

**ALASKA STATE LEGISLATURE
JOINT MEETING
HOUSE SPECIAL COMMITTEE ON ENERGY
SENATE SPECIAL COMMITTEE ON ENERGY
SENATE RESOURCES STANDING COMMITTEE**

Haines, Alaska
September 16, 2009
2:04 p.m.

MEMBERS PRESENT

HOUSE SPECIAL COMMITTEE ON ENERGY

Representative Bryce Edgmon, Co-Chair
Representative Charisse Millett, Co-Chair
Representative Nancy Dahlstrom
Representative Kyle Johansen
Representative Jay Ramras
Representative Chris Tuck (via teleconference)

SENATE SPECIAL COMMITTEE ON ENERGY

Senator Lesil McGuire, Chair
Senator Albert Kookesh
Senator Bert Stedman
Senator Bill Wielechowski

SENATE RESOURCES

Senator Lesil McGuire, Co-Chair
Senator Bill Wielechowski, Co-Chair
Senator Hollis French
Senator Bert Stedman

MEMBERS ABSENT

HOUSE SPECIAL COMMITTEE ON ENERGY

Representative Pete Petersen

SENATE SPECIAL COMMITTEE ON ENERGY

Senator Lyman Hoffman

SENATE RESOURCES

Senator Charlie Huggins, Vice Chair
Senator Gary Stevens
Senator Thomas Wagoner

OTHER LEGISLATORS PRESENT

Representative John Harris
Representative Cathy Munoz
Representative Bill Thomas
Representative Peggy Wilson
Senator Dennis Egan

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
05/29/09	(H)	Heard & Held
05/29/09	(H)	MINUTE(ENE)
06/17/09	(H)	ENE AT 5:00 PM Fairbanks
06/17/09	(H)	Heard & Held
06/17/09	(H)	MINUTE(ENE)
08/07/09	(H)	ENE AT 2:00 PM Kenai
08/07/09	(H)	Heard & Held
08/07/09	(H)	MINUTE(ENE)
08/26/09	(H)	ENE AT 5:00 PM Dutch Harbor

08/26/09 (H) Heard & Held
08/26/09 (H) MINUTE(ENE)
09/16/09 (H) ENE AT 1:30 PM HAINES

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
05/29/09 (H) Heard & Held
05/29/09 (H) MINUTE(ENE)
06/17/09 (H) ENE AT 5:00 PM Fairbanks
06/17/09 (H) Heard & Held
06/17/09 (H) MINUTE(ENE)
08/07/09 (H) ENE AT 2:00 PM Kenai
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08/26/09 (H) ENE AT 5:00 PM Dutch Harbor
08/26/09 (H) Heard & Held
08/26/09 (H) MINUTE(ENE)
09/16/09 (H) ENE AT 1:30 PM HAINES

WITNESS REGISTER

JAN HILL, Mayor
Haines Borough
Haines, Alaska

POSITION STATEMENT: During hearing of HB 218 and HB 219, related efforts to address energy in the Haines area.

ROBERT VENABLES, Energy Coordinator
Southeast Conference
Haines, Alaska

POSITION STATEMENT: During hearing of HB 218 and HB 219, discussed Southeast Conference's efforts with regard to energy.

JIM STRANDBERG, Project Manager
Alaska Energy Authority (AEA)
Department of Commerce, Community, & Economic Development
(DCCED)
Anchorage, Alaska

POSITION STATEMENT: During hearing of HB 218 and HB 219, discussed AEA's efforts in Southeast Alaska and reviewed some of the major projects.

ALBERT HOWARD, Mayor
City of Angoon
Angoon, Alaska

POSITION STATEMENT: During hearing of HB 218 and HB 219, discussed the impact of energy costs in Angoon.

AL DWYER, Mayor
City of Petersburg
Petersburg, Alaska

POSITION STATEMENT: During hearing of HB 218 and HB 219, related that Petersburg wants to have an electrical grid in Southeast and have cost controls.

HENRICH KADAKE, SR., Mayor
City of Kake
Kake, Alaska

POSITION STATEMENT: During HB 218 and HB 219, related the dire situation in Kake.

SUE LIBENSON
Haines, Alaska

POSITION STATEMENT: During hearing of HB 218 and HB 219, expressed the need to review all the alternative energy options, particularly those that don't impact salmon.

KATHLEEN MENKE
Haines, Alaska

POSITION STATEMENT: During hearing of HB 218 and HB 219, urged the committees not to provide blind support and open-ended funding to any and all projects in the name of renewable energy without consideration of Alaska's wild fish stocks.

SALLY McGUIRE
Lutak, Alaska

POSITION STATEMENT: During hearing of HB 218 and HB 219, expressed her opposition to the proposed Chilkoot dam.

TIM JUNE
Haines, Alaska

POSITION STATEMENT: During the hearing of HB 218 and HB 219, encouraged the development of a comprehensive energy plan and offered suggestions.

LISA LANG, Member/Spokesperson
Reynolds Creek Hydroelectric Project
Haida Corporation
Hydaburg, Alaska

POSITION STATEMENT: During the hearing of HB 218 and HB 219, discussed the Reynolds Creek Hydroelectric Project.

WARREN EDGLEY, Member
City Council
City & Borough of Wrangell
Wrangell Alaska

POSITION STATEMENT: During hearing of HB 218 and HB 219, discussed the relationship between the Alaska Canada Intertie and the Southeast Intertie.

ERNIE CHRISTIAN, Vice Mayor
City & Borough of Wrangell;
Chair, Energy Committee
Wrangell, Alaska

POSITION STATEMENT: During hearing of HB 218 and HB 219, discussed the Alaska Canada Energy Coalition.

ROB GOLDBERG
Haines, Alaska

POSITION STATEMENT: During hearing of HB 218 and HB 219, discussed Shubee Lake as the site of a possible hydro power project.

DUFF MITCHELL, Director
Cascade Creek, LLC
Juneau, Alaska

POSITION STATEMENT: During hearing of HB 218 and HB 219, discussed the need to pursue the AK-BC Intertie.

