

APPENDIX VI: ALASKA ENERGY SECURITY TASK FORCE RECEIVED PUBLIC COMMENT

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ALASKA ENERGY SECURITY TASK FORCE-WIDE GENERAL PUBLIC COMMENT

Public Comment #5 from Bridget Shaughnessy Smith, Alaska Public Interest Research Group

The Alaska Public Interest Research Group (AKPIRG) is writing today concerning the rescheduling of the Energy Security Task Force's October 24th meeting from its originally scheduled time of 2-4 p.m. to a new time of 5-6 p.m. AKPIRG, established in 1974, advocates on behalf of public and consumer interests. To our knowledge, we are the only non-governmental organization focused on addressing Alaska-specific consumer interest issues.

We appreciate the decision to move the public comment period to a time when more people may be able to participate, and the Task Force's willingness to listen to public feedback on this issue. We are concerned, however, by the decision to only slightly adjust the time to right at the end of many Alaskans' work day and also reduce the meeting's length by half. We understand that attendance to the first public comment session on October 10th was low (6 commenters). However, this was likely the result of several factors—the relatively short amount of time people had to read the lengthy report (it was released to the public in full on October 4th, less than a week before the public comment opportunity); the lack of robust publicity around the opportunity on the 10th; and the difficult time of day when the initial public comment opportunity took place.

There is every reason to believe that public participation on October 24th will be much higher. By the 24th, people will have had more time to read and consider the voluminous draft. News of the opportunity for public feedback is spreading, and the time change will likely allow more people to attend.

We therefore urge you to extend the time scheduled for people to testify on the 24th back to the original two-hour length (optimally from 5 to 7 p.m.). If, for some reason, you are still convinced of low public turnout on that date, at a minimum you should commit to holding the meeting open until all members of the public wishing to speak have been heard.

We understand that the Task Force is also accepting written feedback; however, there are good reasons why the Task Force and other state bodies accept comments in both formats. Many people are more comfortable speaking and asking questions in real time. Oral testimony also allows for a wider range of emotional expression and frequently makes a stronger impact on listeners. Furthermore, it allows citizens to hear what others have to say.

While the decision to move the meeting on October 24th to a later time is a good decision, we urge you in the strongest possible terms to extend that meeting back to its original two-hour length to accommodate as many Alaskans as possible.

Excerpt: Public Comment #9 from Becky Long, Talkeetna, AK

1) The public comment period needs to be extended due to inadequate public outreach.

- Page 16 has listed the proposed Susitna Dam as one of 3 projects that should be decided whether to move forward. This proposed project would affect Trapper Creek, Talkeetna, and Sunshine communities. Their way of life based is based on the natural resources of the Susitna River watershed. The task force should have made outreach to the community councils there.

- The public comment period is too short for a massive subject that affects the whole state. I find myself wanting to understand and comment on many plan components. The short comment period means I cannot do a thorough job.
- The public has been presented with a draft to comment on when the draft is still evolving. The 10/17/23 Railbelt Transmission, Generation and Storage Subcommittee meeting showed that the draft was not complete at that time. The final draft was to be out hopefully by the end of that week. But there was already a public comment hearing based on an early version. This seems sloppy or unnecessarily rushed.

Excerpt: Public Comment #10 from June Okada, Susitna River Coalition

Lastly, the two public comment opportunities nor this report draft has been widely publicized . If public input is to be accounted for and seriously considered, which it most certainly should, there should be more effort to notify the general public about these important decisions and give them sufficient time to respond.

Excerpt: Public Comment #11 from Mary Burtness

I hope you will extend the time to finalize this plan as you only gave yourself a few days to go over the public comments (as well as gather public comment). With this small amount of time, it feels like public comment is not very important to you.

Excerpt: Public Comment #23 from Bridget Shaughnessy Smith, Alaska Public Interest Research Group

I. Open and meaningful public process

AKPIRG advocates for open processes that allow Alaskans to meaningfully participate in the decisions that determine their futures, and with this concern we have serious misgivings about the Task Force’s planning process. This public comment opportunity and the previous one on Oct. 10 were communicated to the public only via the state online public notice system on Oct. 4 and the Alaska Energy Authority’s social media on Oct.6, allowing barely a week for the public to read, digest, and create comments on the complex, vague, and incomplete 130 page draft plan. For such a far-reaching report, rationalizing that minimum publication requirements were met or expecting everyday people to have been tracking the minutiae of all Task Force meetings is a disservice to Alaskans. Robust publication of the report and multiple public comment opportunities could have included supplemental notice in newspapers, on local radio, via press releases as with the Task Force’s creation, or even social media accounts created specifically for this Task Force and public engagement efforts.

The plan document itself has also undergone piecemeal editing during the period when the public is meant to be considering their response to it. Notably, the second draft version – posted with no public notice 1 on Oct. 20 (the Friday before the upcoming comment opportunity) – replaces Action E-2.3, “adopt a renewable portfolio standard” in the Oct. 3 draft, with a recommendation for a similar but substantively different “clean energy standard” in the Oct. 20 draft. The call for a Renewable Portfolio Standard is nowhere in the Oct. 20 draft. With the Task Force already making such sweeping and under-the-radar decisions on the contents of the report, public comments are rendered meaningless.

Per the slides presented at the Task Force's Oct. 3 meeting, the group intends to vote on final recommendations from the subcommittees in 7 days, on Oct. 31, so that consultants can prepare a final draft by Nov. 10 for board approval on Nov. 17. If the Task Force expects substantive public comment on this lengthy and complex document and seriously intends to incorporate public feedback into the final plan, it has given itself a very short window to work in. The Task Force hasn't allotted sufficient time for either soliciting useful public feedback or for using that feedback in any meaningful way. The fact that edits to the plan are already well underway after minimal comment on Oct. 10 shows a lack of real intent to involve Alaskans in consequential energy decisions.

Excerpt: Public Comment #25 from Erin Mckittrick

This task force process seems explicitly designed to discourage and ignore public feedback. The draft plan is a very long and complex document, released with inadequate explanations of many of the actions, minimal public notice, little time for review, and only two public meetings. If that wasn't bad enough, the 142 page draft was modified on October 20 -- 4 days ago -- on the Friday before a Tuesday meeting. I suspect many commenters haven't seen the latest draft, and no one has had the opportunity to review it in the depth that it deserves...

Finally, I urge the task force to expand the timeline and to actually consider public comments. The many instances of "PLACEHOLDER FOR INFOGRAPHICS THAT DESCRIBE PUBLIC MEETINGS AND PARTICIPATION THAT HELPED IDENTIFY ACTIONS AND STRATEGIES PRESENTED IN THIS SECTION" in the report do not reflect reality.

Excerpt: Public Comment #28 from Bridget Maryott, Cook Inletkeeper

Though the Task Force has given itself only a week to consider public feedback on this packed document before voting on final subcommittee recommendations on Oct. 31, we hope you will

take seriously these comments and others from Alaskans who depend on good energy decisions and a clean environment.

Excerpt Public Comment #35 from Doug Woodby, Juneau, AK

Thank you for this opportunity to comment on the draft energy security plan. Please accept these comments despite being a day late. The public notice for this comment opportunity was minimal and well outside of what is expected of transparency in a democratic system.

ENERGY PRIORITY A. RAILBELT TRANSMISSION, GENERATION, AND STORAGE PUBLIC COMMENT

Excerpt Public Comment #1 from Becky Long

I listened to the April 25, 2023 first meeting of the Task Force. Both the Alaska Energy Authority Director Thayer and Chair Dahlstrom asked the question should the state move forward with this project. I respectfully submit that the state should NOT move forward for 3 basic reasons. 1. It is highly questionable that there is enough water in the Susitna River system to generate 300 MW or more of hydropower. According to the National Oceanic Atmospheric Administration, the arctic is warming more than twice as fast as the rest of the world. The Susitna glaciers mass loss affects the water resource. A new study by lead scientist David Rounce of Carnegie Mellon University along with our very own Regine Hock of the University of Alaska Fairbanks Geophysical Institute has shown that glaciers will be affected under the global temperature increases of 1.5 degrees C to 4 degree C. Losses are found to be one quarter to nearly one half of their mass by 2100. This new study shows glaciers melting faster than has been anticipated. At our current rate of global warming 2/3 of earth's glaciers could be entirely gone by 2100. Of course, how fast and how far Alaskan glaciers will retreat is unclear. Glaciologist Mike Loso of the National Park Service in Wrangell Saint Elias National Park is partnering with scientist Rounce to refine their survey model for specific observation changes in Alaska glaciers. At the very least, the Glacier and Runoff Changes for Susitna River watershed glaciers need reevaluation using up to date scientific methods. 2. Greenhouse gas emissions (GHG) from dam reservoirs, dam infrastructure and permafrost melting shows that hydropower facilities do NOT produce clean zero-carbon energy. In fact, as a result of a petition of over 100 groups, the Environmental Protection Agency is adding dams and reservoirs as a source category under their Greenhouse Gas Emissions Inventory Program. Numerous scientific studies over the past 2 decades have shown that dams and reservoirs produce and emit substantial amounts of carbon dioxide, methane and nitrous oxide including significant emissions in the northern latitudes. Regulators, policy makers, utilities and the public have frequently overlooked these emissions and incorrectly assume that hydropower facilities produce clean, zero-carbon electricity. We can no longer afford this lack of awareness that leads to mistaken assumptions about hydropower as a renewable resource category. With a proposed Susitna Dam reservoir of 40,000 acres inundated and substantial permafrost deposits at the exact site of the dam, the GHG emissions greatly offset any potential carbon reduction benefits.

Public Comment # 3, June Okada, Susitna River Coalition

We write with comments in response to the Alaska Energy Security Task Force's subcommittee meeting on September 14th, 2023 as well as the first public meeting on April 25th, 2023. With Cook Inlet's natural gas contracts ending, reaching the Governor's 10 cents/kWh goal undoubtedly requires the diversification of local energy generation that is local, reliable and affordable as you all collaboratively concluded. We believe developing a sustainable, reasonable, and resilient energy system plan is of the utmost priority for our state. However, including the Susitna-Watana Hydroelectric project in such a plan would be of grave oversight.

The price tag of the proposed project is enough reason to shelve it. The project would cost an estimated total of \$5.6 billion (\$7 billion 2023 value). However, according to a cost analysis study by Erickson & Associates, this is a serious underestimate. New transmission lines and facilities needed to connect the power from the dam to the existing grid would cost an additional \$880 million (\$936 million 2023 value). On top of that, the costs to lease or purchase Native Corporation lands that the dam, the reservoir and the transmission lines would exist on have not been calculated or negotiated. AEA's statement about the FERC licensing costing another \$100 million to finish is misleading and inaccurate. According to a letter to FERC on 10/2/2015 from James Balsiger, NMFS Administrator to the Alaska Region, "AEA has stated that at least \$100 million in funding would be necessary to complete the FERC ordered study plan. This amount does not include modifications in study plans, additional study requirements or additional information requiring that NMFS, FERC and their licensing participants may require." Furthermore, former AEA Susitna Project Manager Wayne Dyok stated that there will be an extra \$230 million needed for detailed engineering and geotechnical information to take the state to the construction phase.

Inaccuracies of the FERC Licensing Status (slide 10 of AEA's presentation) include:

58 FERC-approved studies; Implemented 2012- 2017': The studies were actually done in 2012-2014. This means they were done almost a decade ago. '19 studies completed': The 2017 FERC Determination states 3 of those studies have modifications, which indicates non-completion.

Inaccuracies of FERC Study Plan Determination Outcome (slide 11) include: Confirmed adequacy of environmental studies' and ' Validated quality of work completed to Date. However, FERC stated (re: the water quality study 5.5) in their 6/22/2017 Director's Determination: "...we find that in its current state, the data are largely unusable, and we are also unable to determine the adequacy of the data to characterize the baseline water chemistry, water quality, water temperature, and groundwater of the Susitna River." Some of the most important studies of water quality and instream flow are incomplete and useless.

Rejected nearly all study modification requests': There were 37 modification requests and 17 were actually granted by the Director's determination. Confirmed data gathered thus far is representative of baselines': The water quality data is futile. There is no completed baseline data for ice processes in the sloughs and side channels, river flow access, recreation resources, river transportation, side slough habitat for the lower river to name a few. FERC also determined that AEA's assertion that the dam will have no effect on lower river flows is premature.

There are many reasons why the Susitna Dam should not be built. A massive 705 ft dam, almost as tall as the Hoover Dam, would undoubtedly cause more harm than good, including severe impacts to 40,000 acres of salmon and caribou habitat, and diminish the local tourism, fishing and hunting businesses. This type of load-following dam releases water from a reservoir to meet energy demands. This hydrological change would adversely impact and could ultimately destroy wild salmon populations. Water released from the reservoir would severely alter the river's flow, causing detrimental effects to salmon spawning and rearing habitat. To understand more about the great risks the dam would pose on our watershed, take a look at this film. Putting all our renewable energy dependence into one giant project is dangerous. "A mega-project like Susitna Hydro brings grid risk — if it drops offline, abruptly leaving the rest of the grid to make up the difference, a major disaster might occur to the entire system," warns Bob Butera, an engineer who worked on the project in the 80's, in a recent 2023 ADN article. Relying on one mega hydro project that cannot easily shift in response to fluctuations in demand is precarious and potentially disastrous. Hydroelectric dams are incorrectly labeled as clean carbon-neutral energy sources based on assumptions with poor information. Though categorized as "sustainable" energy facilities, dams emit methane – a harmful greenhouse gas 25 times more potent than carbon dioxide. This greatly offsets the potential carbon emissions that AEA touts the dam will reduce. The EPA now includes reservoirs in their greenhouse gas reports.

The proposed Susitna-Watana project would be an economic disaster, environmentally harmful, and would not help Alaska reach emissions goals. We believe that state and energy policy-makers can and should come up with better solutions to solve the current gas shortage in Cook Inlet and still be able to reach our renewable energy goals for a cleaner, safer and more reliable energy future. We are happy to share additional resources besides the listed below. Please reach out if you have any questions.

Public Comment # 11 from Mary Burtness

I believe at CES is not going to move us in that direction. We need at Renewable Portfolio standard to give us a road map to take advantage of the cost effectiveness future of renewables.

Drop the AKLNG as is it is not a short term expenditure of money when your goal is to make sure these do not hinder the longer term expenditures. This cost will lock us into more fossil fuel and not help in diversifying our energy use, a focus of the plan.

Public Comment# 13 from Connie Markis, Anchorage, Alaska

I would like to comment on the Statewide Energy Master Plan that is currently being reviewed. I agree with it in general Two things need more improvement in my opinion. One is a stronger focus on

building an infrastructure to generate power through renewable technologies immediately. We only need to look at Typhoon Merbok in western Alaska last year to confirm that climate change is real and not going away. And we need to realize that continuing to burn fossil fuels only adds to the problem. Second is I disagree with unifying all of the different electric transmission systems along the Railbelt under the ownership of a single entity. Monopolies do not always act in the best interests of the people they are supposed to serve and diverse voices need to have input so we move away from continuing to rely on oil, gas and coal instead of turning to renewable energy sources that don't contribute to carbon pollution.

Public Comment #16

There are number of provisions in this document that are amazing.

Please continue to support a Renewable Portfolio Standard, not a Clean Energy Standard (which is a misleading and inaccurate name).

Please invest in tidal energy. Cook Inlet alone has enough potential tidal energy to power ALL of Alaska, so if we can make that work, we could still be energy exporters (think electrolysis and green hydrogen).

There are also several that are deeply concerning. The continued investment in fossil fuels is a large mistake.

I ask for a No-Go Decision on the AKLNG Project and North Slope Natural Gas Bullet Line. A recent study by NREL has shown that the most economical way forward for Alaska is to have 78% renewables by 2040. Investing in the AKLNG and North Slope gas line will make that nearly impossible to achieve; further, investing in those WILL hurt our economy.

I ask that AIDEA (and AEA members who are also on the AIDEA board) not be involved whatsoever. AIDEA has a history of making very bad investments that benefit oil and gas companies while detriminting Alaskans. Having AIDEA involved will likely have the same exact outcome.

Public Comment #17 from Gail Heineman

I oppose any further consideration of construction of the Susitna-Watana Dam.

On pages 16-17 your report says "the Subcommittee supports taking these projects through feasibility such that a "go/no-go" decision can be made.", where one of those projects is the Susitna-Watana dam.

The Susitna-Watana dam has already been extensively studied, shown to not make economic sense, and to be extremely harmful to the environment.

I am a long-time Alaska resident, since 1981, and plan to stay. I do not want to pay the higher electric rates, and lose the salmon and caribou and bear, to the destructive Susitna-Watana dam. I don't want the threat of a huge dam collapsing in a big quake (more faults have been discovered in the area recently). I don't want the methane emissions from the reservoir (a recently discovered global problem).

I don't want any more State money, or any money, spent on studying the dam yet again. And I do not want it built, study or no study. The cost is too high, both economic and environmental.

And chances are, the cost of construction would be twice what is estimated (Ansar, A. et al., 2014. "Should we build more large dams? The actual costs of hydropower megaproject development." Energy Policy. University of Oxford..

Public Comment # 19 from Louis Dupree – Homer, Alaska

Every flat roofed building on the rail belt (Costco, Sams club, Outdoor World, and all the school buildings should have solar panels.

Public Comment #21 from Joel

Hi, my comment is to think global and act local, i.e. to align the overall goal of the plan with the Paris agreement and UN Sustainable Development Goals. I can provide more detail if needed. Thanks for your time and consideration in this planning process!

