ALASKA STATE LEGISLATURE
SENATE RESOURCES STANDING COMMITTEE
UNIVERSITY OF ALASKA FAIRBANKS
May 26, 2009
5:04 p.m.

MEMBERS PRESENT

Senator Lesil McGuire, Co-Chair
Senator Bill Wielechowski, Co-Chair
Senator Hollis French
Senator Gary Stevens
Senator Thomas Wagoner

MEMBERS ABSENT

Senator Charlie Huggins, Vice Chair
Senator Bert Stedman

OTHER LEGISLATORS PRESENT

Senator Joe Paskvan
Senator Gene Therriault
Representative Jay Ramras
Representative Scott Kawasaki
Representative Craig Johnson

COMMITTEE CALENDAR

Public Hearing on Statewide Energy Plan

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

JESSE PETERSON, Energy Coordinator
Northern Alaska Environmental Center
Fairbanks, AK.
POSITION STATEMENT: Alaska needs a renewable portfolio standard (RPS).

DAVID GARDNER
Golden Valley Electric Association
POSITION STATEMENT: Advocated developing a comprehensive energy plan for Alaska.

WILLIAM SAKINGER, retired UAF geophysicist
POSITION STATEMENT: Supported statewide energy planning.

RICHARD SIEFERT, Energy and Housing Specialist
Cooperative Extension Service
University of Alaska Fairbanks (UAF)
POSITION STATEMENT: Commented on statewide energy planning.

PAUL PARK, representing himself
POSITION STATEMENT: Supported energy planning through conservation and energy grants.

GARY NEWMAN
Tanana Chiefs Weatherization, Energy and Housing
POSITION STATEMENT: Supported energy planning to include rural Alaska.

ROGER BERGRAFF, representing himself
Fairbanks, AK.
POSITION STATEMENT: Supported adopting statewide energy policy.

An unidentified speaker, engineer
POSITION STATEMENT: Supported comprehensive energy planning and development.

DAN WHITE, Director
Institute of Northern Engineering
University of Alaska Fairbanks (UAF)
POSITION STATEMENT: Thanked them for putting the Alaska Center for Energy and Power in the FY10 budget.

RICK CAULFIELD, Director
Tanana Valley Campus
University of Alaska Fairbanks (UAF)
POSITION STATEMENT: Encouraged them to incorporate workforce development into any statewide energy policy.

PROFESSOR BRIAN ELLINGTON
Process Technology Associate Degree Program
Tanana Valley Campus
University of Alaska Fairbanks (UAF)
POSITION STATEMENT: Encouraged them to incorporate workforce development into any state-wide energy policy.

MICHAEL KRAFT, Managing Partner
Alaska Environmental Power

POSITION STATEMENT: Thanked them for the energy grant and supported energy planning.

LUKE HOPKINS
Member, Fairbanks North Star Borough, and
Member, Alaska Gasline Port Authority (AGPA).
POSITION STATEMENT: Encouraged legislators to continue being bold in looking for ways to successfully hit the 50 percent renewable resource goal.

LARRY LANDRY, representing himself
POSITION STATEMENT: Urged conservation, efficiency and developing renewables.

CARL RUDY, representing himself
POSITION STATEMENT: Supported SB 121 on creating energy efficient buildings and SB 150 on the Emerging Energy Technology Fund.

MIKE SMITH
Tanana Chiefs Conference
POSITION STATEMENT: Urged them to include rural people in any statewide energy plan or policy.

FAY GALLANT
Tribal Campus Climate Challenge Organizer
Red Oil
POSITION STATEMENT: Wanted rural Alaska to be part of statewide energy plan.

TAMMY WILSON
Fairbanks North Star Borough Assembly
POSITION STATEMENT: Highlighted Fairbanks' need for heating energy.

BOB BEECH, representing himself
POSITION STATEMENT: Supported having an energy plan as a legacy for our kids' future.

