

## **Final Technical Report: Washington State – September 2013**

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### **Acknowledgment, Disclaimer and Proprietary Data Notice**

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### **Executive Summary**

The Washington Department of Commerce, via a U.S. Department of Energy grant, supported research into siting and permitting processes for wind projects by Skagit County, Washington. The goal was to help a local government understand key issues, consider how other areas have addressed wind siting, and establish a basis for enacting permitting and zoning ordinances that provided a more predictable permitting path and process for landowners, citizens, government and developers of small and community wind projects.

The County’s contractor developed a report that looked at various approaches to wind siting, interviewed stakeholders, and examined technology options. The contractor outlined key issues and recommended the adoption of a siting process. The Skagit County Commission considered the report and directed the Skagit County Planning & Development Services Department to add development of wind guidelines to its work plan for potential changes to development codes.

### **Introduction**

While Washington State is a national leader in large-scale wind development, those projects have primarily been permitted through the Energy Facility Site Evaluation Council’s “one stop” permitting process. The state does not have processes in place for small and community-scale

projects. The formal EFSEC process is prohibitively expensive for smaller projects, while local special use permit processes are handled on a case-by-case basis and are thus unpredictable.

The legislature considered legislation directing EFSEC to create a statewide approach to siting and licensing of smaller projects that would have been locally administered. In response, local governments pledged to develop their own processes, but few have done so. It is possible to permit wind projects at the local level via special use permits; however these processes do not have defined standards or processes. This uncertainty has discouraged development. A few larger projects have already experienced contentious local siting processes, thus their penchant to use the EFSEC process.

Commerce supported Skagit County exploration of a local permitting system. The county gathered significant information and developed a report that concluded development of such a system was not urgent. The Skagit County Commission approved the Skagit County Planning & Development Services Department adding development of wind guidelines to its work plan for potential changes to development codes.

## **Background**

Commerce supported Skagit County's exploration in an effort to break the legislative impasse over siting, licensing and permitting small wind turbines and community-scale projects (those generating less than 25 megawatts using utility-scale turbines). A number of states have adopted guidelines, standards and processes for small and community-scale projects. Washington State allows local governments to manage many of their own affairs. Our goal was to support a Washington local government's exploration of approaches to siting and licensing local wind projects with the hope they would devise standards and processes that could be adopted by other local jurisdictions.

The following key points inform development of small to community-wind projects:

- The EFSEC process can be used to permit any renewable energy project, but is prohibitively expensive for projects less than 25 megawatts in scale. Thermal projects over 350 megawatts must go through the EFSEC process.
- The region has had surplus generation in good water years, which has resulted in wind projects being displaced. A better approach to sharing these costs has been proposed.
- Renewable energy development will continue as utilities subject to the state's [Renewable Portfolio Standard](#) (adopted by voters through I-937 and known as the Energy Independence Act) meet future compliance tiers for green power purchases (9% by 2016, and 15% by 2020). Seventeen of the state's 62 utilities – those serving 25,000 or more customers – qualify for this requirement. Together they provide 81% of the electricity in the state.
- Utilities impacted by the RPS have already met their first threshold requirements for 2012. That achievement, coupled with expiration of the federal Production Tax Credit, resulted in fewer wind projects moving forward in recent years. Commercial wind project

development will continue being viable given RPS procurement requirements, but are not likely to resume until the Production Tax Credit is extended.

- Transmission continues to be a major regional issue. The [Northwest Wind Integration Forum](#) continues to work on ways to accommodate large wind projects, with a goal of integrating 7500 new megawatts of generation. This activity largely involves major developers and transmission owners.
- Commerce is concentrating on ways to advance smaller, more local wind projects of one to 50 megawatts in size. Development of projects over 50 megawatts generally does not require agency assistance.
- Commerce recently participated in the process of updating the state's interconnection standards for generation up to 2 megawatts. Progress was made for small solar and wind projects up to 100 kilowatts – the net metering threshold. Above that level the requirements become more specific, and applicants face uncertain study, upgrade and insurance costs. These uncertainties, coupled with the region's low power prices, make independent development of renewable energy projects particularly challenging.
- Skagit County focused its review on turbines of up to 100 kilowatts, as that scale has been typical of proposals in the area. Commerce asked the county to look at permitting for projects larger than 100 kilowatts as utilities are not likely to be interested in power purchase agreements with smaller projects. The contractor looked at four tiers up to 25 megawatts: 100 kilowatt, 1 megawatt, 5-10 megawatts, and 10-25 megawatts.

## **Results and Discussion**

The Skagit County Planning & Development Services Department contracted with a consultant to produce a report on wind siting. The consultant researched how other states are addressing the challenge, visited local sites, spoke with stakeholders, and recommended modest changes to the county development code. The Skagit County Commission subsequently concluded it was not urgent to move forward with addressing community-scale projects at this time, and directed the Skagit County Planning & Development Services to add development of wind guidelines to its work plan for potential changes to development codes.

## **Accomplishments**

The project provided a thorough review of how other states are handling wind siting and spoke extensively with stakeholders. The project created a compendium of information for cities and counties to consider when adopting wind siting ordinances. We will continue to work with the county to put a siting process in place. Key accomplishments of the study include:

- A solid report reviewing wind siting issues and alternatives.
- Skagit County contractor outreach to stakeholders and presentation to county Board of Commissioners.

