From:	Kevin Blackwell
То:	House Energy
Subject:	An email concerning HB 121
Date:	Saturday, March 25, 2023 11:15:19 AM

Dear Chair Rauscher and Members of the Committee,

Hi. My name is Kevin Blackwell. I live in Anchorage, and work for Alaska Solar installing solar panels on residential and business properties. I would like to start this letter with a quick story from last Monday. I work for the United States Antarctic Program in the winter time (from October to February) and recently, I was asked to speak at my niece and nephew's school. I made a powerpoint, the United States Antarctic Program sent me a box of educational handouts and issued cold weather gear, and I did my presentation for 3rd and 6th graders.

I started my presentation off by asking what these 3rd and 6th graders knew about Antarctica. I honestly don't remember learning much about the southern hemisphere, and so I was curious to know what they had learned. There were a lot of good comments. One student knew that Antarctica was technically a desert. Another student talked about the Antarctic Circle and how the sun moved across the continent. But what really impacted me during that presentation, was when a 3rd grader (8 or 9 years old) told me about how seals were dying because the ice they depend on is melting due to climate change. A 3rd grader told me that. Can you imagine? Can you imagine growing up your whole life with that kind of image, those kinds of details?

The reason I wanted to tell that story about my nephew's classmate is that I want your committee to imagine that 8 or 9 year old growing up. Let's say 10 years from now, when that child becomes a voter, that child that knew about the impacts of climate change at 8 or 9, can you imagine that child asking his Alaska state representative, "We knew the impacts of climate change. What did you do to stop them?"?

This all brings me to the main point of this letter. This! House Bill 121 is what you as members of the House Energy Committee can point to. You can tell that child in 10 years, "We passed a bill that would establish a Renewable Portfolio Standard for the Railbelt" Your committee will be able to point to this legislation as being on the right side of the climate emergency.

There are several other good reasons to pass this bill. The associated costs of renewables has become much more competitive over the last 10 years. The natural gas situation in the Cook Inlet will become more expensive as supply declines. Renewable energy projects employee Alaskans and boost our economy.

I can't tell you how good it has felt to make the transition into working on renewable energy projects. It's such an exciting industry to be a part of and it is heartwarming to be surrounded by co-workers and customers that are interested in creative climate solutions. You can vote for this bill because it makes good financial sense. You can vote for this bill to help that 3rd grader I spoke to sleep a little better at night. Please just vote so that this legislation can become law.

Thanks for your time, Kevin Blackwell





From:	dbrailey@alaska.net
То:	House Energy
Subject:	comments on HB121
Date:	Wednesday, April 26, 2023 10:32:55 PM

Dear Chair Rauscher and Members of the House Energy Committee,

I am an independent power producer and an alternate Director on the Railbelt Reliability Council. As the "idea man" behind the 300 kW Juniper Creek Hydro, I have been watching the Railbelt energy landscape for over 30 years. The Railbelt's energy infrastructure developed primarily around Cook Inlet gas, Healy coal, and North Pole oil. Unlike the rest of the country and much of the world, the Railbelt has seen almost no movement away from fossil fuels, despite ADNR's 2010 predictions of the current Cook Inlet gas shortfall and AEA's 2010 Railbelt Integrated Resource Plan identifying a path toward fuel diversification and decarbonization. Instead of taking this path, between 2013 and 2016 the Railbelt utilities nearly doubled their existing gas-fired generation capacity at a public cost of over \$2B. The Railbelt utilities resisted legislation requiring the formation of an electric reliability organization, and slow-walked its implementation by challenging its certification before the RCA. As a Director, I can accurately report that the Railbelt Reliability Council is a lame-duck organization that will not be fully staffed until 2024 and will not be able to make resource planning decisions until 2027. In the meantime, Railbelt utility executives are meeting behind closed doors, working to lock in our dependence on imported natural gas for decades to come.

Based on their February 1 testimony to the Alaska Senate, it reasonable to assume that Railbelt utilities will pursue LNG imports, nullifying many of the justifications for their \$2.9B Grid Modernization and Resiliency Plan. Alternatively, Railbelt executives might change their decision in exchange for DOE-funded transmission upgrades. Either way, the Railbelt remains an unregulated monopsony where resource planning decisions are made by utility executives behind closed doors. Most of these decisions adversely affect independent power producers (IPPs), such as the denial of capacity value for firm hydropower, denial of avoided O&M costs, denial of compensation for reactive power, and extortion of renewable energy credits as part of standard power purchase agreements (e.g., Fire Island Wind, Alaska Environmental Power, Renewable Independent Power Producers, Ram Valley LLC, and South Fork LLC). These practices disadvantage Railbelt IPPs relative to the Lower 48, where IPPs have many benefits unavailable in the Railbelt (e.g., open-access transmission tariffs, merit-order dispatch, capacity and reactive power markets, and Renewable Portfolio Standards). Alaska is ranked as one of the worst states in which to do business, and as an IPP I can attest that this is especially true of the renewable energy business. Please take this rare opportunity to turn our future around.

From:	<u>A Steer</u>
To:	Rep. George Rauscher
Cc:	Senate Labor and Commerce, House Energy
Subject:	Energy Bill HB121/ Senate Bill 101
Date:	Friday, April 28, 2023 6:48:41 AM

Representative Rauscher,

Chair Bjorkman and Members of the Committee:

Please consider supporting a Renewable Energy Portfolio (RPS). If additional hearings are needed, <u>please schedule them</u>. This is an urgent matter for our state's economy.

An RPS will stabilize electric costs, keep precious energy dollars from leaving the state, diversify our economy, and attract new investment. As a lifelong Alaskan who is proud to call Alaska home this is very important to me and the small business I operate. I want to see local energy sources, especially renewable sources as a top of our priority for managing today's energy demands. The cost of renewable energy is lowering and I want our state to lead the way in using renewable energy. Thank you for your service.

Sincerely, Anjanette Steer Palmer, AK.

Get Outlook for iOS

From: Anne & Bill <wkwitte@gmail.com>
Sent: Thursday, March 23, 2023 5:59:29 PM
To: Rep. Jesse Sumner <Rep.Jesse.Sumner@akleg.gov>; Rep. Donna Mears
<Rep.Donna.Mears@akleg.gov>; Rep. Genevieve Mina <Rep.Genevieve.Mina@akleg.gov>; Rep.
Mike Cronk <Rep.Mike.Cronk@akleg.gov>
Subject: I support Renewable Portfolio Standards (RPS) HB121

Thank you Representatives Sumner, Mears, and Mina for sponsoring HB121. Alaskan railbelt residents and businesses need reliable & economical electrical power sources. Natural Gas was economic and reliable in the past and even Fairbanks benefitted from plentiful Cook Inlet NG. The energy landscape has changed and NG or LNG is neither reliable nor economic. It is time to diversify Alaskans energy portfolio to include renewable Alaskan resources such as photovoltaics, wind, and hydro.

I urge my AK Representative Mike Cronk to support and join as a sponsor of HB121. Mike please study the Governor's NREL report which analyses 5 separate energy detailed scenarios which incorporate more economically resilient energy mixes for Alaska. Economic development in Alaska (for example, the Fort Knox Mine) requires predictable electric prices and availability.

Bill Witte Fairbanks



April 20, 2023

Senator Löki Tobin State Capitol Room 11 Juneau AK, 99801 **Representative Jesse Sumner** State Capitol Room 421 Juneau AK, 99801

Dear Senator Tobin and Representative Sumner,

Carter Wind strongly supports the passage of Senate Bill 101 and House Bill 121, which would create a Renewable Portfolio Standard (RPS) for Alaska's five urban utilities, achieving 80% by December 31, 2040.

Based in Wichita Falls, Texas, Carter Wind manufactures the world's most advanced, two-blade wind turbines, utilizing a self-erecting, guyed tower design that eliminates the need for cranes. The result is a turbine that is cheaper to install, simpler to transport, and easier to maintain. Our relationship with Alaska started in 2018 through Launch Alaska's climate technology deployment program. We have an interest in seeing Alaska's policies prioritize deployment of renewable energy, providing energy price stability, reduced carbon emissions, and local jobs, and an RPS will help achieve all four.

Alaska has vast renewable energy resources and we're excited by the prospect of an RPS spurring development of those assets and increasing energy independence. We hope the Alaska Legislature acts quickly to establish an RPS in Alaska.

Sinceret

Matt Carter CTO + Founder, Carter Wind



March 21, 2023

The Honorable George Rauscher, Chairman House Energy Alaska State Legislature State Capitol, Room 406 Juneau, AK 99801

Re: House Bill 121

Dear Chair Rauscher and Members of the Committee:

CIRI respectfully supports House Bill 121, an Act relating to a renewable portfolio standard; relating to electrical energy transmission; relating to distributed energy systems; relating to power cost equalization; relating to the Alaska Energy Authority; and providing for an effective date. For too long Southcentral Alaska has relied on a single, high-priced source of fuel to generate electricity – natural gas from Cook Inlet. However, the region is also fortunate to have vast renewable resources. Stable energy prices and reduced carbon emissions can be achieved by balancing our dependency on natural gas with renewable energy. A robust renewable portfolio standard will stimulate investment in the State's population center, create jobs, and drive collaboration and innovation. The proposed legislation is a win-win for the economy and its citizens.

CIRI is one of 12 Alaska Native regional corporations and is owned by over 9,000 Alaska Native shareholders. CIRI has a diverse business portfolio that includes significant energy investments. In 2012, CIRI developed the first commercial scale independent power project in Alaska, Fire Island Wind, with the collaboration of nearly 100 local businesses. Located in Cook Inlet, Fire Island Wind delivers electricity to 6,500 homes and has eliminated 5 billion cubic feet of natural gas consumption since the project was commissioned. Additionally, CIRI has invested in over 500 megawatts of other renewable energy in the United States. With a track record of successful renewable energy investments and a commitment to supporting local communities, CIRI wholeheartedly endorses this legislation.

Sincerely,

Cook Inlet Region, Inc.

Suzanne Settle Vice President, Energy, Land & Resources

March 29, 2023

RE: HB 121 Utilities – Renewable Portfolio Standard

House Energy Committee – Representative Rauscher, Chair, and Members:

It is crucial that the Legislature adopt a Renewable Energy Portfolio Standard (RPS) for the Railbelt utilities. Senate Bill 101 and House Bill 121 are good frameworks on which to develop the necessary goals and coordination to meet present and future Railbelt energy needs. We are facing short-term and long-term threats to our electrical energy supply across the entire Railbelt power distribution system. These threats require diversification by adding significant amounts of renewable energy to our mix of fuels for powering our vehicles, homes, businesses, and industry.

