

VREEM is a monthly electronic newsletter published by Renewable Energy Vermont.

=====

In this issue:

\*News

1. DPS Releases Wind Energy Planning Packet
2. East Haven Windfarm Files for Certificate of Public Good
3. Kirby Survey on Wind Turbines
4. Senator Illuzzi Plans Forum on Commercial Wind Development
5. Northern Power Systems Announces New Wind Turbine
6. Climate Protection Forum Launched in Addison County
7. Landfill Gas Plant Planned in Northeast Kingdom
8. State to Explore Dam Partnerships

\*Features

Ask the Energy Expert: Q&A about Efficiency Vermont  
Company in the Sun: Biomass Energy Resource Center

\*Events

-----

=====

News

-----

1. DPS Releases Wind Energy Planning Packet

Montpelier - The Vermont Department of Public Service has published a packet of resources to help town and regional planners in Vermont plan for utility-scale wind power facilities.

The packet offers a comprehensive collection of resources related to the siting of wind power facilities and includes sections devoted to the history of wind power in Vermont, to various assessments of Vermont's wind energy potential, and to the aesthetic impact of wind turbines.

Also included is a paper by landscape architect Jean Vissering entitled "Wind Energy and Vermont's Scenic Landscape: A Discussion Based on the Woodbury Stakeholder Workshops."

Andrew Perchlik, executive director of Renewable Vermont, feels that the time is ripe for this type of community resource. "With so many wind projects currently being proposed around the state, communities are often at odds about how to address them. This information will help guide their decision-making process," he said.

The packet was developed as part of the Wind Siting Consensus Building Project - an initiative intended to build consensus on the appropriate siting of wind turbines in Vermont's scenic landscape.

For more information:

[www.state.vt.us/psd/ee/wind/windpacket.htm](http://www.state.vt.us/psd/ee/wind/windpacket.htm)

- =====
2. East Haven Windfarm Files for Certificate of Public Good

East Haven, VT - East Haven Windfarm filed its application for a Certificate of Public Good (CPG) with the Vermont Public Service Board on November 17

for a proposed four-turbine wind energy demonstration project on East Mountain in East Haven.

The project will be Vermont's first commercial wind power installation since the Searsburg wind farm was built in 1997 and the first to use modern, utility-scale wind turbines. If approved, the project will supply enough electricity for about 3,000 Vermont homes.

"East Mountain is an ideal place for a wind energy project, as the wind resources are very good and the site has already been developed so no new clearing or roads will be required," said Dave Rapaport, vice president of East Haven Windfarm. The proposed project site was a U.S. Air Force radar base until it was abandoned in 1961.

Four other sites in Vermont are currently being considered for potential wind projects. Energy experts state that more than 10% of Vermont's electrical energy needs could come from the development of six wind farms over the next decade. East Haven Windfarm is the first to file for its CPG.

The Certificate of Public Good under Section 248 of Title 30 is the single permit required for all energy generation facilities in Vermont, including wind farms. Rapaport hopes to receive PSB approval on the CPG by spring 2004 and have the project operating by fall 2004.

For more information:  
[www.easthavenwindfarm.com](http://www.easthavenwindfarm.com)

=====

### 3. Kirby Surveys Town Residents On Wind Turbines

Kirby - The Town of Kirby recently sent out a survey concerning wind energy development in Kirby to property owners.

Town Clerk Wanda Grant said 550 surveys were mailed out to see if residents support wind farms. Of the 177 returned (32 percent), 124 respondents (70 percent), said no. 41 respondents (23 percent) said they did support wind farms and 12 were undecided.

These sentiments were apparent during a recent wind informational meeting at town hall, according to Grant. Rob Ide, executive director of Energy Efficiency for the Public Service Department, Brian Evans-Mongeon of the Vermont Public Power Supply Authority, and Andrew Perchlik, executive director of Renewable Energy Vermont, were on hand to answer questions about wind energy.

"There were a lot of people with a lot of concerns," Evans-Mongeon said Tuesday. "And they had no qualms about speaking about those concerns."

Evans-Mongeon said VPPSA has been looking around the state for three years to find suitable sites for wind generation. He said both the Victory and Darling State Forests have piqued interest.

Ide said questions at the meeting were asked about size, landscaping, costs and the permit process. People were very engaged," Ide said. "Deep, heartfelt feelings were expressed."

Since there is a moratorium on wind development on state lands, Ide said no wind measurement towers have been erected in those areas. "Any project is years and years away," Ide said. "If it happens at all."

