

**ALASKA STATE LEGISLATURE  
HOUSE LABOR AND COMMERCE STANDING COMMITTEE**

February 1, 2008

3:03 p.m.

**MEMBERS PRESENT**

Representative Kurt Olson, Chair  
Representative Mark Neuman, Vice Chair  
Representative Carl Gatto  
Representative Jay Ramras  
Representative Robert L. "Bob" Buch  
Representative Berta Gardner

**MEMBERS ABSENT**

Representative Gabrielle LeDoux

**COMMITTEE CALENDAR**

HOUSE BILL NO. 288

"An Act relating to net energy metering for retail electricity suppliers and customers."

- HEARD AND HELD

**PREVIOUS COMMITTEE ACTION**

BILL: HB 288

SHORT TITLE: NET ENERGY METERING

SPONSOR(s): REPRESENTATIVE(s) SEATON

01/04/08	(H)	PREFILE RELEASED 1/4/08
01/15/08	(H)	READ THE FIRST TIME - REFERRALS
01/15/08	(H)	L&C, FIN
02/01/08	(H)	L&C AT 3:00 PM CAPITOL 17

**WITNESS REGISTER**

REPRESENTATIVE PAUL SEATON

Alaska State Legislature

Juneau, Alaska

**POSITION STATEMENT:** Presented and answered questions as the prime sponsor of HB 288.

MARILYN LELAND, Executive Director

Alaska Power Association (APA)  
Anchorage, Alaska

**POSITION STATEMENT:** Testified and answered questions during the discussion of HB 288.

ANDY LEMAN, Legal Counsel  
Alaska Power Association (APA)  
Anchorage, Alaska

**POSITION STATEMENT:** Responded to questions during the discussion of HB 288.

ROBERT REAGAN, Rates and Tariffs Supervisor  
Anchorage Municipal Light & Power  
Anchorage, Alaska

**POSITION STATEMENT:** Testified and answered questions during discussion of HB 288.

TRISH ROLFE, Alaska Regional Representative  
Sierra Club  
Anchorage, Alaska

**POSITION STATEMENT:** Testified in support of HB 288.

ANDY BAKER, Clean Energy Consultant  
Your Clean Energy Design, LLC  
Berkley, California

**POSITION STATEMENT:** Testified on HB 288.

PAT LAVIN, Staff  
National Wildlife Federation (NWF)  
Anchorage, Alaska

**POSITION STATEMENT:** Testified on HB 288.

KYRA WAGNER  
Homer, Alaska

**POSITION STATEMENT:** Testified during the discussion of HB 288.

ALAN PARKS  
Homer, Alaska

**POSITION STATEMENT:** Testified in support of HB 288.

JOEL COOPER  
Homer, Alaska

**POSITION STATEMENT:** Testified in support of HB 288.

MARLA MCPHERSON  
Homer, Alaska

**POSITION STATEMENT:** Testified in support of HB 288.

TERRY HOEFFERLY  
Dillingham, Alaska  
**POSITION STATEMENT:** Testified on HB 288.

PHIL STEYER, Director  
Government Relations/Corporate Communications  
Chugach Electric Association (CEA)  
Anchorage, Alaska  
**POSITION STATEMENT:** Testified and answered questions during discussion of HB 288.

ANTHONY PRICE, Chair  
Regulatory Commission of Alaska (RCA)  
Anchorage, Alaska  
**POSITION STATEMENT:** Testified during the discussion of HB 288.

JASON KEYES, Attorney  
Wilson, Sonsini, Goodrich, and Rosati, PC  
Interstate Renewable Energy Council (IREC)  
Seattle, Washington  
**POSITION STATEMENT:** Testified during the discussion of HB 288.

BRAD FLEUTSCH  
Juneau, Alaska  
**POSITION STATEMENT:** Testified during the discussion of HB 288.

TIM MCCLEOD, President; General Manager  
Alaska Electric Light & Power  
Juneau, Alaska  
**POSITION STATEMENT:** Testified and answered questions during discussion of HB 288.

FLOYD KOOKESH, Tribal Administrator  
Douglas Indian Association  
Angoon, Alaska.  
**POSITION STATEMENT:** Testified during the discussion of HB 288.

PETER NAOROZ, President  
Kootznoowoo, Inc.  
Juneau, Alaska  
**POSITION STATEMENT:** Testified in support of HB 288.

DEBORAH WILLIAMS, President  
Alaska Conservation Solutions  
Anchorage, Alaska  
**POSITION STATEMENT:** Testified in support of HB 288.

REBECCA SHAFFER, Board Member  
U.S. Green Building Council Chapter  
Anchorage, Alaska

**POSITION STATEMENT:** Testified in support of HB 288.

NICK MOE  
Anchorage, Alaska

**POSITION STATEMENT:** Testified in support of HB 288.

GARRISON COLLETE  
Fairbanks, Alaska

**POSITION STATEMENT:** Testified during the discussion of HB 288.

BILL MACFARLANE  
Anchorage, Alaska

**POSITION STATEMENT:** Testified in support of HB 288.

MARTHA LEVENSALER, Climate Change Project Director  
Alaska Marine Conservation Council  
Anchorage, Alaska

**POSITION STATEMENT:** Testified in support of HB 288.

ADAM BROWNING, Executive Director  
Vote Fuller Initiative  
Address unknown

**POSITION STATEMENT:** Testified in support of HB 288.

PETER BRIGGS, Steering Committee Member  
Anchorage Sustainable Building Initiative  
Anchorage, Alaska

**POSITION STATEMENT:** Testified during the discussion of HB 288.

#### **ACTION NARRATIVE**

**CHAIR KURT OLSON** called the House Labor and Commerce Standing Committee meeting to order at [3:03:59 PM](#). Representatives Buch, Gardner, Neuman, and Olson were present at the call to order. Representatives Gatto and Ramras arrived as the meeting was in progress.