In southcentral Alaska, the supply of affordable natural gas is waning, Hilcorp has announced that they won't be able to renew current supply contracts in the Cook Inlet Basin. In the Fairbanks area, the EPA has threatened to not approve the State Implementation Plan to meet the clean air standards here – this could endanger federal highway funds for all of Alaska. Both problems could be solved by adding significant amounts of renewable energy (RE) to the Railbelt grid.

Further, adding RE to our energy mix would be cost-effective, as oil and gas prices are rising and renewable energy (wind, solar, batteries) prices are dropping. Diversifying so that a much larger percentage of our power is provided by RE just makes sense because it will be cheaper and more stable.

Lastly, in the mid-term, it will be desirable to integrate all the Railbelt utilities into a single generation and transmission entity. Having an RPS in place will focus future generation investments away from large sunk costs in fossil fuel plants that will hinder this integration goal.

Respectfully submitted,

John Davies 1998 Kittiwake Drive, Fairbanks AK 99709 907-474-4927 H, 907-388-0193 C jdavies1945@gmail.com



The Honorable Jesse Sumner State Capitol Room 421 Alaska State Legislature Juneau, AK 99801

Dear Representative Sumner,

The Nature Conservancy in Alaska supports the passage of H.B. 121, legislation intended to establish a renewable portfolio standard for the electric utilities in the Railbelt region of Alaska. We thank you for setting forth a vision for a secure, resilient, clean, and economically feasible energy future for our state that capitalizes on the immense renewable resources we have available.

By giving clarity and direction to utilities and independent power producers in our state, a renewable portfolio standard creates the predictable investment climate needed to leverage the broad suite of available federal incentives for renewable energy. We expect the passage of H.B. 121 will unleash significant new private investment, deliver direct benefits to our economy and consumers through a stable low-cost energy system, and further attract new industries interested in a clean energy economy to our state.

As supporting material, we are also submitting "Alaska's Renewable Energy Economy: Progress and Possibility" as an attachment to this letter. This report, prepared in July 2021 by McKinley Research Group (formerly McDowell Group) for The Nature Conservancy in Alaska, 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.

Thank you for your work to call attention to the importance of renewable energy in Alaska and for the roadmap towards a stable energy future H.B. 121 offers. We strongly support this bill and encourage its passage.

Sincerely,

Kly Silor

Kelsey Schober Senior Policy Advisor The Nature Conservancy in Alaska

March 29, 2023

RE: HB 121 Utilities – Renewable Portfolio Standard

Representatives Sumner, Mears, Mina, and Armstrong: Thanks for sponsoring this bill; below is the text of a letter I sent to the Energy Committee.

It is crucial that the Legislature adopt a Renewable Energy Portfolio Standard (RPS) for the Railbelt utilities. Senate Bill 101 and House Bill 121 are good frameworks on which to develop the necessary goals and coordination to meet present and future Railbelt energy needs. We are facing short-term and long-term threats to our electrical energy supply across the entire Railbelt power distribution system. These threats require diversification by adding significant amounts of renewable energy to our mix of fuels for powering our vehicles, homes, businesses, and industry.

In southcentral Alaska, the supply of affordable natural gas is waning, Hilcorp has announced that they won't be able to renew current supply contracts in the Cook Inlet Basin. In the Fairbanks area, the EPA has threatened to not approve the State Implementation Plan to meet the clean air standards here – this could endanger federal highway funds for all of Alaska. Both problems could be solved by adding significant amounts of renewable energy (RE) to the Railbelt grid.

Further, adding RE to our energy mix would be cost-effective, as oil and gas prices are rising and renewable energy (wind, solar, batteries) prices are dropping. Diversifying so that a much larger percentage of our power is provided by RE just makes sense because it will be cheaper and more stable.

Lastly, in the mid-term, it will be desirable to integrate all the Railbelt utilities into a single generation and transmission entity. Having an RPS in place will focus future generation investments away from large sunk costs in fossil fuel plants that will hinder this integration goal.

Respectfully submitted,

John Davies 1998 Kittiwake Drive, Fairbanks AK 99709 907-474-4927 H, 907-388-0193 C jdavies1945@gmail.com



March 24, 2023

Senator Löki Tobin State Capitol Room 11 Juneau AK, 99801 **Representative Jesse Sumner** State Capitol Room 421 Juneau AK, 99801

Dear Sen. Tobin and Rep. Sumner,

Launch Alaska strongly supports the passage of Senate Bill 101 and House Bill 121, which would create a Renewable Portfolio Standard (RPS) for the five utilities in Alaska's "Railbelt." The bills would require these utilities to generate a specified percentage of their electricity from renewable resources according to the following timeline: 25% by 12/31/2027; 55% by 12/31/2035; and 80% by 12/31/2040.

At Launch Alaska, we work to accelerate the energy transition while unlocking incredible economic opportunities for Alaska. A strong RPS is a crucial piece in moving forward deployment of renewable energy in our state because it sets a clear, achievable, and binding timeline that utilities can incorporate into their planning.

As the cost of natural gas rises and the cost of renewable energy and battery technologies continue to decline, this policy makes economic sense to keep energy prices low and reduce dependence on natural gas for electricity. In February 2022, the National Renewable Energy Laboratory completed a report requested by Gov. Mike Dunleavy that found five different scenarios in which the Railbelt utilities could achieve 80% renewable generation by 2040 *without* impacting customer reliability. The study also found that reaching the 80% renewable standard would save billions of dollars in fuel costs over the next two decades.

The goals of an RPS mirror Launch Alaska's - to see growth in clean energy development across the state and to lower the price of energy with the deployment of innovative solutions. Alaska has vast renewable energy resources and we're excited by the prospect of an RPS spurring development of those assets and increasing energy independence. We hope the Alaska Legislature acts quickly to establish an RPS in Alaska.

Sincerely,

Mr. Isaac Vanderburg CEO, Launch Alaska

From:	John & Gretchen
То:	House Energy
Subject:	HB 121- please support this important legislation
Date:	Saturday, April 15, 2023 9:19:22 AM

Chair Rauscher and Members of the Committee

I am writing to strongly request that you support this extremely important legislation. We must diversify our generational energy portfolio to avoid higher utility costs and avoid the dangerous dependency on fossil fuels and natural gas.

I want our state to be a leader across the country by adopting this must pass legislation. I worry for the future of my two young adult children and all others to come.

Analysis North found that reaching an 80% renewable standard would save billions of dollars in fuel costs over the next two decades. It's economics along with a desire for a future where we can have a healthy, stress free existence.

Thank you for your bold, action for our future.

Gretchen Nelson

3039 Alder Cir, Anchorage, AK 99508

Dear Chair Rauscher and Members of the House Energy Committee,

I want to offer my strongest and most enthusiastic support for HB 121 – Renewable Portfolio Standard. There are so many reasons to support the bill but foremost is the fact that producing electricity on the Railbelt is dependent on gas from Cook Inlet, which is running out!

A planned transition to renewable energy is an exciting opportunity to generate a predictable supply of electricity, stabilize costs by taking advantage of the dramatically declining costs of wind, solar, and batteries, and be a real leader in clean energy development. It will create good jobs and attract new economic activity in Alaska.

The prospect of importing LNG to replace Cook Inlet gas is not reasonable. This would keep us shackled to old technologies and steeply drive up rates for consumers — a clear disincentive for people to stay in Alaska or come to Alaska. I am also deeply concerned about our future if climate change goes unmitigated. So there are powerful reasons to move to renewable energy both for the health of our economy and as an important contribution to climate change solutions.

I urge the committee to move HB 121 forward without delay.

Sincerely, Dorothy Childers 24301 Seward Hwy Indian, AK 99540 Chair Raushcher and Members of the House Energy Committee,

Here in Anchorage we are dependent on natural gas from Cook Inlet for both heat and electricity. Soon we will have to decide whether to import Liquid Natural Gas from abroad, or bring it from the North Slope by truck as Fairbanks is currently doing.

Both schemes will make heating our houses more expensive. Please pass the Renewable Portfolio Standards so that Chugach Electric Association and the other Southcentral electric utilities diversify their sources for energy to produce electricity.

Sincerely

Sarah McCabe Anchorage, AK Chair Rauscher and Members of the House Energy Committee

Please support the Renewable Portfolio Standards. We need to act early to stabilize our heating energy costs – a good way to do this is to diversify our energy sources, so we don't have to pay to import natural gas.

Sincerely,

Sarah McCabe

Anchorage, AK



March 20, 2023

RE: HB 121

Dear Chair Rauscher and Members of the House Energy Committee,

On behalf of the Susitna River Coalition, we support the Renewable Portfolio Standard (RPS), House Bill No. 121, which was introduced by Representative Sumner on March 17th, 2023. SRC is a grassroots organization that protects and supports the Susitna River watershed, its vibrant communities, wildlife and ecosystems.

Cook Inlet's supply of natural gas is expected to fall below demand as soon as 2027. Railbelt utilities are pushing for importing liquified natural gas (LNG) from overseas to compensate for this supply gap. Current LNG prices in the Asian market are three times more expensive than what we pay now for Cook Inlet gas. This will cause a huge increase in energy rates and bills, and Alaskans can not afford it. By supporting an 80% mix of renewable energy sources, we can avoid the high prices of importing LNG and lower dependency on natural gas.

As renewable energy costs continue to decline and technologies advance, investing into clean energy resources such as wind and solar power will inevitably stabilize Railbelt energy costs in the long run. Although we do not support large-scale hydroelectric projects such as the Susitna-Watana Dam for a multitude of reasons, we support the diversification of our energy generation portfolio. In just this last decade, utility-scale solar prices decreased by 90% while on-shore wind costs fell by 75%. Solar and wind energy prices are already competitive with natural gas, and will continue to become cheaper.

A 2022 <u>study by Analysis North</u> concluded that a Railbelt grid scenario of 80% renewable energy generation by 2040 largely powered by solar and wind projects would have a capital cost of \$3.2 billion. This is less than half of what our fuel savings would be - \$6.7 billion in 2020 dollars. An RPS would ensure thriving local domestic energy generation, which would create more opportunities for economic growth and keep our energy dollars in the state. Transitioning towards a more stable, resilient energy future means taking clear committed steps towards a constructive long-term goal that will benefit Alaskans for decades to come.

Best Regards,

June Okada Energy Coordinator, Susitna River Coalition June@SusitnaRiverCoalition.org 907-733-5400

Testimony Objecting to HB 121 and SB 101

Michael L. Jones Resident Homer, Alaska

May 4, 2023

I object to the creation of a Renewable Portfolio Standard (RPS) as noted in HB 121 and SB 101. This RPS is unnecessary and filled with flawed policies.