- Identification of standards to be further developed and added to the county development code.
- It is necessary to ensure the local wind resource is adequate, but it can be prohibitively expensive to measure wind for small projects.
- Understanding that small wind economics are marginal and installation is motivated by a range of factors, including energy independence, reliability and environmental concerns. The consultant also learned that the value of wind generation is exponential, and thus larger projects tend to be more economical.
- Community-scale projects of five to 50 megawatts are likely the most economical, but the county may not have adequate wind or space for installation.
- Developers have largely built projects where the wind regime was known, coincident with transmission.
- Developers would be more likely to consider a community-scale project if the regulatory landscape was more clearly designed.
- Adopting standards and guidelines is not urgent at this time, but should be handled during regular code updates. The consultant visited a number of small wind installations and identified potential code improvements.

## **Conclusions**

It was valuable to support a look at wind siting from the local perspective. Local governments often face development proposals with little context or understanding. They end up learning about technologies and projects in the permitting processes. This review enabled Skagit County to develop a solid basis for developing appropriate local standards.

This project exposed a challenging “Catch 22.” There have been few community wind development proposals because larger projects are more economical, and there is not a clear or affordable permitting path for smaller projects. Because there have been no community wind development proposals, Skagit County has not felt an urgency to develop a siting and permitting system.

- Commerce is pleased with the work done by and for Skagit County. The county has a better understanding of the resources available, issues involved, and approaches adopted by other jurisdictions.
- Commerce had hoped the county would follow-through and adopt a clear system of standards, guidelines and processes for considering wind projects up to 50 megawatts. We look forward to working with the county over the next few years to develop this system.
- The groundwork will be useful for other jurisdictions considering local wind planning, siting, licensing and zoning ordinances.

## Recommendations

- The project produced a useful report. Skagit County has been interested in diversifying its energy mix. However, the County did not have a clear understanding of the alternatives available to them, or how to advance those alternatives.
- Support from the U.S. Department of Energy and state Department of Commerce can be useful to local governments when updating and modernizing local regulatory structures.
- Because local governments have so many responsibilities, they need to recognize that while there is interest in energy it does not mean there is an urgency to act.

## Report from Skagit County

Skagit County is transmitting this correspondence, the documents linked below, and the accompanying attachment as its fulfillment of the Interagency Agreement with the Washington State Department of Commerce “to develop a model permitting ordinance for wind projects in Skagit County that could be adopted by other Washington State Jurisdictions.”

In December 2012, Skagit County received a Windpowering America Grant from the Washington State Department of Commerce. The approximately seven-month project resulted in a report that addresses existing and alternative approaches to the regulation of small wind power projects in Washington State. The report includes a description of the types and scales of wind power systems and a comparison and critique of currently utilized approaches to small wind ordinances in use by local governments statewide, including Skagit County. The report reflects interviews and consultations with local government planners, developers of small wind projects, regional utility representatives, and advocates of alternative energy development. The report provides a starting point for “streamlining” permitting and interconnection processes and improving net metering and interconnection standards. The Windpowering America grant project also identified potential amendments to Skagit County Code that will streamline permitting requirements for small wind energy systems.

## Reference Material

On July 16, 2013, Graham & Bunting Associates [presented](#) a summary report of their research and findings to the Skagit County Board of Commissioners. The following County documents are [available](#) for viewing:

1. *Small Wind Energy Systems: A Review of Alternative Approaches to Regulation in Skagit County, WA*. Graham-Bunting Associates. June 10, 2013.
2. *Draft: Potential Amendments to Skagit County Code to Streamline Permitting Requirements for Small Wind Energy Systems*. Graham-Bunting Associates. June 20, 2013.

3. *Small Wind Energy Systems: A Review of Alternative Approaches to Regulation in Skagit County, WA*. PowerPoint slide presentation. Skagit County Board of Commissioners. July 16, 2013.
4. *Skagit County AOI Regarding Renewable Energy Systems*. Skagit County Planning and Development Services, Washington. July, 2008.

The following references are also [available](#) for viewing:

1. *County Strategies for Successfully Managing and Promoting Wind Power in America's Counties, Implementing Wind Ordinances in America's Counties*. National Association of Counties. No date.
2. *Planning for Wind Energy*. American Planning Association. Planning Advisory Report #566. November, 2011.
3. *Wind Power Guidelines*. Washington Department of Fish & Wildlife. April, 2009.
4. *Wind Energy Guide for County Commissioners*. US Department of Energy, et.al. October, 2006.
5. *Wind Energy Ordinances*. US Department of Energy. September, 2010.
6. *Permitting Small Wind Turbines: A Handbook. Learning from the California Experience*. California Energy Commission. September, 2003.
7. *Model Amendment to a Zoning Ordinance or By-law: Small Wind Energy Systems*. Massachusetts Division of Energy Resources, Massachusetts Executive Office of Energy and Environmental Affairs. No date.
8. *Draft Model Small Wind Ordinance for Towns/Counties*. State of Maryland. March, 2008.
9. *Small Wind Energy System Ordinance*. State of Wisconsin. No date.
10. *New Rules for Wind Energy System Installations*. Whatcom County Planning and Development Services, Washington. October, 2008.
11. *Permitting of Wind Energy Facilities: A Handbook*. National Wind Coordinating Committee. August, 2002.