

## Opening Statement of Chairman Lisa Murkowski ENR Hearing on Remote and Isolated Energy Systems July 14, 2015

Welcome and good morning.

We are at order today in the committee. We are looking at the unique energy challenges that face those who live in remote and isolated areas that are not connected to our national grid. This is Alaska. This is Hawaii. This is our territories.

These areas are largely dependent on imported diesel fuel for their energy needs. The cost of importing that fuel adds significantly to the overall cost of electricity, and in the case of Alaska, it also adds to the cost of space heat. Most remote locations pay at least twice the national average for electricity. In parts of my state, we see number and rates that are at times ten times the national average, as a result of the need to import fuel.

So when we talk about energy challenges for us, it is every bit as important as anything else that we face. And Alaska of course is not alone in this in our isolated areas, in our islands that are reliant on imported energy. This is probably the most debilitating aspect of our ability to have an economy at all.

While the nation's regional grids have a diverse set of energy sources to draw from, most isolated areas simply do not have that luxury. Instead, their energy costs are directly tied to the price of oil. Lower prices are providing some relief right now, but energy source diversity is the best and most stable option over the long-term.

In many parts of our state, the fuel barge comes in once a year, twice a year maybe. Sometimes it doesn't come when you expect it because you can't get the barges up the river. But effectively what happens is the communities are locked into the price of fuel at the time that it was contracted. So if you contract for the fuel in July and the prices are reasonable, you enjoy those reasonable prices until the next shipment comes which maybe a year later. I ask this morning to see what the people in Bethel paid last year. In summer of 2013, heating fuel was going for \$6.09. Diesel was going for \$6.51; gas at \$6.85. Then in October of 2014 we were looking at heating oil at \$6.20; diesel at \$6.82; gas at \$6.79. Then what happens is that we see the low prices around the country. Everyone was benefiting from the low prices – not so much for those of us in Alaska. We are still seeing price comparisons that simply don't add up.

It is also important that we look at remote and isolated energy systems in a holistic manner – not just from a cents-per-kilowatt-hour perspective. In all but a few of the communities served by remote energy systems, economies of scale are simply not a reality. Further, the isolated nature of these energy systems means that they must bear the entire burden of ensuring reliability within the community. The ability to support these energy systems directly depends on the underlying economy and at the same time the cost of energy drives that economy.

I was in Pelican over the Fourth of July break. Pelican Alaska is down in the Southeastern part of the state, a very small community of about 100 or so people. It's only accessible by boat or by float plane. It was founded as a commercial fish processing site in the mid 1930's and processed one million pounds of fish back in 1942. But over the years, they have languished as the fish went elsewhere and they went elsewhere for some pretty simple reasons– ice. If you don't have ice to keep your fish chilled after you have harvested them you don't have a product. Making ice takes energy and without competitive energy the community couldn't provide the ice necessary to support our quality based fisheries. But the good news for Pelican is that they have a small hydro project that has Pelican back on the map as processing small bits of fish that are coming in. The fish are no longer going by this community and it is in part due to the fact that they have to the school, to the water plant, and now to the fish processors.

But Pelican in my mind is an example of how we need to think about energy in these systems. We need to focus on solutions to the problems at hand – where energy sources match what the community needs and what the community can sustain and not simply what is desired for them.

From a federal perspective, we must ensure that our programs do not leave these areas on the sidelines. I note that the DOE's definition of a micro-grid requires the micro-grid to be able to disconnect and connect to a larger grid. Well that's just not possible for the non-contiguous parts of the United States. We have legislation before our Committee, S. 1227, to ensure that the development of micro-grid technologies includes isolated communities, and hopefully that will become part of our larger energy package.

Finally, I would note that this hearing occurs at the same time the Pacific Power Association which is the umbrella organization for the power companies in the Pacific Islands, including those in the U.S. territories and Freely Associated States – is holding its 24<sup>th</sup> annual conference in the Marshall Islands. That's a coincidence, not a matter of coordination, but it is good to know that the issue of remote and isolated energy systems will be highlighted across the globe this week.

The issues associated with islanded energy systems deserve our attention. Energy can be a staggering cost and a staggering burden for the people who live in these areas - so I am pleased that we have set this morning aside to explore what can be done at the federal level to help find lower-cost solutions to them.

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