

MINUTES

PLANNING COMMISSION / COMMITTEE OF THE WHOLE CITY AND BOROUGH OF JUNEAU Michael Satre, Chair

May 15, 2012

I. CALLED TO ORDER

Acting Chair Watson called the meeting of the City and Borough of Juneau (CBJ) Planning Commission (PC)/Committee of the Whole (COW), held in the Assembly Chambers of the Municipal Building, to order at 5:45 p.m.

Commissioners present: Karen Lawfer, Jerry Medina, Nathan Bishop, Benjamin Haight, Marsha Bennett, Nicole Grewe, Dennis Watson

Commissioners absent: Dan Miller, Michael Satre

A quorum was present.

Staff present: Greg Chaney, CBJ Community Development Department (CDD) Acting Director; Benjamin Lyman, CDD Planner

Others present: Carlton Smith, Assembly Liaison to the PC; Scott Willis, Power Generation Engineer, AEL&P

II. REGULAR AGENDA

Review the Comprehensive Plan (Comp Plan) – Chapter 6: Energy

Mr. Lyman stated that Scott Willis with AEL&P is present to answer questions of the Commissioners, and to explain the energy and electricity situation in Juneau. This is a review process of the Comp Plan with the intent to update items that are out of date and incorrect, omit Implementing Actions (IAs) that are complete, or whether some policies might be changed. He stressed that the intent is not to re-write the entire Comp Plan. Chair Watson said they would review the Comp Plan by going Commissioner-by-Commissioner to obtain their individual higher-level concerns on Chapter 6 versus via page-by-page like they have previously been doing. Before that takes place, he requested Mr. Willis to provide an overview.

Mr. Willis said AEL&P worked with staff and the PC during the 2008 Comp Plan update, and he appreciates being invited back. In terms of the situation with electric energy in this community in terms of how things have changed, and what is different since 2008, they completed the development and brought Lake Dorothy Phase 1 online. This is significant because it provides additional electric energy to the community. In the spring of 2008, they had the avalanche that downed the Snettisham line, and many people started focusing on the issue of energy and its cost to the community. Since that time, they had another smaller avalanche in 2009, but they spent a lot of time and money strengthening to protect the Snettisham line against future avalanche damage since then. Although there are no guarantees, they have an aggressive program of

forecasting to mitigate avalanches. He explained that they shoot down avalanches in small increments so they don't come down as large ones. They also spent \$2 million a couple years ago to protect one structure on that line, and they have plans to protect two more this year at a cost of about \$3 million so there is quite a bit of effort being spent to strengthen and make the Snettisham line more reliable. One of the towers knocked down at Snettisham in 2008 and again in 2009 was removed so it's not there to fall down anymore. He believes the Snettisham line is now more secure than it was before, but it would never be absolutely 100% guaranteed never to fail because it is a long transmission line that runs through rugged territory.

AEL&P received approval from the Regulatory Commission of Alaska (RCA) to establish an experimental rate for electrical vehicles for a small program limited to 10 folks. All electrical utilities in the country feel as though such vehicles are going to become more popular, and therefore AEL&P wanted to participate to understand what it takes to serve them. Those other utilities provide discount rates of electricity for people who charge vehicles, as well as some discounts toward charging stations installed at those homes. The utilities meter this use separately, and then request that customers participating in the program report their mileage each month/year to gauge how much electricity they have actually used. This allows them to determine whether electric vehicles would have to be charged overnight, during the day, and so on.

