

**Testimony  
Alaska Federation of Natives  
Ralph Andersen**

**Oversight Hearing  
United States Senate  
Committee on Indian Affairs  
on**

**The Effects of High Fuel Prices in Rural Alaska,  
Sustainable Energy Solutions, including Conventional and Renewable Energy, and  
Energy Efficiency and Conservation**

**Bethel, Alaska  
August 28, 2008**

Good Morning. My name is Ralph Andersen. I am the Chief Executive Officer of the Bristol Bay Native Association (BBNA), and Chairman of the Alaska Federation of Natives' Energy Workgroup. I also serve as Co-Chair of AFN's Human Resources Committee composed of the Chief Executives of the 12 regional non-profits. BBNA is a non-profit tribal consortium that provides vital services to over 30 rural villages in southwestern Alaska. Today, I am testifying on behalf of AFN, as Chairman of the Energy Working Group. AFN is a statewide Native organization whose membership includes over 200 villages and tribes, 13 regional Native corporations and 12 non-profit tribal consortia, including BBNA, that contract and run federal and state programs.

I know many of AFN's member organizations would like an opportunity to provide testimony on how the high fuel prices is impacting them, so I request that the record be kept open for a period of time to allow our tribes and corporations and interested individuals to provide additional written comments.

Alaska Natives are committed to working with the State and the federal governments, as well as private sector partners, to help meet the energy needs of Alaska and the nation. As major landowners, we have resources that can be developed. As owners of major corporations, we have the management capacity and organizational reach to work with the state and federal governments and private sector investors to create new sources of energy. Our federally recognized tribes, our regional housing authorities, our regional tribal consortia all have a strong interest in being part of the solution of obtaining affordable energy – to maintain our unique way of life and to help meet our national energy needs.

The rising cost of energy has reached unprecedented proportions in rural Alaska. While all Americans suffer from the rising cost of gasoline, the impact is unbelievable in our rural communities, threatening the very survival of many remote villages. Rural Alaska has the highest per capita power and fuel costs in the U.S.

Most of our rural communities are not on any power grid and are dependent on petroleum for three major uses – space heat (homes, public buildings and businesses); transportation (aircraft, snow machines, outboard motors, four-wheelers); and electricity (lighting and appliances). Fuel oil prices in some villages have gone as high as \$11 per gallon; and in the winter months, a village home can use four or five 55-gallon drums of oil for heating each month. This equals \$2,000 per home/per month in Arctic Village, \$1,650 in Hughes, and \$1,375 in Illiamna. These prices cannot be met - now or over the long term. Just as significantly, everything in our villages is affected by the high cost of fuel, even more so than in our cities because of the economies of scale of serving remote locations. Groceries, toothpaste, medicine, diapers, clothes, lumber, automobile and truck parts – **everything** - has gone up in price. This is devastating to individuals and small businesses; especially when wages have not gone up in decades. As an example, air cargo prices in one area jumped another 32% in June after previous increases.

According to a recent study by UAA's Institute of Social and Economic Research (ISER), people living in remote, rural communities are paying about 41% of their annual incomes on home energy use, compared to about 4% paid by people living in Anchorage. The State of Alaska's Department of Commerce, Community and Economic Development expects the price of heating oil in remote villages to rise from 30 -50% this winter. It is entirely possible that thousands of our fellow citizens will not be able to pay their energy bills this winter and still buy food and the other necessities of life without additional emergency relief. Making the situation worse is the fact that for some families, the price of gasoline is actually limiting their ability to gather food for the winter. Rural families depend on subsistence, and under normal circumstances they are able to put away fish, berries, moose, caribou and other resources to meet their food needs throughout the winter.

We have encouraged the State of Alaska to adopt a long-term energy plan – one that covers every region of the State and which has an overall goal of equalizing energy costs for all Alaskans. We are hopeful that such a plan will be adopted before the end of the year.

