

House Special Committee on Energy  
Hearing at Bethel, Alaska May 29, 2009

Representative Bryce Edgmon Co-Chair  
Representative Charisse Millett Co-Chair  
Representative Nancy Dahlstrom  
Representative Kyle Johansen  
Representative Jay Ramras  
Representative Pete Petersen  
Representative Chris Tuck  
Representative Mike Chenault, Speaker of the House

Testimony of Jerry Drake, Bethel Alaska

Honorable Representatives,

As you are all well aware of the high costs of energy in rural Alaska and the effects it has, I would like to take this opportunity to offer instead a suggestion that may help reduce those costs and our reliance on high cost energy sources.

The way that wind and solar energy is currently being presented/marketed simply does not work. I base that on the simple fact that if it were cost effective, you would see it in wide use. An example of this was just shown on the evening Anchorage news last week. Where a gentlemen in Anchorage installed a solar water heating system in his home at a cost of some \$14,000.00 with a payback period of 15 years. As long as we keep looking at the problem the same way, only the wealthy will be able to afford renewable energy with a questionable payback period, as is the case today.

Here's the suggestion. As State and Federal agencies are already providing housing in many areas of the State. A joint research project through perhaps the Denali Commission be instituted. The research would be to find out what components are available off the shelf to provide supplemental heat alone. These could be either wind, solar or a combination of the two. This supplemental heat would be simple and not intended to be a replacement for current heating systems. Converting a home over to complete reliance on wind and/or solar power and selling back to the grid add expensive and extremely complicated systems to a home. Both are project killers in rural Alaska.

If the right combinations of off the shelf wind, solar and heaters can be found that are inexpensive, reliable and easy to maintain, then we will have an effective system. The target total cost should be in the \$3,000.00 to \$7,500.00 range. I say this because if a house uses say 600 gallons of oil per year at \$5.00 per gallon. Then a 20% reduction in use would save approximately \$600.00 per year or \$3,000.00 over 5 years. And if a 50% reduction could be achieved then the savings would be \$1,500.00 per year or \$7,500.00 over 5 years. I believe that if these costs and payback periods are met, a cost effective system would be in place that anybody could take advantage of.

If the State is unable to conduct the necessary research to achieve this goal, how about a one time X-Prize like competition? The first person or organization that can achieve something like the above costs and payback period wins a cash prize. It stays in effect till it's met. That could be the best \$500,000.00 the State ever spent.

This would be an excellent use of stimulus energy funds. If the only reason not to accept the stimulus energy funds is the requirement of a statewide energy standard, then that is a non-issue. As the State already has a Building Energy Efficiency Standard (BEES) there is no issue here. The financial institutions have always been the de-facto code enforcers in rural Alaska, ensuring that new construction meets this standard. Anyone that does not adhere to the standard doesn't care because they are not getting financing or ever planning to sell.