He provided a handout of two graphs, with the first one titled Juneau Area Energy (1% growth). He explained that the cost of diesel fuel is much higher now before the spike in 2008, so their concern is that the electric supply now is 99% hydro through AEL&P and 1% diesel for this community, but diesel is AEL&P's only backup option. Therefore, when AEL&P experiences problems such as an avalanche, they have to fall back to diesel, and therefore as the cost of diesel increases and so does the cost of the backup power to customers. Another reason this is significant is because it has historically been much cheaper to heat homes with fuel than with electricity, so most of the homes and businesses in town are heated with fuel, with about 1/3 of them using electric heat. However, the price of heating fuel has increased so it is just about even with the price of electricity now, and in the future if the price of heating fuel continues to rise there would be more financial incentive for customers to switch from fuel to electric heating systems. The first graph demonstrates this, which compares demand for electricity (in red) to hydro resources (in blue) starting from 1970 in Juneau when they had the Salmon, Annex, and Gold Creeks hydro plants online, which is when those small plants generated sufficient electricity for a much lower demand. Snettisham Phase 1 went online in 1973, which provided more hydro capability than they had demand so they had surplus energy. When the resource is greater than the demand they have surplus energy, and when the demand is greater than the resource they have a hydro deficit, which is when they enter into a diesel situation. Snettisham Phase 1 lasted until 1985, and there was a tremendous growth in town during the 1980s when many homes were constructed, so they experienced a huge load growth. Snettisham Phase 2 came online in about 1990, which is when they went back to a surplus situation and started selling interruptible energy to dual fuel customers and cruise ships that lasted until around 2006. Lake Dorothy Phase 1 came online at the end of 2009 so they once again had surplus hydro, which is when Greens Creek was provided surplus energy (dashed blue line denotes Greens Creek's demand). Therefore, depending upon how loads grow, they might need Lake Dorothy Phase 2 in 2030 or so if they were to continue to have this mild 1%/year load growth that they have witnessed over the recent past.

The second graph titled Juneau Area Energy (all electric heat and vehicles) displays a scenario of energy demand that if over the next 10 years every home, business, and vehicle heated or operated with fuel switched to electric energy. This would be astounding growth that would quickly outstrip AEL&P's hydro resource, so those (the light blue lines) would be made up in diesel. If AEL&P picked up all the heating fuel use in town their loads would more than double. They have Lake Dorothy Phase 2 still pending, but even if it came online with this scenario it would be relatively a small increment if this were to happen because there would be a huge deficit that would have to be made up in diesel fuel all the time. This would force them from being a utility that is 90% hydro and 1% diesel to being 70% hydro and 30% diesel, which would make the electric rates much more sensitive to the cost of diesel fuel. He is fearful of this because he realizes that some people believe they are blessed with an abundance of hydro resources in Southeast Alaska, which they are, but he stressed that that resource is precious, not unlimited. There are other projects that could be brought online after Lake Dorothy Phase 2, but those would be more expensive to develop than the projects they have already constructed, including that they would have a greater impact to rates than the 20% rate increase they just had with Lake Dorothy Phase 1 coming online. It noted that this type of situation is mentioned in Chapter 6 - Energy in the Comp Plan, and therefore he wanted to provide the PC this background.

Mr. Haight stated that power at certain times drives them to exceed AEL&P's hydro capacity, which forces them to operate on diesel for brief periods of time, and therefore he asked if this relates to the 99% hydro and 1% diesel situation. Mr. Willis said it does somewhat, explaining that AEL&P's hydro system has always been capacity rich and energy poor, e.g., they have a total installed capacity in their hydro system of about 90 megawatts (MWs), and the all time system peak is on the order of 70 megawatts (MWs) so they have excess capacity. Where they would get into a capacity crunch is if, e.g., they lost Snettisham. They have wound up being short of energy though when they have had to supplement hydro with diesel during dry years where they have drained the lakes down so far that they ran out of energy in the spring before the snow started to melt, so they had to supplement during those times with diesel, but not for capacity reasons.

