

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF DELAWARE**

IN THE MATTER OF THE COMMISSION'S)
CONSIDERATION OF THE INTERCONNECTION)
STANDARD FOR DELMARVA POWER & LIGHT) PSC DOCKET NO. 07-234
COMPANY UNDER THE PROVISIONS OF)
16 U.S.C. § 2621(d)(15))
(OPENED SEPTEMBER 4, 2007))

ORDER NO. 7275

This 4th day of September, 2007, the Commission determines and Orders the following:

1. By Order No. 6983 (July 11, 2006), the Commission opened Regulation Docket No. 58 to consider whether the Public Utility Regulatory Policy Act ("PURPA") Interconnection Standards enacted by the United States Energy Policy Act of 2005 ("the Act") should apply to Delaware regulated electric utilities.¹ In Order No. 6983, the

¹The PURPA interconnection standard to be considered by the State commissions is codified at 16 U.S.C. § 2621(d) (15) as added by the Energy Policy Act of 2005 § 1254 (a). This section provides:

Each electric utility shall make available, upon request, interconnection service to any electric consumer that the electric utility services. For purposes of this paragraph, the term "interconnection service" means service to an electric consumer under which an on-site generating facility on the consumer's premises shall be connected to the local distribution facilities. Interconnection services shall be offered based upon the standards developed by the Institute of Electrical and Electronics Engineers: IEEE Standard 1547 for Interconnecting Distributed Resources with Electric Power Systems, as they may be amended from time to time. In addition, agreements and procedures shall be established whereby the services offered shall promote current best practices of interconnection for distributed generation, including but not limited to practices stipulated in model codes adopted by associations of state regulatory agencies. All such agreements and procedures shall be just and reasonable, and not unduly discriminatory or preferential.

Commission required public notice of the proceeding and set forth the following six specific questions on which the Commission solicited public comment:

- a. Should the Commission revisit and re-examine the "interconnection" protocols previously published by Delmarva Power & Light Company ("Delmarva") and Delaware Electric Cooperative, Inc. ("DEC")?
- b. Do the provisions of the "Electric Utility Retail Customer Supply Act of 2006" provide any guidance on how the Commission should approach or resolve issues related to the interconnection of customer-owned generation?
- c. If the Commission should revisit interconnection protocols and processes, should the Commission utilize any of the existing models as a "straw" proposal?
- d. Should the Commission adopt a certain MegaWatt (MW) ceiling to apply to an interconnection standard and if so what should that limit be for each utility?
- e. If revisiting interconnection protocols is appropriate, what process would be the most efficient way for the Commission to proceed?
- f. Would it be more efficient to have Delmarva and DEC to initially submit re-worked documents and use those as "straw-men" for continued consideration of the PURPA standard?

2. This docket was publicly noticed on July 18, 2006 and Hearing Examiner Price accepted petitions to intervene in the docket through August 29, 2006. Parties to the proceeding included Delmarva, DEC, Mid-Atlantic Solar Energy Industries Association, the Delaware Million Solar Roofs Coalition (collectively "the Coalition"), the Division of the Public Advocate ("DPA") and Staff.

3. Comments were received from the various parties and summarized in Hearing Examiner Price's letter of September 1, 2006 to the Commission. In her review of the comments, Hearing Examiner Price

found no reason to undertake a re-examination of the Delaware interconnection standards at this time. She further concluded that none of the parties provided any legal opinion concluding that the Commission's previously enacted standards constituted "prior state action" under 16 U.S.C. § 2622(f)(1). However, the Coalition maintained that Delaware's standards fulfilled the Act's requirement because the current interconnection protocols have not produced significant issues since their implementation six years ago. If the Commission decided to initiate an examination of the interconnection standards, Hearing Examiner Price observed that neither the PJM nor Mid-Atlantic Distributed Resources Initiative ("MADRI") standards would be appropriate as a "straw proposal" in light of concerns regarding potential technical risks in applying federal concepts on the State level. She further observed that the New Jersey standards endorsed by the Coalition may provide a more efficient starting point. She further noted that any regulations promulgated by the Commission as a result of this endeavor should be clear, concise, and technically operable for both distributors and generators.²

4. On July 17, 2007, Staff filed a motion requesting Hearing Examiner Price to direct Delmarva to file an interconnection standard based on the Act and agreements reached in other nearby jurisdictions.³ Staff first argued that the Act requires the Commission to consider an

²See Hearing Examiner Ruth Ann Price's Letter to the Chair and Members of the Commission (Sept. 1, 2006), attached hereto as Ex. "A."

³See Motion By The Staff Of The Delaware Public Service Commission Requesting Hearing Examiner Price To Direct Delmarva Power & Light Company To File A Proposed Interconnection Standard Pursuant To Recent Actions In Other Nearby Jurisdictions (July 17, 2007), attached hereto as Ex. "B."

interconnection standard because the Commission had not previously adopted such standard. In support of this finding, Staff determined that Commission review of an interconnection standard had been deferred by PSC Order No. 5454 (June 20, 2000) and that no filing of an interconnection standard has been made other than for informative purposes.

5. Staff also argued that the experience of other jurisdictions such as Maryland, New Jersey, and the District of Columbia demonstrates that the adoption of a state-wide interconnection standard with regional consistency would minimize barriers to distributed generation and provide enhanced opportunities for generation development. Moreover, Staff asserted that the ongoing dockets regarding Delaware's energy future require the Commission to consider an interconnection standard in order to promote system reliability and enhanced opportunity to generate renewable energy sources.

6. On July 24, 2007, Senior Hearing Examiner William F. O'Brien⁴ held a teleconference to consider Staff's motion and discuss the future procedural schedule of the docket. Delmarva, the Coalition, Staff, and the DPA participated in the teleconference. After reaching a consensus that no parties objected to Staff's motion, the parties agreed that Delmarva would file a proposed interconnection standard with the Commission by October 31, 2007.⁵ The parties further

⁴Hearing Examiner Price was absent due to illness.

⁵Because further proceedings about an appropriate interconnection services' standard will be confined to Delmarva, the Commission will, now,

agreed that after a public comment period, the Commission would review the filing for potential adoption if the Commission found the proposed interconnection standard reasonable.

Now, therefore, **IT IS ORDERED:**

1. That, for the reasons explained in the body of this Order, further proceedings in Regulation Docket No. 58 are terminated. The Commission will hereafter consider implementation of an interconnection services' standard for Delmarva Power & Light Company in this proceeding (Docket No. 07-234).

2. That, pursuant to agreement among the parties in Regulation Docket No. 58, Delmarva Power & Light Company shall file, by October 31, 2007, a proposed interconnection standard for the Commission's consideration and potential adoption as the state-wide interconnection standard.

3. That interested persons or entities can file comments in response to Delmarva's filed interconnection standard proposal on or before Thursday, November 15, 2007. After review of such comments, the Commission will determine whether Delmarva's proposed interconnection standard shall be implemented in Delaware.

begin a new docket limited to that utility and terminate further proceedings under the Regulation Docket No. 58 caption.

4. That the Commission reserves the jurisdiction and authority to enter such further Orders in this matter as may be deemed necessary or proper.

