

## FAIRFAX COUNTY, VIRGINIA

### MEMORANDUM

DATE: May 30, 2007

TO: Board of Supervisors

FROM: Anthony H. Griffin  
County Executive

SUBJECT: Wind Power Purchases by Individual Neighborhoods

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At its May 21, 2007 meeting, the Board directed staff to provide information as to how wind power could be provided to an individual neighborhood. As described below, neighborhoods interested in such purchases should visit the EPA's "Green Power Partnership" website for comprehensive information regarding purchasing considerations and options, as well as a description of the steps involved in actually purchasing green power.

#### **Types of wind power products**

Wind power, which is electricity generated from wind turbines, is identified by both the Environmental Protection Agency's (EPA) Green Power Partnership and the U.S. Department of Energy/Energy Efficiency and Renewable Energy (DOE/EERE) as a type of "green power," or renewable energy product derived from natural sources that replenish themselves over time.

Two types of commercially available wind power products are:

- "Renewable Electricity" – which is electricity generated using a renewable energy resource (such as wind) and delivered through the utility grid; and
- "Renewable Energy Certificates" (RECs) – which represent the environmental, social, and other positive attributes of power generated by renewable resources.

The power generated from wind turbine farms is distributed to the electric grid at the interconnection point of the wind farm and the transmission facility. Since the electrons generated by the wind facility will flow across the grid according to the laws of physics, it is generally not feasible for an end-user to use the actual electrons generated by the wind facility.

It is possible, however, to purchase the wind facility's environmental benefits, through Renewable Energy Certificates, or RECs, which are sold separately from the actual electricity. RECs represent the reduced emissions associated with renewable generation as compared to conventional generation. The purchase of RECs entitles the buyer to

May 30, 2007

Page 2

claim the environmental attributes of the renewable energy and helps stimulate the demand for new installed wind capacity, thereby foregoing the need for additional carbon-burning facilities.

### **Neighborhood purchases**

The EPA's Green Power Partnership maintains a website to facilitate the purchase of wind power, particularly by organizations, companies, and communities. The website, [http://www.epa.gov/greenpower/partner\\_corner/partnertools.htm](http://www.epa.gov/greenpower/partner_corner/partnertools.htm), includes materials such as a 44-page "Guide to Purchasing Green Power" and a state-specific "Green Power Locator" that identifies available green-power procurement options and includes links that allow interested persons to visit the providers' websites.

The Green Power Locator identifies several Retail Green Power Product Offerings available in Virginia, as well as Renewable Energy Certificate Retail Products. Products available to Virginia purchasers are listed in Attachment 1. In addition to product name, Attachment 1 provides company name or certificate marketers, type of renewable resources utilized, location, residential price premiums, and types of certification.

If you have any questions regarding the purchase of wind energy, please contact Steve Sinclair at 703-324-5955 or [steve.sinclair@fairfaxcounty.gov](mailto:steve.sinclair@fairfaxcounty.gov). If you have any questions regarding the county's commitment in the SIP, please contact Kambiz Agazi at 703-324-1788 or [kambiz.agazi@fairfaxcounty.gov](mailto:kambiz.agazi@fairfaxcounty.gov).

### Attachment

cc: David J. Molchany, Deputy County Executive  
Michael Liberman, Acting Director, Department of Cable Communications and Consumer Protection  
Steve Sinclair, Chief, Utilities Branch, DCCCP  
Kambiz Agazi, Environmental Coordinator