Mr. Haight stated that other hydro-based communities he has worked in have also experienced a 7% incline in conversion to electric heat, which parallels the increased cost of heating fuel. Mr. Willis said AEL&P's loads were up 2.5% last year, and therefore they are not yet reaching a 7% conversion to electric heat. When there is surplus hydro that typically bothers people because they have to pay for the entire hydro project even though they are only using a portion of it, so if the utility sold those kilowatt hours (kWh) it would to spread out the fixed cost to reduce customer rates. Some communities in Southeast Alaska are looking at a long-term surplus to sell more kWh, so they are actually promoting electric heat. AEL&P has not done so because they know that surplus could be depleted more quickly than they might want, which is possibly the reason why this community has not experienced much cross over to electric heat from fuel. Most of the switch over to electric heat mainly takes place in Juneau when people contemplate replacing fuel boilers. However, many are unsure about the future cost of fuel so they tend to be more comfortable with electricity being more stable, which is when some are choosing to switch to electric boilers. Mr. Haight said the recently published Integrated Resource Plan (IRP) mentions trying to integrate Southeast Alaska to a grid system. Mr. Willis said AEL&P supports the planning that Southeast is trying to do as a region, although most communities still have separate systems because many utilities are not interconnected. However, as they look to the future to become more interconnected by seeking grant funding to develop energy resources in

the region, he thinks that would be good. The draft IRP out now doesn't really push interties; rather it states that Southeast Alaska needs to promote biomass heating using wood pellets. There is a lot to be said for that if they had a big push to promote it, and help fund installation of biomass heating systems, e.g., like Sealaska. If so, then AEL&P wouldn't have to meet the low growth of fuel switching to new electric generation if people instead switched from fuel to wood pellet systems. Mr. Haight asked how effective AEL&P has been with being more progressive in trying to simulate better demand control among customer loads. Mr. Willis said his boss from AEL&P would probably respond by saying that they are in a wonderful spot compared to other utilities because they have positive control over 20% to 25% of the demand, which includes Greens Creek. This means that AEL&P is able to turn on or off certain customers to match their hydro resource, especially during unexpected dry periods when they don't have quite as much hydro to meet the demand. In terms of the non-Greens Creek load, they are able to switch off some dual fuel customers such as the Princess Cruise Lines and certain water heaters on a moment-by-moment basis. It is possible that AEL&P might be able to institute additional aspects to stimulate more efficient use of energy with their customers by encouraging individual customer load control. This might consist of installing devices in houses for customers to program, e.g., to assist them in limiting their use electrical use. If they were to do so, it would reduce the peak loads and thereby save money for the entire utility system. Mr. Haight said he recalls that the New England utility previously promoted assisting customers to purchase lower energy florescent lighting devices when there were rapid technical changes. He asked if AEL&P has contemplated doing something similar to better control the electric load or buy back some of that demand. Mr. Willis said they have conducted studies and written plans about this type of idea. He explained that AEL&P is economically regulated by the RCA who approves their rates, and they only allow AEL&P to recover rate-certain expenses. If the RCA were to allow them to recover costs by helping customers to upgrade to more efficient heating or lighting systems, which many regulatory commissions in other jurisdictions do, it might be different. Other utilities, i.e., generally stated that a megawatt (MW) MW saved is a MW constructed, and utility investing in saving MWs is considered as being an investment just like building a new power plant. In addition, some regulatory commissions have stated that they do not want to incentivise utilities to build more power plants to gain a greater return on their investment; rather they choose to recap investments through conservation and he sees RCA starting to move in that direction. Once AEL&P is allowed to recover costs through rates, they would want to pursue doing so much more diligently.

Mr. Bishop said Mr. Willis indicated that the problems are a matter of energy, not capacity. He asked if AEL&P explored the potential for pumping up water storage at Lake Dorothy or at Snettisham during times of high capacity to increase energy in a meaningful way. Mr. Willis said that would not happen because it takes more energy to pump up water to increase capacity than they get from letting it flow back down to generate, so pumped storage always ends up costing energy. Pumped up water storage is used in a number of places in the Lower 48, although there are always financial consequences. In the Lower 48, at peak times during days when they experience the highest loads, they still have to have all the normal base load generation on as well as the next segment of generation. Therefore, energy during peak times is very expensive, and then overnight when everybody heads to bed and the load decreases is when they have some plants that are not running at full capacity that produce inexpensive energy. The idea is to buy storage energy cheap at night to pump up the water, and then generate during the day when they could sell it for a lot more than they bought it for. This has an economic ramification that makes sense, but it is always at the expense of energy. AEL&P's system is at 100% hydro, which runs 99% of the time so they don't have any difference in the cost of

generation, which is whether it is at 8:00 a.m. or 11:00 p.m., and therefore there is no financial advantage to pump up overnight to generate during the day. Mr. Bishop said if energy is the issue, thermal storage at nighttime for heat sources is not really much of a solution for this community either. Mr. Willis said they want to be sensitive in maintaining peaks at a moderate level without sharp spikes because that causes additional investment even though it doesn't use more energy.

