on long term debt	1.3
All other	0.6
Total	24.0 cents per kWh
Fuel	21.9 cents per kWh

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MS. KOHLER reviewed slide 22, Question 8: - Do PCE Villages have any Plant Investment? The slide consisted of a table with the following information:

- o Generally speaking, investment per customer served is **higher** in rural Alaska (2007)

AEL&P

Total plant: \$101,728,884

Per customer: \$6,635

Chugach Electric

Total plant: \$773,762,915

Per customer: \$9,981

Golden Valley

Total plant: \$434,881,925

Per customer: \$10,563

Kodiak

Total plant: \$84,698,822

Per customer: \$14,839

Kotzebue

Total plant: \$16,203,807

Per customer: \$13,526

AVEC

Total plant: \$108,496,970

Per customer: \$14,404

Per village: \$2,047,113

She said the data shows the actual investment per customer, non-grant-funded dollars per customer invested by the utility. In the Lower 48, the average investment is \$2,600 per customer, she said. This data provides a perspective of how much more expensive it is to serve customers in Alaska, primarily due to population.

MS. KOHLER reviewed slide 23, Question 9: Isn't PCE Abused?

There are strict requirements of RCA and AEA

- Line Loss standards - 12%
- Only one eligible account per customer
- Various expenses (like lobbying) disallowed
- Monthly reports must be submitted to AEA
- Community facilities are scrutinized by AEA
- Revenues billed must be collected
 - AVEC writes off less than .005% annually in bad debts

MS. KOHLER explained that if line loss is more than 12 percent of power sold, a penalty factor would kick in and the PCE rate will go down as a result. She emphasized that mechanisms in place deter line loss from being too high.

She emphasized the PCE is scrutinized to such an extent that the program is simply not abused. In fact, PCE is actually underutilized. In reviewing some communities in the PCE reports, she has noticed that their non-fuel costs are \$0.0600 and \$0.0700. She said she would like to work with utilities to figure out what their costs should be to appropriately calculate their PCE rate.

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MS. KOHLER reviewed slide 24, Question 10: Would PCE Money be better spent on Alternative Energy?

Wind generation is six times the cost of diesel generation

- Utility-turbines as in Lower 48 cannot be used
- Average village load is approximately 150 kW
- There are only one or two manufacturers of 50-100kW units

- To accommodate sophisticated integration needs, the existing generation and distribution must be upgraded
- Typical cost of a 300kW integrated project is \$4+ million
- Diesel generation and fuel tankage still needed for the 70+ percent energy that wind cannot provide
- AVEC has recently installed two 900kW turbines

She offered her belief that \$26 million a year does not buy a lot of alternative energy. She emphasized that base load generation must be available when alternative energy is unavailable.

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MS. KOHLER reviewed slide 25, Question 11: Why are we subsidizing Rural Alaska?

- This was the compromise reached in 1984, when the Alaska Legislature recognized that there was no answer to bring affordable power to rural Alaska
- Billions of dollars were spent or committed to reduce power costs for urban Alaska and communities fortunate to have hydropower
- Railbelt communities continue to benefit from heavily subsidized natural gas since 1968
- In 1985, PCE utilities paid \$1.17/gallon of diesel, 25 times the cost of Railbelt gas at \$0.35/mcf

She pointed out that Alaska has had a long history of subsidizing energy. She said she has researched the huge subsidies that went into providing gas access to Chugiak Electric for providing gas power in Anchorage. She noted that greatly reduced royalty rates for Cook Inlet gas have been in place since the 1960s. These were reductions specifically done to bring affordable energy into Anchorage and the surrounding area that continues to be a built-in subsidy, she said.

She emphasized that subsidizing the cost of energy is not a bad idea because affordable energy underpins all economic prosperity. The legislature and the administration have agreed upon compromises every step of the way to provide some degree of affordable power to rural Alaska. However, PCE still only

impacts less than 30 percent of all the kilowatt hours that are sold in rural Alaska so much of rural Alaska struggles.

She offered her belief that Alaska is a state of energy poverty and energy refugees. The PCE program was a wonderful program that worked well for the first few years, then the bottom fell out of the oil market and the legislature started cutting back appropriations for PCE. PCE was underfunded for 15 years from 1992 to 2007 and that was after the program was drastically cut back to reduce the number of eligible kilowatt hours.

She explained that the endowment fund was created for PCE with a lot of blood, sweat and tears along the way. She said Senator Hoffman must be recognized for his undying work to make the endowment happen and to build the fund to the level where it can fully support PCE. She expressed hope that it could also support municipal assistance.

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MS. KOHLER summarized that much more could be said about PCE and how critical it is for not just rural Alaska, but urban Alaska. She said that urban Alaska would not be happy to have 90,000 rural residents move to town for affordable electricity. PCE is a balancing act that must be kept in mind each time an effort to use the endowment fund for other purposes occurs.

CHAIR BISHOP commended Ms. Kohler for her comprehensive presentation. He asked what she would do if she had a magic wand for the systems that she runs.

MS. KOHLER replied she would build a two gigawatt power plant on the North Slope to provide cheap electricity from natural gas for \$0.02 or \$0.03 per kWh with a transmission grid to send the electricity throughout the state. She said Alaska treats itself like an energy refugee and the state needs to stop doing so. Alaska's natural resources are harvested and shipped instead of being processed in-state for creating jobs. Affordable energy would attract industry from around the world, she said.

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CHAIR BISHOP noted that he recently toured Iceland and observed their thriving economy. Iceland was a poor country until it finally got off diesel fuel and coal. Today, Iceland can bring in raw bauxite from South America for smelting, he said.

MS. KOHLER agreed with Chair Bishop and noted that Iceland has \$0.02 per kWh power.

CHAIR BISHOP said if the legislature and administration can pull in the same direction, Alaska could be in the same position as Iceland. He said investing in big infrastructure projects is what governments do to lower operating costs for everybody and to grow the economy.

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There being no further business to come before the committee, Chair Bishop adjourned the Senate Community and Regional Affairs Standing Committee meeting at 4:35 p.m.