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(FORM UPDATED: 08/11/2010)

WISCONSIN STATE LEGISLATURE ...
PUBLIC HEARING - COMMITTEE RECORDS

2009-10
(session year)

Assembly
(Assembly, Senate or Joint)

Special Committee on Clean Energy Jobs...

COMMITTEE NOTICES ...

- Committee Reports ... **CR**
- Executive Sessions ... **ES**
- Public Hearings ... **PH**

INFORMATION COLLECTED BY COMMITTEE FOR AND AGAINST PROPOSAL

- Appointments ... **Appt** (w/Record of Comm. Proceedings)
- Clearinghouse Rules ... **CRule** (w/Record of Comm. Proceedings)
- Hearing Records ... bills and resolutions (w/Record of Comm. Proceedings)
  (**ab** = Assembly Bill) (**ar** = Assembly Resolution) (**ajr** = Assembly Joint Resolution)
  (**sb** = Senate Bill) (**sr** = Senate Resolution) (**sjr** = Senate Joint Resolution)
- Miscellaneous ... **Misc**

* Contents organized for archiving by: Stefanie Rose (LRB) (December 2012)

January 22, 2010

From: The Homegrown Renewable Energy Campaign

A-A Exteriors.com
Agrecol Corporation
Arch Electric, LLC
Artha Sustainable Living Center LLC, Amherst
Better Environmental Solutions
Biomass Solution
Bubbling Springs Solar
Cardinal Solar, Sun Prairie
Clean Wisconsin
Clear Horizons
Cosmic Walker Wood Products
D & D Equipment
EcoEnergy LLC
Ecomanity, LLC
Energies Direct
Energize, LLC
Energy Concepts, Inc.
Full Spectrum Solar
GHD, Inc.
Global Energy Options
GrassWorks, Inc
Green Diesel Wisconsin Foundation
H&H Solar Energy Services, Inc.
Lake County Energy
Lake Michigan Wind and Sun, Ltd.
Legacy Solar
Marathon Renewable Energy, Inc.
Marth Wood Products
Michael Fields Agricultural Institute
Midwest Renewable Energy Association
Next Step Energy, LLC, Eau Claire
Northwind Renewable Energy, LLC, Stevens Point
Organic Valley Cooperative
Partners in Forestry Landowners Cooperative
Photovoltaic Systems, LLC
Prairie Solar Power & Light
RENEW Wisconsin
Ritger Law Office
Seventh Generation Energy Systems
The Nature Conservancy
Timmerman's Talents
UrbanRE Vitalization Group
W.E.S. Engineering
Wave Wind, LLC
Wind Energy Systems LLC, Iron Ridge
Wisconsin Center for Environmental Education
Wisconsin Farmers Union
Wisconsin League of Conservation Voters

To: Senator Jeff Plale – Chair, Senate Committee on Commerce, Utilities, Energy, and Rail
Senator Mark Miller – Chair, Senate Committee on Environment
Representative Jim Soletski – Chair, Assembly Committee on Energy and Utilities
Representative Spencer Black – Chair, Assembly Committee on Natural Resources

Copy: Governor Jim Doyle
Wisconsin State Legislators
Members, Governor's Task Force on Global Warming

RE: Support for policies included in the Clean Energy Jobs Act (AB 649 & SB 450): Advanced Renewable Energy Tariffs, Low Carbon Fuel Standard, Energy Crop Reserve Program, and Fuels for Schools and Communities

The Homegrown Renewable Energy Campaign was formed to support policies that will create jobs and spur economic growth in Wisconsin's rural communities by creating new opportunities for farmers, foresters, rural landowners, and businesses to participate in a clean energy economy. All four of our campaign's core policies have been included to some degree in the Clean Energy Jobs Act recently introduced in the state legislature. The Homegrown Renewable Energy Campaign supports these policies as included in the bill and looks forward to working with legislators to ensure that the policies can be strengthened to maximize the benefit to Wisconsin's farm and rural economies.

Advanced Renewable Energy Tariffs

There are currently no guarantees that individuals, farmers, businesses and entrepreneurs wishing to make investments in renewable energy will receive fair prices from their electric utilities for extra energy they produce from their small-scale renewable energy systems. In the past, electric utilities voluntarily purchased electricity from owners of manure digesters, wind turbines and solar panels for excess energy those systems produce. These programs provided farmers with an additional revenue stream and brought more dollars into rural areas. Unfortunately, many Wisconsin utilities are no longer offering these programs (known as feed-in tariffs).

The Clean Energy Jobs Act charges the Public Service Commission to design mandatory programs that would create fair payments (also called Advanced Renewable Energy Tariffs or ARTs) for excess energy produced from customer-sited renewable energy systems. Fair buy-back rates encourage investments in small-scale renewable energy generation by providing fixed returns that allow farmers, homeowners, businesses and municipalities to adequately plan for the upfront investments these projects require. Because they are structured to support only local generation sources, Advanced Renewable Energy Tariffs are especially effective at attracting renewable energy manufacturers, creating local jobs, reducing energy bills and stimulating Wisconsin's economy.

The Homegrown Renewable Energy Campaign encourages the Wisconsin State Legislature to strengthen this section of the Clean Energy Jobs Act by removing language that exempts Rural Electric Cooperatives and Municipal Utilities from offering Advanced Renewable Energy Tariffs. In general the rural areas covered by these utilities are endowed with quality resources and have the greatest need for sustainable economic development. Furthermore, we believe that ensuring energy producers a fixed price, including a return on investment is essential to the success of a renewable energy tariff program. Rates that remain stable over time are essential to providing the financial certainty that will lift these industries to new heights.

Low Carbon Fuel Standard

A Low Carbon Fuel Standard would help break our dependence on foreign sources of oil and promote energy independence by gradually moving Wisconsin toward the cleanest and most efficient sources of transportation fuels. A Low Carbon Fuel Standard rates different types of transportation fuels by their efficiency and carbon footprint and establishes a schedule for using low-carbon fuels to power our vehicles.

Biofuels are a winner under a Low Carbon Fuel Standard. The economic benefit of producing fuel from Wisconsin farms has been clearly demonstrated in recent years. A Low Carbon Fuel Standard will create a market for more farmers to sell their crops. All of the existing corn ethanol plants in Wisconsin use natural gas and have a lower carbon footprint than coal-fired ethanol plants in adjacent states; Wisconsin has tremendous opportunities to lower the carbon footprints of its corn ethanol plants even more by switching from natural gas to biomass for process heating. Moreover, if adopted, the Clean Energy Jobs Act would allow the thermal energy from biomass used in the ethanol refining process to count towards the state's Renewable Energy Standards in 2020 and 2025. Advanced forms of biofuel under development in Wisconsin, such as cellulosic ethanol, biomass gasification diesel, and green gasoline will become particularly attractive due to their high efficiency and low carbon footprint. This policy will help ensure that Wisconsin remains a leader in the development of biofuels for decades to come.

Methane digesters on farms, factories and food processing plants will be especially attractive when producing biogas that can be used as a transportation fuel under a Low Carbon Fuel Standard. There are already several businesses and farms in Wisconsin producing biogas with methane digesters. Businesses

across the state have begun to produce the equipment for distributing the fuel and manufacturing components for vehicles specifically designed to use these homegrown transportation fuels.

The Homegrown Renewable Energy Campaign encourages the Wisconsin State Legislature to strengthen this provision in the Clean Energy Jobs Act by adding language that would set targets reducing the carbon content of our fuels at least 10% by the year 2020 as recommended by the Governor's Global Warming Task Force.

Energy Crop Reserve Program

The Energy Crop Reserve Program would direct payments to farmers and landowners who begin planting crops that can later be sold for the production of biofuels. This policy will ensure that farmers and landowners can continue to make profits from their working lands as they transition to the production of biofuels. Ensuring that there is an adequate supply of biomass will create even more economic development as the number of businesses, aggregators, distributors and biofuel producers increase in the state to take advantage of these new resources.

The legislation directs the Department of Agriculture, Trade and Consumer Protection to begin rulemaking proceedings to design an effective Energy Crop Reserve Program. The Homegrown Renewable Energy Campaign encourages the Wisconsin State Legislature to support the Energy Crop Reserve Program.

Fuels for Schools and Communities

The Homegrown Renewable Energy Campaign also supports adding language to the Clean Energy Jobs Act that would create a Renewable Fuels for Schools and Communities program. Seven other states have already adopted similar policies that would establish a revolving loan program to generate capital for the purchase of equipment for biomass systems to be installed in schools and government-owned buildings. Wisconsin schools spend close to $200 million dollars each year on energy. A recent study by the Biomass Energy Resource Center found that "200 to 300 schools in Wisconsin now heating with natural gas may find biomass heating economical at current fuel prices and these systems will often cash flow positive in their first year of installation." Biomass heating will save schools and communities tens of thousands of dollars in heating costs each year and help increase demand for local sources of energy. Also, if adopted, SB450/AB 649 would allow the thermal energy from biomass heating systems installed through this policy to count towards the state's Renewable Energy Standards in 2020 and 2025.

The Clean Energy Jobs Act currently directs the Office of Energy Independence (OEI) to provide information, encouragement and assistance to school districts to provide opportunities for renewable energy. The Homegrown Renewable Energy Campaign supports including specific language that would designate a state agency responsible for establishing a revolving loan program for schools and communities to invest in biomass systems.

As members of the Homegrown Renewable Energy Campaign, we would like to indicate our support for Advanced Renewable Energy Tariffs, a Low Carbon Fuel Standard, the Energy Crop Reserve Program, and for the addition of a Fuels for Schools and Communities provision in the Clean Energy Jobs Act. We look forward to working with the Legislature to ensure that these policies designed to promote economic growth in Wisconsin's rural economies remain integral parts of the Clean Energy Jobs Act.

Thank you for your consideration.