BY ORDER OF THE COMMISSION:

/s/ Arnetta McRae
Chair

/s/ Joann T. Conaway
Commissioner

/s/ Jaymes B. Lester
Commissioner

/s/ Dallas Winslow
Commissioner

/s/ Jeffrey J. Clark
Commissioner

ATTEST:

/s/ Karen J. Nickerson
Secretary

EXHIBIT "A"



STATE OF DELAWARE
PUBLIC SERVICE COMMISSION

861 SILVER LAKE BOULEVARD
CANNON BUILDING, SUITE 100
DOVER, DELAWARE 19904

TELEPHONE: (302) 739 - 4247
FAX: (302) 739 - 4849

TO: The Chair and Members of the Commission

FROM: Ruth Ann Price, Hearing Examiner *RAP*

SUBJECT: IN THE MATTER OF THE COMMISSION'S
CONSIDERATION OF THE "INTERCONNECTION"
STANDARD SET FORTH IN 16 U.S.C. § 2621(D) (15)
RELATED TO THE INTERCONNECTION OF CUSTOMER-
OWNED GENERATION TO UTILITY DISTRIBUTION
FACILITIES (OPENED JULY 11, 2006)
PSC REGULATION DOCKET NO. 58

DATE: September 1, 2006

Pursuant to PSC Order No. 6983 (July 11, 2006), I transmit to you the public comments I have received in this docket. Attached are the comments of Delmarva Power & Light Company ("Delmarva") and Mid-Atlantic Solar Energy Industries Association and the Delaware Million Solar Roofs Coalition (collectively "the Coalition").¹ See Appendix A and Appendix B, respectively.

I. BACKGROUND

This docket was opened pursuant to PSC Order No. 6983 (July 11, 2006) to consider the new PURPA interconnection standard enacted by the Energy Policy Act of 2005 ("the Act").² Under the

¹ Since this case was opened on July 11, 2006, the members of the Delaware Electric Cooperative, Inc. ("DEC") voted to remove the Company and its utility services from the regulatory supervision of the Commission. By PSC Order No. 7008, as of August 25, 2006, the Commission terminated all pending proceedings to which DEC was a party. Therefore, DEC did not (and was not obligated to) file comments in this docket.

Act, state commissions are to "consider" new PURPA interconnection standards for their states' electric rate-regulated utilities.

PSC Order No. 6983 set forth six specific questions on which the Commission desired to receive public comment. Commentators were also free to provide comments on other issues they felt relevant to the question of the new interconnection standard. The Commission directed that Notice of publication of this proceeding be placed in *The News Journal* newspaper by July 18, 2006. As stated in the Order, the Commission Secretary filed the affidavit of publication of the "Notice of Initiation of Proceeding Related to PURPA Standard for Interconnection of Customer-Owned Generation" in the docket of this case on July 18, 2006, before the deadline of August 1, 2006. Those wishing to participate in the proceeding were directed to file their petitions for intervention by August 16, 2006. All comments were to be filed by that date as well.

On August 14, 2006, Anthony C. Wilson, Associate General Counsel for Delmarva, filed a letter directed to Senior Hearing Examiner William F. O'Brien requesting a ten-day extension of

² The PURPA interconnection standard to be considered by the state commissions is codified at 16 U. S. C. § 2621(d) (15) as added by the Energy Policy Act of 2005 §1254(a). The section provides:

Each electric utility shall make available, upon request, interconnection service to any electric consumer that the electric utility serves. For purposes of this paragraph, the term "interconnection service" means service to an electric consumer under which an on-site generating facility on the consumer's premises shall be connected to the local distribution facilities. Interconnection services shall be offered based upon the standards developed by the Institute of Electrical and Electronics Engineers: IEEE Standard 1547 for Interconnecting Distributed Resources with Electric Power Systems, as they may be amended from time to time. In addition, agreements and procedures shall be established whereby the services are offered shall promote current best practices of interconnection for distributed generation, including but not limited to practices stipulated in model codes adopted by associations of state regulatory agencies. All such agreements and procedures shall be just and reasonable, and not unduly discriminatory or preferential.

time in which to file comments.³ Mr. Wilson cited Delmarva's obligations in other on-going proceedings as the reason it would not be able to provide its full attention to filing comments in this case by the deadline. On August 14, 2006, I responded to Mr. Wilson's request extending the time for comments to be filed by all parties until Friday, August 25.

On Friday, August 25, 2006, I received electronically a letter addressed to Karen J. Nickerson, Secretary of the Commission from Brian P. Gallagher on behalf of the Mid-Atlantic Solar Energy Industries Association and the Delaware Million Solar Roofs Coalition requesting to intervene in the above-referenced proceeding. Mr. Gallagher's letter also requested an extension of time to file comments until Tuesday, August 29, 2006.

By my letter dated August 28, 2006, I granted Mr. Gallagher's petition for intervention as filed in a timely manner. Under the extension given to all parties, Mr. Gallagher's request to intervene was submitted by the deadline.

Further, since Mr. Gallagher indicated that the entities he represented may take a position against the proposed interconnection standard and, in view of the fact that no prejudice would inure to any party if an extension of time to file comments was allowed, I granted Mr. Gallagher's request to file comments by August 29, 2006 on behalf of the Solar Coalition. Those comments were received by that date and are summarized, with Delmarva's, below.

II. PUBLIC COMMENTS

Question A. Should the Commission revisit and re-examine the "interconnection" protocols previously published by DP&L and DEC (see n. 6 above)? If you believe that re-examination is not necessary, please explain why such protocols remain appropriate? Also, please explain whether such earlier protocols would constitute "prior State action" under 16 U.S.C. § 2622(f)(1) or whether the Commission would need to take further

³ Although Mr. Wilson's letter was directed to the Senior Hearing Examiner, Mr. O'Brien forwarded the letter to me for attention since I was the Hearing Examiner designated in PSC Order No. 6983 to handle petitions in this docket.

**action to utilize such provision's "safe harbor"
from further consideration?**

Delmarva believes that it is unnecessary to reexamine its interconnection protocols. Its current protocols were finalized only six years ago. Delmarva relies on its "Technical Considerations Covering Parallel Operation of Customer Owned Generation of Less than One (1) Megawatt," (referred to as "Technical Considerations < 1MW") published in 2000, as consistent with the latest standards set forth in IEEE 1547 and PJM Interconnection's standards (Small Generator Interconnection "Applicable Technical Requirements and Standards").⁴ The Company notes that its current standards were the product of a request by the Commission, made in 1999, which produced (through working groups composed of Commission Staff, Delmarva experts and members of a consortium of distributed equipment providers) its "Technical Considerations < 1 MW" published in 2000.

Delmarva's comments did not address the question of whether Delmarva's protocols could be deemed as "prior state action" under 16 U.S.C. § 2622(1). Further, Delmarva did not comment on whether the Commission could rely on the safe harbor provision of 16 U.S.C. § 2622(1) should it decide to take no further action.