Mr. Medina asked if AEL&P is able to sell excess kWh outside their service area. Mr. Willis explained that the RCA identifies AEL&P's geographic area where they are required to serve customers with electricity. When they had an opportunity to sell Snettisham and Lake Dorothy surplus energy to Greens Creek, it was outside their service territory so they modified AEL&P's tariff with RCA to include that mine. AEL&P should have a wholesale power agreement to sell to other entities, but they have not done so in the past just because they have not yet had the opportunity, but he thinks that is possible. Mr. Medina said in regards to the intertie to Hoonah a few years ago, it is his understanding that due to AEL&P's tax-exempt financing and the Two County Rule, those prohibited AEL&P from providing power to that community. Mr. Willis said there are obscure twists in the laws that prohibit AEL&P from extending too far outside their service jurisdiction.

Ms. Lawfer asked if AEL&P takes into account when new industries enter the community in relation to peak energy loads and critical mass. Mr. Willis said they have not yet reached critical mass, so as new people, companies, businesses, or industries move into Juneau AEL&P would have available power for them. It's not until they approach the Dorothy Lake Phase 1 resource line on the first graph, which is when they might need to generate a small amount of diesel energy or start planning on bringing another project online. Even so, as energy loads grow in town due to an increase in population, they would take kWh away from Greens Creek to serve the community. If the community continued to have 1% growth, they would have another 20 years before they would reach that point, so they are in good shape right now. Ms. Lawfer asked if any other cruise ship entities are considering purchasing surplus energy from AEL&P. Mr. Willis said AEL&P's entire surplus is committed.

Mr. Bishop asked which of the two AEL&P graph scenarios they are planning towards. Mr. Willis said he didn't provide the PC the Capital Move Load Forecast, so they have an entire range of possible situations that could include losing some load, current circumstances continuing on, or having an aggressive load growth with fuel switching systems. He explained that AEL&P has surplus now so they have bought a little time if loads were to take off like the electric heat conversion scenario on the second graph, and then they would have to meet that additional load using diesel generators until they could bring a new hydro project online, which takes seven to 10 years to plan, permit, and construct. Mr. Bishop stated that Juneau has an aging heating infrastructure, so many homeowners are going to be upgrading their heating systems. This is especially true if they are able to do so for \$.70 to the dollar if they switch to a heat pump scenario, or because fuel prices are going to continue to climb then electricity is going to be the other preferred energy solution. He believes this would be difficult to plan for, but waiting until an actual spike is experienced doesn't seem to be the solution. Mr. Willis said if AEL&P witnesses a rapid increase in load, they have the option to move ahead on the Lake Dorothy Phase 2 project. They are also in the process of permitting a new back-up diesel plant, which he thinks is going to be a more efficient than the power plants they have now. If they had to have a small amount of diesel generation to cover low growth until they are able to bring the next hydro project online, which they could do so more economically than with the existing units, but

they would have to witness several years of a very high load growth prior to making a major investment in the new plant.