Members of the Homegrown Renewable Energy Campaign

Homegrown Renewable Energy Campaign

The Homegrown Renewable Energy Campaign began in 2008 to advance policies that would build Wisconsin's rural economies by spurring investments in renewable energy technologies. The following organizations and businesses have signed on in support of the campaign goals of Advanced Renewable Tariffs, a Low Carbon Fuel Standard, an Energy Crop Reserve Program, and a Renewable Fuels for Schools and Communities Program:

A-A Exteriors.com
Agrecol Corporation
Arch Electric, LLC
Artha Sustainable Living Center LLC, Amherst
Better Environmental Solutions
Biomass Solution
Bubbling Springs Solar
Cardinal Solar, Sun Prairie
Clean Wisconsin
Clear Horizons
Cosmic Walker Wood Products
D & D Equipment
EcoEnergy LLC
Ecomanity, LLC
Energies Direct
Energize, LLC
Energy Concepts, Inc.
Full Spectrum Solar
GHD, Inc.
Global Energy Options
GrassWorks, Inc
Green Diesel Wisconsin Foundation
H&H Solar Energy Services, Inc.
Lake County Energy
Lake Michigan Wind and Sun, Ltd.
Legacy Solar
Marathon Renewable Energy, Inc.
Marth Wood Products
Michael Fields Agricultural Institute
Midwest Renewable Energy Association
Next Step Energy, LLC, Eau Claire
Northwind Renewable Energy, LLC, Stevens Point
Organic Valley Cooperative
Partners in Forestry Landowners Cooperative
Photovoltaic Systems, LLC
Prairie Solar Power & Light
RENEW Wisconsin
Ritger Law Office
Seventh Generation Energy Systems
The Nature Conservancy
Timmerman's Talents
UrbanRE Vitalization Group
W.E.S. Engineering
Wave Wind, LLC
Wind Energy Systems LLC, Iron Ridge
Wisconsin Center for Environmental Education
Wisconsin Farmers Union
Wisconsin League of Conservation Voters

For more information about the Homegrown Renewable Energy Campaign, please contact Bridget Holcomb of the Michael Fields Agricultural Institute at bridget@michaelfieldsaginst.org or by phone at 608-256-1859.


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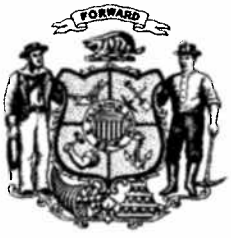
FORWARD

RED
RecycledEnergy
Development

the new green

www.recycled-energy.com 640 Quail Ridge Drive Westmont, IL 60559 phone 630.590.6030 fax 630.590.6037

January 25, 2010

Representative James Soletski
Room 307 West
State Capitol
P.O. Box 8953
Madison, WI 53708

Dear Representative Soletski:

Recycled Energy Development (RED) – which seeks to profitably reduce greenhouse-gas emissions – commends you for authoring AB 649 and offers a suggested amendment.

Include facilities that generate from waste energy recovery under the definition of *renewable facility*.

The capture and recycling of waste energy to generate clean heat and power does not require the burning of fossil fuels or the emission of any pollution or greenhouse gases. Waste heat recovery projects are collocated at industrials and help make these facilities more cost competitive while reducing their carbon footprint. The inclusion of recycled energy within Wisconsin's feed-in tariff would attract substantial investments that increase the productivity of the state's industries. We urge you to insert the following language in AB 649:

> Recycled Energy, which means useful thermal, mechanical or electrical energy produced from (a) exhaust heat from any commercial or industrial process; (b) waste gas, waste fuel or other forms of energy that would otherwise be flared, incinerated, disposed of or vented; and (c) electricity or equivalent mechanical energy extracted from a pressure drop in any gas (excluding any pressure drop to a condenser that subsequently vents the resulting heat).

Any recycled energy generation system that captures heat which otherwise would have been wasted - or prevents the burning of additional fossil fuels - is clean and should be included under the *renewable facility* definition.

RED respectfully requests this change be incorporated into AB 649. We would welcome the opportunity to provide additional information. Thank you for your consideration.

Sincerely,

Melissa Mullarkey
Policy Associate

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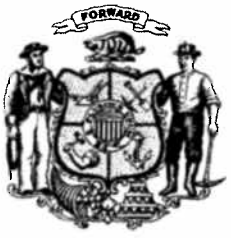


Xcel Energy

To: **Senate Select Committee on Clean Energy**

From: **David Donovan, Manager Regulatory Policy, Northern States Power Company – Wisconsin, d\b\a Xcel Energy**

Re: **Senate Bill 450**

Date: **January 27, 2010**

Co - Chairmen Plale and Miller and members of the Committee, thank you for the opportunity to testify today on Senate Bill 450, the global warming legislation. My name is David Donovan. I'm Manager of Regulatory Policy for Xcel Energy. I will focus my comments today on five areas of the legislation: 1) Increased goals for Energy Efficiency and Conservation; 2) Enhanced Renewable Portfolio Standard (RPS); 3) Biomass definitional changes; 4) Advanced Renewable Tariffs; 5) Nuclear Moratorium.

Xcel Energy is the fourth largest combination gas and electric company in the nation with operations in eight states. Under our environmental leadership strategy, the company takes prudent, balanced steps to reduce the impact of our operations on the environment, while promoting technological and public policy advancements that will encourage a cleaner electric system. Xcel Energy is the nation's largest utility wind energy provider and the nation's fifth largest solar energy provider. Xcel Energy also has the nation's largest Green Power program. As a company, we have outlined plans to voluntarily reduce our overall carbon dioxide emissions by 22 percent below 2005 levels by 2020.

For those reasons, Xcel Energy supported the Governor's Global Warming Task Force recommendations and supports many of the proposals included in Senate Bill 450. However, Xcel Energy believes Senate Bill 450 deviates from the Task Force recommendations in a few areas and therefore requests these provisions be clarified.

Energy Efficiency and Conservation

We support the recommendations to enhance energy efficiency in Wisconsin. Xcel Energy is a strong proponent of energy conservation as a way to address the issue of climate change. Increased program funding is something we've supported in all states in which we serve. However, as the Public Service Commission of Wisconsin (PSCW) sets its budget for Energy Efficiency spending, we feel Joint Finance Committee oversight of that budget should be retained.

Enhanced Renewable Portfolio Standard

We also support a more aggressive Renewable Portfolio Standard (RPS) in Wisconsin. Xcel is the number one renewable energy provider in Wisconsin. Recently, Xcel Energy received approval to

increase its contribution from the PSCW to convert the third boiler at the Bay Front facility in Ashland to biomass gasification, making that plant capable of burning 100 percent biomass. However, while Xcel Energy supports the advanced RPS, we are seeking changes to the baseline calculation that was established in Act 141. Due to Xcel Energy's early investments in renewable energy technology, this baseline calculation requires the company to go almost three percent above the statewide average requirement. This additional investment for Xcel Energy's customers penalizes them for the company's early investments in renewable energy technology. This baseline calculation also penalizes other smaller utilities located in the north and western part of the state creating significant inequities for customers in the most rural areas. (See attached map of impacted utilities)

Biomass Definition

Xcel Energy opposes the proposed changes to the biomass definition. The proposed changes to the biomass definition were not discussed within the scope of the Task Force, and we think the changes severely weaken the current definition. Should an enhanced RPS be passed, energy providers will need a broad range of options to achieve the aggressive renewable energy goals as outlined in the legislation. Separate comments supporting this issue will be submitted by a coalition of concerned stakeholders.

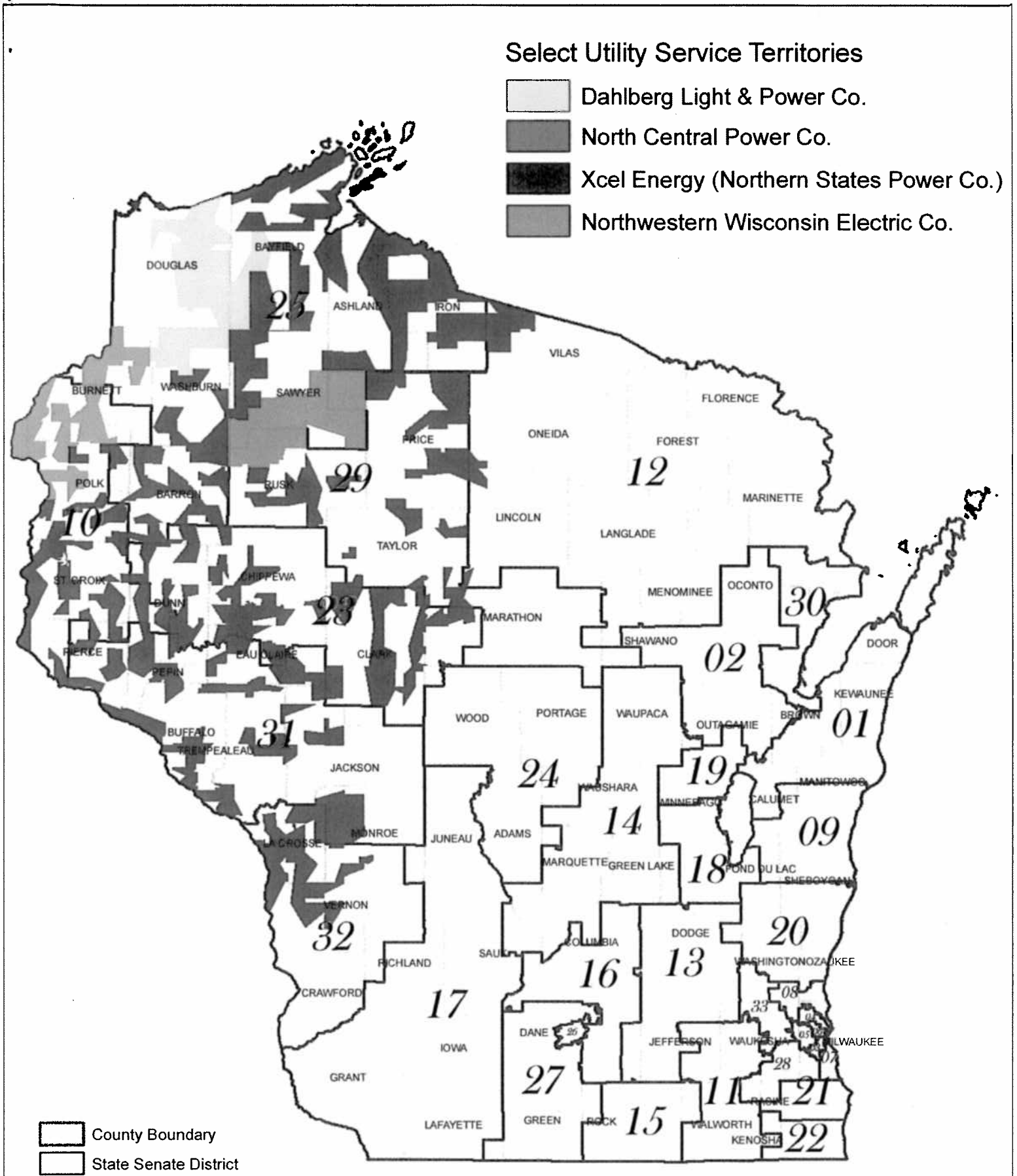
Advanced Renewable Tariffs

Xcel Energy strongly opposes language in the legislation mandating Advanced Renewable Tariffs for Wisconsin's Investor Owned Utilities. This is a deviation from the Task Force recommendations, and we request the bill be amended to remove the language. Xcel Energy has been diligently working to revise its existing voluntary tariff to make it more attractive to customers who want to own and operate distributed generation technology. However, mandating these contracts at an inflated price to benefit a small percentage of customers which will then be subsidized by our entire customer base would put significant upward pressure on rates. We also believe this violates the construct of Act 141, which states that if an electric provider is meeting its statutory obligation under the RPS, additional renewable investments cannot be mandated by the PSCW.