PUBLIC COMMENT # 22 from Chris Rose, REAP

- 1) The Railbelt Reliability Council (RRC) has been formed via state law and certificated by the Regulatory Commission of Alaska (RCA) to develop Integrated Resource Plans (IRPs) for the Railbelt. Those IRPs will determine the best "value" for Railbelt consumers through an economic and technical feasibility analysis. Unfortunately, the Task Force has not had the time or resources to do the thorough technical and economic analysis required to determine which asset investments have the best benefit-to-cost ratio.
- 2) The goal of 10 cent/kWh power is unattainable with the current structure of four coops and their respective overhead and fixed costs unless and until those fixed costs can be spread over many, many more kWh sales. Strategies to increase the electric load in the Railbelt is so far underdeveloped, and in any case would likely take decades to achieve.
- 3) All new generation and transmission project decisions in the Railbelt moving forward should be based on sound and thorough technical and economic analysis through an IRP to ensure that Railbelt consumers do not have to pay for more infrastructure than necessary, and to protect consumers from the volatility of the world fossil fuel markets.
- 4) With the importation of expensive LNG looming in as little as five years, diversification of the Railbelt generation portfolio needs to be a short-term, not a long-term, objective.
- 5) A study currently being done by the National Renewable Energy Laboratory to analyze the currently proposed Railbelt Renewable Portfolio Standard (RPS) is expected to demonstrate that a combination of solar, wind and energy storage is the least-cost pathway going forward for Railbelt consumers. It is anticipated that the study will be published in December 2023.
- 6) With the rapid adoption of electric vehicles and air-source heat pumps around the world and in the United States, the Railbelt's ground transportation and space heating needs are likely to increasingly be met by those electric-based technologies, which could also be powered by local, fuel-free renewable energy.
www.REalaska.org p: 907.929.7770 f : 907.929.1646
- 7) As the Railbelt's renewable energy sector grows, it will create a host of new job opportunities that would not be created if the region continues to rely on natural gas to generate electricity.
- 8) More than two-thirds of the Railbelt's population lives in either Chugach Electric Association (CEA) or Matanuska Electric Association (MEA) service territories. There are very few, if any, transmission constraints between those two service territories that currently prevent a more rapid uptake of renewable energy for more than half the state's population. The RCA has ordered those two utilities to operate in a "tight power pool", something that would improve the efficiencies in the Railbelt and save consumers money.

- 9) If transmission assets are pooled into a new entity, that entity should be independent, not a current asset owner like the Alaska Energy Authority (AEA).
- 10) If a new transmission entity is formed, either it or another new entity like an independent system operator (ISO) must assure that the grid is operated on the basis of merit-order, economic dispatch. Without merit-order economic dispatch, Alaska consumers will not reap the benefits of unified transmission.
- 11) If new natural gas resources are brought to the Railbelt market through any size of pipeline from the North Slope, there is no guarantee that the price of that gas will be attractive for Railbelt consumers. That gas price risk, along the fact the Alaskans have been waiting for a gas line for decades, makes future reliance on natural gas for Alaskan consumers a riskier proposition than instead aiming at a future where Alaskans are able to rely on local, stably-priced renewable energy for their electric, heating and transportation needs.
- 12) A plan to rely on renewable energy is much more likely to attract new investment to the state than a plan to rely on natural gas from the North Slope. It is clear that there are more unknowns with a natural gas future. A renewable future would likely include attracting industry to make carbon-free hydrogen and synthetic fuels, which could increase the region's electric load and drive down consumer prices.

PUBLIC COMMENT # 23 from Bridget Shaughnessy Smith, Alaska Public Interest Research Group

I. Open and meaningful public process

AKPIRG advocates for open processes that allow Alaskans to meaningfully participate in the decisions that determine their futures, and with this concern we have serious misgivings about the Task Force's planning process. This public comment opportunity and the previous one on Oct. 10 were communicated to the public only via the state online public notice system on Oct. 4 and the Alaska Energy Authority's social media on Oct.6, allowing barely a week for the public to read, digest, and create comments on the complex, vague, and incomplete 130 page draft plan. For such a far-reaching report, rationalizing that minimum publication requirements were met or expecting everyday people to have been tracking the minutiae of all Task Force meetings is a disservice to Alaskans. Robust publication of the report and multiple public comment opportunities could have included supplemental notice in newspapers, on local radio, via press releases as with the Task Force's creation, or even social media accounts created specifically for this Task Force and public engagement efforts.

The plan document itself has also undergone piecemeal editing during the period when the public is meant to be considering their response to it. Notably, the second draft version – posted with no public notice 1 on Oct. 20 (the Friday before the upcoming comment opportunity).

It appears the notice on the Alaska online public notices website for the Oct. 10th Task Force meeting was modified to also suffice as notice for the Oct. 24th meeting; the attachment in that public notice only includes the initial draft and states "The DRAFT Report is available below, or by visiting the Alaska Energy Security Task Force web page..." Many might not even know there is a recent, second version of 1 replaces Action E-2.3, "adopt a renewable portfolio standard" in the Oct. 3 draft, with a recommendation for a similar but substantively different "clean energy standard" in the Oct. 20 draft. The call for a Renewable Portfolio Standard

is nowhere in the Oct. 20 draft. With the Task Force already making such sweeping and under-the-radar decisions on the contents of the report, public comments are rendered meaningless.

Per the slides presented at the Task Force's Oct. 3 meeting, the group intends to vote on final recommendations from the subcommittees in 7 days, on Oct. 31, so that consultants can prepare a final draft by Nov. 10 for board approval on Nov. 17. If the Task Force expects substantive public comment on this lengthy and complex document and seriously intends to incorporate public feedback into the final plan, it has given itself a very short window to work in. The Task Force hasn't allotted sufficient time for either soliciting useful public feedback or for using that feedback in any meaningful way. The fact that edits to the plan are already well underway after minimal comment on Oct. 10 shows a lack of real intent to involve Alaskans in consequential energy decisions.

Omissions & Further Considerations:

The Railbelt-relevant sections of the plan have an unwarranted and glaring omission: there is no explicit mention in the Oct. 3 draft of the Railbelt Reliability Council (RRC) or its own ongoing Integrated Regional Planning (IRP) process, and only passing mention in the Oct. 20 draft without real consideration. The RRC's IRP is an open and transparent effort to evaluate with depth and technical rigor the best energy options for the Railbelt. Moreover, the RRC was established with particular safeguards to ensure that directors act independently from users, owners, and operators of the Railbelt grid; there is reasonable notice and opportunity for public comment, due process, openness, and balancing of stakeholder interests; avoidance of undue amplification or attenuation of stakeholder interests; and consideration of whether certain stakeholder class members stand to profit from construction of new facilities used to provide electrical service, among other protections—directly in contrast to the creation of the Task Force, which is largely composed of similarly situated private industry members or state agencies but not consumer or environmental interests as in the RRC. The legislature mandated that an Electrical Reliability Organization carry out the IRP process in SB123, and in 2022 the Regulatory Commission of Alaska certified the RRC as the organization to do it.

Public Comment # 24 from Tim Hinterberger, Anchorage, AK

1. Susitna-Watana dam. In addition to habitat destruction, mega-dams may not lead to a net decrease in carbon emissions. Instead, organic matter that builds up in reservoirs decomposes and emits the powerful greenhouse gas methane, potentially hurting the climate more than would the fossil fuel carbon emissions prevented.
2. The AKLNG pipeline from the North Slope, which would lock in our gas reliance and substantially increase Alaska's carbon impact on the world.
3. The Dixon Diversion hasn't received adequate public scrutiny.

Public Comment # 25 FROM Erin Mckittrick

The stated goal is to reduce costs to Alaskans. Many of the actions involve spending large amounts of Alaskans' money. Clearly, this should require thorough cost/benefit analyses to ensure that the chosen subsidies provide the largest net benefit to Alaskans -- or indeed -- to ensure they provide any benefit at all.

This was not done. Several of the top line actions in the Railbelt section (Actions A 2.1-2.4) involve putting money towards projects that would require multi-billion dollar state subsidies to be built: the \$8.8 billion bullet line and the Susitna dam that was estimated to cost over \$5.6 billion in 2014 -- certainly much higher now with inflation and supply chain issues.

We need to compare the net benefit of those projects to the net benefit of building other large energy projects like wind farms, batteries, or transmission. But we also need to compare that to the benefit of spending the same billions of dollars on subsidizing home energy efficiency and heating, or on directly supporting consumers' energy bills (like we do for PCE communities). And, critically, we need to compare it to billions of dollars of basic state services and permanent fund dividends, and potential tax increases needed to pay for state services if we spend the money on unwise energy projects. Anything we do has to pencil out for Alaskans holistically, not just on their electric bills.

As presented, the idea of subsidizing large industries to promote load growth (Action A 3.1) would be costly and dangerous to Alaskan consumers. While it is true that load growth can help reduce costs by spreading fixed costs among consumers, it is only true if those new customers are willing to pay the entire variable cost of power, as well as a large enough portion of fixed costs to provide benefits to others. The Marathon refinery pays the lowest energy costs in the Railbelt today -- roughly 10-11 cents/KWh, which equates to the entire variable cost of power, plus around 2-3 cents extra. 10-11 cents/KWh is cheap for the Railbelt, but not nearly cheap enough to be competitive with industrial electricity prices in places like Iceland, or elsewhere in the U.S. Marathon also doesn't do much to reduce fixed costs to other consumers, because the fixed costs paid are so low. To be competitive, Alaska would need to subsidize industry enough such that the overall cost of power was in the 3 to 6 cent/KWh range. This would mean that regular Alaskans would bear all the fixed costs, and much of the variable cost of the industries' use -- at a time when dwindling Cook Inlet gas is making those variable costs rise. None of the generation projects suggested in this report are close enough to construction that we can determine when or if they'll be built, what they would cost, and whether they could possibly save enough money to make up the cost of subsidizing these industries.

Action A1 would allow our existing transmission to better support energy diversification by removing pancaking wheeling tariffs. Several of the actions mentioning using what money the state can bring to bear to match federal grants -- which is a great way to multiply our impact, in both rural and urban Alaska.

Public Comment # 28 from Bridget Maryott, Cook Inletkeeper

Inletkeeper opposes energy actions that would sacrifice the health of our watershed, the climate it depends on, and the economically vital salmon runs it supports. The most blatant such action is A-2.3, which recommends appropriating \$50 million to \$100 million to finish FERC process licensing of the Susitna-Watana Dam, as well as the AKLNG project. In addition to the damage that Susitna-Watana would do to our watershed and AKLNG to our climate, these projects are fundamentally uneconomic red herrings rather than actual energy solutions.

In 2011 Cook Inletkeeper's board resolved to oppose "any Susitna-Watana Dam project that significantly alters flow regimes, ice patterns, fish habitat, and temperatures that support wild Alaska salmon." A dam on the scale of the Susitna-Watana project would inevitably have these impacts, potentially without creating a net reduction in climate impact from our energy system. Flooding the area upstream of a hydropower reservoir traps organic

matter, the decomposition of which releases methane, a greenhouse gas with a more powerful heat-trapping effect than carbon dioxide, into the atmosphere. Globally, hydropower reservoirs accounted for 5.2% of human-caused methane emissions in 2020, according to research published in Nature.

Before commenting on responsible hydropower development, we must mention the other bad idea recommended in A-2.3, the AKLNG project. Though the plan recommends progressing these projects to a "go/no-go" decision, the choices that could actually bring AKLNG to this stage aren't Alaska's to make. The viability of AKLNG depends on commitments from gas buyers that have never materialized. With the global gas market returning to equilibrium after the shock of the Ukraine invasion and LNG facing long-term competition from wind and solar generation, there is little reason to believe this will change anytime soon – and certainly no reason to bet our own energy security on it. If the resources invested in AKLNG were put into smarter projects that Alaskans could choose to work on here and now -- such as wind, solar, and responsible hydro -- our energy system would be far better off.

AKLNG and Susitna-Watana have long histories of stagnation, huge price tags, and damaging side effects that should already be enough to warrant "no go" decisions without sinking further time, money, or attention into them. The alternative North Slope "bullet line" gas pipeline, which must be almost entirely state-financed to deliver economical energy, locks in the climate impact of natural gas without lowering current prices and is likewise a poor energy choice for Alaskans. The Dixon Diversion, also recommended in Action A-2.3, may be a poor investment of AEA funds in comparison to other renewable prospects, and we believe it should be analyzed alongside other options in a Railbelt-wide planning process.

Responsible hydropower deployment means strongly considering how changes in water temperature, flow rate, and variability affect the abundance and genetic diversity of downstream fish populations, and prioritizing fisheries in the development and operation of projects. Any measure to promote hydropower – such as Action B-3.1 in the Oct. 3 draft (F-2.3 in the Oct. 20 draft), which includes revising AS 42.45.350 and creating a state fund and a public/private hydro development corporation – must have these priorities.

Public Comment # 29 from Kelsey Schober, The Nature Conservancy

Develop and Sustain Renewable Energy Development Efforts Actions: A-2.1, E-2.3

In July 2021, McKinley Research Group (formerly McDowell Group) prepared a report entitled Alaska's Renewable Energy Economy: Progress and Possibility for TNC-AK. This report reviews the status of renewable energy deployment across Alaska while highlighting the increasing opportunities presented by renewable energy in our state. Notable impacts from investing in these opportunities include reduced energy costs for consumers, job creation, and increased community resilience. TNC-AK supports the adoption of incentives to facilitate reaching energy diversification goals. An overall increase in adoption of renewable energy will create substantial benefits for communities and people across Alaska. For additional material highlighting the economic opportunities created by renewable energy adoption, please refer to the aforementioned report.

Public Comment # 30 from Matthew Clarkson representing Chugach Electric:

I am the Chief Legal Officer at Chugach Electric Association, Inc. (Chugach), and I would like to provide the following comments on the Energy Security Task Force's October 20, 2023, Draft Report.

Chugach shares the Governor's vested interest in securing safe, sustainable, affordable, and reliable energy resources for Alaskans. The desire for a comprehensive statewide energy plan is understandable and the Governor's leadership in this regard is commendable.

As most are aware, the energy industry in general, and the electric utility industry specifically, is undergoing significant transformation. Decarbonization and decentralization of the grid are two key disruptors challenging the historically centralized electric utility model. In that vein, Chugach believes a statewide energy plan-if properly considered, formulated, and executed-would provide the coordination and direction necessary for successful statewide navigation of this uncertain path forward.

The Task Force's Report has six priority areas with numerous strategies and discreet action plans underlying each priority area. The breadth of issues raised and addressed in the 142-page report first released on October 2 and recently updated on October 20 are too numerous for Chugach to meaningfully respond to at this time. While Chugach has several high-level, conceptual concerns regarding certain Task Force recommendations that are set out below, Chugach expects, and specifically reserves its right, to provide additional detailed commentary and analysis on the Task Force's recommendations prior to any formal adoption or implementation of such recommendations.

For now, Chugach's comments will focus on Priority A of the Task Force's Report. Chugach has significant concern regarding any required conveyance of utility transmission assets to the State of Alaska or another third-party. Indeed, such recommendation implicates significant legal, operational, and financial challenges and complexities that should not be ignored or considered in haste.

First, from a legal standpoint, Chugach is a private not-for-profit member-owned electric cooperative utility. State law and Chugach's governing documents currently require supermajority member approval prior to disposal of any significant portion of its utility assets. Thus, depending on certain asset thresholds, Chugach's member approval prerequisite could prevent such a transaction from occurring. Regardless, even if this hurdle could be overcome, Chugach is not able to affirmatively support such a recommendation and would likely oppose any unprecedented State action to condemn its private utility business assets for such a purpose.

Second, from an operational standpoint, Chugach does not believe unified ownership is necessary for coordinated transmission system operations and long-range planning. As the Lower 48 electric grid has demonstrated for decades, neighboring transmission systems can be jointly operated without being singularly owned. Further, transmission system coordination is conceptually flexible and can be shaped to fit Alaska's unique circumstances if given adequate consideration. Chugach is working through the process of considering alternative approaches to coordinated Railbelt transmission system operations and intends to provide opinions and recommendations in the future. Ultimately, any recommendation in this regard should be vetted for clear demonstration of positive economic benefit to end consumers prior to implementation.

Third, from a financial standpoint, substantially all of Chugach's tangible assets, including its transmission assets, fall under the lien of Chugach's Indenture of Trust. The conveyance of Chugach's transmission assets, and corresponding release of the Indenture's lien on those assets, could jeopardize Chugach's credit ratings, increase its cost of borrowing, and significantly undermine Chugach's ability to issue long-term secured debt to

fund future system capital improvement projects. Such financial limitations could also impact Chugach's ability to manage costs and provide sustainable, affordable, and reliable power to its members in the future.

In conclusion, Chugach again wants to express its appreciation to the Governor for his leadership and focus on securing affordable energy for Alaskans, and to the Task Force for its efforts in considering so many important issues on such a truncated timeline. Chugach remains optimistic about Alaska's energy future and looks forward to thoughtfully participating in ongoing public discussions regarding the future of Alaska's integrated electric system. We share in the goal of operational efficiency and a competitive cost structure for the benefit of all Alaskans, both rural and urban alike.

Public Comment # 31 FROM Ky Holland

I'd also like to see a focus on engaging our youth and university on energy challenges, including the long-promoted but never-supported Alaska Energy Prize (Allan Johnston).

Others seem to be self-serving plans by the AEA to add staff and take over control/ownership of transmission capability with the MLP-CEA-inspired dreams of buying out assets "at book value" to save money... I hope we are not fooled twice with this shell game of refinancing our existing infrastructure and giving greater control to an agency with more than enough time and money to buy worthless oil leases.

