

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

Bethel, Alaska  
May 29, 2009  
1:11 p.m.

**MEMBERS PRESENT**

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

**MEMBERS ABSENT**

All members present

**OTHER LEGISLATORS PRESENT**

Representative Mike Chenault  
Representative Bill Stoltze  
Representative Bob Herron

**COMMITTEE CALENDAR**

HOUSE BILL NO. 218

"An Act establishing and relating to the Department of Energy and to the board of directors of the Alaska Energy Authority; transferring the Alaska Energy Authority and the Alaska Natural Gas Authority to the Department of Energy; and transferring the home energy and weatherization program to the Department of Energy."

-HEARD & HELD

HOUSE BILL NO. 219

"An Act relating to the renewable energy grant fund."

-HEARD & HELD

**PREVIOUS COMMITTEE ACTION**

BILL: HB 218

SHORT TITLE: CREATING DEPT OF ENERGY/AEA BD

SPONSOR(s): ENERGY

04/06/09 (H) READ THE FIRST TIME - REFERRALS  
04/06/09 (H) ENE, FIN  
05/29/09 (H) ENE AT 1:00 PM Bethel

BILL: HB 219

SHORT TITLE: RENEWABLE ENERGY GRANT REQUIREMENTS

SPONSOR(s): ENERGY

04/06/09 (H) READ THE FIRST TIME - REFERRALS  
04/06/09 (H) ENE, RES, FIN  
05/29/09 (H) ENE AT 1:00 PM Bethel

**WITNESS REGISTER**

BOB CHARLES, Community Development Coordinator  
Association of Village Council Presidents (ACVP);  
President, Nuvista Light and Electric Cooperative, Inc.  
Bethel, Alaska

**POSITION STATEMENT:** Provided remarks regarding energy in rural Alaska.

MYRON NANENG, SR, President  
Association of Village Council Presidents (ACVP)  
Bethel, Alaska

**POSITION STATEMENT:** Provided testimony on the energy crisis in rural Alaska.

GENE PETOLA, President/CEO  
Yukon-Kuskokwim Health Corporation (YKHC)  
Bethel, Alaska

**POSITION STATEMENT:** Provided testimony on the energy crisis in rural Alaska.

FELIX HESS, Board Secretary  
Calista Corporation  
Anchorage, Alaska

**POSITION STATEMENT:** Provided testimony on the energy crisis in rural Alaska.

ROBERT NICK, Chairman  
AVCP Regional Housing Authority Board  
AVCP Regional Housing Authority  
Nunapitchuk, Alaska

**POSITION STATEMENT:** Provided testimony on the energy crisis in rural Alaska.

RON HOFFMAN, CEO  
ACVP Regional Housing Authority  
Bethel, Alaska

**POSITION STATEMENT:** Provided comments during discussion of the energy problems of the state, particularly in the rural areas.

ELAINE BROWN  
NorthStar Gas, LLC  
Anchorage, Alaska

**POSITION STATEMENT:** Provided comments during discussion of the energy crisis in rural Alaska.

MEERA KOHLER, President/CEO  
Alaska Village Electric Cooperative (AVEC)  
Anchorage, Alaska

**POSITION STATEMENT:** Suggested pooling all power and selling it to utilities at a uniform rate.

DEBORAH VO, Rural Development Specialist  
Yukon Delta Fisheries Development Association (YDFDA)  
Anchorage, Alaska

**POSITION STATEMENT:** Testified that affordable energy is an important part of creating thriving communities.

DENNIS CLINE  
Bethel, Alaska

**POSITION STATEMENT:** Discussed the energy crisis those in rural Alaska face.

IVAN IVAN  
Akiak Native Community  
Akiak, Alaska

**POSITION STATEMENT:** Discussed the energy crisis those in rural Alaska face.

TIM MEYERS  
Myers Farms  
Bethel, Alaska

**POSITION STATEMENT:** Related his success with new farming and construction methods that can help with the energy crisis in rural Alaska.

GEORGE GUY, Business Manager  
Kwethluk, Incorporated  
Kwethluk, Alaska

**POSITION STATEMENT:** Expressed the need for the state's policies and procedures to change in order to address energy emergencies in rural Alaska.

DAVE TRANTHAM  
Bethel, Alaska

**POSITION STATEMENT:** Discussed the energy crisis facing those in the Bethel region.

WILLIE KEPPEL  
Bethel, Alaska

**POSITION STATEMENT:** Discussed the energy crisis facing those in the Bethel region.

SUE TRANTHAM  
Askinuk Corporation of Scammon Bay  
Bethel, Alaska

**POSITION STATEMENT:** Discussed the energy crisis in rural Alaska.

DAN LEINBERGER, Vice Mayor  
City of Bethel  
Bethel, Alaska

**POSITION STATEMENT:** Discussed the energy crisis in rural Alaska.

GEORGE LAMONT  
Tuluksak, Alaska

**POSITION STATEMENT:** Discussed the energy crisis in rural Alaska.

LAUREN WILLIAMS (PH)  
Alaska Municipal League  
Bethel, Alaska

**POSITION STATEMENT:** Discussed the energy crisis in rural Alaska.

NORMAN AYAGALRIA  
Bethel, Alaska

**POSITION STATEMENT:** Discussed the energy conservation methods he has implemented and the positive results of them.

ERIC MIDDLEBROOK  
Bethel, Alaska

**POSITION STATEMENT:** During discussion of the energy crisis in rural Alaska, related the possibility of a pilot study for a natural gas delivery project.

RAYMOND PETE  
Bethel, Alaska

**POSITION STATEMENT:** Discussed the energy crisis in rural Alaska.

JERRY DRAKE, Executive Director  
Bethel Community Services Foundation  
Bethel, Alaska

**POSITION STATEMENT:** Expressed the need to research inexpensive, reliable, and easily maintained off-the-shelf [alternative energy].

#### **ACTION NARRATIVE**

[1:11:56 PM](#)

**CO-CHAIR BRYCE EDGMON** called the House Special Committee on Energy meeting to order at 1:11 p.m. Representatives Edgmon, Millett, Dahlstrom, Johansen, Ramras, Peterson, and Tuck were present at the call to order. Also in attendance were Representative Chenault, Stoltze, and Herron.

[1:12:59 PM](#)

CO-CHAIR EDGMON reviewed the parameters of the meeting in terms of protocol and testimony. Members in attendance then introduced themselves and made brief comments regarding rural Alaska and energy. Co-Chair Edgmon recognized the presence of Former Representative Ivan Ivan and Alaska Energy Authority (AEA) Executive Director Steve Haagenson as well as other AEA staff.

HB 218-CREATING DEPT OF ENERGY/AEA BD  
HB 219-RENEWABLE ENERGY GRANT REQUIREMENTS

[1:29:04 PM](#)

CO-CHAIR MILLETT announced that the only order of business would be HOUSE BILL NO. 218, "An Act establishing and relating to the Department of Energy and to the board of directors of the Alaska Energy Authority; transferring the Alaska Energy Authority and the Alaska Natural Gas Authority to the Department of Energy; and transferring the home energy and weatherization program to the Department of Energy." and HOUSE BILL NO. 219, "An Act relating to the renewable energy grant fund."

CO-CHAIR MILLETT invited comments on the legislation before it as well as the stimulus funds. She related her understanding, from comments she has heard, that energy has risen to a level that it should be a cabinet level position. Therefore, HB 218 was introduced to form a Department of Energy to house a one-stop shop for energy. The other legislation before the committee, HB 219, is cleanup legislation that proposes some parameters to make projects more successful, including hiring an economist with experience in renewable energy projects. Co-Chair Millett characterized both pieces of legislation as works in progress.

CO-CHAIR EDGMON invited written comments and testimony.

[1:33:37 PM](#)

BOB CHARLES, Community Development Coordinator, Association of Village Council Presidents (ACVP); President, Nuvista Light and Electric Cooperative, Inc., informed the committee that the ACVP regional energy plan was charged by leadership to develop a sustainable energy plan by combining resources to review conventional and nonconventional renewable energy development and identify planning and deployment strategies. He noted that during the process, a fuel tank task force was developed. Mr. Charles related the three goals and deployment objectives specific to energy. The first goal is to execute economic stability by developing integrated energy solutions. He clarified that the desire is not just to meet energy needs, but to do so in a manner that provides economic development. The second goal is to find a way to obtain energy security and stability with heating fuel such that it's affordable and equitable. He suggested that rural electric utility rates could be made more affordable through the Alaska Railbelt utility legislation by making an All-Alaskan Generation and Transmission Utility (AAG&T). He expressed the desire for the integrated solution to include expansion of wind energy projects. Furthermore, the region has hydro power potential. He mentioned that work with the tribes to acquire funds to expand the wind projects in the region is occurring.

[1:40:16 PM](#)

MYRON NANENG, SR, President, Association of Village Council Presidents (ACVP), paraphrased from the following written testimony [original punctuation provided]:

We are pleased to have this Committee formed in response to the Energy Crisis a large part of the State experiences. Quyan, thanks to Representative Co-Chairs, Charisse Millett and Bryce Edgmon for hosting this hearing, and for bringing such an important Legislative presence to parts not traditionally visited in the course of your duties representing your own districts.