Nuclear Energy

Lastly, we express concerns over proposed language regarding the nuclear moratorium that would require all of the energy produced from a new nuclear power plant in Wisconsin to be used by Wisconsin ratepayers. Given the way Xcel Energy plans and operates its system and the related multistate cost sharing agreement, if we cannot consider combined load growth of NSP-Wisconsin and NSP- Minnesota when evaluating the construction of nuclear power in Wisconsin, we would not consider a new nuclear facility. Essentially, the moratorium remains in place for our company.

Thank you again for the opportunity to testify. Xcel Energy is committed to protecting the environment and ensuring reliable power at a reasonable cost for our customers. We look forward to working with you on this bill as it moves through the legislative process.



WI State Senate
Wisconsin Electric Service Utility Territories

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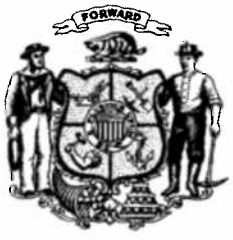
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Testimony in Favor of Clean Energy Jobs Act

Presented at Senate committee meeting January 27th, 2010

Lincoln Tice
503 Kedzie St
Madison, WI 53704
linctice@gmail.com
608-217-9251

Full Spectrum Solar
100 S Baldwin Suite 101
Madison, WI 53703

My name is Lincoln Tice, I'm 24 and I work as a solar-electric installer for a local firm called Full Spectrum Solar. I've been in the clean energy field for almost a year and a half now, and I really enjoy the work because I find it to be extremely rewarding. That's why I took off work today to come and testify on behalf of the Clean Energy Jobs Act: Because I know first-hand that green jobs are quality jobs, careers that young people feel inspired by in a challenging job-searching environment, and careers that are absolutely essential to our future economic well-being. First I will touch on why Full Spectrum Solar believes that this bill will help us to continue to grow and create jobs, and then I will tell my story to try and put a face on these "Green Jobs" that you keep hearing so much about.

Since 2002, Full Spectrum Solar has grown from only two brothers to fourteen full-time year-round employees, and there are two provisions in this bill that Full Spectrum Solar believes would allow us to further expand our company, as well as aiding the entire renewable energy sector: These are the establishment of long-term, statewide ARTs, and increasing the definition of renewables to include solar thermal hot water systems.

Advanced Renewable Tariffs (ARTS), or solar buy-back rates as we call them, have the ability to drastically expand the use of solar power in Wisconsin, as they have in a similar climate in Germany. The solar industry and its potential customers need certainty that the clean energy produced by their solar electric systems is bought by the utility at a fair price. Currently utilities have opened and closed their buy-back programs at will, and though the high buy-back rate has helped us to sell systems, the programs are so popular that they fill up within a month or two. While the cost of solar photovoltaic panels is coming down and will continue to decrease into the future, it is not yet competitive with coal power on a cost per kilowatt-hour basis. However, when case studies are done on increasing electrical generation during peak consumption (in the summer when people are running their air conditioners), the cost of solar is comparable with adding other fossil fuel sources because its production nicely matches the hours of peak demand. Therefore these ARTs should not be viewed as subsidies, but as fair avoided-cost business propositions for utilities. If statewide buy-back rates were established long term, that would create certainty and allow our company to rapidly grow and create jobs, as we have the potential and knowledge base to do so.

Solar thermal gets less attention than solar electric, but solar hot water systems are actually our most economical and accessible renewable energy source even here in Wisconsin. Residential systems are sized to eliminate 75% of natural gas or electricity use by the domestic water heater in the summer, and 50% in the winter, all at an affordable cost for any family. And unlike wind turbines for example, most homes provide a suitable location. For our commercial systems, often the energy savings are even greater. Solar thermal should clearly be an integral of the Renewable Portfolio Standard.

Green jobs aren't just "pie in the sky". Take my story, for example: I graduated from UW-Madison in May of 2008, with a major in Biology and a desire to make a difference in the fight against global warming. But after a couple of internships, one on the campaign trail and one with an environmental law and policy group, it became clear that I didn't enjoy these jobs as I thought I would. Sitting in an office in front of a computer on a summer day was torture! I feel really fortunate that I found a temp job with Full Spectrum Solar, but for a small business in a growing industry the going isn't always smooth. I was quickly laid off after the economy crashed and a million-dollar installation fell through. Luckily I had gained contacts that I used to land work with a local wind-energy non profit over the winter, traveling all over the Midwest erecting wind turbines and meteorological towers to supply wind-speed data used to site planned wind farms. I was then rehired when solar work picked up again in the spring.

The reason I enjoy going to work most days (when it's not too cold out!) is because I believe in the work that I'm doing. When I talk to friends, many seem sort of envious of my work and express interest in renewable energy. They often are still unemployed, or decided to go back to school because they couldn't find a good job. Many are working dead-end jobs that they don't like. And there just aren't enough jobs in renewable energy yet; even though I helped my roommate to find work in the wind industry, he's frustrated by how sporadic the work is. I see myself working in the solar industry my entire career, and I've been taking classes and obtaining certifications so that someday I hope to be designing and engineering these systems.

Please support the Clean Energy Jobs Act, in its current form with Advanced Renewable Tariffs, an expanded definition of renewables to include solar thermal, and strengthened Renewable Portfolio Standards including a mandate that a large percentage of utilities' renewable energy generation be within the state of Wisconsin. Thank you.


FORWARD
E PLURIBUS UNUM

To: **Assembly Special Committee on Clean Energy Jobs**

From: **Xcel Energy, Midwest Forest Products Company, Plum Creek Timber Company, Inc., Great Lakes Timber Professionals Association, Alliant Energy, We Energies, Domtar – Rothschild Mill, Potlatch Corporation**

Re: **Assembly Bill 649**

Date: **January 28th, 2010**

The above signed organizations would like to express concerns over changes to the existing definition of biomass as proposed in the Clean Energy Jobs Act, Assembly Bill 649. Since first becoming aware of the change we have learned the existing definition was modified in an attempt to streamline and simplify the current definition. However, in our opinion, what results is a new definition that is unclear and subject to different interpretations. Our primary concern is that the word "wood" has been struck from the definition and is now intended to be included and covered by "plant material." We are concerned that some will interpret the removal of the word "wood" from the biomass definition as an overt act by the Legislature to eliminate wood or woody material as a qualifying renewable resources that could be used to satisfy the renewable portfolio standard (RPS).

Utilities and suppliers need assurances that the significant investments made in renewable energy facilities, including biomass-based facilities, will qualify under the RPS mandate. In our opinion this change severely weakens the existing biomass definition. Given that the change was not within the scope of the Task Force discussions, we respectfully request the language be amended to revert back to its existing definition.

For your reference, the existing and proposed definitions are included below.

The current definition:

196.378(1)(ar) "Biomass" means a resource that derives energy from wood or plant material or residue, biological waste, crops grown for use as a resource or landfill gases. "Biomass" does not include garbage, as defined in s. 289.01 (9), or nonvegetation-based industrial, commercial or household waste, except that "biomass" includes refuse-derived fuel used for a renewable facility that was in service before January 1, 1998.

The proposed definition:

SECTION 72. 196.374 (1) (am) of the statutes is created to read:
196.374 **(1)** (am) "Biomass" means plant material or residue, biological waste, or landfill gases. "Biomass" does not include garbage, as defined in s. 289.01 (9), or nonbiological industrial, nonbiological commercial, or nonbiological household waste.

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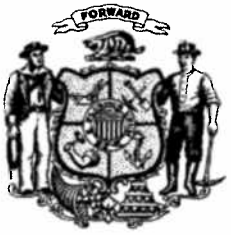

February 2, 2010
Chairperson Callisto Remarks

Good morning, Chairman Black, Chairman Soletski, members of the committee. Thank you for giving me the opportunity to appear before you this morning. My name is Eric Callisto, and I serve as Chairperson of the Public Service Commission. The Commission helps to administer Wisconsin's renewable portfolio standards, it oversees our statewide energy efficiency programs, and it is responsible for evaluating applications to construct power generation facilities in Wisconsin or those that are proposed to meet Wisconsin's energy needs. I also serve with both Secretary Leinenkugel and Secretary Frank in the Governor's Energy Independence Cabinet.

The electric sector provisions in the Clean Energy Jobs Act make good sense for Wisconsin, and the Commission supports them.

- Increasing our renewable portfolio to 25% renewable energy by 2025 will diversify our generation fleet, it will make sure we keep more of our energy dollars here in Wisconsin, and in the long run, will allow us to retire some of the older, dirtier fossil fuel burning units around the state.

- Doing more on energy efficiency and linking energy efficiency spending to actual energy savings goals means our businesses and consumers will be spending less on their utility bills, they'll be investing more in job creation, and Wisconsin will have less reason to build new, expensive electric generation.

- Finally, nuclear power is a nearly zero-emissions source of base-load energy, and putting that option back on the table for Wisconsin is a good idea.