STEPHANIE SCOTT, Haines Borough Energy and Sustainability Coordinator
Haines Borough Energy and Sustainability Commission
City & Borough of Haines
Haines, Alaska

POSITION STATEMENT: During hearing of HB 218 and HB 219, discussed the commission's efforts.

ACTION NARRATIVE

[2:04:58 PM](#)

CO-CHAIR BRYCE EDGMON called the joint meeting of the House Special Committee on Energy and the Senate Special Committee on Energy and the Senate Resources Standing Committee to order at 2:04 p.m. Representatives Edgmon, Millett, Dahlstrom, Johansen,

Ramras, and Tuck (via teleconference) and Senators McGuire, Wielechowski, French, Stedman, and Kookesh were present at the call to order. Also in attendance were Representatives Harris, Munoz, Thomas, and Wilson and Senator Egan.

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

CO-CHAIR EDGMON 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."

[2:05:39 PM](#)

SENATOR KOOKESH welcomed everyone to Haines, the district that he and Representative Thomas serve. Senator Kookesh related that he and Representative Thomas believe that the future in rural Alaska is low cost energy. The aforementioned has resulted in much work in the area of hydro projects, of which there are eight in Southeast Alaska. The hydro project in Metlakatla is over 100 years old, he mentioned, and yet it has enough power to offer power for Ketchikan over the next couple of years.

[2:08:02 PM](#)

CO-CHAIR MCGUIRE, speaking on behalf of the Senate committees, thanked everyone for attending today's hearing. She then introduced her Senate colleagues.

[2:09:24 PM](#)

CO-CHAIR EDGMON then had the attending Representatives introduce themselves. He extended thanks to the Southeast Conference and the legislators from the area for scheduling this meeting.

[2:13:48 PM](#)

CO-CHAIR MILLET informed everyone that before the committee are two pieces of legislation, HB 218 and HB 219. She explained that after hearing that the state's energy agencies are spread throughout various state departments, HB 218 was introduced to

create a Department of Energy. A Department of Energy will consolidate resources and provide a one-stop shop for energy needs. The other legislation, HB 219, is cleanup legislation that implements recommendations from a recent report on HB 152, sponsored by Representative Harris, such that when renewable energy projects are funded, they actually come to fruition, reduce energy costs, and displace diesel. Co-Chair Millet then informed everyone that there is also draft legislation that has been developed by a stakeholders' group. This draft legislation is the beginning of an energy policy that will be introduced next session. She requested feedback on all the aforementioned measures.

[2:16:51 PM](#)

REPRESENTATIVE HARRIS noted that he worked closely with co-sponsor Representative Thomas on HB 152.

[2:17:47 PM](#)

JAN HILL, Mayor, Haines Borough, related that energy is an important topic in the Haines Borough. She noted that Haines and Skagway recently celebrated the opening of the Kasidaya Creek Hydro Project. She then told the committees that a year ago, Haines created an Energy and Sustainability Commission, which made the community more aware of energy uses, how energy could be used more wisely, and how the cost of energy could be reduced. The Haines Borough Assembly was pleased with the work of the commission and decided to extend it for a few months to continue its work. Mayor Hill related that the public process for the possible Connelly Lake Hydro Project will take place soon. She expressed the desire to review the options and determine which option will serve the needs of the Upper Lynn Canal the best in terms of cost and impact to the environment.

[2:21:23 PM](#)

ROBERT VENABLES, Energy Coordinator, Southeast Conference, paraphrased from the following written testimony [original punctuation provided]:

Southeast Conference is the State of Alaska's Regional Development Organization (ARDOR), the Federal Economic Development District (EDD) and the USDA Resource Conservation and Development (RC&D) Council for Southeast Alaska. Our mission is to help develop

strong economies, healthy communities and a quality environment in Southeast Alaska.

Southeast Conference was formed over 50 years ago in response to the region's need for improved transportation and an advocate for the ferry system. Since then, our member communities have worked through Southeast Conference on issues ranging from transportation, economic development, timber, fisheries, mining, environment, health care, tourism and energy. Our energy committee first gathered in 1997 as the Intertie Committee and produced the study in 1998 called the Southeast Alaska Electrical Intertie System Plan. That study has been the guiding document for the concept of a region-wide interconnected intertie system that would (in a perfect world) provide energy security and electrical redundancy for the communities of Southeast.

However, as construction costs continue to escalate and time passes, our focus is turned toward the resources at hand and the extreme need that still exists in many communities such as: Kake, Angoon and Hoonah. Many of our more urban communities are facing shortages in the near and foreseeable future as the demand for energy exceeds the capacity of current renewable resources.

But, Southeast Alaska has a plan. Each of our communities has short-term and long-term objectives that, if constructed, will meet the needs of our region. We have had significant achievements this past year due, in large part, to the work of the Legislature and the guidance of the Alaska Energy Authority. The Southeast Conference Energy Committee will be meeting directly after this hearing, and will have more in-depth reports to share on the current status and projected plans for each utility.

The most significant achievement in the region this year is the completion of [the Southeast Alaska Power Agency] SEAPA's Swan-Tyee Intertie. You will hear more on this from Mr. Dave Carlson, but this project has been long advocated by Southeast Conference. What we are seeing emerge is a stable supply of renewable resources and a network that can extend from Metlakatla, where there is already surplus power

generated and additional resources along the intertie route, to the community of Kake where there are no significant renewable resources to develop in a community that is economically devastated. Southeast Conference is working with SEAPA, IPEC [Inside Passage Electric Corporation] and the local governments and making significant progress on the Kake-Petersburg Intertie that will allow Kake to displace its diesel-generated power and enable Kake to be revitalized, both socially and economically.

[2:26:12 PM](#)

Other significant milestones for the region are the completion of 3 new hydroelectric facilities. [Alaska Electric Light & Power] AEL&P's Lake Dorothy Hydro in Juneau, AP&T's Kasidaya Creek Hydro in Upper Lynn Canal and the Falls Creek Hydro Electric facility in Gustavus.