#### HB 288-NET ENERGY METERING

[3:04:30 PM](#)

CHAIR OLSON announced that the only order of business would be HOUSE BILL NO. 288, "An Act relating to net energy metering for

retail electricity suppliers and customers." He noted his intention to take public testimony and keep public testimony open.

REPRESENTATIVE PAUL SEATON, Alaska State Legislature, speaking as prime sponsor of HB 288, explained that he is working on public policy to encourage alternative energy and HB 288 is one of several measures that address some aspect of renewable energy projects. The purpose of HB 288 is to encourage alternative energy use by individuals throughout the state. This bill authorizes net metering, which is the excess energy accumulated when electricity produced from a customer's private generating equipment exceeds the amount of electricity purchased from a utility. This bill allows customers to obtain kilowatt hour credits (kWh) for any energy generated beyond the consumer's usage. The energy credit can be carried forward so when a customer generates more energy than used during the month, the customer can receive a monthly credit referred to as "roll over", which is allowed to accumulate over a period of time not to exceed 24 months under the bill, he noted. Customers can either sell or roll over energy back to the utility in the form of a credit in kW hours, based on wholesale power price or "non-firm" power purchase price or apply it to their future utility bills. The credit is returned in kW instead of cash. Since there is just one meter, the problem encountered with a dual meter system, in which a meter runs one way in kilowatts(kW), but runs backward at a different rate is avoided. HB 288 also limits the capacity to 25 kW to avoid the issue of electrifying a transmission line and concern about electrocution, which can occur when a line is recharged [after a power outage]. The process is cheap, simple, and does not require sophisticated equipment, and 42 other states currently allow net metering in some form.

[3:08:14 PM](#)

REPRESENTATIVE SEATON specified that HB 288 requires that generating equipment must be on the customer's premises, limits generator capacity to 25 kW, and restricts the generation source to solar, wind, tidal, geothermal, or hydropower. He opined HB 288 encourages the offset of carbon dioxide output since it allows consumers to reduce their commercial energy consumption and helps reduce energy consumption. He recalled an article that relates that Alaska has one of highest per capita carbon dioxide output in the nation. Therefore, HB 288 would allow individual Alaskans the flexibility to reduce their carbon footprint by using alternative power generation and choose to

make a difference, he opined. He noted an additional benefit is there is less line loss with a distributive generation process under net metering since power is comprised of smaller customer units producing energy instead of one major power plant. He acknowledged that there has been some confusion or misinterpretation on the buy back rate of the excess energy, since some states require a utility to buy back excess power at the retail rate.

[3:11:21 PM](#)

REPRESENTATIVE SEATON recalled conversations held with Alaskans statewide and highlighted concerns some small power plants and utilities have had because they provide service to fewer customers, and thus may be adversely affected by net metering. He noted consumers replace light bulbs, better insulate their homes, and install energy efficient freezers or other energy efficient appliances in order to reduce their overall energy consumption. Net metering is simply another measure consumers can take [in an effort to reduce overall energy consumption], he opined. Under HB 288, customers can make a capital investment to install net metering and if they generate more energy than used, utilities can obtain the energy not consumed at wholesale cost. Thus utilities avoid having to make a capital investment such as expanding to a larger plant. He noted that most of the energy generated in Alaska is currently based on carbon fuel sources and with the increase in fuel costs [net metering offers a way to reduce costs]. This bill allows an exemption for a retail supplier of electricity whose power is generated by an alternative energy system. The intent of the bill is not to provide incentives for major power plants or for major utility generated plants, just to allow small producers to offset their energy costs. Representative Seaton clarified that is not a dual metering bill, in which one meter is for input and the second for output, which allows for tracking the different rates. This bill also does not require a utility to install meters or expensive switches.

REPRESENTATIVE SEATON related that Connecticut has offered net metering to consumers as a subsidy to promote renewable resources for over 20 years. Minnesota has the oldest net metering law, finds the interconnection process simple, and reports that no safety issues have arisen. The committee packet contains a 2007 report called, "Freeing the Grid", which is a summary that may answer questions that committee members may have, he offered.

3:20:30 PM

REPRESENTATIVE GATTO inquired as to whether the generator capacity specified in HB 288 should be expanded to accommodate consumers with generators larger than the 25kW.

REPRESENTATIVE SEATON offered explained that one reason that the breaking point for meters and switches is set at 25 kW is because meter costs are more expensive above that amount. Another reason for the limited size is because the utility must be able to absorb wind generation caused by gusts, which is easier with known loads. A further reason is to address a concern by some utilities about re-electrifying the grid backwards during an outage in larger systems such as those in the 100 - 500 kW range.

3:23:37 PM

REPRESENTATIVE GATTO expressed concern that a windmill producing 30kW [of wind energy] on a gusty day would be disqualified from using net metering.

REPRESENTATIVE SEATON noted his agreement that the limit for net metering is set at 25 kW, but offered his belief that a windmill that can produce 25 kW, or 25,000 watts, is a big windmill.

3:25:14 PM

REPRESENTATIVE RAMRAS expressed his eagerness to cosponsor HB 288, and explained that he currently has a solar panel system. He offered that it is one of the first private-sector commercial systems in the state, can produce up to 21 kW of electricity, and uses a dual-meter system. He shared with members that his local utility, Golden Valley Electric, has a green committee and modeled its program, Sustainable Natural Alternative Power (SNAP), after the first of its type in Chelan County, Washington. He said that the SNAP program is a progressive program, he opined. Overall, he is quite pleased with his system and he offered to give his full and passionate support for HB 288. He suggested consumers participate in programs such as net metering because they are passionate, since [alternate renewable energy] is not yet cost effective due to lack of participation. He predicted there will be cost savings in 10-15 years similar to those that are beginning to occur in the Lower 48.