We'd also like to thank the Speaker of the House, Mike Chenault and Rules Chairman, John Coghill for joining the other Committee members to hear directly from Rural Alaska on our lack of energy infrastructure, consumption, needs, challenges and longterm plans. Senator Lyman Hoffman has long represented our interests for the greater parts of Rural Alaska, and we are glad to have Representative Bob Herron join him in Juneau.

We continue to present our position in seeking appropriate and adequate energy relief for rural regions of this great state outside the railbelt, natural gas, hydro-electric and roadsystem.

AVCP recognizes the many attempts the State Legislature has made to address the rural energy crisis as it loomed in the last session, as well as in the first few weeks of the 26<sup>th</sup> Legislature. We have presented supporting comments to many pieces of legislation like SB 88 (extending the PCE program), 91 (a fuel cap subsidy), 114 (utilizing State transportation resources for compassionate aid to Yukon villages) 115 and 116 (to authorize and appropriate funds for emergency energy relief) and most recently, for the \$28.6 million in federal stimulus money for weatherization and renewable energy projects that the Governor has rejected.

I want to make it perfectly clear, that we did not want to advocate for costly emergency legislation this winter. Last summer, we wanted very much to be proactive in addressing the high fuel costs most of our villages had to lock-in at in order to service their communities when oil was going for over \$140 a barrel. What may have been good for State coffers was ironically a debt sentence for our village households, corporations and services. SB 4002 attempted to

address our concerns in a comprehensive and long-term manner that were trumped by the well-intentioned but badly formulated energy rebate. However, we are grateful for the far-sighted benefits that a fully funded Renewable Energy Grant program authorized under the Alaska Energy Authority (AEA) beyond the first \$100 million in FY2009 would provide for areas such as ours.

When oil prices plummeted, the State went through a very serious budget shortfall and fears of a monumental deficit - that affected intended state capital projects and other appropriated mandates. Since mid-January, the price of Alaska North Slope crude oil has rebounded by a third, bringing money back into the state treasury through taxes and royalties.

**Petroleum Dependency at the YK Level and living in Disaster Mode**

Because we are roadless, all of our villages have to import fuel by barge or by air in emergencies. In most cases, we have no choice but to sign no-fault contracts with fuel vendors if weather or acts of god prevent a scheduled delivery. Some of our villages, with human resources turnover or other constraints, are unable to make their fuel orders in concordance to State programs such as the bulk fuel loan in time to lock in at more agreeable rates. Factors such as these aggravate the already challenging nature of providing light and heat to our communities with little or no energy infrastructure.

There have always been constantly expressed concerns by some of your colleagues within the Senate and your House counterpart that the subsidy in [Senate Bill] 88 creates an unending entitlement program, that it is an insufficient one-size-fits-all solution to an enduring program. Truthfully, it could be that way should the commercial fisheries continue to collapse; however, the circumstances that brought about this particular energy crisis are unusual. The price of oil topping over \$100 a barrel, the commercial salmon fishery on either river no good, but catastrophic on the Lower Yukon, the early freeze-up and particularly hard winter has sopped up whatever energy program and cash most families need for our sub-arctic winters. Because

of the poor fishing season, the cash usually generated by that commercial practice was not there to outfit seal, small whale or moose hunting and gathering expeditions that make up most of our winter sustenance.

Frankly, this winter's river break-ups and flooding that finally prompted a Governor Declared Disaster also heavily exacerbates our region's economy. By the time the National Weather Service called off its flood warning for Emmonak and other Lower Yukon River villages Tuesday, May 26, breakup flooding had soaked a total of roughly 40 communities along more than 3,000 miles of rivers, according to the state. There is no limit to how much federal money Alaska can get in disaster funding and the state is still assessing the damages on both rivers even after the letter requesting aid has gone out to President Obama. Even with a cap on how much a single family can receive at \$30,300, it is rare for families to get the maximum amount allowed.

We appreciate the state authorized spending up to \$2.5 million on the emergency response to the floods to cover things like delivering food, testing water and travel, but we hope that a coordinated response with the federal government and tribal organizations such as AVCP, the Housing Authority and the Health Corporation will maximize the benefits of the effort and provide for smart, lasting and sustainable results.

[1:47:15 PM](#)

CO-CHAIR EDGMON opined that population trends in Southwest Alaska can largely be attributed to the high cost of living, which revolves around the high cost of fuel. Either the population of these communities are decreasing or are remaining stagnate with changing demographics such that some communities are mainly the young and the old. He asked if Mr. Naneng is observing similar changes in the Bethel area.

MR. NANENG indicated that's the plight in the Bethel region.

[1:49:12 PM](#)

REPRESENTATIVE HERRON related his disappointment with Governor Palin's rejection of the federal stimulus funds for weatherization and energy. He asked if Mr. Naneng had any recommendations as to how the legislature should handle that decision of the governor.

MR. NANENG pointed out that the legislature can find ways to support the regional nonprofits which can receive those funds directly. He mentioned hearing that last year Anchorage had to return over \$2 million in home energy [rebates] that rural areas could've used.

1:51:02 PM

GENE PETOLA, President/CEO, Yukon-Kuskokwim Health Corporation (YKHC), paraphrased from the following written testimony [original punctuation provided]:

YKHC is the regional tribal health organization for the 58 Tribes of the YK Delta, and as the principal health care provider in the region, we serve Natives and non-Natives alike. Within a service unit the size of Oregon, we operate a hospital, 5 sub regional clinics, 44 village clinics and a variety of outpatient and inpatient services here in Bethel.

The impact of high energy costs on the delivery of health care to our residents and its affect on the Company are staggering and certainly not sustainable. For village residents, high energy costs effectively deny access to higher levels of health care. For example, if a patient in Kotlik was seen at our village clinic and was referred to the Bethel hospital, travel costs alone could likely prevent the visit.

The one-way air fare from Kotlik to St. Mary's is \$125 and \$150 from St. Mary's to Bethel. If the patient was then referred to Anchorage for treatment, the round-trip Alaska Airlines fare is currently \$542.60. Patients are beginning to forego their health care visits, simply because patient travel costs are too expensive as a result of high fuel costs. This often leads to higher acuity patients not being seen in a timely manner.

YKHC owns and operates five Sub-Regional Clinics in Aniak, St. Mary's, Emmonak, Toksook Bay and Hooper Bay. In 2004 we spent \$84,000 and this year we expect to spend \$150,000 on heating fuel and utilities at the Emmonak Sub-Regional Clinic. We experienced similar costs and increases at the other Sub-Regional Clinics.

Here in Bethel, the Yukon-Kuskokwim Delta Regional Hospital consumes approximately 10% of the local power production and YKHC's total power consumption for all our Bethel facilities is closer to 15% of local power generation. We are struggling to manage the steady rise in energy costs. In 2006 the electric bill for the Hospital alone was \$1.19 million. We are projecting electrical costs for 2009 at nearly \$2 million. In 2004 YKHC, corporate wide, spent a total of \$3 million on fuel and utilities. These energy cost increases are not due to any significant increases in our demand, instead the substantial rise in fuel costs. Unfortunately, for every dollar increase, we must decrease health services that we otherwise would have been able to provide to the residents of the YK Delta.

A strong and fully funded Power Cost Equalization (PCE) program is extremely important for residents to be able to continue living in rural Alaska, and is necessary for nonprofit businesses operating community facilities.

Unfortunately, the PCE statutes and regulations do not differentiate between a small village and a larger rural hub like Bethel. There is no allowance for the fact that a hub community will have more and larger community facilities that in fact serve their larger regions. The current PCE allocation for community facilities is 70 KWH per resident per community. This gives Bethel a community facilities allocation of about 420 thousand kilowatt hours of electricity per month. The current community facilities formula should be revisited. My staff is prepared to work with your Committee on this important statewide issue.

We endorse the concept of an All-Alaskan Generation and Transmission Utility bringing low cost electricity to every community on our State through

interties and power purchasing agreements. We know that this is being seriously considered for the road system and should be extended to all of Rural Alaska.

YKHC has had the benefit of lessons learned from our Rural Utility Cooperative, or RUC, which provides a variety of technical assistance and management services to community water and sewer systems. These lessons point to two things - economies of scale and the need for continuity in system components. My point here is that it should be the policy of the State, as new energy systems are developed and brought on line to ensure uniformity of technology and the provision of technical assistance.

While we encourage the development of new generating systems, particularly wind systems, we do not believe it is economical for an organization like ours to build stand-alone capacity. A 50 KW wind powered turbine contributing about 1% of the Hospital's electric needs hardly offsets the high cost of construction and operation. Aggregated wind systems like AVECs and Chaninik's make far more sense.

There is no incentive here in Bethel for the local power utility to explore alternative energy to reduce energy costs when they can simply pass on fuel costs to their consumers, including YKHC. Also waste heat costs from the local power plant per BTU [British thermal unit] are nearly the same as heating oil costs per BTU when it seems it should be substantially less.

Thank you, and I will be happy to answer any questions you might have.

[2:01:01 PM](#)

MR. PELTOLA, in response to Representative Ramras, said that currently the Yukon Kuskokwim Delta region is experiencing a transfer in population from [the rural areas] to Bethel and Anchorage. He indicated that villages will scale down to the point some won't have viable population bases to justify a school or other services. (Indisc.)