We are particularly grateful for the state's investment of nearly \$17 million into renewable energy projects in Southeast Alaska. This will allow many of the most critically needed projects to advance, such as the interties from Petersburg to Kake and Metlakatla to Ketchikan (construction funds are still needed) and the intertie to Coffman Cove and Naukati (which should be completed next season), as well as generation projects such as the Reynolds Creek Hydro, Whitman Lake Hydro and a feasibility study for the Takatz Lake Hydro.

We are also appreciative of the important legislation that has passed (HJR 25, especially HB 152) and those still under consideration such as SB 132 (S.E. Energy Fund), SB 31 (renewable energy production tax credits), and HB 218 and HB 219 which are being discussed today.

Southeast Conference is extremely grateful for the support and guidance given by the Alaska Energy Authority. Their expertise has helped the region to make more informed decisions and build better projects. We are currently working with AEA and our local municipalities and utilities to update energy plans that have been in existence for many years and have, in some cases, become obsolete. Having a current

up-to-date Integrated Resource Plan (IRP) is key to understanding which projects truly need to be constructed and brought on line first. This will be a top priority as we develop an energy plan for the region and state.

2:29:42 PM

Another important project needing immediate funding is the development of a comprehensive energy plan for Hoonah and Chichagof Island. Each of the 4 communities on the island have energy projects underway to address short-term needs. Southeast Conference facilitated an island-wide joint meeting in Hoonah this summer that discussed the untapped potential that may exist around the communities of Hoonah, Pelican, Tenakee Springs and Elfin Cove.

One of the obsolete energy plans that has been abandoned is the intertie from Juneau to Hoonah. While technically feasible, a recent analysis of the proposed intertie showed the construction costs ranging between \$40-50 million. This coupled with the future costs for operations, maintenance and eventual line replacement made constructing this intertie (in one of the world's deepest channels) uneconomical.

As you can see by the attached FY 2010 Work Plan established by the Southeast Conference Energy Committee, there is much work yet to be done. But progress is being made and we hope that with your support we can continue to work toward continued success in implementing our shared vision to utilize Southeast's plentiful hydroelectric potential and reduce, to the maximum extent possible, the use of diesel as a primary fuel source for the generation of electricity.

MR. VENABLES then directed attention to the slide entitled "Southeast's Hydros = Bullet Line," which highlights the plentiful resources available in Southeast Alaska.

2:32:20 PM

JIM STRANDBERG, Project Manager, Alaska Energy Authority (AEA), Department of Commerce, Community, & Economic Development (DCCED), said that today he would discuss AEA's efforts in

Southeast Alaska and review the major appropriations projects. He noted that he and Representative Wilson have had some good dialogue about the Alaska-British Columbia (AK-BC) Export Intertie. Furthermore, the Canadian government has put forth a press release saying it will fund a backbone transmission line that would bring the robust transmission connect to within 60 miles of the Alaska border. This is likely to be a three-year project, on the Canadian side. There has been considerable discussion in Southeast Alaska regarding whether to connect via an export intertie to export excess hydropower. The backbone transmission connection is one more step from the Canadians that could result in the eventual interconnection. He opined that interconnection makes for a more robust network and under the right circumstances would allow export/import of power. The state's energy future, he remarked, is unknown. Furthermore, in the near term the electric systems in Southeast Alaska are coming under stress as more and more people connect to electric heat, and thus draw more current from the wires than originally conceived to be needed.

[2:35:52 PM](#)

MR. STRANDBERG then turned attention to the Petersburg to Kake Intertie Project. He explained that AEA has over \$4 million from several sources, one of which was a reappropriation of funds into the intertie project. Also, IPEC filed for a renewable grant from which it received an additional \$2 million for the project. He noted that AEA is working with the Department of Transportation & Public Facilities (DOT&PF) on this project due to the proposed road between Petersburg and Kake and the congressional easement. If the agencies cooperated, the road and the intertie could be constructed within the same corridor and save money. He related that AEA is working on finding a way to permit an intertie to Kake, which is in severe economic distress. The desire is to move as quickly as possible and arrange for an electrical intertie that is coordinated with road development.

MR. STRANDBERG then informed the committee that AEA was the grant conduit for the last segment of funding for the Swann-Tyee Intertie, in the amount of \$46.2 million. Over the last two years AEA has worked with SEAPA. The Swann-Tyee project is essentially complete and the hope is for interconnection in October.

[2:38:34 PM](#)

MR. STRANDBERG highlighted the power projects AEA is working on in Angoon and Hoonah. On the energy planning side, he recalled mention of integrated resource planning. There are two levels of planning, one of which is the higher level of energy plans that are being conducted by Mr. Haagenson, executive director of AEA. The other level of planning is the integrated resource plan in which AEA works with regions; the hope is to perform an island wide integrated plan with the serving utility, AP&T, for Prince of Wales Island. He noted that AEA is also engaged with the Southeast Conference on Chichagof Island. Furthermore, AEA is working with SEAPA, which is instituting an integrated resource plan for its region; the hope is that work with Metlakatla and Kake can be integrated in the SEAPA plan.

[2:40:08 PM](#)

MR. STRANDBERG returned to the issue of people converting to electric heat due to the high cost of heating fuel and relative inexpensive electric costs. The aforementioned is placing stress on the electric systems in the communities. Moreover, this trend is likely representing a change condition on the actual energy planning for the availability of hydroelectric power. Mr. Strandberg proposed that everyone remain vigilant on this emerging issue and that AEA report further as the situation develops. He noted that there was a substantive meeting on the Kake to Petersburg Intertie, which Senators Thomas and Stedman attended. Mr. Strandberg thanked both senators for helping to move the project forward.

MR. STRANDBERG then turned to the renewable energy grant program, for which there have been recent awards for the Metlakatla Intertie project. For the aforementioned, Mr. Strandberg tipped his hat to Representative Thomas. There was also an award for the Petersburg Kake Intertie and the Reynolds Creek project on Prince of Wales Island. He noted that Whitman Lake was awarded for Ketchikan Public Utilities and funds were put forth for the Takatz Lake Hydroelectric Power project, which is located in Sitka.