A decade ago, Wisconsin was facing a near energy crisis. Investments in new generation had been put off for years, and with a growing economy and increased demand for electricity, the reliability of our power sector was teetering on the edge. We did what we had to do to deal with that. Since then, Wisconsin has added nearly three thousand megawatts of new power generation, and over 1000 miles of new transmission infrastructure. In terms of electric reliability, we're in great shape and will be for years to come.

However, our energy landscape is changing. It is no longer just speculation that carbon emissions will be subject to limits. The EPA has already moved to regulate greenhouse gas emissions in response to a Supreme Court ruling, and further Congressional action on this front is still possible yet this year. At the Commission, we don't have the luxury of putting on the blinders and pretending that nothing will happen. With or without new federal laws, with or without a Clean Energy Jobs Act, this kind of regulation is coming. And that's a challenge, because Wisconsin has a coal-heavy generation fleet. We get about two-thirds of our power from coal. That coal is a tremendously reliable source of energy, but its regulatory costs are sure to rise, and as a state, we're sitting on a lot of – potentially very expensive – regulatory liability right now.

Increasing Wisconsin's renewable portfolio standard and significantly enhancing our energy efficiency initiatives are common sense steps for Wisconsin to take to better position us as we face a warming planet and an evolving regulatory environment in Washington.

Other states are doing this, and many have now moved ahead of Wisconsin. Today, twenty-nine states and the District of Columbia all have mandatory renewable portfolio standards. Here in the Midwest, many of them are more aggressive than Wisconsin's existing RPS law. Illinois and Minnesota both require 25% renewable energy by 2025; Kansas requires 20% by 2020; Missouri is 15% by 2021; and Ohio has an "Alternative Energy Portfolio Standard" of 25% by 2025, half of which must come from renewable sources. The Midwest has moved to capture the growing market in renewable energy, and Wisconsin is now falling behind. We need to change that, and the Clean Energy Jobs Act will allow us to do so.

It has been said many times, but it bears repeating: Wisconsin doesn't have coal, we don't have natural gas, and we don't have oil. We do, however, have wind, biomass, the sun, water, and the industrial base to capitalize on these native assets. We need to keep more of our energy dollars here at home, and increasing our renewable portfolio standards will help us do exactly that.

Additionally, energy efficiency and conservation are far cheaper than building new power generation, they represent the least cost means of mitigating carbon pollution, they make our manufacturers more competitive, and they have a proven track record of creating jobs. Wisconsin can't continue to allow other states to get ahead of us on this, and we need to act quickly.

Regarding nuclear power, under Wisconsin's current law it would be impossible to site a new nuclear power plant. Consequently, our utilities essentially can't even study this option because the Commission would almost certainly deny them the right to recover those expenses from their customers. The changes in the Clean Energy Jobs Act would allow our utilities to evaluate all their options, but would keep in place and even expand the protections to make sure that nuclear power plants would only be built if they serve the interests of ratepayers and the public.

Opponents of this legislation argue that it will unreasonably increase costs for energy customers. There is no doubt that adding renewable facilities to our fleet will cost money. But any of our energy futures cost money, and none of the alternatives is cheap. What the question should be is where should we be spending those energy dollars? Should we continue to support policies that guarantee billions of dollars leave our state every year to purchase coal and natural gas from other states? Or should we try to keep more of those energy dollars here in Wisconsin to support renewable projects? The legislation, I think appropriately, answers that question by keeping more of what we spend on energy here in Wisconsin by helping to diversify our energy portfolio over the next decade and a half.

Because of what the legislation sets forth on energy efficiency targets (i.e., 2% annual energy savings starting in 2015), Wisconsin will actually be using less energy over time. That means we will be saving money on our energy bills, even though the per-unit cost of electricity may increase. And if we assume that carbon constraints will soon be upon us – and they will – the relative cost of enhancing our renewable portfolio standards falls dramatically.

Finally, and importantly, the Clean Energy Jobs Act retains the existing RPS "off-ramps" which allow the Commission to delay compliance with the RPS when doing so would prevent an unreasonable increase in electric rates. I am confident that our Commission will take its obligation to the state's ratepayers very seriously and we won't hesitate to step in should circumstances require it. You have my pledge on that.

The Clean Energy Jobs Act represents an important step forward for Wisconsin. In the last decade, we've made critical strides in improving our energy profile and making sure that the lights will come on when we flip the switch. It is now our obligation to ensure that we're generating our state's energy responsibly, that our businesses and energy consumers have the tools they need to use energy more efficiently, and that we keep as much of our energy dollars here in Wisconsin to grow our economy and sustain stable, family-supporting jobs for decades to come.

Thank you.


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BILL CHRISTOFFERSON TESTIMONY 2-2-10

ASSEMBLY SPECIAL COMMITTEE ON CLEAN ENERGY JOBS

My name is Bill Christofferson. I'm a board member of the Wisconsin Network for Peace and Justice, a statewide network of 170 organizations. We are part of a Carbon Free Nuclear Free coalition, made up of a number of groups working toward a 100% renewable energy policy for the state.

There are many good things about the Clean Energy Jobs Bill. I support about 93% of it.

But there is one section, on nuclear power, which doesn't fit the rest of the bill. The groups I'm working with would like that section removed from the bill.

The industry presents nuclear power as carbon-free clean energy, a solution to the problems caused by greenhouse gases. But nuclear power is not carbon-free electricity. Far from it.

At each stage of the nuclear fuel cycle -- from uranium mining, milling, and enrichment to construction, decommissioning and waste storage -- nuclear power uses fossil fuels and emits greenhouse gases that worsen climate change.

Compared to renewable energy, nuclear power releases four to five times the CO2 per unit of energy produced, according to a recent study at Stanford University.

The sensible current law, passed in 1984, is not a ban or moratorium. It simply says that before a new reactor can be built it must meet two tests: (1) It must be economically beneficial and (2) There must be a federal waste repository to handle the high-level radioactive waste the reactor generates.

This bill would eliminate the second requirement, and replace it with one that simply says the Public Service Commission must approve a plan for waste disposal.

We know what that is likely to be: on-site storage next to the reactors, in water or in dry casks. That's what's happening right now at Point Beach and Kewaunee and 102 other reactors in the US. That is not a long-term solution.

Here's the part nobody has mentioned:

After 50 years of producing the deadly material, there is no solution to the problem of how to safely and permanently dispose of high-level nuclear waste. No country -- not even those smart French people the nuclear advocates like to talk about -- has found a way to handle the waste.

It is dangerous to humans and the environment for hundreds of thousands of years. I hesitate to say that because it sounds like an exaggeration. But it is absolutely true.

The waste must somehow be kept out of the environment for hundreds of thousands of years. By comparison, 15,000 years ago Wisconsin was still covered by glaciers.

So it is no small problem. And despite what you're being told by the industry and supporters of the bill, this is no small change in the law. This is a huge change in the law – a drastic, dangerous change that should be rejected and removed from the bill.

If it doesn't do anything, why does the nuclear industry want this so badly? If it's so meaningless, let's agree just to take it out and we can all be happy.

But it does matter, because it would eliminate the only objective standard we have to decide whether to approve a new reactor – is there a federal waste repository or not? Instead, we'd be asking, Does the PSC think it's OK to store this stuff until somebody finds a repository?

To build more reactors to produce more waste when we can't even handle the waste we're already producing is not only unacceptable. It is unconscionable.

We don't have to choose between nuclear power and coal. We don't have to make a deal with the devil.

Available renewable energy and energy efficiency technologies are faster, cheaper, safer and cleaner ways to reduce greenhouse emissions than nuclear power. That's what this Clean Energy Jobs Bill should be all about.

Thank you.


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Cooperative Network

131 West Wilson Street, Suite 400, Madison, WI 53703-3269
608.258.4400 fax 608.258.4407
400 Selby Avenue, Suite Y, St. Paul, MN 55102-4520
651.228.0213 fax 651.228.1184
www.cooperativenetwork.coop

TO: Members of the Special Committee on Clean Energy Jobs

FROM: Cooperative Network

RE: AB 649 (SB 450)

DATE: February 2, 2010

Thank you for the opportunity to comment on the legislation arising from the work of the Task Force on Global Warming. Cooperative Network has devoted considerable time presenting the task force recommendations to its membership and other organizations representing rural Wisconsin. Most expressed willingness to maintain a positive dialogue about the Task Force's recommendations.

Cooperative Network CEO Bill Oemichen participated in the Task Force's work from the beginning—co-chairing its Agriculture and Forestry Work Group—and was happy to help advance the process to the crucial next step, converting recommendations into practical legislation codifying agreed-upon commitments and setting forth an orderly path toward achievable goals.

Assembly Bill 649 and Senate Bill 450 appear to fail in several ways to meet those criteria. The following comments (with only such revisions as were necessary to bring the verbiage in line with the current date,) are the same as those submitted to Task Force co-chairs Roy Thilly and Tia Nelson on January 6:

- A straightforward economic assessment of the legislation is needed in order to properly evaluate the new costs to be incurred against any offsetting benefits. So far, the Wisconsin Policy Research Institute's[1] research is the only study that looks at specific aspects of Task Force proposals in the legislation and it concludes they would have a net negative impact. While the Political Economy Research Institute[2] concludes that Wisconsin could become a green jobs state, this conclusion is based on its own strategies and not those of the Task Force.

  Furthermore, a study by the U.S. Department of Energy[3] concludes that similar

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[1] *The Economics of Climate Change Proposals in Wisconsin*, November 2009.
[2] *Job Opportunities for the Green Economy: A State-by-State Picture of Occupations that Gain from Green Investments*, June 2008.
[3] *Energy Market and Economic Impacts of H.R. 2454, the American Clean Energy and Security Act of 2009*, August 2009.

federal legislation would have a substantial negative effect on manufacturing jobs and a net negative impact on employment for all non-farm sectors over its implementation timeline. It is crucial to know the cost impacts of the renewable portfolio standard, low-carbon fuel standard, and other provisions that are certain to raise energy costs across the board. Construction costs for commercial, residential and agricultural facilities will also rise.