[2:05:24 PM](#)

FELIX HESS, Board Secretary, Calista Corporation, began by welcoming everyone in his Native tongue. He then thanked Representative Ramras who helped with the food drive for Emmonak and Kotlik. He also mentioned Senator Hoffman. Mr. Hess discussed the difference in fuel prices between rural and urban Alaska. He informed the committee that in his region fuel can only be delivered once in spring and once in the fall. By the time fuel reaches the Bethel area, residents pay more than double for it due to transportation costs. He discussed the Yukon River area where the economy is very depressed. He indicated that the bycatch reduction impacted the region, which can't be taken lightly. He then mentioned that Alaska has an international treaty that requires allowing the escapement of Chinook salmon into Canada. Mr. Hess emphasized that those in the villages have been voicing the difficulties they face for some time. However, it seems that it's sometimes to a deaf ear. He then highlighted the tragic reality of the increasing suicide rate, which he attributed to the loss of hope. He mentioned the need to provide employment [in rural areas] when possible, particularly for young people. Mr. Hess charged the committee to do the best it can with regard to helping people [in rural areas]. In conclusion, he thanked the committee and noted that a copy of his testimony has been provided to the committee.

[2:14:09 PM](#)

ROBERT NICK, Chairman, AVCP Regional Housing Authority Board, AVCP Regional Housing Authority, began by thanking Representative Herron for showing interest in the wind generation and the intertidal generation. He highlighted the success story of wind generation in his region, and related that prior to the wind generation project he paid over \$300 per month for electricity. However, since the wind generation project came on line, his bill has only once totaled over \$100. Mr. Nick expressed thanks for this opportunity to testify before and provide input on rural energy issues, which are dramatically affecting rural areas in many ways. The aforementioned, he said, has left him very encouraged that the members of the Alaska State Legislature are willing to come this far and listen to the concerns.

MR. NICK reminded the committee that in rural Alaska there are unique challenges. He pointed out that as of today regular gas in Anchorage costs under \$3 while in rural areas such as Bethel it costs \$5.65 and up. The energy prices of the last two years have been very distressing on rural Alaska residents. In fact, the aforementioned has resulted in many using all their personal

resources just to stay warm and fed. However, some were forced to use their resources to purchase fuel rather than food and instructed their children to eat breakfast and lunch at school. The parents made do with what they could. Furthermore, households are getting by on 100 percent subsistence foods, which becomes difficult to do in late winter. The situation became so difficult, the crisis in Emmonak occurred.

MR. NICK informed the committee that this past winter it was so cold residents used various electric appliances to heat their homes, which created a financial burden itself. He noted that households heating their homes with electrical appliances had electric bills as high as \$1,000 per month. He highlighted specific villages in which the increase in electrical costs was astronomical and many residents fell behind in their monthly electric payments. Furthermore, it was difficult even in wooded areas because there was so much snow that it was difficult to collect firewood. The situation is even more difficult because many village residents have low paying jobs because of the depressed economies in their areas. Moreover, grocery items are very expensive due to the items being flown into these rural communities. The lack of jobs makes it difficult for village residents who rely upon store bought foods to supplement subsistence foods.

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MR. NICK pointed out that the Yukon Kuskokwim area consists of the Bethel and Wade-Hampton census districts, which had unemployment rates in April 2009 of 16.8 percent and 24.5 percent respectively. In comparison, Alaska's overall unemployment rate is 8.4 percent while the U.S. unemployment rate is 8.9 percent. He then related that the poverty rate in Alaska is 7.8 percent while the poverty rate in the Bethel census area is 20.7 percent in 2004. The residents of these areas already lived a tough life prior to the energy crisis, he noted. These residents rely upon fishing in both the Yukon and Kuskokwim Rivers to provide cash resources for the summer, fall, and coming winter. However, the money made from fishing barely pays for expenses. Furthermore, due to the expected low number of salmon, the Alaska Department of Fish & Game (ADF&G) has (indisc.) which means that fishermen in the area won't make the money they once did to push through the winter slump. Therefore, bills and loans can't be paid and there won't be much cash for summer and fall gathering activities. The lack of bills being paid means that businesses don't have the funds due them and find themselves in a difficult situation as well. All

of the aforementioned coupled with the lack of fishing opportunities resulted in some of the [rural] nonprofits calling on the governor to issue an economic disaster declaration for the Yukon-Kuskokwim Delta.

MR. NICK, in conclusion, relayed that he wholeheartedly supports the House Special Committee on Energy's activities and fact-finding missions throughout the state. He opined that there are many options that should be considered to combat the high costs of energy. First, efforts to drill for more oil in Alaska and environmental safety fines should be pursued. Furthermore, alternative energy options should be pursued and funded. For example, harnessing wind energy would seem to be the first easily available alternative energy technology for rural Alaska villages. In fact, wind turbines have stabilized energy costs wherever they have been deployed, and thus some rural village residents are paying what an average Anchorage resident would pay for electricity. Still, although energy costs haven't decreased in the vast majority of villages, those with wind turbines have kept costs below those in villages without wind turbines. Since wind projects are expensive to maintain, Mr. Nick urged the legislature to support and fund wind generation projects in rural Alaska. Additionally, the state should support and provide funding for other green projects, such as geothermal, hydro power, tidal power, acidification, interties, and biomass projects. Even nuclear energy projects should be supported and funded by the legislature, he said. He opined that if the military can safely harness and utilize nuclear energy in their submarines, then there ought to be a way to provide energy options to Bush Alaska. Support should also be given to the governor's idea to merge Railbelt utilities into one entity. However, rural Alaska should be included in that merger, he said.

[2:28:25 PM](#)

MR. NICK then asked the legislature to request all the economic stimulus funding slated for Alaska from the American Recovery and Reinvestment Act of 2009 (ARRA), including that for weatherization and renewable energy projects. He relayed that he's deeply disheartened that the governor turned down slated for the aforementioned. He said that there should also be support for improvement and expansion of the weatherization programs by nonprofits, tribes, and local organizations. Mr. Nick told the committee that ACVP Regional Housing Authority weatherized 114 homes this past winter and is slated to weatherize 121 homes this year. Although ACVP is only required

to do 90 homes a year, the organization wants to do more. There are 6,500-7,000 homes in the Yukon-Kuskokwim Delta, which means that the ACVP Regional Housing Authority only weatherized fewer than 2 percent of the homes in the area. The \$28.6 million turned down by the governor could've resulted in the weatherization of more homes. He noted that the ACVP Regional Housing Authority and the other 14 housing authorities in the state are already required to comply with Alaska building energy efficiency standards in the state, which applies to private, public, and commercial buildings alike.

MR. NICK encouraged the state to develop a statewide energy policy, which would be appropriate in helping Alaska have an energy plan. The energy plan should address strategies on development of sustainable energy along with funding strategies. A plan should also assist communities with little expertise to implement energy options best suited for their area.

[2:32:08 PM](#)

REPRESENTATIVE HERRON inquired as to what Mr. Nick would recommend the legislature do in response to Governor Palin's rejection of the \$28.6 million in stimulus funds.

MR. NICK recommended that the legislature simply needs to override the governor's vetoes of that funding and use some mechanism that allows those funds to be available directly to the housing authority.

REPRESENTATIVE HERRON offered his understanding that even if the legislature overrides the governor's veto, she wouldn't comply with taking the funds. He surmised that Mr. Nick was suggesting that the legislature make a statement on this matter.

MR. NICK offered his belief that Governor Palin needs to accept all of the stimulus funds being offered to the State of Alaska.

[2:34:41 PM](#)

RON HOFFMAN, CEO, ACVP Regional Housing Authority, pointed out that energy issues have caused great hardship for families, organizations, and businesses. Ever since the price of oil skyrocketed last summer, a lot has been learned about various options to generate energy and electricity. Mr. Hoffman paraphrased from the following written testimony [original punctuation provided]:

Wind, hydroelectricity projects, biomass (wood and organic solid waste), and to some degree solar energy along with alternative fuels can provide the AVCP Calista region with energy sustainability, independence and rural community development. The recently completed Alaska Energy Authority Energy guide demonstrates the potential generation capability for renewable energy based upon location to potential hydroelectric power and wind class and other available renewable energy sources.

### ***Wind***

There is abundant wind energy resource available in the AVCP Calista region. The 2002 Nuvista study evaluated wind generation in those villages where there is sufficient wind resources to justify installation of wind turbines. The study assumed wind generation would be considered in areas where the Wind Power Class is 4 to 5 or greater as designated in the Wind Energy Resource Atlas of the United States. 16 villages are rated 7, 3 are rated 6, 5 are rated 5 and 2 are rated class 4.

There are two wind generation projects developed and managed by the Alaska Village Electric Cooperative. These are located in the communities of Toksook Bay on Nelson Island on the Eastern Bering Sea Coast, and Kasigluk which is 20 miles west of Bethel.

In recent years local utilities have become more interested in co-generation capabilities based upon the wind energy potential demonstrated by these projects. Four villages of the lower Kuskokwim River Bay area joined together under an organization called the Chaninik Wind Group whose aim is to develop wind generation capacity of the four villages in that area and reduce their dependence on fossil fuel generated electricity and heating. They are currently engaged in developing a wind development project to determine the feasibility of a subregional wind farm project to serve the four villages and will also determine the wind resource availability for expansion and possible build-out to other parts of the region.

