

COMMONWEALTH OF PENNSYLVANIA



OFFICE OF CONSUMER ADVOCATE

555 Walnut Street, 5th Floor, Forum Place
Harrisburg, Pennsylvania 17101-1923
(717) 783-5048
800-684-6560

FAX (717) 783-7152
consumer@paoca.org

May 20, 2015

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

RE: Petition of PPL Electric Utilities
Corporation for Approval of Its Smart Meter
Technology Procurement and Installation
Plan
Docket No. M-2014-2430781

Dear Secretary Chiavetta:

Enclosed please find the Office of Consumer Advocate's Exceptions, in the above-referenced proceeding.

Copies have been served upon all parties of record as shown on the attached Certificate of Service.

Respectfully Submitted,

A handwritten signature in cursive script that reads "Christy M. Appleby".

Christy M. Appleby
Assistant Consumer Advocate
PA Attorney I.D. # 85824

Enclosures

cc: Honorable Susan D. Colwell, ALJ
OSA ra-OSA@pa.gov
Certificate of Service

186854

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of PPL Electric Utilities Corporation :
For Approval of its Smart Meter Technology : Docket No. M-2014-2430781
Procurement and Installation Plan :

EXCEPTIONS
OF THE
OFFICE OF CONSUMER ADVOCATE

Christy M. Appleby
Assistant Consumer Advocate
PA Attorney I.D. # 85824
E-Mail: CAppleby@paoca.org

Amy Hirakis
Assistant Consumer Advocate
PA Attorney I.D. #310094
E-Mail: AHirakis@paoca.org

Hobart J. Webster
Assistant Consumer Advocate
PA Attorney I.D. #314639
E-Mail: HWebster@paoca.org

Aron J. Beatty
Senior Assistant Consumer Advocate
PA Attorney I.D. # 86625
E-Mail: ABeatty@paoca.org

Counsel For:
Tanya J. McCloskey
Acting Consumer Advocate

Office of Consumer Advocate
555 Walnut Street 5th Floor, Forum Place
Harrisburg, PA 17101-1923
Phone: (717) 783-5048
Fax: (717) 783-7152

Dated: May 20, 2015

TABLE OF CONTENTS

I. INTRODUCTION..... 1

II. BACKGROUND AND PROCEDURAL HISTORY 3

III. EXCEPTIONS..... 5

OCA Exception No. 1: The ALJ Erred in the Determination that Accelerated Replacement of the Existing First Generation Advanced Metering Infrastructure is Necessary in Order to Meet the Requirements of Act 129 and the Commission’s Implementation Order. (I.D. at 18-25; OCA M.B. at 14-20; OCA R.B. at 4-7)5

OCA Exception No. 2: The ALJ Erred in the Determination that the 15-Minute Interval Data and the In-Home Display Technological Issues Provide a Basis for Replacing the Existing PLC AMI System on an Accelerated Basis. (I.D. at 25-31; OCA M.B. at 21-25; OCA R.B. at 7-9)..... 11

OCA Exception No. 3: The ALJ Erred in Determining that no Disposition Was Needed Regarding Meter Failures at Four Times the Industry Standard. (I.D. at 31-33; OCA M.B. at 25-28; OCA R.B. at 9-11) 13

OCA Exception No. 4: The ALJ Erred in Her Approval of the Company’s Proposed Accelerated Second Generation Smart Meter Deployment Timeline. (I.D. at 33-38; OCA M.B. at 29-31; OCA R.B. at 11-14) 15

OCA Exception No. 5: The ALJ Erred By Not Adopting The OCA’s Recommendation Regarding the Requirement for PPL to File an Amended Plan With the Commission if the Company Intends to Use the Remote Disconnect Function for Involuntary Terminations, the Service Limiting Function or the Prepayment Metering Function. (I.D. at 63-66; OCA M.B. at 49-53; OCA R.B. at 21-22)..... 18

IV. CONCLUSION 21

TABLE OF CITATIONS

Administrative Decisions

Petition of PPL Electric Utilities Corporation for Approval to Modify its Smart Meter Technology Procurement and Installation Plan and to Extend its Grace Period, Docket Nos. P-2002-2303075, M-2009-2123945, Order (August 2, 2012)..... 4

