

**ALASKA STATE LEGISLATURE
HOUSE SPECIAL COMMITTEE ON ENERGY**

March 16, 2023
10:15 a.m.

MEMBERS PRESENT

Representative George Rauscher, Chair
Representative Tom McKay
Representative Josiah Patkotak
Representative Stanley Wright
Representative Mike Prax
Representative Calvin Schrage
Representative Ashley Carrick

MEMBERS ABSENT

All members present

COMMITTEE CALENDAR

PRESENTATION: RENEWABLE ENERGY ALASKA PROJECT

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

CHRIS ROSE, Founder and CEO
Renewable Energy Alaska Project
Juneau, Alaska

POSITION STATEMENT: Gave a presentation titled "Renewable Energy Alaska Project."

ACTION NARRATIVE

[10:15:15 AM](#)

CHAIR GEORGE RAUSCHER called the House Special Committee on Energy meeting to order at 10:15 a.m. Representatives Schrage, McKay, Wright, and Rauscher were present at the call to order. Representatives Carrick, Patkotak, and Prax arrived as the meeting was in progress.

PRESENTATION: RENEWABLE ENERGY ALASKA PROJECT

[10:16:26 AM](#)

CHAIR RAUSCHER announced that the only order of business would be a presentation titled "Renewable Energy Alaska Project."

[10:17:03 AM](#)

CHRIS ROSE, Founder and CEO, Renewable Energy Alaska Project, (REAP), gave a PowerPoint presentation, titled "Renewable Energy Alaska Project" [hard copy included in the committee packet]. Showing slide 2 and slide 3, he stated that REAP is a nonprofit coalition of businesses, NGOs, electric utilities, and clean energy developers across the state of Alaska. He said that REAP has existed for 20 years, and its mission is to increase renewable energy development and energy efficiency in Alaska. The project has several programs, including promoting energy literacy, partnerships with federal agencies to bring technical assistance to rural Alaska, and working to create clean energy careers across the state. He said that REAP played an important role in the creation of the Renewable Energy Grant Fund, as well as establishing a "green bank" to provide loans to Alaskans for the purpose of weatherizing their homes. He said that more people are needed in Alaska who can provide maintenance for these projects.

[10:25:11 AM](#)

CHAIR RAUSCHER asked whether a journeyman electrician has to work on each of these projects.

MR. ROSE affirmed that is correct.

MR. ROSE continued to slide 4 and gave a brief overview of the presentation, focusing on how electricity rates in Alaska are rising faster than those in the Lower 48. He pointed out that the cost of natural gas is rising, and Hilcorp may not renew its contracts with Cook Inlet. He said that importing natural gas would be an expensive option and rising natural gas prices on the Railbelt would prevent rural Alaskans from benefiting from the power cost equalization (PCE) program.

[10:30:42 AM](#)

MR. ROSE, in response to a committee question concerning access to solar panels, answered that the federal government has

extended tax credits for solar panel installation by 10 years. He added that the credit is up to 30 percent, and it is possible for solar panel users to sell excess power back to the utilities. In response to a follow-up question, he said that building solar panels is one of the biggest businesses in the world.

MR. ROSE, in response to a committee question concerning Hilcorp not renewing its contracts, expressed the hope that other companies would have the ability to produce natural gas at a greater volume and an affordable price. In response to a follow-up question, he said that renewable energy would be competitive even without tax credits. In response to questions concerning whether Golden Valley Electric Association buys fuel to power its plants, he stated battery technology would give Golden Valley a greater chance to integrate power. He explained Golden Valley's battery cost is paid by "everyone." He added that it is ultimately less expensive than buying more fuel. In response to a follow-up question, he said that federal grants are being sought for upgrades to the Bradley Lake Hydroelectric Project.

[10:46:09 AM](#)

MR. ROSE continued to slide 5 through slide 7 and gave a brief comparison of electric rates and natural gas prices. He said that the Matanuska Electric Association (MEA) serves his area, and rates have increased by 50 percent. The average increase in cost in the Lower 48 in the last 10 years has been 2 cents per kilowatt-hour (kWh) compared to the 7-cent increase per kWh on the Railbelt. He said that costs for Cook Inlet natural gas have increased from \$1.50 to \$7.50 in the last 10 years, an increase of more than 3 times compared to the Henry Hub natural gas market. He expressed the understanding that starting in 2027 the amount of natural gas being produced from Cook Inlet is expected to fall below the demand.

[10:50:46 AM](#)

MR. ROSE, in response to a committee question, stated that there is a discrepancy between supply and demand. He pointed out that there is gas; however, it needs to be developed. In response to a follow-up question, he reemphasized that it is ultimately a matter of developing natural gas.

REPRESENTATIVE CARRICK suggested that even with the proof of natural gas, it might not be developed in the next two to five years.

REPRESENTATIVE MCKAY expressed the opinion that proven undeveloped natural gas means that there is already some infrastructure in place, but additional wells would be needed.

REPRESENTATIVE PRAX expressed the opinion that evidence of natural gas means that development is likely, and he compared it to the development of oil on the North Slope.

REPRESENTATIVE SCHRAGE expressed the opinion that the natural gas available will only become more difficult and expensive to produce.

MR. ROSE noted that the current contracts for natural gas begin to expire next year, meaning that further price increases are likely to begin occurring in the near future.