LISA PEGGER, representing herself
Fairbanks, AK.
POSITION STATEMENT: Supported energy planning.

ACTION NARRATIVE
5:04:39 PM

Co-CHAIR LESIL MCGUIRE called the Senate Resources Standing Committee to order at 4:43 p.m. [Teleconference reception was lost from 5:04 to 5:06.]

Public Hearing on Statewide Energy Plan

5:06:14 PM
SENATOR PASKVAN said SB 162 puts a solution in place in case the price of heating oil rises again as rapidly as it declined, a situation that can be devastating to individual Alaskans, business owners and their families. SB 162 will require the State of Alaska to provide energy relief to home and commercial heating costs when the price of a barrel of crude rises to the point where the state is enjoying budget surpluses. It will require that the consumer price of heating oil increase each of the next three years, reinforcing the need for Alaskan's to conserve and plan for the long term solution.

5:10:24 PM
CO-CHAIR MCGUIRE found no questions and opened up public testimony on the proposed statewide energy plan.

5:10:32 PM
JESSE PETERSON, Energy Coordinator, Northern Alaska Environmental Center, Fairbanks, said Alaska needs a renewable portfolio standard (RPS) that will show investors that Alaska is open for business. The Alaska Energy Plan should reduce carbon emissions, provide affordable and reliable base power for communities, reduce dependence on non-renewable fossil fuels, implement energy conservation measures, invest in new technologies and empower Alaskans to be part of the solution. She urged them to support SB 150 that establishes the Emerging Energy Technology Development Fund.

5:15:29 PM
SENATOR STEVENS asked how an RPS works. Does it establish percentages that have to be achieved by specific times?

MS. PETERSON replied yes; it is an obligation to develop renewable energy resources. It's very flexible; every state has molded it in a different way based on their resources and their energy portfolio.

5:16:54 PM
DAVID GARDNER, Golden Valley Electric Association, advocated developing a comprehensive energy plan for Alaska focused around:

1. Utility-scale renewable resources;

2. Energy efficiency and reduction of demand. He said the U.S. government must address larger issues such as funding for energy research and development and legislation for regulation of green house gases. But Alaskans can still move forward with a plan. He said reducing consumption by 1 kwh is equivalent to increasing supply by that same amount. Products like programmable thermostats, smart meters, efficient appliances and lighting systems, building insulation and simple common sense reductions in demand can all play a role in meeting Alaska's energy production needs.

3. Increasing the amount of electricity generated by renewable energy sources, replacing aging infrastructure and development of a transmission grid across Alaska will require a significant investment in the construction of new transmission lines. An Alaskan Power Pool should be established modeled on those in the Lower 48 to facilitate the planning and coordination of transmission line development. Its responsibilities would include planning, sighting, and routing of transmission lines in addition to the sources of financing for the new lines and for line upgrades. These are difficult and expensive tasks, but achievable if local, state and federal officials work together for mutually beneficial solutions.

4. Developing energy diversity to provide affordable and reliable source of energy in an environmentally responsible manner - including coal, hydro electric, oil, natural gas, wind, solar, geothermal and biomass.

5. Have renewable portfolio standards RPS, the statutory requirements in a state that generate a certain percentage of electricity to distribute from renewable resources. Currently, 28 states have adopted an RPS or have renewable energy standards (RES) legislation, and a national RPS may be enacted in the near future. However, Golden Valley opposes mandatory RPS and RES legislation because without careful consideration these requirements can create inequities among the utilities and cause electric consumers to suffer from low electric reliability and precipitously high rate increases.

6. Enact other resource methods including partnering with the Alaska Legislature and Alaska's Congressional delegation to extend the federal protection tax credit for renewable energy to make federal tax credits for wind energy available, and to

increase the annual appropriations for renewable energy product incentive (RPI), which are designed to offer public utilities incentives for development of renewable generation capacity in place of production tax credits for which they don't qualify; and expansion of the clean renewable energy bonds. Support continuation of federal tax credits for small scale wind production and for residential photo voltaic generation systems and in partnership with the University of Alaska, support the development and rapid low cost implementation of carbon capture and sequestration techniques at existing and future coal fired generating plants.

