

ALASKA STATE LEGISLATURE
HOUSE SPECIAL COMMITTEE ON ENERGY

February 20, 2025

1:39 p.m.

MEMBERS PRESENT

Representative Ky Holland, Co-Chair
Representative Donna Mears, Co-Chair
Representative Chuck Kopp
Representative George Rauscher
Representative Mia Costello

MEMBERS ABSENT

Representative Bryce Edgmon
Representative Cathy Tilton

COMMITTEE CALENDAR

PRESENTATION(S) : ALASKA SOLAR 2016 - 2025

- HEARD

PRESENTATION(S) : ALASKA RURAL ENERGY CONSIDERATIONS

- HEARD

PRESENTATION(S) : TANANA CHIEFS CONFERENCE ENERGY PROGRAM FUNDING
AND MISSION

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

BEN MAY, Owner
Alaska Solar
Anchorage, Alaska

POSITION STATEMENT: Gave a PowerPoint presentation on solar energy.

BRIAN HIRSCH, PhD, CEO
DeerStone Consulting

Anchorage, Alaska

POSITION STATEMENT: Gave a PowerPoint presentation on energy in rural Alaska.

EDWARD DELLAMARY, Rural Energy Manager

Tanana Chiefs Conference

Fairbanks, Alaska

POSITION STATEMENT: Gave a PowerPoint presentation on Tanana Chiefs Conference and its energy program.

ACTION NARRATIVE

[1:39:19 PM](#)

CO-CHAIR HOLLAND called the House Special Committee on Energy meeting to order at 1:39 p.m. Representatives Costello, Kopp, Rauscher, Mears, and Holland were present at the call to order.

PRESENTATION(S): Alaska Solar 2016 - 2025

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CO-CHAIR HOLLAND announced that the first order of business would be a presentation on Alaska Solar, 2016 to 2025.

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BEN MAY, Owner, Alaska Solar, gave a PowerPoint presentation on solar energy [hard copy included in the committee packet]. On slide 1, he gave a history of Alaska Solar, which began in 2016. He stated that the price of solar panels was dropping at that time, and permits had become easier to obtain because regulations had changed. He pointed out that because of community solar projects, people trust solar now. He spoke about the growth of capacity in solar, which has doubled within the last year.

MR. MAY moved to slide 2 and spoke about how solar jobs have helped to keep people in state. He pointed out that Alaska Solar pays comparable wages for construction jobs, and it offers benefits. He stated that most of his clients are residential, but solar demand is growing with commercial businesses. He continued that Alaska Solar is starting to do bigger projects, such as with utilities. He moved to slide 3, which showed examples of bigger projects Alaska Solar is doing with Chugach Electric.

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REPRESENTATIVE RAUSCHER questioned the cost of solar when considering the needed labor, engineering, administration, and materials.

MR. MAY responded that some material costs have decreased, while inverters and wiring costs have increased. He stated that "soft costs" of residential solar are around 40 percent of the labor costs, as this includes municipal permits, applications, and inspections. He summarized that labor is about a third of the cost, while the rest consists of materials and overhead. In response to a follow-up question, he stated that self-installation could save an individual up to 50 percent of these costs. He pointed out the difficulties in shipping the materials and the permitting process. He added that the biggest impediment to self-installation would be the permitting process.

MR. MAY, in response to a follow-up question from Co-Chair Holland concerning self-installation, stated that the engineering and the permitting process would first need to be determined. He noted that the permitting process initially took him five to six months, but now it takes him around five to six hours. After finishing the project, there would be an inspection by the municipality, and possibly an inspection by the corresponding utility company. In response to a follow-up question, he stated that currently commercial solar projects are subject to state permits, and for larger projects, the permit cost would be 1 percent of the value of the project. He suggested that the cost of the permit for larger projects should be capped, as a \$16 million project would barely have a return on the investment.

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MR. MAY stated that, because of pricing trends of the materials and other energy sources, Alaska Solar's experience has mirrored the larger world experience utilizing this energy. He expressed the opinion that the worldwide market is becoming more competitive for energy, with the emphasis in the next decade being on the cheapest energy. He suggested that this would affect Alaska's population. On slide 4, he pointed out the decrease in the price of solar panels in the last 20 years, as the price has gone from \$2,000 a panel to \$155 a panel. He compared the price of gas and solar per megawatt hour, pointing out that solar plus a battery would be the most economical option. He stated that over the last 4 decades there has been a

10-fold increase in the installation of solar systems to the grid. He opined that if this usage continues, solar would be 60 percent of the worldwide energy usage in 10 years.

MR. MAY argued that solar projects are cheaper and more easily deployed than other energy infrastructure projects; therefore, the capitalist market would be going in this direction. To be competitive, he asserted, "Cheaper energy matters." He moved to slide 5 and pointed out that the biggest "headwind" in Alaska to solar energy is the uncertainty with the current federal administration and the funding freeze. He expressed the opinion that this would undermine trust. He gave the example of the gas shortage in the state as a "tailwind," as this has driven utilities toward solar energy. He discussed annual net metering, stating that this would save gas for the purpose of heating homes. He expressed the opinion that annual net metering would also provide a better return on investment for solar energy projects.

