BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Alternative Energy Portfolio Standards

Docket No. M-00051865

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Statement of Douglas A. Krall

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Good morning/afternoon. My name is Doug Krall. I am the Manager of Regulatory Strategy for PPL Electric Utilities Corporation ("PPL Electric"). I am testifying today on behalf of PPL Corporation, which I will refer to simply as PPL. PPL appreciates the opportunity to offer some thoughts on how to implement Alternative Energy Portfolio Standards ("AEPS") in ways that are viable, meaningful and affordable to Pennsylvania's electricity consumers.

I would like to emphasize that PPL supports the development of renewable and advanced technology energy, and has a track record to prove it. In 2003, PPL produced approximately 8 percent of its energy in the United States from renewable sources, primarily hydroelectric generation. PPL's generation company owns about 300 megawatts of renewable energy sources in Pennsylvania, mostly in the form of hydroelectric generation at the Holtwood and Safe Harbor plants on the lower Susquehanna River and the Wallenpaupack plant in the Poconos. We also own nearly 600 megawatts of hydroelectric generation in the western United States and 44 megawatts in Maine. In 2003, PPL signed an agreement to purchase 20 megawatts of wind power that will be generated by a project being developed by Community Energy in northeastern Pennsylvania, near Wilkes-Barre.

PPL Energy Services is developing fuel cell and landfill methane recovery projects in several states. We have installed fuel cells at two hotels and a community college campus in New Jersey, a U.S. Coast Guard station in Massachusetts and a high-tech business campus in Montana. We would like to site a fuel cell project in Pennsylvania and have advocated incentives like those offered by other states be made

available here as well. Finally, for decades, PPL Electric has offered retail rate initiatives to encourage its customers to use electricity efficiently. Examples include interruptible rates, price response service and time of use rates.

PPL has long recognized the value of legislation that would establish a renewable portfolio standard in Pennsylvania. Late last year, PPL was actively involved in drafting and reviewing legislative initiatives that ultimately were enacted as the Alternative Energy Portfolio Standards Act of 2004 (the "Act" or "Act 213"). These activities took place in the context of a much broader stakeholder group. A broad array of environmental, consumer, marketing, generating and utility interests were represented throughout the legislative process. That process produced what I believe is a well-crafted Act that carefully balances the interests of all stakeholders in the Commonwealth.

PPL is committed to the success of Act 213. We believe that the Act can be a vital engine for the development of alternative energy resources in Pennsylvania. One of the critical elements is implementation by the Pennsylvania Public Utility Commission ("PUC"). In the short time since passage of Act 213 and announcement of this technical conference, PPL has not had an opportunity to extensively study all aspects of the Act. PPL will continue its review and expects to address additional issues and concerns in the context of the Commission's various implementation proceedings.

What I would like to do in these remarks, rather than trying to address every aspect of Act 213, is focus on recommendations in four specific areas. PPL believes that proper resolution of issues in these areas can create an environment favorable to the development of alternative energy projects consistent with the Commission's mandate to ensure safe, reliable, and reasonably priced electric service for Pennsylvania consumers and to serve as a responsible steward of competition. These areas are:

1. The need for full recovery of an Electric Distribution Company's ("EDC") Alternative Compliance Payments.
2. The development of rules to facilitate the physical connection of small renewable generation projects while assuring safety and reliability.

3. A resolution of net metering issues that avoids jeopardizing EDCs' collection of distribution, stranded and generation costs.
4. The need to develop and implement rules that are consistent with existing requirements.

Of course, I'd be happy to respond to questions regarding PPL's view on any aspect of the Act.

With regard to the first area, PPL recommends that the Commission develop rules to permit EDCs serving as default service providers to fully recover Alternative Compliance Payments. Such an approach will support the basic objective of the Act by channeling additional funds to the development of alternative energy projects.

Act 213 establishes Alternative Compliance Payments as the mechanism to be used by the Commission in the event retail generation service providers do not have sufficient Alternative Energy Credits available for compliance. The Act sets the amount of Alternative Compliance Payments at $45/mwh for most classes of resources and establishes a market index as the basis for Alternative Compliance Payments related to a shortfall in credits from photovoltaic sources. In addition, the Act provides that funds collected through Alternative Compliance Payments will be channeled to sustainable energy funds and, ultimately, by those funds to the development of alternative energy projects and technologies.