[10:59:27 AM](#)

MR. ROSE continued to slide 8 through slide 10 and gave an overview of liquefied natural gas (LNG) prices around the world. He showed a chart including the Henry Hub price, as well as prices in Japan, the Japan-Korea market, and Europe. He explained that the Henry Hub price is a spot-market price that is currently the lowest. He said that Alaska would likely have to buy LNG on the Asian market and pay the same prices as those markets. The price of Japan's spot LNG has been volatile and has reached as high as \$35 per thousand cubic feet (Mcf). He said that the Chugach Electric Association is looking at scenarios involving gas with prices as high as \$12 or \$18 per Mcf.

MR. ROSE, in response to a committee question concerning an Alaska LNG project, commented that demand in Japan, one of the most likely investors, is decreasing, and Alaska would be unlikely to receive a "hometown discount" based on the price of other fuels in the state.

[11:09:12 AM](#)

MR. ROSE continued to slide 11 and slide 12 and showed the potential impact of LNG import prices on individual households. He said that those relying on PCE are being affected the most because of the increases in PCE's floor. He expressed REAP's

belief that moving to renewable energy and saving natural gas for heating is the best path forward to avoid reliance on volatile LNG imports.

MR. ROSE moved to slide 13, showing a chart comparing the cost of solar and wind power generation. He said that wind and solar power are cheaper than natural gas, and he suggested that these prices are decreasing.

MR. ROSE, in response to a committee question, compared renewable energy projects in Alaska with those in the Lower 48 and said that a wind project is approximately 1.7 times more expensive in Alaska. He added that even with that additional cost, the cost of wind power still ends up being a lower cost than natural gas. He pointed out that the price of wind power produced on Fire Island has decreased since the project was first built. In response to a follow-up question, he said that parts for an offshore turbine would travel by ship.

[11:21:58 AM](#)

MR. ROSE moved to slide 14 and showed a chart with the percentage of solar power generation in the country. He said that in California, a state with a population of 37 million, 25 percent of its energy is generated by solar.

MR. ROSE continued to slide 15 and slide 16 and gave an overview of net capacity additions by their source. He said that in the last 10 years, more fossil fuel plants have been closed than opened, and 80 percent of new power plants in the Lower 48 are either wind or solar plants. He showed a chart detailing the percentages of capacity generation by source.

MR. ROSE, in response to a committee question concerning whether the numbers would change if each wind turbine was considered its own plant, answered that a project's capacity is measured by the megawatt hours (MWh) it can produce, even if it does not always produce this amount. He added that fossil fuel and geothermal plants have the ability to operate at times in which other renewable energy sources cannot.

MR. ROSE, in response to a committee question, answered that the capacity on the chart is nameplate capacity.

[11:31:17 AM](#)

MR. ROSE continued to slide 17 through slide 19 and gave a brief overview of avoided cost. He explained that "avoided cost" is a term that describes the cost avoided when a utility company buys generated fuel from a third party. He said that MEA's recent wind power project has an avoided cost that already makes it cheaper than natural gas. He stated that the Regulatory Commission of Alaska (RCA) requires a five-year projection of costs relating to utilities, including the avoided cost. He showed a chart detailing avoided cost scenarios with potential LNG spot prices. He added that using renewable energy projects would allow the private sector to be involved in lowering energy prices. The investors of these projects, not the utilities, take all risk of a project not working.

[11:38:10 AM](#)

MR. ROSE moved to slide 20 and slide 21 and continued his discussion of avoided cost. He showed a line graph with the same information as the previous bar graph. He stated that the avoided cost rises even if natural gas prices increase only to \$12 Mcf. He pointed out the target of reaching a renewable portfolio standard (RPS) of 80 percent by the year 2040, and utilities would face a fine for every MWh not produced with renewable energy over the allotted amount. He explained that the estimated capital cost to reach 80 percent renewable energy would be \$3.2 billion; however, he allowed that the estimate was made before it was known that federal tax credits for renewable energy would be continued.

[11:44:00 AM](#)

MR. ROSE, in response to a committee question, answered that the analysis is based on a recent wind project built in Alaska. In response to a follow-up question, he expressed the possibility that tax credits for natural gas may have the potential to help with natural gas prices; however, this does not remove the volatility of these prices. He noted that prices for renewable generation remain stable.

MR. ROSE, in response to a committee question, answered that the cost of battery storage is not included in the analysis because the Railbelt utilities have plans to build batteries regardless of the direction taken for power generation.

MR. ROSE, in response to a committee question, expressed the opinion that it is generally correct that more transmission lines would mean less needed battery storage. He added that

some battery storage would still be necessary, as batteries have other purposes, such as offering power during gaps in generation. In response to a follow-up question, he said that the status quo would result in the incurrence of additional costs due to LNG imports.

[11:57:09 AM](#)

MR. ROSE continued to slide 22 and slide 23, listing the benefits of having RPS, as follows: diversifies Alaska's generation portfolio and protects ratepayers from cost volatility; saves Cook Inlet natural gas for heating; utilizes local resources; creates jobs; and increases Alaska's energy independence. He advised that Alaska should see where it is going and act accordingly.

[12:00:02 PM](#)

ADJOURNMENT

There being no further business before the committee, the House Special Committee on Energy meeting was adjourned at 12:00 p.m.