These conclusions are supported by the following testimony that is provided in two main parts: Policy (pages 2-11) and Problematic Language (pages 12-17).

CONCLUSIONS:

The RPS approach creates artificial renewable percentages and deadlines that will require implementation of a sub-optimal generation resource mix. Considering the challenges ahead, the State needs to support a robust generation planning effort which considers ALL potential solutions. Rather than expanding optionality, this legislation effectively limits options and "picks winners" driven by artificial deadlines and arbitrary renewable quantities that are not based on science.

This renewable portfolio standard has many policy and specific implementation flaws that create a "one size fits none" solution to electric generation that undermines thoughtful, science based, generation resource planning being performed by the Railbelt utilities as they seek to implement generation solutions that meet the needs of their members/customers.

A state mandated RPS removes the local decision-making process from the people who will be impacted financially for years to come. As is typical with a State mandated RPS, the mandate requires "too much too soon" saddling the customer with years of high electricity costs that could have been avoided using a more measured bottoms up approach.

This legislation reeks of special interests (particularly the solar lobby) shaping the net metering requirements that will allow them to increase their profits. This will be a hugely expensive, never ending investment plan that electric customers will pay for decades—long after the renewable advocates have cashed their checks and left the state.

There are several advocates for wind and solar who claim that these forms of renewable generation are less costly than gas fired or hydro generation. IF THAT IS THE CASE, THEN THIS LEGISLATION IS COMPLETELY UNNECESSARY. LET THE SCIENCE AND ECONOMICS OF ELECTRICTY SUPPLY PLAY OUT SO THE BEST TECHNICAL AND ECONOMIC SOLUTION WINS OUT.

ANALYSIS:

The HB 121 and SB 101 Sponsor Statements are a very helpful resource as it helps provide the context as to "what is the problem we're trying to solve here?" The Sponsor Statement identifies five drivers for the need for this legislation. With all due respect, the legislation seeks to address each of these drivers, but does so using flawed policies. Each of the five drivers are listed below with Policy Flaw descriptions following:

- 1) Railbelt utility managers are considering importing liquified natural gas into the Cook Inlet region to make up the shortfall.
- 2) Scarce natural gas supply is resulting in high prices
- 3) Renewables are abundant and mandating them will keep costs down
- 4) Twenty-nine other states have implemented similar renewable energy portfolio standards.
- 5) Reliance on carbon heavy resources

Policy Flaw 1: Railbelt utility managers should NOT look at importing liquified natural gas (LNG).

HB 121 and SB 101 Sponsor Statements say, "Rather than pivot to renewable energy sources, whose prices have fallen dramatically over the last decade, Railbelt utility managers are considering importing liquified natural gas into the Cook Inlet region to make up the shortfall."

The flawed policy is that somehow, Railbelt utility managers should NOT look at importing liquified natural gas (LNG).

Railbelt utility managers MUST investigate and consider ALL technical and economic solutions—to fail to do so would be irresponsible. As would be typical in the energy business, the leaders of these organizations would sign Non-Disclosure Agreements (NDA's) with solar, wind, hydro, and natural gas providers in order to understand the breadth of options and possible outcomes when developing a generation portfolio. They may even be prevented from acknowledging they have entered into an NDA. It is highly likely that the State Legislative Representatives, who are not party to these NDA's, do not have complete line of sight to the portfolio of solutions that the utility managers are working on. For example, it is very easy to see the need for using imported LNG for a short-term bridging strategy as Cook Inlet supply drops, and hydro, wind, or solar resources are coming online.

Railbelt utility managers MUST investigate and consider ALL technical and economic solutions and develop contingency plans for an uncertain future. This legislation infers that it is forbidden to look at certain solutions, regardless of how they may fit into a safe, reliable and affordable resource mix. The premise behind this legislation is that is irresponsible to consider importing LNG as a viable option and it seeks to remove options for consideration. Perhaps it is the legislation that is encouraging irresponsible action.

Policy Flaw 2: Legislation should reward behavior by special interests who seek to create scarcity of natural gas supply and hydro resources.

HB 121 and SB 101 Sponsor Statements say, "Railbelt electricity prices have risen by nearly 50 percent in the last 10 years, in large part because Cook Inlet gas prices have risen sharply. The Alaska Department of Natural Resources is predicting that Cook Inlet will see natural gas production shortfalls as soon as 2027."

The flawed policy is that Legislation should reward behavior by special interests who seek to create scarcity of natural gas supply and hydro resources.

This sponsor statement is factually correct; however, it fails to tell the complete story. One major contributor to creating scarcity of supply is the actions of intervenors who provide barriers to every step of the exploration, development, and production process, using litigation to drive small and medium sized oil and gas companies out of the state. Two specific projects, Cook Inlet leasing and the Alaska LNG project, would provide ready access to sufficient low-cost natural gas to meet the Railbelt utilities' needs; however, vast uncertainty is created through legal, political, and media interventions, thus creating scarcity.

In the Cook Inlet leasing case, an April 28, 2023, KINY Radio news article¹ describes how the Federal Bureau of Ocean Energy Management (BOEM) had to be mandated by Congress to comply with the Inflation Reduction Act to conduct a lease sale in Cook Inlet. It goes on to note that five environmental groups sued the Federal government alleging that the BOEM's administrative process violated several federal laws and have requested the federal court for the District of Alaska to vacate the leases sold. The State of Alaska has intervened in that litigation. The following excerpts from that article capture the Governor's, Attorney General's, and DNR Commissioner's positions on the issue:

"Given the federal government's reluctance to encourage robust leasing on its land, the task has fallen to Alaska to defend what leasing has been made available--all the more so when the development directly impacts the energy security of such a large number of Alaskans," said Alaska Governor Mike Dunleavy. "Development of the oil and gas resources in Alaska, whether on federal or State land, is vital to maintaining Alaska's sovereignty, strengthening its economy, and fostering an environment where our residents can build homes and raise a family."

Alaska Attorney General Treg Taylor stated "Ensuring the responsible development of Alaska's abundant resources is a right shared by all Alaskans. The Inflation Reduction Act provides a clear congressional mandate for development of federal oil and gas leases in

¹ <u>https://www.kinyradio.com/news/news-of-the-north/state-intervenes-to-protect-federal-oil-and-gas-lease-in-cook-inlet/</u>

Cook Inlet. By intervening in this litigation, the State is advocating for that mandate to be followed through."

"Alaska's interest in Cook Inlet goes beyond economic benefits to our core need for secure supplies of energy for the people of Alaska," said DNR Commissioner-designee John Boyle. "The residents of Alaska's Railbelt—the state's most populated region—rely on the energy produced in Cook Inlet to power their homes and businesses. We must have further exploration and development of Cook Inlet to meet Alaska's energy needs."

Hydro is a substantial renewable resource. In fact, given the abundance of water, it is surprising that there isn't more hydro generation in place in this state. These same entities who create scarcity of natural gas supply, and others, also intervene in hydro projects to limit them as a viable generation resource—creating another form of scarcity.

This scarcity creates the opportunity to require their preferred solutions, which just happen to line up with the wind, solar and battery lobbies who stand to profit greatly from mandates like an RPS.

The creation of an RPS rewards behavior by special interests who seek to create scarcity of fossil fuel supply and hydro generation to favor wind, solar and battery solutions. Legislation should not reward that behavior.

Policy Flaw 3: Mandating renewables will keep costs down.

HB 121 and SB 101 Sponsor Statements say, "Rather than rely on carbon heavy sources of energy that are getting more expensive in Alaska's small market, it is time to diversify how electricity is generated in the Railbelt region, which contains abundant and complementary wind, solar, conventional hydropower, geothermal, biomass, tidal, and run-of-river power resources."

A 30-page presentation provided by Renewable Energy Alaska Project (REAP) to the House Special Committee on Energy, dated April 27 entitled "Why the Railbelt Needs a Renewable Portfolio Standard (RPS)"² devotes several pages describing (consistent with their website) that "solar and wind energy are already cost competitive with natural gas—and getting cheaper."

If that is truly the case, is this legislation even necessary? Shouldn't wind and solar generation be able to stand on their own technical and economic merits? If the total cost of RPS implementation is \$4.5 million per year (as noted in HB 121 and SB 101 Fiscal Notes submitted by RCA, AIDEA, and AEA), and solar and wind are cost competitive with natural gas, there is no need for this legislation and the State can save \$4.5 million per year. Additionally, according to

² HB 121 ROSE House Energy RPS 4-27-23.pdf

DSIRE³, there are 52 Regulatory Policies of Financial Incentives already in place in Alaska that support renewable energy and energy efficiency. Do we need more policies and incentives in the generation sector when solar and wind are cost competitive with natural gas?

Finally, mandating renewables with the calendar timeline specified in HB 121 and SB 101 will actually result in <u>more expensive implementation</u> of renewables in the Railbelt. The artificial deadlines in the legislation transfer a significant amount of negotiation leverage from the utilities to the renewables providers. In negotiations, a renewable provider can take advantage of an upcoming deadline to extract higher profits from the utilities (and hence their customers) who must comply with the deadline or face penalties. If wind and solar are cost competitive with natural gas, there is no need to legislate a deadline that drives costs unnecessarily higher.

Policy Flaw 4: Twenty-nine other states have implemented similar renewable energy portfolio standards.

HB 121 and SB 101 Sponsor statements say, "Currently, 29 states have <u>similar renewable</u> <u>energy portfolio standards</u> to those set out in HB 121."

This statement should probably stand out as being factual and non-controversial. However, just because other states have done it, doesn't mean it is the right solution for Alaska. The devil is really in the details here. If you say that the other 29 states have percentages of renewables required in their portfolio standards, you would be <u>partially</u> correct.

A summary level review of the RPS programs implemented as shown on the National Conference of State Legislatures (NCSL) website shows a wide range of "percentage by year".⁴ These percentages are just one of many features that need to be evaluated in order to qualify as "<u>similar renewable energy portfolio standards</u>". According to Lawrence Berkeley National Laboratory, 20 states and Washington, D.C., have cost caps in their RPS policies to limit increases to a certain percentage of ratepayers' bills. One state caps RPS gross procurement costs. ⁵ There are no cost caps in HB 121 or SB 101.

There are MANY additional elements of Alaska's RPS that would need to be compared to other states' implementation of their RPS in order to justify the use of the phrase "similar renewable energy portfolio standards" (Net Metering, in particular, is discussed later). That side-by-side comparative analysis should be provided by the proponents of this legislation.