The Coalition agrees with Delmarva that at the present time there is not a compelling need to reexamine Delmarva's interconnection standards. The Coalition notes that the current interconnection standards were developed in 2000, before IEEE 1547 was promulgated, but the standards were created in anticipation that an IEEE standard would address various types of distributed generation. In general, the Coalition has found that solar companies and installers are satisfied with the customer-owned generation connection to Delmarva's system.

The Coalition believes that the "prior State action" requirement of 16 U.S.C. §2622(f)(1) has been satisfied in Delaware because there have been six years of experience using Delmarva's current standards that have not produced any significant issues that need correction at this time.

⁴Delmarva's operating protocol, "Technical Considerations < 1 MW" was "published" by the Company in 2000 and has been in use since that time. These interconnection standards were never approved by the Commission as promulgated regulations.

Question B. Do the provisions of the "Electric Utility Retail Customer Supply Act of 2006" (75 Del. Laws ch. 242 (Apr. 6, 2006)) provide any guidance on how the Commission should approach or resolve issues related to interconnection of customer-owned generation to DP&L's and DEC's distribution facilities?

Delmarva and the Coalition assert that the Electric Utility Retail Customer Supply Act of 2006 ("the Act") does not address interconnection issues. In addition, the Coalition contends that the Act does require an integrated resource planning process to encourage opportunities for fuel diversity and emphasize the economic and environmental value of renewable resources.

Question C. If the Commission should revisit interconnection protocols and processes, should the Commission utilize any of the existing models as a "straw" proposal for Delaware interconnection standards?

i. If so, please describe which model should be chosen and why it is superior to other models for use in Delaware?

ii. In particular, please evaluate the MADRI model against the processes, standards, and agreements proposed by PJM (including its streamlined procedure for 2 MW or less resources).

As stated in answer to Question A, Delmarva does not believe that it is necessary to reexamine its current interconnection protocols, which are only six years old. Further, the Company believes that neither the IEEE 1547 nor the PJM standards should be used as a "straw" proposal for Delaware interconnection standards.

Delmarva contends that the IEEE 1547 standards (published in July 2003) cannot be used as a "straw" proposal for Delaware because its technical requirements are not specifically delineated. For example, the IEEE's system protection requirements are not sufficiently clear and specific for interconnecting generators and IEEE 1547 does not state the

responsible party for paying the costs of interconnection generators. Further, IEEE 1547 does not speak to: (1) the electrical system changes that may be caused by interconnecting generation; (2) the administrative procedures and timeframes for processing interconnection applications; (3) the monitoring and metering of interconnecting generation; and (4) the technical details are unclear and subject to misinterpretation.

Similarly, Delmarva objects to the MADRI Small Generator Interconnection Procedures ("MADRI" Procedures) because they are not comprehensive, detailed and do not reflect industry practice. In fact, MADRI Procedures contain contradictory recommendations that will only confuse and obfuscate the technical guidelines. Delmarva acknowledges that the MADRI Procedures were designed to be consistent with PJM's interconnection standards. However, as presently constituted, the MADRI Procedures, Delmarva contends, expose customers to safety risks because they could lead to damage to interconnection companies' equipment and to the electric distribution system.

Question D. Should the Commission adopt a certain MW ceiling to apply to an interconnection standard to State-jurisdictional distribution facilities? If so, what should be that limit, and should the limit differ for each particular utility?

In the event that the Commission would undertake to approve a regulation specifying a megawatt ceiling interconnection standard, Delmarva recommends up to 3 MW on a 12kV circuit and up to 6 MW on a 25kV circuit. Larger generators would require significant upgrades or installation of a dedicated circuit. However, any standard imposed by the Commission should include the necessary technical requirements and administrative rules for safe and efficient interconnection.

The Coalition reiterates its position that reevaluating the state's interconnection standards at this time is not a pressing concern. However, if the Commission should decide to go forward with a full-scale review of such standards, the Coalition's model standards would be, in order of preference:

1. New Jersey's interconnection standards;
2. The Interstate Renewable Energy Council's model rules;

3. Colorado's recently promulgated interconnection rules.

The Coalition contends that adopting New Jersey's interconnection rules would be preferable because Atlantic City Electric, like Delmarva, is a subsidiary of Pepco Holdings, Inc. Therefore, Delmarva would have access to people who have worked within the parameters of the rules. The rules have been tested and proven having been used in over 1,000 small generator systems. Members of the Coalition are familiar with New Jersey's interconnection standards.

The Coalition advises the Commission to reject the use of the PJM and MADRI standards on the state level because there are serious, and potentially dangerous, weaknesses in trying to apply federal concepts on the state level. The Coalition cites the serious technical difficulties of using the MADRI model and directs the Commission's attention to the fact that no state has adopted the MADRI model for its interconnection standards

Question E. If revisiting is in order, what process would be the most efficient way for the Commission to proceed?

- i. In particular, should the Commission defer its proceedings for a time to await actions by neighboring jurisdictions considering similar interconnection protocol standards? Can this be structured consistent with the PURPA procedural requirements?
- ii. If an immediate process is appropriate, how should that be structured consistent with the PURPA procedural requirements?

Delmarva recommends that should the Commission decide to revisit the interconnection protocols, a working group of technical experts from the Company, the Commission Staff and other interested persons should be convened to discuss technical and procedural issues regarding interconnection. Further, Delmarva does not necessarily believe that any benefit is gained by waiting for neighboring jurisdictions to undertake these

issues because system configuration and operational processes are different for each utility and for each state.

The Coalition endorses the establishment of a limited number of "informal discussions" to resolve technical issues in Delaware. However, it specifically objects to constituting a "working group" which could easily overwhelm the resources and time of small generators to participate.

Question F. Would it be more efficient to have DP&L and DEC to initially submit re-worked documents and use those as "straw-men" for continued consideration of the PURPA standard? Similarly, should the Commission strive for a single interconnection standard and process or do differences exist between the two jurisdictional utilities that call for different interconnection protocols?

Rather than having Delmarva submit re-worked documents to use as "straw-men" for consideration of the PURPA standard, Delmarva believes that a working group of technical experts from the Company, Commission Staff and interested persons is the best method to develop standards and practices for interconnection.

The Coalition believes that its suggestions made in response to Question E are its preferred method of reexamining Delaware's interconnection standards. While the Coalition suggests that interconnection standards modeled on those in New Jersey are preferred and could serve as a "straw" proposal, it does not view "straw-men" as necessary to initiate technical discussions on interconnection issues.

III. CONCLUSION

Neither Delmarva nor the Coalition state a need for the Commission to undertake a reexamination of Delaware's interconnection standards at this time. However, neither of the commentators provided a legal opinion concluding that the Commission's previously enacted standards constituted "prior state action" under 16 U.S.C. §2622(f)(1) even though, in its view, the Coalition believes that Delaware's standards fulfill the requirement.

Should the Commission decide to initiate an examination of the interconnection standards, the commentators unanimously agree that the PJM and the MADRI standards are not appropriate to be used as a "straw proposal." In light of the Coalition's endorsement of New Jersey's standards, it may be an efficient use of time and resources to have Delmarva first review these standards and to advise the Commission concerning which of these standards is already in effect in Delaware, which are cared-for by a standard already in effect, and which are not appropriate for Delaware. Thereafter, the Commission may consider whether to convene a limited number of discussions (either face to face or telephonically) to discuss any outstanding technical issues.

