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The USDA Farm Bill and Other Incentives for Mid-Atlantic States

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2002 Farm Bill Section 9006

- **Renewable Energy Systems and Energy Efficiency Improvements** - Section 9006
Establishes a grant, loan, and loan guarantee program to assist eligible farmers, ranchers, and rural small businesses in purchasing renewable energy systems and for making energy efficiency. **Provides \$23 million** per year in FYs 2003 through 2007.
- “The Rural Business-Cooperative Service (RBS) announces the availability of \$23 million in competitive grant funds for fiscal year (FY) 2003 to purchase renewable energy systems and make energy improvements for agricultural producers and rural small businesses. In order to be eligible for grant funds, the agricultural producer or rural small business must demonstrate financial need. The grant request must not exceed 25 percent of the eligible project costs.”

¹USDA Rural Development Farm Bill web page:

<http://www.rurdev.usda.gov/rd/farmbill/9006resources.html>

²Windustry Farm Bill web page: <http://www.windustry.com/resources/farmbill.htm>

2002 Farm Bill Section 9006

- **Awardees from the Mid-Atlantic include:**
 - **Virginia** \$ **500,000** **Wind (large)**
- **Awardees from nearby states:**
 - New York \$ 1,956,397 Biomass
 - New York \$ 842,811 Energy Efficiency
 - **New York** \$ **78,819** **Wind (large)**
 - North Carolina \$ 130,000 Biomass
 - South Carolina \$ 15,000 Solar
- **Nationwide Totals:**
 - **Wind** \$ **7,388,903**
 - **2003 Farm Bill Awardees** \$ **21,207,233**

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Highland New Wind Development, LLC Farm Bill award (\$500,000)

- The grant was written on behalf of Highland New Winds, LLC, a partnership between Community Energy, Inc. and Red Oak Ranch, LLC (McBride family). Highland New Winds, LLC is the development company and the eventual ownership company for the project.
- The 50-MW project utilizes the NEG-Micon 1.65-MW, 82-m rotor turbines.
- Three 40-m meteorological towers were installed by the McBrides in 2000, data demonstrate a commercially-viable wind energy resource.
- A 69-kV line and US Route 250 pass through the property, both features improve the feasibility of the project.

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Highland New Wind Development, LLC Farm Bill award

- “A project-specific feasibility study prepared by a qualified independent consultant will be required for all renewable energy system projects. An acceptable feasibility study must include an analysis of the market, financial, and management feasibility of the proposed project. The feasibility study must include an opinion and a recommendation by the independent consultant.”
- Evaluation Criteria include:
 - quantity of energy produced
 - environmental benefits
 - commercial availability
 - cost effectiveness
 - amount requested
 - leveraged funds
 - management plan

Highland New Wind Development, LLC Farm Bill award

- Observations:
 - Eligibility limited to agricultural producers and rural small businesses.
 - The program is designed to help agricultural producers and rural small businesses reduce energy costs and consumption and help meet the nation's critical energy needs.
 - The proposal requirements are significant.
 - The time commitment to complete a successful proposal is significant.
 - There is the possibility that the process will be simplified for 2004 submissions.
 - The opportunity was under-utilized, especially in the Mid-Atlantic, in 2003.

Other wind-based programs in the Mid-Atlantic

	Incentives	Outreach	Rules & Regs
Delaware	<ul style="list-style-type: none"> •Mainstay green tag purchase program (C/R) •Energy Alternative Rebates (C/I/R) 		<ul style="list-style-type: none"> •Fuel mix disclosure •Interconnection •Net metering (25 kW C/R) •Public benefits fund
<p>Maryland</p> <p>Note: several incentives, rules & regs available for technologies other than wind</p>	<ul style="list-style-type: none"> •Personal tax credit (C/P) •Mainstay green tag purchase program (C/R) 		<ul style="list-style-type: none"> •Fuel mix and emissions disclosure •State clean energy procurement
New Jersey	<ul style="list-style-type: none"> •Mainstay green tag purchase program (C/R) •Sales tax exemption •Rebate program (C/R) 	<ul style="list-style-type: none"> •New Jersey Green Homes program 	<ul style="list-style-type: none"> •Generation disclosure •Interconnection •Net metering (100 kW C/R) •Societal benefits •RPS