Some sections seem to be just not connecting the dots, such as Priority areas A, which never mentions the planned demand on gas for a Donlin Mine (14" gas line from cook inlet), and then in A.3 suggests we need to increase demand in an area that has excess electrical generation capacity and a shortage of natural gas that we want to give away to a large industrial user. Why isn't the Donlin mine considered for some of the additional demand, or better yet, solve some of the gas shortage by giving Alaskans access to lower-cost electricity and incentivizing them to ramp up the use of electric gas, returning their homes to electric head etc. (My home was initially heated with electricity on the hillside in the 70s. It is still installed and could pull electrical power today if there was an intelligent metering system to allow me to use excess electrical energy at a rate competitive with the potential cost of natural gas-supplied heating energy.

Another set of dots not connected is that we don't need a gas line AND the Wantana dam. Our plan should not be promoting more energy demand on one hand and then at the same time burdening us with fanciful expensive projects on the other hand that could lead us to even more excess production capacity and the capital burden of the projects. The plan reads more like a wish list for the construction industry than a thoughtful determination of a plan and hard decisions one what we should actually do next to address our energy needs.

Public Comment # 33 from George Donart, Anchorage

STRATEGY A-3: Increase Demand -

If we were to put out an RFP to increase our demand, we may end up building much larger generation facilities than we need prematurely. Demand for electricity will increase as more parts of our economy electrify, but counting on a large new demand may only drive new generation without closing old, expensive, polluting generation facilities. Alaska's focus must be on reducing reliance on fossil generation sources and moving

rapidly to clean energy. When we have cleaned up our generation, that is the time to start enticing large new demand centers, not before. We're not in the same situation as Iceland was in the mid 90's.

STRATEGY A-2.3 Progress Known Energy Generation Diversification Projects to Go/No-Go Decision -

Both the Susitna dam and a gas pipeline from the North Slope are at least a decade away - if everything goes smoothly, both are extremely expensive, and both have major negative impacts locally and globally. It doesn't take any more study to determine that there are plenty of other affordable viable options for new, renewable generation in the Railbelt. Waiting for yet further analysis of either should not be used to hold up an ambitious clean energy transition on Alaska's biggest grid.

Public Comment # 35 from Doug Woodby, Juneau, AK

I oppose the apparent bias towards funding the Alaska LNG pipeline, even if it is a line just to the railbelt. There are more worthy projects that will have lasting positive impacts for the people of Alaska that do not have an outsized carbon footprint that the LNG pipeline has.

Public Comment # 36 FROM Sarah Clement

1. Issue a No-Go decision on the AKLNG project and the North Slope Natural Gas Bullet Line. Finish a comprehensive alternative energy source analysis FIRST. Our priority should be investing in alternative, renewable energy sources, not hanging onto the declining fossil fuel industry.
2. Enact a Renewable Portfolio Standard in place of the "Clean Energy Standard." We have no evidence that a CES approach leads to stronger mobilization of private sector capital investment or utility adoption. An RPS provides realistic, enforceable targets and deadlines for Railbelt utilities to achieve energy transition.

These additional comments were provided by Railbelt Regional Coordination as the Railbelt Roadmap Workshop Summary, August 28th, 2023.

Summary Report

Introduction

In August 2023, technical and policy experts from the Railbelt Electric utilities and the Alaska Energy Authority gathered for a one-day workshop. Their primary objective was to brainstorm and articulate their vision for the future of the Railbelt Electric system. To achieve this, the team initially established end-state goals and subsequently crafted a roadmap to attain these objectives. This document serves as a summary of the workshop's significant insights and outcomes.

The tasks outlined below encompass a wide spectrum of initiatives, spanning from policy and regulatory measures to project assessment, design, permitting, and construction. This report is organized into two primary timeframes, further divided into subcategories that address evaluation, design, permitting, and construction. Although the tasks are presented in a somewhat sequential manner, it's important to note that we haven't formally prioritized or refined this list. Generally, items of lower priority are slated for later periods. However, many of these tasks will require concurrent and ongoing attention. Given the limited capacity of both the Railbelt utilities and AEA, it's imperative to allocate the necessary resources effectively to navigate this pivotal transition successfully. The initial three summary sections focus on actionable items, while the fourth section

diverges slightly, spotlighting areas that demand continuous oversight due to their profound implications for Railbelt's policy, investments, and operations in the forthcoming decades.

2060 End State goals:

1. By 2060, all current thermal generation will have been fully depreciated thus stranded investment is not an issue.
2. Virtually all replacement generation is "Clean Energy".
3. Transmission limits have been resolved and a resilient and reliable transmission grid has been completed.
4. Transmission investment and cost recovery allows for non-discriminatory, open access, resilient, reliable, and economic energy delivery to all Railbelt regions.
5. Generation development and dispatch allows optimization across the system.
6. We are resiliently and reliably able to meet load demand.
7. Constructive regulatory, policy, and permitting processes have been developed that are not an impediment to energy production and delivery.
8. The cost of energy supports economic development and quality of life.
9. Utility systems accommodate evolving customer requirements.
10. The Copper Valley has been integrated into the Railbelt grid, by completing the Roadbelt intertie.

Roadmap Swim Lanes:

Data was gathered from the Team under the following swim lanes topics, where practical overlapping efforts and dependencies were identified. Each swim lane topic was evaluated over the short, medium, and long-term identified as 2023-2035, 2036-2050, 2051-2060. For simplicities sake in this summary, we have combined the medium and long term into a single category.

- Fuel Diversification
- Policy
- Regulatory
- Technology
- Generation
- Load Growth/Beneficial Electrification
- Transmission
- Distribution
- Decarbonization

Time frame [2023-2035]

Policy, Regulatory, and Structural Reform:

- Develop state energy policy and the corresponding statutory structure.
- Consider a potential Clean Energy Standard (CES).
- Implement net metering changes to minimize subsidies from other members and promote equitable growth.
- Explore the potential for a public-private industrial energy economic development program, possibly modeled after the TVA-BPA-Icelandic approach to achieve low-cost power. This might include large-scale direct air carbon capture, and injection, data server farms, or sustainable aviation fuel production.
- Develop a contractual framework for transmission development, operation, and control that includes the following:

- Explore the possibility of adopting a Transmission System Operator (TSO) model similar to that of Iceland. This TSO would operate within a regulated Railbelt BPMC-like management committee governance structure and have the authority to acquire control of the existing backbone transmission through methods such as pledge, lease, or purchase. The organization would be charged with developing the backbone transmission grid into a reliable and resilient open access transmission system.
 - Reorient the nature of the transmission grid (at least the backbone transmission grid) from being a private good to a public good, eliminating wheeling charges, and shifting transmission costs to end-use consumers rather than generators and purchasers.
 - Designate the State (AEA) as a primary, though not exclusive, transmission asset owner. Regulation of the TSO through the Regulatory Commission of Alaska, with TSO responsibility for developing and owning the transmission tariff.
 - Ensure non-discriminatory open access while maintaining the rights of legacy owners to access generation resources and serve firm loads.
 - Minimize incremental costs by leveraging *existing* expertise and resources for planning, development, management, operation, and maintenance of the transmission grid.
 - Develop a state-utility endowment or bond funding mechanism for developing and improving the public good backbone transmission system.
 - Limit Electric Reliability Organization (ERO) statutory obligations to reliability standards development, enforcement, and traditional interregional Integrated Resource Planning (IRP), thereby transferring transmission-related functions away from the organization.
- Modify SB 123 and Alaska Administrative Code ERO regulations to minimize the incremental cost of the organization and create a more streamlined cost-causer, cost-payer-based organization.
 - Implement regulatory rate-making reform to incentivize prudent transmission investment.
 - Consider reducing project carrying costs by allowing the inclusion of transmission costs in the rate base via simplified rate filing (SRF) process prior to being considered "used and useful."
 - Explore the option of forward funding transmission projects for the same reasons.
 - Implement state clean energy generation and transmission permitting and ROW acquisition reforms, including permitting time limits, document page limits, and moderated legal recourse.
 - Develop state licensing and siting regulations for Small Modular Nuclear Reactors (SMRs).
 - Address near-term NEEPA reform.

Planning, Evaluation, Design, and Permitting

Planning

- Complete a traditional IRP for the Railbelt.
- Develop short, medium, and long-term plans to diversify electric generation fuel supply, including sources and companies.
- Develop a natural gas transition plan for home heating.
- To comprehend the implications of future decisions on energy rates and economic development, it is imperative to establish a comprehensive financing plan. Collaborate with the RCA to formulate a high-level funding strategy aimed at identifying funding sources for future grid development.
- In the energy sector, demand, often referred to as "load," drives all operations. It is essential to create a comprehensive regional load forecast that considers both thermal and electrical loads. This forecast should

be maintained as a dynamic, regularly updated document, incorporating sensitivities that account for different degrees of technology development and adoption.

Evaluation and Permitting

- Complete and secure the Watana license, while concurrently postponing actual project development to assess the commercial viability of Small Nuclear Reactors (SNRs). Absent commercial viability of SNR's with in a decade proceed with the project.
- Evaluate benefit-cost analysis and complete the amendment to the Bradley Lake license for the Dixon diversion. If the project is determined economically viable, complete development.
- Evaluate benefit-cost analysis and work towards completing and securing the license for Godwin Creek if it is both economically and technically viable.
- Explore and quantify all small wind, solar, and hydro projects that fall within the cost-effective range of the Railbelt transmission and distribution systems for future development.
- Design and permit a near-term expandable LNG import project, or the development of additional bridging Cook Inlet gas reserves.

Design and Permit

- Design, permit, and acquire the right-of-way (ROW) for a second transmission line from Nikiski to Healy, potentially using the Beluga and AKLNG pipeline ROW.
- Design and permit the reconstruction of the Railbelt backbone from Bradley to Fairbanks.
- Initially, focus on the following segments:
 - Healy to Douglas
 - Douglas to Eklutna-Fossil Creek
 - Quartz Creek to Anchorage
 - Bradley to Soldotna
 - Healy to Fairbanks (old line)
- Design an interregional coordinated control scheme for BESS and HVDC assets.
- Complete the design and permitting of the relevant elements of the GVEA strategic generation plan, including BESS, wind, and power purchase agreements (PPA).
- Complete the relevant design and permitting of elements related to other Railbelt utility clean energy goals, including siting, and permitting regulations for Small Modular Nuclear Reactors (SNRs).

Evaluate for Potential Future Design and Permitting

- Evaluate the required improvements for the Cook Inlet natural gas storage system.
- Pursue and make a final near-term decision on LNG import, the AKLNG pipeline, or the bullet line from the North Slope to Cook Inlet.
- Assess the efficacy of developing additional natural gas resources in Cook Inlet.
- Complete the evaluation of the large wind resources in West Cook Inlet and obtain permits if economically viable.
- Evaluate carbon capture options for coal plants and potentially gas turbines in the Railbelt as part of a transition strategy.
- Assess the state of technology, conduct benefit-cost analyses, and consider piloting tidal generation in Cook Inlet.

- Determine conclusively the viability of West Cook Inlet geothermal energy (Mt. Spurr) and explore the potential of Augustine geothermal energy.
- Evaluate the potential for offshore wind near the entrance to Cook Inlet.
- Re-evaluate Chakachamna hydroelectric project in light of technology improvements in terms of fish habitat enhancement.

Infrastructure and Structural Development - Complete or Construct

Statutory or regulatory

- Complete structural reform of the transmission system, e.g., Transmission System Operator.
- Reform Electric Reliability Organization statutory and regulatory requirements.
- Implement reforms related to energy-related permitting.

Assets

- Construct a second transmission line from Nikiski to Healy, potentially via Beluga and the AKLNG pipeline alignment (with a separate ROW).
- Construct battery energy storage systems (~40-70 MW, two-hour to four-hour) in each of the three Railbelt regions: Southern, Central, and Northern.
- Complete the coordinated control and operation of the regional BESS systems.
- Complete the South Kachemak Bay submarine cable system.
- In accordance with the GVEA strategic generation plan, retire Healy 2, and construct a replacement wind facility in the Healy area with a corresponding long-duration energy storage component and necessary power purchase agreements (PPAs).
- Reconstruct the existing backbone transmission system between Bradley and Fairbanks, with an initial focus on:
 - Healy to Douglas
 - Douglas to Lake Lorraine
 - Fossil Creek
 - Quartz Creek to Anchorage
 - Healy to Fairbanks (old line)
- If technologically and economically viable, develop a possible pilot or prototype for carbon capture for:
 - Natural gas generation sources in Cook Inlet (re injection into depleted oil and gas formations)
 - Direct Air Capture (re injection into depleted oil and gas formations)
 - Healy Coal (re injection into coal formations).
- Construct the Dixon diversion if it is determined to be economically viable.
- Construct a Cook Inlet natural gas fuel storage solution to mitigate peak deliverability challenges.
- Monitor and potentially adopt successful small SNR prototypes at an early stage.
- To the extent cost-effective, expand hydro ponding (raise dams) at existing hydroelectric projects (Cooper, Eklutna, Bradley) to increase the capability to provide long-term storage and regulation of variable renewable generation resources.
- Construct Godwin Creek if it is viable.

Technology and Load Growth Monitoring

- Long-duration energy storage (LDES) solutions

- Short-term battery technology
- Small and micro nuclear reactor development
- Carbon capture technology
- Hydrogen
- As a fuel, either mixed or in its pure form
- As a feedstock for ammonia
- Load growth related to beneficial electrification.
- Electric vehicle adoption
- Heat pump adoption
- Large loads, such as server farms, mine loads (e.g., Donlin), compression stations, sustainable aviation fuel production, carbon capture, etc.
- High-voltage solid dielectric cable development
- Grid-forming inverters
- Short-circuit current delivery by or for inverter-based technologies
- Distributed Energy Resource Management (DERM) development
- Superconductor development
- Nuclear fusion

Time frame [2036-2060]

- Policy, Regulatory, and Structural Reform
- Wildfire liability reform for cooperatives and municipals.
- Tort reform for permitting litigation.
- Reform of the federal refuge "let it burn" policy.
- Reform of hydro development policies.
- The widespread adoption of electric vehicles (EVs) and heat pumps may require significant investments in distribution assets by utilities. Considering the limitations of balance sheet capacity, this could redirect vital capital away from transmission and generation projects. It is crucial to anticipate and prepare for this potential scenario.

Planning, Evaluation, Design, and Permitting-

- As energy demand increases, there will be a need for more dispatchable generation sources. Within this evolving context, a crucial decision point will emerge, influenced by factors such as load growth, technological advancements, and political feasibility. With the current state of clean energy technologies and those on the near horizon, the decision might revolve around whether to invest in SNRs, various scales of hydro projects, or a combination of both. However, this decision could be swayed by unforeseen technological breakthroughs, such as nuclear fusion, tidal energy, or other yet-to-be-discovered technologies.
- If SNR is available then adopt design and permit, else absent the SNR option consider construction of Watana and perhaps Chakachamna.
- Large-scale long-term energy storage projects to regulate large scale variable generation.
- Development of all small Hydro projects within economic reach of the Railbelt.
- Development of tidal resources in Cook Inlet
- Railbelt Roadmap Workshop Summary October 30, 2023 Executive Director of Railbelt Regional Coordination

- Design, Permit and Construct
- Complete design, permitting, and construction for remainder of the Railbelt Backbone reconstruction.
- Fairbanks to Delta Junction
- Complete Design, Permitting and ROW acquisition and construction for the Roadbelt intertie.

Evaluate for future Design and Permitting

- Tielke River Hydro at Maximum capacity (~ 400GWH).
- Evaluate DC line North Slope to Fairbanks.
- Evaluate DC line North Slope to Peace River.

Recommendations

1. To ensure the continued progress of these diverse initiatives, one viable approach might be to create an interregional project management office. This office, possibly funded by utilities, could operate as a subsidiary of the proposed transmission organization, tasked with prioritizing, monitoring, and advancing these initiatives.
2. At present, technology monitoring occurs on an ad hoc basis, leading to varied opinions on the state of different technologies. A potential solution worth exploring is the establishment of a Railbelt technology working group. This group's mandate would be to stay updated on the topics listed in the technology list (along with any new ones that emerge) and to regularly report their findings to relevant stakeholders, perhaps on a biannual or quarterly basis. Additionally, this group could oversee the continuous updates to the electric and thermal load forecasts referenced below.

ENERGY PRIORITY B. COASTAL GENERATION, DISTRIBUTION, AND STORAGE PUBLIC COMMENT

Excerpt: Public Comment #6 from John Neary, Juneau, Alaska

Net metering reform (pg. 52, pg. 101) is also a positive recommendation as it will help incentivize smaller investments in solar or in-stream hydro on private lands.

It's also encouraging to see you support training to grow the renewable energy workforce (pg. 67, 77, and 110). This is really needed here in Juneau where heat pump installations have been unnecessarily delayed due to a lack of skilled workers...

Lastly, it is also unnecessarily divisive to recommend skirting the federal roadless rule for development in national forests such as the Tongass and Chugach, especially considering that every exemption to the rule for a renewable energy project has been granted!

In conclusion, good work on your draft plan but please make some changes to improve the details. Renewable Energy is something everyone supports regardless of party affiliation or political leanings. Please operate within that spirit of unity on such an important document.

Excerpt: Public Comment #11 from Mary Burtness

Workforce development is a necessary component for future jobs that will keep our youth in the state, as well as re-tool the fossil fuel industry workforce.

Excerpt: Public Comment #13 from Connie Markis, Anchorage, Alaska

Net metering reform (pg. 52, pg. 101) is also a positive recommendation as it will help incentivize smaller investments in solar or in-stream hydro on private lands.

It's also encouraging to see you support training to grow the renewable energy workforce (pg. 67, 77, and 110). This is really needed here in Juneau where heat pump installations have been unnecessarily delayed due to a lack of skilled workers...

