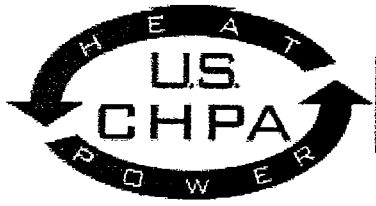

UNITED STATES COMBINED HEAT & POWER ASSOCIATION

COPY

January 31, 2005

Secretary
Pennsylvania Public Utility Commission
P.O. Box 3265
Harrisburg, PA 17105-3265

Re: Comment on ANOPR Docket No. L-00040168

To Whom It May Concern:

The U.S. Combined Heat and Power Association (USCHPA) is pleased to comment on your Advance Notice of Proposed Rulemaking Regarding Small Generation Interconnection Standards and Procedures. We applaud the Pennsylvania PUC for initiating these proceedings, and hope that our comments help you to maximize the effectiveness of your interconnection standard.

The U.S. Combined Heat and Power Association (USCHPA) brings together diverse market interests to promote the growth of clean, efficient CHP in the United States. It is a private, non-profit association, formed in 1999 to promote the merits of CHP and achieve public policy support.

The USCHPA and its members have been active participants in interconnection proceedings in California, Texas, Massachusetts, Illinois, New York, New Jersey and at FERC, and it is from this collective experience that our comments are derived. In particular, we focus herein on your request for "best-practices", from other jurisdictions.

Of those standards cited in your ANOPR, we would recommend the New Jersey standard as a model for Pennsylvania, but with the following important modifications:

1) The New Jersey standard does not include a dispute resolution process, deferring instead to the dispute resolution mechanisms in effect at PJM. Given the large disparity in resources between the utility and the interconnecting customer, it is critical to incorporate cost- and time-effective dispute resolution processes into an interconnection standard. Such processes provide the commercial "teeth" of a standard, without which the technical details have only limited value. At a minimum, we would advise Pennsylvania to follow the New Jersey model and rely on PJM dispute resolution mechanisms. Better still would be to follow the Massachusetts model and build in a dispute resolution mechanism administered by the local PUC.
2) Include an information-tracking protocol as has been explicitly included in the Massachusetts and California standards, and implicitly in the New York standard.

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> As states develop interconnection standards, there is a tendency to err on the side of safety and conservative judgment until experience justifies a loosening of the standards. As a result, interconnection standards tend to be more balanced in those states that have adopted standards more recently, and in those (like New York) that have taken the initiative to continuously modernize their standards as justified by experience. Since this trend will continue after the Pennsylvania standard is in place, we encourage the addition of an information-tracking process to ensure that Pennsylvania has best-in-class interconnection policy both now and in the future.

While we recommend PJM's dispute resolution mechanism, we strongly advise *against* the adoption of the remainder of the PJM interconnection standard. The PJM standard includes technical limitations on interconnection that are not used in other jurisdictions, and its adoption in Pennsylvania would therefore represent a step backwards in our national progress towards fair and uniform interconnection standards. Our specific concerns with the PJM model are two-fold:

1) The PJM standard fails to fully incorporate IEEE 1547. We believe that the exceptions PJM takes to IEEE 1547 are without technical merit, as evidenced by the many jurisdictions that have not taken these exceptions. Furthermore, the failure by PJM to adopt the standard *in toto* is counter to the purpose of IEEE 1547; inconsistent and piecemeal adoption of a standard serves not to standardize, but instead to undermine the many hours of time and effort which went into its creation.
2) The PJM standard is silent on interconnection to network grids, while New Jersey includes a limited – but reasonable – protocol for such interconnections. Much time and thought has been put into "the network issue" in recent years, and this is widely understood to be the largest and most technically challenging remaining barrier to grid-wide interconnection. In the late 1990s, the first interconnection standards focused solely on radial interconnections, but recent standards in Massachusetts, New York and New Jersey have begun to include protocols for network grids. These technical details are the cutting-edge of national interconnection legislation, and are therefore critical to incorporate in a Pennsylvania standard, lest the state be relegated to decade-old technological protocols.

Finally, we make the following recommendations specific to the state of Pennsylvania, and the PUC's administration of future interconnection protocols.

1) Do not craft an interconnection standard that is limited by the fuel used or prime mover technology.

In Pennsylvania Senate Bill No. 1030, the PUC is directed to *"develop technical and net metering interconnection rules for customer-generators intending to operate renewable on-site generators in parallel with the electric grid."* We presume that this ANOPR is a

direct response to that directive, and urge the PUC not to limit their standard to renewable generation technologies. There is no technical relationship between the fuel used by a generator and the safety or cost-effectiveness of the manner in which it is connected to the electric grid. Furthermore, while net-metering is sometimes limited to renewables and/or cogeneration, we know of no other state that has limited interconnection standards in the manner that seems to be suggested by this bill, for the simple reason that these states have recognized the broad social benefits that come from streamlined interconnection policy without regard to fuel type. We therefore strongly urge the state to apply their proposed standard to all in-state distributed generation.

2) Craft an interconnection standard for distributed generation, not small generation.

Your ANOPR is described as "regarding small generation". We urge you to refocus the ANOPR on distributed generation (DG) rather than small generation, defined as *generation sited at the point of electricity consumption, for the economic benefit of the end-user*. This is not simply a matter of semantics, but rather one that goes to the heart of the need for interconnection standards. The greatest benefits from and greatest barriers to new generation occur when those generators are locally sited, external to existing regulatory processes, for the benefit of the end user. Without the benefit of guaranteed cost recovery or other "rate-base" treatment, such generators are only installed if they can be counted on to deliver overwhelming economic advantage to their owners. It is for this economic reason that such generators so frequently operate in a combined heat and power (CHP) mode, and are designed for maximum reliability. Thus, these generators end up being cheaper to install and less polluting than the central-generation alternative that they displace. However, this same economic logic puts competitive pressure on utilities that have sometimes abused their monopoly position to erect overly complex technical requirements for interconnection. These barriers and benefits accrue to any DG, without respect to its size; they are just as prevalent for a steel mill considering a 100 MW behind-the-fence installation as they are for a fast food restaurant installing a 30 kW microturbine. However, there are plenty of small generators that do not create these benefits or face these barriers; a 1 MW gas turbine installed for substation support that is dispatched by the local utility is certainly small, but no reasonable person would assume that such an installation is likely to be blocked due to a utility's interconnection policy.

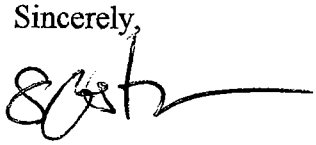
3) The Pennsylvania PUC should appoint a dedicated staff person to direct and facilitate the interconnection proceedings.

Different states have adopted different philosophies for the appropriate role of the PUC in interconnection proceedings. Some believe that a standard should be developed external to the PUC so as to achieve maximum consensus, while others believe that the PUC must guide the process to avoid a "least-bad" outcome common to consensus-driven processes. This latter, more hands-on approach can be fairly described as the New York model, and our experience has been this approach creates a much more robust standard, by virtue of the legitimacy that the PUC can impose on a proceeding, the evidentiary nature of any

hearing led by the PUC and the long-term benefits that come from having dedicated PUC staff who have intimate familiarity with the details of the state policy.

We again commend you the initiation of this effort, and hope you will continue to consider USCHPA as a resource for DG and CHP issues in the future.

Sincerely,



Sean Casten
Chair, Energy Issues Committee