Chair Watson asked Mr. Willis to describe the preferred processes for permitting a small power plant versus a large hydro plant. Mr. Willis said the Federal Energy Regulatory Commission (FERC) developed a process for permitting energy projects because they regulate all falling waters in the United States. This requires environmental studies to be conducted, and other agency interaction, so FERC receives all that data to make permitting decisions. The resource agencies provide fairly strong recommendations about the method in which projects are constructed or operated to minimize impacts to fisheries, wildlife, and the environment, which FERC oversees. This encompasses several years of field studies to be performed by the agencies, which are aspects that are taken into consideration when they prepare the Environmental Impact Statement, so the FERC permitting process takes five to seven years. Chair Watson said the CBJ Lands and Resources Department developed a plan that would soon be reviewed by the Public Works and Facilities Committee (PWFC) for 600+ new homes in Juneau, and he knows staff has worked with AEL&P during that planning process. At the same time, the City is working on a the 16B dock project that includes constructing two new cruise ship floating ramps with power hookups. He explained that Mr. Willis said AEL&P is somewhat tapped out on surplus power, so he asked how these new projects might impact AEL&P. Mr. Willis said he believes it would stretch AEL&P, although he would have to review the specific data to determine what impact 600+ new homes would have, but he doesn't know if AEL&P would use up the entire Lake Dorothy Phase 1 surplus, although they would use up a great portion of it. As the City constructs new cruise ship floating ramps and rehabilitates docks, it would be a good idea to leave the potential for an electric connection because Greens Creek has a finite mine life. Therefore, if that mine is no longer functioning in the future, it would be nice to have other surplus customers when AEL&P has it, and then pull it back when they don't. Even though today AEL&P might not have surplus energy for them, they might in the future. Chair Watson said the National Atmospheric Administration Association is using seawater for ground source heat pump systems, and he asked if this is having much of an influence upon electric generation. Mr. Willis said AEL&P recognizes that their hydro resource provides a tremendous benefit to the community, so they want them to use it as efficiently as possible because it is valuable and precious. Ground source heat pump systems are much more efficient than electric resistance heat, so if people could be motivated to consider installing heat pumps rather than electric resistance heat it would significantly change those graphs that he handed out to the PC. He explained that the utility in Sitka has a demand for energy that exceeds their hydro capacity, so they currently have diesel at the margin. Sitka is now looking at adding onto an existing project for more hydro energy, but it is going to cost them a lot of money so they are actively promoting heat pump systems in public and residential buildings. He believes Juneau needs to continue to promote heat pump system installations, which would make much more efficient use of their precious hydro resource. Chair Watson described a previous opportunity he had to spend part of a day at Snettisham, and he was fairly impressed with the standards and pride the employees have with that project. Mr. Willis commented that Snettisham came online in 1973, which is nearly 40 years old.

Mr. Lyman stated that if other cruise lines wanted to purchase available power from AEL&P and AEL&P foresees at some point they would need Lake Dorothy Phase 2, it seems to make sense that they should get the Lake Dorothy Phase 2 project online as quickly as possible instead of switching to diesel. Mr. Willis said this is what they did when they brought Lake Dorothy Phase 1 online because they really did not need it at that time for their firm customers, but having it online and ready to generate when loads grew was beneficial. However, if AEL&P were to

connect two cruise ship lines that would only encompass a small amount of energy because those ships are in port for part of the day for 120 days per year, so those ships would not use nearly enough power, and therefore doing so would place a huge burden on ratepayers.

Chair Watson thanked Mr. Willis for his presentation to the PC. Mr. Willis offered to remain at the meeting to answer questions of the PC while they discuss Chapter 6 – Energy of the Comp Plan.

BREAK: 6:31 - 6:44 p.m.

Mr. Lyman said Chapter 6 - Energy includes the revisions regarding the ubiquitous use of the acronym “CBJ.” Therefore, he added a paragraph to the introduction of the Comp Plan which mentions that the “CBJ” could be referring to a “government entity,” a “geographic area,” or the “community,” and this could also be said about the term “Juneau” and the fully-spelled-out “City and Borough of Juneau,” so readers would be cautioned to be aware of the context of those statements. In addition, he revised every policy in the Comp Plan to start out with “It is the policy of the CBJ Government...” This adds wordiness, but he thinks it helps to clarify what the policies are referring to.