Lastly, it is also unnecessarily divisive to recommend skirting the federal roadless rule for development in national forests such as the Tongass and Chugach, especially considering that every exemption to the rule for a renewable energy project has been granted!

In conclusion, good work on your draft plan but please make some changes to improve the details. Renewable Energy is something everyone supports regardless of party affiliation or political leanings. Please operate within that spirit of unity on such an important document.

Excerpt: Public Comment #16

Please invest in tidal energy. Cook Inlet alone has enough potential tidal energy to power ALL of Alaska, so if we can make that work, we could still be energy exporters (think electrolysis and green hydrogen).

Public Comment #18 from Lisa Behnken, Alaska Longline Fisherman's Association

The Alaska Longline Fishermen's Association (ALFA) strongly supports long-term energy planning efforts initiated by Governor Mike Dunleavy through the reinstating of the Alaska Energy Security Task Force. This

proactive step towards a comprehensive statewide energy plan is critical to meet the challenge of climate change while safeguarding community resiliency in Alaska.

The Alaska seafood industry is an economic pillar of our state's economy, especially in coastal Alaska. It is the largest private sector employer in Alaska and generates \$5.7 billion annually in economic activity while contributing 60% of the United States' wild seafood production. Alaska's seafood industry includes over 100 large seafood processing plants in 40+ of Alaska's coastal communities, supporting a fleet of 9,000 vessels using more than 200 million gallons of diesel and gasoline fuel annually.

Our industry depends on energy to operate, and ALFA is eager to lead the nation's seafood industry to fuel efficiency and decarbonization. We recognize the threat climate change and ocean acidification pose to our industry and our State, and we are actively pilot testing hybrid equipment while researching next generation renewable energy. We recently received a Department of Energy award to convert two commercial fishing boats to hybrid propulsion and one mariculture boat to full electric. ALFA is committed to fleet decarbonization, and we recognize the need for shoreside infrastructure to co-evolve in support.

In many coastal communities, the seafood industry serves as an anchor buyer of utilities, which justifies large-scale capital investment in power generation and lowers electrical prices for coastal residents. That investment supports harbors and fishing fleets, providing the primary employment and economic opportunity in most coastal communities. Harvesting and processing go hand and hand, and the evolution to renewable energy must support both through a strategy that is also compatible with the remote and isolated locations characteristic of Alaska's coastal fishing communities.

Given the considerable energy consumption and the consequential impact of energy costs on the seafood industry's operations, profitability, and competitiveness, ALFA strongly recommends that the seafood industry be a stronger focus and better represented in the Task Force's deliberations and recommendations.

Our recommendations for the Task Force's consideration include:

1. Elevate Alaska's Seafood Industry
 - Welcome a representative from the Alaska commercial fishing sector onto the Task Force to provide nuanced insights from our complex and diverse industry.
 - Facilitate presentations from key stakeholders within our industry to describe how energy impacts costs, profitability, and investment decisions.
 - Research and describe the significant role of the Alaska seafood industry in coastal communities within the energy discussion framework.
2. For Priority B: Coastal Generation, Distribution, and Storage – Action Tracking Sheet
 - Highlight the importance of initiatives B3.1, B4.4 & B4.5 to the seafood industry.
 - Advocate for the exploration and establishment of public-private partnerships to bolster energy infrastructure.
 - Offer guidelines on leveraging local, state, and federal funds for financing new renewable energy projects.
 - List vessel and processing plant decarbonization and efficiency as a long-term goal in the energy plan draft.

ALFA anticipates that these considerations will enrich the statewide energy plan while also securing robust alignment with the needs of coastal communities, supporting community resilience, and fostering a sustainable economic trajectory for Alaska's maritime sector. We are eager to work with the Alaska Energy Security Task Force and believe you will find the fishing sector to be among the early adapters of renewable energy options.

Public Comment #20 from Hannah Wilson, Alaska Fisheries Development Foundation, Inc.

The Alaska Fisheries Development Foundation (AFDF) strongly supports long-term energy planning efforts initiated by Governor Mike Dunleavy through the Alaska Energy Security Task Force. This proactive step towards a comprehensive statewide energy plan is critical for Alaska's sustained economic growth and community resiliency.

The Alaska seafood industry is a significant pillar of our state's economy, especially in coastal Alaska. It is the largest private sector employer in Alaska and generates \$5.7 billion annually in economic activity while contributing 60% of the United States' wild seafood production. The industry's operations across 100+ large seafood processing plants in 40+ of Alaska's coastal communities, and a fleet of 9,000 vessels using more than 200,000,000 gallons of diesel and gasoline annually, underscore its substantial role in our state's energy landscape.

Our industry serves as an anchor buyer of utilities in coastal communities, which justifies large-scale capital investment in power generation and drives down electrical prices for coastal residents.

Given the considerable energy consumption and the consequential impact of energy costs on the seafood industry's operations, profitability, and competitiveness, we believe that a more pronounced representation and consideration of the seafood industry in the Task Force's deliberations and recommendations are both necessary and beneficial.

We look forward to the opportunity to contribute to the meaningful discussions and actions of the Alaska Energy Security Task Force. Your consideration of our recommendations is highly appreciated.

Public Comment #22 from Chris Rose, REAP

Priority B: Coastal Generation, Distribution and Storage.

- 1) REAP agrees with the Task Force's objective of integrating and promoting more air source heat pumps to reduce the heavy energy burden currently put on consumers in coastal Alaska by relying on imported heating oil.
- 2) REAP also supports the objective to electrify the Alaska Marine Highway fleet to stabilize prices and reduce emissions.
- 3) REAP is not sure what "light" integrated resource planning is.¹ Integrated Resource Plans will deliver more to Alaskans if the technical and economic analysis is thorough, and there is some type of requirement to follow through with the IRP's action plan.
- 4) Hydropower must be compared on an "apples to apples" basis with other generation alternatives in IRPs.

Public Comment #23 from Bridget Shaughnessy Smith, Alaska Public Interest Research Group

II. Omissions & Further Considerations

The Railbelt-relevant sections of the plan have an unwarranted and glaring omission: there is no explicit mention in the Oct. 3 draft of the Railbelt Reliability Council (RRC) or its own ongoing Integrated Regional Planning (IRP) process, and only passing mention in the Oct. 20 draft without real consideration. The RRC's IRP is an open and transparent effort to evaluate with depth and technical rigor the best energy options for the Railbelt. Moreover, the RRC was established with particular safeguards to ensure that directors act independently from users, owners, and operators of the Railbelt grid; there is reasonable notice and opportunity for public comment, due process, openness, and balancing of stakeholder interests; avoidance of undue amplification or attenuation of stakeholder interests; and consideration of whether certain stakeholder class members stand to profit from construction of new facilities used to provide electrical service, among other protections—directly in contrast to the creation of the Task Force, which is largely composed of similarly situated private industry members or state agencies but not consumer or environmental interests as in the RRC. The legislature mandated that an Electrical Reliability Organization carry out the IRP process in SB123, and in 2022 the Regulatory Commission of Alaska certified the RRC as the organization to do it.

In creating the IRP, the RRC would compare the economic trade offs of different options for meeting our transmission and generation needs -- an already-existing mechanism that could avoid the danger of bad investments being made in an absence of public oversight. In contrast, the draft Statewide Energy Plan was created through an opaque and politically influenced process and contains particular actions that risk spending public resources on poorly conceived energy projects if no transparency and accountability measures are included or are simply performative. Action B-1.4, which would create a transmission fund within the Alaska Energy Authority; B-3.1, which calls for, among other things, a public/private hydropower investment 2 AS 42.05.765; 3 AAC 46.060. fund; E-5.1 and E-5.4, creating an energy incentive program; and E-5.5, creating tax exemptions for generation and transmission investors; all require definite mechanisms for public transparency.

In the Oct. 20 draft, the existence of the RRC IRP is mentioned in Action F-3.4, which only notes that the process may take several years and recommends the RCA review time considerations. F-3.5 recommends modifying a section of the RRC's underlying statute, AS 42.05.760, "to ensure alignment with unified Railbelt transmission authority." It does not specify how the current RRC is misaligned or incompatible with unified transmission.

Public Comment #23 from Bridget Shaughnessy Smith, Alaska Public Interest Research Group

IV. Endorsed recommendations

Among the recommendations that AKPIRG would like to see adopted in the final plan and executed by the legislature or executive branch are those in Action B-1.5, especially the establishment of a Data Department at the Alaska Energy Authority and a data governance committee for establishing data collection protocols. Having easy access to a body of consistent data on our energy system not only enables better decisions, but would help utilities, agencies, and IPPs seek federal funding for their projects, and allow researchers and the public insight into the energy options that best meet our needs. These benefits depend on the data collected

and organized by AEA being open to the public, and we urge for language to this effect to make this explicit in the Statewide Energy Plan. 3 Action F-1.6 (F-3.1 in the Oct. 20 draft), “provide budgetary support to the Regulatory Commission of Alaska,” should be a high priority for decision makers acting on this plan. A lack of staff capacity likely contributed to the RCA’s inattention in this summer’s 400% rate increase for the residents of Aniak, which the RCA commissioners unanimously approved in May. Though the Commission later mitigated the impact on Aniak residents, it could have avoided subjecting them to the increase in the first place had there been more capacity devoted to the case and to the underlying problem with Aniak’s utility. Currently the RCA is considering whether to grant the Alaska Power Company a 25% rate increase, which deserves a degree of regulatory scrutiny the RCA does not seem to be currently equipped for. Future regulatory matters emerging from our changing energy system will require even greater capacity.

Public Comment #26 from Study of Environmental Arctic Change (SEARCH)

The Study of Environmental Arctic Change (SEARCH) is a collaboration of Indigenous Knowledge holders, scientists, and public and private decision makers with the goal to provide a deeper understanding and inform decisions related to the drivers and consequences of environmental Arctic change. These consequences include the impacts of environmental changes on human-well-being, as well as on international collaboration and economic decision making. This collaboration is funded by the U.S. National Science Foundation and more information can be found at www.searcharcticsscience.org.

Increasing energy security, affordability, and reliability for every Alaskan is a critical priority for the entire state, but those goals remain particularly difficult to achieve for any rural, remote or coastal community not connected to the Railbelt Grid or near locally sourced hydroelectric power. These communities continue to primarily rely on economically and environmentally costly diesel generation. This dependency severely limits these communities’ ability to have secure and affordable heat and power, and exposes the individual community, and the state more broadly, to a multitude of compounding and cascading environmental hazards.

Our co-produced comments integrate perspectives and examples from Indigenous Knowledge holders, scientists, and public and private decision makers. We focus on the sections of this draft Energy Master Plan that relate to rural communities now relying on Power Cost Equalization (PCE) to help make residential electricity rates affordable, but many of our comments apply more broadly to energy systems throughout the state.

Comment 1: Definitions need to be revised.

The Draft Plan broadly groups the state’s energy Priorities, Strategies, and Actions by Railbelt, Coastal, and Rural areas. However, many of the state’s most challenged communities are both rural and coastal. Rural coastal communities in many parts of the state experience double jeopardy: they face the same energy affordability challenges that most off-grid communities face, but their energy infrastructure is also experiencing severe environmental damage due to permafrost thaw, coastal erosion, and increased exposure to wave and sea spray.

The term Rural is defined differently at federal, state, and local levels, and within specific programs, and it is important that the Plan provide a broad definition of the term, particularly given that it recommends policy changes at all levels of government.

Recommendation: Given these different conditions, we encourage the Task Force to recognize the three different types of energy conditions in Alaska as Railbelt, and two rural situations as Coastal non-PCE, and PCE communities. It is important to make clear that the current “coastal” definition is only for developed coastal communities with existing access to resilient energy infrastructure and renewable generation sources (e.g., hydropower).

Comment 2: Electricity generated by renewable sources (wind, solar) is less costly, more reliable, and more secure than diesel-powered electricity.

The stated aim of this Energy Master Plan is to ensure that energy for all Alaskans, including those in PCE communities, is affordable, secure, and reliable. While the Railbelt section, and to a lesser extent the Coastal section, emphasize the need to diversify power generation sources and to provide economic incentives for reducing both residential and business energy costs, no such considerations are provided for existing PCE communities. The Plan needs to consider a nondiesel energy future for PCE communities so they too can have affordable, secure, and reliable energy.

There are clear advantages for renewables over diesel power for each of the Plan’s three goals (please also see the diagram at the end of this letter).

Security. Diesel fuel is subject to both the variability of commodity pricing and the vulnerability of Alaska’s complex supply-chain. Locally-sited renewables and power storage (e.g., batteries) are inherently more secure. Fuel storage, generation and transmission infrastructure is increasingly vulnerable to climate related environmental risks such as wildfire, flooding, erosion, permafrost thaw, wind storms, ocean spray, fallen lines from heavy or freezing rain in winter, and permafrost thaw. Transmission lines that span long distances are costly to install and maintain, and may expose communities to increased energy insecurity due to changing environmental conditions.

Savoonga provides a case study. Fuel is primarily provided to Savoonga via barge. Barge service, however, is limited by weather and ocean conditions, including when shorefast ice is present in winter during which time barges cannot be used at all. Fuel is airlifted into Savoonga when barge service is not possible. This method, though, is similarly limited by weather as, among other concerns, Savoonga (like many other remote Alaskan villages) does not have multidirectional runways. Naturally, airlifted fuel is more expensive than fuel transported by barge. Just this autumn 2023, there was a plan to airlift several thousand gallons of fuel to keep Savoonga’s airport garage operable. Despite the need, however, the \$19-per-gallon price of airlifted fuel led to the plan not receiving approval. Similarly, when Savoonga’s local store ran out of gas, fuel was airlifted in, nearly tripling the price.

Loss of power on all scales is a security risk for rural Alaskan communities. For example, many communities (such as Chevak) are required to travel dozens of miles for wood to fuel wood stoves. These necessary labors,

which often only yield minimal amounts of firewood, further increase communities' reliance on diesel energy, thereby exacerbating insecurity.

Reliability. Most rural communities in Alaska lack redundancy in their power generation infrastructure. If diesel fuel becomes unavailable due to supply-chain issues, or power generators fail, rural communities lack the redundancy and diversity that most urban communities have. Locally sourced renewables like wind and solar can provide power independently, and rapid advances in storage technology will help increase redundancy and reliability by diversifying energy sources. Rapid advances in electricity storage technologies are reducing the need for backup power generation, but diesel generation capacity is still necessary in many parts of the state to backup renewables.

See also: <https://alaskapublic.org/2020/03/19/village-of-savoonga-contends-with-power-outage-as-region-is-hit-with-heavy-storms/>

Affordability. The high cost of diesel in rural Alaska results mainly from long transport distances (i.e., no local sources), and although the market for diesel is competitive the requisite barge service to rural communities is not. This problem is compounded by unpredictable and volatile markets, which is an energy security problem. Locally-sourced renewables help alleviate these problems and provide lower-cost energy once established. Because of the way electricity prices are regulated by the RCA, the regulated price of electricity generated by renewables may be higher for an initial startup period (1-3 years), although the long-term cost is lower.

Current state policy associated with PCE, given the way that utilities are regulated by the Regulatory Commission of Alaska (RCA), prevents utilities that invest in renewable power from receiving PCE subsidies for any return on their initial equity investment. Because renewable sources typically have much higher initial capital costs, but much lower operating costs that are eligible for PCE assistance, this amounts to a crippling disincentive for moving to renewable power. The argument that the short-term cost of renewables is higher than diesel is like saying buying a house is more costly than renting, even when your monthly mortgage payment would be lower than the rent. However, this current policy can be changed, without compromising the objectives of the PCE program.

In some communities, existing renewables do not adequately serve as backup energy sources. In Savoonga, a majority of the power generated by their two wind turbines is being used to offset the costs of the community's power generators.

Additionally, businesses and service providers in PCE communities do not have access to PCE payments and consequently continue to suffer increasingly unaffordable energy until there is an investment made in truly affordable power generation.

Recommendation: Transition to renewable energy sources is the most robust energy strategy, especially for PCE communities, and needs to be prioritized. To help support this transition, PCE statutes should be revisited to allow for a fair rate of return on capital investments targeted at bringing renewable power generation infrastructure online, reducing the reliance on diesel fuels, and lowering the necessity for equalization subsidies in the longer term.

Comment 3: Risks to community energy infrastructure are increasing, and will continue to increase without diversified alternative energy sources that provide redundancy, storage, and reliable backups.

Diminishing sea ice is increasing coastal erosion and the changing climate is raising precipitation levels - both snow and rain - in other areas of the state. Flooding, snowfall and freezing rain can directly impact transmission lines and cause power outages. Recently, for example, areas of the Fairbanks North Star Borough suffered extended power outages due to downed transmission lines.

The isolation of many northern Alaskan communities further increases their vulnerability to weather-related energy disruptions. Many of these communities do not have the resources (especially linemen) in village to repair energy infrastructure following outages. Often, outages are caused by storms which then delays linemen and resources being flown in, thereby prolonging outages. Linemen for rural Alaskan communities do not live in the communities in which they work, instead traveling to dozens of villages when their services are needed. This prolongs outages and delays repairs. For example, earlier this year, a storm affected 20 homes, the preschool, and tribal offices in Savoonga. While Savoonga does have certified electricians, there are no linemen in the community. In this case, it took two days for the lineman to come in and for power to be restored.

In Savoonga, the last few years have seen high winds affecting the power plant with the community experiencing unscheduled power outages from strong winds and precipitation during the winter. Similarly, permafrost thaw in Savoonga causes energy setbacks by shifting transmission poles. Maintenance resources, however, are limited, meaning that once workers fix poles in one community, the poles have moved again before they are able to return.