- A related issue is the unknown potential for job gains or losses. There should be a substantive analysis that will determine what the overall impact will be on the state's employment numbers and long-term payroll. For example, if the number of green jobs created exceeds the number of jobs lost this is a positive impact. However, scoring by the simple net increase could ignore the varied impact of actual job losses. These consequences must not be overlooked since the bill—understandably constrained by the fiscal realities state government is facing because of the already battered economy—provides no additional resources for low-income assistance or funding to retrain displaced workers.

- Presumably for fiscal reasons alluded to above, every recommendation for incentives that would help rural Wisconsin cope with the certainty of a higher cost of living has unfortunately left out of the bill. Our state's rural residents are already at an income disadvantage and rural areas generally trail urban areas in job creation. For example, what's labeled as an incentive for agricultural producers to grow bioenergy crops has no dollars appropriated to fund it. Rather, funding is punted to the first day of the next fiscal biennium and the resourcefulness of a Legislature not yet elected. It will be difficult to ask the agricultural and forestry constituency to accept the certainty of higher energy prices in exchange for the slender hope that the 2011-12 Legislature will discover a meaningful funding source. Furthermore, other state incentives recommended by the Ag and Forestry Work Group to promote development of distributed generation in rural areas are dropped in favor of electric rate subsidization that will hurt low-income households already having difficulty paying their bills.

- The language most Task Force members understood to be aimed at giving the Public Service Commission greater latitude to allow new nuclear plant construction does not appear to serve the intended purpose. Instead, it appears destined to invite a constitutional challenge, the successful pursuit of which would cause state law to revert to the status quo that the Task Force agreed was unacceptable. To achieve the deep cuts in carbon dioxide emissions implied by this legislation—without precipitating a disastrous contraction of Wisconsin's economy—will be impossible unless this state's power providers have among their range of viable options emissions-free nuclear energy from newly-constructed plants.

- An additional problem with revising the nuclear "moratorium" as proposed is that the bill (citing here a Legislative Council memorandum of December 8, 2009,) "Delays the effective date of all these changes until after the PSC has initially implemented the enhanced energy efficiency and renewable resource programs and the enhanced RPS identified above." It is not immediately apparent what span of time will pass

before the requirement that these programs are "initially implemented" can be satisfied. But clearly the intent is that the provision delays any change in the status quo. This is at cross purposes with the overarching goal of achieving cuts in greenhouse emissions, since the only currently available base-load generation source that does not produce such emissions—nuclear—is placed in the queue behind generation sources that must be backed up by approximately equivalent fossil-fueled capacity.

- There are additional cost increases beyond the scope of Task Force recommendations. These include a domestic generation component for the enhanced RPS, mandated boiler efficiency improvements, expansion of the idle-reduction proposal, creation of an agricultural energy efficiency code and elimination of the cost-to-benefit consideration currently required by the residential energy efficiency code.

- Inclusion in the enhanced RPS of a specified domestic generation component is troublesome. The question needs to be answered whether the prescribed standards are even feasible. The number of suitable in-state sites for wind generation and the availability of other sustainable energy resources are not infinite. It would be unwise to mandate expenditures for renewable generation that is less efficient than similar generation in alternative locations. While the provision is promoted as a job-creator, it's uncertain how long such jobs would last. What *is* certain is prices for renewable energy would be higher than they otherwise would have been without this standard.

- Questions about the potentially unconstitutional delegation of authority must be explored. The broad expansions of authority granted to the Department of Natural Resources and Public Service Commission leave legislators to support or not support initiatives whose details will be filled in later on. In addition, the Low Carbon Fuel Standard appears to cede authority to the Midwest Governors' Association and adoption of the California Vehicle Emissions Standard likewise cedes authority to another state's regulators to make decisions for Wisconsin.

More broadly, questions need to be answered concerning the value of Wisconsin's single-state approach to issues everyone agrees would be more effectively addressed nationally or, ideally, globally. Conspicuously missing is any quantification of the environmental benefit Wisconsin residents could expect their greater energy cost outlays would achieve if the many challenges set forth in the draft are undertaken successfully. In order to make honest statements regarding the legislation's impact on job creation, rural economies, the overall statewide economy and the environment, the proposal and all its components require additional, careful analysis.

Thank you for the opportunity to provide input on this legislation. Cooperative Network will do its best to respond to any questions or need for clarification.

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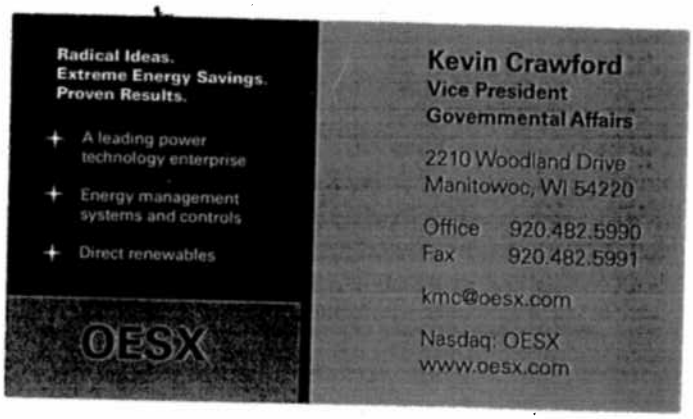
Radical Ideas.
Extreme Energy Savings.
Proven Results.
A leading power technology enterprise
Energy management systems and controls
Direct renewables
OESX
Kevin Crawford
Vice President
Govemmental Affairs
2210 Woodland Drive
Manitowoc, WI 54220
Office 920.482.5990
Fax 920.482.5991
kmc@oesx.com
Nasdaq: OESX
www.oesx.com

Assembly Bill 649 | Clean Energy Jobs Act

Testimony by Kevin Crawford | SVP Governmental Affairs Orion Energy Systems

February 2, 2010

Dear Co-Chairs Black and Soletski and Members of the Special Committee on Clean Energy:

Thank you all for your service to the families of the state of Wisconsin. In particular, thank you for taking on the monumental task of establishing energy policy that will combat the issues of climate change and at the same time put our citizens back to work.

Orion Energy Systems has deployed its energy management systems in 5,082 facilities across North America, including 120 of the Fortune 500 companies. Since 2001, Orion technology has displaced more than 477 megawatts, saving customers more than $710 million and reducing indirect carbon dioxide emissions by 6.1 million tons.

Orion employs 230 full time employees and our world headquarters is located in Manitowoc, Wisconsin.

Manitowoc, like many of our state's communities, has seen its share of hard times, but our talented and skilled workforce is resilient and manufacturing businesses are in recovery from America's economic crisis.

Certain other manufacturers though, while hampered by the downturn, are doing much better than others due to energy and environmental policy already set in place by our state and other sub-national governments. The Renewable Portfolio Standards established by 28 of America's states and districts have contributed to 170 jobs at Tower Tech (manufacturer of huge wind towers), 600 jobs at Manitowoc Cranes (manufacturer of lift cranes used to construct wind farms) and 230 jobs at Orion Energy Systems (manufacturer of very high-efficiency lighting systems, energy control devices, and "direct use" renewables).

The jobs at these three companies in Manitowoc, along with the myriad jobs within the cluster of businesses that support them, are but an example of how carefully crafted environmental and energy policy can positively affect Wisconsin's economy.

Orion is proud to have a technology included in the Green Energy Jobs Act as a qualifying renewable that can be counted toward achieving our State's Renewable Portfolio Standard.

Assembly Bill 649 | Clean Energy Jobs Act

Testimony by Kevin Crawford | SVP Governmental Affairs Orion Energy Systems

February 2, 2010

The Apollo® Solar Light Pipe harvests the direct energy of the sun to illuminate a building's interior cavity, oftentimes taking a facility's lighting load completely off the grid. This technology is already employed in facilities in the control of such notables as Coca Cola, Miller-Coors, Polo Lauren, Apple (computer), Sysco and US Foods.

In order to create additional jobs and put Wisconsin's unemployed back to work, Orion requests the following changes to the legislation being discussed.

First, replace the term "non-electric energy" currently used in the bill to describe "direct-use renewables" with the term "renewable non-electric resources". The latter term is more consistent with other "renewable terms" in the bill and will help define appropriate rule promulgation by the Public Service Commission.

Second, the bill as drafted creates one year Renewable Certificates for the megawatt hours displaced by "direct-use renewables". These certificates are unlike Renewable Energy Credits generated currently under state law, making it impossible to trade them regionally, thus dramatically reducing their value.

Light pipe technology, a solar renewable non-electric resource, should generate Renewable Energy Credits in exactly the same way as those credits generated by photovoltaic technologies.

Orion metrics indicate that if these changes are made to the legislation, more than 1.4 million hours of work will be generated in Wisconsin's construction industry alone for the purpose of the installation of the technology. New jobs would also be developed in the areas of sales, distribution and manufacturing.

Thank you for hearing us on this issue of importance to Orion Energy Systems and the workforce of Wisconsin.

Orion Energy Systems

Apollo® Solar Light Pipe

GREEN JOBS LEGISLATION • SB450 and AB649

Creating Jobs | Reducing GHG | Achieving Energy Independence

1.4 million The estimated number of **WORK HOURS** created by passage of the bills for the installation alone of light pipes.

146,000 The number of **TONS** of CO_2 avoided in Wisconsin by the installation of light pipes stimulated by passage of the bills.

100 The **PERCENT** of Orion products manufactured in the state of Wisconsin.

MADE IN USA


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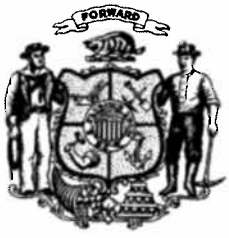
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Assembly Bill 649 - Clean Energy Jobs Act
Assembly Select Committee on Clean Energy
Tuesday February 2, 2010
10:00 AM
412 East

Testimony on behalf of Northwestern Wisconsin Electric and North Central Power

Thank you, Chairpersons Black and Soletski and members of the Committee, for allowing me to testify regarding Assembly Bill 649, the Clean Energy Jobs Act (the Act). My name is Dave Dahlberg. I am Vice President of both Northwestern Wisconsin Electric Company (NWE) and North Central Power Co., Inc. (NCP). I have worked for NWE and NCP for over 23 years. I am testifying today on behalf of NWE and NCP regarding the proposed Renewable Portfolio Standards, Energy Efficiency and Renewable Resource Programs and Advanced Renewable Tariffs contained in the Act. Background on both companies is detailed in my written testimony. However, in the interest of time, I will limit my comments today to North Central Power only.