³ DSIRE is operated by the <u>N.C. Clean Energy Technology Center</u> at N.C. State University and claims to be the most comprehensive source of information on incentives and policies that support renewable energy and energy efficiency in the United States

⁴ <u>https://www.ncsl.org/energy/state-renewable-portfolio-standards-and-goals</u>

⁵ <u>https://www.ncsl.org/energy/state-renewable-portfolio-standards-and-goals</u>

Additionally, and perhaps more importantly, the side-by-side analysis should identify which states were motivated by the cost and availability of fossil fuel supplies for generation (as noted prominently in the HB 121 and SB 101 Sponsor Statements) as opposed to simply desiring to reduce Greenhouse Gas Emissions (GHGs). This is an important distinction as the methods used to achieve the outcomes may be different.

It would be insightful to see which states were motivated by the cost and availability of fossil fuel supply (Hawaii being one example as the Hawaii State Energy Office shared in their presentation on HG 121 on April 27, 2023⁶) and what provisions they implemented in their RPS. Conversely, it would be insightful to see which other states may have a fossil fuel supply concern but used instruments other than RPS to address it.

Understanding motivation behind the other states' RPS implementations is critical as Alaska's motivation (as described in this legislation), is likely far different than other states. Consequently, the tools used to address Alaska's concerns will likely be different than the tools deployed elsewhere. Specifying arbitrary "percentage by year" timelines effectively rules out superior economic and technological solutions and leads to a more costly implementation.

Policy Flaw 5: Using terms like "carbon heavy resources" exposes additional flawed thinking behind this legislation.

HB 121 and SB 101 Sponsor Statements say, "Rather than rely <u>on carbon heavy sources of</u> <u>energy</u> that are getting more expensive in Alaska's small market, it is time to diversify how electricity is generated in the Railbelt region, which contains abundant and complementary wind, solar, conventional hydropower, geothermal, biomass, tidal, and run-of-river power resources."

By introducing the term, "carbon heavy resources", the Sponsor Statement telegraphs to a select audience that it is important to reduce carbon (GHG) emissions, and this is an important feature of this legislation. In fact, renewables advocates will celebrate this legislation as a critical victory in reducing GHG.

As noted at the beginning of this testimony, it's important to identify "what is the problem we are trying to solve here?" If the problem is scarcity of natural gas supply, there can be a variety of solutions to be implemented without the need for this flawed legislation. If the problem is GHG emissions, we need to evaluate two questions:

Question 1: Is there is indeed a problem at all caused by GHG emissions from the Alaska Railbelt Generation resources?

⁶ HB 121 HSEO_Alaska_StateLeg_04272023.pdf

Question 2: If there is a problem, is the generation sector in the Alaska Railbelt the place to address this problem.

First, let's look at the facts about GHGs in Alaska.

- Alaska is currently ranked 40th in the Nation for greenhouse gas emissions (GHGs). ⁷
- Alaska contributes less than 1% of the Nation's total GHGs. ⁸
- Alaska's electricity generation sector accounts for 7.6% of Alaska's GHG's.⁹
- Alaska's electricity generation sector accounts for 0.0596% % of nationwide GHG emissions. ¹⁰

Answers:

- Is there a problem at all? Alaska's electric generating sector is an <u>inconsequential contributor</u> to National (and worldwide) GHG's.
- 2. Is the generation sector on the Alaska Railbelt the location to implement GHG reducing mandates?

The typical renewables championed by renewable advocates, can be implemented more effectively elsewhere. A solar system designed for operation on the Kenai Peninsula that produces at a 10% capacity factor, can produce at DOUBLE the output if placed in Arizona, without the Alaska supply chain premium. ¹¹ Additionally, advocates for reducing GHG's can simply invest in reducing generation related GHGs in another state which will have a higher direct reduction in Nationwide GHGs.

If the RPS legislation is intending to reduce GHG, is the RPS being created simply so we can "feel good about ourselves" or so we can say we're "taking action" to reduce GHG's?

We should **NOT** be implementing a renewable portfolio requirement for Alaska for the express purpose of reducing GHGs and that context should be clear in the Sponsor Statement and perhaps in the legislation. The FACTS above demonstrate that this legislation is the worst example of unfunded government mandates, championed by special interests, specifying

⁹ United States Energy Information Administration, **Data for:** 2020, **Release Date:** October 11, 2022, **Next Release Date:** October 2023, **Energy-Related CO₂ Emission Data Tables, Table 3**

¹⁰ United States Energy Information Administration, **Data for:** 2020, **Release Date:** October 11, 2022, **Next Release Date:** October 2023, **Energy-Related CO₂ Emission Data Tables, Table 1, Table 3**

⁷ United States Energy Information Administration, **Data for:** 2020, **Release Date:** October 11, 2022, **Next Release Date:** October 2023, **Energy-Related CO₂ Emission Data Tables**, **Table 1**

⁸ United States Energy Information Administration, **Data for:** 2020, **Release Date:** October 11, 2022, **Next Release Date:** October 2023, **Energy-Related CO₂ Emission Data Tables, Table 1**

¹¹ Identical 8kW systems were specified in Homer and Phoenix using National Renewable Energy Laboratory (NREL) PVWatts calculator.

solutions, irrespective of cost or technical merit. There is no need for this legislation. As mentioned previously, other testimony has argued that "solar and wind energy are already cost competitive with natural gas—and getting cheaper" so those technologies should be able to stand on their own technical and economic merit and the GHG emission reductions will naturally follow.

Policy Flaw 6: Net Metering Design

A sixth policy flaw with the RPS is Net Metering. The Net Metering aspect of this bill is woefully inadequate and does not reflect lessons learned from other states that are years ahead on implementation.

This bill appears to cherry pick the best possible terms net metering for roof top solar installations and ignores or discards any balancing terms other states have deemed to be necessary as knowledge has matured in other states.

For example, Net Energy Metering (NEM) in California is being replaced by Net Billing (some call this NEM 3.0) this year.

Key learnings for California as reflected in just SOME elements of Net Billing include:

- New rate plans: Homeowners who get solar panels must sign up for "highly differentiated" time of use rate plans, under which electricity is very expensive during times of peak usage, and much less expensive when usage is lower.
- Energy credits: The utilities will offer significantly reduced credits for excess energy, averaging about 5 to 6 cents per kilowatt-hour (kWh), compared to the retail rate, which averages around 30 cents/kWh.
- Annual true-up: Once per year, on the customer's "true up" date, any carryover credits that remain will be credited at the "Net Surplus Compensation Rate" (currently about 8 cents/kWh).

Question:

Net metering is a highly complex, multifactored rate design challenge. Why is the legislature cherry picking rate features rather than having the RCA facilitate a robust, transparent, fact-based, multi-party (including customers) proceeding to evaluate the far-reaching implications of Net Metering rate design? Why is the legislature even designing the net-metering rate at all?

Answer:

The legislature is not the proper place for rate design. In fact, based on lessons learned from other utilities, the current net metering rules in Alaska should be revisited and re-evaluated to determine if the existing structure is a form of rate discrimination providing unfair subsidies

Testimony Objecting to HB 121 and SB 101

from non-solar owners to solar owners. Rate discrimination is discussed in a following section on problematic language.

Additionally, the NREL report provides 5 scenarios where 80% renewable energy production can be achieved. Scenario 3 is there most aggressive use of solar in the portfolio mix equating to a 12% energy contribution. A 12% energy contribution equates to 456 MW of installed solar capacity. Inherent in their calculations, the NREL report assumed the solar installations would be one-axis tracking systems. One-axis tracking systems can provide for greater solar generation, particularly in Alaska where the sun traverses the sky in dramatically different paths throughout the year. It should be noted; however, the actual performance of solar installations with tracking falls far short of what was expected due to tracker reliability—in good climate conditions, let alone in the challenging Alaskan climate. The production of utility scale solar facilities with one-axis tracking systems will likely fall short of expectations requiring substantially more solar capacity (and associated cost) to achieve the desired energy contribution.

In the Net Metering provision of the RPS, the presumption is that rooftop solar (typically fixed panel installations) produces valuable energy output; however, the NREL report makes no mention of the contribution of rooftop installations in meeting the 80% renewable target.

This may be the result of scope definition for NREL, but likely can also be a recognition that fixed panel roof top installations, absent some highly subsidized, rate discriminating, net metering tariff, will fail to produce a meaningful contribution to the renewable energy mix.

Bottom Lines on Flawed Policy: Conclusions

The RPS approach creates artificial renewable percentages and deadlines that will require implementation of a sub-optimal generation resource mix. Considering the challenges ahead, the State needs to support a robust generation planning effort which considers ALL potential solutions. Rather than expanding optionality, this legislation effectively limits options and "picks winners" driven by artificial deadlines and arbitrary renewable quantities that are not based on science.

This renewable portfolio standard has many policy and specific implementation flaws that create a "one size fits none" solution to electric generation that undermines thoughtful, science based, generation resource planning being performed by the Railbelt utilities as they seek to implement generation solutions that meet the needs of their members/customers.

A state mandated RPS removes the local decision-making process from the people who will be impacted financially for years to come. As is typical with a State mandated RPS, the mandate requires "too much too soon" saddling the customer with years of high electricity costs that could have been avoided using a more measured bottoms up approach.

This legislation reeks of special interests (particularly the solar lobby) shaping the net metering requirements that will allow them to increase their profits. This will be a hugely expensive, never ending investment plan that electric customers will pay for decades—long after the renewable advocates have cashed their checks and left the state.

There are several advocates for wind and solar who claim that these forms of renewable generation are less costly than gas fired or hydro generation. IF THAT IS THE CASE, THEN THIS LEGISLATION IS UNNECESSARY. LET THE SCIENCE AND ECONOMICS OF ELECTRICTY SUPPLY PLAY OUT SO THE BEST TECHNICAL AND ECONOMIC SOLUTION WINS OUT.

Sec. 42.05.900. Renewable portfolio standard.

- (a) A load-serving entity that is subject to the standards of an electric reliability organization under AS 42.05.760 shall comply with the renewable portfolio standard established in this section. Under the renewable portfolio standard, a load-serving entity's portfolio shall include sales from renewable energy resources in the following percentages:
- 1) 25 percent by December 31, 2027
- 2) 55 percent by December 31, 2035
- 3) 80 percent by December 31, 2040

QUESTION: Where is the science that says these are the right percentages and necessary timeline?