#### 4. Senator Illuzzi Plans Forum on Commercial Wind Development

Orleans - Senator Vincent Illuzzi has scheduled a meeting of the Senate Institutions Committee on December 13 to review the positive and negative aspects of constructing commercial wind farms on the state's ridgelines.

Four such projects have been proposed and are at various stages of planning and development in the Northeast Kingdom. Others are planned in other parts of the state.

The meeting on wind turbine energy will be held on December 13 starting at 9:00 A. M. at Lake Region Union High School in Orleans.

"The purpose of the meeting is to explore the benefits of wind energy and the detriments of ridgeline development and related construction," Illuzzi said.

Illuzzi has requested that the state Public Service Board impose a moratorium on the issuance of permits for wind farm projects, pending a review of the existing law by the 2004 General Assembly.

"When section 248 was written, no one contemplated the impact of large wind farms on ridgelines around Vermont. The Public Service Board has expertise with the electric grid and rate setting, but not much experience with projects that have such a significant land use component."

Illuzzi said payment of regional impact fees to surrounding communities should also be considered in addition to the payment of property taxes to the host town.

Persons familiar with different aspects of wind energy will make presentations. They are:

- \* Peter Bluhm, a policy analyst with the state Public Service Board;
- \* Dave Lamont of the Department of Public Service;
- \* Richard Sedano of the Regulatory Assistance Project in Montpelier, and a former commissioner of the Department of Public Service;
- \* David Blittersdorf of NRG Systems in Hinesburg, a company that sells wind measuring equipment worldwide;
- \* John Zimmerman of Vermont Environmental Research Associates in Waterbury Center, a company that has prepared maps identifying optimum wind sites around Vermont;
- \* Mark Sinclair of the Conservation Law Foundation in Montpelier;
- \* Former Senator John McClaughry of Kirby, president of the Ethan Allen Institute;
- \* Former Representative Sam Lloyd of Weston, a long-time member of the state Environmental Board;
- \* Matthew Rubin of Montpelier, who has proposed a commercial wind farm in East Haven;
- Tom Broderick of East Burke, a member of Kingdom Commons Group, an opponent of commercial wind farms; and
- \* Steve McLeod of Bolton, executive director of the Vermont Traditions Coalition.

The public is invited to attend and participate.

For more information:  
Senator Vincent Illuzzi

---

## 5. Northern Power Systems Announces New Wind Turbine

Waitsfield - Northern Power Systems has announced that it is now offering its NorthWind 100 wind turbine for commercial sale.

The turbine was developed by Northern and cooperating U.S. government agencies in order to expand the implementation of wind power in distributed generation and remote applications.

During the turbine's six-year development, two of the wind turbines operating have been operating as test units, including one in Boulder, Colorado at the National Renewable Energy Laboratory (NREL) and one above the Arctic Circle in the remote community of Kotzebue, Alaska.

For more information:  
[www.northernpower.com](http://www.northernpower.com)

---

## 6. Climate Protection Forum Launched in Addison County

Middlebury - Approximately 100 people from Middlebury and surrounding areas attended Addison County's kick-off forum, called "Save Energy and Protect the Climate," on November 18. Held at the American Flatbread restaurant, the event showcased the recently completed greenhouse gas emissions inventory for the Town of Middlebury.

Organized by the Middlebury Area Global Warming Action Coalition, the event also featured local businesses, environmental organizations, and state and international groups concerned with global warming and energy issues.

Efficiency Vermont, Kilowatt Partners, and local businesses made presentations regarding the economic and environmental benefits of energy efficiency. Two areas business, Geiger of Austria and Greg's Meat Market, are benefiting from efficiency upgrades provided by Efficiency Vermont. For example, Greg's Meat Market is now bringing in cold air from the outside to cool their meats, cheeses, and beverages - and in the process, reducing greenhouse gases and saving money.

Present at information booths were other area organizations, such as ECOLOGIA, the Middlebury College Carbon Reduction Initiative, Addison County Transit Resources, and Vermont Biofuels Association.

Sponsors of the kick-off event included Middlebury Climate Protection Campaign, Efficiency Vermont, and American Flatbread.

For more information:  
Contact Steve Maier at [smaier@adelphia.net](mailto:smaier@adelphia.net)

---

## 7. Landfill Gas Plant Planned in Northeast Kingdom

East Montpelier - Washington Electric Cooperative (WEC) announced in early September that it intends to develop a landfill gas plant in cooperation with Casella Waste Systems of Rutland. The plant will generate electricity from landfill gas being produced and collected at the state's largest landfill in Coventry, Vermont.