7. Support the Alaska Center for Energy and Power because researching new energy technologies is crucial for the continuing availability of affordable reliable energy in Alaska. This can create jobs, lessen dependency on foreign oil, and reduce green house gas emissions. Research that identifies new means of conservation can help lower demand for energy and, thereby lower the cost. In cooperation with the federal grant making bodies, local and state government and national research institutions, the Alaska Center for Energy and Power UAA can play a leading role in tackling these research questions.

8. Plan today for energy solutions tomorrow.

5:24:45 PM
MR. GARDNER said Golden Valley Electric Association suggested the draft statewide energy policy:

> To have adequate reliable, affordable sustainable and clean energy resources by promoting the development of non renewable energy resource including natural gas, coal and oil and renewable energy resources including geothermal, solar, wind, biomass and hydro electric. Alaska will promote the development of resources and infrastructure sufficient to meet the state's growing energy demand while reducing dependency on foreign energy sources through energy conservation, through energy efficiency, energy research, energy related workforce development and state regulatory processes and balance economic costs with environmental quality.

CO-CHAIR WIELECHOWSKI asked if he supported voluntary RPSs.

MR. GARDNER answered yes.

CO-CHAIR WIELECHOWSKI asked if other states have voluntary RPS.

MR. GARDNER said he didn't know.

5:26:41 PM
SENATOR STEVENS asked him if clean coal production is possible.

MR. GARDNER replied that Golden Valley is definitely working towards cleaner coal. Their project is one step in the right direction.

SENATOR STEVENS asked how that project is cleaning up carbon production.

MR. GARDNER replied that the plant is located directly adjacent to the existing 24 megawatt (MW) Unit 1 coal fired power plant. The new plant is 50 MW, which means when they are operating together, they will produce three times the power and produce less emissions than the existing plant was when it was first built.

5:28:03 PM
SENATOR THERRIAULT joined the committee.

SENATOR THOMAS asked what projects Golden Valley thought would be feasible in the renewable area.

MR. GARDNER replied that wind is the primary renewable in Interior Alaska. However, getting together with the other area utilities and a project like Susitna Hydro is in the best interests of the state.

5:29:07 PM
WILLIAM SAKINGER, retired UAF geophysicist, said he had a global perspective, then a national, then an Alaskan viewpoint. The global viewpoint is that oil is going to level off in production in the year 2022 and demand will then exceed supply. He figured there would be about $30/barrel price increment due to that particular effect alone. Natural gas and coal will be brought the bare to produce hydro carbon liquids that will be used for transportation fuels.

He said the price of oil escalates by about 2-3 percent a year and with the devaluation of the dollar it is in the neighborhood of 4-5 percent per year. Taking those numbers he calculated oil at $150/barrel in 2015. This means with the normal mark up of $20, that we would be paying $170/barrel at the pump. This is "kind of a low estimate."

Alaska wants to produce as much oil as it can; so we have to be extremely careful to squeeze all the oil out of our reservoirs that we can. Carbon has to be delivered in all three forms – oil, gas and coal. Fortunately Alaska has all of that. Alaskan gas has to be moved from its reservoir into the world markets.

From a national standpoint, the nation, as well as the world and Alaska will all be facing the same problems he just described. So naturally the nation is trying to forestall the demand shortfall problem by changing the amount of gasoline used by cars. The Chinese and Indians are not reading those tea leaves and will continuing growing their needs at about 8 percent in China and 6 percent in India.

MR. SAKINGER said the tight shale in the Lower 48 has lots of gas and it's unlikely that the gas pipeline will come to pass. But they can expect a separate high prices gas market in the Pacific Rim which is set by LNG from Qatar, Iran and other LNG suppliers. So he supported LNG production.