The commentators agree that any regulations promulgated by the Commission as a result of this endeavor should be clear, concise and technically operable for both distributors and generators.

Attachments: 2

cc: Connie S. McDowell, Chief of Technical Services
Gary Myers, Deputy Attorney General
William F. O'Brien, Senior Hearing Examiner
Janis Dillard, Regulatory Policy Administrator
Robert J. Howatt, Public Utilities Howatt, III

A P P E N D I X

"A"

Comments OF

Delmarva Power & Light Company

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF DELAWARE**

IN THE MATTER OF THE COMMISSION'S)
CONSIDERATION OF THE "INTERCON-)
NECTION" STANDARD SET FORTH IN)
16 USC § 2621 (d) (15) RELATED TO) PSC REGULATION DOCKET No. 58
THE INTERCONNECTION OF CUSTOMER-)
OWNED GENERATION TO UTILITY)
DISTRIBUTION FACILITIES)
(OPINED JULY 11, 2006))

**COMMENTS OF
DELMARVA POWER AND LIGHT COMPANY**

Delmarva Power & Light Company ("Delmarva"), hereby offer its comments in response to Order No. 6983 ("Order") issued by the Public Service Commission of the State of Delaware ("Commission") on July 11, 2006. The Order invited interested persons and entities to file comments in response to the questions posed in paragraph 4 of the body of the Order. Delmarva's comments are set forth below.

Question A.

Should the Commission revisit and reexamine the "interconnection protocols" previously published by DP&L and DEC (see n. 6 above)? If you believe that re-examination is not necessary, please explain why such protocols remain appropriate? Also please explain whether such earlier protocols would constitute "prior State action" under 16 U.S.C. §2622(f)(1) or whether the Commission would need to take further action to utilize such provisions' "safe harbor" from further consideration?

Answer A

Delmarva is of the view that there is no need for the Commission to revisit and re-examine the "interconnection" protocols previously published by the Company. The Delmarva document "Technical Considerations Covering Parallel Operation of Customer Owned Generation of Less than One (1) Megawatt" ("Technical Considerations < 1 MW") published by the Company in 2000 is current and consistent with IEEE 1547 and with the technical requirements of the PJM Interconnection, LLC's ("PJM") Small Generator Interconnection "Applicable Technical Requirements and Standards" ("PJM Standards") for generators 2MW and less. The PJM Standards are based upon IEEE 1547.

Moreover, Delmarva's document, Technical Considerations < 1 MW, is the product of a process based upon the Commission's request in 1999 that the Delaware utilities develop such a tariff and interconnection standards for net energy metering (NEM, 25 kW and less). This document was produced by a working group including Commission Staff, Delmarva technical experts, and members of consortium of distributed generation equipment providers.

Question B.

Do the provisions of the "Electric Utility Retail Customer Supply Act of 2006" (75 Del. Laws ch. 242, April 6, 2006) provide any guidance on how the Commission should approach or resolve issues relate to interconnection of customer-owned generation to DP&L's and DEC's distribution facilities?

Answer B

The Electric Utility Retail Customer Supply Act of 2006 does not address interconnection.

Question C.

If the Commission should revisit interconnection protocols and processes, should the Commission utilize any of the existing models as a "straw" proposal for Delaware interconnection standards?

- i. If so, please describe which model should be chosen and why it is superior to other models for use in Delaware?
- ii. In particular, please evaluate the MADRI model against the processes, standards, and agreements proposed by PJM (including its streamlined procedure for 2 MW or less resources).

Answer C

Delmarva's position is that there is no need for the Commission to revisit and re-examine the "interconnection" protocols previously published by the Company. However, should the Commission decide to do so, Delmarva contends that no single existing model is adequate or appropriate to be used as a "straw" proposal for Delaware interconnection standards. The following discussion provides background and specific issues which must be resolved before IEEE 1547 or the PJM Standards could be considered for use as a "straw" proposal for Delaware interconnection standards.

1. IEEE 1547 and PJM Small Generator Interconnection Standards

In July 2003, IEEE published *IEEE Standard 1547 for Interconnecting Distributed Resources with Electric Power Systems* ("IEEE 1547") which applies to generators of less than 10 MVA. The stated intention of IEEE 1547 is to provide a uniform standard for interconnection of distributed resources with electric power systems. It includes requirements relevant to the

performance, operation, testing, safety considerations, and maintenance of the interconnection. During May 2004, the PJM began developing the PJM Standards for generators less than 2 MW, which were aligned with IEEE 1547. The PJM Standards were established in December of 2004 and are consistent with the FERC-approved tariffs. Delmarva's present technical interconnection standards are consistent with IEEE 1547 and the PJM Standards.

2. Delmarva Comments Regarding the PJM Standards

The PJM Standards are generally in compliance with technical specifications of IEEE 1547. However, individual PJM transmission owners specified their own protection, telemetry and metering technical requirements that were not specifically set forth in IEEE 1547. In addition, the PJM Standard clarified some of the technical issues in IEEE 1547 that were subject to varied interpretation. [Note – PJM this year adopted Tariff changes in response to FERC Order 2006 and added a "super expedited" sub-procedure for generators 2 MW and less.

3. Delmarva Comments Regarding IEEE Standard 1547

Delmarva's technical interconnection standards are consistent with the PJM Standards as described above. However, the Companies note that IEEE 1547 is not comprehensive regarding interconnection technical requirements and would be insufficient as the sole basis for a Delaware interconnection standard. Specifically,

- IEEE's system protection requirements for interconnecting generators are not sufficiently clear and detailed, possibly leading to misinterpretation.
- IEEE 1547 does not address who is responsible for paying the costs of the interconnection of generators.

- IEEE 1547 is silent as to what electric system changes may be required as a result of interconnection of generation.
- IEEE 1547 is also silent in outlining administrative procedures, processes and timeframes for handling interconnection applications.
- The monitoring, metering and control of interconnected generation are not specified in IEEE 1547.
- Some of the technical details are unclear and subject to interpretation.

Therefore, Delmarva suggest that IEEE 1547 is inadequate and inappropriate to be used by the Commission as a "straw" proposal for Delaware interconnection standards.

4. Delmarva Comments Regarding the MADRI Small Generator Interconnection Procedures

In 2004, the MADRI Interconnection Subgroup began developing a document setting forth the MADRI model for small generator interconnection procedures for facilities in parallel with the electric distribution company. The document was developed to be consistent with the PJM Standards. The technical interconnection requirements in the PJM Standards will apply under the MADRI Procedures if an interconnection agreement with PJM is required. In November 2005, MADRI published its *MADRI Model Small Generator Interconnection Procedures* ("MADRI Procedures") document covering small generation interconnection procedures and interconnection agreements.

Additionally, the MADRI document implements the established Federal Energy Regulatory Commission procedures used in evaluating customer generation projects. (Docket No. RM02-12-000, Order No. 2006: "Standardization of Small Generator Interconnection

Agreements and Procedures." Issued May 12, 2005). Should a customer elect to interconnect their generator under the MADRI Procedures and later decide to participate in the PJM market, the generator will then be subject to PJM rules and regulations. The PJM Standards are included as Attachment H in PJM Manual 14 B.

