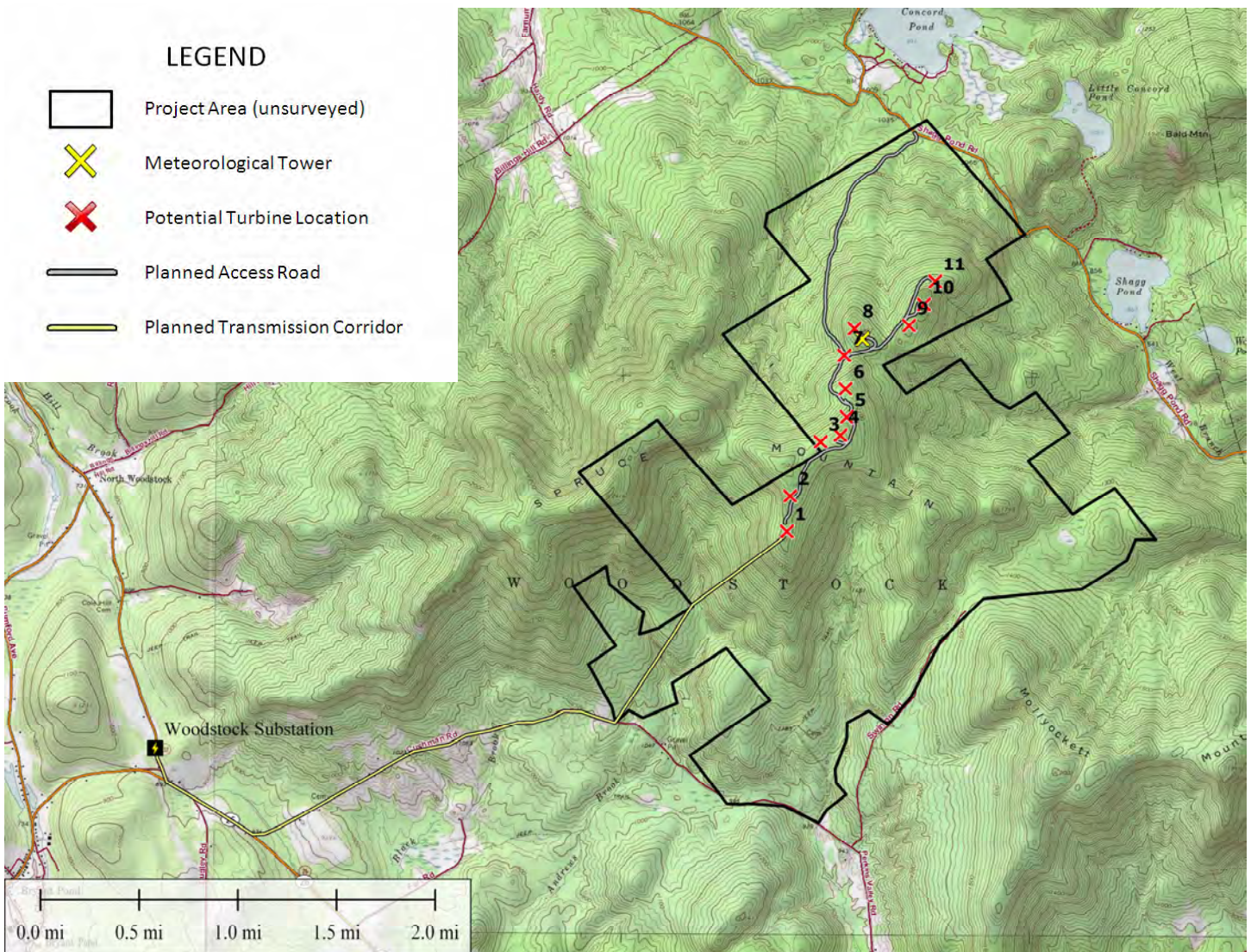


# SPRUCE MOUNTAIN WIND PROJECT UPDATE DECEMBER 2009

Patriot Renewables, LLC, headquartered in Quincy, Massachusetts, is proud to respond to the national call for increased renewable energy and the need for energy independence. We are proposing a 9-11 turbine wind project on part of Spruce Mountain in Woodstock, Maine that could provide more than 55 million kilowatt-hours of electricity per year. That's enough to power about 8,700 Maine homes annually (based on an 18-megawatt project at a 35% capacity factor and an average annual electricity usage of 6,335 kWh per year per Maine household).

Below is a map of the project showing the planned access road, transmission corridor, and potential turbine locations. The transmission line will run down the mountain, continue west along Cushman Road, and run along Route 26 to Route 232, stopping at the Woodstock Substation.



A map of the proposed Spruce Mountain Wind Project.

# FREQUENTLY ASKED QUESTIONS

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We're sure you have lots of questions about the proposed wind project in Woodstock. Keep reading for answers to many of the most common questions that people ask about the project.