5:34:05 PM
He said that "clean coal" is a buzz word from 20 years ago. A modern definition is that coal should perform so that there are no particulate emissions going into the air at all-nothing. It should perform so that CO2 that comes from it is fully utilized – either going into a sequestration or into an industrial process. The carbon from the coal that goes into a conversion should be optimized in a conversion plant. In Fairbanks they have talked about a plant with about two-thirds natural gas feed stock and one-third coal feedstock. This would produce the optimum 2:1 ratio of hydrogen to carbon; all of the carbon in that instance can appear as either useful hydrocarbon fuel or CO2.

5:35:33 PM
Finally, he said, every plant in the world has a lot of waste heat, and it's time for that to get used for district heating. Fairbanks needs 200-F water and this kind of plant would work for that.

5:36:04 PM
RICHARD SIEFERT, Energy and Housing Specialist, Cooperative Extension Service, University of Alaska Fairbanks (UAF), said he has a very long history with energy policy and that cheap energy is over. Our wishes for alternative energy are inconsistent with reality because we think we can do everything with alternative

energy that we now do with fossil energy, but that is not possible. But, he said, renewable energy can work in a modern technical civilization. His graph showed that we are already at peak oil despite what some others say.

He thanked them for helping fellow Alaskans with the weatherization rebate money so each home owner can use what they need.

5:39:29 PM
People always think they want lower energy costs, he reiterated, but cheaper energy is over. It is something we will never control, and people refuse to face that. Fossil fuel prices are set internationally and it is in our best interests for it to be high, but to not need it ourselves regardless of what it costs. Weatherization is the first best step.

5:40:44 PM
MR. SIEFERT said that a major thrust for energy policy should be as soon as it is feasible to use the Permanent Fund, at least as collateral, to convert all electrical production facilities to renewable resources to the maximum degree possible, first, because all modern communication and financial transactions require the electrical grid to be functioning and efficient. Without it, we don't have a technical civilization. Second, renewable energy as a source of power for this electrical grid ensures that communications, health and financial connections we can all maintain without threatening the climate, which will surely be a major factor in future electrical production planning. "Moving toward renewable energy is simply the best and safest way to insure our future access to electricity..."

He said that Kodiak is exemplary, because it is already 60 percent electrified with hydro and they are putting in three 1.5 MW wind turbines this summer. They will come close to 90 percent renewable for electricity.

He was asked at a lecture in Kodiak what one thing he could say to a community about how to secure the energy future for them, and he said, "Get all of your electricity renewably based." Renewable energy requires using local resources to the maximum extent and protecting them accordingly. This will further enhance local cooperation and strengthen communities and even improve environmental quality. Finally he said the energy policy work the Alaska Electric Association (AEA) is doing of moving Alaska to renewable energy is good. This is now being called "the sustainable transition."

A book subtitled, "From oil dependency to local resilience" is good for all of Alaska. Professor David Orr in his book "Ecological Literacy" says that we need the following skill bases for our sustainable transition: people to know a great deal about solar design, horticulture, waste, composting, greenhouses, intensive gardening, food preservation, household economics, and onsite energy systems. These happen to be almost precisely the skill base and information set available from the Cooperative Extension Service.

5:45:04 PM
PAUL PARK, representing himself, thanked legislators for funding the energy grants. He saved 25 percent in energy costs on his house alone using those funds. He supported programs like that instead of giving away $1200.

5:47:20 PM
GARY NEWMAN, Tanana Chiefs Weatherization, Energy and Housing, said he had been out to the villages to get them something that was sustainable within their own communities. For a 30 year investment and looking at the regulatory climate that is going to tend to discourage coal energy, he questioned investing another $100 million in the experimental coal plant in Healy over the $300-$400 million that has already been spent. Conservation and renewables that are sustainable are the things that are going to be good in the long term, not just for 20 years.