According to WEC, the project will be a source of long-term, affordable, stable, and predictably priced renewable power, and it is expected to meet a significant portion of the electricity needs of the WEC's consumers for up to 30 years. The facility is expected to begin generating in 2005.

In its initial stages, the project will generate approximately 3.2 megawatts (MW), equivalent to the amount of energy that WEC was purchasing from the Vermont Yankee nuclear power plant up until February 2002.

However, a number of regulatory and other approvals must all be in place before the project can be built. WEC will be seeking a Certificate of Public Good (CPG) from the Vermont Public Service Board (PSB), which will review economic, environmental, and other aspects of the project in making its decision. The project will also need an air quality permit.

Landfill gas is methane produced by the natural decomposition of waste. Because methane is a harmful greenhouse gas, modern landfills such as the one in Coventry collect the gas and burn it, rather than letting the methane escape into the atmosphere. Generating electricity from the waste gas creates additional environmental benefits, according to WEC.

For more information:  
[www.washingtonco-op.com](http://www.washingtonco-op.com)

---

## 8. State to Explore Dam Partnerships

Montpelier - The Vermont Renewable Power Supply Acquisition Authority voted on November 13 to pursue partnerships with three private utility firms that are interested in some kind of joint ownership of the Connecticut River hydroelectric dams.

With its consultant predicting a long-shot chance of the state being the successful bidder for the hydroelectric dams on the Connecticut River in a bankruptcy auction, the state authority agreed to study the partnership option, or even purchasing power from those utilities.

James Coyne of the state's consulting firm, Lexecon, of Cambridge, Mass., put the odds at 13 to 1 that the state would be able to put together a financing package and power contracts that would allow it to be the successful bidder for the six dams on the Connecticut River and the five dams on the Deerfield river.

The dams are owned by the bankrupt energy giant, PG&E National Energy Group.

But Coyne said that analysis showed there would be "a substantial net economic benefit to the state of Vermont from ownership, largely derived through its lower cost financing. Once purchased, the risks of ownership are manageable," he said.

Sen. Vincent Illuzzi, R-Essex-Orleans, the leading proponent of a state purchase, said he didn't view Thursday's action as a defeat of the public power idea. "We're 7.5 percent ahead of where we were a year ago," he said, referring to Lexecon's analysis that boiled down to a 13-to-1 chance.

An interim report will be ready by the Dec. 1 deadline established by the 2003 Legislature, Smith said.

(This article was excerpted from the November 14, 2003 issue of the Rutland Herald as reported by Susan Smallheer)

---

## Features

---

### Ask the Energy Expert: Q&A about Efficiency Vermont

Editor's Note: As electricity consumers increasingly realize the value of energy efficiency in helping the economy and the environment, VREEM has received queries about the role of Vermont's groundbreaking efficiency utility, Efficiency Vermont. We hope the following Q&A will help answer many of these questions.

#### What is Efficiency Vermont?

Efficiency Vermont is Vermont's statewide energy efficiency utility - the first of its kind in the United States.

#### What does Efficiency Vermont do?

Efficiency Vermont helps Vermonters, statewide, reduce energy costs by making their homes and businesses energy efficient. We provide technical assistance and financial incentives to help Vermonters identify and pay for cost-effective approaches to energy-efficient building design, construction, renovation, equipment, lighting, and appliances.

#### How does energy efficiency help Vermont?

\* Energy efficiency lowers your energy bills. Energy-efficient actions taken today - such as using high efficiency lighting and Energy Star appliances - will lower annual energy costs for an average of 14.5 years.

\* Energy efficiency lowers all Vermonters' energy bills. When any Vermonter efficiently uses energy, all of us benefit. Utilities generally need to buy less energy. Associated utility costs don't rise, and everyone's electric bills are lower than they would be without energy-efficient practices. So all Vermonters experience the financial benefits of Efficiency Vermont's work, whether or not they individually take advantage of energy efficiency services.

\* Energy efficiency strengthens Vermont's economy. Most of every dollar spent on energy efficiency stays in Vermont, while most of each dollar paying for power purchases leaves the state. When Vermonters lower their energy bills, more of their money is available to buy local goods and services. These dollars stimulate the economy as they may be spent several more times before leaving Vermont.

\* Energy efficiency protects the environment. By saving energy, we reduce the need for new power, thereby decreasing the air pollution created by power generation.