- Page 61: He said a previous PC comment was provided that AEL&P was given little due deference or were not acknowledged as much they should have been in this chapter, so he added a paragraph to the end of the introduction, which he cited. He intends to include that Juneau lost connection to Snettisham in 2009 in the final paragraph on this page as well. He thinks the two graphs Mr. Willis provided are very informative projecting Juneau’s past and projected use, including if everybody converted all homes and vehicles to electric power. Therefore, with AEL&P’s permission, and if it is the will of the Commission, he suggests that they might want to include them in this chapter.
 - Mr. Willis said Mr. Lyman could include the first graph of AEL&P’s historic use in the Comp Plan. However, the second graph shows the magnitude if everybody switched over to an electric system, and therefore an additional narrative might be provided because that load forecast amount includes a timing aspect. Even so, he does not want those who view this graph to think that AEL&P states that this projected massive shift is going to take place next year.
 - Mr. Lyman said he would state that this is a projection illustrating if the community were to go down a particular course. He explained that this would assist regarding education and sharing information with the community in terms of many of the IAs. The historical and forecasting would provide people when making the choice to covert to electricity from fuel systems by providing information that in the short term that might look like a good idea, but over the long term it probably would not be a good idea because that might cause everybody to pay a higher electrical rates over the long term.
 - Mr. Willis said if staff and the PC choose to do so, he offered to work with them to come up with a scenario that would be instructional for people to view, including ensuring that it is what AEL&P would be comfortable in providing.
 - It was the consensus of the PC to do so.
 - Ms. Grewe said they might provide a thumbnail sketch of historic data relating to heating fuel per gallon for systems versus electrical. She said heating fuel has

escalated, and there isn't any sign of it decreasing, which they should plot in terms of consumption versus cost.

- Mr. Lyman said a comment was provided about the RCA not allowing utilities to charge ratepayers for investment and conservation. Therefore, he wonders if it is the will of the PC to add a new IA that states something like, "The CBJ work to encourage the RCA to allow that."
 - It was the consensus of the PC that he does so.
- Mr. Lyman said he wonders if they should provide an IA about the City promoting conversion to wood pellets or bio fuel and geothermal heat pumps rather than converting from oil to electric heat.
 - Mr. Bishop said he does not prefer to do so because he is not sure that wood pellets are the best option at this point, as he prefers to use up electrical resources before doing so.
 - Chair Watson suggested using the word "biomass" instead, which is what the US government is working on, including other states.
 - Mr. Haight said biomass or exploration of any renewable resource should be promoted and encouraged, as well as demand control.
- Chair Watson requested each Commissioner to provide their high-level comments on this chapter, and then they could provide suggested wordsmithing later on.
 - Page 62: Mr. Medina referred to the top sentence, "...revenue source when sold to external communities..." He does not know if this could be done, but he thinks this is a moot point.
 - Ms. Grewe said the first AEL&P graph provides a 40-year history, and then a 30-year forecast, but even if they do not include the futuristic outlook the historical data is interesting on its own. In addition, they should include that they encourage exploration of all renewable resources, but narrow it down to pellets and bricks, which is a popular subject being discussed throughout Southeast Alaska communities. However, those communities discovered that they are experiencing issues with federal policies, which are larger aspects than the CBJ witnesses. Therefore, for those communities to do so is not always as easy as many anticipate in thinking they would be able to take the refuse off the ground and turn it into bricks and pellets without major policy changes at the federal level. This would also have to encompass a different management of the Tongass National Forest. She does not believe this is worth focusing on, but she did not find a whole lot of this topic addressed in the Comp Plan. In addition, with every policy beginning with "It is the policy of the CBJ government..." She questions whether they need to state this for every policy since it is already included in the introduction of the Comp Plan.
 - Mr. Lyman said it is easy enough to delete this verbiage from all the Comp Plan policies, and asked if this is the will of the PC
 - The PC nodded their agreement for him to do so.
 - Mr. Chaney commented that this verbiage is included in all of the policies so it is rather redundant, but when cited individually out of context this preamble is helpful, and therefore he sees this both ways.
 - Page 63: Ms. Lawfer referred to the section titled Support State Capital Functions, stating that this verbiage appears to be too broad, as they are just dealing with energy so she would revise it to state, "Support State Capital Energy Efficiency."