The basic objective of Act 213 is to stimulate the development of alternative energy projects in Pennsylvania and encourage the use of alternative energy throughout the Commonwealth. The main vehicle in the Act to accomplish this objective is the requirement that EDCs and Electric Generation Suppliers ("EGS") serving retail load purchase specified amounts of their supply from alternative energy sources. A second vehicle to accomplish this objective is the imposition of Alternative Compliance Payments and the use of those payments to support the development of alternative energy projects and technologies.

However, the Act does not specifically address the recovery of these Alternative Compliance Payments by an EDC through its rates. PPL recommends that the

Commission, in its discretion, provide assurance of such recovery, if the EDC can demonstrate that it has made a good faith effort to comply with the Act. This approach would have several benefits. First, it would encourage EDCs to be more aggressive in obtaining alternative energy supply from projects that have just begun operations or projects that use new technology. The EDC will realize that if these projects don't deliver the required amount of alternative energy thereby forcing the EDC to make Alternative Compliance Payments, it will be permitted to recover those payments through rates. Second, symmetrical cost recovery provisions for Alternative Compliance Payments will encourage EDCs to make appropriate economic decisions in the marketplace. Third, as I discussed earlier, Alternative Compliance Payments will be used to fund development of alternative energy projects, whose output will be available for future compliance with the requirements of the Act.

Recovery of Alternative Compliance Payments is the essential element of this recommendation. Full recovery of the cost of compliance is mandated by the Act. Identical treatment of Alternative Compliance Payments is required, otherwise EDCs serving as default service providers may be reluctant to aggressively pursue all options for obtaining alternative energy supplies.

With regard to the interconnection of small renewable generators, PPL recommends that the Commission develop a process to resolve technical issues that is simplified and standardized to the extent practical, recognizing that the physical interconnection of renewable generation projects involves significant and complex safety, reliability, and power quality issues.

The Act directs the Commission to develop technical interconnection rules for customer-owned generators intending to operate in parallel with the electric utility grid and directs that those rules be consistent with requirements that may already exist or may be under development within the PJM Interconnection. The Commission has already begun such an effort through its issuance of an Advanced Notice of Proposed Rulemaking at Docket No. L-00040168. PPL is drafting comments that it plans to submit at that docket, however, we wish to address a matter of overarching policy here. While it is PPL's belief that certain aspects of this process can be simplified and

standardized, PPL also believes that there is a certain amount of engineering analysis that is necessary and should not be jeopardized by efforts to streamline and expedite the process.

The distribution of electricity is a complex undertaking requiring systems that can accommodate a wide range of conditions on an instantaneous basis. While connecting a generator might seem like a simple matter, consideration has to be given to how the distribution system will respond to various levels of generator output and, conversely, how the generator will be affected by various loadings on the distribution system. Ultimately, engineering analysis must be performed to develop a method of accommodation that minimizes the likelihood of disruption to both the generator and to customers. This accommodation may be different at different points on the grid. Inadequate accommodation can lead to outages and power quality problems. It can also create unsafe conditions for utility workers, customers and the general public.

PPL believes that while some efficiencies may be gained through simplification and standardization, additional engineering resources ultimately will be required to carry out necessary analyses on a more timely basis. PPL will obtain such additional resources, not only to be able to respond more quickly to requests, but, also, to respond to what it expects will be a greater number of requests. PPL anticipates that the cost of such resources will be recovered, in part, directly from individual projects and, also, depending on circumstances, as a component of the cost of Alternative Energy Credits, through the recovery of costs associated with Demand Side Response, and as a component of distribution base rates.

With regard to net metering, PPL recommends that the Commission should not require implementation of net metering (using a single meter) to avoid jeopardizing EDCs' collection of distribution, stranded and generation costs.

Act 213 requires the Commission to develop, within nine months of the effective date of the Act, net metering rules for customer-generators. Act 213 defines net metering as follows:

> "The means of measuring the difference between the electricity supplied by an electric utility and the electricity

> generated by a customer-generator, when the renewable energy generating system is intended primarily to offset part or all of the customer-generator's requirements for electricity."

The Act does not further define net metering. Various approaches to net metering are available, and these options need to be fully reviewed and evaluated. However, one method of implementing net metering requirements is the use of a single meter which runs forward to measure the electricity consumption by the customer-generator and runs backward to measure the electricity generation by the customer-generator. For reasons I will discuss, the Commission should not require a single metering arrangement.