5:51:11 PM
ROGER BERGRAFF, representing himself, Fairbanks, said he had been in the natural resource industry for many years, and he thinks Alaska needs to develop an aggressive plan to meet its energy needs.

Alaska has become complacent with cheap oil, but it has many different kinds of energy. If we had a plan, we wouldn't have a problem. The plan should have short term, mid-term and long term goals. Short term, at least for Fairbanks, is the Healy clean coal plant. Solar and wind are fine, but "it's not defendable." Mid-term it's the natural gas bullet line, but he didn't think it would happen. The long term fix is Susitna and that's what the legislature should look at now. He thought if they would have acted on it in 1980, they would have cheap power now, and if Alaska's resources were developed properly now, we could have inexpensive power that would allow us to maintain a decent standard of living.

5:59:14 PM
REPRESENTATIVE RAMRAS supported his comments.

5:59:45 PM
An unidentified speaker said he has been an engineer for 40 years working power plants and as a consultant. He has been at almost every facility in Alaska. He said that everyone wants their energy to be reliable, efficient, low-cost, and renewable (although he wonders if they are spending a lot of money on it for not very much power). More government subsidies would be needed along with practice to get us where we need to be.

Interior Alaska and the Railbelt need to move toward renewables to reduce dependency on oil and coal-and they would like to get gas. Conservation is their primary goal now and the bullet line is their mid-term goal. The really big project that would achieve 50 percent renewable is the Susitna Hydro Dam. It is the only renewable that has reliable storage; storage provides energy 24/7 and backs up solar when the sun is not shining. Wind is variable; a good wind site is only blowing a third of the time. Coal also needs to be part of the solution.

SENATOR THOMAS asked what he saw as a long term solution for Southeast and rural areas.

The unidentified person replied propanes for rural and hydro for Southeast.

6:05:06 PM
DAN WHITE, Director, Institute of Northern Engineering, University of Alaska Fairbanks (UAF), thanked legislators for being here and for providing funds for the Alaska Center for Energy and Power in the FY10 budget.

6:05:53 PM
RICK CAULFIELD, Director, Tanana Valley Campus, University of Alaska Fairbanks (UAF), said he and Professor Ellington would be giving a joint presentation. He encouraged them to incorporate workforce development into any state energy policy. Programs in diesel heavy equipment, welding, process technology and automotive technology, instrumentation, and power generation should be developed as career pathways for Alaskans to get in to these critical jobs as part of the energy policy.

He said two critical factors in Alaska's workforce are the very significant numbers of dollars that go out of state every year

with the number of out of state workers who come in to work in these sectors, and a graying workforce. The critical factor is to work with our high schools, middle schools and into post-secondary to provide career pathways into these vital jobs.

6:08:21 PM
PROFESSOR BRIAN ELLINGTON, Process Technology Associate Degree Program, Tanana Valley Campus, University of Alaska Fairbanks (UAF), said the encouraging part of this program is the fact that it is a general degree, and it applies itself really well to several parts of industry. He has found that the base knowledge and skills they get in this program sets them up with knowledge about equipment, instrumentation, controls, and the human factor involved in the processes and how to make them more efficient and last longer.

He recently learned at the biomass heating symposium just how wide and varied the projects are, especially in the rural communities. But he found that the equipment, control systems and were common. He said their program is flexible and they try to stay current with industry research and what is happening in communities so students stay in touch with projects that are happening.

6:11:59 PM
MICHAEL KRAFT, Managing Partner, Alaska Environmental Power, said they are one of the grant recipient of HB 152. He provided pictures of a turbine they installed last year out of their pocket and the hole in preparation for the one from the grant. They hope to be at 1 megawatt by the end of September. They signed the interconnection agreement with Golden Valley.

He has a lot of land development experience, and one of the largest hurdles to developing renewable energy in Alaska was NIMBI (not in my backyard); and a lot of it came from the Department of Natural Resources.