[2:42:33 PM](#)

REPRESENTATIVE RAMRAS asked for a show of hands of those folks who heat with the following forms of energy: electricity, diesel, natural gas, wood, and coal.

[2:44:04 PM](#)

REPRESENTATIVE JOHANSEN, referring to the press release from the Canadian Premier that guarantees about one-quarter of the funding for the proposed project, inquired as to when AEA is going to have information for the legislature to analyze.

MR. STRANDBERG related his plan to contact his colleague in British Columbia with Transmission Corporation, who is the business development director. He offered to report his findings to the committee.

[2:46:19 PM](#)

ALBERT HOWARD, Mayor, City of Angoon, began by informing the committee that the unemployment rate in Angoon is 87 percent. Last winter residents paid \$.62 per kilowatt hour (kWh) for electricity and over \$6 a gallon for diesel fuel. At times Angoon residents face the choice of heating their home or having electricity. He noted that the subsistence lifestyle of those in Angoon helps them manage through the winter. Mayor Howard stressed that [Angoon] sits in the middle of an available resource, but the city doesn't have the funds to utilize that resource. He recalled hearing that the project could be funded if the power cost equalization (PCE) funds were taken for 20 years. He lauded the City Council of Angoon as well as the city's staff, which are aggressively working to make Angoon a better place for the children and grandchildren such that there's more energy security. He opined that everyone in the region wants more energy security. Mayor Howard opined that by working together much can be accomplished.

[2:49:43 PM](#)

MAYOR HOWARD, in response to Representative Munoz, related his understanding that the Native corporation would comment on the Bear Creek project during its testimony.

[2:50:09 PM](#)

AL DWYER, Mayor, City of Petersburg, remarked that Petersburg would be lost without hydro power. He noted his agreement with earlier comments relating the need for Southeast Alaska to take care of its own residents before exporting any hydro power. Mayor Dwyer related that Petersburg wants to have an electrical grid in Southeast and have cost controls. Currently, wholesale costs total about \$.06 per kWh. The average homeowner pays about \$.11 per kWh, which he attributed to the fact that the hydro power is publicly owned by SEAPA. The City of Petersburg

wants to have control over the wholesale power rate and wants the public to own the hydro power. He noted that at least one developer has some good ideas that are environmentally acceptable. That corporation, however, is looking to make a dollar. Energy is so important to Southeast Alaska, he opined. Mayor Dwyer expressed the need to have a reserve fund for maintenance and to have the lowest energy costs to consumers in Southeast Alaska. In closing, he mentioned the need to help Kake get power.

[2:54:33 PM](#)

The committee took an at-ease from 2:54 p.m. to 2:59 p.m.

[3:00:31 PM](#)

HENRICH KADAKE, SR., Mayor, City of Kake, began by thanking the legislators for thinking of Kake and Petersburg when legislation moves through the process. He commented that the Kake Petersburg Intertie is moving along, albeit a bit slower than he would like. Mayor Kadake emphasized that the City of Kake is very distressed and every day of the year a family moves out of the community because they can't afford to stay. He related that he has lived in Kake for 65 years. Although the last 40 of those years the community has been working on renewable energy options to no avail, the City of Kake has gone further in the last few years with the help of the legislature. He stressed that he has worked hard for Kake, Hoonah, and Tenakee, all of which are dependent upon diesel. He highlighted that many residents don't have heat. He then noted his agreement with Mayor Dwyer regarding the fact that without subsistence many wouldn't [make it]. Mayor Kadake expressed the desire to fund the Kake Petersburg Intertie in the next couple of years before everyone has left. In conclusion, Mayor Kadake emphasized that addressing the situation in Kake is the top priority of the Southeast Conference.

[3:04:20 PM](#)

CO-CHAIR EDGMON announced that there will be a committee hearing at the annual Alaska Federation of Natives (AFN) convention. He then turned the gavel over to Co-Chair McGuire.

[3:05:12 PM](#)

CO-CHAIR MCGUIRE announced that at this time the committees would now take public testimony.

3:06:03 PM

SUE LIBENSON related that although she is currently a customer of Alaska Power Telephone (AP&T), for many years prior she lived off the grid with various alternative sources of energy. She explained that she decided to pay to have the electrical lines come to her house, which she felt good about since at the time AP&T was using hydro power from a source that had no salmon issues. However, now expanding hydro power for the communities is being considered. The aforementioned provides an example of reviewing potential conflicts with other users and community involvement. After living in Haines for 15 years, Ms. Libenson said she realizes that Haines "floats" on salmon. Furthermore, Haines is experiencing an influx of retirees due to the area's long salmon season. The good news is there are a lot of options in Southeast Alaska, particularly near Haines. However, with hydro power one has to consider the salmon and even how that may impact other Southeast Alaska communities. Noting that there are some alternative options that don't have conflicts with salmon, she expressed hope that AP&T will review all the alternatives and take caution to stay out of the salmon fisheries.

3:09:36 PM

KATHLEEN MENKE, speaking as a resident of Haines and small business owner, provided the following testimony:

I understand the legislature is considering setting up new energy authorities and funding mechanisms in order to support and provide incentives for renewable energy in Alaska. Fifty years ago, when Alaska's constitution was written and we became a state, Alaska's leaders had the vision and sensibility to provide to the people of Alaska ownership of Alaska's resources. At that time, and today, one of these primary resources was and is Alaska's wild fish stocks. So, my request to you today is to remember the people of Alaska and Alaska's wild fish stocks as you further deliberate actions within the state regarding the siting of and funding support for new hydroelectric projects in Alaska. I urge you not to provide blind support and open-ended funding to any and all projects, bad or good, cost effective or not, in the name of renewable energy without consideration of Alaska's wild fish stocks. Politics should not be

used to force unhealthy decisions on Alaska's economy and resources.