### ***Regional Hydroelectric Power***

It has been estimated from previous studies conducted involving a potential Hydroelectric project

in the Kuskokwim region that approximately 24 megawatts of power and roughly 130 million kwh of energy may be available for nearby Bethel villages from Tuluksak to Quinhagak located along the Kuskokwim River. This project has the potential of replacing diesel as the primary source of energy in this region. In today's dollars energy costs could equate to approximately 23¢ per kwh based upon conservative estimates of inflation costs. PCE reports indicate costs up to 60¢ per kwh without PCE adjustments for continued diesel power generation demonstrating greater potential savings per household with hydroelectric power. Additional savings to the state in the form of reduced PCE requirements provide added cost saving benefit to the state over the long term.

2:42:41 PM

MR. HOFFMAN then turned to biomass projects. The Yukon Kuskokwim Delta has many biomass resources for energy generation. Biomass resources available in the region include wood, plant, and fish waste to some extent. Currently, there are no biomass fuels for generation for electricity, commercial heat, and transportation. Wood-fired heaters and stoves are used in the region as a major source of heat. In fact, wood-fired steam baths exist in most communities in the region. Approximately, 36 percent of heat is derived from wood. A 2006 University of Alaska Cooperative Extension Service study for the Kuskokwim Native Association found that nearly 23 million cubic feet of commercial stands of spruce and 22.7 million board feet of noncommercial stands amounts to 45.7 million feet of growth in the Lower Kuskokwim River area. The study illustrates that it increases 1.3 feet annually. A similar analysis would be appropriate for the Lower Yukon River area, he remarked. The AEA biomass energy program provides practical working examples in other parts of Alaska that are applicable to Alaska. For instance, the City of Craig's gasification heater system and the Interior's wood-fired heating system for community facilities. Furthermore, the fuel for schools program in the Lower 48 provides a working program model for local school districts. There are a number of low cost equipment and options that are available for community and business development consideration. In conclusion, Mr. Hoffman returned to his written remarks, as follows:

***It is our strong recommendation for an Integrated Renewable Energy Solutions approach in rural Alaska***

*for achieving energy sustainability and economic viability.*

*In our region we seek to:*

- *Expand Wind Energy Projects along the eastern Bering Sea Coast and the Bethel area*
- ★ *determine feasibility for integrated wind/diesel/solar/biomass heating and electric systems with community heat storage system.*
- *Determine feasibility of Regional Hydroelectric Project (Lake Chikuminuk) to provide region-wide electricity and heat.*

*Develop and install Biomass projects: including wood fired boilers, heaters and wood chippers for community facilities and buildings.*

MR. HOFFMAN then echoed Mr. Nick's testimony regarding the need for the state to develop a statewide energy policy that works toward the development of a statewide plan. The plan should consider sustainability, funding strategies, and relief for all Alaskan residents. He urged the need to decrease the state's dependence on fossil fuels and to work toward making energy prices more affordable for Alaska's residents while implementing a state saving strategy for them.

[2:46:30 PM](#)

REPRESENTATIVE RAMRAS provided his understanding that the Senate Resources Standing Committee said that it was developing a state energy plan, but unnamed staff from the administration said the state already has an energy plan. Noting that representatives from the administration are present, he questioned what the administration thinks of Mr. Hoffman's suggestions for the Yukon Kuskokwim region. Representative Ramras asked if Mr. Hoffman's plan takes into account the cost of amortizing the initial capital investment or does the plan call for the state to provide that at no cost (indisc.).

MR. HOFFMAN replied that many of the projects he mentioned reduce the high cost of energy. He said that he's requesting that the state adopts a statewide energy plan so that it can develop strategies to fund projects throughout the state. He noted that this morning he met with Mr. Haagenson, who provided a review of the preliminary information for the Yukon Kuskokwim

Delta region and discuss the aforementioned projects. In further response to Representative Ramras, Mr. Hoffman opined that there should be a legislative mandate to direct all electric utilities to allow [alternative electrical generation] to be part of the electrical grid.

2:51:27 PM

ELAINE BROWN, NorthStar Gas, LLC, referring to the first slide of her presentation, explained that NorthStar Gas, LLC, (NSG) was: "Created to serve the people of Rural Alaska." The company was formed in July of 1998 to grant Native ownership of a fuel company, primarily to deliver bulk fuel to rural Alaskan villages. As a Native-owned petroleum retailer, NSG manages a gas station in Bethel, delivers heating fuel and unleaded gasoline in the Yukon Kuskokwim Delta Region, and retails petroleum products. The company is owned by 18 corporations, of which 2 are regional corporations and 16 are village corporations. She reviewed the specific corporations involved, which are listed on the first slide.

MS. BROWN moved on to the second slide entitled, "Fuel Costs to Rural Alaska." She explained that fuel prices in rural Alaska are made up of the following three components: market pricing, transportation costs, and overhead, maintenance and community profit margin. The market pricing is determined either by the Oil Price Information Service (OPIS), Platt's, or Jet A fuel, and is determined the day the fuel is lifted from the refinery. The transportation costs vary by location such that the further one goes up the river, the more expensive the fuel is. The overhead and maintenance, and community profit margin is the landed cost of fuel plus overhead and maintenance plus a percentage for profit margin. She noted that each community's overhead and maintenance plus the percentage of profit margin varies, which is why you see the varied prices in neighboring communities. Furthermore, the number of employees at each company and the age of the tank farms also contribute to the varied prices. She then directed attention to slide three entitled "Fuel Cost Example," which provides an example of a fuel cost per the applicable fuel index. The example illustrates that the quantity makes a difference in the price.

MS. BROWN continued with slide four entitled "FUEL PRICE PARITY - HEATING FUEL." She referred to [the possibility of] a statewide heating fuel price cap of \$3.00 per gallon from September 1 to March 31. The reimbursement, she explained, would occur at the rural community fuel distributor level rather

than on an individual basis. She highlighted the formula, which is as follows: the number of households multiplied by the gallons allowed per household multiplied by the cost above \$3.00. The responsibility of tracking gallons per household lies with the fuel distributor.

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MS. BROWN, referring to slide five, specified that the chart illustrates the price of fuel from 2004-2009, which provides an idea of what people are paying in the various areas of the Yukon Kuskokwim Delta Region. She highlighted that in the spring of 2004 the heating fuel was more expensive than in the fall. In the Lower Kuskokwim Region in 2005, the heating fuel for the fall was more expensive than in the spring. Although NSG has tried to determine when fuel prices are cheaper for its customers, there seems to be no rhyme or reason for the prices. As the chart illustrates pricing from year to year, from spring to fall, varies drastically. A similar situation exists with unleaded gas as illustrated by the chart on slide six. She clarified that the chart only refers to delivered costs and doesn't include any overhead and maintenance costs or profit. In response to Chair Edgmon, Ms. Brown confirmed that the chart specifies the cost to the cooperatives and that the final cost in any village could be double what's specified on the chart. Ms. Brown explained that the chart on slide seven specifies the price per barrel, delivered cost, and the transportation costs. The transportation costs average \$1.25.

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MS. BROWN directed the committee's attention to slide eight entitled "Example on Pricing Your Fuel." The slide details what the total operating expenses per gallon of \$64,000 includes. The slide also specifies the price of fuel, gas and heating fuel. The overhead per gallon works out to \$1.30. The cost, including only overhead and maintenance, totals \$5.15 for 50,000 gallons of fuel. Therefore, the total cost of 50,000 gallons would be \$256,000, which would only cover the operations and the cost of (indisc.).

[3:04:10 PM](#)

MS. BROWN continued with slide nine entitled "Revision of AEA Loan Application." She explained that she was tasked with revising the AEA loan application, which every community has to complete every year. She suggested making the AEA loan

application valid for five years rather than for a single year. The aforementioned eliminates annual filing of an 11-page application and allows the supporting documentation, such as the letter of intent, promissory note, waivers, and resolutions, to be valid for five years. The supporting documentation, especially those requiring signatures, is often difficult to obtain due to seasonal activities. However, a two-page bulk fuel loan agreement would need to be filed annually. In order to expedite the process, Ms. Brown suggested allowing approval of the AEA loan application from a faxed copy rather than waiting for the original mailed application. However, the funds would only be released upon receipt of the original signed application. She explained that loan approval would be based on the prior year's payment history. Late payments or questionable credit would revoke the five-year loan approval and require an annual application to be filled out until the credit history improves.

[3:06:24 PM](#)

MS. BROWN, upon the request to summarize, said that if a couple of the suggested changes to the loan application process on slides nine and ten occurred, it would expedite the process. She explained that in a situation in which a loan is approved based on payment history but the community still has outstanding payments, the approved funds wouldn't be released until the final prior year's loan payment is received. In an effort to address some of the difficulties, NSG is working with Alaska Village Electric Cooperative, Inc. (AVEC) to bring in fuel together in order to decrease transportation costs. Furthermore, there are efforts to have multiple communities or tank farms to purchase fuel in bulk in order to reach the 100,000 gallon break point. Ms. Brown related support for the merging of tank farms to form regional tank farms.

[3:08:53 PM](#)

REPRESENTATIVE RAMRAS said he is not in favor of the \$3.00 plan. He emphasized that the state, rural and urban, is running out of oil and money. He asked Ms. Brown what plan she would choose if the choices were the \$3.00 plan or capital projects for alternative energy.

MS. BROWN answered that she would choose alternative energy because she would like to have economic growth in rural Alaska.