3:27:26 PM

REPRESENTATIVE SEATON, in response to Representative Neuman, answered that Mr. Ramras's power generation would not be considered a commercial entity under the bill.

REPRESENTATIVE NEUMAN asked whether the cost of transmission or any other costs would also need to be paid by the net metering customer.

REPRESENTATIVE SEATON explained the process. Electricity generated and used over a month's time would be tracked. The customer would pay the residential rate on the amount used and when the energy generated by the customer exceeds the energy the customer uses, the roll over is carried forward. When a customer routinely generates excess energy, the customer can elect to sell it to the utility at wholesale cost, calculated in kW. However, if the customer chooses not to sell the accumulated roll over, the excess energy credit would zero out after two years.

[3:31:13 PM](#)

REPRESENTATIVE NEUMAN referred to language under proposed AS 42.45.045, which read: "is intended primarily to offset part or all of the customer's requirements for electricity" and asked whether this refers to the energy produced by the customer.

REPRESENTATIVE SEATON noted his agreement that the customer is the one who produces the energy that is carried forward.

[3:31:34 PM](#)

REPRESENTATIVE GARDNER inquired as to whether there is any benefit to holding action on HB 288 since the Regulatory Commission of Alaska (RCA) [is scheduled] to complete its review of net metering standards by August 8, 2008.

REPRESENTATIVE SEATON answered he did not believe so, but acknowledged that the RCA is reviewing net metering and interconnection standards. He also mentioned plans to bring forth an amendment specifying that non-regulated utilities would pay an avoided cost rate.

REPRESENTATIVE GARDNER asked for clarification on the "purchase" and the "sales" price in HB 288. She posed an example, in which a utility purchases or generates energy it must use and maintain transmission lines to deliver the electricity to residences.

The utility charges a price to reflect the transmission costs. In the event that a customer stores energy credits over an 18-month period, increased energy costs could result in the utility paying more for energy at the end of the 18-month period. Thus, the customer would have an energy credit valued at more than the customer paid. She expressed concern that the potential two-year lag time could result in costs, especially for small utilities.

REPRESENTATIVE SEATON explained that the "avoided cost" is the utility's cost to produce energy [at the wholesale rate], but electricity is sold at retail cost or the utility's cost plus its mark-up. While he noted his agreement that huge fluctuations could be a problem, he pointed out that customer credits are based on the wholesale rate. He further pointed out that HB 288 allows for seasonal fluctuations in energy use, while limiting the length of time energy credits can accrue to two years.

[3:36:20 PM](#)

REPRESENTATIVE GARDNER offered that a consumer could cash in the energy credits in 23 months in order to take advantage of the system. She then inquired as to whether there is a definition for the "non-firm" purchase power rate.

REPRESENTATIVE SEATON related his understanding that the RCA calculates the "avoided cost" which is basically the wholesale price, he opined. He said it's "non-firm" because it's like a spot market.

REPRESENTATIVE RAMRAS suggested that the committee might consider whether to require the utility to determine its most expensive kW production and use that rate rather than the wholesale rate since the wholesale rate is the utility's blended cost of the hydroelectric, natural gas, and diesel costs. Alternative energy consumer benefits should be based on how to displace the most expensive or dirtiest kW cost, he opined. He noted that it takes time for new technology to develop and while 25 kW system doesn't [necessarily make economic sense, it is a starting point].

[3:40:22 PM](#)

REPRESENTATIVE SEATON stated his belief that HB 288 reflects a balance that stems from discussions he held with utilities, consumers, and producers. He offered that the non-firm rate set

by the RCA is a known quantity. This bill represents a compromise, and therefore he cautioned that altering the energy credits from the non-firm rate could create resistance. He specified it is also not his intention to disregard [the impact of HB 288] on rural Alaskans, and thus it may be necessary to consider an exemption for utilities with fewer users or to adjust the total kW power in some instances. However, it would be unfortunate to preclude rural Alaskans from the benefits of net metering, he opined.

[3:43:58 PM](#)

MARILYN LELAND, Executive Director, Alaska Power Association (APA), noted that Andy Lemman, APA legal counsel was also present to answer questions. She offered that APA shares some of the concerns already mentioned. Net metering makes electricity more expensive because almost all Alaskan electric utilities are owned by their customers or local governments that represent them. She opined that there is no "deep pocket" to pay the real cost of net metering, instead a cost savings for one customer will come at the expense of another customer. Secondly, net metering does not reduce costs for utilities since small "avoided costs" accrued because Alaska's utilities have made tremendous investments in generators, power lines, trained personnel, and facilities to ensure "that when Alaskans turn on a light switch, the lights come on." None of these costs are lowered by net metering and at best net metering would only help a utility offset some costs such as fuel costs, she said. However, net metering ignores the high unfavorable fixed costs that form the basis of a substantial part of retail electric rates. Renewable energy is unlikely to help utilities to meet peak demand since low water flow and frozen lakes make generating hydroelectric difficult or impossible during the winter months when peak demands occur, she opined. Although wind could be available at peak demand, its variability or unpredictability makes it an unreliable power source too, she alleged. Therefore, renewable net metering power sources are most likely to be generated when they are not needed so utilities will still need to pay for generation and transmission facilities to meet peak demand, she concluded.