Petition of PPL Electric Utilities for Approval of a Smart Meter Technology Procurement and Installation Plan, Docket No. M-2009-2123945, Order (June 24, 2010) passim

Re: Smart Meter Procurement and Installation, Docket No. M-2009-2092655, Implementation Order (June 24, 2009) passim

Statutes & Regulations

66 Pa. C.S. § 2807(f)..... 2, 3

66 Pa. C.S. § 2807(f)(1).....15

66 Pa. C.S. § 2807(f)(2).....6, 15

I. INTRODUCTION

On April 30, 2015, the Office of Administrative Law Judge issued the Initial Decision (I.D.) of ALJ Susan D. Colwell (ALJ Colwell) in the above-captioned proceeding. ALJ Colwell recommended approving the Petition of PPL for Approval of its Smart Meter Technology Procurement and Installation Plan (Plan) for accelerated deployment of the Company's "second generation" smart meters at a cost of \$450 million. I.D. at 18-31, 33-38. The ALJ also determined it was not necessary to address the high rate of first generation smart meter failures and the attendant costs identified by the OCA. I.D. at 31-33. The ALJ did adopt several of the Office of Consumer Advocate's (OCA) proposed modifications regarding quantification of savings and benefits, the necessary modifications to the Company's Communications Plan, and the development of a data privacy policy for smart meter data. I.D. at 39-43, 48-59, 63-66.

The OCA respectfully submits, however, that the ALJ erred by not adopting the modifications recommended by the OCA regarding the accelerated deployment of the Company's second generation smart meters, the Company's treatment of existing meter failures, and the OCA's request that PPL receive explicit Commission approval through a Plan amendment if it seeks to use the involuntary remote disconnect function for involuntary terminations and for service limiting or pre-paid metering use. The OCA respectfully submits that the Commission should adopt the OCA's proposed modifications addressed in these Exceptions to help ensure the Plan is modified in a manner consistent with the consumer's interest and the public interest.

In general, the ALJ determined that PPL's Plan to replace all of its Advanced Metering Infrastructure (AMI) in an expedited manner was necessary in order to meet the requirements of Act 129 of 2008 (the Act or Act 129) and the Commission's Smart Meter Implementation Order.

I.D. at 18-31, 33-38; see gen'ly, 66 Pa. C.S. § 2807(f); Re: Smart Meter Procurement and Installation, Docket No. M-2009-2092655, Implementation Order (June 24, 2009) (Implementation Order). In the Initial Decision, ALJ Colwell recommended that the Commission adopt PPL's proposed Plan to replace its existing smart meter infrastructure with "second generation" advanced meters on the proposed expedited schedule at an estimated cost of \$450 million. PPL proposed accelerated deployment for two major reasons: (1) to address the Act 129 requirements and the nine additional capabilities identified in the Commission's Implementation Order and (2) to address existing meter failure rates that are four times the industry standard. In its testimony and briefs, the OCA demonstrated that there are no anticipated benefits to the accelerated deployment as proposed by PPL, and that the accelerated deployment is not necessary to meet the requirements or the objectives of Act 129. The objectives of the Act can be met, and are being met, with the current advanced meter system. The OCA also demonstrated that PPL should pursue action against its existing meter provider for its meter failures rather than shift this risk to ratepayers through an accelerated meter deployment with automatic cost recovery.

The OCA raises five Exceptions as discussed below regarding the ALJ's Initial Decision. The OCA's Exceptions address: (1) whether replacing the existing first generation AMI on an accelerated basis is necessary to meet the requirements of Act 129 and the Commission's Implementation Order; (2) whether the 15-minute interval data and the In-Home Display technological issues provide a basis for replacing the existing first generation smart meters on an accelerated basis; (3) whether a disposition was needed regarding the issue of the existing meter failures rate; (4) whether the proposed accelerated deployment timeline for the second generation smart meter deployment was reasonable under the facts here; and (5) whether the Company must

seek explicit Commission approval through a Plan amendment if it intends to use remote disconnection for involuntary terminations, service limiting features or pre-paid metering.