REPRESENTATIVE RAMRAS pointed out that half of the people in Alaska live in Southcentral, and therefore they are a force at the ballot box. Although residents in Southcentral Alaska have the cheapest natural gas prices in the nation, they say their gas prices have doubled over the last few years and that they pay more in terms of property taxes. The aforementioned results in many of these residents saying that if the diesel part of the economy wants a break, they deserve a break also. He inquired as to how [rural communities] and their small amount of voters can respond to such viewpoints.

MS. BROWN expressed the need for a comprehensive statewide [energy] plan such that power groups are combined and that there's one large fuel purchasing consortium. She acknowledged that the cost of living in Anchorage may have doubled, but pointed out that in rural Alaska the cost of living has tripled or quadrupled. Therefore, there is no comparison.

CHAIR EDGMON commented that Representative Ramras has identified the major policy point that will land squarely on the state in a couple of years. He reminded the committee that when he has questioned what rural communities will do if there's another year of high fuel prices, the answer has been that those residents will move. The aforementioned, he said, is the policy question [for the state]. He questioned what can be done to keep rural communities alive, to which he said he didn't believe anyone has an answer.

MS. BROWN said that programs such as the weatherization program will help tighten homes. She noted that one of the [goals] of the Western Fuel Task Force is to reduce fuel consumption by 10 percent in 2009, which is an aggressive goal. Another important aspect is to educate residents with regard to lowering thermostats and dressing warmer. She mentioned creating jobs in rural communities and using tie (ph) lines to connect communities, which she predicted would ultimately result in connecting roads. The aforementioned could result in consolidated community schools. Although such would cause eliminate jobs in the school district, new jobs would be created for snow removal and bus drivers.

CO-CHAIR EDGMON emphasized that although the aforementioned may sound good on paper, it may not work if fuel increases to \$130 per barrel next winter.

[3:16:22 PM](#)

MEERA KOHLER, President/CEO, Alaska Village Electric Cooperative (AVEC), paraphrased from the following written testimony [original punctuation provided]:

We were established 40 years ago to bring "the light" to Alaska's villages - communities where Alaskans relied upon kerosene lamps and seal oil for their modest energy needs.

I'm sure many of you have read Willie Hensley's recent book - Fifty Years from Tomorrow. Willie was AVEC's first president. He had the vision that, by perseverance and dedication, we could make the impossible happen. That vision led the way to ANCSA and to AVEC.

But AVEC was not a slam dunk. We teetered on the brink of bankruptcy for many years. It was not until the early 80s that we were able to finally collect enough revenue to pay for our very modest operations and PCE [power cost equalization] made that possible.

It surprises many to know that AVEC's generation and distribution assets were not built with state or federal largesse. We now have more than \$114 million invested in our utility systems, not counting any grant-funded plant. All we had at the beginning were REA [Rural Electric Association now know as the Rural Utility Service] loans that had to be paid back. It was not until this decade, when we became a Denali Commission partner, that we were able to start upgrading our power plants and tank farms to acceptable utility standards. Our villages are still the only communities that actually bring a substantial amount of cash to match our various federal construction grants. We have almost \$100 million of federally funded plant improvements now and more than \$12 million in AVEC equity match.

This morning, you visited Kasigluk and toured the wind farm there. Kasigluk is one of our villages. Power from the diesel and wind generators there serve both Kasigluk and the nearby village of Nunapitchuk. The power plant, wind turbines tank farm and intertie cost some \$15 million. 10% came from AVEC's equity - the rest came from the Denali Commission and the RUS [Rural Utility Service]. Not a penny of state funds

were used. About 20% of the two communities' power comes from wind and the fuel cost per kWh [kilowatt hour] is 12 cents lower than neighboring communities.

But wind is not the answer to reduce the cost of power. Our average cost of electricity is more than 62 cents a kWh. Fuel alone is 37 cents this year and non fuel costs are 25 cents. PCE helps make power affordable for homes and public facilities, but it does nothing for commerce and schools. We must find a way to do away with PCE so that electricity can be affordable for everyone!

The answer is for all Alaskans to be treated the same, at least as far as electricity is concerned. To that end, we propose the All Alaska Generation and Transmission plan. The concept is very simple. The AAG&T in effect operates all the generation and transmission assets in the state of Alaska. All the existing utilities become distrusting utilities only. Power is sold back from AAG&T at a "postage stamp" rate and the local utilities add their local administration, billing and operating costs to achieve local retail rates, likely ranging from 13 cents to 25 cents a kWh.

Currently, utilities sell some 6.5 billion kWh in the state. 85% of those sales are in the Railbelt and in other low-cost areas like Barrow, Juneau and Sitka, where retail rates average less than 13 cents kWh. Of the remaining 15%, about 8.5% of sales are in non-PCE communities like the Four Dam Pool where the cost of power is now around 30 cents and the last 6.5% covers the PCE communities where the average retail rate is around 55 cents.

By pooling all power and selling it to utilities at a uniform rate, we achieve many purposes:

- Communities outside the Railbelt are no longer second-class citizens when it comes to reliable electricity. Even diesel power plants are complicated to operate and many communities have tenuous generation systems because of the lack of qualified local personnel.
- Economic development becomes feasible. Unaffordable electricity is a prime reason why local commerce cannot develop and flourish.

- The need for PCE goes away, saving the state some \$32 million a year.
- The cost of operating rural schools declines dramatically as electricity cost drop, likely saving another \$20 million annually.
- Similarly, costs to operate other state facilities decline, estimated to save another \$20 million each year.
- The perennial challenges in keeping the lights on across the state diminish as a technically competent operations team will work across the state to address local generation challenges.
- And of paramount importance, vying for scarce capital grants disappears. The entire state will unite behind generation projects that deliver the maximum benefits to the largest area because reducing the cost of power in Anchorage, for example, will translate to lower generation costs for the entire state. Regional projects that deliver the maximum benefits will not have to compete for funds because they will naturally fall into a state-wide priority list.

Honorable legislators, it is time to end the politics of separation. We are all Alaskans equally. We all deserve affordable and reliable electricity. Electricity is the basic underpinning of modern society. Without it, we would not have schools, potable water, sewer systems, healthcare or airports. For too long, electricity for rural Alaskans has been an almost unaffordable luxury. You can change that and our children and grandchildren will thank you, as I do.

[3:23:06 PM](#)

MS. KOHLER, in response to Representative Ramras' earlier question regarding parity, related that she lives in Anchorage where the cost of natural gas has tripled. She reviewed a formula that she used to illustrate the high cost of diesel in rural Alaska as compared to the cost of natural gas [in Southcentral Alaska].

REPRESENTATIVE RAMRAS, in response, pointed out that constituents in Anchorage are focused on the fact that their energy costs have tripled.

REPRESENTATIVE JOHANSEN inquired as to what he tells his constituents who already pay 9.5 cents kWh when [under a statewide plan] everyone's rates would increase.

MS. KOHLER clarified that Representative Johansen's constituents' rates wouldn't necessarily increase. She projected that the pooled cost of generation would be parsed out throughout the state. By focusing on specific projects, such as the Susitna, power costs would decrease for everyone in the state. The formula can be utilized such that no one faces a substantial increase in the cost of power.

REPRESENTATIVE JOHANSEN opined that any increase would be a substantial increase. If there's a solution for rural Alaska, the rest of Alaska will want such as well.

MS. KOHLER said that's why the plan she proposed has merit. In Southeast Alaska, she explained, a grid with a cost of almost \$.5 billion is being considered. This proposal would eliminate the need for the aforementioned because those not connected to hydroelectric power would experience a decrease in costs and wouldn't need or want a grid connection. She attributed the decrease in costs to lowering the cost of power processing in a virtual manner. This proposal, she clarified, doesn't mean that physical plants have to be built throughout the state but rather it would be a virtual connection.

[3:27:56 PM](#)

DEBORAH VO, Rural Development Specialist, Yukon Delta Fisheries Development Association (YDFDA), relayed that YDFDA is one of the six community development quota (CDQ) organizations in Western Alaska. She reviewed the communities that she represents. She then provided the following testimony:

First and foremost, YDFDA supports the goals and deployment objectives outlined at the AVCP Calista Regional Energy Plan. These goals and objectives reduce the cost of generating power by integrating renewable energy solutions, such as wind, hydro, biomass, and biomass projects. Secondly, YDFDA supports bulk fuel purchasing under cooperative purchase agreements. This will reduce purchasing costs by our villages by participating in this type of arrangement.

On the All Alaskan Generation and Transmission Utility ... YDFDA supports the concept as a long-term solution since the benefits reaped from this arrangement will be advantageous to all Alaskans. The Power Cost Equalization subsidy that is necessary to equalize the cost of generated power across the state will no longer be needed under this scenario. However, the high cost of energy must be reduced in rural Alaska to spark economic development in our communities immediately. That means right now, especially in the Lower Yukon Region where we have been very much in the news these past six months. Until the concept of the AAG&T is realized, YDFDA recommends and supports expanding the PCE program to private enterprises and public facilities, such as schools and clinics, in rural communities at 50 percent of what is subsidized to households and other community facilities and utilities. Currently, our subsidiary, Kwikpak Fisheries, that operates in Emmonak pays for the full cost of power, including the fuel surcharge. The exorbitant cost of power coupled with the high cost of transportation, transporting our product to market, which is the fish, makes it extremely difficult to compete globally and with non-rural communities. The savings incurred by lowering the cost of power will allow Kwikpak Fisheries to pay a higher price to the fishermen and women in our villages for their fish; therefore contributing more cash to the local economy. Along the same lines, making PCE available to local schools and clinics to operate and maintain quality service at a more reasonable cost contributes to overall healthy and sustainable villages.

