

Committee on Environmental Resources and Energy  
Senate of Pennsylvania  
Testimony on Recommendations to Encourage  
Wind Energy Development in Pennsylvania  
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Chairwoman White, Chairman Musto, and members of the Committee, thank you for the opportunity to appear before you today to offer recommendations on ways to encourage additional wind energy development in Pennsylvania. We thank the Committee, the Senate and the General Assembly for their leadership in promoting alternative energy generally and wind energy specifically. I would like to especially offer our thanks for the Committee's leadership in passing Act 35, which provides important enhancements to the Alternative Energy Portfolio Standards Act (AEPS).

Iberdrola is the largest owner and operator of renewable energy in the world. We currently manage a 21,000 megawatt North American project pipeline. Iberdrola has 600 employees in the U.S. and Canada with approximately 80 of those employees working in our growing Radnor office – one of the company's three main U.S. offices. In 2006, we completed the Locust Ridge wind farm in Schuylkill County. Other Pennsylvania wind energy projects, including those in Meyersdale, Somerset, Mill Run, Garrett, and Bear Creek were developed by Atlantic Renewable and Community Energy, Inc., companies with long-standing ties to the Commonwealth, which are now part of Iberdrola. PPM Energy, part of the Iberdrola group, is currently building the Casselman wind project in Somerset County. Iberdrola is committed to investing in Pennsylvania's energy future and appreciates the ongoing opportunity for dialogue with members of this Committee.

Pennsylvania is a wind energy leader. The state's first wind projects, and the first commercial scale wind energy projects east of the Mississippi, were built in Somerset and Fayette counties through a partnership that enabled individual utility customers and businesses and universities to purchase wind energy. This "voluntary market," which was enabled by electricity restructuring, spurred several wind energy projects across the state. Today, Pennsylvania's eight commercial wind farms provide enough electricity to power 55,000 average homes annually.

Wind energy is a reliable, fuel-free, domestic resource that provides emission-free electricity. Pennsylvania is in the unique position of having a significant wind resource that is also relatively close to load centers. In many cases, states have one attribute, but not the other. Therefore, promoting wind energy is a sound energy strategy for the Commonwealth.

In addition to possessing a good wind resource, Pennsylvania has a number of policy and market attributes that make it favorable for wind energy development: (1) Wind energy is an eligible resource under tier one of the Alternative Energy Portfolio Standard (AEPS). The AEPS market requires Pennsylvania electric distribution companies (EDCs) and electric generation suppliers (EGSs) to acquire tier one non-

solar renewable energy credits (RECs) equivalent to 7.5% of their load by 2021, thereby creating a market demand for renewable energy. As the cheapest commercial-scale renewable energy source, wind energy is well positioned to take advantage of this market; (2) Most of the state's utilities are part of the PJM interconnection, therefore wind energy projects built in Pennsylvania have access to the broader PJM energy and REC markets. Being part of the PJM or MISO control areas also ensures that large amounts of wind energy can be cheaply and reliably incorporated into the electricity grid; (3) Restructured wholesale and retail markets ensure that wind energy projects always have a willing counter-party for their output, meaning that wind energy generators are not reliant on regulatory approvals in order to obtain customers. As noted above, retail electricity restructuring has also promoted consumer choice for electricity and Pennsylvania's voluntary market for wind energy purchases has flourished with over 37,000 customers participating in PECO's PECO Wind program, making it one of the fastest growing voluntary green power programs in the country.

While Pennsylvania's electricity market and policy environment possesses many positive features favorable to wind energy, we do offer the following recommendations to ensure and enhance the continued success of wind energy in Pennsylvania.

- (1) Stable, consistent tier one AEPS eligibility requirements. AEPS creates a market for renewable energy. However, for this market to properly encourage investment it is necessary that renewable energy developers have confidence in the long-term stability of the market rules. Maintaining tier one's eligibility requirements in their present form is the best way to encourage wind energy investments in Pennsylvania.
- (2) Production incentives. Senate Bill 1 includes an Alternative Energy Production Tax Credit. A production tax credit would be very helpful for wind project development in Pennsylvania and would level the playing field for developers deciding whether to invest in projects in Illinois or Pennsylvania – the two best wind states in PJM. Because Illinois's wind resource is slightly better than Pennsylvania's, Illinois projects tend to have better economics. A production incentive would help address this disparity.

We offer a different incentive structure than the current one found in Senate Bill 1 for the Committee to consider. We propose that the incentive be based on actual production and that it be provided to the owner in the form of a grant instead of a tax credit. Wind energy projects are highly capital intensive and it takes some time before these types of investments are depreciated and producing taxable income. Thus, the type of tax credit proposed in Chapter 9 of Senate Bill 1 may not provide the intended incentive investment.

The type of grant is also important. Production-driven grants are preferable to conventional grants for capital costs. This is because conventional grants are deducted by the IRS from the value of the federal renewable energy production tax credit, while production-driven grants are not. Further, production grants ensure that taxpayer funds are not expended until projects

are producing electricity and the commensurate environmental, economic, and energy security benefits.

- (3) Long-term renewable energy credit contracts with utilities. The currency by which electric distribution companies and electric generation suppliers comply with AEPS is the renewable energy credit. This is a tradable commodity separate from the actual electricity that a renewable energy project produces. It has a separate value from electricity in that electric distribution companies and electric generation suppliers must acquire the required number of renewable energy credits to be in compliance with AEPS. This is an important revenue stream for wind energy projects and in all cases with which I am familiar is necessary for wind energy projects to be economically viable.

Therefore, we recommend that EDCs be required to solicit, as part of their default service request for proposals, specific long-term bids for renewable energy credits, in addition to any shorter term bids. While we are recommending the requirement for the bid, we are not recommending that EDCs be required to accept the long-term bid. Because the REC market is not as liquid as the energy market, we believe a system that enables both long and short-term REC pricing information is necessary at least while the market is in its early stages.

If the long-term bids yield a competitive price we believe that EDCs should be allowed to accept those bids and recover their costs pursuant to the provisions of the AEPS statute. This long-term option gives wind energy generators greater flexibility in pricing their projects, possibly even offering a discounted price for RECs in exchange for the certainty of the long-term contract.

Please note that we are not advocating for mandated long-term contracts, just the ability for EDCs to be able to do so in the special case of the REC market. Such long-term bid solicitations recognize that some meaningful portion of the EDC load, most likely residential and small commercial customers, is not likely to choose a competitive supplier. Also, to clarify, EDC long-term bid solicitations would apply only to RECs, not to electricity. So long as Pennsylvania retains a competitive market we believe wind energy projects can compete without EDCs entering into long-term electricity contracts.

Wind energy can and should be a growing part of Pennsylvania's energy and economic future. We thank the Committee for the opportunity to present these recommendations today. I am very pleased to address any of the Members' questions at the end of this panel. Thank you.