CO-CHAIR MEARS questioned the issues that might dissuade individuals from using solar.

MR. MAY expressed uncertainty concerning the amount of solar that would be allowed on the grid, as this could be an issue. He suggested that a regulatory change could help, as current regulation would not allow the needed capacity for commercial solar systems.

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CO-CHAIR HOLLAND questioned Alaska Solar's involvement with the community solar projects.

MR. MAY expressed the opinion that community-led solar projects have "run their course." He stated that this effort "primed the pump on solar" and people were involved, but it has waned in the last couple of years.

REPRESENTATIVE RAUSCHER requested an explanation of the calculation of the 900 tons of carbon offset, as seen on slide 6 under "Achievements."

MR. MAY stated that this amount is the average for the country. He pointed out that the slide shows the achievements of customers, employees, subcontractors, suppliers, and more. He pointed out that adding up the achievements is a "trickle

effect." In conclusion, he stated that all the panels he has installed are still working, and "this is the beauty of solar."

REPRESENTATIVE KOPP questioned any upgrades that would be needed with the installation of solar energy.

MR. MAY suggested that upgrades would be rarely needed. He noted that occasionally a transformer upgrade would be needed. He added that in community projects, new lines might need to be run. He stated that for the larger projects the problem arises of how to share the cost.

PRESENTATION(S): Alaska Rural Energy Considerations

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CO-CHAIR HOLLAND announced that the next order of business would be a presentation on rural energy.

[2:14:15 PM](#)

BRIAN HIRSCH, PhD, CEO, DeerStone Consulting, gave a PowerPoint presentation on energy in rural Alaska [hard copy included in the committee packet]. He stated that the company has been in existence for 10 years, and it works across the state. He noted that DeerStone Consulting's expertise is concentrated in clean energy, including solar, wind, hydropower, biomass, batteries, geothermal, energy efficiency, powerplant upgrades, and distribution systems. He stated that it is also involved in other infrastructure issues, such as broadband, water and sanitation, and transportation.

DR. HIRSCH stated that this work is concentrated in villages in the state, and the company is "all about people." On slide 2, he noted that 20 employees work from various locations across the state. He explained that DeerStone provides services to communities from the beginning to the execution of projects, along with trouble shooting. This includes working with funding, workforce development, site control, and permitting. He stated that this work also includes consulting with stakeholders to understand the unique challenges in the different communities.

DR. HIRSCH pointed out that because Deerstone works with tribes and municipalities in rural Alaska, it also works with the well-known agencies and organizations in these areas, including many Native organizations and utility companies. He moved to slide

3, which demonstrated where Deerstone's projects are located. He noted that with the federal funding freeze, \$265 million in grants to clients have been frozen, and this money was for executing projects. He gave an example of a project on hold in Kotzebue that would intertie smaller communities in the area to an electrical grid.

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REPRESENTATIVE RAUSCHER questioned whether any frozen funds would be accessible in the near future.

DR. HIRSCH expressed uncertainty on the funding. He expressed hope that the federal government would meet its pre-signed obligations. He stated that a report on the funding would need to be submitted to the federal government within 90 days. He expressed the understanding that this could be related to the Impoundment Control Act of 1974, which addresses the authorities of the different branches of government.

REPRESENTATIVE COSTELLO questioned the contents of the 90-day report to the federal government.

DR. HIRSCH stated that Deerstone is not involved with submitting the report, as this would be an internal federal agency review through the U.S. Department of Energy. He stated that Deerstone has reached out to federal agencies, but there has been no response.

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DR. HIRSCH moved to slide 4, titled "Role of State Funding in Rural Communities." He stated that while most of the funding comes from the federal government, state funding is "critical." He noted that federal funding requires a non-federal cost share, and the Alaska Energy Authority often provides this funding. He noted that areas with more resources leverage the non-federal requirements more easily. He noted that the Renewable Energy Fund (REF) is a longstanding program, and he urged the committee to continue to support this. He suggested that REF could be used to match federal funds that have not been frozen. He pointed out that there could be emergency needs during power outages, especially in winter.

DR. HIRSCH moved to slide 5 and discussed the role of the Power Cost Equalization (PCE) Program in rural communities. He stated that PCE is more widespread than the Rural Energy Fund, as it

was created to support energy projects on the Railbelt in exchange for rural energy funding. He pointed out that PCE is an endowment fund with no cost to the state. He referenced the complicated nature of the PCE formula, suggesting that it needs to be optimized. He also suggested that the Regulatory Commission of Alaska could give more guidance to the program.

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DR. HIRSCH, in response to a question from Representative Kopp, stated that Deerstone has worked with the Alaska Native Health Consortium on projects.

CO-CHAIR HOLLAND expressed the understanding that many of Deerstone's projects work to link energy demand with supply. He questioned the use of smart metering demand control to break down barriers in the renewable systems.