In closing, private investment by local and regional investment is important to our communities. And for our communities to thrive, affordable energy must be an important part of that equation.

[3:32:20 PM](#)

REPRESENTATIVE RAMRAS noted that he isn't a big fan of the 500 gallon plan, which he characterized as complex. He questioned utilizing a regional solution in which the state subsidizes the price of fish such that cash coming into the community would be guaranteed. Such a solution would place the onus on the Alaska Seafood Marketing Institute (ASMI) to increase the value of fish in the global market.

MS. VO indicated that the region is open to solutions. However, the key remains rejuvenating and keeping the local economy going, such that cash stays in and circulates in the local community. Therefore, any solution is worth discussing, she opined.

3:34:09 PM

DENNIS CLINE, related that he has lived in Bethel off and on since 1967 and is a retired school teacher and retired from the Alaska Army National Guard in 2005. He further related that he lives in Girdwood, Eagle River, and Bethel, which he said is exciting. With regard to energy, he characterized it as the common denominator. Mr. Cline highlighted that while this discussion occurs, a barge is headed up river with fuel that has already been purchased. Fuel prices have varied according to the summer surge, which is what occurred last year. Therefore, little progress has been made in that area. However, he applauded the efforts with weatherization programs. Although he applauded efforts to focus on the problem, he opined that it's somewhat subverted due to generating revenues within the state with oil production. Oil is taken from the North Slope and shipped to the West Coast to be refined and returned the state, which he estimated results in a transportation factor of \$1.5-\$2 per gallon. He questioned why the oil can't be refined and have it near those [in the state] who use it. He then turned to the royalty oil within the state, which is sold and becomes revenue within the state. Those revenues are haggled over. He informed the committee that in his home in Girdwood he pays about \$60 per month for electricity and gas, in Eagle River gas and electricity totals about \$200 per month, and in Bethel in the month of January his electricity, propane, and oil totaled \$2100. Mr. Cline said that he isn't the person to worry about. However, he has had discussions with others for which there should be concern. For instance, he had a discussion with a village public safety officer (VPSO) staying at his bed and breakfast. The VPSO related his relationship with subsistence in which he purchased the fuel for his snow machine and ammunition for his gun, which totaled in excess of \$80. The VPSO said that he realized he could've purchased a lot of chicken with that money. The high cost of fuel is changing things in the lifestyle that once allowed folks to live on subsistence with part-time employment. Mr. Cline expressed the need to move on to alternative energy sources, which could've had a jump start with the federal stimulus funds the governor rejected. He opined that [the governor's rejection of the

federal stimulus funds] was unconscionable, particularly when no other plan has been articulated that addresses the issues. A plan needs to come from the governor and through the legislature's budget process. Mr. Cline then related his belief that the oil companies, through an inducement process, would have some ability to stabilize fuel costs whether that means building extra refineries in the state or refinery capacity in the state, or addressing shipping issues, liquefying natural gas on the North Slope and shipping down the western coast in order to decrease transportation costs.

[3:41:28 PM](#)

IVAN IVAN, Akiak Native Community, described the Yukon Kuskokwim Delta area, noting the difference in its economy as compared to other areas. He noted that in his younger days the economy was based upon fish and wildlife. With regard to a statewide energy policy, he suggested reviewing the [government] in the villages. For instance, in Akiak there is an Akiak Tribal Council and the Akiak Native Community. He remarked that in most cases the tribal government seems to be invisible in the process. Therefore, he expressed the need to include them and respect the region's way of life. He discussed alternative energy options, including wind energy. He recalled that in the late 1970s or 1980s a study was performed regarding hydro electric power in the region. He also recalled that recently there was a \$250,000 appropriation whereby (indisc.). He told the committee that the Akiak Tribal Council put forth a resolution that recognizes the high fuel and electricity costs and the need to pursue alternative energy opportunities, including wind energy. The council submitted an application for [hydro power] to the U.S. Department of Energy and is waiting to hear back. Also, the regional housing authority is being asked for \$120,000 of the \$250,000 appropriation to (indisc.). He concluded by expressing interest in pursuing alternative energy sources while protecting the area's natural resources.

[3:49:56 PM](#)

REPRESENTATIVE STOLTZE noted his appreciation for Mr. Ivan's passion. (Indisc.)

[3:51:57 PM](#)

TIM MEYERS, Myers Farms, expressed his enthusiasm because he has learned how to live in the region for about half the cost. He related that a couple of years ago he started farming and now he

can grow enough food for a family of eight. He is also supplying produce for 350 people on the WIC program in June. Mr. Meyers informed the committee of his plan to bury five forty foot shipping containers underground, which will enable him to store possibly 200,000 pounds of potatoes, carrots, rutabagas, cabbage, turnips, collard greens, and kale. Such storage will be necessary due to his plans to expand his growing capacity. He opined that if about 15-20 others also grew produce, they could grow enough food to feed a good portion of the region. The plan, he related, is to sell 30 pound boxes of this produce and ship it to the villages for approximately \$1 per pound, which is roughly half the cost of current produce costs. Furthermore, this produce is 100 percent organic. He then explained that he composts chum salmon to create dirt; the aforementioned could establish a market for chum salmon that are being caught and let go.

MR. MEYERS explained that he has been building homes in the region for about 30 years. He opined that he has mastered building small, energy efficient, affordable homes in the region that beat existing energy specifications. The homes are built with a completely different building system than that traditionally used in the region. Once he began farming, he discovered that he could create rooms underground in which he could farm and utilize free heat where it's 30 degrees. Mr. Meyers said, "You cannot afford to live in this region, in this environment when fuel is \$6 a gallon, above ground." Although he said he was impressed with the state's energy program, he stressed that above ground houses aren't efficient enough when heating fuel is \$6 per gallon. Therefore, he suggested reviewing what he's doing and putting 200-300 people to work in the region to build high quality underground homes that everyone can afford.

[3:57:18 PM](#)

REPRESENTATIVE RAMRAS commented that underground housing is spot on and expressed his desire to discuss modular heat pumps for Fairbanks.

[3:58:26 PM](#)

MR. MEYERS said he has talked about this for years, but there hasn't been a lot of interest in homes that don't mimic the regular construction/housing building system. Therefore, he suggested following his building methods to produce some totally different, high quality homes that folks can afford to live in

and then involve the federal government, U.S. Department of Housing and Urban Development. Cold climate research supports the notion that stick-frame, foam-panel houses don't work in the region. He told the committee that he kept chickens in one of his structures and he burned less than a gallon of fuel a day and never had frozen water or eggs. Mr. Meyers shared photographs of his farm with the committee. He then related the need to get others to follow his method and to set them up with land that they will help tend for two years. Furthermore, this food allows folks to eat more healthfully and live sustainably.

[4:08:38 PM](#)

GEORGE GUY, Business Manager, Kwethluk, Incorporated, informed the committee that Kwethluk, Inc., operates its own electric utility. He then recounted how last fall an early freeze prohibited the community from receiving fuel for its power plant and the community. The aforementioned triggered a super energy crisis for the community during which the generators were low on fuel and they ran out of stove oil for consumers. At that time, Mr. Guy activated the strategy plan for the community, which entailed purchasing stove oil from the local school and the City of Kwethluk sold five gallons of fuel to each household. The City of Kwethluk, the Indian Reorganization Act (IRA) Council, and the Kwethluk, Inc. Board of Directors issued a declaration of emergency in the hope of activating state agencies. He mentioned the various agencies and individuals he contacted. However, no remedies from the State of Alaska have been received and thus there was no choice other than to fly in fuel at a cost of \$6.09 per gallon. Mr. Guy related the need for the state's policies and procedures to change in order to address energy emergencies in rural Alaska. He highlighted that the majority of rural areas use diesel for heat and [Kwethluk] currently consumes approximately 108,000 gallons of heating fuel to keep the generators running. He pointed out that in the rest of the nation the price of fuel fluctuates, but rural areas such as Kwethluk are locked into the price at the time of purchase. The various alternative and renewable energy resources are most needed in rural Alaska, he opined. He informed the committee that currently stove oil/ heating fuel costs \$7.20 per gallon and unleaded gas costs \$[6].23 per gallon. This past winter people often had to choose between food and fuel to survive.

[4:14:40 PM](#)

DAVE TRANTHAM, told the committee that he has lived in Western Alaska since 1946, specifically in Bethel for the last 43 years.

He noted that since he retired in 1979 he has been a volunteer in Bethel. The cost of energy impacts every Alaskan no matter the locale. However, it impacts some areas greater than others. Currently, many residents in the Bethel region are in survival mode due to the high cost of energy. He related that he knows elders who live in one room in the winter because they can't afford to heat the entire house. He urged the committee to hear "It's heat or eat with some people ... in many communities throughout the state." Mr. Trantham thanked the governor and the legislature for the \$1,200 in energy assistance. He noted that oftentimes Native people of Bethel wouldn't say thank you as it's not their cultural way, although they are. Although Mr. Trantham said that he didn't know what the solutions are, he encouraged the committee to listen carefully as there's much wisdom being provided. Furthermore, collectively a solution to the high cost of energy should be developed.

