

our Wind our Power our Future

February 10, 2012

Senate Utilities Committee

Capitol Office

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RE: Senate Bill 383

The Distributed Wind Energy Association (DWEA) is a collaborative group comprised of manufacturers, distributors, project developers, dealers, installers, and advocates, whose primary mission is to promote and foster all aspects of the American distributed wind energy industry. Distributed wind, commonly referred to as small and community wind, is the use of typically smaller wind turbines at homes, farms, businesses, and public facilities to off-set all or a portion of on-site energy consumption. Our aim is to foster safe installation and efficient operation of small and community-scale wind energy generation.

BENEFITS OF DISTRIBUTED WIND GENERATION... EMPOWERING CONSUMERS

Distributed wind energy, sometimes referred to as a behind-the-meter installation, generates local economic activity, increases tax revenues, improves fuel diversity, promotes energy independence, lowers consumer energy costs by displacing purchased retail energy (including peak energy capacity charges), reduces the need for expensive long-distance transmission projects, generates good will with customers and communities and visibly demonstrates a commitment to environmental conservation.

The principal drivers behind a community's or organization's decision to develop on-site wind generation often include:

Environmental stewardship. Substituting clean, renewable energy for fossil fuel-based energy can substantially reduce the emissions of GHGs and other pollutants that result from company-wide activities. Generating wind energy on-site is an effective and visible way of demonstrating commitment to a more sustainable environment.

Hedge against financial risks. On-site wind energy generation can reduce facility energy costs by displacing purchased retail energy, minimizing peak energy capacity charges, and reducing reliance on fossil fuels with volatile pricing. This allows better planning and more predictable energy expenditures.

Educational opportunities. Local wind projects foster opportunities to educate school-age children, businesses, and the broader community on the many diverse benefits of distributed wind energy.

Economic benefits through job creation and market development. Investing in on-site renewable energy generation creates jobs and helps to stimulate local, state, and regional economies.

When available, net metering can provide an on-site generator with more flexibility to meet the on-site electricity demand when sizing the wind project. Because wind is a variable resource, the need for energy may not align



our Wind our Power our Future

exactly with its availability. As a result, net metering may allow the wind project to be sized to cover a greater amount of the load.

Net metering is an easily administered method of encouraging customer investment in renewable energy technologies. It enables customers to "bank" their renewable energy, increasing flexibility and maximizing production value. Providers benefit from net metering because the system load factor is improved, particularly during peak periods. In addition, customers with net metering systems tend to be much more aware of their energy consumption and plan their use more efficiently,

Currently, net metering is offered in more than 35 states. For more information on this and other state and federal renewable energy incentives for wind energy developers, see the Database of State Incentives for Renewables and Efficiency at www.dsireusa.org.

Without passing Senate Bill 383 on-site projects may in some cases remain possible by implementing smaller systems which never generate more energy than a customer consumes in real-time. However, such projects are typically expensive, economically inefficient, and rare as witnessed by the lack of distributed wind development in the state. Senate Bill 383 would significantly expand the opportunity for and feasibility of potential projects across the state.

A COMPLEMENT TO LARGE WIND FARMS

"Community Wind" uses wind turbines to power large, grid-connected loads, generally between 1 and 20 megawatts, such as schools, public lighting, government buildings, agriculture and municipal services.

The key factor is that these systems are owned by or for the benefit of the community. "Small-scale Community Wind" typically utilizes 1-5 mid-size turbines of 1 MW or less. These projects typically connect to service or distribution level voltage, either behind the meter— offsetting a portion or all of the electricity used on-site by a load in the community, or by selling the renewable energy generated to the interconnecting utility.

Unlike large commercial wind farms, Community Wind Farms keep more of the profits/resources in the local community, foster local energy independence, and protect the environment. Community wind can complement corporate development and accelerate the adoption of clean wind energy with a more diverse set of stakeholders, locations, and wind resources.

The benefits of community wind, compared to large wind farms include:

Local job creation and other economic benefits averaging 1.5X to 3X that of wind farms

Distribution near the load centers. In places where transmission is currently limited, community wind with its typically smaller scale can be developed closer to the load to serve local needs, avoiding costly substation build-outs and long-distance transmission network upgrades.

Stimulus for the local economy through business income, tax revenue, and local spending multiplier effects. This economic benefit, according to a University of Minnesota study, is as much as 5X that of a large wind farm project.

Access to potentially lower-cost sources of capital, as community investors may accept lower returns than traditional, commercial investors, thereby improving project economics.



our Wind our Power our Future

Active involvement in and ownership by the local community, thereby reducing the "not in my back yard" (NIMBY) objections.

Lower and more predictable costs for renewable energy. By diversifying the geographic spread of wind turbine projects, state, local, and national wind resources become more reliable and valuable. As more individual wind farms become interconnected and more wind energy is brought on-line, production costs and load payments decline. Large energy consumers become less reliant on fossil fuel and conventional energy with variable pricing.

Thank you for your leadership on this issue. Feel free to contact me with questions.

Jennifer Jenkins

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