(b) A purchase power agreement entered into between a load-serving entity and a renewable electrical energy producer will be considered to satisfy all or part of the percentages required under (a) of this section if

(1) the effective date of the purchase power agreement is before the end of the compliance period;

(2) the purchase power agreement guarantees that the renewable electrical energy producer will deliver the renewable electrical energy to the load- serving entity not later than two years after the compliance period;

QUESTION: If it's so critical to achieve these milestone percentages, why is there an un-level playing field where IPP's under Power Purchase Contracts are held to a lower standard of delivery?

Testimony Objecting to HB 121 and SB 101

Problematic Language in both HB 121 and SB 101

* Sec. 2. AS 42.05.391(a) is amended to read:

(a) Except as provided in AS 42.05.306, a public utility may not, as to rates, grant an unreasonable preference or advantage to any of its customers or subject a customer to an unreasonable prejudice or disadvantage. A public utility may not establish or maintain an unreasonable difference as to rates, either as between localities or between classes of service. A public utility offering net metering for customers who install distributed energy systems is not engaging in rate discrimination solely because some customers receive net metering.

QUESTION: if an RPS is such a good idea and there aren't any unfair rate subsidies being provided to people with net metering, why would this language be needed?

ANSWER: the presence of this statement is <u>exactly the evidence</u> that net metering, especially as stated in this bill, IS A DISCRIMINATORY RATE STRUCTURE subsidizing net metered customers over non-net metered customers. The legislative language attempts to deem this approach as non-discriminatory, even though it clearly is discriminatory.

Additionally, the percentage of high-income electric customers installing home solar systems is much larger than the low-income customers. This means low-income customers subsidize high-income customers.

Sec. 42.05.925. Net metering. (a) A load-serving entity subject to the renewable portfolio standard under AS 42.05.900 shall monthly credit in a tariff the account of a retail customer for the number of kilowatt-hours, at the **full retail rate** per kilowatt-hour, of electric energy supplied by the customer's distributed energy system to the load-serving entity....

Full retail rate: This is perhaps the single biggest subsidy imbedded in this legislation. Crediting at the full retail rate equates the energy output of a homeowner's roof top solar system as identical to a dispatchable generation resource (like fossil and hydro) that:

- produces output in a planned, predictable, schedulable fashion,
- that regulates upward and downward to match electric demand, second by second, day or night, cloudy or clear, snow or sunshine, wind or no wind
- responds to system disturbances to provide grid reliability

Additionally, crediting at the full retail rate does not recognize costs for:

- Transmission system operation, maintenance, capital investment, storm response, etc
- Distribution system operation, maintenance, capital investment, storm response, etc
- Customer service, billing, administrative and general, etc,

This is a MAJOR subsidy that non-net metered customers provide to net metered customers.

Sec. 42.05.925. Net metering. (a) A load-serving entity subject to the renewable portfolio standard under AS 42.05.900 ... to the load-serving entity. The tariff may not limit the aggregate capacity that customers may install unless the commission, after a hearing, finds that capacity limitation is necessary to protect system reliability.

System Reliability: Is a real time supply/demand energy balance with additional resources providing:

Capacity, Regulation (Up and Down), Spinning Reserve, Non-Spinning Reserve, Inertia, Voltage/VAR/frequency control, stability.

System Reliability has an Asymmetric Risk Profile. In Alaska's climate, failure to be reliable in the worst case can result in a life-or-death situation. Less dramatically, failure can result in substantial financial consequences from damage to home heating, plumbing, and foundation systems. Probability of an outcome is different than Risk of an outcome. Failure to provide system reliability is a Low Probability/High Consequence event.

Regulatory processes typically treat reliability as an accounting exercise, ignoring the Asymmetric Risk.

Years ago, I played key roles in the development and rate filings for two combined cycle fossil power plants and multiple hydro pumped storage projects. The California Public Utilities Commission (CPUC) declined our applications saying there was no need. These assets would have been operational in time for recent peak summer demands where California has ordered residents to reduce electricity consumption in general, and electric car charging, in particular, due to lack of supply.

In spite of ENORMOUS quantities of wind and solar additions over those years, the CPUC's failure to recognize the need to back up wind and solar with fossil and hydro pumped storage facilities resulted in lack of supply. It will take years to resolve this generation shortfall, in the meantime, California is rushing to installing gas fired peakers and huge volumes of battery storage at great expense in an attempt to mitigate the problem.

Sec. 42.05.925. Net metering. (a) A load-serving entity subject to the renewable portfolio standard under AS 42.05.900 shall <u>monthly</u> credit in a tariff the account of a retail customer for the number of kilowatt-hours, at the full retail rate per kilowatt-hour, of electric energy supplied by the customer's distributed energy system to the load-serving entity. The tariff may not limit the aggregate capacity that customers may install unless the commission, after a hearing, finds that capacity limitation is necessary to protect system reliability.

Monthly: These systems produce energy in such an intermittent fashion and solar systems only produce during daylight hours, dramatically varying over the course of an hour, day, and month and "leaning on the grid to provide virtual storage and energy supply" that this results in a huge subsidy to the customer with net metering.

The proposed Bills cherry pick a favorable aspect of Net Metering while ignoring a key component of California's new <u>Net Billing</u> program which requires homeowners who get solar panels to sign up for "highly differentiated" time of use rate plans, under which electricity is very expensive during times of peak usage, and much less expensive when usage is lower. This approach provides incentive for homeowners to install storage as part of their solar system or to direct their solar installations toward the west (and produce less energy during the middle of the day) to aid in delivering power to the grid for the evening peak when it is most needed.

Under the <u>Net Billing Tariff</u>, the value of excess solar energy sent to the grid is designed to match the value it provides to the grid based on the utility's average "avoided cost" of energy during each <u>hour</u> of the day. There are many hours during the year where there is excess wind and solar supply on the grid, so the energy produced in these hours would have zero or even negative value if the utility has to pay an adjacent region to take the excess energy. It's not clear yet how negative energy values are addressed in the Net Billing Tariff, but it's an important point to understand as it may provide incentive to install storage to handle the excess supply.

* Sec. 3. AS 42.05.780(a) is amended to read:

(a) An electric reliability organization shall file with the commission in a petition for approval an integrated resource plan for meeting the reliability requirements of all customers within its interconnected electric energy transmission network in a manner that provides the greatest value, consistent with the load-serving entities' obligations. An integrated resource plan must contain an evaluation of the full range of cost-effective means for load-serving entities to meet the service requirements of all customers, including additional generation, transmission, **battery storage**, and conservation or similar improvements in efficiency. An integrated resource plan must include options to meet customers' collective needs in a manner that <u>provides the greatest value</u>, consistent with the public interest, regardless of the location or ownership of new facilities or conservation activities. An integrated resource plan must include options by which each load-serving entity may satisfy the renewable portfolio standard under AS **42.05.900**.

Provides the greatest value, consistent with the public interest.... may satisfy the renewable portfolio standard. This is a contradictory requirement. There are legitimate reasons why the integrated resource plan may provide the greatest value to the customer by <u>NOT</u> implementing the RPS. What if a generation portfolio mix is not compliant with the arbitrary RPS deadline milestones yet provides the customer with lower cost and higher reliability? Will additional hurdles or "fudge factors" be used to manipulate "the public interest" clause to somehow determine that complying with the arbitrary RPS deadline at higher cost and lower reliability is the greatest value to the customer?

Battery Storage: Preconceived notion that a battery system is the only form of electricity storage available. What about hydro pumped storage or compressed air energy storage? Has anyone evaluated the supply chain for lithium-ion batteries lately? The BESS installed recently by HEA reached commercial operation in the fall of 2022. Similar systems being evaluated by the Railbelt Utilities are substantially more expensive with significant delivery delays due to international demand. Recommend the language be modified to include other forms of storage or delete "battery".

Each LSE to satisfy the RPS: Does this mean that one LSE can't "over-comply" such that collectively all the LSE's have met the RPS requirement? Cost effective facilities are brought online in defined blocks of generation capability, such that excess amounts may exist for time periods relative to the milestones. Because of the "blocky nature" of generation resource additions, is there provision to miss a near term milestone without penalty if the LSE's overperform prior to the following milestone? It isn't explicitly stated. Is there a reward for exceeding targets before milestones? It isn't explicitly stated. Penalty provisions make no sense (especially for legislation that is not needed). Requiring each LSE to comply individually will likely result in wasteful expenditure relative to the milestones.



April 26, 2023

Representative George Rauscher Chairman, House Special Committee on Energy State Capitol Juneau, Alaska 99801

RE: HB 121 Utilities Renewable Portfolio Standard

Dear Representative Rauscher and Members of the House Special Committee on Energy:

As the Committee deliberates HB 121 Utilities: Renewable Portfolio Standard, please consider the importance of coal in providing stable jobs as well as reliable, affordable, heat and power in Interior Alaska.

Alaska's energy policies must prioritize reliability and affordability while embracing technological innovation to reduce emissions. It is essential that energy policy is based on realistic, regional solutions that do not unnecessarily burden ratepayers.

Coal-fired heat and power plants are the backbone of energy generation in Interior Alaska. Coal accounts for approximately 40% of Golden Valley Electric Association's electricity generation. Interior Alaska's remote location and cold climate drive high energy demands in the region. Given coal's abundance, as well as its price advantage over other fuels, the absence of coal from the region's energy mix would significantly increase costs, which would likely be passed on to ratepayers.

Coal-fired generation provides firm, base-load heat and power. There is no readily available alternative to Alaska's coal fleet. As you know, natural gas is not readily available and renewable energy options cannot provide firm power. Renewable sources are intermittent and cannot be relied upon during Interior Alaska's cold, dark, winter months.

It is critical that Alaska's policy makers not only understand the realities of the region's unique energy needs and opportunities, but also approach this legislation sensibly so as not to cause unintended consequences. Jeopardizing jobs and the reliable, affordable, heat and power generated by coal in Interior Alaska to make room for more expensive and less-reliable, intermittent renewable energy is dangerous. Energy policy must prioritize reliability and affordability.

If you have any questions about coal's importance in Alaska, please contact me at lorali@usibelli.com.

Sincerely,

Lord M Simon

Lorali M. Simon Vice President, External Affairs



April 27, 2023

Senator Löki Tobin State Capitol Room 11 Juneau AK, 99801 Representative Jesse Sumner State Capitol Room 421 Juneau, AK, 99801

Dear Sen. Tobin and Rep. Sumner,

ZeroAvia strongly supports the passage of Senate Bill 101 and House Bill 121, which would create a Renewable Portfolio Standard (RPS) for the five utilities in Alaska's Railbelt.