Recommendation: The Draft Plan should explicitly consider the increased vulnerabilities Alaska's energy infrastructure will be facing due to weather-related hazards, especially for communities in northern areas. This will require a focus on diversifying energy sources within local systems and grids, to include incorporating battery backup and storage, and other emerging technologies. Such an approach will not only make energy more reliable and secure, but also more affordable than being dependent on the supply of diesel via barge and storage in fuel tank farms vulnerable to coastal erosion and permafrost thaw.

Comment 4: This plan does not adequately consider the needs of non-residential energy users in PCE communities.

A stated goal of the Plan is to make energy more affordable to drive economic growth, yet current regulations for PCE inhibit that in a variety of ways. The regulations stifle business and commercial enterprise, and they restrict many aspects of overall development that contribute to and support human wellbeing and economic prosperity. For example, diesel power is very expensive for transportation services such as airport and freight operations, and for municipal infrastructure such as water, sewer, and broadband internet. The high cost of diesel energy also makes the operation of medical and educational facilities more difficult.

Recommendation: PCE as currently operated reduces the energy cost for residential users; it does not do the same for businesses and commercial facilities. Reduced cost for reliable energy in these communities, however, is needed to support economic growth. While we understand the safeguards against misuse by power

companies from this policy, we recommend that PCE statuses be revisited to support community assets including small businesses and commercial enterprises.

Comment 5: The current process that created this Draft Statewide Energy Master Plan has not adequately considered the energy security, affordability, and reliability of PCE communities.

As noted, and as evident from the brevity and content of the Rural Section of the Plan, this process has not adequately considered the current conditions, limitations, and options for PCE communities, nor has it adequately consulted with PCE community members. As such, many of the proposed strategies fail to address their energy security, affordability, and reliability realities and future needs. These realities all need active strategies to transition to renewable energy sources, to allow PCE to support capital investments for renewable and weather-resilient energy infrastructure, and to receive direct input from PCE communities from the beginning stages of these planning efforts.

Recommendation: We recommend substantial in-person consultation with PCE communities prior to finalization and implementation of the plan. Without such input the Plan as drafted cannot achieve energy affordability, reliability, security, and equity for rural Alaskans living in PCE communities.

We appreciate the opportunity to comment on this Draft Plan and look forward to seeing how these comments will be reflected in the final draft version. We are certain of our agreement with your Task Force that creating a new Statewide Energy Master Plan is a tremendous opportunity to transition the State to a more robust, reliable, affordable, and environmentally responsible energy infrastructure. As has been shown in many other regions and states, these goals are best met by transitioning to renewable energy sources and supporting its transmission, storage, and use. This will directly benefit Alaskans while simultaneously establishing Alaska as a leader in our urgent national and global need to reduce, prevent, and mitigate the increasing environmental hazards many of our residents are experiencing, especially as they relate to affordable power.

Public Comment #27 from Pacific Seafood Processors Association

The Pacific Seafood Processors Association (PSPA) represents seafood processing companies with operations throughout coastal Alaska and Washington. PSPA's corporate members are twelve major shoreside and mothership seafood processing companies, each with multiple facilities, that purchase, process, and market billions of pounds of seafood from just about every commercial fishery in Alaska, including wild Alaska pollock, salmon, cod, crab, halibut, and rockfish, among others. PSPA member companies have made significant investments in the future of Alaska seafood, spending hundreds of millions of dollars in rural infrastructure, facilities, processing technology, and, in some cases, energy generation

The Alaska seafood industry is a significant pillar of our state's economy, especially in coastal Alaska. It generates \$5.7 billion in total economic activity and \$2.2 billion in labor income annually in Alaska, including spending for energy, capital reinvestments, regulatory compliance, payroll, innovation, and other costs. This industry supports more than 31,000 commercial fishermen and 27,000 processing workers in 160 shore-based plants, and onboard 9,000 registered commercial fishing vessels, including 52 catcher-processor vessels, and 30 floating processors in Alaska. The fishing fleet alone uses more than 200,000,000 gallons of diesel and gasoline annually, which underscores its substantial role in our state's energy landscape. This industry also serves as an

anchor buyer of power from utilities in coastal communities, which helps justify large-scale capital investment in generation and drive down electrical prices for coastal residents.

PSPA strongly supports long-term energy planning efforts initiated by Governor Mike Dunleavy through the establishment of the Alaska Energy Security Task Force by Executive Orders #344 and #345, and by hosting annual Alaska Sustainable Energy Conferences. These proactive steps toward an abundant energy future are critical for Alaska's sustained economic growth and community resiliency. Additionally, some international markets are beginning to require carbon footprint accounting throughout their supply chain as companies and countries aim to implement net zero sustainability goals. This could prove challenging for Alaska's seafood industry which is still highly dependent on diesel to power vessels and, in some cases, shoreside operations.

The Task Force has held numerous meetings toward the future of Alaska's energy security. The Task Force drafted a Statewide Energy Master Plan (Plan) and has asked for comments from the public. Members of PSPA commend this significant undertaking and offer our recommendations to help make this Plan as

effective as possible, given a particular eye toward the unique needs of the Alaska seafood industry. Respectfully, PSPA's offers the following recommendations for consideration by the Task Force:

General – Elevate the Alaska Seafood Industry in the Plan and the Process

Given the considerable energy consumption, the consequential impact of energy costs on the seafood industry's operations, profitability, and competitiveness, its unique needs and requirements, and the interdependent nature of Alaska's coastal communities and seafood industry, we firmly believe that a more pronounced representation and consideration of the seafood industry in the Task Force's deliberations and recommendations are both necessary and beneficial to the State. The Plan should include a description of the significant role of the Alaska seafood industry and its unique challenges and needs in securing energy. For example, seafood processing companies must generate their own power in some remote areas, such as Bristol Bay, because community facilities cannot meet peak energy demand.

Additionally, representation by the Alaska seafood industry is missing from the Task Force, although oil, gas and mining are included. Therefore, moving forward, we recommend additional outreach to and inclusion of the seafood industry in both the Task Force's Plan and implementation process. For example, the Task Force may benefit from presentations by key seafood industry stakeholders to describe unique needs, challenges and considerations for investment decisions, such as the potential for geothermal energy in Unalaska and its connection to future industry investment decisions.

Specific - Priority B: Coastal Generation, Distribution, and Storage

Below, we offer some specific recommendations for the Plan related to Priority B – Coastal Generation, Distribution, and Storage:

- Highlight the importance of initiatives B-1.6, B-3.1, B-4.4 & B-4.5 to the seafood industry.
- Add a strategy to advance adoption of geothermal where appropriate.
- Add actions to B-4 Alaska Market Initiatives, including:

- Plan, finance and support the execution of shore power for fishing vessels converted to electric or hybrid
- Consider and support technical assistance for alternative energy sources and solutions for vessels of all sizes (fishing vessels, support vessel, maritime shipping, ferries, cruise ships)
- Technical assistance to right-size community and industry needs with new renewable energy technologies, such as technologies being demonstrated in Alaska by the U.S. Dept. of Energy's Advanced Research Projects Agency – Energy (ARPA-E)
- List vessel and processing plant decarbonization, efficiency, and energy solutions as a long-term goal in the Plan.
- Reduce emphasis on distribution in coastal Alaska, where sparse populations and geography in many cases make distribution economically unfeasible.
- Advocate for the exploration and establishment of public-private partnerships to bolster energy infrastructure.
- Offer guidelines on leveraging local, state, and federal funds for financing new renewable energy projects

We look forward to the opportunity to contribute to the meaningful discussions and actions of the Task Force. We appreciate your diligent work on a topic of extreme importance to all Alaskans. Thank you for your service to Alaska.

PUBLIC COMMENT # 28 from Bridget Maryott, Cook Inletkeeper

Responsible hydropower deployment means strongly considering how changes in water temperature, flow rate, and variability affect the abundance and genetic diversity of downstream fish populations, and prioritizing fisheries in the development and operation of projects. Any measure to promote hydropower— such as Action B-3.1 in the Oct. 3 draft (F-2.3 in the Oct. 20 draft), which includes revising AS 42.45.350 and creating a state fund and a public/private hydro development corporation – must have these priorities.

Excerpt: PUBLIC COMMENT # 29 from Kelsey Schober, The Nature Conservancy

Promotion of Energy Efficiency and Conversion Measures in Buildings

Actions: B-4.1, E-6.3

The mentioned report, *Resilient Homes: Alaskans Building for Climate Change*, contains information pertinent to building energy efficiency and fuel reduction measures in buildings across Alaska. This report specifically notes that these measures result in reduced cost burdens for households, additional opportunities for employment, and health benefits.

TNC-AK supports the implementation of Action B-4.1 to promote heat pumps as an alternative energy and heat source in coastal Alaska. We also support the Task Force in exploring successful case studies in order to further implementation in Alaska, as identified in Action B-4.1. The aforementioned report, *Resilient Homes*, identifies examples of residential heat pump integration by Tlingit-Haida Regional Housing Authority in Petersburg and Baranof Island Housing Authority in Sitka as two heat pump integration projects (see pg. 14). It

also identifies the installation of combination heat pump and solar array systems in Ambler as an example of deployment that utilizes integration as a way to address overall high energy costs (see pg. 14).

Given the additional identified risk of exceeding monthly PCE limits as a barrier that could slow adoption of heat pump technology in regions with high electricity costs (see pg. 2), we encourage the Task Force to take into account successful examples of deployment from across Alaska in order to ensure equitable rollout of any heat pump deployment-related efforts.

Additionally, TNC-AK supports the implementation of Action E-6.3 which seeks to increase availability of resources for weatherization, energy efficiency, and building retrofits. Energy efficiency and weatherization efforts from 2008 to 2018 under the Home Energy Rebate Program

(HERP) and weatherization programs translated into "a combined \$444 million in residential energy savings over the decade" with participants of the program seeing an average annual savings of \$1200-\$1300 in their energy costs (pg. 14). As Alaskans face high energy costs and a high cost of living, savings from these programs is not only an economic boon but also supports community sustainability and resilience.

Thank you for your work to call attention to the importance of affordable and renewable energy for Alaskans. As supporting material, we are submitting the two reports referenced throughout these comments. We ask that the task force to review these supplementary materials to inform future development of the report and we encourage robust outreach to the public as the task force works to review and finalize this plan

PUBLIC COMMENT # 31 FROM Ky

I have the opportunity to review the draft Statewide Energy Master Plan. The task force does not appear to have delivered the initial plan required in May under the Executive Order, and it seems this plan is not on track to be completed by the end of October when the task force is set to sunset. I would appreciate an update on what is planned since this draft appears to be missing a substantial amount of what might be in the final plan, so it isn't easy to offer much in the way of comments. I do not want what I do offer considered comments on a final plan. I do not feel that what has been proposed in this draft is adequate for a master plan for the state.

Overall, it's clear the plan is nothing more than a restatement of current plans and policies of the state and offers little to change the trajectory of our energy use or supply or achieve any cost containment, much less cost reduction. (e.g. Redundancy is nice for transmission, but only increases capital carrying costs.) In fact, many sections are missing strategies and details or, offer lofty thoughts but little in tangible results, or recommend more AEA staff.

e.g. "...Benefits: The ability of the state to achieve a moonshot goal [emphasis added - what "moonshot"?] requires a coordinated effort across agencies and through all programs that intersect with the goal. The state can consider every program through the lens of lowering energy costs for Alaskans, and refine its approaches to achieve that end. Expected Results: [blank]..." page 57. or

e.g. "Strategies" B-1 to B4 that are not strategies but seem to be titles for a group of actions that follow.

Others seem to be self-serving plans by the AEA to add staff and take over control/ownership of transmission capability with the MLP-CEA-inspired dreams of buying out assets "at book value" to save money... I hope we

are not fooled twice with this shell game of refinancing our existing infrastructure and giving greater control to an agency with more than enough time and money to buy worthless oil leases.

Some sections seem to be just not connecting the dots, such as Priority areas A, which never mentions the planned demand on gas for a Donlin Mine (14" gas line from cook inlet), and then in A.3 suggests we need to increase demand in an area that has excess electrical generation capacity and a shortage of natural gas that we want to give away to a large industrial user. Why isn't the Donlin mine considered for lower-cost electricity and incentivizing them to ramp up the use of electric gas, returning their homes to electric head etc. (My home was initially heated with electricity on the hillside in the 70s. It is still installed and could pull electrical power today if there was an intelligent metering system to allow me to use excess electrical energy at a rate competitive with the potential cost of natural gas-supplied heating energy.

Another set of dots not connected is that we don't need a gas line AND the Wantana dam. Our plan should not be promoting more energy demand on one hand and then at the same time burdening us with fanciful expensive projects on the other hand that could lead us to even more excess production capacity and the capital burden of the projects. The plan reads more like a wish list for the construction industry than a thoughtful determination of a plan and hard decisions one what we should actually do next to address our energy needs.

And my list could go on, but I don't have time to start untangling this plan, particularly when it is clearly in a form that is not quite ready for public review with a strong and well-accepted set of goals and strategies to start with.

I'd suggest if the Task Force is extended that it back up and get clear on the goals of this plan rather than lots of fluffy words, including a goal to monitor and reduce Alaska's greenhouse gas emissions with specific targets rather than vague references and address the monster in the room of gas supplies in south-central. I'd also like to see a focus on engaging our youth and university on energy challenges, including the long-promoted but never-supported Alaska Energy Prize (Allan Johnston). Further, the plan should start with a number of objective goals and real targets, potentially tied to 4-5 scenarios for the Alaska's future.

The plan reads like a recipe to keep the gas line dream alive and to keep doing all the other work being done, and there is a lot of good work being done. It is well past time to set the pipeline aside and think about a state master energy plan without the line distracting us from the many other opportunities we have for energy and exports and see what it looks like. Or if you want to keep that dream alive, I'd build the master plan based on a set of scenarios that might be something like:

1. Gas Dreams - A gas line is built and running by 2035, perhaps with a bridge of imported gas... (that will never help our energy costs...)
2. Transformer - There is no gas pipeline and no sufficient supply of southcentral gas for the Anchorage or Donlin needs but instead, alternative energy systems, storage, and smart demand controls are used to accelerate a transformation for the railbelt and Donlin goes ?Nuclear? or uses an ammonia pipeline feed by the Alutians geothermal or Mightypipelines' proposal to bring blue ammonia down the existing TAPS line.

3. Slow Drain - Alaska continues to do nothing to invest in its economy and we have a declining population reliant on federal subsidies and stagnant/flat natural resource development.
4. Climate Winner - Alaska chooses to think and act like a potential climate change winner and make 10c power a reality and invests in being a global leader in energy systems and economic transformation (See Calgary and Iceland examples).
5. 1987 - Disaster strikes and the oil industry collapses in the next 10 years, while the federal funding dries up due to deficits and conservative politics.

If you'd like help with the current plan offers nothing of a "master plan", but I agree one is needed, and the remarkable work at ACEP, the H2 and CCUS working groups, RPS legislation, the meetings this week in Iceland on energy transformations, the national energy hubs all point the way to amazing future if we choose to create a plan to move in that direction vs. keep the status quo, give AEA more control, and hope someone will buy our gas. h scenario planning, let me know!

ENERGY PRIORITY C. RURAL GENERATION, DISTRIBUTION AND STORAGE PUBLIC COMMENT

Public Comment #2 from Joel Groves, Polarconsult Alaska, Inc.

I've reviewed minutes for the the Energy Security Task Force's April 25th meeting. In contemplating the magnitude of the Governor's charge and resultant impacts to the state's energy infrastructure / industry, it occurs to me that low-power HVDC / MVDC (high-voltage / medium voltage direct current) electric transmission technology that was advanced by an R&D project that the Denali Commission funded, ACEP managed, and Polarconsult performed about a decade ago merits consideration by the Task Force.

I think any practical path to achieving 10-cent energy in our villages will need to include (a) increased subsidy beyond PCE and/or (b) significant transmission build to achieve economies of scale and consolidate operations. This is not to exclude the importance of other significant contributing efforts such as local energy solutions, but it is hard to see how the 10-cent goal is achieved absent major subsidy and/or transmission components. If transmission is to be part of the solution, HVDC / MVDC should be part of the transmission discussion as it holds significant promise as a lower-cost solution for interties between rural Alaska communities and / or the Railbelt bulk electric system and rural communities.

Relevant take aways from the Denali Commission-funded R&D project that pertain here include:

1. Low power (500 kW to 5 MW) HVDC / MVDC transmission in remote AK applications holds promise to be more economic than conventional AC tie lines for lines over ~20 miles in length. 20 miles does not get you very far in Bush Alaska.
2. The basic technology is not a barrier to this solution. Suitable commercial converters are probably still not commercially available but they could be developed with capital commitment for R&D - either from government or private investment depending on the market potential / interest.
3. Adapting low power HVDC / MVDC to conform with telecom submarine cable manufacturing practices / capabilities would be a key innovation that holds promise to reduce the capital / installed cost of low-power HVDC / MVDC submarine cables. This is because the comm sub cable manufacturing and installation industry is larger than the power sub cable industry, and offers lower costs. If successful this effort could have profound implications for the economic viability of low-power village interties in southeast Alaska and other coastal regions of our state. Dual-purpose cables (power transmission and broadband fiber) is an obvious synergistic opportunity here.
4. Principal barriers to low power HVDC / MVDC implementation are:
 - a. Regulatory. National codes adopted by the state and managed by the DOL do not anticipate the unique conditions of remote AK and do not allow elements of HVDC / MVDC installations that would maximize tie line economics. The principal issue here was the "single wire ground return" operational mode of monopolar DC circuits.
 - b. Industry. The electric utility industry is conservative by nature and advancing this technology from R&D to commercially accepted and financeable (RUS financing vehicles, etc.) merits scrutiny and a holistic strategy / roadmap to success. A robust supply chain for manufacture / life-cycle support of the power converters is a key need as well.
 - c. Advocacy. An appropriate advocate within the utility or state realm needs to be identified if the potential benefits of HVDC / MVDC are to be realized. This Task Force seems well-positioned to identify that advocate and facilitate it being charged with the appropriate mission.