MS. LELAND opined that electricity can't be stored at any reasonable cost. Net meters will run backwards when customers have the least need for electricity, thus net metering is likely to result in allowing customers to sell low-value electricity to the utility for the same price that customers pay for high-value peak electricity. Thus, the cost for net metering is paid by

other consumers, she opined. The RCA has until August 2008 to consider whether to require some form of net metering and has already begun to take initial comments from interested parties. Therefore, HB 288 short circuits that process, she opined. She stressed that since the RCA is charged with the oversight of Alaska's electric utilities, it should be the first one to look at whether net metering makes sense for Alaska. She noted that many of Alaska's cooperatives regulate their rates for electricity since cooperatives are owned by its customers. Since local board members have a better sense of their utility's needs than regulators in Anchorage do, HB 288 would override local control by giving RCA jurisdiction over rates paid for net metering sales, she opined. Finally, the APA believes that there are better ways to encourage renewable energy such as the state providing funds to utilities to help offset the high upfront cost of alternative energy projects. She expressed concern that small utilities would not currently qualify for the exemption under HB 288, since smaller utilities producing hydroelectric or wind power use diesel fuel sources to produce it.

[3:47:38 PM](#)

REPRESENTATIVE GARDNER inquired as to whether there is any way for a utility to also measure the flow on a meter that runs backwards in order to adjust the consumer's energy costs.

ANDY LEMAN, Legal Counsel, Alaska Power Association (APA), replied that the short answer is that typical residential meters do not have the ability to measure power transmitted in both directions and that it would require additional equipment to do so.

[3:48:41 PM](#)

ROBERT REAGAN, Rates and Tariffs Supervisor, Anchorage Municipal Light and Power (ML&P), said that the Alaska Public Utilities Act that is widely vested in the Alaska Public Utilities Commission (APUC), succeeded by the RCA, has the power and obligation to set just and reasonable rates for regulated utilities and to impose reasonable standards of service on those utilities. Presumably, he opined, the legislature recognizes that appropriate business practices, standards, and rates are complex matters that are too dynamic to be set by statute. Therefore, the legislature established an administrative body, the APUC, what later became the RCA, to develop the body of knowledge and understanding necessary to set appropriate

regulations that define the conditions under which utilities provide service and appropriate rates. This legislation would depart from that policy by requiring utilities to allow customers to generate power, and for utilities to purchase random output from customer generators as though it were worth as much as retail electric service.

MR. REAGAN opined that if the legislature believes that it should mandate net metering, the threshold question it needs to ask is whether net metering is a reasonable means to achieve any purpose. If the purpose of HB 288 is to promote alternative renewable energy, ML&P questions limiting net metering only to micro-scale alternative energy use, he said. Net metering, as proposed in HB 288, would create a very large subsidy for generators of 25 kW or less located on the premises of utility customers, he opined. He inquired as to why the bill allows renewable generation to be constructed in such tiny increments when there is every reason to believe that the minimum efficient scale would be much larger than that. "Anyone who has stood next to a functioning wind generator knows even renewable power producing machinery almost always produces undesirable environmental effects," he said. Therefore, ML&P questions why HB 288 would require the new generation on customer's premises thereby concentrating the undesirable environmental effects where people live. One reason might be that large-scale net metering is considered harmful so the limitations in HB 288 are designed to limit the harm, he opined. He said, "If that is true, and ML&P thinks it is, ML&P hopes the legislature will ask why small scale net metering would not also be harmful, just on a smaller scale." He also opined that net metering would not be a small subsidy.

[3:52:34 PM](#)

TRISH ROLFE, Alaska Regional Representative, Sierra Club testified in support of HB 288. This bill addresses most of the concerns people have about net metering, she offered. Net metering will enable the consumer to personally do something to lower his/her own carbon footprint. Furthermore, HB 288 will allow consumers the ability to recoup a portion of the cost to switch to alternative energy sources, she offered. She agreed with Representative Ramras that some people feel passionate about net metering and recognize they will never recoup all their costs. This bill also helps produce jobs because as more people install net metering systems in their homes, the demand for trained professionals to assist them will also increase, she opined.

[3:54:14 PM](#)

ANDY BAKER, Clean Energy Consultant, Your Clean Energy Design, LLC, said that his job as an energy consultant is to help people design small systems such as the ones being discussed today. He offered that the renewable energy economy has three tiers, which include the utility scale, community scale, and residential scale. Of those, net metering speaks to the third tier, he said. The installed cost for some systems is currently pretty high so even if HB 288 were to pass tomorrow, the people who will install systems will slowly evolve and the quantity of electricity they can produce will be small. So the cost to utility companies is exaggerated because the impact is relative to the number of customers who participate in the proposed program, he opined. He acknowledged that the process to develop alternative energy has been slow in the Lower 48 and he predicted that Alaska would likely follow suit. While it is slow growing, it is growing. Nationwide the renewable economy is about \$40 billion a year, he opined. However, the small residential and commercial sector is part of that. People use solar or wind as an alternative energy source at home because renewable resources are often located on private land and not on public land or utility company land, he offered. Some people who produce wind power live on large parcels of land in remote areas so they can produce power without impacting others, he opined. This bill would allow those types of sources to be developed, he offered. He stated that Alaska can generally look to the Lower 48 for specific programs in order to examine the process, the cost, and the benefits derived by other states. Some people overreact to the cost and impact of net metering so he suggested that utility companies should support allegations of hardship with specific facts.

[3:57:42 PM](#)

PAT LAVIN, National Wildlife Federation (NWF), related that NWF has over 3 million members, of which 5,000 reside in Alaska. He said that global warming is NWF's top priority. As part of its program, Alaska Youth for Environmental Action (YEA), NWF sends some youth to Juneau each year to meet with legislators. Nationwide energy costs are a national concern so HB 288 helps provide a means for reducing residential energy costs. Initially only the people with passion will be the ones to sign up for the proposed net metering program, but it is policy changes like the ones contained in HB 288 that will help transition Alaskans into a more efficient and clean economy, he

opined. Besides the individual benefits for homeowners, net metering also represents a societal transition and is one reason why NWF supports HB 288. The legislature should continue to move forward with HB 288 in concert with the RCA because the legislative discussions will help inform and improve the quality of the outcome. He offered that the RCA's role could focus on implementation.