The operation of a single meter results in reduction of the customer-generator's metered usage during the billing period with a corresponding reduction in total charges paid to the EDC. This reduction applies to all components of the EDC's rates including energy, capacity, distribution, Competitive Transition Charges ("CTC") and Intangible Transition Charges ("ITC"). An EDC provides a number of separate services to its retail customers and, because EDC rates were unbundled during the restructuring process, retail bills now reflect a separate charge for each service. Consistent with the unbundling of EDC bills, any reduction resulting from a single meter arrangement should be limited to the energy component only. However, this approach is impossible because the use of a single meter doesn't measure what must be measured to properly adjust customer bills in this way.

Accordingly, under a single meter arrangement, the customer-generator receives excessive payments for its output because those payments include revenue from charges other than energy and capacity. At the same time, the EDC is not able to fully recover its distribution costs or its stranded costs.

In addition, imposition of single metering requirements could lead to uneven development of alternative energy resources in Pennsylvania. Because a single meter runs backward to record the electricity produced by the customer-generator, the customer-generator does not pay the EDC's charges for that amount of power. In essence, the customer-generator is receiving payments for its output equivalent to the

EDC's total charges. In Pennsylvania, the EDCs' charges vary widely, particularly during the cost recovery period while different CTCs and ITCs remain in effect. As a result, developers of alternative energy resources may have an incentive to construct facilities within the service area of EDCs with relatively high rates and not to construct facilities in other parts of the Commonwealth. Moreover, the payments received under a single metering protocol may be greater than or less than the amounts actually necessary to support new construction.

Single metering is particularly problematic during the restructuring transition period. Act 213 recognizes the unique nature of the restructuring transition period, which the Act designates as the "cost recovery period." It is defined as the longer of the period during which CTCs or ITCs are recovered or the period during which an EDC operates under a Commission-approved generation rate plan. The Act explicitly recognizes that a critical element of the cost recovery period is collection of stranded costs through the CTC and the ITC. However, the customer-generator served under a single metering arrangement can, in essence, avoid paying the CTC and ITC. As defined in the Electricity Generation Customer Choice and Competition Act ("Competition Act"), both the CTC and the ITC are non-bypassable charges that must be paid by every customer accessing the transmission or distribution network. It could be argued that imposition of single metering requirements during the cost recovery period would violate this provision of the Competition Act.

To address these concerns, PPL recommends that the Commission not mandate single metering. Rather, the Commission should implement a metering protocol under which the customer-generator utilizes two meters – the first to record its usage and the second to record its generation.

Under this recommended approach, it might be necessary for the Commission to establish the rates that EDCs would pay for the output from alternative energy generators. One possible approach would be a rulemaking in which the Commission could determine appropriate rates and establish generator qualification standards. Properly designed rates should provide alternative energy developers with an incentive to construct facilities throughout Pennsylvania.

In addition, EDCs would have an incentive to purchase output from these alternative energy facilities. Act 213 specifically provides that costs incurred during the cost recovery period for purchases of generation from alternative energy sources and alternative energy credits will be deferred as a regulatory asset and fully recovered in the first year after expiration of the cost recovery period. The Act explicitly provides that after the cost recovery period these costs shall be recovered on a full and current basis.

The Commission's implementation of Act 213 should strive, to the extent possible, to be consistent with standards that currently exist and that can be applied regionally.

In the comments PPL intends to file in response to the Commission's Advanced Notice of Proposed Rulemaking regarding the interconnection of small generators (Docket No. L-00040168), PPL will recommend that any rules the Commission establishes should be consistent with rules that may already exist or that may be established by PJM, the FERC, or recognized standards organizations such as IEEE. PPL will also comment that, if possible, the Commission should simply adopt such rules. PPL believes that, in the interest of encouraging development, it is critically important to avoid creation of inconsistent rules. Further, PPL believes that, even if such rules are consistent, the mere existence of multiple sets of rules will tend to discourage development.

This issue is particularly important in the Commission's establishment of a credit tracking system. Here, PPL strongly urges that the Commission endorse use of the PJM Generator Attribute Tracking System which is currently under development and is projected to be in service during the third quarter of 2005. That system should provide a comprehensive, regional, controlled and accurate tracking of credits which will add certainty and credibility to the credit market and, in turn, encourage investment.

Again, on behalf of PPL, I thank you for this opportunity to express our views on these critical issues. There are many unanswered questions and significant work ahead of us. PPL looks forward to the opportunity to work with the Commission and other stakeholders to develop implementation rules that will help to realize the promise and potential of Act 213. I'd be happy to answer any questions you may have.