I was Polarconsult's project manager for the prior HVDC R&D project and am available to answer questions about that prior effort. Robert Venables and Gwen Holdman are both current task force members with some direct knowledge of the prior HVDC R&D project.

I've also copied Bill Stamm on this email for general awareness as AVEC was a key supporter of the prior HVDC effort back in the Meera Kohler / Brent Petrie days. Also AVEC perhaps best-understands the economic benefits of village tie-lines generally.

Details on the prior project are available at: <http://energy-alaska.wikidot.com/high-voltage-direct-current-transmission>

Public Comment #4 from Katya Karankevich, Alaska Native Health Consortium

I am writing to express support with your draft as it relates to rural initiatives. We most desperately need state financial match in the form of 20-50% so that we can harness the federal dollars for remote communities. Action C-1.1 and C-1.3 are very important. But C-1.2: "developing public/private partnerships for financing" has not ever produced results and will likely never produce results for the vast majority of remote communities. This point should be removed or restated. The factors that make private capital interested in infrastructure projects is generally a financial environment that rural Alaska does not meet. The energy projects that are cost effective at such a small scale usually save as much over their lifetime as they cost, giving them a cost benefit ratio of around 1. This would be a 3% return on a lifetime of a project, given a 25 year life like in the case for solar systems. Returns under 10% do not interest private capital investors, as local private capital sources have told me that they don't choose projects below 14% annual returns. Even the state revolving loan fund is at 6.25% currently. Our investment in making remote community's power more affordable will not come from private capital. The returns are too low and the performance risk is too high compared to larger scale projects on the railbelt. To put effort into finding funding partnerships with funders who want these expected returns will be wasted effort. More effort should be put on local match sources, forgivable loans and state derived match sources, which unlock millions more than they cost in federal dollars.

In our statewide work lowering the costs of providing water and sewer to remote communities through energy projects, we have experienced these hurdles acutely. Please let us know if there is another version of this document that we could provide input on.

Excerpt: Public Comment #6 from John Neary, Juneau, Alaska

It's also encouraging to see you support training to grow the renewable energy workforce (pg. 67, 77, and 110). This is really needed here in Juneau where heat pump installations have been unnecessarily delayed due to a lack of skilled workers....

You also recommend (pg. 67) the state create and distribute community outreach and education programs to promote extractive energy projects in rural areas. This program would research how projects "have successfully navigated opposition mounted by local communities and environmental NGOs." What an unfortunate and divisive use of words to describe legitimate opposition to certain projects, and the state should not position itself to deliver what seems like corporate messaging.

Excerpt: Public Comment #11 from Mary Burtness

Workforce development is a necessary component for future jobs that will keep our youth in the state, as well as re-tool the fossil fuel industry workforce.

Excerpt: Public Comment #6 from Connie Markis, Anchorage, Alaska

It's also encouraging to see you support training to grow the renewable energy workforce (pg. 67, 77, and 110). This is really needed here in Juneau where heat pump installations have been unnecessarily delayed due to a lack of skilled workers...

You also recommend (pg. 67) the state create and distribute community outreach and education programs to promote extractive energy projects in rural areas. This program would research how projects "have successfully navigated opposition mounted by local communities and environmental NGOs." What an unfortunate and divisive use of words to describe legitimate opposition to certain projects, and the state should not position itself to deliver what seems like corporate messaging.

Public Comment #22 from Chris Rose, REAP

Priority C: Rural Generation, Distribution and Storage

- 1) REAP believes there should be more of an emphasis on lowering costs through energy efficiency programs, incentives and subsidies
- 2) Another important way to reduce energy costs in rural Alaska is by reducing operations, repair and maintenance costs, and REAP supports state investments in workforce training and local capacity building to ensure that projects are fuel efficient, and have high availability rates.

Public Comment #23 from Bridget Shaughnessy Smith, Alaska Public Interest Research Group

Action C-3.3, a "community outreach and education program to combat NIMBYism in energy projects in rural areas" is an activity that the state should not subject its citizens to or spend its resources on. Studying and imitating the tactics of projects "that have successfully navigated opposition mounted by local communities and environmental NGOs," as recommended in Appendix II is neither an appropriate activity for the state nor an impactful solution for our energy problems. Community engagement and power in difficult decisions -- such as the hydropower or mining activities specifically mentioned in association with this action in Appendix II -- is a necessary function of civil society in a democracy. The urge to "combat" it with state-delivered propaganda is a fundamentally authoritarian one that has no place in any plan in Alaska.

PUBLIC COMMENT # 24 from Tim Hinterberger, Anchorage, AK

Thank you for this opportunity to comment on the Alaska Energy Security Task Force Statewide Energy Master Plan. I'm sure my thoughts align with those of many other concerned citizens you're hearing from. The draft plan contains both proposals that are highly beneficial to the energy future of Alaska and ones that should be avoided.

TO AVOID

5. Community outreach and education programs to promote extractive energy projects in rural areas are not an appropriate part of an unbiased, science-based energy policy.

HIGHLY BENEFICIAL

1. Renewable Portfolio Standards (RPS) will be a strong motivator for Alaska utilities to invest in clean energy.
2. Green Bank state financing institution for sustainable energy as considered in SB 125 and HB 154.
3. Making better use of already existing energy data to guide decisions with a full and consistent picture of how Alaska uses energy, and better equip utilities, agencies, and power producers to seek federal funding (pg. 31, 106-108).
4. "Postage stamp" transmission rates that would allow power generated anywhere in the region to be consumed anywhere else for a single transmission rate.
5. Net metering reform (pg. 52, pg. 101).
6. Training the growing renewable energy workforce (pg. 67, 77, and 110).

The Task Force has an enormous responsibility not only for the future of Alaska, but for all the occupants of the planet. I urge you to take an extremely long view and to think about what we owe to the many generations that will follow us.

Public Comment #26 from Study of Environmental Arctic Change (SEARCH)

The Study of Environmental Arctic Change (SEARCH) is a collaboration of Indigenous Knowledge holders, scientists, and public and private decision makers with the goal to provide a deeper understanding and inform decisions related to the drivers and consequences of environmental Arctic change. These consequences include the impacts of environmental changes on human-well-being, as well as on international collaboration and economic decision making. This collaboration is funded by the U.S. National Science Foundation and more information can be found at www.searcharcticsscience.org.

Increasing energy security, affordability, and reliability for every Alaskan is a critical priority for the entire state, but those goals remain particularly difficult to achieve for any rural, remote or coastal community not connected to the Railbelt Grid or near locally sourced hydroelectric power. These communities continue to primarily rely on economically and environmentally costly diesel generation. This dependency severely limits these communities' ability to have secure and affordable heat and power, and exposes the individual community, and the state more broadly, to a multitude of compounding and cascading environmental hazards.

Our co-produced comments integrate perspectives and examples from Indigenous Knowledge holders, scientists, and public and private decision makers. We focus on the sections of this draft Energy Master Plan that relate to rural communities now relying on Power Cost Equalization (PCE) to help make residential electricity rates affordable, but many of our comments apply more broadly to energy systems throughout the state.

Comment 1: Definitions need to be revised.

The Draft Plan broadly groups the state's energy Priorities, Strategies, and Actions by Railbelt, Coastal, and Rural areas. However, many of the state's most challenged communities are both rural and coastal. Rural coastal communities in many parts of the state experience double jeopardy: they face the same energy affordability challenges that most off-grid communities face, but their energy infrastructure is also experiencing severe environmental damage due to permafrost thaw, coastal erosion, and increased exposure to wave and sea spray.

The term Rural is defined differently at federal, state, and local levels, and within specific programs, and it is important that the Plan provide a broad definition of the term, particularly given that it recommends policy changes at all levels of government.

Recommendation: Given these different conditions, we encourage the Task Force to recognize the three different types of energy conditions in Alaska as Railbelt, and two rural situations as Coastal non-PCE, and PCE communities. It is important to make clear that the current "coastal" definition is only for developed coastal communities with existing access to resilient energy infrastructure and renewable generation sources (e.g., hydropower).

Comment 2: Electricity generated by renewable sources (wind, solar) is less costly, more reliable, and more secure than diesel-powered electricity.

The stated aim of this Energy Master Plan is to ensure that energy for all Alaskans, including those in PCE communities, is affordable, secure, and reliable. While the Railbelt section, and to a lesser extent the Coastal section, emphasize the need to diversify power generation sources and to provide economic incentives for reducing both residential and business energy costs, no such considerations are provided for existing PCE communities. The Plan needs to consider a nondiesel energy future for PCE communities so they too can have affordable, secure, and reliable energy.

There are clear advantages for renewables over diesel power for each of the Plan's three goals (please also see the diagram at the end of this letter).

Security. Diesel fuel is subject to both the variability of commodity pricing and the vulnerability of Alaska's complex supply-chain. Locally-sited renewables and power storage (e.g., batteries) are inherently more secure. Fuel storage, generation and transmission infrastructure is increasingly vulnerable to climate related environmental risks such as wildfire, flooding, erosion, permafrost thaw, wind storms, ocean spray, fallen lines from heavy or freezing rain in winter, and permafrost thaw. Transmission lines that span long distances are costly to install and maintain, and may expose communities to increased energy insecurity due to changing environmental conditions.

Savoonga provides a case study. Fuel is primarily provided to Savoonga via barge. Barge service, however, is limited by weather and ocean conditions, including when shorefast ice is present in winter during which time barges cannot be used at all. Fuel is airlifted into Savoonga when barge service is not possible. This method, though, is similarly limited by weather as, among other concerns, Savoonga (like many other remote Alaskan villages) does not have multidirectional runways. Naturally, airlifted fuel is more expensive than fuel transported by barge. Just this autumn 2023, there was a plan to airlift several thousand gallons of fuel to keep

Savoonga's airport garage operable. Despite the need, however, the \$19-per-gallon price of airlifted fuel led to the plan not receiving approval. Similarly, when Savoonga's local store ran out of gas, fuel was airlifted in, nearly tripling the price.

Loss of power on all scales is a security risk for rural Alaskan communities. For example, many communities (such as Chevak) are required to travel dozens of miles for wood to fuel wood stoves. These necessary labors, which often only yield minimal amounts of firewood, further increase communities' reliance on diesel energy, thereby exacerbating insecurity.

Reliability. Most rural communities in Alaska lack redundancy in their power generation infrastructure. If diesel fuel becomes unavailable due to supply-chain issues, or power generators fail, rural communities lack the redundancy and diversity that most urban communities have. Locally sourced renewables like wind and solar can provide power independently, and rapid advances in storage technology will help increase redundancy and reliability by diversifying energy sources. Rapid advances in electricity storage technologies are reducing the need for backup power generation, but diesel generation capacity is still necessary in many parts of the state to backup renewables.

See also: <https://alaskapublic.org/2020/03/19/village-of-savoonga-contends-with-power-outage-as-region-is-hit-with-heavy-storms/>

Affordability. The high cost of diesel in rural Alaska results mainly from long transport distances (i.e., no local sources), and although the market for diesel is competitive the requisite barge service to rural communities is not. This problem is compounded by unpredictable and volatile markets, which is an energy security problem. Locally-sourced renewables help alleviate these problems and provide lower-cost energy once established. Because of the way electricity prices are regulated by the RCA, the regulated price of electricity generated by renewables may be higher for an initial startup period (1-3 years), although the long-term cost is lower.

Current state policy associated with PCE, given the way that utilities are regulated by the Regulatory Commission of Alaska (RCA), prevents utilities that invest in renewable power from receiving PCE subsidies for any return on their initial equity investment. Because renewable sources typically have much higher initial capital costs, but much lower operating costs that are eligible for PCE assistance, this amounts to a crippling disincentive for moving to renewable power. The argument that the short-term cost of renewables is higher than diesel is like saying buying a house is more costly than renting, even when your monthly mortgage payment would be lower than the rent. However, this current policy can be changed, without compromising the objectives of the PCE program.

In some communities, existing renewables do not adequately serve as backup energy sources. In Savoonga, a majority of the power generated by their two wind turbines is being used to offset the costs of the community's power generators.

Additionally, businesses and service providers in PCE communities do not have access to PCE payments and consequently continue to suffer increasingly unaffordable energy until there is an investment made in truly affordable power generation.

Recommendation: Transition to renewable energy sources is the most robust energy strategy, especially for PCE communities, and needs to be prioritized. To help support this transition, PCE statutes should be revisited to allow for a fair rate of return on capital investments targeted at bringing renewable power generation infrastructure online, reducing the reliance on diesel fuels, and lowering the necessity for equalization subsidies in the longer term.

Comment 3: Risks to community energy infrastructure are increasing, and will continue to increase without diversified alternative energy sources that provide redundancy, storage, and reliable backups.

Diminishing sea ice is increasing coastal erosion and the changing climate is raising precipitation levels - both snow and rain - in other areas of the state. Flooding, snowfall and freezing rain can directly impact transmission lines and cause power outages. Recently, for example, areas of the Fairbanks North Star Borough suffered extended power outages due to downed transmission lines.

The isolation of many northern Alaskan communities further increases their vulnerability to weather-related energy disruptions. Many of these communities do not have the resources (especially linemen) in village to repair energy infrastructure following outages. Often, outages are caused by storms which then delays linemen and resources being flown in, thereby prolonging outages. Linemen for rural Alaskan communities do not live in the communities in which they work, instead traveling to dozens of villages when their services are needed. This prolongs outages and delays repairs. For example, earlier this year, a storm affected 20 homes, the preschool, and tribal offices in Savoonga. While Savoonga does have certified electricians, there are no linemen in the community. In this case, it took two days for the lineman to come in and for power to be restored.

In Savoonga, the last few years have seen high winds affecting the power plant with the community experiencing unscheduled power outages from strong winds and precipitation during the winter. Similarly, permafrost thaw in Savoonga causes energy setbacks by shifting transmission poles. Maintenance resources, however, are limited, meaning that once workers fix poles in one community, the poles have moved again before they are able to return.

Recommendation: The Draft Plan should explicitly consider the increased vulnerabilities Alaska's energy infrastructure will be facing due to weather-related hazards, especially for communities in northern areas. This will require a focus on diversifying energy sources within local systems and grids, to include incorporating battery backup and storage, and other emerging technologies. Such an approach will not only make energy more reliable and secure, but also more affordable than being dependent on the supply of diesel via barge and storage in fuel tank farms vulnerable to coastal erosion and permafrost thaw.

Comment 4: This plan does not adequately consider the needs of non-residential energy users in PCE communities.

A stated goal of the Plan is to make energy more affordable to drive economic growth, yet current regulations for PCE inhibit that in a variety of ways. The regulations stifle business and commercial enterprise, and they restrict many aspects of overall development that contribute to and support human wellbeing and economic prosperity. For example, diesel power is very expensive for transportation services such as airport and freight

operations, and for municipal infrastructure such as water, sewer, and broadband internet. The high cost of diesel energy also makes the operation of medical and educational facilities more difficult.

Recommendation: PCE as currently operated reduces the energy cost for residential users; it does not do the same for businesses and commercial facilities. Reduced cost for reliable energy in these communities, however, is needed to support economic growth. While we understand the safeguards against misuse by power companies from this policy, we recommend that PCE statutes be revisited to support community assets including small businesses and commercial enterprises.

Comment 5: The current process that created this Draft Statewide Energy Master Plan has not adequately considered the energy security, affordability, and reliability of PCE communities.

As noted, and as evident from the brevity and content of the Rural Section of the Plan, this process has not adequately considered the current conditions, limitations, and options for PCE communities, nor has it adequately consulted with PCE community members. As such, many of the proposed strategies fail to address their energy security, affordability, and reliability realities and future needs. These realities all need active strategies to transition to renewable energy sources, to allow PCE to support capital investments for renewable and weather-resilient energy infrastructure, and to receive direct input from PCE communities from the beginning stages of these planning efforts.

Recommendation: We recommend substantial in-person consultation with PCE communities prior to finalization and implementation of the plan. Without such input the Plan as drafted cannot achieve energy affordability, reliability, security, and equity for rural Alaskans living in PCE communities.

We appreciate the opportunity to comment on this Draft Plan and look forward to seeing how these comments will be reflected in the final draft version. We are certain of our agreement with your Task Force that creating a new Statewide Energy Master Plan is a tremendous opportunity to transition the State to a more robust, reliable, affordable, and environmentally responsible energy infrastructure. As has been shown in many other regions and states, these goals are best met by transitioning to renewable energy sources and supporting its transmission, storage, and use. This will directly benefit Alaskans while simultaneously establishing Alaska as a leader in our urgent national and global need to reduce, prevent, and mitigate the increasing environmental hazards many of our residents are experiencing, especially as they relate to affordable power.

Excerpt: PUBLIC COMMENT # 33 from George Donart, Anchorage

STRATEGY C-3.3 Create and implement a community outreach and education program to combat NIMBYism in energy projects in rural areas - Simply put, this strategy needs to be changed substantially by dropping the "to combat NIMBYism in energy projects in rural areas" focus. Community members - all residents of the state of Alaska - should be involved early on in permitting and citing decisions, and they need to be listened to. People living in Alaska love the land they live on; the state must respect its citizens and should not be running a propaganda operation or trying to pit Alaskans against each other. PRIORITY C Rural Generation, Distribution, and Storage This section of the Plan seems particularly weak. Though there are some decent, action-sounding strategies and actions, most were undeveloped in the appendices. Also, I'd like to suggest setting an Action of

investment and research into standardizing technology for "diesel-off" operations during extended periods of low load and/or high renewable output in small rural communities.