In its recent Special Session, AFN also encouraged the Alaska Legislature to take steps to stabilize energy costs and provide immediate relief to individuals, families and communities who are the hardest hit by high energy costs. We believe a multi-faceted approach must be taken – one that provides reliable, sustainable and affordable energy to all Alaskans; encourages conservation; and promotes economic development opportunities in the process. We also need to continue to invest in conventional oil and gas while working to transition to a low carbon future. That future is many years away – until then, coal, oil and natural gas will remain indispensable to meeting the total projected energy demand. And, Alaska is rich in those resources.

Over the summer, AFN's Energy Workgroup met to identify various options for addressing the energy crisis in Alaska. We developed a matrix of short-term and long-term actions that could be taken by the state and federal governments, by individuals and by private industry. A copy of that matrix of ideas is attached.

Today, I would like to briefly cover the recommendations that emerged as our top five recommendations for the State's Special Session and then focus on what we believe Congress can do to address the energy crisis.

1. Strengthen the Power Cost Equalization Program by fine-tuning its mission, adding more resources and expanding the eligibility requirements. Additional funding is critically needed to cover the short-fall expected this year. While the Alaska legislature increased the ceiling for entitlement for the program from 52.5 cents to \$1.00 per KWH, it did so for only one year. It also failed to make schools, health clinics and businesses eligible, as the PCE program was originally designed, and it did not address the need for increased funding for PCE. Making schools, health clinics and businesses eligible is important because it will focus energy help where it is needed, help keep down inflation, and ensure that health and education funding goes to those purposes. According to the Alaska Native Tribal Health Consortium, as much as 33% of village health clinic funding is going to pay for electricity and increased fuel costs. Our hospitals and schools are places of refuge for people in the villages. We need to ensure that the infrastructure we've invested in (our schools, clinics, hospitals) is maintained. Costs for everything from rubber gloves to patient travel, to medivacs have increased. These increases threaten the ability of our health care providers to deliver much needed services. As people move in together to save costs, there will be huge public health ramifications.

2. Buy down debt of rural utilities in order to reduce costs passed on to consumers - and include a price cap on fuel stock purchased prospectively, with a mechanism for reimbursement from the State for costs in excess of the cap. Most rural utilities generate their power with diesel fuel. According to the Alaska Energy Authority, the cost of diesel fuel for most of these, even at 2007 prices, amounted to close to 50% or more of the cost of providing power. With the increase in fuel prices in 2008, rural utilities will find it difficult to operate and maintain power plants, tank farms and distribution lines -- not to mention their insurance, interest on long-term debt, taxes and general administrative costs. The Alaska Village Electric Cooperative (AVEC), for example, serves 53 villages in rural Alaska, communities that have the lowest per capita cash incomes in the State. Because of the historically high cost of power, residents and businesses in these communities have been conserving power for many years, resulting in extremely low electricity consumption. AVEC purchased fuel for its power plants at an average cost of \$1.29 per gallon in 2002. In 2007, it paid \$2.93. Its 2008 deliveries will be at least \$4.60 per gallon (based on the L.A. Platt's Fuel Price Index as of May 13, 2008, reporting crude oil prices at \$132.57).

Because of these considerations, we advocated for a program that would give relief directly to utility companies. We also proposed capping the price of fuel purchased prospectively by electric utilities (AVEC has suggested a cap of \$10.00 per million BTU, which would translate to a price of about \$1.30-\$1.45 a gallon for various fuels, depending on their BTU content.) The fuel supplier would charge the utility the mandated price and bill the State for the balance.

3. Expand and support bulk fuel purchasing, transportation and cooperative purchase agreements - and contribute to the Denali Commission's bulk fuel storage program, in an effort to eliminate the storage backlog and to complete rural upgrades. Communities across Alaska are faced with the costs of storing fuel, once it arrives. Fuel tanks are expensive to buy and to maintain - and have to meet stringent government environmental regulations. Many fuel tanks in Alaska are not large enough or are in need of upgrades. Federal funds available for the Denali Commission's energy programs totaled about \$23 million for FY 2008, a significant decline from previous years. We encouraged the State to step up as a true partner with the federal government in funding for the Denali Commission's bulk fuel storage program. Being able to store more fuel should help stabilize consumer fuel prices. In addition, we recommended that the State provide grant funding to create bulk-fuel co-ops that combine purchases for utilities, schools, the state (for state facilities) and private businesses, so that individual communities, clusters of communities and/or regions can create economies of scale. A total of \$211 million are needed to complete the backlog of bulk fuel storage tanks, which are old and unsafe; while \$198 million are needed to complete small electrical generation upgrades.

