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VIA eFILING

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
P.O. Box 3265
Harrisburg, PA 17105-3265

**Re: Proposed Policy Statement on Combined Heat and Power
Docket No. M-2016-2530484**

Dear Secretary Chiavetta:

Enclosed please find the **Comments of PECO Energy Company to the Proposed Policy Statement** in the above-captioned matter.

If you have any questions regarding this filing, please do not hesitate to contact me at 215-841-5974.

Very truly yours,



W. Craig Williams

Enclosures

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

PROPOSED POLICY STATEMENT :
ON COMBINED HEAT AND POWER : **DOCKET NO. M-2016-2530484**

**COMMENTS OF PECO ENERGY COMPANY
TO THE PROPOSED POLICY STATEMENT**

PECO Energy Company (“PECO” or the “Company”) submits these Comments in response to the Pennsylvania Public Utility Commission’s (“PUC” or the “Commission”) Proposed Policy Statement on Combined Heat and Power, entered in the above-captioned docket on March 9, 2016.¹ PECO appreciates the opportunity to comment on this important issue and supports the Commission’s intention to encourage and promote the development of viable Combined Heat and Power (“CHP”) installations in Pennsylvania. PECO further acknowledges that electric distribution companies (EDCs) have an important role to play in such development, by collecting and providing information and data for the Commission, serving as a communication conduit for customers, and continuing to facilitate CHP expansion in PECO’s service territory.

I. OVERVIEW OF POSITION

PECO shares the Commission’s commitment to expanding CHP development in the Commonwealth. In fact, prior to the implementation of the Act 129 energy efficiency programs, PECO facilitated the installation of three (3) CHP systems for customers at their facilities. These three existing CHP systems account for approximately 116 MW of installed capacity. Further, the PECO Smart Ideas portfolio of programs under Act 129 continues to support the growth of CHP in

¹ *Proposed Policy Statement on Combined Heat and Power*, Docket No. M-2016-2530484, (entered March 9, 2016); published April 16, 2016) (“Proposed Policy Statement”).

the PECO service territory by providing incentives for qualified CHP installations. PECO currently promotes CHP projects through its PECO Smart Ideas website and by direct outreach to customers and project developers. In Phase I of PECO's Act 129 program (2009 through mid-2013), PECO provided incentives to complete eight (8) CHP installations through its PECO Smart Equipment Incentives program, resulting in approximately 12 MW of installed capacity and \$4.6M in Act 129 incentives. In Phase II (mid-2013 through mid-2016), PECO developed its PECO Smart On-Site program with the goal of increasing the number of CHP installations. PECO designed the program to provide tiered incentives for installed capacity as well as performance incentives for the electric energy displaced by CHP generation. The maximum incentive included up to 50% of the total project cost, capped at \$1M. To date, five (5) CHP projects have been completed under this program, delivering approximately 9 MW of installed capacity and \$5.6M in incentives. Four (4) CHP projects are nearing completion in Phase II and are expected to deliver 3 MW of installed capacity as well as \$1.1M in incentives.

For Phase III (starting June 1, 2016), PECO is again offering a CHP incentive program, with enhancements to provide design assistance for project developers, incentive payouts at key construction milestones, and an increase to the incentive cap. PECO has identified a pipeline of eight (8) customers contemplating CHP installations, with completion expected in Phase III if pursued, which could add a total of 14 MW of installed capacity and \$2.9M in incentives.

PECO has clearly supported the growth of CHP systems in its territory and agrees with the Commission that there are good reasons for doing so. As the Commission indicated, among a list of notable benefits of CHP are possible improved energy efficiency through increased use of thermal energy; possible reduced energy costs through reductions in peak demand, as well as the associated mitigation of price volatility; possible reduced emissions

resulting from less overall energy consumption; and possible improved reliability for a grid that is increasingly challenged by natural and manmade disasters.² It is for these, and other reasons noted by the Commission, that PECO agrees that there may be benefits to customers with CHP development and EDCs play an important role in that development.

Further, PECO appreciates the concern expressed by the Commission about possible barriers to CHP expansion, including those indicated by the PUC: difficulty in justifying capital investment, particularly due to the long term payback requirements of CHP; costs of purchasing backup power during planned plant maintenance and unplanned downtime; and interconnection procedures and fees.³ PECO agrees that, to the extent such barriers exist, EDCs have a role in minimizing or mitigating those barriers. However, care should be taken to identify genuine barriers to CHP development. For example, EDCs may review their existing interconnection procedures and fees to facilitate the introduction of CHP, consistent with AEPS and interconnection rules, but there are legitimate efforts and costs undertaken by the EDC to facilitate interconnection, for which the EDC must be compensated without shifting those costs to other classes or customers. As further explained below in PECO's response to the proposed regulations, CHP poses certain interconnection issues that often require extensive distribution-system engineering solutions, depending on how the customer chooses to deploy CHP. Provisions aimed at minimizing interconnection costs should account for the EDC's out-of-pocket costs in developing distribution engineering solutions for CHP interconnection.