[4:00:28 PM](#)

KYRA WAGNER said she is representing herself and offered that she works with a group called Sustainable Homer that is currently working through the Homer Chamber of Commerce. She noted that she primarily supports the bill because of the green economy factors. While she said she agreed that sustainable energy will grow slowly, if not many people participate in large scale production, the impact will be minimal, she opined. As alternative energy catches on it will become more affordable and the benefits for utility companies will also increase as energy costs will continue to rise, she opined. She said that she would like to see the state "step up to the plate" and make it happen at the state level.

[4:01:58 PM](#)

ALAN PARKS noted that he has served as the Chair of the City of Homer's Global Warming Task Force. He offered his support for HB 288. He gave an overview of the Homer Global Warming Task Force, which was created in January 2007 to advise the City of Homer on methods to plan for and mitigate global climate change. The task force met over 30 times in 2007 to discuss the subject of net metering in detail. The outcome resulted in a comprehensive climate action plan adopted by the Homer City Council, which recommended that the City of Homer support net metering. He related his understanding that the City of Homer will soon consider net metering. He said he anticipates approval of a resolution and letters of support for legislators. He said he strongly believes that net metering will create an economic opportunity at the community level through sales, service, and support of small-scale renewable energy systems, said. This bill could maximize the economic viability of small-scale renewable resources and would give all Alaskans an opportunity to reduce their energy costs and carbon dioxide emissions. While he acknowledged the concerns of small utilities, he said he believes that the benefits of HB 288 outweigh any perceived adverse impacts. He referred to the committee packet, which includes documentation illustrating that

other state's programs are effective with minimal effects to utilities. He suggested that the state amend the Power Cost Equalization Program (PCE) to reward small utilities that reduce energy generation. If the potential for small renewable energy generation systems exists to severely impact utilities, then there must be potential for utility-scale renewable energy generation. He urged utilities to work toward the energy generation. In closing, he summarized that HB 288 will offer individuals an opportunity to reduce reliance on fossil fuels used in energy generation and in a small way, will assist Alaskans to lower energy costs, emissions, and ultimately achieve energy independence. He urged the committee to support HB 288.

[4:05:37 PM](#)

JOEL COOPER said that he supports HB 288. He related that he built his own home with "an eye to energy conservation" and hopes to use active and passive solar to meet his future energy needs. He appreciates that HB 288 allows a citizen to benefit from net metering. He opined he does not see any problems created for local or Railbelt utilities. He offered that solar energy can generate significant energy from March through October and some years it spans an even longer period. As an environmental scientist, he opined that technology currently exists for the entire Railbelt to run on renewable energy. He recalled that when he attended a wind forum sponsored by Homer Electric Association, Inc., he asked whether the Railbelt could be 100 percent renewable. The response given was that the technology currently exists, but that to do so utilities must support and implement it.

[4:09:09 PM](#)

REPRESENTATIVE GARDNER acknowledged that while it is true that one can do anything, the question is whether renewable energy is cost effective and whether people will pay more for their energy.

MR. COOPER responded that the Homer Electric Association (HEA) conducted a survey and 75 percent of its members responded that they are willing to pay more for renewable energy costs. He offered that consideration of renewable energy goes beyond economics to environment and health issues. He opined that the cost of air pollution from burning combustible fuels such as natural gas and coal far outweighs projected costs for geothermal, hydroelectric, wind or solar alternative energy.

[4:09:59 PM](#)

MARLA MCPHERSON said that she supports HB 288 and, as a landowner, would like to set up a system to generate her own electricity. She opined many Alaskans will support HB 288 because it embodies the Alaskan spirit of independence. What stops Alaskans from using renewable energy generation is the up-front cost to invest in a generation system, she opined. This bill would provide incentives to landowners and enable them to afford to install a system to pursue alternative energy generation. She said she thinks HB 288 is good for the independent consumer, the landowner, and the do-it-yourself spirited person. This bill also offers community benefits because it would put more energy into the grid, could help utility companies diversify energy, and could mitigate climate change. Because net metering is a process that will slowly happen, HB 288 would also allow utilities the opportunity to adapt to it without dramatic change, she opined. This bill would essentially allow utilities to pass savings on to consumers by avoiding the greater cost of finite resources such as coal and natural gas and the potential costs that utilities may incur with potential carbon taxes, she said. She said, HB 288 is "good all around for Alaskans", and urged committee members to support the bill.

[4:12:06 PM](#)

TERRY HOEFFERLY said that HB 288 is excellent in its intent and purpose because it addresses the issues of reducing the carbon footprint, global warming, and dependence on petrochemicals. He noted two separate cost structures for utilities across the state and opined that the [difference] between large and small utilities is fundamentally rooted in issues related to scale. It is important for small utilities throughout Alaska to find renewable sources of energy because rural areas have the highest energy costs in the state, he said. Since small utilities are the least able to adapt to net metering, he urged the committee to consider either amending HB 288 or power cost equalization statutes to subsidize small utilities and mitigate the cost of net metering. He agreed with previous speakers that net metering will happen slowly so the overall cost to utilities should be relatively small.