He has looked at wind for the last four years and he knows of eight different spots where both the wind and the grid are, but the land is owned by the government. He tried negotiating with the government three years ago about developing some wind sites, but to this day he has gotten zero response. The state wants to own the information and negotiate a contract on the land. The same thing happens with tidal resources. Roads and access are needed pretty much over state lands; so, he advised, make areas accessible to people who want to do the work.

6:17:32 PM
LUKE HOPKINS, Fairbanks North Star Borough Assemblyman and Board Member Alaska Gasline Port Authority (AGPA). He thanked them for the energy grant funding and the energy assistance bill during special session, even though it wasn't put in place. He asked them to continue being bold – and soon. "When you take aim at it, fire a number of rounds at it so that you successfully hit that 50 percent renewable resource goal, and you can hit it sooner the more rounds you fire at it." He hoped they would take some action on the energy funding that the Governor vetoed.

MR. HOPKINS urged them to fund the University's requests to continue looking at energy solutions for our state. On the state level, Alaska must spend money on energy infrastructure – roads and rights-of-way to reach the energy. Fairbanks adopted an energy plan into its economic development strategy; Susitna is very important – as is coal. Sequestering CO^2 is another situation that needs investigation.

SENATOR THERRIAULT asked for a snapshot on the Port Authority's preparations to participate in the open season. Are things progressing?

MR. HOPKINS replied that confidentiality agreements keep him from saying too much, but the Port Authority has spoken to TransCanada that has said they will work on the first leg of the major pipeline to Valdez for an LNG connection depending on volumes. That is the point the Port Authority wants them to stay focused on. That may be the only amount that is a viable project in the first open season. He said the Authority's partners are also making contact with TransCanada.

6:26:51 PM
LARRY LANDRY, representing himself, supported developing renewables, but conservation and efficiency is the first way to go. Big homes are ill-suited to Alaska and Interior Alaska, in particular. He supported education related to smallness in homes and energy efficiency.

He was not a fan of Susitna, because it would bury a lot of land even though it is renewable energy; but he liked Chakachamna better because of its small footprint. It would cost a lot less and deliver a lot of power – a better first step. The signs of climate change get short shrift, he said, but the scientific evidence that it is happening and is human-caused is becoming more powerful.

He said that other than peat, coal is the most inefficient and the most carbon-intensive fuel on the planet, “And until we can learn to sequester coal, there is no clean coal.”

SENATOR THERRIAULT said a lot of times people talk about Susitna as if it were one dam and one huge reservoir, but it is really a three to four dam project built in different sequences and different potential heights. He asked him if he opposed the whole concept of a number of different dams.

MR. LANDRY replied that Watana Dam would be of the most concern [indisc.].

6:32:37 PM
CARL RUDY, representing himself, said he supported SB 121 on creating energy efficient buildings and SB 150 on the Emerging Energy Technology Fund. However, he suggested not using all the energy funds for clean coal and coal-to-liquids technology because their price tags could eat up 30-50 percent of the energy generated by it. He encouraged development of wind farms, geothermal and biomass generation for the villages, tidal electric generation capacity for the Railbelt, and suggested removing the subsidies on natural gas, oil and coal to help pay for it.

He pointed out that the people from the fossil fuel industry are the ones who are saying that renewables won’t replace Alaska’s current oil, natural gas and coal resources for power generation. While Alaska needs oil and natural gas, we shouldn’t need to rely on them completely for space heating and electrical generation. Renewable energy sources are all local and wars do not need to be fought over them. Using them would keep energy dollars in the state and lessen production of CO^2 and other harmful byproducts from energy production.

Creating energy efficient buildings is one of the simplest things we can do to ensure a lower cost of energy. The cheapest unit of energy is the one you don’t use. A recent study by the Fairbanks Economic Development Corporation indicated that 68 percent of the cost of energy used in the Fairbanks North Star Borough was used for space heating. “This is the low hanging fruit.” Investing 3-10 percent in energy efficiency in new construction up front can save 30-50 percent in maintenance and operation costs for the life of the building. The Alaska Housing Finance Corporation Weatherization and Energy Retrofit program has proved the effectiveness of retrofitting; in many cases

people are experiencing fuel savings of 30-50 percent over previous years.