Similarly, PECO's Capacity Reservation Rider ("CRR") Pilot, proposed by PECO and

² Proposed Policy Statement, at 3.

³ Proposed Policy Statement, at 3-4.

approved by the Commission in PECO's 2015 electric base rate case,⁴ prices capacity reserved for CHP and other customer-owned generation connected to the distribution system, so those costs are not subsidized by other customers. The CRR Pilot is not a barrier to CHP development, but is instead a tool to arrive at a correct charge for the reservation of capacity for customer-owned generation. In fact, under the CRR Pilot, affected customers have their CRR rates individually negotiated and tailored based on verified nameplate generation capacity and historical and projected operating experience. Those customers are active participants in determining the underlying data and outcomes of their tailored CRR rates. The CRR, therefore, is a fact of self-generation and does not properly belong in the conversation about barriers to CHP development in the context of PECO's service territory.

Finally, acknowledging that there may be economic and capital barriers, PECO suggests that EDCs may be in a position to develop and implement innovative CHP applications to support the growth of CHP in the Commonwealth.

II. PARTICULARIZED REGULATION COMMENTS

A. § 69.3201. Statement of Scope and Purpose.

PECO reasserts the general comments above as to the Statement of Scope and Purpose and has no further comments on this section.

⁴ *Pennsylvania Public Utility Commission v. PECO Energy Co – Electric Div.*, Docket No. R-2015-2468981 (order entered December 17, 2015)

B. § 69.3202. Biennial Reports.

All jurisdictional EDCs and natural gas distribution companies (NGDCs) shall file biennially on _____ commencing in 200__ (*Editors' note: The blanks refers to four months after issuance of the policy statement*) a report that documents their strategies, programs and other initiatives in support of CHP systems.

PECO notes that there appears to be a typographical error in the date referenced in this section. The date should be listed as "201_" or "20_" rather than "200_".

The report shall include:

a) Identification and description of all CHP systems interconnected with the EDC or NGDC, including:

1) The location, the nameplate capacity (MW) and basic operation of each system.

PECO has the location and nameplate capacities of CHP installations for customers that have completed an interconnection application as required by the Alternative Energy Portfolio Standards ("AEPS") of Pa. Code Title 52, Chapter 75 and/or applied for an Act 129 rebate under PECO's Smart Ideas programs. PECO's information for other customer CHP installations is limited.

PECO questions what is meant by "basic operation of each system." If this is meant to be the type of system and the fuel source, PECO likely will have that information to provide. However, actual operating times and output of the system is "behind the meter" from PECO's perspective, and PECO does not have access to this information. CHP customers would have to be willing to share information on their CHP system operations for reporting purposes. PECO suggests that the reporting requirements be modified to reflect the availability of data by adding "if known" or "if available," where applicable.

PECO suggests that CHP customers might treat this information as competitively sensitive or proprietary, and EDCs may, therefore, have difficulty obtaining such information.

2) **Projected cost savings for CHP customers, if known.**

PECO does not have this customer data for any CHP installations. To determine cost savings for CHP customers, pre- and post-installation information such as electric, natural gas and other fuel consumption, fuel supply pricing, equipment and installation costs, maintenance costs, stand-by costs, etc., would be required. EDCs are typically not privy to this data, and customers would need to provide this data voluntarily to the Commission. Customers are also in the best position to calculate their cost savings based on information in their possession.

In addition, PECO asks the Commission to specify how far in the future the customer projections should be calculated.

3) **Any system reliability benefits. The description shall include specific benefits to critical customers, including but not limited to federal, state, and local government facilities, educational institutions, hospitals, nursing homes, and retail and wholesale suppliers of food, wastewater facilities, and water distributors.**

PECO points out that deployment of a CHP system in and of itself does not necessarily benefit system reliability. The majority of CHP systems PECO has seen to date are in hospitals, retirement homes or apartments. In most cases, these CHP systems do not automatically provide reliability benefits, because they do not have the capacity necessary to support the entire electrical load of the facility that they serve. Adding to this, customers occasionally install CHP systems in a manner that has the potential to negatively impact reliability.

Many of PECO's critical customers are supplied by two separate sources of electric service (known as "dual-service") with the capability for one service to automatically support the entire facility when the other is interrupted. Since each service supplies approximately half of the facility's load, this setup allows the customer to avoid a complete outage if one service is interrupted.