[4:15:10 PM](#)

PHIL STEYER, Director, Government Relations/Corporate Communications, Chugach Electric Association (CEA), said that CEA is not opposed to buying power from customers under the appropriate conditions and agreements. In fact, CEA has already approved tariffs as well as interconnection standards for that purpose. However, CEA is opposed to net metering in HB 288 for several reasons since it overprices generation of electricity, it causes the customer to under contribute distribution costs, and it puts the wrong organization in the business of setting rates. He explained that net metering overprices generation because when overall customer demand causes power to flow from the utility through a meter the energy consumption is measured in kW hours. And that forms the basis for the utility to recover much of its costs to provide services to the customer. The retail rate charged per kW hour recovers the cost of providing not only generation and transmission, but the distribution of power, as well. He noted that CEA customers currently pay approximately 12 cents per kW hour, with half to cover generation and transmission costs and the other half to cover distribution costs. However, under net metering CEA would pay the full 12 cents per kW hour for generation. Under net metering not only would the customer be overpaid for generation, the distribution costs would be unfairly shifted to other utility customers, he said. He offered that the key principle of rate-making involves cost, cost-causer, and cost-payers and net metering violates this principle. He opined that it puts the wrong organization in the business of setting rates. He offered that CEA and many other utilities are regulated by the RCA, who set the rates that CEA charges. When CEA files post-tariff sheets to support proposed rates, CEA believes those rates are fair and reasonable. He reviewed the rate change process, which consists of the RCA's staff review of CEA's justification, taking testimony from any intervenors, taking testimony from CEA, examination and testimony of experts engaged by any of the parties, replying to comments and testimony, and finally deliberation and decisions by the RCA commissioners. He noted that the RCA commissioners have observed the process and reviewed the documentation for the rate change. The rate-making process is a deliberative process. This bill would allow the legislature to determine the appropriate rate for generation instead, he opined. He said that CEA believes rate-making decisions are best made by the RCA since it is the organization the state has created and charged with that duty. He noted that the RCA currently has a proceeding underway to consider whether net metering is appropriate for Alaska. He summarized that CEA is not opposed to buying power from the customer, but there

needs be a proper interconnection and CEA needs to pay the appropriate price for power generation.

[4:19:27 PM](#)

REPRESENTATIVE BUCH inquired as to the timeframe for net metering review by the RCA.

MR. STEYER offered his understanding that the RCA is to have completed its net metering activity by August 2008.

[4:19:56 PM](#)

REPRESENTATIVE GATTO inquired as to whether costs for the lack of carbon emissions due to net metering would be refunded to customers if a utility was required to pay for carbon emissions.

MR. STEYER answered that he was not sure if refunds have been considered although that is the type of question that would be covered in the complex rate-making proceedings.

[4:20:51 PM](#)

ANTHONY PRICE, Chair, Regulatory Commission of Alaska (RCA), in response to Chair Olson, said that the statutory deadline will run out on the regulation docket by August 2008, the date the RCA must issue a decision on net metering. He noted that although the RCA has an opportunity to extend the matter for 90 days for good cause, that it is the RCA's intention to complete the matter by August 2008. He offered that the RCA is subject to statutory deadlines and opined that the RCA does not miss its deadlines.

[4:21:53 PM](#)

REPRESENTATIVE BUCH asked for an analysis and opinion of the provisions included in HB 288.

MR. PRICE answered that the RCA is a deliberative body that takes testimony from all sides, considers the matter, and makes a decision at the end of the process. He opined that HB 288 would short circuit the needs of the RCA to deliberate on net metering, although there would no doubt be more issues that would come before the RCA as a result of the bill and [ensuing] litigation. He said he would refrain from making any comments on HB 288 because the RCA has not gone through its deliberative

process, has not collected all the testimony, and it would be highly improper for him to do so.

[4:23:12 PM](#)

CHAIR OLSON asked Mr. Price if he would be able to stand by in case there were questions.

MR. PRICE said he would do so, and offered that also standing by are RCA staff: James Keen, Chief/Engineering, Rich Gazaway, Chief Administrative Law Judge, Ann Wilde, RCA Section Manager, and Mary Vittone, Chief, Utility Tariff Analyst, Tariffs.

[4:23:42 PM](#)

JASON KEYES, Attorney, Wilson, Sonsini, Goodrich, and Rosati, PC, explained that for the past eight months, he has spent about half of his time of IREC in various state proceedings on net metering and interconnection standards. He noted that prior to law school he worked for a solar firm for eight years. He gave a brief background of IREC, which is a nonprofit organization funded by the U.S. Department of Energy (DOE). It is not an advocacy group for solar industry, but is funded by the DOE to give states a perspective on energy, and an analysis of what has worked and what has not worked very well in other states. He offered that he is available for questions, but would like to make a few comments. He opined that the 25 kW limit in HB 288 would be one of lowest limits in the nation, which he opined is alright, but as was pointed out by Mr. Reagan from the ML&P, the natural size for a cost-effective system is probably going to be something higher than that. For example, in California the vast majority of the systems are residential systems that produce 5 kW, or less, however, 80 to 85 percent of the total capacity is provided by commercial systems with a minimum of 50 kW, but some systems are as large as half a megawatt. He encouraged the committee to consider raising the minimum limit above 25 kW. He noted several people testified on the appropriate rate to pay customers for power generated, but suggested that rather than pay customers, the most effective systems rollover excess generation from one month to the next, in the form of a credit to offset kW hours that will be consumed in the next month. He offered that when a customer retrofits his home with insulation and lighting, it reduces the customer's energy consumption, and that small amount of conserved energy is then available for use by other customers, so the effect is that the conserved energy cost is borne by the other customers in a static system. The same thing happens with net metering, he opined, although most

utilities grow which means that eventually utilities need new facilities. Alternative energy use such as solar panels will conserve energy and could help delay or defer the need to build new facilities to accommodate utility growth. He noted his experience has been with about 10 other states and has focused on interconnection standards, although he has some experience with net metering.