In the Upper Lynn Canal and in Southeast Alaska we have abundant choices for hydro power sites. The current site for which funding is being heavily lobbied by certain politicians and by Alaska Power & Telephone is for the Connlley Lake Hydro Project located in the sensitive salmon spawning grounds of the Upper Chilkoot watershed above Chilkoot Lake. Many people in our community are strongly opposed to a hydro project in this location. AP&T's application to [Federal Energy Regulatory Commission] FERC for this project in June received opposition filings from numerous organizations, including the Alaska Department of Fish & Game and the National Marine Fisheries Service. Recent studies by AP&T have indicated that a more cost effective option for the next hydro project in the Upper Lynn Canal to be Shubee Lake near Skagway. Here no roads and dams have to be built; here there is not the issue of impact to salmon. Therefore, I urge you to proceed with care and caution, delegating authority for funding and decision making regarding renewable energy projects in Alaska. We really need your leadership on this.

[3:12:51 PM](#)

SALLY MCGUIRE related that she lives on the Chilkoot [near] the site of the proposed dam. She encouraged the committee to drive through the area, which she characterized as an area where it's difficult to believe anyone would want to perform industrial development. Furthermore, the area is the basis of tourism in Haines, which is extremely important. She opined that any road in that valley to some such development would be detrimental, particularly to the bears that depend upon the salmon fishery. Furthermore, she questioned how a road could be built through all the salmon spawning beds in that area without impacting the salmon. She then related her understanding that there are many smaller scale hydro options in Haines that would fulfill its needs, which she understood to be about 2 megawatts a day. The Connolly Hydro Project is supposed to provide five to six times the current needs of Haines. At the same time, smaller towns in Southeast Alaska are desperate for help. Ms. McGuire explained that AP&T is proposing to build a huge dam on the side of a mountain, with the entire economy beneath. Furthermore, the dam is in an earthquake zone as it sits above a complex of faults.

She urged the [legislature] not to allow the construction of the dam.

[3:15:37 PM](#)

TIM JUNE related that he has followed renewable energy technology and installation for the last 25 years. He noted that he will provide the committee with copies of his testimony, which includes a "comprehensive energy plan." He encouraged everyone to think big as an energy plan is being developed because it's probably the most important matter before the state in the next 5-10 years. Although the state, he opined, is currently benefitting from billions of dollars of new revenue from increased oil taxes and the oil industry is reaping record profits, many Alaskans are struggling with fuel heating and electricity costs. Alaska's energy strategy must first include a strong commitment to creating and using profits from the state's nonrenewable resources in order to establish a sustainable, multi-faceted, renewable energy infrastructure that will last for the next 100 years. While the state recently adopted energy programs such as the home weatherization program, a comprehensive statewide strategy that will coordinate long- and short-term solutions still hasn't been developed. Mr. June emphasized that since energy switching usually takes 20-30 years to accomplish, it's in Alaska's best interest to begin immediately. He noted that currently, Oregon and Washington already have 900 megawatts of wind power online. Although Alaska has the highest wind resource in the nation, Alaska only has 1 megawatt of wind power online.

[3:19:10 PM](#)

MR. JUNE then turned to solar power, noting that he and his wife have obtained about 80 percent of their electricity from solar power for 20 years in Southeast Alaska. He related that Germany is the leader in solar power production; 8 percent of Germany's power is from solar. Germany accomplishes this and it receives less sunshine than Juneau. Mr. June stressed that because the cost of energy is so high in Alaska, not much sun is necessary to offset the price. He told the committee that Oregon State University has an energy team that has developed wave generators. The team has calculated that every three feet of coast line in Oregon can produce enough wave energy, 50 kW, for 10 homes. Alaska has 44,000 miles of coastline, and therefore he opined that Alaska has tremendous potential with wave energy.

[3:20:50 PM](#)

MR. JUNE, referring to his comprehensive energy plan, opined that energy solutions have to be funded. In order to accomplish the aforementioned, maximum return on the state's natural resources has to be obtained to fund the state's next renewable industry. For example, Norway has taken the same amount of oil out of the ground in the same amount of time as Alaska. However, Norway's permanent fund totals about 10 times that of Alaska's permanent fund. Norway taxes its oil at 89 percent of the gross. Alaska, on the other hand, spent two years arguing whether to charge 20 or 21 percent of the net. Mr. June encouraged the legislators to be bold and think big because the funds are necessary to produce renewable systems for the future. He then turned to public transportation, and predicted that electric cars will come online shortly. Therefore, as capacity is created, that capacity has to include the switch from gas fueled cars to electric cars.

MR. JUNE expressed his pleasure with the introduction of HB 218, and suggested that Alaska look to Washington and Oregon, states who have had such departments for a number of years. Furthermore, there should be an important cabinet-level position for the Department of Energy. He encouraged the committees to expand the weatherization and energy programs to include schools, municipalities, and businesses. Energy efficiency is the biggest bang for the buck and beats hydro, solar, wind, coal, and oil power. He complimented the [legislature] in getting the energy funds to Alaskans. However, Mr. June opined that a golden opportunity is being missed with renewable systems, for which he suggested creating a 30 percent rebate program. He explained that currently, the federal government is allowing individuals to have a 30 percent tax credit on investments in renewable energy systems for their homes. Most states match that grant. By Alaska not matching the grant, the state is passing on millions of dollars of federal funds. In Oregon, a \$25,000 home solar system costs the homeowner \$6,000 after the federal, state, and power company rebates. Furthermore, a \$25,000 solar system installed in a business costs the business owner \$4,000 after energy and tax credits. He pointed out that these are systems that will be in place for the next 50 years. If that path is chosen and the federal funds leveraged, the state will move ahead.

[3:24:12 PM](#)

MR. JUNE then turned to small scale systems. He related that North Carolina has made 500 wind anemometers to record yearly

data of wind availability. These wind anemometers are leased to individuals for \$100 deposit. He suggested that such a system be set up with the schools in the state in order to compile a database of micro wind maps. For an upfront investment of about \$300 for a recording wind anemometer, the state could be mapped within five years to determine where to set up wind turbines.