Some customers, in order to maximize the benefits of CHP output and avoid exporting excess generation to the grid (for instance, if their Electric Generation Supplier (“EGS”) does not offer compensation), have converted their dual-service setup to a “regular and reserve” setup. In so doing, these customers take all load from their regular service and connect their CHP system to the regular service. The implication is that an interruption in regular service results in a complete outage for that customer until the customer’s load can be transferred to the reserve service.

PECO believes that CHP deployment could have reliability benefits for a facility’s critical load, but also believes that achieving such benefits may require significant reconfiguration of customer-owned, internal wiring within the facility.

4) Any transmission or distribution related savings or avoided costs as the result of a CHP facility. NGDCs shall also report on any revenue impacts.

There are no transmission and distribution (T&D) related savings or avoided costs to PECO from CHP facilities, since PECO must maintain the ability to serve a customer’s total peak load at any time. This requires PECO to hold line capacity in reserve that could be used to serve other loads, which results in no T&D cost savings to PECO, since PECO’s costs associated with reserving capacity are no different than if the customer were using the line every day. PECO is currently implementing the CRR Pilot to recover associated costs for holding that line capacity and will be providing related data to the Commission as part of that effort.

Given the above, PECO views the potential cost avoidance for CHP customers as only applicable to the generation portion of the customer’s electric bill. This assumes that the billed generation costs would exceed the customer’s own fuel and operating costs associated with hot water/steam generation of the CHP facility.

As an EDC, PECO does not have visibility of revenue impacts on customers with installed CHP systems and would need CHP customer cooperation to provide such information. As stated previously in regard to operational data, CHP customers might treat information on revenue impacts as competitively sensitive or proprietary, and EDCs may have difficulty obtaining this information deemed from CHP customers.

From an NGDC perspective, if and when PECO is made aware of a new CHP deployment, PECO will identify impacts relative to its own gas sales for that customer to the extent possible.⁵

- 5) All CHP systems are to be included in the initial report. In subsequent reports, the companies need only identify new CHP systems interconnected (or disconnected) during the prior twenty-four month period.**

PECO has no mechanism for tracking a disconnected CHP system. CHP customers would have to voluntarily provide this information. PECO suggests that the reporting requirements be modified to address this issue of data availability by adding the words “if known” or “if available.”

- b) A description of all future CHP projects that are scheduled to come on line or are under discussion.**

PECO will provide this information to the extent customers are willing to make such information available. PECO suggests that the reporting requirements be modified to address this issue of data availability by adding the words “if known” or “if available.”

⁵ PECO may have difficulties isolating the impact of a CHP deployment on natural gas sales for facilities that install CHP concurrent with the installation of other non-CHP natural gas loads that are not separately metered. In addition, the use of natural gas can also be dependent on other factors, including but not limited to changes in existing gas load and weather sensitivity of the load.

- c) **A discussion of challenges that occurred during the time period covered by the report and any recommendations that might improve upon or hasten the deployment of CHP systems.**

PECO will report any challenges, provided such challenges are known to the Company.

- d) **Additionally each EDC shall report:**

- 1) **Its communications strategy relevant to CHP systems.**

PECO can provide this information. PECO currently promotes incentives for the installation of CHP projects through its Smart Ideas website and direct outreach to customers and project developers. For Phase III, PECO will be employing methods similar to those used in Phase II to promote CHP system installation.

- 2) **Its interconnection terms and conditions, including but not limited to:**
(i) **CHP specific interconnection fees.**

PECO requires all non-wholesale customers who wish to interconnect with the PECO distribution system, including customers deploying CHP, to complete and submit the required application in accordance with interconnection standards set forth at 52 Pa. Code §§ 75.21 – 75.51 (AEPS) and the interconnection fees set forth at 52 Pa. Code §§ 69.2101-2104. (PECO does not require wholesale customers interconnecting directly with PJM to submit the AEPS application and fee.) PECO can provide information about fees, but notes that the fees are nominal in comparison to project costs.

- (ii) **Streamlined procedures, including well-defined application processing timelines and simple decision trees which are based on the characteristics of the project and for which interconnection procedures apply.**

PECO believes that the current AEPS interconnection process contains well-defined processing timelines and provides adequate instruction on how to interconnect distributed

generation, like CHP, with PECO.⁶ However, PECO also believes that a review of the interconnection application form and associated instructions may be useful.

(iii) Standardized technical requirements.