## How Would the Wind Project Benefit Woodstock?

Patriot has offered a benefits package to the Town of Woodstock for hosting the project. If the project is built, we will put at least 1,000 acres of the project area into conservation for public use, including hiking and hunting. We will make an annual payment of \$20,000, above and beyond tax payments, to a town-administered community benefit fund. And we have offered use of the project's snowcat to the fire department for emergency response.

With an estimated construction cost of \$33-\$38 million, the project would generate significant annual tax revenue for the town. It would also provide a clean, renewable source of electricity without emitting harmful compounds that pollute the air we breathe and contribute to global warming. During the construction phase of the project, purchasing of food, lodging, fuel, and other construction-related services would benefit local and neighboring communities. Local area subcontractors would be used for construction of the project as much as possible, and several full-time jobs would be created for operations and maintenance of the wind farm.



Bat sensors, like the ones installed on the meteorological tower's guy wires, passively record bat calls at night in the spring and fall.

## What's the Wind Like on Spruce Mountain?

A meteorological tower has been collecting data since November 2008 and has confirmed that the wind speeds are strong and can support a project. The strongest wind measured to-date was a gust of 85 mph on December 28, 2008. The coldest temperature recorded was -15° F on January 16, 2009 and the hottest temperature recorded was 90° F on May 21, 2009.



A radar unit on top of Spruce Mountain monitors migrating birds 24 hours a day for 30 days in the spring and 30 days in the fall.

## How Do You Minimize the Environmental Impact?

Extensive field observation surveys on resident birds (including raptors) and bats were completed this spring and fall. A radar unit was installed on-site to monitor the passage rate and height of migrating birds, and the data indicates that the site is not located in a major migration path. Our turbine and access road locations have been modified to avoid and minimize wetlands, which have been located and flagged around the project area.

### **How Big Are the Wind Turbines?**

The size of the wind turbines used in this project will depend on the wind turbine manufacturer and model that we select. Commercial-scale wind turbines are large, with rotor blades over 100 feet long, mounted on towers over 250 feet tall. The best way to understand how big commercial wind turbines are is to see them in person. The 3-turbine Beaver Ridge Wind project in Freedom, which we constructed and now operate, uses GE model 1.5sle wind turbines that reach 389 feet tall at the highest point, with 122-foot blades mounted on 262-foot towers. If you have an interest in seeing the project for yourself, please email us at [info@patriotrenewables.com](mailto:info@patriotrenewables.com) to arrange a visit.

### **How Much Noise Do They Make?**

The best way to answer this question is to see a wind project in person and judge for yourself. Turbines have gear boxes and generators that can be heard near the project area. Their blades make a whooshing sound as they cut through the air. Even standing directly beneath the turbines, you can carry on a normal conversation without raising your voice, and the sound of the turbines dissipates as you move away from the turbines.

The Spruce Mountain Wind Project has been designed to meet Maine Department of Environmental Protection (DEP) sound requirements, including a full noise assessment study, which has been presented to the town. All of the turbines are being sited more than 2,200 feet from the nearest residence.

### **What's Next?**

We submitted a Site Plan Review application to the Town of Woodstock on November 6, and we plan to file a permit application with the Maine Department of Environmental Protection (DEP) before the end of this year. We will hold a public informational meeting in December. The time and place will be posted at the Woodstock Town Office and published in the *Lewiston Sun Journal* and the *Bethel Citizen*. The DEP will also hold public hearings, probably next year, during their permitting process. We hope to begin construction next summer and to be fully operational by the end of 2010.

## **LEARN MORE**

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We are committed to building strong relationships with the communities in which our projects are located. We are interested in feedback from the community, and we are proud to contribute to local community groups. We held a public meeting last November, and our Site Plan Review hearing was on November 17. You can attend the informational meeting next month and any DEP-sponsored public meetings. You can also contact us directly by calling Project Manager Andy Novey at (617) 503-5516 or emailing us at [info@patriotrenewables.com](mailto:info@patriotrenewables.com). Please visit us on the web at [www.patriotrenewables.com](http://www.patriotrenewables.com).



A few members of the Woodstock Planning Board toured the Beaver Ridge Wind project in early September.

### **What Will the Wind Project Look Like?**

Below are photosims of the proposed wind project. The project is expected to consist of between 9 and 11 commercial-scale turbines. The photosims below are based on the maximum number of potential turbines.

A photosimulation of a panoramic view from Shagg Pond Road looking across Shagg Pond toward the proposed Spruce Mountain Wind Project. The closest wind turbine is about 1.1 miles away.



A photosimulation of a panoramic view from Bald Mountain looking toward Shagg Pond and the proposed Spruce Mountain Wind Project. The closest wind turbine is about 1.4 miles away.