[4:28:42 PM](#)

BRAD FLEUTSCH, representing himself, noted that he also serves as Investment Counsel for Fluetsch Financial Services, LLC. He said that he is very pleased to see HB 288 introduced. He offered that net metering creates a product not currently available, one that is produced by individual Alaskans. He noted there are a few things that he would like to see changed in HB 288, although he noted he did not know how many homes 25 kW could serve. He offered that his electrician advised that the tiny creek by his home could generate enough electricity to serve six homes in Brazil. He suggested that proposed AS 42.45.045(a)(3), which reads, "uses solar, wind, tidal, geothermal or hydropower as its fuel" be deleted and instead refer to renewable resources because there are other types of renewable resources that could be used. For example, the Juneau landfill emits methane gas that could be collected and municipal sewage plants could also be used. He offered his belief that the 2.5 cent kW production cost does not consider pollution costs so he suggested that the committee consider adding a carbon tax to the bill to offset the costs for energy alternatives. He also suggested that the committee add a provision for a "20-20 type policy" to require that 20 percent of production come from renewable energy sources by a time certain, as many other states do. This legislation could be funded by the governor's proposed \$250 million as part of a renewable energy package, he suggested. He pointed out that currently a community's growth is capped by the willingness of the utility to produce power, therefore, net metering can help free rural Alaskan villages by allowing individuals to generate alternate energy.

[4:31:45 PM](#)

TIM MCCLEOD, President; General Manager, Alaska Electric Light & Power, noted that he generally agrees with the comments made by CEA. However, he said that the customer's rate for surplus energy is unclear, whether it would be paid at the retail rate, an avoided cost rate, or a non-firm rate. He said he did not

know the definition of non-firm rate. Regardless of the purchase rate paid, that rate should be decided by the RCA through its rate-making process, he opined.

REPRESENTATIVE GARDNER noted her agreement that the non-firm rate is not clear. She inquired as to whether it would be easier to require one meter since it was her understanding that the installation of meters to measure energy going both directions is costly.

MR. MCCLEOD opined if the customer gets full retail rate, it would inflate the cost to other customers. He said the avoided cost rate varies, for example, when AEL&P has surplus hydroelectric energy the avoided cost is zero, but when AEL&P uses diesel fuel the avoided cost could be as much as 20 cents per kW hour, although those costs still would not include the retail rate of the distribution and transmission costs.

REPRESENTATIVE SEATON clarified the RCA's definition for avoided cost is the rate that a utility would pay to a qualifying facility for supplying electric power in unpredictable quantities and at unscheduled times in intervals. The rate is determined using avoided energy related costs, he said, which is a rate that RCA determines for each utility it regulates, he noted. He offered that smaller utilities have an avoided cost rate schedule, too. The avoided cost rate is basically the wholesale avoided cost rate, or the amount that a utility would purchase power from another producer or generator.

[4:35:26 PM](#)

FLOYD KOOKESH, Tribal Administrator, Douglas Indian Association, noted that he is also a charter boat operator in Angoon. He opined that net metering is just a start and suggested there should be more incentives for the net metering program and other renewable resource programs. He offered that Angoon has been struggling to develop hydroelectric power for Angoon for over 20 years and offered that he would like to see net metering "take off." He suggested that if incentive programs are a long way out that perhaps the state should consider if it should adopt one rate for all its electricity to create a better cost balance across the state. He offered that he is familiar with Representative Ramras's advertising for his energy efficient hotel in Fairbanks and commended him for doing something that is good for the environment. He said he would like to see more programs like net metering developed.

REPRESENTATIVE RAMRAS described the energy program in Fairbanks, which he said is modeled after one in Chelan, Washington. He opined that Washington is the only place in the country with an innovative program designed to eliminate the cost to rate payers. He explained details about the green program that his local utility Golden Valley Electric Association adopted, and offered its goal which is to be 20 percent green by the year 2014. Currently, GVEA offers enthusiasts who don't want to invest in a system, a method to participate by checking a box on his/her utility bill to agree to pay a super premium for green kW. That rate will continue to go down with increased participation, he opined. He described the method to determine the overall cost based on the number of producers and subscribers, who currently pay up to a maximum of \$1.50 per kW. He noted that anyone interested should check out the GVEA web site.

[4:44:10 PM](#)

PETER NAOROZ, President, Kootznoowoo, Inc., which is the Angoon village corporation established under the Alaska Native Claims Settlement Act (ANCSA). He noted that his corporation is currently in the process of developing a hydroelectric project, and noted that Kootznoowoo, Inc supports HB 288. He said his corporation is also a member of the Inside Passage Electric Cooperative (IPEC). He said net metering is a way for small investors to participate and for the state to move towards energy independence. The legislature is the appropriate arena to address net metering, and not RCA, he opined. He said that net metering provides a fundamental piece of the energy policy of the 42 other states that are served by utilities who understand the benefits of the program. Alaskans should view net metering as positive even though the program will impact small rural utilities given the lack of economy of scale. He encouraged legislators to listen carefully to utility managers. Overall, his corporation supports HB 288 because net metering will increase private investment, reduce dependence on diesel fuel, and more fully develop Alaska's resources and economy. He opined that the highest use for diesel fuel is as fuel for planes and fishing boats, not to heat homes. The more diesel fuel Alaska can eliminate, the healthier and more economically viable the state will be. He suggested members consider adopting a higher non-residential rate than residential rate, as some other states have done. In doing so, the bill will address the interests of entities, such as Kootznoowoo, Inc., that have large land holdings to develop. As the renewable energy grows, the legislature can consider whether energy credits could be

used to offset municipal and school district costs or property taxes, he opined.

[4:48:36 PM](#)

DEBORAH WILLIAMS, President, Alaska Conservation Solutions said that she strongly supports HB 288. For the last several years, her company has received numerous calls from people who say they are not interested in coming to Alaska because the state does not have a net metering program. She opined that net metering should be a legislative policy decision. She said she supports net metering because it is consistent with Alaska's frontier spirit, it empowers individuals, it fosters innovation, and it makes Alaska competitive with other states. She added that net metering promotes businesses such as tourism since tourists are interested in visiting places with a zero or small carbon footprint. Businesses compete to lower the carbon footprint, so Alaska needs to create an environment that attracts businesses to come and to flourish. This bill helps with distributive power issues and helps promote energy independence. She offered she has worked extensively in Washington D.C. and Congress is currently assessing which states have net metering programs in order to determine which states will qualify for federal funding to be used for their adaptation needs. With respect to the RCA, she cautioned that when she said she worked on a similar issue for an in-state competition for telephone service, that the Alaska Public Utilities Commission (APUC)[predecessor of the RCA] could not make a policy decision on telephone competition. She opined that the legislature needs to make the policy decision on net metering. She offered her belief that the RCA has probably received very few comments on its net metering docket because most Alaskans are not aware of the RCA's role in net metering yet. She concluded with the slogan, "North to the Future" and opined that Alaska needs this net metering bill passed.