ZeroAvia is developing the first practical, zero-emission powertrains for aircraft. These powertrains consist of an electrical motor powered by hydrogen fuel-cells; they are coming faster than you might believe, with entry-into-service planned for 2025, and ZeroAvia has been hard at work developing customer relationships with commercial aircraft operators in Alaska (e.g. Ravn and others) to speed adoption of this novel, zero-emission technology.

Because the hydrogen powering our technology is most sustainably produced through electrolysis of water, the proposed renewable fuel standard will have a direct positive impact on the carbon abatement achievable by our powertrains. Such a standard will ensure that a hydrogen-enabled airport can plug into the grid and confidently purchase renewable electricity, thereby producing the cleanest hydrogen and maximizing the carbon abatement of flights powered by ZeroAvia powertrains. Short of an airport installing its own renewable power source (e.g., a solar or wind array), there is no more sustainable approach to commercial aviation.

As the cost of Jet A rises in the coming years, and with a dire shortage of Sustainable Aviation Fuel available to Alaska's many small carriers, this policy will help make green hydrogen cost-competitive with fossil fuels and will incentivize operator adoption of true zero-emission flight. With the lower operating costs our technology offers, this can result not only in cleaner aviation in Alaska's skies, but in enhanced service to isolated communities where the economics previously discouraged air routes.

These two bills offer the Alaska Legislature an opportunity to advance clean energy across the state and save Alaskans money, while also supporting innovative businesses operating in the state. ZeroAvia believes this is a rare chance to deliver an easy win, and we hope the legislature acts quickly to establish a renewable Power Standard in Alaska.

Sincerely,

Val Miftakhov, Founder & CEO

From:	Michael Powell
То:	House Energy
Subject:	HB 121
Date:	Thursday, April 27, 2023 8:43:53 PM

Honorable Chair Rauscher and Members of the Committee,

I very much appreciate the time you take to discuss and learn about the very complex energy issues of our state. Having an interest in the subject, I learned that I could personally save money by investing in solar for my home. I now know that I am further helping my neighbors and doing my part to burn leas natural gas. But I have learned that our state is nearing an energy emergency as our base resource of natural gas runs out. Although it helps, what individual homeowners like myself do it is just not enough. We need more.

I would therefore urge you to take action to assure we have a sustainable, reliable and affordable energy production portfolio in Alaska by supporting HB 121 which is essential for this. By establishing standards, you can also do a part to help my neighbors and set the pace in which our utilities can meet our communities energy needs and sidestep the emergency.

Please support the urgently needed passage of HB121.

Thank you for your service From: Michael Powell 3208 Woodland Park Anchorage, AK 99517

I urge you to schedule additional hearings for HB 121. It is critical that Alaska creates the framework and infrastructure to achieve a future run by sustainable energy. By having an RPS, power consumers will help utilities to plan for a staggered shift away from non-renewable energy sources and make it feasible for Alaskans to afford sustainable energy. The technology is out there, we just have to have the foresight and innovation to set the ball in motion. We need to progress into the future for our energy needs and distance ourselves from the harms of fossil fuels.

Anissa Berry PO Box 1222 Haines, AK 99827 907-766-3490

From:	Tim Hinterberger
То:	House Energy
Subject:	HB 121
Date:	Sunday, April 23, 2023 12:41:15 PM

As energy industry experts have reported, Alaska's Railbelt utility rates are going to increase dramatically in the next five years if we do not diversify our generation portfolio.

Luckily, renewable energy costs are plummeting, with utility-scale solar electricity prices dropping 90%, while the cost of land-based wind energy decreased 72% between 2009 and 2021. The National Renewable Energy Laboratory (NREL) completed a study requested by Governor Mike Dunleavy that found five different scenarios in which the Railbelt could achieve 80% renewable generation by 2040 without impacting customer reliability.

A Renewable Portfolio Standard (RPS) for the Railbelt region, as HB 121 creates, will stabilize electric costs, keep precious energy dollars from leaving the state, diversify our economy, and attract new investment. Wind and solar can be developed quickly, and doing so will create thousands of new jobs. This 21st century workforce will diversify our state's labor market and keep Alaska competitive in a fast-changing world.

I urge you to pass HB 121 out of the Energy Committee and to do everything you can to see that it is enacted into law in this session.

Sincerely,

Tim Hinterberger

905 W 12th Ave. Anchorage 99501

I read and support your efforts on HB121

I especially agree with the "net Metering" section, and the verbiage of :

"at the full retail rate kilowatt-hour," and fine with the credit expiring once a year on 31MAR.

Certainly more fair than the current credits offered by the "load-serving entity" and feel it would promote more interest in individual home investment in solar attentive energy installations (helping the utility meet the alternative percentage requirement).

Put me in the "yes" column for this effort, and thank you

William Beck

From:	<u>Hannah Payne</u>
То:	House Energy
Subject:	HB 121
Date:	Friday, April 14, 2023 4:23:11 PM

I'm writing in support of the renewable portfolio standard bill. While I wish the bill was even more aggressive, we need to do something, anything to spur renewable energy development in our state. As the past ~15 years have shown, aspirational goals don't work - we need a legally binding mandate. Time is running out - in fact, it's already too late to solve the problem preemptively. We will most likely end up importing natural gas from outside the state in a few years. Energy prices on the Railbelt and in PCE communities are set to skyrocket when this happens. Natural gas must be phased out - both because it's too expensive to develop and due to climate change - but it's going to happen more quickly than we are prepared for. I'm disappointed in the decisionmakers of Alaska for the lack of action thus far. Please do something now.

With hope,

Hannah Payne Anchorage

As an informed and concerned Alaskan, I am writing to you today to encourage your support of the Renewable Portfolio Standard, House Bill 121. We are in dire need to head toward renewable resources. Given new technology, this bill is achievable. We can reduce our dependence on Cook Inlet gas while creating energy stability.

Thank you, Carol DelValle 5721 College Dr Anchorage, AK 99504 (907)764-7672 Dear Chair Bjorkman and Members of the Committee,

I am writing on behalf of Alaska Community Action on Toxics to express our explicit support for the House Bill 121, the Renewable Portfolio Standard. As an organization dedicated to environmental justice and toxic-free air, we believe that the adoption of renewable energy standards and benchmarks is pivotal in generating a resilient energy source for a sustainable, dependable future.

We understand Alaska and the Arctic faces difficult challenges in transitioning to greener energy sources, including expensive energy and harsh weather patterns. However, we have faith in innovation and leadership with abundance and available renewable energy sources occurring naturally in Alaska.

By investing aggressively in green energy, Alaska can exemplify its dedication to affordable energy and stimulate innovative technologies and best practices - regardless of location in Alaska.

To close, we urge lawmakers to support HB 121 and establish a Renewable Portfolio Standard in Alaska. By supporting this critical bill, Alaska can partake in regenerative economies, support innovation and job creation, and safeguard public health of Alaskan communities and natural resources.

Sincerely, Adam Ortega

Adam Ortega he/him Communications Coordinator <u>Alaska Community Action on Toxics</u> 1225 East International Airport Rd. Suite 220, Anchorage, Alaska 99518 Phone (907) 222-7714; Fax (907) 222-7715 <u>Website | Twitter | Facebook | Instagram</u>

Please donate to support environmental health and justice. Join in support of our work! We believe that everyone has the right to clean air, clean water, and toxic-free food. We acknowledge that our offices are located on the ancestral and unceded traditional territories of the Dena'ina Peoples. The Indigenous peoples of this land never surrendered lands or resources to Russia or the United States.

I urge you to please pass the Renewable Energy Fund bill, as it is a proven and effective tool for clean energy development and lower energy costs, especially in rural Alaska.

I appreciate your attention to this important bi-partisan bill.

Sincerely, Cynthia Decker 1636 Birchwood St Anchorage, Alaska 99508

From:	worcester1@gci.net
То:	House Energy
Cc:	Rep. Jennie Armstrong
Subject:	HB 121
Date:	Thursday, April 6, 2023 5:13:48 PM

I have a number of significant concerns with HB 121, Renewable Energy Standards bill. While I believe that it is critical to address long-term plans for reliably and cost-effectively securing the electrical power needs of the Railbelt, and believe diversification of the Railbelt's electrical supply is necessarily a part of those plans, this bill has serious flaws.

First, the focus on renewable sources of energy, and the interim and 2040 deadlines are all arbitrary, with no apparent justification. It is clear that future Cook Inlet gas supply and cost is a serious issue. So is the issue of carbon emissions, which oddly is not addressed. But, any comprehensive search for solutions for long-term needs should include consideration of the potential for more Cook Inlet gas exploration and development (which would be chilled by the passage of this bill), LNG imports, and the potential for delivery of the abundant North Slope gas for utility use. The potential for nuclear-generated electrical power should not be excluded. Also, the capital costs and timelines for technical development, engineering, and permitting of the various potential sources of electrical power must be realistically evaluated. This bill jumps past all of these issues by simply positing renewable energy requirements and deadlines. This is irresponsible. Although there may be a lack of assurance of Cook Inlet gas supplies at this time, there could be more exploration and development, LNG could be imported, there is a huge stranded gas resource on the North Slope, and small nuclear generating plants are being developed. The utilities should not be hamstrung from seeking the most cost-effective and reliable sources of generation consistent with any emission reduction goals.

Second, implicit in the bill is the judgment that renewable sources of energy are "good," and non-renewable sources are "bad." However, this is simplistic. All the non-renewable resources require the use of non-renewable resources. Wind towers, turbine blades, solar panels, batteries and dams all involve mining of non-renewable resources, and the manufacturing and transportation of those materials also uses non-renewable resources. Also, if the real goal of the bill is to reduce carbon emissions, why is biomass ok, and why not consider carbon sequestration as mitigation for fossil fuel use?

Third, the National Renewable Energy Laboratory (NREL) study hardly justifies the provisions of this bill. The NREL report specifically states that its "analysis only included technology options included in the draft RPS design that was provided to NREL by the Governor's office. These resources include biomass, geothermal, hydropower, landfill gas, solar PV, tidal energy, and wind." (p.vi) The report candidly opens with the statement that "[d]ue to the quick turnaround time of approximately six seeks, we focused on ... developing a set of plausible 80% RPS scenarios...." (Emphasis added, p v.) It also cautioned "that this analysis was conducted to meet an immediate need and was based on the best information available within timing constraints. It is a starting point for additional research and consideration of investment or policy options. Other factors that can inform decision-making are not considered here. The analysis results are not intended to be the sole basis of investment, policy, or regulatory decisions." (p. 2) It admits that "the additional capital costs associated with the renewable resources" is a " primary uncertainty." (p. 31). Importantly, it

punted on a key issue associated with balancing variable wind and solar power in a footnote: "We would typically perform an estimate of dynamic operating reserve requirements that account for the variability of wind and solar. Project timeline constraints prevented this, so we used a fixed level." (fn. 22, p. 15) Similar disclaimers are peppered throughout the report.