4. Provide a family fuel subsidy to help meet the immediate crisis. The State Legislature voted to provide a "resource rebate" of \$1200 per person to be added to the 2008 permanent fund dividend payment. The rebate will provide much-needed relief to families and individuals, but as a recent ISER study points out, for about half of the remote rural households, increased home-energy costs since 2006 will far outweigh the energy rebate (\$3,300 for the average-size household).

5. Make a sizable investment in projects that promote renewable/alternative energy and conservation efforts. The Legislature created a Renewable Energy Fund last year to be housed in the Alaska Energy Authority and provided \$50 million in funding. During its recent Special Session, the Legislature added another \$50 million to the fund bringing the total available for spending on energy projects this year to \$100 million.

The State Legislature also suspended the state's motor fuels tax for one year, and increased the bulk fuel revolving loan fund and bridge loan program funding. All of these steps will help with the immediate crisis, but fall far short of what is needed for the long term.

Turning to viable sustainable energy solutions, AFN and its member organizations are strong supporters of the development of alternative energy resources as an important addition to our country's fossil energy resources. Many villages in rural Alaska are actively working to develop a wide array of alternative and renewable energy projects. They see not only the potential for reducing the cost of energy, but also the tremendous manufacturing, sales and service components (e.g., the fact that wind and solar energy will need tailored products, services and alternative building materials; and the fact that plans and supplies for hybrid homes and facilities that are now being developed and manufactured abroad could be developed and manufactured in Alaska. Our larger cities are doing the same.

Alaska is so large and diverse that one Village's alternative resources may not be available elsewhere. Some areas have strong wind for electrical generation; others can look to geothermal resources. There is no "one-size-fits-all" solution for rural Alaska, making local solutions more specific and expensive. Because of the vastness of Alaska and its virtually unlimited potential, Alaska can be a model for the rest of the country. Our communities could be part of a national demonstration project on alternative energy technologies. We could serve as a proving ground to show how Alaska Native people and their institutions have the experience, the capital and the community relationships that will be necessary to effectively implement workable solutions to the energy crisis. Investing now in renewable energy development will bring down energy costs and create jobs.

The undeveloped energy sources most often discussed for rural Alaska are small hydro power (using rivers to provide power to small communities), solar energy, sea wave action, biomass, coal, methane and geothermal:

**Wind:** Alaska has world-class wind energy resources, especially along the coastal and western regions of our state. There are 31 rural Alaska communities that already have good opportunities for wind generation – and 17 more that are “potentially attractive.” There are at least seven projects currently operational and another eight in the planning stages. Congress needs to look at ways to provide incentives to wind developers and to train our citizens to maintain the windmills.

**Hydro:** Existing hydro generation produces nearly 25% of the state's electricity. But Alaska also has almost 45 billion watts of large and small hydro potential, more than any other state.

**Solar:** Summer in Alaska produces a huge amount of sunlight, but winter darkness is the time of greatest energy demand. Small-scale solar projects have great potential, especially if combined with other sources of energy to lower the overall cost. Because the homeowner or community must make up-front capital investments, the federal or state governments should provide incentives.

**Ocean Wave Action:** Alaska has over 34,000 miles of coastline, and some of the highest tides in the nation making it one of the best ocean energy resources in the world.

**Geothermal:** A recent study points out four potential geothermal areas in Alaska: interior hot springs, southeast hot springs, the Wrangell Mountains, and a combination of the Alaska Peninsula and the Aleutian Chain. The value of geothermal power is magnified by the fact that it can produce both heat and electricity. Large-scale geothermal electric power generation projects have been proposed that would provide power to Unalaska, and Akutan. Naknek Electric Association is actively investigating geothermal potential and the development of a regional electrical transmission system.