Taken by themselves, the MADRI Procedures are not sufficiently comprehensive, detailed, or reflective of industry best practice. These problems are compounded by the fact that the MADRI Procedures were published with many inconsistent and misleading comments by various parties. The MADRI Procedures as released on November 25, 2005 contain contradictory recommendations which must be resolved before any useful interconnection technical guidelines can be implemented based on the MADRI Procedures. There are many specific technical issues which must be addressed before it would be appropriate for the Commission to adopt the MADRI Procedures as a "straw" proposal for developing interconnection procedures in Delaware. Using the MADRI Procedures as presently constituted for the basis for Delaware interconnection procedures could lead to damage to interconnection customers' equipment or to the electric distribution system, and could needlessly expose the public and the Companies' employees to added safety risks.

Question D.

Should the Commission adopt a certain MW ceiling to apply to an interconnection standard to State-jurisdictional distribution facilities: If so, what should be that limit, and should the limit differ for each particular utility?

Answer D

Delmarva believes that any interconnection standard should be one that provides the maximum likelihood of maintaining the safe and reliable operation of the utility's distribution system. Therefore, any interconnection standard should be based on established operating principles and procedures for the utility in question.

As a practical matter, on a state-jurisdictional (non-PJM Market) up to 3 MW on a 12kV circuit and up to 6 MW on a 25kV circuit appear to be effective respective generator size limits for the Delmarva system. Generators larger than this would probably require extensive circuit upgrades or the installation of a dedicated circuit. In addition, larger units would probably be selling into the PJM market and thus the PJM Standards would apply rather than the Delaware State-jurisdictional standard.

Regardless of any size limit, any approved Delaware state standard must provide all the necessary technical requirements and acceptable administrative rules needed for safe and reliable interconnected operation.

Question E.

If revisiting is in order, what process would be the most efficient way for the Commission to proceed?

- i. In particular, should the Commission defer its proceedings for a time to await actions by neighboring jurisdictions considering similar interconnection protocol standards? Can this be structured consistent with the PURPA procedural requirements?
- ii. If an immediate process is appropriate, how should that be structured consistent with the PURPA procedural requirements?

Answer E

If the Commission decides to revisit the interconnection protocols previously established by Delmarva and DEC, then the Company suggests that the most efficient process would be based upon the Commission's establishing a working group of technical experts from Delmarva, DEC, Commission Staff and other interested parties to explore the technical and procedural issues pertaining to interconnection standards for Delaware electric distribution systems.

Although awaiting the results of proceedings in neighboring jurisdictions may afford the Commission some insights into technical and other interconnection issues, electric system design, configuration and operational processes differ from utility to utility and from state to state. Therefore, the results of work on these issues in other states may not be directly applicable to Delaware. A Delaware-specific working group would focus on Delaware State-jurisdictional electric systems and therefore avoid this problem.

Question F

Would it be more efficient to have DP&L and DEC initially submit re-worked documents and use those as "straw-men" for continued consideration of the PURPA standard? Similarly, should the Commission strive for a single interconnection standard and process or do differences exist between the two jurisdictional utilities that call for different interconnection protocols?

Answer

As discussed above, if the Commission decides to revisit the interconnection protocols previously established by Delmarva and DEC, then the Company suggests that the most efficient Process would be the Commission's establishment of a working of technical experts from

Delmarva, DEC, Commission Staff and other interested parties to explore the technical and procedural issues pertaining to interconnection standards for Delaware electric distribution systems. This group would formulate recommendations to the Commission based upon the determination of the soundest approach to the technical and procedural issues concerning interconnection standards for Delaware electric distribution companies.

Respectfully submitted,

/s/ Anthony Wilson

Anthony C. Wilson
Associate General Counsel

On behalf of:
Delmarva Power & Light Co.
800 King Street, 4th Fl
Wilmington, DE 19801

CERTIFICATE OF SERVICE

I hereby certify that on this 25th day of August, 2006, copies of the foregoing pleading were served via first class mail and email on the following:

William O'Brien Hearing Examiner Delaware Public Service Commission 861 Silver Lake Boulevard, Suite 100 Dover, DE 19904	Ruth Ann Price Delaware Public Service Commission 861 Silver Lake Boulevard, Suite 100 Dover, DE 19904
Janis Dillard Delaware Public Service Commission 861 Silver Lake Boulevard, Suite 100 Dover, DE 19904	Mark A. Nielson Delaware Electric Cooperative 14198 Sussex Highway, Box 600 Greenwood, DE 19960
G. Arthur Padmore Public Advocate 820 North French Street Wilmington, DE 19801	James McC. Geddes, Esquire Ashby & Geddes 222 Delaware Avenue P.O. Box 1150 Wilmington, DE 19899
Brian Gallagher Delaware Solar 2100 Lea Highway, Suite 221 Arlington, VA 22201	

Counsel for Delmarva Power & Light Company

/s/ Anthony Wilson

Anthony C. Wilson

A P P E N D I X "B"

Comments OF
Mid-Atlantic Solar Energy
Industries Association and the
Delaware Million Solar Roofs
Coalition
(collectively "the Coalition")

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF DELAWARE**

IN THE MATTER OF THE COMMISSION'S)
CONSIDERATION OF THE)
"INTERCONNECTION" STANDARD)
SET FORTH IN 16 USC § 2621 (d) (15)) **PSC REGULATION DOCKET NO. 58**
RELATED TO THE INTERCONNECTION)
OF CUSTOMER-OWNED GENERATION)
TO UTILITY DISTRIBUTION FACILITIES)
(OPENED JULY 11, 2006))

**COMMENTS OF THE
MID-ATLANTIC SOLAR ENERGY INDUSTRIES ASSOCIATION
AND DELAWARE MILLION SOLAR ROOFS COALITION**

The Mid-Atlantic Solar Energy Industries Association ("Mid-Atlantic SEIA") and the Delaware Million Solar Roofs Coalition ("DE MSR") hereby offer their comments in response to Order No. 6983 issued by the Delaware Public Service Commission ("PSC or Commission") on July 11, 2006. PSC Order No. 6983 invited interested persons and entities to file comments in response to the questions posed within the body of the Order.

The joint comments of Mid-Atlantic SEIA and DE MSR are set forth below.

Question A

Should the Commission revisit and reexamine the "interconnection protocols" previously published by DP&L and DEC ... ? If you believe that reexamination is not necessary, please explain why such protocols remain appropriate? Also please explain whether such earlier protocols would constitute "prior State action" under 16 U.S.C. §2622(f)(1) or whether the Commission would need to take further action to utilize such provisions' "safe harbor" from further consideration?