MR. TRANTHAM related that since he can't pay for electricity, he doesn't have a television and has no refrigerator but rather uses a hole in the ground. He further related that he doesn't have a clothes dryer and thus dries his clothes outside no matter the season. Methods of the old timers, who were survivors, should be reviewed. He stressed the need to do things for oneself and hope a little help comes from the government as was the case with the \$1,200. He reviewed the various methods of conserving energy and resources, such as changing light bulbs and building underground. The collective wisdom of those in the area needs to be used to find solutions. Mr. Trantham concluded by relating that solutions can be found.

[4:22:44 PM](#)

WILLIE KEPPEL, noted that he provided a packet to the committee. Mr. Keppel stated that the problem is that everything is connected to Bethel. He identified two monopolies in Bethel: the Bethel power plant and the Crowley fuel plant. No matter how hard one tries to regulate Bethel's utilities, it won't work because a social conscious can't be legislated. He related his belief that the reason Bethel has the highest cost of diesel generation in the state is collusion, which he attributed to the lack of oversight and rules that would make Bethel utilities operate at a cost efficient rate for the people. He recalled Representative Herron's and Senator Hoffman's visit to Bethel this past fall during which there was a discussion regarding the cost of electricity. During that discussion, Senator Hoffman said that nothing can be done about Bethel's electricity prices because the utilities negotiate for the highest price. Senator

Hoffman also brought up the need to purchase fuel together. However, that's not an option because the two providers are "Siamese twins," he opined. "There is no competition in Bethel," he charged. Furthermore, there's no place for a competitor to haul fuel because the major tank farms are owned by the two providers. Mr. Keppel opined that there needs to be an independent tank farm in Bethel that's operated by the most efficient corporation on the Delta, AVEC. The AVEC has figured out how to partner with the school districts and village corporations, and purchase fuel in bulk. He also expressed the need to allow the Aleuts to come to Bethel with their barges and totes to sell fuel to the region, which would provide another option for the villages as well as AVEC. The aforementioned is how to obtain fair competition.

MR. KEPPEL reminded the committee of what the legislature did in the 1980s when Bethel utilities couldn't deal with the waste heap so they allowed radiator waste to be pumped into the ground, which resulted in a huge environmental problem. In order to address the aforementioned, the state bought, purchased, and built all the waste heat lines in the city. He then informed the committee of the time when it was found that the city's utilities overcharged its residents by \$70,000. In conclusion, Mr. Keppel said that numerous times the laws have been violated by Bethel utilities and the only way to cut electricity costs in Bethel is to revoke the utility's license. He requested that AVEC be utilized to temporarily run the utilities. The desire, he related, is to pay the appraised rate in the tariff. The AVEC will work for the people, and he suggested that electricity costs will be at least one-third less.

[4:31:53 PM](#)

REPRESENTATIVE RAMRAS said that he shares Mr. Keppel's concerns regarding Fairbanks Natural Gas as well as the Bethel Utilities Corporation.

MR. KEPPEL applauded Governor Palin for not taking the stimulus funds. He said he believes in investing the money in [the residents]. Therefore, if one is interested in building wind towers, only the state's constitution has to be consulted and the legislature merely has to pass a loan that's paid back for with interest.

[4:34:09 PM](#)

SUE TRANTHAM, Askinuk Corporation of Scammon Bay, related that she has heard that the commercial fishermen, mostly from Scammon Bay, aren't going to fish in Black River. These commercial fishermen fish to pay for their electricity, gas, and put away food for the winter. She noted that most of the residents of Scammon Bay live at the poverty level. She related that her 93-year-old mother spends most of her time sewing to pay for her electricity. Ms. Trantham asked the committee members to try to get the stimulus funding rejected by the governor in order that each village has something in the future. With regard to the legislation before the committee, Ms. Trantham opined that they should've been worked on 20 years ago.

4:37:09 PM

BOB GRAHAM (ph)\* No address provided\* Discussed the energy crisis in rural Alaska. { told the committee that a multi-pronged approach to energy is necessary. Addressing energy begins with individuals, who should conserve, recycle, and use renewable energy and manual mechanisms such as bicycles. He further recommended that everyone should turn down the heat, wear more clothes in the house, and use energy efficient devices. Second, helpful designs such as LED lights and compact fluorescent lights should be supported and utilized. Mr. Graham related that he is going back to the older ways. He indicated support for the construction of underground houses and using gravity flow stoves that don't require electricity. Wind, sun, geothermal, and water flow are [alternative energy possibilities] that may require help from the government [to implement].

MR. GRAHAM expressed concern with the things that he doesn't have control over, such as the prices charged by the electric and fuel companies. He related that he has considered that it may be best for him to move where the costs aren't as high. Mr. Graham opined that government should encourage individuals and groups to be more efficient and cost effective. Furthermore, the funds available should be directed to those who really need it without administrative costs and stretched profits. The government could provide oversight with the aforementioned. However, government shouldn't force folks to live a more costly lifestyle. He told the committee that he has rentals for which 80 percent of the money coming in went toward city services, electricity, and fuel oil.

4:45:19 PM

DAN LEINBERGER, Vice Mayor, City of Bethel, addressed the concept of capping \$3 heating oil. Under the AAG&T, the best projects would enjoy the dollars contributed to it. However, under the existing system it's not the best projects that receive the funding, but rather which legislator has the most political clout [to obtain funds for his/her area's projects]. He acknowledged that currently the Bethel region enjoys a very influential Senator. Therefore, he said that AAG&T does make sense from a financial standpoint. With regard to an earlier statement that one can't have alternative energy and \$3 heating fuel, Mr. Leinberger contended that both can be had. He explained that this winter the City of Bethel reviewed the possibility of hedging its fuel cost, but since Bethel's fuel comes from Nikiski rather than Cherry Point, Washington, there is no direct correlation between the fuel price derived out of Nikiski and the New York Mercantile Exchange price of heating oil or gasoline. Therefore, the City of Bethel couldn't, with any confidence, hedge fuel and guarantee an at least break even proposition. However, most of the fuel in Alaska is pulled out of Cherry Point, which does have a direct correlation to the spot price on the New York Mercantile Exchange. The state would, therefore, be in a much better position to hedge fuel throughout the state than a city would. Conceptually, futures contracts would be purchased at a specific price per gallon regardless of the oil prices increasing or decreasing, he explained. He noted that when the City of Bethel first reviewed hedging fuel oil was \$.97 a gallon, whereas now fuel oil costs about \$1.80 a gallon. "The point is," he said, "that I think the state can pull off alternative energy and a \$3 cap via fuel hedging."

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REPRESENTATIVE RAMRAS stated his disagreement with Mr. Leinberger. He explained that he believes Commissioner Galvin lost over \$1 billion for the state when he tried to aggressively manage the state's money. He opined that the administration's staff doesn't have any business trying to sell contracts.

CO-CHAIR EDGMON suggested that Mr. Leinberger may want to speak with Ms. Kohler regarding what the Alaska Power Association encountered when it tried to hedge fuel prices.

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MR. LEINBERGER then turned to PCE, which was brought about many years ago during construction of several large projects in order to lower the cost of electricity to various communities. Although PCE was a balancing effort to do something for rural Alaska, it continually remains a challenge to get the legislature and the governor's office to recognize that consumers still benefit from the lower power costs of projects that were funded many years ago. The challenge, he identified, is that PCE seems to be viewed as a give-away program for rural Alaska. The legislature has moved toward a \$250 million program for alternative energy, most of which is being spent in rural Alaska. The aforementioned is a good method to remove some of the burden of PCE. However, the state does need to go farther, which comes back to AAG&T and thus the projects that make the most sense receive the funding, regardless of the location. The aforementioned, he said, is why he supports AAG&T.

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REPRESENTATIVE STOLTZE expressed frustration with (indisc.).

CO-CHAIR EDGMON added (indisc.).

MR. LEINBERGER clarified that he is aware of Representative Stoltze's support of PCE, but is trying to illustrate that AAG&T takes away all political argument out of the equation.

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CO-CHAIR MILLETT pointed out that PCE isn't a good energy plan and to expand it isn't appropriate. Although such action might be a short-term fix, the problem is long term. From an urban perspective, Co-Chair Millett said that her constituents understand the issues that rural Alaska faces, particularly when the prices spiked.

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DENNIS MEINERS (PH)\* Chaninik Wind Group\* Bethel, Alaska\* Discussed the energy crisis in rural Alaska. { related that the Chaninik Wind Group started about five years. He opined that it's inevitable that wind will be used for energy purposes. The group came together as an effort to lower costs, support each other, and build capability. The objective of the Chaninik Wind Group, he related, is to seriously displace fuel with wind for electrical and heat generation and possibly transportation. A baseline survey regarding how much energy is being used in the

areas has begun and provided some interesting information with regard to where the costs are occurring. Mr. Meiners then related his support of the Renewable Energy Fund, which he characterized as probably the most important thing the state has done for rural communities since PCE. He recalled that last year the legislature provided \$150 million to this program, which is a commitment that no other state has made. Furthermore, judging from the types of energy problems in the state, these investments have the potential to create value much greater than the money invested in the programs. The aforementioned is what the committee is concerned about, he opined.

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MR. MEINERS specified that the program is important for three reasons. He explained that a different source of money is being injected into the utility sector, and it's rearranging the utility structure by unleashing opportunities for innovation and competition that didn't exist. The dynamics of innovation and competition will drive the system to lower costs while creating new opportunities.