- Page 67: She referred policies 6.10 and 6.11, and the sections titled Use of Favorable Energy Assets for Job Creation and Use Renewable Energy for Transportation, stating that she questions whether this is the best chapter for these policies. If someone were to think about what is in the Comp Plan for transportation or job creation, they would refer to those specific sections relating to them, not this energy chapter.
 - Mr. Lyman said it makes sense to relocate these policies into the chapters where they belong in the Comp Plan
 - The PC agreed for him to do so.
- Mr. Bishop said he believes more data has to be added to what was provided on the AEL&P graphs. It is imperative to conduct the research necessary especially in terms of the second graph. They have to provide an IA that recognizes the need for imperativeness of putting together a commission or some organization within this community managed by the Assembly, which has the power to expend funds to put energy forecasting research together. He explained that this should not solely be the responsibility of the utility because this community has quite a bit of vested interest to ensure there are plans for future energy resources in relation to what the development needs are in the immediate future to meet the potential forecasted spike.
 - Page 62: Mr. Lyman referred 6.1.IA1, 6.1.IA2, and 6.1.IA4 and asked if he should reference some sort of commission or city agency that would do so.
 - Mr. Bishop said yes, explaining that an organization needs to be developed within the administration of the Assembly that is responsible for putting together energy research projects.
 - Mr. Haight said the Juneau Commission on Sustainability (JCOS) held discussions regarding addressing the Climate Action Plan, which was provided in response to the Comp Plan, but there also needs to be a coordinated effort in regards to the IAs Mr. Lyman mentioned.
 - Chair Watson described in 1984-1985 when industries were challenged to reduce engine costs, which was calculated per square foot, which is when they determined that certain entities were either above or below the bar, which was delegated among those entities to oversee. This is similar to what Mr. Bishop just mentioned. He does not see these IAs providing leadership, and the borough has to be more proactive regarding its own buildings. He mentioned at a previous meeting the fact that the Juneau School District has an employee that works on energy management who has already made a difference even though she does not have a background in doing so, and therefore the City has to lead by example.
 - Mr. Chaney commented that Chair Watson mentioned leadership by example, and another was actual CBJ facility management.
 - Chair Watson said this community tends to only focus on energy when the lights go out and the cost of energy increases, but now that the avalanche scare is over, and now a couple of years later everybody is back to not worrying about energy conservation very much.

- Mr. Lyman said he could possibly provide a new 6.1.IA8, which states that “A commission be established to work with the JCOS, including being provided sufficient resources to ensure that this task is feasible.”
 - It was the consensus of the PC for him to do so.
 - Mr. Bishop asked if a fulltime staff member is assigned to the JCOS.
 - Mr. Chaney said the CDD has appointed a liaison to the JCOS.
 - Mr. Bishop said the CBJ has a fulltime staff member appointed to the Affordable Housing Commission, which is important because the health of the community evolves around housing affordability. However, even more of a pressing issue is the affordability of energy, as this community is not going to be affordable if it doesn't have this. Therefore, an individual, not necessarily a staff member, has to be assigned to be responsible for looking into energy issues for this community. This is whether it is within the JCOS, or another subgroup working on it. He stressed that this does not mean that a group of volunteers should get together and hash things out. He believes volunteers are necessary and an important part of this, but a newly formed energy commission has to be assigned a fulltime person who could consolidate information and conduct research on the behalf of the community, including working with utility councils, and so on.
- Page 64: Chair Watson referred to 6.1.IA7, stating that this does not mention solid waste, although the Public Works & Facilities Department staff talked about plasma burning of solid waste, which he understands is expensive.
- Page 63: Ms. Grewe referred to policy 6.3, asking if this is still relevant to support development of a Southeast Alaska intertie, although she knows the Southeast Conference folks are still discussing this possibility.
 - Mr. Medina stated that if this includes connecting Alaska with British Columbia (BC), he has major issues with that. However, if it is in terms of Hoonah, this should be deleted because he does not think that is ever going to happen. The Alaska Energy Authority discussed this, but the geographic nature and cost of doing so for southeast communities probably is not going to happen.
 - Mr. Willis said AEL&P's position they articulated in the development of the Southeast Resource Integrated Plan is that interties would connect various communities in Southeast Alaska, not export energy to BC. Interties are very expensive, and even if they were to obtain state funding to construct all of them, most of them would be unsustainable. This is because they wouldn't be able to charge enough for the energy that goes through the interties to build up a fund in 40 years, which is when submarine cables would need to be replaced. This is why AEL&P has been somewhat negative on the Southeast Alaska intertie compared to some of the other communities. As a power planner, interties are somewhat nice because when AEL&P is contemplating constructing another hydro plant, they have to find a location fairly close to Juneau otherwise the cost of transmission would make that project unfeasible. If all the Southeast Alaska communities were connected via interties, and the