II. BACKGROUND AND PROCEDURAL HISTORY

On August 14, 2009, pursuant to Act 129 of 2008 (Act 129) and the Pennsylvania Public Utility Commission's (Commission) Smart Meter Procurement and Installation Order, PPL filed its Petition of Electric Utility Corporation for Approval of a Smart Meter Technology Procurement and Installation Plan (Initial Plan). 66 Pa. C.S. 2807(f); Implementation Order. When PPL filed its Initial Plan, PPL was uniquely situated because unlike other Pennsylvania Electric Distribution Companies (EDCs), the Company had already installed advanced meter infrastructure for all of its customers from 2002 through 2004. Petition of PPL Electric Utilities for Approval of a Smart Meter Technology Procurement and Installation Plan, Docket No. M-2009-2123945, Order at 5 (June 24, 2010) (June 24 Order). The system was built using a Power Line Communications (PLC) Advanced Metering Infrastructure (AMI) system and consisted of meters, communications, infrastructure, computer services and applications that allow PPL to remotely read the meters for all its customers. Id. Beginning in 2005, the Company also upgraded its AMI system through the installation of a Meter Data Management System. June 24 Order at 5. The system provided for advanced metering applications including: (1) a customer interface that allows customers to analyze their specific usage; (2) a data storage base that provides storage for two years of hourly reads from all customers; (3) a billing system that allows hourly billing; (4) an energy settlement system that allows electric generation suppliers to serve customers based on actual hourly usage; and (5) advanced load analysis capabilities. Id.

In the Initial Plan proceeding, PPL stated that its existing smart meter system was able to support all of the capabilities set forth in the Commission's Implementation Order. See, June 24 Order at 6. Since all of the Company's customers had advanced meters installed, the Company proposed to study, test, and pilot applications to enhance and to expand the capabilities of its current advanced meter infrastructure over the thirty-month grace period provided for in the Commission's Implementation Order. Id. The Commission's June 24 Order approved PPL's proposed Plan to move forward with the pilots during the grace period. Id. at 32-33. On August 24, 2012, the Commission granted a further extension of the grace period until June 30, 2014 in order to address technical delays that occurred in the pilot programs. Petition of PPL Electric Utilities Corporation for Approval to Modify its Smart Meter Technology Procurement and Installation Plan and to Extend its Grace Period, Docket Nos. P-2002-2303075, M-2009-2123945, Order at 20 (August 2, 2012) (August 2 Order).

On June 30, 2014, the Company filed its Plan to deploy second generation advanced meters with Radio Frequency (RF) Mesh technology at an additional cost of \$450 million over existing smart meter investments pursuant to Act 129 and the Commission's Implementation Order. The Petition was published in the Pennsylvania Bulletin on July 12, 2014 with Answers to the Petition due on August 11, 2014.

On July 21, 2014, the OCA filed its Notice of Intervention, Public Statement and Answer. On August 6, 2014, the Office of Small Business Advocate (OSBA) filed its Notice of Intervention, Public Statement and Notice of Appearance. On August 7, 2014, the International Brotherhood of Electrical Workers, Local 1600 (IBEW), filed a Petition to Intervene. On August 8, 2014, the Coalition for Affordable Utility Service and Energy Efficiency in Pennsylvania

(CAUSE-PA) and the PPL Industrial Customer Alliance (PPLICA) each filed a Petition to Intervene, with PPLICA also filing a Protest.

Hearings were held before ALJ Colwell on December 16, 2014. Main Briefs were filed by PPL, OCA, OSBA, CAUSE-PA, and PPLICA on January 13, 2015. Reply Briefs were filed on February 2, 2015 by PPL, OCA, OSBA, and PPLICA.

On April 30, 2015, the Office of Administrative Law Judge issued the Initial Decision of ALJ Colwell. The OCA submits these five Exceptions to the ALJ's Initial Decision.

III. EXCEPTIONS

OCA Exception No. 1: The ALJ Erred in the Determination that Accelerated Replacement of the Existing First Generation Advanced Metering Infrastructure is Necessary in Order to Meet the Requirements of Act 129 and the Commission's Implementation Order. (I.D. at 18-25; OCA M.B. at 14-20; OCA R.B. at 4-7).