Fourth, and most troubling to me, is the hubris that legislation with such rigid, arbitrary restrictions and timelines will provide the promised results. In fact, it will almost certainly result in inefficient and subobtimal results. For instance, the rigid short compliance schedule, combined with steep noncompliance penalties, would incentivize small distributed systems over large capital projects, which require a much longer engineering and permitting timelines. Yet, it is large projects, such as hydroelectric projects, that are needed to provide the load necessary to balance the variable wind and solar generated power. The problem is exacerbated by the fact that the NREL report created only a variety of scenarios, not an optimized one. Yet, the legislation simply assumes that the technology will be developed, investments made and optimizations made. Both private and government projects are typically subject to delays and cost-overruns. It is folly to think that the mandates in HB 101 will timely meet its goals.

Fifth, the bill would require all ratepayers to subsidize new solar panels and wind generators by getting retail credit for electrical power beyond the month in which it is generated. This is unfair, and may result in building more solar and wind generation than the system can balance.

Please do not pass this bill. The next step should be to pursue a feasibility and optimization study that includes all generation options. The study should be the basis for the development of a single <u>achievable</u> diversification plan and timelines, as opposed to a mishmash of "plausible scenarios" with arbitrary time and options constraints As the NREL study put it, "[i]mportant next steps could include a comprehensive analysis of costs and benefits (including resilience) of various scenarios, analysis to support the interim targets, and engineering analysis of required transmission system upgrades to support deployment of renewable energy technologies in various locations throughout Alaska's Railbelt grid." (p.vi)

Thank you for considering my views.

Mark Worcester 2247 Arctic Circle Anchorage, AK 99517

From:	<u>Jamie Hansen</u>
To:	House Energy
Cc:	Rep. George Rauscher
Subject:	HB 121
Date:	Thursday, April 6, 2023 7:19:21 AM

To Chair Rauscher and Members of the House Energy Committee,

I am writing in strong support to HB 121 and request you take action to move this legislation forward. I am the Principal Consultant with Information Insights, a member of the Renewable Energy Alaska Project, a small business owner in Fairbanks, a ratepayer with GVEA, and a mom who hopes my kids stay and thrive in Alaska.

Now is the time for strategic action by the legislature to stabilize and lock in lower energy costs far into the future. The Renewable Portfolio Standard (RPS) is the foundation for this. The RPS combined with the recently introduced legislation on financing energy development projects (SB 125 and HB 154) would open up opportunity and provide a very clear pathway to reducing electricity costs, developing new areas of Alaska-based industry, and keeping money in our economy.

There is so much happening right now in rural and urban infrastructure from energy to broadband. Alaska is knocking it out of the park with federal dollars and local investments in broadband infrastructure. Clean and low-cost energy infrastructure should be the same, and the scale of the investment needed in energy is just as enormous. Again, a lot is already happening on transmission lines and more, the RPS is needed to focus in on renewable generation that will lower our costs and grow our economy.

Thank you,

Jamie

JAMIE HANSEN, Principal Consultant & CEO she/her/hers



☐ jamie@iialaska.com ☐ (907) 450-2461 ☐ iialaska.com Cold Climate Housing Research Center Building PO Box 83070, Fairbanks AK 99708 My Hours: M-F 9:00-4:00 *Working from Fairbanks, Alaska*

From:	Zachary Brown
То:	House Energy
Subject:	HB 121
Date:	Saturday, April 1, 2023 1:53:49 PM

Hello from Gustavus, my name is Zach Brown, and I am a rural Alaskan and a climate scientist.

I strongly urge you to support bipartisan HB 121, which would establish a renewable portfolio standard (RPS) for Alaska. With climate change beating down our door, high fuel prices harming rural Alaskans, and massive Federal incentives for clean energy made available by the Inflation Reduction Act, THIS IS THE MOMENT TO ACT!

Thank you for protecting our climate and our communities by supporting HB 121.

Thank you, Zach Brown, Gustavus AK

Zach Brown PhD, Stanford University Co-Executive Director, Tidelines Institute Living & Working on Traditional Tlingit lands of the Huna Káawu zach@tidelinesinstitute.org 907-697-2210

Please talk about the climate crisis.

From:	Colleen Fisk
То:	House Energy
Subject:	HB 121
Date:	Tuesday, March 28, 2023 6:37:14 PM

Chair Rauscher and Members of the House Energy Committee:

I support the Renewable Portfolio Standard (RPS) for Alaska. I am concerned by the projected shortfall of Cook Inlet Natural Gas which is producing 85% of the electricity for my utility (Matanuska Electric Association - MEA). MEA has an annual survey which shows that many of their members want more renewable energy, but MEA has been slow to significantly add renewables to their production. They have increased purchasing of solar power, however not at a fast enough rate to avoid the projected shortfall of natural gas in 2027. Renewable energy prices have plummeted, and a 2022 report by the National Renewable Energy Lab concluded that increased renewable energy on the Railbelt grid would not impact reliability, contrary to the claims of the utilities.

Alaska is all about energy independence, and an RPS would support development of the vast wind, solar, geothermal, hydro, biomass, and tidal resources of the region, while still utilizing the existing natural gas power plants already built. That is true energy independence and resilience.

Sincerely, Colleen Fisk Wasilla, AK, 99654 907-891-9608 Chair Rauscher and Members of the House Energy Committee

Alaska's railbelt needs a renewable portfolio standard which would require the electric utilities on the railbelt to generate an increasing percentage of their electricity from renewable resources starting now and increasing in the coming years.

With the prospect of Cook Inlet natural gas not being able to meet demand in the very near future, and the likelihood of utility rates increasing in response, it seems the time to diversify energy resources is now. The falling costs of implementing renewable energy sources - and the jobs this will create - also makes now the opportune time to act. The future of Alaska energy must turn to renewables.

My husband and I moved to Alaska 21 years ago with our young children and decided it was the place we wanted to make our home. Our kids are now married and raising children of their own, and we want Alaska to be the place they will want to stay and call home. The legislature must plan for the future now. There is no time to waste - please help HB 121 become a reality.

Thank you, Erin Borowski 16048 Wind Song Dr 99516 907-441-3340

From:	Bob Shavelson
То:	House Energy; Rep. George Rauscher
Subject:	HB 121
Date:	Friday, March 24, 2023 9:22:53 PM

Dear Chairman Rauscher & Members of the House Energy Committee -

I'm writing to strongly encourage you to pass HB 121 and adopt a renewable portfolio standard for Alaska.

I'm a long time resident of the Cook Inlet basin, and right now, one company has a virtual monopoly on natural gas production, and gas supply forecasts look bleak.

That means many Alaskans in southcentral Alaska can expect their home heating and electricity costs to continue to rise.

At the same time, the costs for renewable energy are declining rapidly.

For Alaskans facing the increasingly difficult effects of inflation, it makes little sense to continue to invest in finite energy resources that will cost us more in the long run.

The Cook Inlet basin is blessed with world-class renewable energy assets, and our massive tides, smoldering volcanoes and ample winds can provide long term affordable energy for years to come, while making Alaska a jobs and technology leader in the renewable energy sector.

I hope you agree, and will adopt HB 121.

Thank you -

Bob Shavelson Homer, Alaska

From:	Randy Brown
To:	House Energy
Subject:	HB 121
Date:	Tuesday, March 21, 2023 3:50:59 PM

It's crucial that we increase renewable energy in Alaska. It supports local jobs and contributes to national security. It also protects the thing that is most precious about Alaska: the natural environment. Please support SB 101!

Thanks, Randy Brown 927 Juneau St #2 Anchorage, AK 99501

Thank you for taking the time to hear from Alaskans on House Bill 101. This bill will set up a Renewable Portfolio Standard (RPS). I ask that all of you vote in favor of HB 101.

There are many reasons to support an RPS. These are the ones I consider most important.

- We are dangerously dependent on natural gas (and other fossil fuels); their supply and therefore their price is inherently volatile, repeatedly causing damage to our economy every time their price fluctuates.
- Renewable energy prices are plummeting! Solar and wind energy is already cost-competitive with natural gas and their prices are still improving.
- Distributed renewable energy IMPROVES grid resiliency. The National Renewable Energy Laboratory found 5 different pathways to increase renewables without impacting reliability.
- An RPS will make us energy independent! This improves national security and has huge benefits for our economy. The Alaska Climate Alliance's report titlted "Alaska's Renewable Energy Future: New Jobs, Affordable Energy" showed that a full switch to renewables will require almost 100,000 long-term jobs, about 70,000 more jobs than all of the fossil fuel industry currently provides (for context, the Willow Project will only produce 2,500 short-term jobs, most of which will be for out-of-state workers).

For these reasons and many more, please vote 'yes' on HB 101 and set up a Renewable Portfolio Standard (RPS).

Thank you, Joshua Knicely

I am an Anchorage resident writing in favor of HB 121. Since 2015, my family has been proud to call Alaska our home. My wife and I are in our prime working years. We hope that our state leaders will act now to secure our energy future, so that families like ours can hope to prosper and contribute to a society that matches our splendid scenery.

Power generation on Alaska's Railbelt is overdependent on a single source of fuel: methane gas from Cook Inlet. A Renewable Portfolio Standard for the region would take advantage of one of the most hopeful advancements of the 21st century — the plummeting cost of renewable power — to diversify our energy mixture and improve reliability, affordability and energy independence.

Solar and wind are already competitive with fossil fuels and only getting less expensive. Over the last decade, utility-scale solar prices have dropped 90%, onshore wind power dropped 72% and lithium-ion batteries decreased 89%.

In 2020, the International Energy Agency (IEA) concluded that solar power was the cheapest form of electricity in history. Most new power plant capacity being built in the United States today is renewables. This is what it looks like when math wins.

A recent report by the National Renewable Energy Laboratory (NREL) found five different pathways for the Railbelt to get to 80% renewable power without impacting reliability. NREL's researchers found that transmission upgrades, batteries, flexible hydropower and fossil gas generation can keep the system balanced in times of no sun, wind or water. Moving away from the inherent volatility of gas will stabilize energy prices and create good-paying local jobs in one of the most promising economic sectors of the modern era.

Whether you care mostly about social equity or the power of free enterprise, the beauty of this moment is that it has something for everyone.

Thank you for your consideration of this important bipartisan legislation.