Other wind-based programs in the Mid-Atlantic

	Incentives	Outreach	Rules & Regs
Pennsylvania	<ul style="list-style-type: none"> •Multiples grant and loan programs •Mainstay green tag purchase program (C/R) 		<ul style="list-style-type: none"> •Fuel mix disclosure •Net metering (variable up to 50 kW C/I/R) •Public benefits program •RPS
Virginia	<ul style="list-style-type: none"> •Mainstay green tag purchase program (C/R) •TVA Green Power Switch (C/R) (limited availability) 		<ul style="list-style-type: none"> •Fuel mix and emission disclosure •Interconnection •Net metering (10 kW R, 25 kW C)
West Virginia	<ul style="list-style-type: none"> •Tax exemption (C) •Mainstay green tag purchase program (C/R) •Special tax assessment 		

Virginia Small Wind Incentives Program (VSWIP)

- The *Virginia Small Wind Incentives Program* (VSWIP) will provide to Virginia landowners the opportunity to buy down the cost of a small wind system, thus making such an investment cost-effective in the sense of providing a life cycle cost comparable to that for fossil-generated electricity over the lifetime of the wind system.
- The longer-range goal for this project is to provide the stimulus needed in Virginia to spur consumer confidence in wind energy.
- VSWIP is intended to bring the first wind energy systems online in Virginia.
- This program will subsequently provide data and evidence to the wind energy industry and legislators that further investments and political support in wind energy are appropriate.

Virginia Small Wind Incentives Program (VSWIP)

- Program details:
 - An initial development for program administration that can be modeled by other states
 - Workshop(s) offered to interested landowners that describe (i) in the classroom and (ii) in the field the details of small wind energy systems
 - Two rounds of press release, solicitation and review of applications for buy-down grants, and landowner assistance
 - Assistance in dealing with vendors and installers
 - Approximately 10 grants amount to be determined on case-by-case basis but not to exceed \$10,000 or 33% of installed project cost

Virginia Small Wind Incentives Program (VSWIP)

- Selection Criteria:
 - quality of landowner's wind resource (prior participation in SBALP or *Next Step* is not required, but may expedite review)
 - financial commitment of landowner (the goal is to install a wind turbine, the financial commitment of the landowner is pertinent)
 - landowner's willingness to work with local K-12 educational institutions in order to further knowledge and understanding of wind energy systems
 - landowner's ability to intertie with the utility grid and willingness to net meter (although agricultural applications will be encouraged)
 - landowner's willingness to install in an area that is visible and easily accessed
 - landowner's willingness to allow data collected to be open in the public domain
 - landowner's commitment to properly maintain the system
 - the ability of the landowner to secure the necessary permits
- **Comments appreciated!!!**

Barriers in Virginia

- Economic
 - In the course of development and implementation of economic models and subsequent analyses of specific sites in Virginia on behalf of the *Small Wind in Virginia Now!* and *Next Step* projects it has become clear that for Class 3 regions small wind systems are competitive (assuming dollar for dollar) with traditional power in the event that
 - the price of power from the grid increases by 1–2 cents or
 - significant incentives are provided
 - In the present economic environment our analyses are particularly sensitive to
 - property taxes on installed wind system
 - availability of rebates, grants, or other financial support

Barriers in Virginia

- Several counties were studied in 2002–03 with respect to zoning and permitting
 - Loudoun County
 - According to the Loudoun County Zoning Ordinance (LCZO) wind energy systems are neither a permitted nor special exceptions use of land.
 - Rockingham County
 - The Rockingham County Zoning Ordinance (RCZO) is much like the LCZO in its very strict nature. In this county a more active approach was taken to address codes that impact wind development (amendment has been filed).
 - Grayson County
 - The process in Grayson County is like that in several other counties in Virginia. Wind systems will be allowed under the special use process, means although it is not a permitted use per se, it may be allowed with further scrutiny.
 - Highland County
 - Highland County also requires a special use permit.

Barriers in Virginia

- Several additional counties are presently under consideration
 - Prince William County
 - A landowner wishes to install a 20 kW Jacobs machine. The county zoning ordinance is the same as for Rockingham County. In the county zoning ordinance there is a clause that says that if an accessory used to farm uses solar energy then the height limitation of 30 feet for a structure does not apply to solar energy. We support the argument that wind energy is a form of solar energy. We also support the argument that the solar energy accessory use was established to support the larger vision of renewable energy systems in the county such that the zoning board should permit wind energy in this application.
 - Northumberland County
 - A landowner wishes to install a Bergey XL.1 wind turbine with PV panels for a hybrid system. We are assisting the distributor/installer in working with the county zoning administrator to draft an amendment to the zoning ordinance to permit wind turbines. The same approach as in Rockingham applies, but the county moves more quickly. The county zoning administration has already approved the zoning ordinance and it is now in the hands of the board of supervisors for final approval.
 - Challenge: The amendment process for zoning ordinances is very long and costly, state-wide rules would significantly improve process (Debra?)

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