Background on North Central Power

NCP is a small investor-owned utility serving almost 5,000 customers in southern Sawyer and northern Rusk Counties. NCP's customers are typically agricultural or small commercial or residential with a significant portion being cabins on lakes in the area. NCP serves one industrial customer and one school and has a customer density of only 8.3 customers per mile of power line. As a result of this low customer density, NCP has the second highest rates in Wisconsin among investor-owned and municipal utilities. NCP customers heat with propane, oil, wood, or electric heat. There is no natural gas available in the area.

Comments on the Proposed Renewable Portfolio Standard

NCP also has one of the highest mixes of renewables in our energy portfolio with over 33% of the energy we sell coming from renewables. This is in part because of the hydro facilities in our service territory that were built in the 1930's and supply 28% of our energy. NCP is a wholesale customer of Xcel Energy, formerly Northern States Power Company, and receives an additional 5% renewables from Xcel's energy mix.

Under the proposed legislation contained in the Act, Wisconsin would become a leader in the advancement of renewable energy with a renewable portfolio of 25% by the year 2025. NCP is not against establishing this goal and achieving it. We have already exceeded this goal. However, the proposed method of achieving this goal is to have each utility in the state increase their renewable mix by 21% above their baseline by 2025. The 21% requirement comes from a statewide average baseline of 4% in 2001-2003. With NCP's baseline of 33% in 2001-2003, this

means that NCP would be required to increase to over 54% renewables by 2025. Increasing NCP's renewable purchases to 54% in 2025 will add extraordinarily burdensome costs to the second highest rates in the state in counties with nearly the highest unemployment rates in the state. Rusk County has 11.3% unemployment as of November 2009, making it the 2nd highest unemployment rate in Wisconsin. Sawyer County has a 9.3% unemployment rate in November 2009 which is the 19th highest out of 72.

So under this proposal the counties with the 2nd and 19th highest unemployment rates and customers with the 2nd highest electric rates are being asked to buy the highest amount of renewables in the state. This is an unfair burden for NCP and its customers.

We respectfully suggest changes to the legislation to make it more equitable. We ask that each utility achieve a 25% renewables portfolio individually and that no utility would be required to increase their renewable mix after reaching the 25% threshold. Then each utility and their customers would be required to bear the costs on their own and utilities that have a higher base renewable energy mix would not be subsidizing other utilities' customers. This suggestion is in keeping with the Public Service Commission of Wisconsin (PSCW) philosophy of every energy customer being responsible for their own costs. The cost-causer should also be the cost-payer.

Another suggestion is to exclude utilities that are defined as a "Small Electric Utility", as defined in Section 208 of the Act. These are utilities that sold less than 2,500,000 MWH in 2008. NCP sold 31,167 MWH in 2008. This exclusion would have a minimal effect on the total renewable percentage in the state due to the fact that these utilities' sales represent a fraction of the sales statewide.

While it is true that current law and the proposed legislation offer an "Off-Ramp" option for utilities where these RPS requirements are too burdensome, this option is untested and poorly defined and may be costly for ratepayers as well. A simpler solution is to write the legislation to require each utility to achieve 25% renewables on their own. If this goal is achieved by each utility individually, the statewide average would exceed 25% because NCP is above this goal already. NCP wants to be environmentally responsible and do our part, but it is not fair to ask us to bear the burden for customers of other utilities.

Comments on Energy Efficiency and Conservation

NCP supports the further advancement of energy efficiency measures throughout the state. We realize this is an important tool to address climate change and quite probably the most cost effective. Utilities have used this tool for decades in the form of demand side management programs.

Because of our location in the state, and relative size, NCP would like to see mechanisms in place to insure equitable distribution of statewide programming, throughout all areas of the state. As a small utility in North Central Wisconsin, we often are missed by statewide programming intended to produce results targeted towards more populated areas.

We are also concerned about the proposal requiring the PSCW to review the effectiveness of the programs in meeting the goals outlined in the legislation and giving the PSCW unilateral authority to increase the fees to our customers. Because our area is marked by low per capita income, utility costs affect personal budgets more severely. Sales tax, energy efficiency fees, public benefits fees, and other non-electric charges already account for 9.7% of our customers' electric bills. We therefore request Joint Finance committee oversight as the PSCW revises future budgets for energy efficiency funding requirements.

Comments on the Proposed Advanced Renewable Tariffs

NCP opposes the mandating of Advanced Renewable Tariffs (ART) for investor-owned utilities in Wisconsin. While the concept encourages the development of renewable energy within the state, mandating that NCP purchase all renewable energy produced within our system, at a price significantly higher than today's wholesale costs, would cause our rates to go even higher than the RPS will. As I have stated earlier, NCP already has the second highest rates in Wisconsin and a requirement to purchase renewables under a statewide ART will make them higher still. This also directly contradicts Act 141 which prevents the PSC from mandating additional renewable purchases if NCP is already meeting its RPS obligation.

Background on Northwestern Wisconsin Electric

NWE is also a small investor-owned utility serving almost 14,000 customers in Burnett and northern Polk Counties. NWE's customers are typically agricultural, small commercial, light industrial, and residential with a significant portion being cabins on lakes in the area. NWE has a customer density of only 13 customers per mile of power line. Natural gas is available to only 15% of our customers.

Comments on the Proposed Renewable Portfolio Standard

NWE also has one of the highest mixes of renewables in our energy portfolio with over 12.5% of the energy we sell coming from renewables. This is in part because of the hydro facilities in our service territory that were built in the 1930's. NWE also receives a portion of our renewable mix from our wholesale supplier Xcel Energy.

Under the proposed legislation contained in the Act, Wisconsin would become a leader in the advancement of renewable energy with a renewable portfolio of 25% by the year 2025. NWE is not against establishing this goal and achieving it. However, the proposed method of achieving this goal is to have each utility in the state increase their renewable mix by 21% above their

baseline by 2025. The 21% requirement comes from a statewide average baseline of 4% in 2001-2003. With NWE's baseline of 12.5% in 2001-2003, this means that NWE would be required to increase to over 33% renewables by 2025. Increasing NWE's renewable purchases to 33% in 2025 will add extraordinarily burdensome costs to our rates. Burnett and Polk Counties have per capita income that is well below the state average ranking 53rd and 47th in the state, respectively.

So under this proposal counties that consistently rank lower than the statewide average per capita income and higher unemployment are being asked to buy the highest amounts of renewables in the state.

We respectfully suggest changes to the legislation to make it more equitable. We ask that each utility achieve a 25% renewables portfolio individually and that no utility would be required to increase their renewable mix after reaching the 25% threshold. Then each utility and their customers would be required to bear the costs on their own and utilities that have a higher base renewable energy mix would not be subsidizing other utilities' customers. This suggestion is in keeping with the PSCW philosophy of every energy customer being responsible for their own costs. The cost-causer should also be the cost-payer.

Another suggestion would be to exclude utilities that are defined as a "Small Electric Utility", as defined in Section 208 of the Act. These are utilities that sold less than 2,500,000 MWH in 2008. NWE sold 168,651 MWH in 2008. This exclusion would have a minimal effect on the total renewable percentage in the state due to the fact that these utilities' sales represent a fraction of the sales statewide.

While it is true that the current law and the proposed legislation offer an "Off-Ramp" option for utilities where these RPS requirements are too burdensome, this option is untested and poorly defined and may be costly for ratepayers as well. A simpler solution is to write the legislation to require each utility to achieve 25% renewables on their own. NWE wants to be environmentally responsible and do our part, but it is not fair to ask us to bear the burden for customers of other utilities.

Comments on Energy Efficiency and Conservation

NWE supports the further advancement of energy efficiency measures throughout the state. We realize this is an important tool to address climate change and quite probably the most cost effective. Utilities have used this tool for decades in the form of demand side management programs.

Because of our location in the state, and relative size, NWE would like to see mechanisms in place to insure equitable distribution of statewide programming, throughout all areas of the state.

As a small utility in Northwestern Wisconsin, we often are missed by statewide programming intended to produce results targeted towards more populated areas.

We are also concerned about the proposal requiring the PSCW to review the effectiveness of the programs outlined in the Act and giving the PSCW unilateral authority to increase the fees to our customers. Because our area is marked by low per capita income, utility costs affect personal budgets more severely. Sales tax, energy efficiency fees, public benefits fees, and other non-electric charges already account for 9.7% of our customers' electric bills. We therefore request Joint Finance committee oversight as the PSCW revises future budgets for energy efficiency funding requirements.

Comments on the Proposed Advanced Renewable Tariffs

NWE opposes the mandating of Advanced Renewable Tariffs (ART) for investor-owned utilities in Wisconsin. While the concept encourages the development of renewable energy within the state, mandating that NWE purchase all renewable energy produced within our system, at a price significantly higher than today's wholesale costs, would cause our rates to go even higher than the RPS will. Most utilities in the state already have "net metering" tariffs in place to buy small scale generation from their customers. Also, the ART proposal directly contradicts Act 141 which prevents the PSCW from mandating additional renewable purchases if NWE is already meeting its RPS obligation.

Thank you for your time and the opportunity to participate in this process. We are striving hard to keep rates down at both NCP and NWE, and ask that you don't implement laws that create more hardship for our customers.

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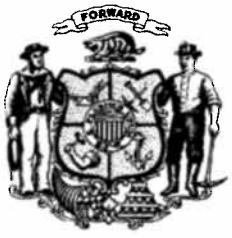


February 2, 2010

Re: **Remarks Regarding Assembly Bill 649**

To: **Assembly Special Committee on Clean Energy Jobs**

Thank you for the opportunity to provide these remarks.