The technical standards used to evaluate the proposed installation will be in accordance with IEEE 1547 and UL 1741, as well as those referenced in the AEPS regulations. In addition, for PECO installations, PECO applies the technical standards required per its Interconnection Requirements for Parallel Operation of Generation Greater Than 50 kW Connected to the PECO Distribution System, applicable to interconnecting generators greater than 50kW.

(iv) Standardized, simplified application forms and contracts.

PECO uses standardized forms and agreements in accordance with the AEPS regulations, which are available on PECO's website.

(v) A simplified, defined process to address disputes.

Disputes between PECO and customers interconnecting distributed generation are infrequent. PECO effectively resolves most disagreements informally with interconnecting customers and utilizes the AEPS dispute resolution process when appropriate. PECO prefers this method of dispute resolution, rather than creating another forum. PECO sees no need for this item in the report.

⁶ *Policy Statements and Guidelines on Fixed Utilities Interconnection Application Fees*, (entered June 26, 2008); and *Implementation of the Alternative Energy Portfolio Standards Act of 2004: Standard Interconnection Application Forms* (entered February 27, 2009), both at Docket No. M-00051865.

(vi) The ability for larger CHP systems and those not captured under net metering regulations to meet interconnection standards.

The AEPS interconnection application process is applicable to all non-wholesale distributed energy resources (“DER”), including “larger CHP systems,” regardless of its net metering participation status. PECO sees no need for this item in the report.

3) Actual interconnection fees collected from each CHP facility.

PECO sees this item no differently than the item labeled “CHP specific interconnection fees.” The interconnection fees are fixed charges, and PECO is concerned that the term “fees” may become confused with other operational, interconnection “costs,” which are typically dependent upon the technology and complexity of the associated deployment. For example, the AEPS fee schedule allows an hourly rate beyond the basic flat application fee for required engineering studies. Increased penetration of DER, including but not limited to CHP, as well as added complexity of deployment based upon the customer’s needs and the associated technology, can result in significantly different engineering requirements and attendant costs.

4) Actual electric generation delivered to all customers with CHP by the EDC on an hourly basis for the preceding twenty-four month period.

PECO expects the amount of data reported to be voluminous but will provide the data.

5) The information in subsection (a)(4) in chart form.

See response to (d)(4) above.

- 6) **Any standby rates applicable to CHP systems offered by tariff, including backup service, scheduled maintenance service and supplemental services. The discussion shall address the circumstances under which the rates apply and the level of each rate element.**

PECO recently eliminated its old standby rates and replaced them with the CRR Pilot as part of its 2015 electric distribution base rate case. The CRR Pilot applies to new distributed generation systems, including CHP. The purpose of the CRR Pilot is to ensure that distribution capacity that PECO must reserve when serving DER systems is paid for by DER customers and not subsidized by other rate classes. PECO has no objection to providing a description of the CRR Pilot in the report.

- 7) **As to each tariffed rate identified in the previous section, discuss:**
- (i) **The methodology used to design each customer, demand, and energy rate element.**
 - (ii) **Whether the rates reflect cost differentials for daily and seasonal fluctuations in usage.**
 - (iii) **Whether the rates encourage the scheduling of maintenance at non-peak times.**

See response to (d)(6) above.

- e) **Additionally each NGDC shall report:**
- 1) **How it encourages industrial, commercial, and institutional CHP projects.**

PECO currently promotes incentives for the installation of CHP projects through its PECO Smart Ideas website and direct outreach to customers and project developers, not through its natural gas programs. For Phase III, PECO will be employing similar methods to promote CHP system installation as were used in Phase II. PECO can include such information in the report.

2) **Any separate rate classes it has for customer accounts with CHP systems.**

PECO does not currently have a separate NGDC rate class specifically pertaining to CHP customers.

C. **§ 69.3203. Staff report.**

The Commission's Bureau of Technical Utility Services shall provide a biennial report to the Commission summarizing and analyzing the EDC and NGDC reports, as well as making any recommendations regarding the development of CHP in Pennsylvania.

PECO suggests that a due date be established for when the Commission's Bureau of Technical Utility Services would be required to issue this report, as this report may have bearing on the next biennial report due from the EDCs/NGDCs.

D. **§ 69.3204. Sunset.**

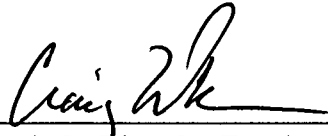
This policy statement shall automatically terminate on ____, 20 (Editor's note: The blanks refer to 8 years and one day after the first report is filed) unless extended by Commission Order.

PECO has no comments to this section.

I. CONCLUSION

PECO appreciates the opportunity the Commission has provided to offer these Comments on CHP advancement in the Commonwealth and looks forward to working with the Commission and interested stakeholders on this important initiative.

Respectfully submitted,



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