Answer A

Mid-Atlantic SEIA and DE MSR do not believe there is a pressing need, at this time, to reexamine Delmarva Power & Light Company's ("DP&L or Delmarva") interconnection

standards (entitled "Technical Considerations Covering Parallel Operation of Customer Owned Generation of Less than One (1) Megawatt"). While Mid-Atlantic SEIA and DE MSR believe there are several aspects of Delmarva's interconnection standards that could be improved, we are unaware of any significant issues that have arisen from the interconnection of solar or other types of customer-owned generation to DP&L's system. In general, solar companies and installers in Delaware have been satisfied with Delmarva's current interconnection standards and procedures.

As noted in PSC Order No. 6983, Delmarva's interconnection standards were promulgated in 2000, before the approval of IEEE 1547. However, Delmarva's interconnection standards were developed with the expectation of a future IEEE standard that would cover various types of distributed generation (not just photovoltaic systems as was the case for IEEE 929). In practice, DP&L's interconnection standards have met the EPAct 2005 standard since 2003, when IEEE 1547 was approved.

Delmarva's interconnection standards were developed as part of PSC Docket No. 99-163 due to the net energy metering provisions also developed as part of that docket.¹ The interconnection standards were developed from a series of working group meetings in 1999 to 2000 with representatives of DP&L, Commission Staff, the Division of the Public Advocate, and other interested parties. The resulting interconnection standards document was a consensus document and was approved by the Commission as part of a settlement. At the time of

¹While Mid-Atlantic SEIA and DE MSR do not see a pressing need to reexamine Delmarva's interconnection standards, we do see a need to reexamine the 25 kW limit for net metering. We believe Delmarva's very modest net metering limit is hampering the development of a robust solar energy market in Delaware and that the net metering limit should be significantly raised to encourage broader applications, particularly in the agricultural and commercial sectors.

Commission approval, only a handful of state public service commissions had approved interconnection standards for customer-based generation.

Mid-Atlantic SEIA and DE MSR believe that the development of Delmarva's interconnection standards, the Commission approval of those standards, and six years of distributed generation interconnection without significant issues, constitutes "prior State action" under 16 U.S.C. §2622(f)(1).

Question B

Do the provisions of the "Electric Utility Retail Customer Supply Act of 2006" (75 Del. Laws ch. 242, April 6, 2006) provide any guidance on how the Commission should approach or resolve issues related to interconnection of customer-owned generation to DP&L's and DEC's distribution facilities?

Answer B

The Electric Utility Retail Customer Supply Act of 2006 ("Act") does not address interconnection and therefore does not offer specific "guidance" on how the Commission should approach interconnection issues.

However, the Act does require an integrated resource planning (IRP) process that investigates all potential opportunities for fuel diversity and specifically encourages DP&L to consider the economic and environmental value of renewable resources, including solar energy. Fair and equitable interconnection standards encourage the use of distributed generation which usually leads to greater fuel diversity on the electric system. A robust IRP process would look at the potential of distributed generation to meet the goals of the IRP and what barriers exist to gaining the full potential of distributed generation.

Question C

If the Commission should revisit interconnection protocols and processes, should the Commission utilize any of the existing models as a "straw" proposal for Delaware interconnection standards?

- i. If so, please describe which model should be chosen and why it is superior to other models for use in Delaware?*
- ii. In particular, please evaluate the MADRI model against the processes, standards, and agreements proposed by PJM (including its streamlined procedure for 2 MW or less resources).*

Answer C

As stated above, Mid-Atlantic SEIA and DE MSR do not believe Delmarva's interconnection standards require reexamination at this time. If, however, the Commission decides to revisit interconnection standards, our preferred model standards are as follows, in order

1. New Jersey's interconnection standards.²
2. Interstate Renewable Energy Council's ("IREC") model rules.³
3. Recently promulgated rules for interconnection in Colorado.⁴

Any of the above would be preferable to the MADRI model and each uses the IEEE 1547 standard as a fundamental component of the interconnection standards. In particular, using New Jersey's interconnection standards as a model for Delmarva's interconnection standards makes a lot of sense due to the following:

- Pepco Holdings, Inc.'s (PHI) familiarity with New Jersey's interconnection standards because Atlantic City Electric, like DP&L, is part of PHI.
- New Jersey's interconnection standards are proven and tested having been used in more than 1,000 small generator system installations.
- Members of Mid-Atlantic SEIA and other solar companies and installers in the Mid-Atlantic region are very familiar with New Jersey's interconnection standards.

²N.J.A.C. 14:4-9.2 and 14:4-9.5 through 14:4-9.11.

³See <http://www.irecusa.org/connect/modelrules.pdf>.

⁴See Decision No. C05-1461 Colorado Public Utilities Commission, Docket No. 05r-112c, In The Matter Of The Proposed Rules Implementing Renewable Energy Standards 4 CCR 723-3, Rule 3665.

In addition, we believe using New Jersey's interconnection standards as a model would lead to standards in Delaware that are similar to Delmarva's current standards and would lead to a seamless transition for both DP&L and small generator installers.

Mid-Atlantic SEIA and DE MSR believe that using MADRI or PJM's interconnection standards as "straw proposals" would be inappropriate and likely detrimental to the development of solar (and other types of small generators) as an economical resource in Delaware. Mid-Atlantic SEIA is a regional affiliate of the Solar Energy Industries Association ("SEIA"), which a national trade association of solar energy manufacturers, dealers, distributors, contractors, installers, architects, consultants, and marketers. Mid-Atlantic SEIA and SEIA were part of the Small Generator Coalition that participated in the MADRI discussions. The general concerns of small generators regarding the MADRI process are stated in the opening comment in the MADRI interconnection draft. Therein, the Pennsylvania Small Generator Coalition and Solar Energy Industries Association state:

The intent of the MADRI Interconnection Working Group was to formulate regulations that could be used as a model by state utility commissions looking to establish distributed generation programs. We had hoped to formulate regulations that would build on the experiences of those states that have operating DG programs and provide a set of regulations that would be straightforward and "user-friendly." We understand many of the provisions in the MADRI procedures and standard form contracts are drawn from the FERC final rules. However, using the federal rules as a guide makes it more difficult and cumbersome to develop procedures and language suitable for state interconnection procedures and we believe the final draft reflects serious weakness because it is trying to apply federal concepts at the state level.

We are concerned that the MADRI proposed regulation, in general, will not be easily understood by the regulated public, is overly prescriptive and actually

complicates rather than simplifies the application and review process for small systems, particularly residential systems.⁵

While we believe there are a number of other problems with the MADRI model, we will highlight one issue with MADRI that we think should be of concern to the Commission — its fundamental reliance on the PJM interconnection standards. Adoption of the MADRI model could lead to the Commission foregoing its jurisdiction over those generators that would ordinarily be within its purview.

PJM interconnection rules are subject solely to the jurisdiction of the Federal Energy Regulatory Commission ("FERC"). However, based on MADRI rule 3.5.1 "[t]echnical standard to be used in evaluating all Interconnection Requests under Level 1, Level 2, Level 3 and Level 3A reviews, unless otherwise provided for in these procedures, is PJM's Small Generator Technical Requirements and Standards as those standards may be modified by PJM from time to time." This language means the Commission's standards would be based on technical standards at PJM and it would incorporate by reference the changes in those standards submitted to and approved by FERC from "time to time". The Commission would have no input, oversight, or review over those technical standards.