MR. JUNE then pointed out that BP Exploration (Alaska) Inc. builds solar panels. He suggested that the state take its royalty share and trade the oil for BP's solar panels at a greatly reduced rate. The solar panels could be made available to Alaskans at a much reduced cost. The aforementioned would be very helpful to the state's residents and businesses, he opined. Furthermore, partnering with the state's Native corporations would be helpful in terms of utilizing their ability to attract and qualify for federal dollars for renewable energy solutions. Mr. June then expressed the need to invest in developing renewable energy curriculum for K-12 because it's the future of those students. He also expressed the need to invest in research and development through the university. Green power, education, and jobs need to be fostered through the University of Alaska, which could be a leader in the country. The state, he opined, has so much to gain. Furthermore, Alaska is likely the only state in the country that has the funds to immediately address renewable energy in a big way. In conclusion, Mr. June said: "We all know when the oil runs out the oil companies are going to leave. We're going to be left with a flashlight and a match; I just want us to have the best flashlight on the block."

CO-CHAIR MCGUIRE, referring to Mr. June's suggestion for a 30 percent rebate, said that Alaska's challenge is that it doesn't have a state income tax. She informed everyone that there is legislation pending in committee for a production tax credit for renewable energy investments. With regard to electric cars, there is also legislation pertaining to them.

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REPRESENTATIVE RAMRAS said that he applauded the initiatives discussed, particularly investment in the university, but opined that Mr. June's suggestions cherry pick data points to paint a utopian society that's not affordable for a state that already has a difficult time sustaining its budget. For instance, in Germany there's a feed-in rate that generally attributes to a rising cost of all kilowatts. He expressed hope that everyone recognizes that different regions of the state are trying to solve different problems and that solutions with price tags in

the hundreds of millions of dollars aren't feasible in a state with an already strained budget. Moreover, the through put in the Trans-Alaska Pipeline System (TAPS) is declining by at least 6 percent due to Alaska's aggressive taxation policies. Norway's 89 percent tax rate is entirely different than Alaska's net profits tax.

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MR. JUNE responded that he is simply trying to offer possibilities and that the state is behind [with renewable energy solutions]. With regard to where the funds will come from, Mr. June reminded the committee that just a year ago the state had an energy rebate that totaled about \$780 million. Although that was nice for the residents of the state, he suggested that were those funds used to seed an energy fund to develop the proposals he mentioned, the state would be further along the road to energy independence. "We're pinching pennies, but at the same time we have to be creative and responsible for future generations," he remarked.

REPRESENTATIVE HARRIS thanked Mr. June for his ideas and suggested that he speak with Mr. Haagenson. Representative Harris then disagreed with the comments that the state isn't doing anything comprehensive, adding that the legislature has reviewed various possibilities over the past few years. The legislature's review led to the direction of Mr. Haagenson's position. He said that there is knowledge about the various renewable energy sources in the state, but he pointed out that any system/plan has to be economic and beneficial to people throughout the state for many years.

MR. JUNE acknowledged that the legislature has made tremendous gains in the area of renewable energy. Still, it's necessary to think outside of the box, he remarked.

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LISA LANG, Member/Spokesperson, Reynolds Creek Hydroelectric Project, Haida Corporation, informed the committee that the Reynolds Creek project is being directed under Haida Corporation, which recently partnered with AP&T. Haida Corporation has invested private funds totaling nearly \$4 million in this project. The project totals \$17 million, of which there is some state and federal funds. With regard to hydro power, she suggested that everyone should know what they're talking about because it's a sophisticated sort of

project. She noted that Haida Corporation went through the FERC permitting process and is ready to go. She then related that she is a fisherman who has a deep respect for the environment. However, she said that she's also a realist. After reviewing AEA's process last year, she went to the island to discuss how to move forward. The area needs plans and financing for the 11 organizations on Prince of Wales Island. She related that the community, the village, the corporation, and the city have gotten the Reynolds Creek project to its current status.

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MS. LANG reminded committee members that hydro power is excluded from the renewable energy legislation as it's no longer considered a renewable energy source. Ms. Lang requested, on behalf of Haida Corporation and Prince of Wales Island, that the Reynolds Creek Hydroelectric Project be included specifically in the renewable energy legislation. She expressed the desire to have federal funding for the project and a match from the state, especially after the federal government told her to go home to the state for funding. She alluded to the logistics and costs that face those living on Prince of Wales Island.

MS. LANG reiterated her respect for the environment, but emphasized the need for economic development in communities which requires energy. She characterized the situation as critical because no matter how low the rates are, without economic development communities [won't survive]. She then noted that she has received support from the Alaska Federation of Natives (AFN), U.S. Congressman Don Young, U.S. Senator Lisa Murkowski, and various other organizations. Ms. Lang urged the committees to take the message forward and provide communities with the ability to plan for their future. She also urged the committees to continue to support HB 152, the funds from which have been put to good use.

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CO-CHAIR McGUIRE reminded everyone that the legislature has unanimously supported a resolution to Congress requesting to include hydro power in the definition of renewable energy.

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WARREN EDGLEY, Member, City Council, City & Borough of Wrangell, relayed to the committees that the Minister of Energy for British Columbia has announced that it has accumulated \$404

million and will proceed with the Northern Transmission Line. The aforementioned, he opined, is good news. Without the Northern Transmission Line there is no opportunity for an Alaska Canada Intertie. Without an Alaska Canada Intertie, one can't rationally build a Southeast Intertie. Without a Southeast Intertie there won't be any significant hydroelectric development because that intertie and the connection to the North American power grid provides a market for all the power that can be generated. He told the committee that the City & Borough of Wrangell joined the Highway 37 Coalition and has discussed the development that will occur between Wrangell's border and Highway 37 in Canada. Currently, the Canadians are focused on building the Northern Transmission Line with the knowledge that there will be taps on that line that go to the West, which he opined is where the Alaska Canada Intertie comes into play. Mr. Edgley related his belief that the Alaska Canada Intertie is just part of the Southeast Intertie, which he recalled has to be a regional transmission organization modeled after BCTC or Bonneville. The responsibility of the intertie is to dispatch, purchase, and market power. The desire, he explained, is to form an organization like the Highway 37 Coalition in Alaska, a subject which has been discussed with Alaska's Congressional delegation.

CO-CHAIR McGUIRE related [the legislature's] willingness to work with the City & Borough of Wrangell in setting up the aforementioned organization.