next most cost-effective project was located near Petersburg, it could be developed and the power could be routed to Juneau. However, from a power-planning standpoint, they have to wait and time the next development of generation when they are able to use a significant amount of new power in order to afford it. If every Southeast Alaska community was interconnected, and when a future project is planned to be built in Southeast Alaska, e.g., if Juneau needs 40%, Ketchikan needs 20%, Sitka needs 20%, and some other community needs 20%, they could all pitch in together to develop it. Some segments of an intertie might make sense, i.e., like now with Skagway being connected to Haines, which happened because that section made sense, although an entire regional Southeast Alaska intertie would be extremely expensive, so he would be surprised if any of the communities are able to come up with money to complete an intertie.

- Ms. Lawfer suggested revising policy 6.3 to state, "...support Southeast Alaska Energy Systems." This is so they are not necessarily stating the "intertie," although she believes the CBJ being the regional hub has to provide support in terms of energy systems for Southeast Alaska communities, which is also imperative with Juneau being the Capital.
- Mr. Haight said he does not wish to alter this policy too much because of the opportunities that could be gained from an intertie. He said it is not just the cost of the hydro plant that AEL&P has to construct, but they also have to construct a standby power plant in a commensurate manner. AEL&P is obligated by regulation to maintain an equally sized plant to support events such as the recent avalanche. When that happened, legislators asked him what they are able to do to bring in a backdoor source of power in a manner other than power from avalanche zones. He believes electrical distribution should include loop feed, e.g., what a grid provides via a redundant pathway. Therefore, he would rather encourage if/when it is economically feasible, they should allow for an intertie because Juneau is sitting in a dangerous avalanche situation.
- Mr. Lyman noted staff determines if projects meet the code and whether they are consistent for the Comp Plan. He cited policy 6.2, stating that he wonders of this gets to what Ms. Lawfer mentioned about projects in general about Juneau supporting renewable energy resources in the Southeast Region. If so, he cited policy 6.3, and if staff was reviewing this as is, they would be forced to support the development of a Southeast Alaska intertie. Therefore, he requested to revise the language to state, "To be open to or fully consider and investigate the development of a Southeast Alaska intertie." This would provide them the option to approve or disapprove doing so on a case-by-case basis, which would be called out as being important and worth investigating.
- It was the consensus of the PC for him to do so.
- Mr. Lyman requested the Commissioners provide to him any wordsmithing or language changes they have following this meeting. He noted that Ms. Bennett already provided several comments.

Staff recommendation: That the PC works with AEL&P staff to review Chapter 6 and make any needed updates or revisions. After all chapters have been reviewed on a preliminary basis, a draft Comp Plan will be published for review, after which the PC would begin a second round of review of the entire document.

III. **OTHER BUSINESS** - None

IV. **REPORT OF REGULAR AND SPECIAL COMMITTEES** - None

V. **ADJOURNMENT**

MOTION: by Ms. Bennett, to adjourn the COW meeting.

There being no objection, it was so ordered and the COW meeting adjourned at 7:45 p.m.