While this provision of the MADRI model could be crafted to remove this jurisdictional issue (as well as the technical basis for the model), we believe an easier solution would be to use New Jersey's proven and tested interconnection standards as a model. The inadequacy of the MADRI model can also be seen in a parallel proceeding, Case No. 9060, in Maryland in which no

⁵See MADRI Model Small Generator Interconnection Procedures, <http://www.energetics.com/madri/interconnection.html>, p. 6.

party in the case, including Maryland Commission Staff, fully supported the MADRI model. To our knowledge, to date, no state commission has adopted the MADRI interconnection standard.

Question D

Should the Commission adopt a certain MW ceiling to apply to an interconnection standard to State-jurisdictional distribution facilities: If so, what should be that limit, and should the limit differ for each particular utility?

Answer D

The 1 MW or less ceiling for Delmarva's current interconnection standards is one of the aspects of the standards that Mid-Atlantic SEIA and DE MSR believe could be improved. This ceiling could probably be raised to 2 MW without alteration to other aspects of the standards. However, we believe that any changes to the current standards could best be accomplished a workshop/meeting comprised of DP&L's and other parties' technical experts to fully and frankly explore issues related to Delmarva's system. See our response to Question E for more on our thoughts any possible proceeding and issues related to state jurisdiction.

Question E

If revisiting is in order, what process would be the most efficient way for the Commission to proceed?

In particular, should the Commission defer its proceedings for a time to await actions by neighboring jurisdictions considering similar interconnection protocol standards? Can this be structured consistent with the PURPA procedural requirements?

If an immediate process is appropriate, how should that be structured consistent with the PURPA procedural requirements?

Answer E

If the Commission decides to reexamine Delmarva's interconnection standards, Mid-Atlantic SEIA and DE MSR suggest that the most efficient way to proceed would be to start with

several informal meetings for interested parties to discuss technical issues. This is how Delmarva's current standards were developed in 1999 to 2000.

While we believe that a series of informal discussions is the best way to resolve technical issues and we anticipate that these technical issues could be resolved relatively quickly in Delaware, we have concerns that establishment of a working group could overwhelm small generators' limited resources to participate if the proceeding became protracted. A limitation on the total number of workshop or other meetings would allow those parties with limited resources to participate. In addition, discussions regarding state-jurisdictional issues should be scheduled as part of the informal meetings or working group.

Mid-Atlantic SEIA and DE MSR do not see any direct value of awaiting the results of proceedings in neighboring jurisdictions.

Question F

Would it be more efficient to have DP&L and DEC initially submit re-worked documents and use those as "straw-men" for continued consideration of the PURPA standard? Similarly, should the Commission strive for a single interconnection standard and process or do differences exist between the two jurisdictional utilities that call for different interconnection protocols?

Answer F

Mid-Atlantic SEIA and DE MSR believe that the process described in response to Question E would be the most efficient way to begin any reexamination of the Delmarva's interconnection standards. While we believe that interconnection standards very similar to New Jersey would be appropriate and could serve a "straw" proposal, we do not think "straw-men" are necessary to begin technical discussions.

The recent vote by the members of the Delaware Electric Cooperative, to no longer be subject to Commission regulation, makes the second part of Question F no longer relevant.

Mid-Atlantic SEIA and DE MSR appreciate the opportunity to comment in this proceeding.

Respectfully Submitted,



Brian Gallagher
Delaware Million Solar Roofs Coordinator

Susan P. LeGros



Executive Director, Mid-Atlantic Solar Energy Industries Association

cc: Service List

Service List
PSC Regulation Docket No. 58

<p><u>Hearing Examiner</u></p> <p>Ruth Ann Price Delaware Public Service Commission 861 Silver Lake Blvd., Suite 100 Dover, DE 19904 Phone: 302-739-3232 Fax: 302-739-5258 E-Mail: ruth.price@state.de.us</p>	<p><u>Division of Public Advocate</u></p> <p>G. Arthur Padmore, Public Advocate Division of the Public Advocate 820 N. French Street, 4th Floor Wilmington, DE 19801 Tele: 302-577-5077 Fax: 302-577-3297 E-mail: Arthur.padmore@state.de.us</p>
<p><u>PSC Staff</u></p> <p>Janis Dillard, Case Manager Delaware Public Service Commission 861 Silver lake Blvd., Suite 100 Dover, DE 19904 Tele: 302- 739-2107 Fax: 302-739-4849 E-mail: Janis.Dillard@state.de.us</p>	<p><u>Delmarva Power & Light Company</u></p> <p>Anthony C. Wilson, Assoc. General Counsel 800 King Street, P. O. Box 231 Wilmington, DE 19899 Phone: 302-429-3016 Fax: 302-429-3801 <u>E-Mail: ACWilson@pepcoholdings.com</u></p> <p>William R. Moore, Jr. Manager, PHI Regulatory Services Group Delmarva Power - New Castle Regional Office 401 Eagle Run Road P.O. Box 9239 Newark, DE 19702 Phone: 302-454-4542 Fax: 302-454-4440 E-Mail: bill.moore@pepcoholdings.com <u>Plus: gary.cohen@pepcoholdings.com;</u> <u>joseph.ianocha@pepcoholdings.com</u> <u>mebrowning@penco.com;</u> <u>heather.hall@pepcoholdings.com;</u> <u>len.beck@pepcoholdings.com</u></p>
<p><u>Mid-Atlantic Solar Energy Industries Association and Delaware Million Solar Roofs Coalition</u></p> <p>Susan P. LeGros Executive Director 600 College Road East Princeton, NJ 08540 Tele: 609-513-7295 Fax: 610-988-0862 Email: mscia@stevenslee.com</p> <p>Brian P. Gallagher Delaware Million Solar Roofs Coalition 2100 Lee Highway, #221 Arlington, VA 22201 Tele: 877-413-1182 Fax: 703-524-1249 Email: brian@delawaresolar.org</p>	

EXHIBIT "B"

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF DELAWARE

RECEIVED
07 JUL 18 AM 10:19
DELAWARE P.S.C.

IN THE MATTER OF THE COMMISSION'S)
CONSIDERATION OF THE "INTERCONNECTION")
STANDARD SET FORTH IN 16 U.S.C.)
§ 2621(D)(15) RELATED TO) PSC REG. DOCKET NO. 58
INTERCONNECTION OF CUSTOMER-OWNED)
GENERATION TO UTILITY DISTRIBUTION)
FACILITIES (OPENED JULY 11, 2006).)

**MOTION BY THE STAFF OF THE DELAWARE PUBLIC SERVICE COMMISSION
REQUESTING HEARING EXAMINER PRICE TO DIRECT DELMARVA POWER &
LIGHT COMPANY TO FILE A PROPOSED INTERCONNECTION STANDARD
PURSUANT TO RECENT ACTIONS IN OTHER NEARBY JURISDICTIONS**

The Delaware Public Service Commission Staff ("Staff"), by and through Rate Counsel, hereby requests that Hearing Examiner Price direct Delmarva Power & Light Company ("Delmarva") to file a proposed interconnection standard pursuant to recent actions in other nearby jurisdictions, and in support thereof states:

BACKGROUND

1. The Commission opened this Regulation Docket to consider whether the Public Utility Regulatory Policy Act ("PURPA") Interconnection Standards enacted by the United States Energy Policy Act of 2005 ("the Act") should apply to Delaware regulated electric utilities.¹ In Order No. 6983, the Commission required public notice of the proceeding and set forth the following six specific questions on which the Commission solicited public comment.