Jeff DeLaune

Johnson Controls, Inc.
2140 American Drive
Neenah, WI 54956
(920) 257-8657
Jeffrey.l.delaune@jci.com

February 2, 2010

Re: **Remarks Regarding Assembly Bill 649 to the Special Committee on Clean Energy Jobs**

By: **Jeff DeLaune – Johnson Controls**

Members of the Assembly, ladies and gentlemen, thank you for providing Johnson Controls the opportunity to comment on Assembly Bill 649. My name is Jeff DeLaune and I serve the role of Renewable Energy Manager for Johnson Controls for the upper Midwest. Prior to working at Johnson Controls I worked for over 25 years at Wisconsin Public Service, the electric and natural gas utility for northeastern Wisconsin, where I researched distributed generation technologies and developed and managed renewable energy programs.

Johnson Controls designs and installs renewable energy systems, primarily sited at commercial buildings and facilities. We work with the facility owner to determine the right renewable energy technology for their needs. We combine renewable energy with energy efficiency improvements to lower the facility's energy costs.

Many of our customers are non-profit entities. They are actively seeking to install renewable energy systems. One of the main reasons is that renewable energy is almost always fixed-price energy. For many renewable energy technologies most of the life cycle cost of the power is the first cost – the cost of purchasing and installing the equipment. From that point forward the only cost is servicing the debt and operations and maintenance costs. These costs are known from the beginning and will be the same ten, fifteen, and twenty years from now.

Johnson Controls views the proposed 25% Renewable Portfolio Standard in the same way. Renewable energy is a Risk Mitigation Strategy for the State of Wisconsin, its residents and its businesses. The proposed RPS calls for higher levels of renewable energy in 2020 and beyond. To the extent that the State's traditional electricity generating sources exposes the state to both price volatility and potentially a significant risk of much higher energy prices in ten to fifteen years, renewable energy helps the State to reduce this risk. An important question for the State is "What is Wisconsin's risk tolerance - how much of the State's energy assets should be variable price assets and how much should be fixed-price assets". From this perspective, a 25% Renewable Energy Standard seems reasonable, justifiable, good energy policy, and good economic policy.

Secondly, Johnson Controls recommends the State include technology-specific set-asides in Wisconsin's Renewable Portfolio Standard. Many of the states surrounding Wisconsin have set-asides and bonus points for solar, wind, and biomass technology as a feature of their RPS. We recommend establishing set-asides of 0.5% of the RPS energy for each of the following technologies:

a. Customer sited biomass cogeneration systems. Wisconsin has a plentiful but finite supply of biomass. Requiring utilities to burn biomass, where 65% of the energy value of the fuel is wasted, is a terrible misuse of this valuable State

resource. Biomass cogeneration systems on the other hand can achieve 70 to 80% efficiencies and provide both electricity and heat right to the location where it's needed, while not adding to congestion on Transmission lines. Biomass cogeneration systems could, right now, today, allow many of the State's University campuses to become energy independent.

b. Utility-owned and utility-customer-owned solar-electric systems. Solar electric systems provide electricity during the daytime when energy prices are usually at their highest and when the strain on the State's energy infrastructure is at its greatest. To help improve solar's cost-effectiveness, each megawatt-hour of electricity produced should be awarded two bonus Renewable Energy Credits to allow this technology to economically compete with wind energy.

c. Customer-owned wind turbines and wind turbine clusters up to 10 Megawatts.

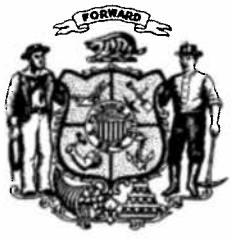
These technology set-asides will facilitate customer ownership of renewable energy equipment and help develop an efficient renewable energy market in Wisconsin, along with all the economic and job creation benefits this brings.

These three technologies have the advantage of having federal tax credits. Non-profit entities, cannot take advantage of these benefits. Our third point is we recommend the State find a way to facilitate non-profit entities ability to acquire renewable energy equipment. One such method might be to use federal funds to establish a zero interest loan program for non-profit entities administered by Focus on Energy.

Our fourth and final point we wish to draw your attention to is consumer protection, and with that the sustained orderly development of Wisconsin's renewable energy market. More homes and businesses in Wisconsin will install renewable energy systems as renewable energy equipment prices fall and traditional energy prices increase. Currently these renewable energy equipment buyers face substantial risk because of inadequate consumer protection safeguards for owners. Utility customers are provided significant consumer protection through Wisconsin State Statutes Chapter 196 that describes the authority and responsibility of the Public Service Commission of Wisconsin. Similar consumer protection for renewable energy equipment owners is not provided for by State law or regulation. How do you know your solar equipment is working properly? How do you know if your wind turbine is producing the amount of energy that it is supposed to? Who ensures meter accuracy? To facilitate sustained orderly development of the renewable energy market, as a method for both reducing Wisconsin's contribution to Global Warming, and enhancing the State's energy infrastructure by facilitating greater amounts of distributed generation of electricity, the State needs to address consumer protection.

This concludes my remarks. Thank you for your time and attention.


WISCONSIN STATE LEGISLATURE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To: **Assembly Special Committee on Clean Energy Jobs**

From: **David Donovan, Manager Regulatory Policy, Northern States Power Company – Wisconsin, d\b\a Xcel Energy**

Re: **Assembly Bill 649**

Date: **February 2nd, 2010**

Co - Chairmen Black and Soletski and members of the Committee, thank you for the opportunity to testify today on Assembly Bill 649, the global warming legislation. My name is David Donovan. I'm Manager of Regulatory Policy for Xcel Energy. I will focus my comments today on five areas of the legislation: 1) Increased goals for Energy Efficiency and Conservation; 2) Enhanced Renewable Portfolio Standard (RPS); 3) Biomass definitional changes; 4) Advanced Renewable Tariffs; 5) Nuclear Moratorium.

Xcel Energy is the fourth largest combination gas and electric company in the nation with operations in eight states. Under our environmental leadership strategy, the company takes prudent, balanced steps to reduce the impact of our operations on the environment, while promoting technological and public policy advancements that will encourage a cleaner electric system. Xcel Energy is the nation's largest utility wind energy provider and the nation's fifth largest solar energy provider. Xcel Energy also has the nation's largest Green Power program. As a company, we have outlined plans to voluntarily reduce our overall carbon dioxide emissions by 22 percent below 2005 levels by 2020.

For those reasons, Xcel Energy supported the Governor's Global Warming Task Force recommendations and supports many of the proposals included in Senate Bill 450. However, Xcel Energy believes Senate Bill 450 deviates from the Task Force recommendations in a few areas and therefore requests these provisions be clarified.

Energy Efficiency and Conservation

We support the recommendations to enhance energy efficiency in Wisconsin. Xcel Energy is a strong proponent of energy conservation as a way to address the issue of climate change. Increased program funding is something we've supported in all states in which we serve. However, as the Public Service Commission of Wisconsin (PSCW) sets its budget for Energy Efficiency spending, we feel Joint Finance Committee oversight of that budget should be retained.

Enhanced Renewable Portfolio Standard

We also support a more aggressive Renewable Portfolio Standard (RPS) in Wisconsin. Xcel is the number one renewable energy provider in Wisconsin. Recently, Xcel Energy received approval to

increase its contribution from the PSCW to convert the third boiler at the Bay Front facility in Ashland to biomass gasification, making that plant capable of burning 100 percent biomass. However, while Xcel Energy supports the advanced RPS, we are seeking changes to the baseline calculation that was established in Act 141. Due to Xcel Energy's early investments in renewable energy technology, this baseline calculation requires the company to go almost three percent above the statewide average requirement. This additional investment for Xcel Energy's customers penalizes them for the company's early investments in renewable energy technology. This baseline calculation also penalizes other smaller utilities located in the north and western part of the state creating significant inequities for customers in the most rural areas. (See attached map of impacted utilities)

Biomass Definition

Xcel Energy opposes the proposed changes to the biomass definition. The proposed changes to the biomass definition were not discussed within the scope of the Task Force, and we think the changes severely weaken the current definition. Should an enhanced RPS be passed, energy providers will need a broad range of options to achieve the aggressive renewable energy goals as outlined in the legislation. Separate comments supporting this issue will be submitted by a coalition of concerned stakeholders.