[4:52:43 PM](#)

REBECCA SHAFFER, Board Member, U.S. Green Building Council Chapter said that she is a strong advocate for net metering. She noted that the council has a green rating system for rating green buildings. This bill would positively impact two program points awarded on buildings that use on-site energy that demonstrate energy efficiency. She stressed that 100 cities around the country have adopted policies requiring their buildings to be lead rated. Acquiring the green rating can reduce residential taxes, she mentioned. She noted she is the

owner of a triplex in Anchorage and to the extent she can reduce her utility costs, it allows her to reduce rent to help provide affordable housing. She expressed hope that utility companies can find strategies to work with the bill so residential customers can take advantage of net metering.

[4:55:29 PM](#)

NICK MOE, staff, Renewable Resources Department, Municipality of Anchorage, said that he receives numerous calls from constituents interested in alternative energy resources, but the MOA often can't help because of its code issues. He said he is happy the state is addressing net metering. Looking to the future, HB 288 is a great first step to assist with residential renewable energy, he opined. He noted HB 288 allows the state to join the 42 other states that already have laws allowing some form of net metering. He noted his disagreement with the utilities that net metering be an immediate hardship because the majority of states allowing net metering would not do so if net metering caused hardships for utilities. He urged the legislature to do more to provide a renewable energy reserve to fund micro and macro projects such as wind power on Fire Island. He said he fully supports HB 288.

[4:57:49 PM](#)

GARRISON COLLETE said he is representing himself but that he works in Fairbanks in a lead accredited building with 11 kW solar panels outside. As one of two statewide energy specialists, Mr. Collete says he is familiar with many of these issues first hand. He related that he does not get many queries about net metering from interior Alaskans, but he does receive inquiries from Southcentral Alaska since there is no widespread program for purchasing back green power. This bill could encourage companies like ML&P to introduce a program similar to the SNAP program. He further noted that participation in net metering is optional to customers. He noted that energy efficiency is the most cost effective solution because it reaps rewards for consumers each year. He offered that HB 288 could bring Alaska "out of the stone age" as it creates the basis for a renewable energy policy in Alaska. He urged the committee to pass HB 288. He opined that although consumers could use dual metering to prevent waste and avoid extra expense, it is not currently allowed by [in-state] utilities.

[5:02:53 PM](#)

BILL MACFARLANE stated that as an Anchorage homeowner he fully supports HB 288 and looks forward to the day when he can produce all of his own energy needs at home from solar and wind power. Net metering is what can make this possible, he said. He offered that Alaska has incredible wind and solar resources, which, he opined, should be taken advantage of at all scales, including at the local level. He related his belief that net metering is the right thing to do for the present and for the future, and he thanked the Chair for the opportunity to testify.

[5:03:42 PM](#)

MARTHA LEVENSALER, Climate Change Project Director, Alaska Marine Conservation Council, said that she fully supports HB 288. She said she looks at how carbon dioxide pollution impacts our oceans, both in terms of warming and making them more acidic on a daily basis as part of her job. Therefore, she noted her support of more innovative programs such as this one.

[5:04:55 PM](#)

ADAM BROWNING, Staff, Vote Fuller Initiative, related his support for HB 288. He said that he has testified before 10 regulatory commissions, and state legislatures and offered his belief that this discussion has been the most cogent and sophisticated yet. He opined that net metering is a fundamental part of the regulatory infrastructure that will allow clean distributive generation to exist. He further opined that across all 50 states a net metering program is part of the bedrock and he has yet to find a functional Fuller market that doesn't have a robust net metering program. He offered, with respect to costs to utilities, that impacts are not any different from an energy efficient or conservation effort and that net metering is fairly universally accepted as being beneficial to the utility and other ratepayers. He characterized HB 288 as a good bill.

[5:06:54 PM](#)

PETER BRIGGS, Member, Steering Committee Member, Anchorage Sustainable Building Initiative, explained that the focus of the initiative is to work towards a sustainable building ordinance through the Municipality of Anchorage, to encourage incentives and flexibility that will help develop a sustainable environment. He pointed out the concept of growing a green economy. He offered that he is beginning to see some offshoots from his work that encourage economies, such as demolition and salvage of materials, the Habitat for Humanity restore, that are

spinoffs that create jobs in the community. This is the age of unintended consequences and thus the cost of doing business includes the costs of carbon air pollution. While diesel and fuel oil is inexpensive, the costs to clean up spills are expensive. He offered that Kotzebue is moving toward wind energy to offset its reliance on diesel. He stated that he uses the three-legged stool approach in green design, which is health, environment, and the economy working together. He acknowledged that although details need to be worked out, HB 288 contributes to all three aspects of the three-legged stool. If Alaska looks at one aspect without looking at the other two, it will result in unintended consequences, he opined. He said that Alaskans need to look forward and make plans to make Alaska a better place to live.

[5:10:28 PM](#)

CHAIR OLSON asked if there was anyone else who wished to testify and there were none.

[HB 288 was held over.]

[5:10:52 PM](#)

**ADJOURNMENT**

There being no further business before the committee, the House Labor and Commerce Standing Committee meeting was adjourned at 5:10 p.m.