#### How is Efficiency Vermont funded?

Efficiency Vermont is funded by an energy efficiency charge that appears on your electric bill (except in Burlington Electric Department's service territory). Before Efficiency Vermont was formed, you paid for energy efficiency services in a charge included in your electric rates. When Efficiency Vermont was created, that charge was separated from electric rates and you're now able to see it listed separately on your bill. Each utility negotiated its contribution to the energy efficiency utility based on factors unique to its service territory. For this reason, the size of the energy efficiency charge varies from one utility to the next.

#### Who oversees Efficiency Vermont?

Efficiency Vermont is administered by the Vermont Energy Investment Corporation (VEIC), an independent non-profit energy services organization under contract to the Vermont Public Service Board. VEIC is a Vermont-based

company that has designed and implemented energy efficiency programs throughout Vermont, and in more than twenty states and eight countries since 1986. Efficiency Vermont's work undergoes rigorous review and verification through an independent financial audit, a savings verification process conducted by the Vermont Department of Public Service, and by a legislatively-mandated independent audit.

How was Efficiency Vermont created?

Efficiency Vermont was created by the Vermont Public Service Board and the Vermont Legislature in response to a request from the Vermont Department of Public Service, all of the state's twenty-two electric utilities, and a dozen consumer and environmental groups. Before the creation of Efficiency Vermont, the state's electric utilities provided energy efficiency services. Through Efficiency Vermont, all Vermonters, throughout the state, can participate in the same services.

For more information:

[www.encyvermont.org](http://www.encyvermont.org)

---

---

### Company in the Sun: Biomass Energy Resource Center

The Biomass Energy Resource Center (BERC) is an independent, non-profit organization that assists in the development of biomass energy projects across the United States. As an unbiased, experienced partner, we help communities, utilities, businesses, farms, schools and colleges, state and local governments, and others make the most of their local energy resources.

In Vermont, BERC is working with state agencies to establish a school wood-energy program that will accelerate the pace at which schools implement wood-chip heating. Currently, there are about 25 wood-heated schools in the state, with more than 10 percent of all public school students attending wood-heated schools. BERC is also working to establish biomass-fueled community district energy systems in Montpelier and Richford and helping Johnson State College and Middlebury College study the use of wood wastes to replace fuel oil in campus district heat systems. Under contract with the Vermont Department of Public Service, BERC is the energy partner of the Vermont Methane Program, which helps to develop anaerobic digesters for energy production on dairy farms.

BERC recently received a \$500,000 grant from the Massachusetts Technology Collaborative to provide capital for a demonstration gasifier combined heat and power (CHP) system at a sawmill in the western part of the state. BERC is also leading a study and putting together a stakeholder team to develop a 6 MW biomass gasification system at an industrial site in the state.

In the West, BERC consults for the U.S. Forest Service in a program called "Fuels for Schools" that is designed to make use of low-grade wood wastes from the national forests. This initiative aims to reduce the threat of catastrophic forest fires while also stimulating local economic development in rural forested communities. BERC is the project manager for the first wood-heated school in the Rocky Mountain west, located in Montana's Bitterroot Valley.

For more information please visit our web site at [www.biomasscenter.org](http://www.biomasscenter.org) or call us in Montpelier at (802) 223-7770.

---

Events

---

Friday, December 5, Warren

LEED (Leadership in Energy & Environmental Design) Intermediate Workshop, Yestermorrow Design/Build School. Understanding LEED is an important step towards reducing environmental impacts and achieving superior economic performance. Architects, engineers, facility managers, and building owners who master LEED concepts and processes become knowledgeable practitioners and consumers of green design and construction. In the full-day LEED Intermediate Training, participants will learn to apply LEED to their design practice and building projects. Registration Costs: USGBC members \$325/\$355, non-members \$425/\$475. Information and registration: [http://www.usgbc.org/Events/events\\_training\\_calendar.asp](http://www.usgbc.org/Events/events_training_calendar.asp)

Saturday, December 13, Orleans, 9:00 a.m.  
Commercial Wind Energy Development Forum, Lake Region Union High School in Orleans. Senator Vincent Illuzzi has scheduled a meeting of the Senate Institutions Committee to review the positive and negative aspects of constructing commercial wind farms on the state's ridgelines. Several state experts on wind energy will speak. See story above for more details. For more information: Senator Vincent Illuzzi, [villuzzi@leg.state.vt.us](mailto:villuzzi@leg.state.vt.us), (802) 754-9939.

---

#### About VREEM

---

VREEM is a monthly electronic newsletter published by Renewable Energy Vermont with a grant from the Vermont Department of Public Service and U.S. Department of Energy funds secured by U.S. Senator James Jeffords.

VREEM editorial staff:  
Greg Strong  
Andrew Perchlik  
Bronwyn Becker