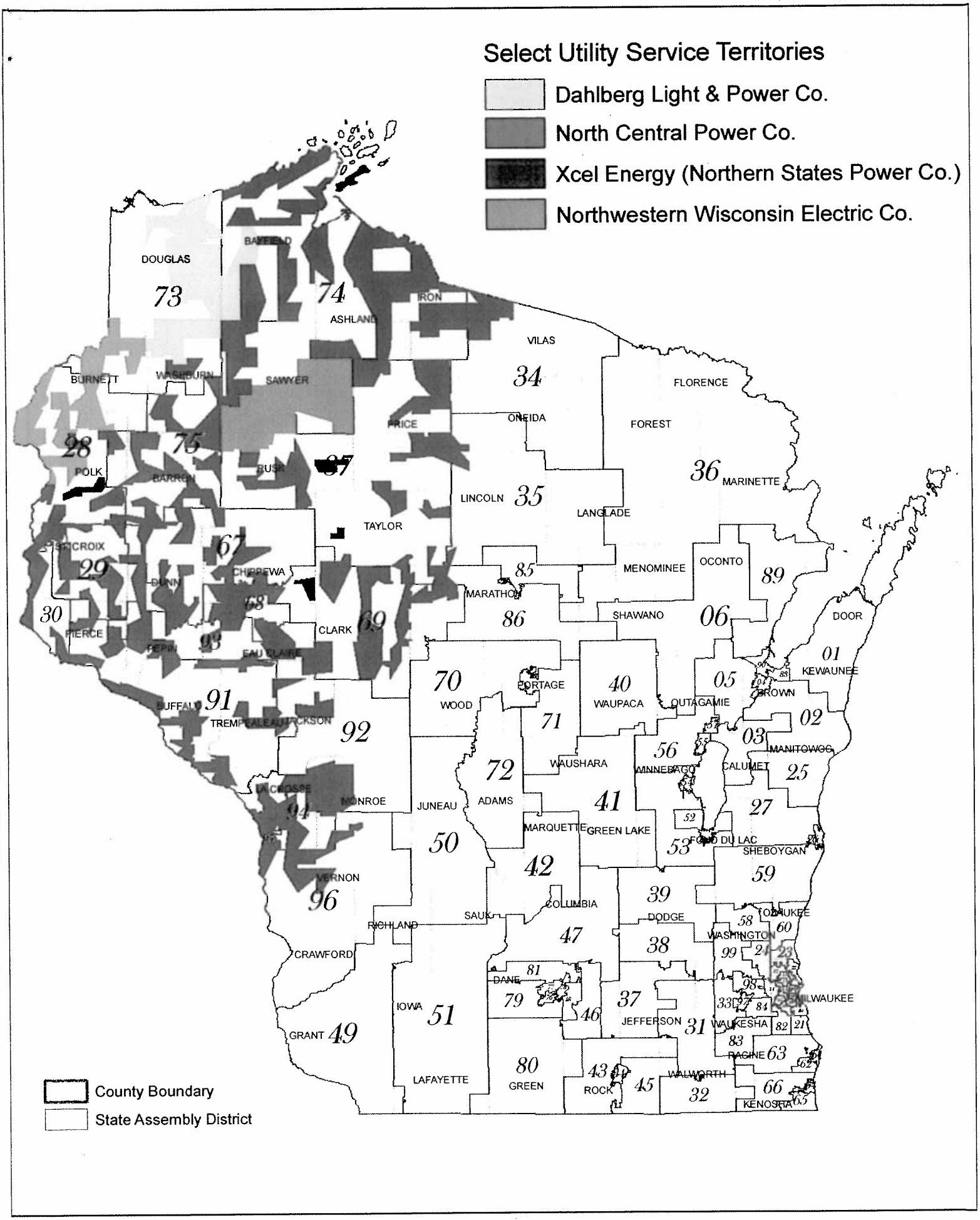
Advanced Renewable Tariffs

Xcel Energy strongly opposes language in the legislation mandating Advanced Renewable Tariffs for Wisconsin's Investor Owned Utilities. This is a deviation from the Task Force recommendations, and we request the bill be amended to remove the language. Xcel Energy has been diligently working to revise its existing voluntary tariff to make it more attractive to customers who want to own and operate distributed generation technology. However, mandating these contracts at an inflated price to benefit a small percentage of customers which will then be subsidized by our entire customer base would put significant upward pressure on rates. We also believe this violates the construct of Act 141, which states that if an electric provider is meeting its statutory obligation under the RPS, additional renewable investments cannot be mandated by the PSCW.

Nuclear Energy

Lastly, we express concerns over proposed language regarding the nuclear moratorium that would require all of the energy produced from a new nuclear power plant in Wisconsin to be used by Wisconsin ratepayers. Given the way Xcel Energy plans and operates its system and the related multistate cost-sharing agreement, if we cannot consider combined load growth of NSP-Wisconsin and NSP- Minnesota when evaluating the construction of nuclear power in Wisconsin, we would not consider a new nuclear facility. Essentially, the moratorium remains in place for our company.

Thank you again for the opportunity to testify. Xcel Energy is committed to protecting the environment and ensuring reliable power at a reasonable cost for our customers. We look forward to working with you on this bill as it moves through the legislative process.



WI State Assembly
Wisconsin Electric Service Utility Territories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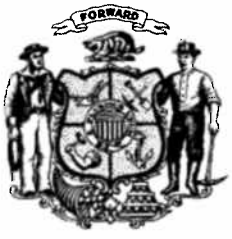
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Co-Chairs Black and Soletski and committee members, thank you for providing me an opportunity to appear before you today to discuss this critically important piece of legislation. I applaud you for your leadership on this issue. We look forward to working with this committee and the legislature to pass a strong clean energy and jobs bill.

I also want to acknowledge the work of the Governor's Global Warming Task Force, Chaired by Roy Thilly and Tia Nelson. The stakeholders on the Task Force worked hard to lay out a comprehensive strategy to deal with the threat of the climate change and the opportunity to grow Wisconsin's economy by developing a new energy policy. We also thank Chairs Plale and Miller in the Senate and Chairs Black and Soletski in the Assembly for carefully reviewing Task Force recommendations and molding them into the legislation before you today.

Climate change and our reliance on fossil fuels are the most significant environmental, conservation and economic challenge of our time. Our dependence on fossil fuels has profound adverse impacts on the sustainability of Wisconsin's public health, economy, environment and ecosystems.

AB 649 sets ambitious but reachable targets that are important to Wisconsin's economic and environmental future- reducing electricity use by 2% annually beginning in 2015, generating 25% of the power used in our homes and businesses and our vehicles from clean and renewable energy by 2025, and reducing our greenhouse gas emissions by 75% by 2050.

Legislative action on this bill will move Wisconsin another important step forward towards energy independence. We have the opportunity to transform our economy from one dependent on fossil fuels to one that improves our environment and creates jobs in Wisconsin. Wisconsin has something more valuable than oil, gas or coal. We have a world class energy research capacity through our University of Wisconsin system, a globally competitive manufacturing base, the best workers in the world, and a strong natural resource base that can make us a leader in energy conservation and clean and renewable energy technologies.

The Governor's Global Warming Task Force emphasized energy conservation as one of the best investments we can make to protect ratepayers, make our businesses more competitive, create jobs and strengthen our economy in the long run.

We have the opportunity to redirect the 16 billion dollars Wisconsin spends annually on fossil fuels such as oil, gas and coal, towards energy efficiency and home grown energy-solar, wind, geothermal, energy storage and bioenergy from our forests, agriculture lands, and other waste streams such as cow manure. Development of this capacity can make Wisconsin's existing manufacturing base more globally competitive, create new opportunities to grow Wisconsin's economy by capturing part of the new energy economy, and strengthen our rural communities and agricultural economy while improving environmental protection.

The Regional Economic Model (REMI) prepared for this bill estimates that at least 15,000 new jobs will be created in Wisconsin by 2025, including many in the manufacturing and construction sectors of our economy. These will be good paying jobs, paying on average about 25% more than the average Wisconsin all-industry wage.

A clear choice is before us. We can either be a leader in the new energy economy, or we can cede our leadership to other states and countries that are moving aggressively. Action on this bill will help leverage Wisconsin's assets. By laying out reachable goals and standards, we provide a path to reinvest the dollars we already spend on energy through our utilities and other sources, as well as attract new private investment and entrepreneurs to innovate and create new businesses and jobs here in Wisconsin.

Five years ago we became one of the first states in the country to enact renewable portfolio standards. And since then we've seen a rapid expansion in alternative energy production and real growth in green jobs:

- The state has over 50 companies involved in the manufacture of energy star appliances alone, and many others that provide energy efficiency equipment;
- Wisconsin has great business growth potential in the area of building retrofits needed to achieve energy conservation;
- Through the use and manufacture of biofuels, Wisconsin's paper industry is finding ways to reduce energy costs and establish multiple profit centers; and
- The manufacture of equipment that produces clean and renewable energy is growing quickly throughout Wisconsin. This bill builds on this growth.

The passage of this bill will build on Governor Doyle's leadership to make Wisconsin a national leader in fighting climate change and seize the opportunity to create new jobs, grow Wisconsin's economy and protect our environment. Imagine a Wisconsin where:

-a farmer grows switch grass to provide biomass for cellulosic ethanol and utilizes cow manure to generate biogas or electricity, expanding habitat for wildlife and improving water quality in our lakes and streams, for the benefit of our fisheries and outdoor recreation.

-a forest land owner discovers new options for sustainable forest management, supplying not only our paper and wood products industry but also the emerging biomass energy economy, reducing the incentive to subdivide his forest land into new housing developments, keeping our forests working as forests, creating and maintaining jobs while benefiting both wildlife and recreation.

-a manufacturer invests in energy conservation, lowering long term energy costs, making the business more globally competitive and profitable, while reducing its carbon footprint and its reliance on fossil fuels that reduce air quality.

-a municipality explores the relationship between water conservation and energy conservation, and finds that the best way to accomplish both goals is to design systems and employ technology that does both at the same time.

These examples are not science fiction. These advances and many others are already underway.

Lastly, let's not overlook the importance of transportation fuels and the impact it has on our economy, and our health. Roughly ¼ of the GHG in Wisconsin are produced from the transportation sector. That is why the GWTF and this legislation has recommendations to reduce this impacts. The point of those elements of the bill are to promote the establishment of strong national standards for fuel efficient, clean vehicles.

These are exciting times and the stakes are high. We look forward to working with the legislature on this legislation to build upon our current efforts to make Wisconsin a leader in confronting climate change and create a more sustainable, growing economy for all Wisconsin citizens.

Thank you.


FORWARD
E PLURIBUS UNUM

City of Stevens Point
1515 Strongs Avenue
Stevens Point, WI 54481-3594

FAX 715-346-1530

Andrew J. Halverson
Mayor

715-346-1570

February 2, 2010

Representative James Soletski
Room 307 West
State Capitol
P.O. Box 8953
Madison, WI 53708

Dear Representative Soletski,

Unfortunately, I am unable to attend any of the public hearings in Madison regarding State Senate Bill 450, Clean Energy and Jobs Act. Instead, this letter has been drafted to express the importance of S.B. 450.

Senate Bill 450 will help Stevens Point to obtain an environmentally and economically healthy community. S.B. 450 would be beneficial to the city of Stevens Point due in part to its inclusion of specific language that addresses schools, local government, and energy efficient communities. These points of focus increase the opportunity for cities like Stevens Point to gain access to grants that will enable the city to achieve the goals of a more energy efficient infrastructure in our community. S.B. 450 also includes explicit targets in reduction of greenhouse gasses and increase in conservation. This directly correlates to the mission statement of the Stevens Point Eco-municipality Task Force which is to ensure an ecologically, economically, and socially viable future for Stevens Point and to inspire other communities in the region to take a similar path.

Stevens Point has already declared by resolution its commitment to working toward a more energy efficient community by establishing a framework for the community's future. We have sustainability goals in place that include energy modeling when considering new construction, and tracking of energy cost and consumption. S.B. 450 would promote programs that could help to reduce the cost of a cities operation. I believe that programs that convey fiscal responsibility to the citizens while at the same time reducing the impact on the environment will receive the support of the community. S.B. 450 would help Stevens Point continue its commitment to sustainability as well as further the ability to gain access to the resources that can help our community reach our goals and objectives, fiscally and environmentally. Please support S.B. 450, Clean Energy and Jobs Act.

Sincerely,

Andrew J. Halverson, Mayor
City of Stevens Point