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ERNIE CHRISTIAN, Vice Mayor, City & Borough of Wrangell; Chair, Energy Committee, explained that the City & Borough of Wrangell is in the preliminary stage of the Alaska Canada Energy Coalition, which is being modeled after the Highway 37 Coalition. He provided the committee with a brochure, presentation, press release, and contact information for the coalition. There are three goals of the Alaska Canada Energy Coalition. Firstly, it would provide affordable energy for all of Southeast and would be a catalyst to justify the Southeast Intertie. He pointed out that without a market, a 30-70 megawatt facility won't be built. With regard to the Southeast Intertie, Mr. Christian related that the Thomas Bay Power Project has the possibility of producing 130 megawatts of power between three different hydro projects. For perspective, he told the committees that Snettisham Hydroelectric produces about 78 megawatts of power. Therefore, the Thomas Bay Project will produce more megawatts than most of Southeast will use. If the

Thomas Bay Project is going to be constructed and funded, one must review the cost benefit ratio. He noted that it would likely take two to three years to connect the [Thomas Bay Project] to the Northwest Transmission Line.

MR. CHRISTIAN reminded the committees that back in 2006 \$3.2 million was appropriated by the legislature and was approved by Governor Murkowski. Those funds were to study, develop, and permit the line. However, some of those funds were reappropriated later on. Although some may say this project is premature, Mr. Christian opined that if work doesn't begin, it will never happen. He pointed out that the Lake Dorothy Project took 11 years to bear fruit. Therefore, the Alaska Canada Energy Coalition sent out over 200 e-mails to various entities from which over 40 responded and wanted to join.

MR. CHRISTIAN continued with the other two goals of the Alaska Canada Energy Coalition. He related that the project would bring short-term and long-term well paying jobs to Southeast and would promote economic develop in Southeast. Furthermore, this project would provide up to 3,000 megawatts of power to the green North American grid. [The Southeast Intertie] has the capability of producing up to 3,000 megawatts of developable power. He noted that there is a report available regarding the energy that's available in Southeast Alaska, particularly hydroelectric energy. The report doesn't address the other forms of nonrenewable energy that could be produced. He noted that within Wrangell there are six potential hydro projects and possible geothermal projects that could be developed. At this point there's no incentive to develop the aforementioned hydro power because there's no market for it. Therefore, the Alaska Canada Energy Coalition, with a tiered membership, is a step forward, he remarked. He expressed hope that by January or February, the coalition will come before the legislature.

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ROB GOLDBERG related his belief that establishing a Department of Energy is critical for Alaska's future. Statewide renewable energy should be used as much as possible. He mentioned his excitement with regard to the Chakachamna Lake Project, which seems to be a project that could provide power from Homer to Fairbanks. He indicated his support of the state helping [to fund] the Chakachamna Lake Project. With regard to HB 219 that addresses the criteria for funding renewable energy projects, Mr. Goldberg opined that one must consider not only the power

produced by the projects but also the habitat and community issues.

MR. GOLDBERG told the committee that he has been a planning commissioner in Haines for the past seven years. As a planning commissioner, he is charged with finding creative solutions to the problems facing the community. Ideally, those solutions should promote harmony and the best long-term interests of the community, he opined. Recently, the communities of Skagway and Haines have faced a problem in the winter months when folks use electric heaters to augment their heat during very cold spells. However, in such situations the Goat Lake Hydro Project isn't capable of providing the power for both communities, and thus AP&T has to use its diesel generators to carry that load. The aforementioned has caused AP&T to review an alternative storage hydro project to run in the winter months in order to avoid the use of diesel. Since 1981, the Connelly Lake Hydro Project in the Upper Chilkoot has been considered. Due to the opposition to this project, Mr. Goldberg related that he took it upon himself to find a creative solution and avoid another community battle in Haines. None of the sites he reviewed had anywhere near the power potential of Connelly Lake until he received a newer USGS map which showed a mile-long 300 foot lake, Shubee Lake, that wasn't noted on an older map. He estimated that Shubee Lake has 78,000 acre-feet of water in it, which offers tremendous hydro potential.

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MR. GOLDBERG informed the committee that he ran some calculations and provided his findings to AP&T. He told the committee that he has been working with the local manager [of AP&T] regarding ways to develop the Shubee Lake hydro site most efficiently. Although AP&T is still considering the Connelly Lake site strongly, Mr. Goldberg expressed concern with the Connelly Lake site because the salmon habitat in the Upper Chilkoot is some of the most productive in all of Southeast Alaska. The proposal for Connelly Lake includes 10 miles of road and a 575 foot long dam, which would require about 60,000 cubic yards of material to be brought in or extracted on site. "I don't see how these facilities can be built without disturbing the salmon habitat," he opined. He explained that there have been studies that show turbidity in a sockeye salmon lake causes the zooplankton levels to decrease, such a decrease means that there's less for the young salmon to feed on and the salmon run is lost. He related that years ago there was a disturbance in the Chilkoot when a road was put in and a clear

cut was done. Some years later, there was a big crash in the Chilkoot salmon run. Since then, the road has mostly been consumed by the Chilkoot and the salmon runs are returning. Mr. Goldberg expressed his excitement to discover the Shubee Lake site, which he didn't believe had any habitat issues and doesn't require a road or dam to be built. The Shubee Lake site would be a siphon project, much like AP&T's Goat Lake Project. He expressed hope that AP&T would put forth effort in trying to develop the Shubee Lake site. Mr. Goldberg, turning to the legislation before the committees, stated his hope that habitat and community issues will be considered along with the power potential of proposed sites. He offered to provide his comparative analysis of the Connelly Lake and Shubee Lake sites.

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DUFF MITCHELL, Director, Cascade Creek, LLC, began by highlighting that the state has a wide variety of energy sources, terrain, and needs. He suggested that Southeast Alaska has the most diversity between the haves and the have nots. For instance, there are urban communities that received subsidies in the past that now have \$.06 wholesale hydro power rates while 40 miles away a Native village is using expensive diesel. Mr. Mitchell thanked the legislature for its support for hydro power as the legislative resolutions sent a loud message to Congress that Alaska is serious about renewable energy. The state's goal of 50 percent renewable energy by 2025 is an aggressive goal that he likes.