PUBLIC COMMENT # 34 FROM Tom Atkinson, Kotzebue Electric

My name is Tom Atkinson. I am the General Manager / CEO of the Kotzebue Electric Association a Rural electrical cooperative located in Kotzebue, Alaska. Our power is 70% diesel generated and 30% renewables generated.

Priority "C" for Rural Generation, Distribution, and Storage. We need more capital and investment. KEA has several shovel ready renewable energy projects. If funding were available, it would take us from 30% to 50% renewable energy. We need to up fund the Renewable Energy Fund which allows us to seek funding in a less competitive arena.

Increasing renewable energy will lower operational costs. The required maintenance is much less with renewable energy than with diesel generation. Development of more renewable energy will displace more diesel which is the greatest annual cost to our cooperative.

The greatest economic burden in our community is using diesel for home heating. Development of renewables will allow us to use electricity to heat our homes at a much-reduced cost. This creates the greatest economy of scale by using clean energy for most of our power needs.

KEA has a close relationship with the Alaska Center for Energy and Power. They are working on projects with KEA that will help us with data to make the best decisions for energy generation.

We are working with other entities on a regional energy plan, but the distance between communities in this region makes shared and/or connected infrastructure unfeasible at present.

Priority "E" Incentives and Subsidies. The PCE is not a subsidy. The PCE is a negotiated agreement. We ask that we not be penalized for our development of renewable energy by making energy created with it not eligible for PCE. You are de-incentivizing the development of renewable energy by not giving PCE credit for renewable energy that cooperatives create.

PUBLIC COMMENT # 37 from Matt Bergan

Below are my comments on the October 20, 2023 draft document pertaining to Priority C. "RURAL GENERATION, DISTRIBUTION, AND STORAGE":

1. Energy is not just electricity! The title and "Introduction" (pg.55) appear to only be concerned about electricity in terms of energy. Due to the regulatory requirements of electricity for most communities the costs of electricity are well documented. However, a more significant cost burden for Rural Alaska is thermal/heating from diesel fuel (stove oil). Diesel fuel in Alaska is unregulated and subject to market conditions that tend be dominated by monopolies in Rural Alaska. An average home in Kotzebue pays 3-5 times more for stove oil annually than electricity. If a goal of the Energy Security task for is to reduce the cost of energy, there is low hanging fruit to look at in the Rural AK stove oil supply chain. Natural gas is regulated; could stove oil pricing

be regulated to provide heating energy at an affordable rate? Kotzebue is \$8/gal but many of the surrounding villages are over \$10/gallon.

2. Strategy C1 should consider reinstating the "Middle Earth" seismic and well tax credits to encourage development of local natural gas resources that may be available in Rural AK.
3. Strategy C-2.4 should include stove oil to read: "...demonstrate a regional approach to supplying affordable and reliable (stove oil / heat) and power to multiple communities."
4. Strategy C-2.8 should call out local natural gas and hydrogen specifically in addition to micronuclear.
5. Strategy C3 in the "Purpose" sentence should include "heat/stove oil" along with "power/electricity".
6. Strategy C4. This strategy is relating mostly to electricity and ignores the heating cost burden of stove oil in Rural AK. If more electric load is needed to increase the kWh sales just convert all heating to electric heating (no more stove oil) and increase PCE to roughly 3000-5000 kWh per month.... just an idea...
7. Strategy C5. C-5.1 should also collect data related to cost of stove oil at the bulk and retail levels. Gasoline prices could also be collected.

I have also included some comments on Appendix II for Priority C.

1. Action C-2.1... Community water/sewer infrastructure energy needs (which are significant) should be included in the regional planning approach.
2. Action C-2.4 should include heating/thermal/stove oil in addition to power.
3. Action C-2.8 should name local natural gas resources and hydrogen in addition to micronuclear.
4. Action C-5.1 should also examine the costs of heating in Rural AK. The cost of stove oil is the primary driver.

This a good document that will hopefully help lead to an exit from "energy poverty" in Rural AK...

ENERGY PRIORITY D. STATE ENERGY DATA PUBLIC COMMENT

Excerpt: Public Comment #6 from John Neary, Juneau, Alaska

Your draft plan also suggests making better use of existing energy data which is scattered, sporadic, and inconsistent. Better organizing it could also help utilities, agencies, and power producers seek federal funding.

Excerpt: Public Comment #13 from Connie Markis, Anchorage, Alaska

Your draft plan also suggests making better use of existing energy data which is scattered, sporadic, and inconsistent. Better organizing it could also help utilities, agencies, and power producers seek federal funding.

Public Comment #22 from Chris Rose, REAP

Priority D: State Energy Data

- 1) REAP agrees that better data acquisition, analysis and sharing is one key to the success of future energy projects in Alaska. REAP believes the state should invest in ensuring that that data is centrally located and managed to make it useful. Without measuring current energy projects, it will be much more difficult to improve and optimize them over time, or to build projects that are based on past learnings. This investment could include mandatory instrumentation of all projects funded by the state through the Renewable Energy Fund (and other sources) to collect and deliver data for a period of at least 10 years. REAP also agrees that it is in the state's best interest to improve data acquisition, coordination, analysis and sharing among other energy related programs and agencies of the state, including the RCA and PCE. Finally, REAP supports a statutory requirement to annually update the Alaska Energy Statistics report.

Excerpt: PUBLIC COMMENT # 33 from George Donart, Anchorage

ACTION C-4.1 Identify Economies of Scope/Scale to Provide Multi-Benefit Utility Projects - AND ACTION C-4.2 Identify Energy Anchor Tenants to Provide Economy of Scale for Rural Communities - Again, these two actions seem to be putting a large cart before the horse. These are 2 of the few Plan actions in Priority C with any description at all. These actions, and a lack of detail for other Plan actions, appear to prioritize large industrial sites over the needs of rural Alaskans, perhaps holding rural communities hostage until large development operations begin.

ENERGY PRIORITY E. INCENTIVES AND SUBSIDIES PUBLIC COMMENT

Excerpt: Public Comment #6 from John Neary, Juneau, Alaska

I'd like to comment on the Draft Statewide Energy Master Plan by the Security Task Force.

It's encouraging to see you recommend a Green Bank that would help power market incentives for renewable energy investments. I understand SB 125 and HB 154 are bills that will be introduced this session. That's smart.

Please also support a pair of Renewable Portfolio Standards (RPS) bills currently in front of the state legislature to require Railbelt utilities to become 80% renewable by 2040. It's great that your draft plan calls for the adoption of an RPS but please don't recommend a weakened Clean Energy Standard (pg. 89) that could include loopholes such as counting waste heat recovered from gas turbines as "clean."

Your recommendation to allow power generated anywhere in the region to be consumed anywhere else for a single transmission rate, analogous to a stamp on a letter, is a very good idea and worthy of support.

Excerpt: Public Comment #8 from Zach Brown, Stanford University, Living & Working on Traditional Tlingit lands of Huna Knaaw

Thank you for your hard work in creating a Master Plan for meeting Alaska's statewide energy needs.

I applaud your inclusion of a Renewable Portfolio Standard for Alaska's electricity generation, a Green Bank (aka Alaska Energy Independence Fund), net metering reforms, and workforce development investments...

The only way for Alaska, and America, to achieve true energy independence is to use our abundant renewable energy resources, and end the fossil fuel era. Fossil fuels go on a globalized commodity market over which Alaskans have virtually no control – being dependent on fossil fuels for energy and for revenue leaves us at the whims of petro-dictators like Vladimir Putin and Saudi Princes.

Thank you for your consideration. Please push Alaska toward our energy future, not our energy past!

Excerpt: Public Comment #10 from June Okada, Susitna River Coalition

Re: E-2.3 Adopt a Renewable Portfolio Standard (RPS) (pg. 73)

The SRC supports passing the RPS. This bill would enhance energy security, reduce fuel prices, and promote local job growth. According to a new National Renewable Energy Laboratory (NREL) economic wind study,, we can achieve 78% renewables by 2040 by relying solely on new solar and wind infrastructure and no large-hydro projects. We support the RPS over the Clean Energy Standard (CES). This watered-down version of the bill includes unproven technologies such as carbon-capture, and waste heat recovery, which is already widely generated by utilities and relies on natural gas.

Excerpt: Public Comment #11 from Mary Burtness

First off I am in favor of moving away from an increase fossil fuel dependency. This plan should consider the move towards renewables in an orderly and timely manner. It is the future, and although our state depends on fossil fuels, we do not need to be using them here in this polar region, where the impact of the climate change is happening here faster than anywhere else

I believe at CES is not going to move us in that direction. We need at Renewable Portfolio standard to give us a road map to take advantage of the cost effectiveness future of renewables...

...I am very glad you are including a Green Bank to help expedite financing renewable projects.

Workforce development is a necessary component for future jobs that will keep our youth in the state, as well as re-tool the fossil fuel industry workforce.

Public Comment #12 from Pamela Hays, Cindy Atcheson, Katie Tongue, Kelsey Shields and Laura Rhyner, Kenai Peninsula, Alaska

We the undersigned are writing regarding the Statewide Energy Master Plan.

We are a group of Alaskans from communities across the Kenai Peninsula who care deeply about our state. We look forward to a future in which the pollution of our air, water, and land has stopped.

As you know, Hilcorp is not renewing any of its contracts with our electric utility Homer Electric Association. Given the dwindling supply of oil and gas, it only makes sense that the state increase investment in alternative energy sources. Affordable energy options would benefit many Alaskans, as would training and jobs in the alternative energy sector. We strongly support clean energy alternatives and encourage you to do so too.

Excerpt: Public Comment #13 from Connie Markis, Anchorage, Alaska

I'd like to comment on the Draft Statewide Energy Master Plan by the Security Task Force.

It's encouraging to see you recommend a Green Bank that would help power market incentives for renewable energy investments. I understand SB 125 and HB 154 are bills that will be introduced this session. That's smart.

Please also support a pair of Renewable Portfolio Standards (RPS) bills currently in front of the state legislature to require Railbelt utilities to become 80% renewable by 2040. It's great that your draft plan calls for the adoption of an RPS but please don't recommend a weakened Clean Energy Standard (pg. 89) that could include loopholes such as counting waste heat recovered from gas turbines as "clean."

Your recommendation to allow power generated anywhere in the region to be consumed anywhere else for a single transmission rate, analogous to a stamp on a letter, is a very good idea and worthy of support.

Public Comment #14 from Terry Johnson, Anchorage, Alaska

I recently moved from Massachusetts to Anchorage and am shocked and surprised that Anchorage's future energy needs are at risk. We need a comprehensive plan to meet our short term and long term energy goals using renewables as much as possible. Thank you.

Excerpt: Public Comment #16

Thank you for taking the time to read my comments concerning the proposed Statewide Energy Master Plan for Alaska.

There are number of provisions in this document that are amazing.

Please continue to support a Renewable Portfolio Standard, not a Clean Energy Standard (which is a misleading and inaccurate name).

Public Comment #21 from Joel

Hi, my comment is to think global and act local, i.e. to align the overall goal of the plan with the Paris agreement and UN Sustainable Development Goals. I can provide more detail if needed. Thanks for your time and consideration in this planning process!

Public Comment #22 from Chris Rose, REAP

Priority E: Incentives and Subsidies

- 1) REAP believes the disparities in power costs can be alleviated with heavy investments in energy efficiency. This can be done through state and federal grants, as well as through affordable loans from a proposed state green bank.
- 2) PCE rules should be aligned with the Renewable Energy Fund so that communities with successful renewable energy projects are not penalized through lower PCE subsidies.
- 3) REAP supports the establishment of a “new and improved” Emerging Energy Technology Fund (EETF). There are many new energy technologies being researched and developed today that could benefit Alaska, especially in rural communities where energy costs are so high. Subsidizing technologies that are not yet commercial, but could be within five years, could be a sound state investment if done thoughtfully.

Public Comment #23 from Bridget Shaughnessy Smith, Alaska Public Interest Research Group**II. Omissions & Further Considerations**

The Railbelt-relevant sections of the plan have an unwarranted and glaring omission: there is no explicit mention in the Oct. 3 draft of the Railbelt Reliability Council (RRC) or its own ongoing Integrated Regional Planning (IRP) process, and only passing mention in the Oct. 20 draft without real consideration. The RRC’s IRP is an open and transparent effort to evaluate with depth and technical rigor the best energy options for the Railbelt. Moreover, the RRC was established with particular safeguards to ensure that directors act independently from users, owners, and operators of the Railbelt grid; there is reasonable notice and opportunity for public comment, due process, openness, and balancing of stakeholder interests; avoidance of undue amplification or attenuation of stakeholder interests; and consideration of whether certain stakeholder class members stand to profit from construction of new facilities used to provide electrical service, among other protections—directly in contrast to the creation of the Task Force, which is largely composed of similarly situated private industry members or state agencies but not consumer or environmental interests as in the RRC. The legislature mandated that an Electrical Reliability Organization carry out the IRP process in SB123, and in 2022 the Regulatory Commission of Alaska certified the RRC as the organization to do it.

In creating the IRP, the RRC would compare the economic trade offs of different options for meeting our transmission and generation needs -- an already-existing mechanism that could avoid the danger of bad investments being made in an absence of public oversight. In contrast, the draft Statewide Energy Plan was

created through an opaque and politically influenced process and contains particular actions that risk spending public resources on poorly conceived energy projects if no transparency and accountability measures are included or are simply performative. Action B-1.4, which would create a transmission fund within the Alaska Energy Authority; B-3.1, which calls for, among other things, a public/private hydropower investment 2 AS 42.05.765; 3 AAC 46.060. fund; E-5.1 and E-5.4, creating an energy incentive program; and E-5.5, creating tax exemptions for generation and transmission investors; all require definite mechanisms for public transparency.

In the Oct. 20 draft, the existence of the RRC IRP is mentioned in Action F-3.4, which only notes that the process may take several years and recommends the RCA review time considerations. F-3.5 recommends modifying a section of the RRC's underlying statute, AS 42.05.760, "to ensure alignment with unified Railbelt transmission authority." It does not specify how the current RRC is misaligned or incompatible with unified transmission.

PUBLIC COMMENT # 24 from Tim Hinterberger, Anchorage, AK

Thank you for this opportunity to comment on the Alaska Energy Security Task Force Statewide Energy Master Plan. I'm sure my thoughts align with those of many other concerned citizens you're hearing from. The draft plan contains both proposals that are highly beneficial to the energy future of Alaska and ones that should be avoided.

HIGHLY BENEFICIAL

7. Renewable Portfolio Standards (RPS) will be a strong motivator for Alaska utilities to invest in clean energy.
8. Green Bank state financing institution for sustainable energy as considered in SB 125 and HB 154.
9. Making better use of already existing energy data to guide decisions with a full and consistent picture of how Alaska uses energy, and better equip utilities, agencies, and power producers to seek federal funding (pg. 31, 106-108).
10. "Postage stamp" transmission rates that would allow power generated anywhere in the region to be consumed anywhere else for a single transmission rate.
11. Net metering reform (pg. 52, pg. 101).
12. Training the growing renewable energy workforce (pg. 67, 77, and 110).

The Task Force has an enormous responsibility not only for the future of Alaska, but for all the occupants of the planet. I urge you to take an extremely long view and to think about what we owe to the many generations that will follow us.

PUBLIC COMMENT # 29 from Kelsey Schober, The Nature Conservancy

The Nature Conservancy in Alaska (TNC-AK) is encouraged to see a draft of the Statewide Energy Master Plan, a plan to find ways to lower power costs and ensure electric reliability across the state in the coming decades, available for public comment. Within this draft plan, we are pleased by the focus on renewable energy in pursuing a vision for a secure and affordable energy future for Alaskans.

On average, Alaskans currently pay about 23 cents per kWh for electricity. The draft plan outlines a goal to harness the vast resources in our state to reduce the price of electricity in Alaska to 10 cents per kilowatt hour (kWh) by 2030. From the perspective of TNC-AK, highlights of this draft plan include the policy recommendation to develop and sustain renewable energy efforts throughout the state, the proposal to establish a green bank, and the promotion of use of heat pumps in individual communities. As such, we have organized our comments under these three general areas of focus, with specific attention given to actions we support.

Develop and Sustain Renewable Energy Development Efforts

Actions: A-2.1, E-2.3

In July 2021, McKinley Research Group (formerly McDowell Group) prepared a report entitled *Alaska's Renewable Energy Economy: Progress and Possibility for TNC-AK*. This report reviews the status of renewable energy deployment across Alaska while highlighting the increasing opportunities presented by renewable energy in our state. Notable impacts from investing in these opportunities include reduced energy costs for consumers, job creation, and increased community resilience.

TNC-AK supports the adoption of incentives to facilitate reaching energy diversification goals. An overall increase in adoption of renewable energy will create substantial benefits for communities and people across Alaska. For additional material highlighting the economic opportunities created by renewable energy adoption, please refer to the aforementioned report.

Establishing Entity to Finance Community-Scale Energy Efficiency

Action: E-4.3

In September 2021, McKinley Research Group (formerly McDowell Group) prepared a report entitled *Resilient Homes: Alaskans Building for Climate Change for TNC-AK*. This report summarizes the relationship between energy efficiency investments and cost savings. Notably, it specifically states that a financing mechanism like a green bank “would be the most

comprehensive way to make financing available statewide” for sustainable energy deployment, with “[s]tate and federal efforts to capitalize the institution” being critical to this effort (pg. 21).