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CO-CHAIR MILLETT highlighted that HB 219 adds an economic aspect to the oversight of [alternative energy] projects in order to ensure that those projects are successful and don't increase rural Alaska's energy costs. Recalling when the renewable energy projects were going through the Legislative Budget and Audit Committee, there was testimony that the projects had no accountability. Therefore, the legislation before the committee attempts to include accountability and an economic aspect into all the energy projects prior to receipt of funds.

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MR. MEINERS said that is exactly what he's addressing. He then related his belief that there are four strategies that should be incorporated into the management of the program. These strategies, he opined, would strengthen the program and create value for the entire state above and beyond the investment. The components have to work together to achieve the aforementioned, he said. He further opined that AEA has good leadership and he supports Mr. Haagenson's efforts. The first strategy is to pick the right projects by selecting and evaluating those technologies that are thought to have the greatest overall

impact, which he indicated can be achieved by utilizing the cost benefit analysis. The second strategy is to educate and attract others. The aforementioned draws investors and increases the pool of money. The third strategy is to move from a funding agency to a fully engaged partner, which is important. If the grantees are successful and funds are provided to reach a specific measurable goal, that success increases the effectiveness of the investment. Therefore, the value of the investment is magnified. The fourth strategy, and perhaps the most important, is to advance the state of the art. This strategy probably creates the greatest value because there would be funding of a systematic progression of increasingly more efficient projects and effective ways in which to address with the energy problem. The aforementioned pursuit of knowledge results in breakthroughs that establish new standards, which can benefit millions of people while creating new jobs and funding for innovation. Mr. Meiners clarified that he's advocating, particularly in terms of small villages, [determining] how to get to the solutions that are necessary while making good decisions about the renewable energy fund that benefit the entire state. The aforementioned, he remarked, is an important obligation of the fund.

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REPRESENTATIVE STOLTZE related that he was struck by the viability of the project because it was tied to the state maintaining economic development. He indicated the need for affordable energy for the fisheries industry not just to survive but to sustain.

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GEORGE LAMONT, talked about the rising cost of fuel, which is over \$8.00 a gallon in his village. [Much of the testimony is inaudible.] He indicated the need for state assistance in the region. He mentioned that it now costs less to fly from Tuluksak than it does to take a motorboat. Mr. Lamont told the committee that in his village two generators run all the time, one of which is for the school. He indicated that it's a problematic and costly situation. He requested that the legislature help the area obtain renewable energy for the school system. He mentioned flooding in the area that was an emergency situation. In conclusion, Mr. Lamont maintained the importance of energy.

[5:16:10 PM](#)

LAUREN WILLIAMS (PH), Alaska Municipal League, informed the committee that his region covers 39 communities from the Bering Sea to the Canadian Border, which encompasses three Senate and three House districts. The communities in the region are rural and isolated, which results in a very high cost of energy. He acknowledged that transportation costs and the low demand for each community are contributing factors in the high cost of energy. Mr. Williams opined that AML wants to work with the legislature to find energy solutions across the state. In closing, he expressed the hope that the legislature overturns the governor's veto on the stimulus money in order to ensure that residents can better equip their homes to save money on fuel in the future.

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NORMAN AYAGALRIA, reminded the committee that many years ago his ancestors traveled the Kuskokwim River using a power boat that harnessed wind and, at times, tidal energy. He recalled being told stories by the elders regarding travel by sled dogs. Based on the stories from his elders, Mr. Ayagalria surmised that energy resources used by his elders required small amounts of hydrocarbons, such as oil, natural gas, and/or gasoline, although they required physical and mental work. Since moving to Bethel, he realized that he uses lots of stove oil to heat his home. Due to the high energy prices, he and his wife invested in a wood stove, which has proven to be a positive investment so far, although it requires many hours of maintenance and hard work. Instead of paying a \$300 heating bill each month, he is down to at least \$150 a month in the winter. Furthermore, he recently invested in a small wind energy system capable of delivering 500 watts. When there was enough wind to turn the turbine, it would charge at least four batteries. The aforementioned provided enough energy on the batteries to run his power tools, shed lights, as well as some [electrical needs] in the house. In terms of finances, he estimated that he has saved at least \$10-\$20 a month. He related that he also replaced his incandescent bulbs with [compact] fluorescent bulbs, which he estimated has saved at least \$10 a month. Moreover, he and his family turn off and unplug appliances when not in use, which saves another \$5-\$10 on electricity costs. He related that he also rides a bicycle in the summer, which saves at least \$30 a week. His goal, he relayed, is to ride his bicycle all summer in order to save at least \$1,000. "What does this all mean: it means that individual energy conservation adds more disposable income to

individual families," he specified. The aforementioned simple measures allowed his wife and daughter to recently travel to participate in subsistence activities, which hasn't been possible in the past. Furthermore, energy conservation provides a physical benefit, which he said he has experienced in terms of losing weight, gaining muscle mass, having more energy, participating in more family activities, and his family's quality of life has improved. He noted that it took three years worth of permanent fund dividend checks from himself, his wife, and daughters to invest in these systems and now they are finally paying off.

5:24:09 PM

ERIC MIDDLEBROOK, opined that the committee coming out to Bethel illustrates its willingness to work together with [the rural communities]. He related that although he is the vice mayor of Bethel, he is speaking on his own behalf. He first addressed the issue of the tank farm and opined that there isn't real competition as the residents are still paying a high price for fuel because the company says the fuel was delivered last year and it needs to sell all of it. However, Mr. Middlebrook opined that if there was competition, a competitor would purchase cheaper fuel on the world market and sell it to Bethel residents for less right now. He endorsed regulation of the fuel company since the Bethel area doesn't have a situation in which free competition or a free market can be achieved.

MR. MIDDLEBROOK then told the committee that PDC (Indisc.) Group is seeking a community with which to perform a pilot study for a natural gas delivery project. The idea is to purchase liquefied natural gas at market prices at Nikiski or the world market, deliver it by barge to Bethel where it would be stored as compressed natural gas, and then it would be delivered to the community. He informed the committee that liquefied natural gas is a fraction of the cost of petroleum products in terms of price per million British thermal units (Btu). The group made a proposal that was endorsed by the Bethel tribe and a pilot study grant was submitted to AEA, but AEA turned it down on what was said to be a technicality in the legislation. The grant funding for Phase I and Phase II of the project stated that no natural gas would be done in areas with a renewable resource. The wind is considered to be a renewable resource for Bethel. Although Mr. Middlebrook said he endorsed wind projects, he predicted it would be several years before Bethel would see any real benefit from something like [wind energy]. The [wind] systems in place now are achieving 25 percent penetration on electricity alone

and don't really address transportation or home heating issues, whereas the proposed liquefied natural gas project may be able to provide cheaper energy across the board for all facets of energy usage. If the legislation can't be adjusted such that the pilot study can be performed through AEA with the endorsement of local communities and leaders, then he expressed the need to put in place some other mechanism to review such an energy distribution system. The aforementioned would benefit all of rural Alaska. At the moment, the price of liquefied natural gas is low due to a market flooded with it and it's likely to remain that way for many years. If the price of petroleum decreases and the price of liquefied natural gas increases, rural Alaska would still benefit.

CO-CHAIR MILLETT inquired as to the amount of the funding request.

MR. MIDDLEBROOK specified that it was for \$750,000. He offered to provide the committee with the grant proposal submitted to AEA. He related his hope to bring it before the Bethel City Council, who he hopes will pass a resolution to endorse the project or a project similar in nature.

[5:29:45 PM](#)

RAYMOND PETE, informed the committee that he is a volunteer coordinator for the Berry Very Clean Fish, Moose Harvest, which is a yearly potluck to show appreciation for all volunteers that serve the Yukon Kuskokwim Delta. The potluck began in 2007. He emphasized that he, a legally disabled individual that still works, made a difference as can anyone. In 2008 donations decreased, which he attributed to the increased costs of heating fuel and gas. He stressed the need to place a cap on the cost of heating oil and fuel because it impacts everyone.

[5:32:42 PM](#)

JERRY DRAKE, Executive Director, Bethel Community Services Foundation, suggested that the way wind and solar energy is being marketed doesn't work, which he based on the fact that there aren't systems in (indisc.). An example of this was on the Anchorage evening news last week, which featured a gentleman who purchased a \$2,000 home solar water heating system. Mr. Drake opined that only the wealthy will be able to afford renewable energy for which there's a questionable payback period. He suggested research into the area of what off-the-shelf components are available that provide supplemental heat

alone. Supplemental heat wouldn't be intended as a replacement for the existing heating system in the home. Converting a home to complete reliance on wind or solar energy is very expensive and complicated. The aforementioned are project killers in rural Alaska. Mr. Drake opined that the appropriate combinations of off-the-shelf wind, solar, and (indisc.) that are inexpensive, reliable, and easy to maintain would result in an effective system. The target cost would be in the \$3,000-\$7,500 range with (indisc.) payback timeframe. If the state is unable to conduct such research, perhaps a competition with a cash prize could be offered. The aforementioned, he said, could be an excellent use of stimulus funding. (Indisc.)

CO-CHAIR EDGMON thanked everyone for hosting and attending. He then suggested that those who didn't have the opportunity to testify should feel free to speak with members after the meeting and/or submit written comments.

[HB 218 and HB 219 were held over.]

[5:37:59 PM](#)

#### **ADJOURNMENT**

There being no further business before the committee, the House Special Committee on Energy meeting was adjourned at 5:38 p. m.