MR. RUDY said the state needs to establish strict building codes - despite what the Governor might think - that demand the highest quality materials, energy efficient methods and craftsmanship be incorporated into every public building.

6:39:04 PM
MIKE SMITH, Tanana Chiefs Conference, said the people who are the worst off are in the Interior portion of Alaska. He wanted to make sure that when the state develops a statewide energy plan, that "they don't forget us." The Governor has said she wants to have 50 percent renewable energy in this state by a certain time, and they have all heard about all the great projects that are intended to alleviate some of the burden that the Railbelt areas carry; and they are afraid that would come about for the Railbelt, but not for people in rural areas who "are slowly dying on the vine." It's not glamorous to talk about a million-dollar project for Shageluk that has 100 people, but those people are paying over $1/kwh and $5 or $6 for gas and diesel.

MR. SMITH said the state spends a lot of time and effort providing economic incentives for the oil and mining companies, but they would like to see a little economic incentive for the small business owner in rural Alaska to counter all the incentives given to the big companies. Alaska could do this by having an adequate energy policy that reflects the needs of rural Alaska. He said that the Conference represents 42 communities; and he anticipates the energy money being gone in a few years. Rural Alaska should get some of it. Good projects are needed in the villages, not "a bill of goods," and they should be done in a comprehensive manner.

6:45:47 PM
FAY GALLANT, Tribal Campus Climate Challenge Organizer, Red Oil, an Alaska Native grass roots organization resisting environmental destruction on indigenous lands, said she works with students around Alaska who want to learn more about climate and clean energy.

She asked climate change skeptics to think about it this way: If you think something might be making you sick, and the overwhelming majority of doctors tell you that it is probably making you sick, wouldn't you try to limit your exposure to it? Some people might want to take the risk with their health, but

she didn’t want them to take that risk with her health. Climate change in Alaska, whether you believe in it or not, is having a disproportionate impact on two communities -indigenous peoples and the youth, she said - Indigenous peoples because they are so intimately tied to the land and on youth because they are the ones who will be here 20-50 years from now when things are worse. Alaska should be a leader in developing renewable resources.

6:48:35 PM
TAMMY WILSON, Fairbanks North Star Borough Assembly, said they need something besides oil and coal and they can't wait 20 years for it. She said last year people in Fairbanks went out and got coal, wood, oil, and who knows what for their heating. So now they are in a non-containment area with the EPA, which is going to start causing real problems with the Borough. The Assembly is now trying to figure out what should be regulated when in reality they need something besides oil. They can't wait because regulations are only going to get tougher and it will be harder to get transportation. They need the legislature’s help; and they especially need some natural gas so they can meet the EPA regulations.

6:52:14 PM
BOB BEECH, representing himself, supported having an energy plan as a legacy for our kids’ future. Alternative energies are graspable and viable.

6:57:33 PM
LISA PEGGER, representing herself, Fairbanks, said the energy markets are manipulated by hedge funds and this is part of the culture of corruption that made prices go up 300 percent. She said we should use the Permanent Fund for in-state energy, because equities will be flat for a long time. Fundamentals of the economy are worse now than during the Great Depression due to the amount of indebtedness tax payers are on the hook for. The State of Alaska should own fuel storage tanks to bring competition where there is none. Coal-to-liquids costs way more to build and run than the fuel it would create. She said the state should own its own small pipeline. She noted that Forest Refinery is selling lots of biomass that is the only fuel that can replace petroleum in all aspects including plastics. This is the wave of the future.

7:08:48 PM
CO-CHAIR MCGUIRE thanked everyone for their testimony and adjourned the meeting at 7:08 p.m.