**Biomass:** Alaska has a great amount of wood, wood waste and sawdust for potential use in space heating and electrical generation. A few villages have begun to talk about

making wood pellets from plentiful willow brush. Alaska's fish processing plants produce about 8 million gallons of fish oil each year. With some chemical changes, this oil can be mixed 50-50% with diesel for generation. Community waste disposal produces 650,000 tons of garbage in Alaska each year that could be used to generate electricity. But, again, design and capital costs are expensive and need public incentives.

**Coal:** Coal is abundant in Alaska, but has higher CO<sub>2</sub> emissions than other energy sources. However, coal can be used to produce synthetic "natural" gas with and without carbon capture. The problem is that these gasification technologies are expensive and still under development.

In terms of what Congress can do to address the energy crisis, we have the following suggestions:

1. Provide significant increases in the needs-based Low Income Home Energy Assistance (LIHEAP) program and urge the State to add its own additional appropriations for this program. Currently, the only energy aid program Congress has established is LIHEAP. It provides aid to residents whose income is at or below 150 percent of the federally defined poverty level. That program provides approximately 13,880 qualified Alaskan households with about \$730 a year to buy fuel. That, at best, only covers about one winter month's supply of fuel for a typical home at current prices. In many of our villages, it does not even cover one-month's cost.
2. Increase funding for the Denali Commission. The congressionally created Denali Commission and the Alaska Energy Authority recently awarded \$5 million for alternative/renewable energy projects (\$4 million from the Denali Commission and \$1 million from AEA. While this was a good start, it only provided funding for 33 projects out of a total of some 96 proposals. Congress should increase funding to the Denali Commission for its energy projects and make a sizeable investment in developing alternative/renewable energy projects.
3. Enact a comprehensive energy bill to decrease energy demand over the long term and increase energy efficiency. As a part of that bill, Congress needs to extend the investment tax credit for installing solar energy, the production tax credit for producing wind power as well as the credits for geothermal, wave energy and other forms of renewable energy. These critical renewable energy tax credits are set to expire at the end of this fiscal year and, if they do, it will mean thousands of jobs lost and billions of dollars of investments not made.
4. Fully fund and implement the Energy Independence and Security Act of 2007, which was authorized in 2006. That bill includes a host of provisions to further renewable energy development, including a renewable energy deployment grant program that would provide federal grants for up to 50% of the cost of building a wide variety of renewable electricity projects, including wind, geothermal, ocean, biomass, solar, landfill gas and hydroelectric projects in Alaska. It provides for a federal grant program specifically to

help with construction of geothermal energy projects in areas of high electricity costs like rural Alaska.

5. Provide incentives and funding for the creation of regional energy authorities in rural Alaska.

6. Increase the supply of energy by encouraging exploration and development of private, state and federal lands, both onshore and off-shore. This can be done by providing incentives, such as OCS revenue sharing for Alaska's coastal communities, as has been done for Florida, Louisiana and Texas. AFN supports the right of self-determination for our Native communities and urges that leases which have generated a lack of widespread community support be revisited, and discussions opened up with affected communities to address their concerns.

7. Work closely with the State of Alaska to ensure that in the development of a Natural Gas Pipeline in Alaska, our communities have access to the natural gas that will pass through that pipeline through spur connections; and that ownership, partnership and contracting opportunities for Alaska Native tribes and corporations are part of the development plans. Serious training funds should be appropriated for workforce development to ensure broad Native participation in the projects.

8. Provide consumers with energy rebates and other economic incentives to conserve energy. Congress should provide homeowners with incentives to shift to supplemental alternative energy, including rebates, tax credits, low interest loans, and grants to weatherize homes and install energy saving changes.

9. Enact and fund S. 2232, the Native American Challenge Demonstration Project Act. This bill would create a total of five pilot projects in remote, predominately Native American areas modeled after lessons learned from the U.S. experience in providing foreign aid to the developing world. The project would use a compacting model to channel significant development funds to implement locally designed economic development strategies, including energy strategies. The objective would be to enhance the long-term job creation and revenue generation potential of Native economies by creating investment-favorable climates and increasing Native productivity.

We thank you for the opportunity to testify today. This is an enormous issue for us. We want to be part of the solution and look forward to working with both the Congress and the State of Alaska to address this issue.