Griffin Hagle-Forster 2407 Cottonwood St Anchorage, AK 99508

Sent from my iPhone

I am strongly in support of SB101, the Renewable Portfolio Standard for Alaska. We have the resources to achieve these goals. Our future depends on it.

Philip Kaluza PO Box 3234 Seward, AK 99664

From:	Bob Butera
То:	House Energy
Subject:	HB 121, Renewable Portfolio Standards
Date:	Thursday, March 23, 2023 4:53:34 PM

I am writing to ask you to pass Renewable Energy Portfolio Standards (RPS) for Alaska. These standards were proposed as aspirational both by Governors Palin and Dunleavy. It is long past the time to codify them in State Statute. We need to quickly move Alaska to lower cost, resilient, and stable forms of electrical generation. Distributed renewable generation provides these benefits, and it conserves our natural gas for heating our buildings.

Beyond codifying in statute the actual RPS standards, the most important part of this bill is the amendment of Sec. 3. AS 42.05.780(a) to include that an Integrated Resource Plan (IRP) must include options to satisfy RPS standards. The IRP will drive our electrical future and it must be updated as soon as possible and with RPS standards in place so that we can move forward in an orderly, cost effective way.

I suggest that Sec. 42.05.930. Definitions (9) be modify the definition of "renewable energy resource" to include nuclear power. The goal is to reduce carbon, and if nuclear will get us there, then let the IRP decide if it is the right path.

I also suggest slimming down this bill to focus exclusively on Renewable Energy Portfolio Standards. Its current emphasis on rooftop solar should be removed. There is an important role for solar to play in the Railbelt's future, but it should be primarily developed as utility-scale solar.

Just a few days ago the latest UN report stated: "There is still one last chance to shift course. But it would require industrialized nations to join together immediately to slash greenhouse gases roughly in half by 2030 and then stop adding carbon dioxide to the atmosphere altogether by the early 2050s. If those two steps were taken, the world would have about a 50 percent chance of limiting warming to 1.5 degrees Celsius. Delays of even a few years would most likely make that goal unattainable, guaranteeing a hotter, more perilous future. The pace and scale of what has been done so far and current plans are insufficient to tackle climate change. We are walking when we should be sprinting."

The time is past to dawdle. Move the important parts of this bill forward.

Thank you,

Bob Butera Anchorage

I am writing in support of HB 121.

We know Cook Inlet gas is declining. We know the price of energy on the Railbelt will go up in the very near future when contracts with Hilcorp expire and higher priced natural gas becomes our reality.

A study by Analysis North showed the cost to transition the Railbelt grid to 80% renewable energy would be about \$3.2 Billion – less than half of the \$6.7 Billion the region would save in natural gas costs. Importing LNG may benefit producers, but it will not benefit ratepayers.

Just like in rural Alaska's renewable microgrids, reducing imported fuel keeps the money local. Jobs are created to build out projects and others to maintain the new infrastructure. Utilities no longer bleed local money to outside vendors but keep it in the community.

Establishing an RPS will incentivize utilities to make an expedient transition to renewable energy – and that's just what we need.

It's the right thing to do. I encourage you to pass this bill!

Thank you,

Constance Fredenberg 12322 E. Biscane Drive Palmer, AK May 8, 2023

Alaska State Capitol Attn: Chair Rauscher and Members of the House Energy Committee 120 4th Street Room 3 Juneau, AK 99801

Dear Chair Rauscher and Members of the House Energy Committee,

On behalf of Ranger Power ("Ranger"), I write in support of the proposed Renewable Portfolio Standard (RPS) legislation introduced as Senate Bill 101 by Senator Löki Tobin and House Bill 121 by Representative Jesse Sumner.

Ranger is an experienced utility-scale renewable energy developer that believes can help Alaska utilities achieve their RPS goals. While the majority of our over 10,000MW renewable energy project portfolio exists in the Midwest, we have been actively developing renewable projects in Alaska since 2019.

The standards set forth in the proposed RPS legislation are critical to providing Alaskans with affordable clean energy alternatives. Increases in price-stable renewable energy would provide long-term benefits to Alaska energy consumers. This proposed RPS legislation will bring millions of dollars of investment to the region.

Thank you again for your time, and please let us know if we may provide additional information.

Best regards,

Paul Harris President

I am writing to support HB121. Non-binding goals may feel good but they usually do not work. We need to follow the example of over half the states in the USA and implement a Renewable Portfolio Standard (RPS) for the Railbelt utilities. Wind and solar can be developed quickly, will create many good paying jobs, and will reduce our energy costs in the long run. We need to be more proactive in the transition to renewables since there is a diminishing supply of fossil fuels in Alaska and the world. This makes sense for the economy and for the environment.

Please support HB121.

Thank you for your time,

Dale Banks

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Dale Banks Loopy Lupine LoopEride PO Box 2888 4854 Eagle Place Homer, Alaska 99603 https://urldefense.com/v3/__http://loopylupine.com__;!!LdQKC6s!LsXWzh30IFSIfih8OIJVA42u7cLRk7rFhtpr1PFxA6O919yqcKuMoCw4qLuARp1cl-MrxKBpdZAu4S6XUlqww\$ https://urldefense.com/v3/__http://LoopEride.com__;!!LdQKC6s!LsXWzh30IFSIfih8OIJVA42u7cLRk7rFhtpr1PFxA6O919yqcKuMoCw4qLuARp1cl-MrxKBpdZAu4S6XUlqww\$ 907-235-5100 office 907-299-0524 mobile

I applaud any effort to reduce Alaska's dependency on oil for energy. Along those lines I've heard about and read HB121.

I totally support this effort.

I especially agree with the "net Metering" section, and the verbiage of : "at the full retail rate kilowatt-hour," and fine with the credit expiring once a year on 31MAR.

This is certainly more fair than the current credits offered by the "load-serving entity" and feel it would promote more interest in individual home investment in solar attentive energy installations. It is going to take individuals installing solar to make the alternative percentage requirement a reality.

Thank-you so much for your effort and I surely hope to see this potential change to our net Metering system. I currently have solar installed on my home in Ninilchik, AK and with the current Net Metering system, I surely would discourage people from installing solar as due to the method Homer Electric Association (HEA) uses for Net Metering. Its criminal the way that they calculate it. I can produce over twice what I use and I will still have an electric bill. Lets get the Net Metering system changed to be a fair and just system that encourages participation.

Put me in the "yes" column for this effort, and thank you

John Amerson Ninilchik, AK (907)351-1790 cell

From:	Zachary Brown
То:	House Energy
Subject:	Please advance HB 121!
Date:	Friday, April 28, 2023 12:14:22 PM

Please advance HB 121, a Renewable Portfolio Standard, as soon as possible!

It would be suicidal to miss this moment and begin importing expensive gas. This critical legislation will open huge pools of federal \$\$ to build energy infrastructure in our state.

Please act on HB 121 for true energy independence!

Thank you for your consideration, Zach Brown Gustavus, AK

Please support House Bill 121 to establish a Renewable Portfolio Standard for the railbelt region!

The war in Ukraine and resulting gas price spikes should make abundantly clear how dangerous it is for Alaska to plan on *importing* gas. This will make us energy insecure and subject to the whims of petro-dictators.

Clean energy has never been cheaper, and there have never been such generous federal dollars available to build it.

Please support HB 121 for Alaska's energy future!

Thank you, Zach Brown Gustavus, AK

From:	<u>N C</u>
То:	House Energy
Subject:	SB 121
Date:	Friday, March 17, 2023 1:03:30 PM

I moved to Alaska to live in a more sustainable way. I am committed to the electrification of my home to contribute on a personal level. Having electricity supplied from renewable sources by my utility is critical and I support SB 121!

Thanks, -Nathan Collingridge

I am writing to support this bill because I feel we need to address the future of our energy consumption in Alaska. We will run our of "cheap" gas in the next 5 years? Wow, we will be hurting like my friends in the lower 48 who pay enormously for their gas and electric now. If there is a way we can get ahead of this, I think we need to get on it! The solar panels we put on the roof 5 years ago show me that it is doable to use these alternate ways to generate energy.

Besides the price, we sure need to quit making our energy kill our wonderful clean environment that we by and large enjoy here.

Please get HB 121 done-we need it!

Deborah Vandruff, RN Anchorage, Alaska

Sent from Mail for Windows

From:	Shaina Kilcoyne
То:	House Energy
Subject:	Support for HB 121
Date:	Thursday, April 27, 2023 9:09:26 AM

I am writing in support of HB 121 in order to make it easier for our Railbelt utilities to integrate more renewable energy now and avoid importing expensive gas to the extent possible. We've been fortunate to have abundant, local natural gas supplies for decades. But now those supplies are dwindling. Fortunately, this coincides with historic grant opportunities for renewable energy, of which we have abundant, local sources. The Cook Inlet region has the ability to supply much of our electricity needs, allowing us to save our limited gas supplies for heating.

Establishing a Renewable Portfolio Standard will keep hundreds of millions of dollars in the local economy and stimulate jobs and economic activity. Using local renewable resources rather than importing expensive fuel will also strengthen and diversify Alaska's economy.

Thank you for your consideration of this important legislation. With respect, Shaina Kilcoyne Anchorage, AK Dear Chair Rauscher and Members of the House Energy Committee,

As Southcentral utility ratepayers for over 40 years, we are writing to voice our strong support for HB 121, which would require increasing levels of renewable power generation on the Railbelt over the next 20 years. Our rationale is a follows:

- <u>Our communities are running out of affordable natural gas</u> for heat and power in Southcentral. According to DNR, demand may outstrip supply by 2027 and, short of developing other sources of energy, force us to import liquified natural gas at a premium. Given our state's abundant energy sources, exporting Alaskans' cash to pay for expensive energy harvested out-of-state simply doesn't make sense.
- <u>Renewable energy in Alaska is abundant and economically competitive</u>. Hydropower has been an important part of the mix for most of the last century. Cost of solar and wind generation has dropped to a fraction of their costs only ten years ago..
- <u>We can't build a sustainable economy in Alaska by putting all our eggs in one basket</u>. Natural gas and diesel have served us well, but we must diversify to maintain stable prices and energy supply over the next decades.
- <u>Alaska is suffering from climate change</u>. Instead of trying to maintain the status quo, we should demonstrate a commitment to new technologies in order to attract new jobs and retain our younger people. Instead of burning them, we should conserve our precious hydrocarbons for export and manufacture.

Thank you for your consideration.

Sincerely, Peter Crimp and Paula Cullenberg 4950 Craftsman Rd Homer, AK 99603 907-440-6709