DR. HIRSCH responded that this question is complex, as wind and solar availability can be unpredictable. He noted that batteries could be used to store some of this energy, but typically, electricity is not used for generating heat except in the case of heat pumps. Because of this, he noted that wind in the wintertime could help with the heat demand. He explained that using smart metering in the villages would be complicated because of the need for high-speed internet. He expressed the understanding that connectivity is improving, but there would need to be "a whole host of things" to solve this problem. Concerning heat demand, he suggested that energy efficiency in homes should be addressed before smart metering. He expressed the opinion that the first steps to address home heating should be repairing homes and power plants. He explained that using smart metering is a multistep process that takes time.

PRESENTATION(S): Tanana Chiefs Conference Energy Program Funding and Mission

[2:38:18 PM](#)

CO-CHAIR HOLLAND announced that the final order of business would be a presentation on Tanana Chiefs Conference and its energy program.

[2:38:38 PM](#)

EDWARD DELLAMARY, Rural Energy Manager, Tanana Chiefs Conference (TCC), gave a PowerPoint presentation on TCC's energy program

[hard copy included in the committee packet]. He stated that he would discuss TCC's energy program, funding, projects, and mission. On slide 2, he stated that TCC is a nonprofit tribal consortium composed of 42 members, with 37 federally recognized tribes. He stated that TCC's region covers 235,000 square miles in the Interior. He pointed out that only nine of these communities are on the road system, and the Railbelt serves only one. He added that diesel power plants serve the remaining communities.

MR. DELLAMARY moved to slide 3 and discussed TCC's energy program. He pointed out that it was created for economic reasons after the economic crisis of 2008. He listed some of TCC's services, including grant writing, emergency energy support, and renewable energy project planning and implementation. He added that solar energy has been proven in the Interior of Alaska. He pointed out his work in the villages, as TCC also provides energy administrative assistance for utility management and engineering support.

MR. DELLAMARY, in response to a question concerning geothermal from Representative Rauscher, stated that in the community of Manley Hot Springs there has been evaluations for geothermal and ground source heat pumps, but there have been no installations.

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The committee took an at-ease from 2:45 p.m. to 2:46 p.m.

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MR. DELLAMARY moved to slide 4 and stated that TCC works with several utility partners, such as the Alaska Village Electric Cooperative, Alaska Power and Telephone, Golden Valley Electric Assn, and independent utilities. He discussed the expensive cost of energy, as the average price of fuel in these communities is \$7 a gallon. He stated that one of TCC's goals is to alleviate this high cost, and he added that diesel is 50 percent of the total expenditure for the utility. He noted that the Power Cost Equalization (PCE) Program helps lower some of the costs of electricity.

MR. DELLAMARY moved to slide 5 and discussed projects aimed at bringing down fuel costs. This includes using energy efficiency measures, examining economies of scale, and implementing energy upgrades. He stated that the majority of this work focuses on installing renewable energy, as there has been available funding

for this. He further discussed the use of renewable energy, with the goal of tribal energy sovereignty.

MR. DELLAMARY moved to slide 6 and discussed the federal funding freeze. Since the funding freeze, he stated that TCC has worked to secure \$16 million in federal funding; however, \$131 million of funding is at risk. He expressed confusion and lack of clarity concerning the future of these funds, noting that only one of three planned construction projects would go forward this summer. He discussed this project further.

MR. DELLAMARY, in response to a question from Co-Chair Mears, responded that if funds were available tomorrow, the projects could begin; however, they would not be completed, as the timeline has been damaged. In response to a follow-up question, he explained that the estimated additional cost for a delayed project would be difficult to assess because potential tariffs could increase the cost of steel and other materials. He stated that there are too many variables to formulate an answer.

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MR. DELLAMARY moved to slide 7 and pointed out the successful solar energy projects in Hughes, Manley Hot Springs, and Galena. He stated that data could now be drawn from these projects. He explained that the solar project in Hughes is saving 10,000 gallons of diesel per year. He expressed the hope that future projects could make a larger dent in the fuel bill. He stated that previously fuel was being flown into Hughes at \$9 a gallon, but now a fuel farm has been built so fuel can be purchased at a lower cost.

MR. DELLAMARY, in response to a question from Co-Chair Holland, discussed the graphs on the slide, which showed the impact of independent power producers (IPPs) on PCE in Hughes. He stated that Hughes spends around \$260,000 annually on fuel, and this is after a reimbursement of around \$150,000. He noted that there was a drop in the fuel bill after the installation of solar energy. He stated that TCC has been modeling this with the goal of creating a stable business model to ensure longevity. He explained that the federal funding agencies would need assurance that this infrastructure has been built to last. In conclusion, he stated that this is a symbol of success in remote Alaska.

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REPRESENTATIVE RAUSCHER expressed appreciation to the presenters and remarked that the Renewable Energy Fund was referenced in each presentation, and he noted that the governor supports the fund.

CO-CHAIR HOLLAND thanked the presenters and gave closing comments.

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ADJOURNMENT

There being no further business before the committee, the House Special Committee on Energy meeting was adjourned at 3:03 p.m.