TNC-AK supports the creation of a green bank entity to finance community-scale energy efficiency. Between 2010 and 2020, more than \$750 million in public and private investments were made across Alaska for sustainable energy efficiency, integration, and deployment – with Alaska Housing Finance Corporation (AHFC) playing a substantial role in facilitating the State’s investment in many of these programs, particularly at the residential level. Establishing a financing mechanism like a green bank with the AHFC as the lead would build off their record of success in deploying sustainable energy development programs. As well, it could allow the State to leverage funding and economic opportunities created by the Bipartisan Infrastructure Law (BIL) and the Inflation Reduction Act (IRA) pertaining to the financing of clean energy and technology.

Historically, energy efficiency investments in Alaska have resulted in an estimated \$444 million reduction in residential energy savings and \$320 million in health and safety benefits between 2008 and 2018, as well as

increased employment opportunities due to the deployment of energy efficiency programs. Creation of a green bank would continue to build on these successes and TNC-AK strongly supports the implementation of this recommendation.

Promotion of Energy Efficiency and Conversion Measures in Buildings

Actions: B-4.1, E-6.3

The mentioned report, *Resilient Homes: Alaskans Building for Climate Change*, contains information pertinent to building energy efficiency and fuel reduction measures in buildings across Alaska. This report specifically notes that these measures result in reduced cost burdens for households, additional opportunities for employment, and health benefits.

TNC-AK supports the implementation of Action B-4.1 to promote heat pumps as an alternative energy and heat source in coastal Alaska. We also support the Task Force in exploring successful case studies in order to further implementation in Alaska, as identified in Action B-4.1. The aforementioned report, *Resilient Homes*, identifies examples of residential heat pump integration by Tlingit-Haida Regional Housing Authority in Petersburg and Baranof Island Housing Authority in Sitka as two heat pump integration projects (see pg. 14). It also identifies the installation of combination heat pump and solar array systems in Ambler as an example of deployment that utilizes integration as a way to address overall high energy costs (see pg. 14).

Given the additional identified risk of exceeding monthly PCE limits as a barrier that could slow adoption of heat pump technology in regions with high electricity costs (see pg. 2), we encourage the Task Force to take into account successful examples of deployment from across Alaska in order to ensure equitable rollout of any heat pump deployment-related efforts.

Additionally, TNC-AK supports the implementation of Action E-6.3 which seeks to increase availability of resources for weatherization, energy efficiency, and building retrofits. Energy efficiency and weatherization efforts from 2008 to 2018 under the Home Energy Rebate Program

(HERP) and weatherization programs translated into “a combined \$444 million in residential energy savings over the decade” with participants of the program seeing an average annual savings of \$1200-\$1300 in their energy costs (pg. 14). As Alaskans face high energy costs and a high cost of living, savings from these programs is not only an economic boon but also supports community sustainability and resilience.

Thank you for your work to call attention to the importance of affordable and renewable energy for Alaskans. As supporting material, we are submitting the two reports referenced throughout these comments. We ask that the task force to review these supplementary materials to inform future development of the report and we encourage robust outreach to the public as the task force works to review and finalize this plan

Excerpt: PUBLIC COMMENT # 33 from George Donart, Anchorage

Next, I would like to commend the numerous forward looking proposals in the Plan that I believe serve the best interests of Alaskans:

ACTION E 2.3 Adopt a Renewable Portfolio Standard followed by a Renewable Energy Credit - The experience of regions in the lower 48 and Hawai'i, shows that Renewable Portfolio Standards save ratepayers money and bring on clean energy resources faster than they would otherwise. This is partly due to the clear focus on a doable goal. An RPS precludes a constant re-examination of direction and pace of energy development. A strong RPS also stabilizes energy costs and provides certainty for both ratepayers and power producers. One concern here, though. It seems that the "Clean Energy Standard" is very vague, as is the oft used term "diversification". A lot of emphasis is put on diversification and it seems to be the standard that a CES is measured by. Including more coal, for instance, might make the railbelt more diverse. So a diverse portfolio isn't necessarily what we need -- reliable, renewable and affordable is. "Diversify" is so common in the Plan that it should be clearly defined. Using the term "renewable" is a lot clearer.

PRIORITY E: INCENTIVES AND SUBSIDIES I feel this Priority is especially strong; the actions recommended are broad, effective and efficient. STRATEGY E 3: I agree that a flatter rate across Alaska improves the mobility of residents, increases local economic opportunities, and improves the quality of life for Alaskans overall.

STRATEGY E 4: Improve the economics of project development - is important, especially in these Actions: E-4.2 Utilize FERC-defined open access on all State-owned/subsidized and RCA regulated utility transmission lines - E-4.3 Establish a green bank for financing of community scale energy efficiency projects - E-4.4 Ensure adequate workforce training and skills development alongside job creation goals of State - The state should partner with the Anchorage School District which has recently established new "academies" in its high schools some of which could focus on workforce training for the renewables industry.

STRATEGY E 5: Evaluate and implement State policy, tax, and other incentives - This part of the Plan is fairly vague and needs much more clarification. In closing, I'd like to point out that we have a lot of existing generation sources, but we need to move as quickly as we can to renewable generation throughout the entire state. There are many reasons to do this. Costs of renewable technology continue to fall. Renewable energy is price stable once in operation. In Alaska, we've already shown ourselves to be leaders in renewables innovation, and we can continue that path. The rest of the world has already started imposing penalties on fossil fuel generation and use, and that will continue to accelerate. Solar and wind, especially, are relatively quick to build and bring into operation. We've seen reports that indicate the lowest cost way forward is to retire fossil resources and replace them with renewables.

This plan would be greatly improved if it were to reflect a move to renewable generation more explicitly. Thank you for all the hard work and good thinking that have gone into the Statewide Energy Master Plan by the Alaska Energy Security Task Force team members. I appreciate the chance to comment on the Plan.

PUBLIC COMMENT # 34 FROM Tom Atkinson, Kotzebue Electric

My name is Tom Atkinson. I am the General Manager / CEO of the Kotzebue Electric Association a Rural electrical cooperative located in Kotzebue, Alaska. Our power is 70% diesel generated and 30% renewables generated.

Priority "C" for Rural Generation, Distribution, and Storage. We need more capital and investment. KEA has several shovel ready renewable energy projects. If funding were available, it would take us from 30% to 50%

renewable energy. We need to up fund the Renewable Energy Fund which allows us to seek funding in a less competitive arena.

Increasing renewable energy will lower operational costs. The required maintenance is much less with renewable energy than with diesel generation. Development of more renewable energy will displace more diesel which is the greatest annual cost to our cooperative.

The greatest economic burden in our community is using diesel for home heating. Development of renewables will allow us to use electricity to heat our homes at a much-reduced cost. This creates the greatest economy of scale by using clean energy for most of our power needs.

KEA has a close relationship with the Alaska Center for Energy and Power. They are working on projects with KEA that will help us with data to make the best decisions for energy generation.

We are working with other entities on a regional energy plan, but the distance between communities in this region makes shared and/or connected infrastructure unfeasible at present.

Priority "E" Incentives and Subsidies. The PCE is not a subsidy. The PCE is a negotiated agreement. We ask that we not be penalized for our development of renewable energy by making energy created with it not eligible for PCE. You are de-incentivizing the development of renewable energy by not giving PCE credit for renewable energy that cooperatives create.

PUBLIC COMMENT # 38 from Allegory Smith

Hey folks,

Thanks for doing what you do.

I'm here to add my voice in support of renewable energy, efficiency, and recycling investments. Our collective appetite for energy is unsustainable, and while liquid natural gas and other fossil fuels are still available, we have need of institutional urgency between the efficiency deficits we've atrophied into and the severity of present and future lifeway disruptions due to the climate crisis. A Renewable Portfolio Standard is suggested: incentives for transition, intrinsic and extrinsic, must be paired with clear targets and timelines. We've run out of the very easiest options, and the next best one doesn't involve more oil subsidies. We need support in our diversifying renewable energy systems. It's already happening, we just need your help.

PUBLIC COMMENT # 39 from Yvonne Leutwyler

Thank you for extending the comment period for this very important master plan.

Generally speaking, I am pleased to see the Task Force recognizing the need to diversify Alaska's energy sources.

However, I am disappointed that there is no mention of the Renewable Portfolio Standard (RPS) for the Railbelt. There are two bills in the Alaska Legislature regarding the RPS right now. It is a concise and reasonable standard that takes into account the looming natural gas shortage, and provides a plan for achieving a high percentage of renewable energy sources in the mid- to long-term (80% by 2040).

The “Clean Energy Standard” the Task Force is proposing is inferior to the RPS – please streamline Action A 2.1 with the RPS.

Also, please consider NOT using the term “clean energy”. It is really an oxymoron, as NO form of energy generation is “clean”. To differentiate from fossil fuel-generated energy, the term “renewable energy” is often used and well understood by the public.

Action A 2.4.1: Two proposed projects stand out like sore thumbs: Susitna Watana dam, and a natural gas pipeline. Other commenters have pointed out why both of those projects are too risky, and not appropriate solutions to address Alaska’s energy issues. There are more feasible options that are implementable in the short to mid-term: Solar PV and wind energy (including pumped hydro where environmentally and technologically reasonable), along with energy storage systems. Small-scale nuclear as well as tidal energy do have potential in Alaska, and are mid to long-term projects that deserve to be considered as well.

ENERGY PRIORITY F. STATUTES AND REGULATIONS PUBLIC COMMENT

Excerpt: Public Comment #1 from Becky Long

[regarding Susitna River Hydroelectric Project]

3. Prohibitive cost of FERC licensing studies to complete the license process must be recognized.

It will take substantially more than \$100 million to complete the studies. \$100 million was an AEA estimate from 2015. What this stated cost does not include is the following.

The 58 FERC approved study data was from 2012-2014. There was no study implementation in 2015-2017. The data is stale and much over a decade old. FERC more than likely will require more recent baseline information.

- 17 study modifications were mandated by the FERC Director.
- 3 of the studies that AEA says are complete have mandated modifications. So they are not completed.
- FERC has stated that the water quality data, ice processes in the sloughs and side channels, river flow access, recreation resources, and river transportation to name just a few have no completed baseline data.
- Also former project Director Wayne Dyok stated in 2014 that on top of the \$100 million to complete the studies, \$230 million will be needed for detailed engineering and geotechnical information to take to the construction phase.

Taken all this into consideration plus many more factors too numerous to comment here, the State needs to move beyond considering this project.

Public Comment #23 from Bridget Shaughnessy Smith, Alaska Public Interest Research Group**IV. Endorsed recommendations**

Among the recommendations that AKPIRG would like to see adopted in the final plan and executed by the legislature or executive branch are those in Action B-1.5, especially the establishment of a Data Department at the Alaska Energy Authority and a data governance committee for establishing data collection protocols. Having easy access to a body of consistent data on our energy system not only enables better decisions, but would help utilities, agencies, and IPPs seek federal funding for their projects, and allow researchers and the public insight into the energy options that best meet our needs. These benefits depend on the data collected and organized by AEA being open to the public, and we urge for language to this effect to make this explicit in the Statewide Energy Plan. 3 Action F-1.6 (F-3.1 in the Oct. 20 draft), "provide budgetary support to the Regulatory Commission of Alaska," should be a high priority for decision makers acting on this plan. A lack of staff capacity likely contributed to the RCA's inattention in this summer's 400% rate increase for the residents of Aniak, which the RCA commissioners unanimously approved in May. Though the Commission later mitigated the impact on Aniak residents, it could have avoided subjecting them to the increase in the first place had there been more capacity devoted to the case and to the underlying problem with Aniak's utility. Currently the RCA is considering whether to grant the Alaska Power Company a 25% rate increase, which deserves a degree of regulatory scrutiny the RCA does not seem to be currently equipped for. Future regulatory matters emerging from our changing energy system will require even greater capacity.

PUBLIC COMMENT # 28 from Bridget Maryott, Cook Inletkeeper

The Oct. 20 draft's Action F-1.6 also calls for unspecified changes to 11 ACC 93.120, the code that governs permits for the appropriation of water. Cook Inletkeeper would strongly oppose certain changes to this code, such as weakening part (e), allowing the Department of Natural Resource to put conditions on permits to protect water quality, fish and wildlife habitat, or any other purpose DNR determines is in the public interest.

Excerpt: Public Comment #6 from John Neary, Juneau, Alaska

I'd like to comment on the Draft Statewide Energy Master Plan by the Security Task Force.

It's encouraging to see you recommend a Green Bank that would help power market incentives for renewable energy investments. I understand SB 125 and HB 154 are bills that will be introduced this session. That's smart.

Excerpt: Public Comment #13 from Connie Markis, Anchorage, Alaska

I'd like to comment on the Draft Statewide Energy Master Plan by the Security Task Force.

It's encouraging to see you recommend a Green Bank that would help power market incentives for renewable energy investments. I understand SB 125 and HB 154 are bills that will be introduced this session. That's smart.

Public Comment #22 from Chris Rose, REAP

Priority F: Statues and Regulations

- 1) Please see REAP comments under Priority A, above.
- 2) REAP supports a budget for the RCA that reflects that agency's need for highly competent technical analysts that typically command high wages in the private sector.
- 3) REAP supports the preservation of the PCE endowment fund.
- 4) REAP supports the establishment of an RPS, with a focus on rapidly advancing renewable energy projects in the Railbelt to displace expensive natural gas, rather than a clean energy standard.

Excerpt: Public Comment #26 from Study of Environmental Arctic Change (SEARCH)

Affordability. The high cost of diesel in rural Alaska results mainly from long transport distances (i.e., no local sources), and although the market for diesel is competitive the requisite barge service to rural communities is not. This problem is compounded by unpredictable and volatile markets, which is an energy security problem. Locally-sourced renewables help alleviate these problems and provide lower-cost energy once established. Because of the way electricity prices are regulated by the RCA, the regulated price of electricity generated by renewables may be higher for an initial startup period (1-3 years), although the long-term cost is lower.

Current state policy associated with PCE, given the way that utilities are regulated by the Regulatory Commission of Alaska (RCA), prevents utilities that invest in renewable power from receiving PCE subsidies for any return on their initial equity investment. Because renewable sources typically have much higher initial capital costs, but much lower operating costs that are eligible for PCE assistance, this amounts to a crippling disincentive for moving to renewable power. The argument that the short-term cost of renewables is higher

than diesel is like saying buying a house is more costly than renting, even when your monthly mortgage payment would be lower than the rent. However, this current policy can be changed, without compromising the objectives of the PCE program.

In some communities, existing renewables do not adequately serve as backup energy sources. In Savoonga, a majority of the power generated by their two wind turbines is being used to offset the costs of the community's power generators.

Additionally, businesses and service providers in PCE communities do not have access to PCE payments and consequently continue to suffer increasingly unaffordable energy until there is an investment made in truly affordable power generation.

Recommendation: Transition to renewable energy sources is the most robust energy strategy, especially for PCE communities, and needs to be prioritized. To help support this transition, PCE statutes should be revisited to allow for a fair rate of return on capital investments targeted at bringing renewable power generation infrastructure online, reducing the reliance on diesel fuels, and lowering the necessity for equalization subsidies in the longer term.

Comment 3: Risks to community energy infrastructure are increasing, and will continue to increase without diversified alternative energy sources that provide redundancy, storage, and reliable backups.

Diminishing sea ice is increasing coastal erosion and the changing climate is raising precipitation levels - both snow and rain - in other areas of the state. Flooding, snowfall and freezing rain can directly impact transmission lines and cause power outages. Recently, for example, areas of the Fairbanks North Star Borough suffered extended power outages due to downed transmission lines.

The isolation of many northern Alaskan communities further increases their vulnerability to weather-related energy disruptions. Many of these communities do not have the resources (especially linemen) in village to repair energy infrastructure following outages. Often, outages are caused by storms which then delays linemen and resources being flown in, thereby prolonging outages. Linemen for rural Alaskan communities do not live in the communities in which they work, instead traveling to dozens of villages when their services are needed. This prolongs outages and delays repairs. For example, earlier this year, a storm affected 20 homes, the preschool, and tribal offices in Savoonga. While Savoonga does have certified electricians, there are no linemen in the community. In this case, it took two days for the lineman to come in and for power to be restored.

In Savoonga, the last few years have seen high winds affecting the power plant with the community experiencing unscheduled power outages from strong winds and precipitation during the winter. Similarly, permafrost thaw in Savoonga causes energy setbacks by shifting transmission poles. Maintenance resources, however, are limited, meaning that once workers fix poles in one community, the poles have moved again before they are able to return.

Recommendation: The Draft Plan should explicitly consider the increased vulnerabilities Alaska's energy infrastructure will be facing due to weather-related hazards, especially for communities in northern areas. This will require a focus on diversifying energy sources within local systems and grids, to include incorporating battery backup and storage, and other emerging technologies. Such an approach will not only make energy

more reliable and secure, but also more affordable than being dependent on the supply of diesel via barge and storage in fuel tank farms vulnerable to coastal erosion and permafrost thaw.

Comment 4: This plan does not adequately consider the needs of non-residential energy users in PCE communities.

A stated goal of the Plan is to make energy more affordable to drive economic growth, yet current regulations for PCE inhibit that in a variety of ways. The regulations stifle business and commercial enterprise, and they restrict many aspects of overall development that contribute to and support human wellbeing and economic prosperity. For example, diesel power is very expensive for transportation services such as airport and freight operations, and for municipal infrastructure such as water, sewer, and broadband internet. The high cost of diesel energy also makes the operation of medical and educational facilities more difficult.

Recommendation: PCE as currently operated reduces the energy cost for residential users; it does not do the same for businesses and commercial facilities. Reduced cost for reliable energy in these communities, however, is needed to support economic growth. While we understand the safeguards against misuse by power companies from this policy, we recommend that PCE statutes be revisited to support community assets including small businesses and commercial enterprises.