- a. Should the Commission revisit and re-examine the "interconnection" protocols previously published by Delmarva and Delaware Energy Cooperative ("DEC")?
- b. Do the provisions of the "Electric Utility Retail Customer Supply Act of 2006" provide any guidance on how the Commission should approach or resolve issues related to the interconnection of customer-owned generation?

¹ The PURPA interconnection standard to be considered by the state commissions is codified at 16 U.S.C. § 2621(d) (15) as added by the Energy Policy Act of 2005 § 1254 (a).

- c. If the Commission should revisit interconnection protocols and processes, should the Commission utilize any of the existing models as a “straw” proposal?
- d. Should the Commission adopt a certain MegaWatt (MW) ceiling to apply to an interconnection standard and if so what should that limit be for each utility?
- e. If revisiting interconnection protocols is appropriate, what process would be the most efficient way for the Commission to proceed?
- f. Would it be more efficient to have Delmarva and DEC to initially submit re-worked documents and use those as “straw-men” for continued consideration of the PURPA standard?

2. This docket was publicly noticed in July 2006 and Hearing Examiner Price accepted petitions to intervene in the docket through August 29, 2006. Parties to the proceeding included Delmarva, DEC, Mid-Atlantic Solar Energy Industries Association, the Delaware Million Solar Roofs Coalition (collectively “the Coalition”), the Department of the Public Advocate (“DPA”) and Staff.

3. Comments were received from the various parties and summarized in Hearing Examiner Price’s letter of September 1, 2006 to the Commission. In her review of the comments, Hearing Examiner Price found no reason to undertake a re-examination of the Delaware interconnection standards at this time. She further concluded that none of the parties provided any legal opinion concluding that the Commission’s previously enacted standards constituted “prior state action” under 16 U.S.C. § 2622(f)(1). However, the Coalition maintained that Delaware’s standards fulfilled the Act’s requirement because the current interconnection protocols have not produced significant issues since their implementation six years ago. If the Commission decided to initiate an examination of the interconnection standards, Hearing Examiner Price observed that neither the PJM nor Mid-Atlantic Distributed Resources Initiative (“MADRI”) standards would be appropriate as a “straw proposal” in light of concerns regarding potential technical risks in applying federal concepts on the state level. She further observed that

the New Jersey standards endorsed by the Coalition may provide a more efficient starting point. She further noted that any regulations promulgated by the Commission as a result of this endeavor should be clear, concise, and technically operable for both distributors and generators.²

ARGUMENT

I. WITH NO PREVIOUS INTERCONNECTION STANDARD, COMPLIANCE WITH THE ACT REQUIRES THE COMMISSION TO CONSIDER AN INTERCONNECTION STANDARD REGULATION.

4. Staff has found no formal adoption of any interconnection standards by the Delaware Commission. Staff has reviewed Delmarva's interconnection protocols that refer to the potential need for such standard in Order No. 5454,³ which deferred the development of such standards. In that same order, the Commission noted, "[a]lso attached to the proposed settlement, *for information purposes only*, is a technical manual on the interconnection standards applicable to Net Energy Metering customers and for other customers with on site generation of less than 1 Megawatt capacity."⁴ Following thorough research, Staff determined that no filing of interconnection standards was made other than for informative purposes subsequent to the restructuring case.

5. In addition, regulations promulgated in Commission Docket No. 50 required regulated electric utilities to file interconnection standards with the Commission:

3.7 Each EDC shall ensure that distribution system generation interconnection requirements are consistent with the I.E.E.E. 1547 series, "Standard for Interconnecting Distributed Resources with Electric Power Systems, as currently approved and as may be revised.

² See Hearing Examiner Ruth Ann Price Letter to the Chair and Members of the Commission (September 1, 2006), attached hereto as Ex "A."

³ This order was enacted by the Commission in Docket 99-063 regarding Delmarva's Retail Competition Restructuring Plan.

⁴ See Order No. 5454 (June 20, 2000) at 5-6. (emphasis added).

3.8 Each EDC shall file and maintain with the Commission a copy of the technical requirements for distribution system generation interconnection.⁵

II. IN LIGHT OF THE CURRENT STATUS OF INTERCONNECTION STANDARD DISCUSSIONS IN OTHER JURISDICTIONS, IT WOULD BE MOST EFFICIENT FOR DELMARVA TO FILE A DELAWARE INTERCONNECTION STANDARD THAT IS COMPATIBLE WITH THOSE IMPLEMENTED IN MARYLAND, NEW JERSEY, AND THE DISTRICT OF COLUMBIA.

6. Following Hearing Examiners Price's September 1, 2006 letter, Delmarva entered into interconnection standard discussions with Maryland Commission Staff. These discussions were completed in late March 2007. The parties to the discussions, including Pepco Holdings, Inc., unanimously agreed that the Maryland Commission should adopt the statewide interconnection procedures and standard interconnection agreements as developed by the working group.

7. As highlighted by Hearing Examiner Price in her September 1, 2006 letter, the Coalition recommended the New Jersey interconnection standard as the most appropriate "straw proposal" if the Commission were to consider Delaware interconnection standards.

8. The evolution of many of the working groups on interconnection standards in which Staff has either monitored progress or participated, including PJM, MADRI, and the Federal Energy Regulatory Commission, has revealed that consistency across a broad region is most beneficial to generation developers. Developers have cited inconsistent or overly complex interconnection requirements as one of the barriers to distributed generation. In light of this obstacle, adoption of reasonable standards across regional areas will provide enhanced opportunity for generation developers.

9. Finally, the ongoing dockets regarding Delaware's energy future require the Commission to consider interconnection standards. In light of Delaware's emphasis on

⁵ See Order No. 6925 (June 20, 2006).

renewable energy and the recent amendment of the Renewable Portfolio Standards to require additional generation, it is incumbent on the Commission to establish an interconnection protocol that provides for both the safety and reliability of the system, and enhanced opportunity for generation developers -- particularly solar, wind and other renewable energy sources.

WHEREFORE, for the reasons set forth herein, Staff respectfully requests that the Hearing Examiner:

- (1) Direct Delmarva to file an interconnection standard based on agreements reached in other nearby jurisdictions;
- (2) Provide opportunity for the various parties and public to provide comment on Delmarva's filing; and
- (3) If consensus is reached among the parties, file such proposed interconnection standard with the Commission for their consideration as a standard.

Respectfully submitted,

ASHBY & GEDDES



James McC. Geddes
Brooke E. Leach
500 Delaware Avenue, 8th Floor
P.O. Box 1150
Wilmington, DE 19899
(302) 654-1888 (telephone)
(302) 654-2067 (facsimile)

Dated: July 17, 2007
182200.1