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MR. MITCHELL, in response to Representative Johansen, explained that Cascade Creek, LLC, is a member of the Alaska Independent Power Producers Association, which consists of nine Alaskan companies developing power, primarily renewable power. He clarified that he is only testifying on behalf of Cascade Creek, LLC, not the association. Returning to his testimony, Mr. Mitchell informed the committee that Cascade Creek is energy agnostic, although it's in the renewable side. Cascade Creek recognizes Alaska's diversity and that the bullet pipeline is essential for the Railbelt. He submitted that the AK-BC Intertie is the bullet line for Southeast Alaska. Mr. Mitchell said that although he appreciates what's happening in the villages and the need to take care of Alaskans first, he opined that building small hydro power plants with a cost of \$.30-\$.40 [per kWh] doesn't make sense when other communities pay \$.06-\$.08 per kWh. In order to achieve economies of scale, larger

hydro power resources need to be developed in an environmentally sound manner. The AK-BC Intertie provides a market for full utilization of its hydro power resources and allows excess kilowatts to be put in the North American market. The aforementioned could provide a small help to America and sending the energy through the AK-BC Intertie would spread the maintenance and overhead costs over a larger amount of energy. Therefore, the AK-BC Intertie would economically manage the risk for the Southeast Alaska Intertie. Furthermore, many years ago Public Law 106.511 authorizing \$384 million, with a 20 percent state match, for the Southeast Alaska Intertie was passed. Mr. Mitchell submitted that there has never been a better time to approach Congress for infrastructure funds that would allow residents of Southeast Alaska to have cheap energy. The legacy, he opined, is valuable, particularly considering the longevity of hydro power plants. Mr. Mitchell then suggested that the state use the windfall it received when oil was \$140 a barrel to construct renewable energy systems on the infrastructure [provided by the aforementioned funds]. The U.S. Department of Energy predicts that by 2015 oil will be \$112 per barrel, which he opined is a conservative estimate.

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MR. MITCHELL reminded the committees that Juneau was one of the first communities to use hydro power. He highlighted Treadwell mine's heated swimming pool and the 18-mile electrical line run from Douglas to Mendenhall Glacier in 1914 to build Nugget Creek. Mr. Mitchell said that [Southeast] Alaska is blessed in the state's natural resource to create an industry, perhaps green collar jobs, and other industries. He then returned to the AK-BC Intertie, which is only 65 miles from Wrangell at this point. In the middle of those 65 miles is a hydro power plant, and therefore only about 26.8 miles to the border and 35 miles to this other hydro power plant. In closing, Mr. Mitchell thanked the committees for listening and expressed hope that they come back with a plan. He noted that Alaska is one of the last states not doing net metering, which he recognized has positives and negatives. Alaska is also one of the last states with a renewable portfolio standard. He opined that a fourth renewable portfolio standard isn't necessary and the 50 percent target by 2025 is good. He said he looked to the leaders of the state to lay down the foundation for energy.

[4:09:13 PM](#)

REPRESENTATIVE DAHLSTROM inquired as to who owns Cascade Creek.

MR. MITCHELL answered that Cascade Creek is a private company that's owned by Kake Tribal, Tollhouse Energy - a company out of Bellingham that owns about 80 percent, an anesthesiologist in Anchorage, as well as an assortment of smaller investors. He noted that the majority of the directors of Cascade Creek are Alaskans.

[4:10:13 PM](#)

STEPHANIE SCOTT, Haines Borough Energy and Sustainability Coordinator, Haines Borough Energy and Sustainability Commission, City & Borough of Haines, explained that the Haines Borough Energy and Sustainability Commission is a nine-member commission that was authorized by the Haines Borough Assembly about a year ago. The notion was that the commission would promote energy conservation and efficiency. "We take very seriously the idea that the least expensive unit of energy is the one that you don't use," she related. The commission, she further explained, is a cooperation of tribal organizations, local utilities, the Haines Borough's planning commission, an assembly member, and members at large. The commission has taken on the task of helping the City & Borough of Haines reduce its energy consumption by 5-7 percent. One of the things that AEA promotes is that conservation is the first fuel, which is something that everyone can do now. She provided the committees with a compilation of the commission's achievements, including the fact that Haines led the region in terms of those participating in the Home Energy Rebate Program. She noted that the commission has implemented a weekly radio show, Energy Talk, during which there is discussion about things that can be utilized in one's own home. She pointed out that the unnumbered work draft discusses initiating and supporting a program to educate state residents regarding the benefits of energy efficiency and conservation. The aforementioned is so important and must be an ongoing effort, she opined.

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REPRESENTATIVE RAMRAS inquired as whether Ms. Scott would support energy conservation being a mandatory curriculum in Alaska's schools.

MS. SCOTT replied yes. She then highlighted that Haines has looked into replacing its street lights with LED lights. However, it was discovered that 90 percent of Haines' 250-watt street lights are on state-owned and maintained roads and DOT&PF

won't allow the installation of LED street lights on those state-owned and maintained roads. The DOT&PF says LED lights aren't allowed because they don't meet a certain standard of illumination. She explained that LED lights can't be measured by the same standards as incandescent or high-pressured sodium lights, and therefore there's a disconnect between the measurement standards and LED lights. She pointed out that she found it curious, though, that the [city and borough] can remove lights from state-owned and maintained roads. In response to Representative Dahlstrom, Ms. Scott agreed to provide the committees with the information she has on the matter of LED street lights.

[4:17:34 PM](#)

CO-CHAIR McGUIRE remarked that she would work with Ms. Scott on [LED lights] as Anchorage is reviewing that possibility as well. Co-Chair McGuire thanked everyone for their hospitality and announced that those who have not yet testified should submit their testimony in writing as the committees must adjourn.

[HB 218 and HB 219 were held over.]

[4:17:58 PM](#)

ADJOURNMENT

There being no further business before the committee, the joint meeting of the House and Senate Special Committees on Energy and Senate Resources Standing Committee was adjourned at 4:18 p.m.