The OCA respectfully submits that ALJ Colwell erred in her determination that the existing first generation advanced metering infrastructure must be replaced on an accelerated basis with the second generation smart meters in order to meet the requirements of Act 129 and the Implementation Order capabilities. I.D. at 24-25. The ALJ stated that:

[w]hile the OCA, OSBA and CAUSE-PA arguments are well-intentioned and well presented, the bottom line is that the legislature requires compliance with Act 129, the Commission has indicated that the present PPL meters do not comply, and the introduction of HAN capability would bring compliance. The arguments would have been better made before the adoption of the *Implementation Order*.

I.D. at 24. The ALJ concludes that the June 24 Order already determined that the existing system does not meet the requirements as identified in the Commission's Implementation Order because it was missing the Home Area Network (HAN) capability required by the Implementation Order. I.D. at 18-19, citing Implementation Order at 22.

The OCA respectfully disagrees with the ALJ's recommendation to accept the Company's \$450 million Plan to accelerate its deployment of its second generation advanced metering infrastructure.¹ The OCA submits that accelerated deployment is not necessary to meet the requirements of Act 129 and the cost-effective capabilities identified in the Commission's Implementation Order. As discussed in the OCA's Main Brief and Reply Brief, PPL has not shown any need to replace the existing first generation meters on an accelerated basis in order to address the requirements of Act 129. OCA M.B. at 14-20; OCA R.B. at 4-7. The OCA continues to recommend that the Company evaluate its options over the next two to five years to extend the life of the current AMI system while working towards a more gradual, cost-effective transition to its second-generation AMI system by 2025.

The ALJ adopted PPL's arguments that the accelerated smart meter deployment was necessary to meet one of the six requirements of Act 129 and seven of the nine Implementation Order capabilities. I.D. at 18-25. In the underlying case, PPL acknowledged that as to the Act 129 requirements, the existing metering infrastructure meets five of the six requirements. As to the sixth requirement -- regarding providing customers with direct access to usage data -- the Commission's June 24 Order stated that providing access to hourly usage data *within 48 hours* was not considered to be providing customers with "direct access to and use of price information" in accordance with Act 129. June 24 Order at 24.

In the June 24 Order, the Commission expressed a concern with the 48-hour delay of access to information when considering the "direct access" requirement of Act 129. The ALJ is correct that the Commission did advise the Company to "use the Grace Period Pilot programs to

¹ Act 129 provided that EDCs shall furnish smart meter technology upon request of a new customer, in new construction, and in accordance with a "depreciation schedule" that was not to exceed 15 years. 66 Pa. C.S. § 2807(f)(2). In its Implementation Order, the Commission stated that the 15-year period should commence upon Plan approval. Implementation Order at 15. PPL's Plan was approved in 2010, and therefore, under Act 129 and the Commission's Implementation Order, the full smart meter deployment must be completed by 2025.

fully develop a Plan, to be filed with the Commission, to fully comply with Act 129.” I.D. at 19, citing June 24 Order at 22. The OCA submits, however, that while the Commission raised a concern with the 48-hour delay in gaining access to this information, this does not automatically mean that the existing Power Line Communications Advanced Metering Infrastructure (PLC AMI) itself cannot satisfy this requirement if the information could be provided in a much shorter timeframe. It also does not alone support an accelerated deployment that has been shown to be more costly to ratepayers than compliance on the schedule set out in Act 129. See, OCA St. 1 at 17-20.

OCA witness Mudd testified that there are web-based capabilities that could address the 48-hour delay and provide access to the usage information in less than 24 hours. Tr. 146. OCA witness Mudd explained:

I also understand that the primary reason [under the Commission’s prior Order] was that the information was not available in short enough time period from the actual usage, consumption usage, and the pricing availability of the electricity, and through some pilot projects undertaken by PPL, that there were options to sort of speed up that access to information.

So, I’m not sure that the “direct access to information” question was necessarily resolved, because there was a 48-hour window prior to the pilot project, and following the pilot project, the window was under twenty-four hours.

Tr. 147.

The Initial Decision adopted PPL’s arguments that OCA witness Mudd’s web-based solution for providing direct access to price and usage information in less than 24 hours does not meet the requirements of Act 129 or the Commission’s June 24 Order. I.D. at 20-21, 24-25; PPL M.B. at 13-14. The Commission, however, expressed a concern over the length of the delay, and the Act itself does not establish any time parameters for direct access. As the record shows, solutions exist that will greatly reduce the time necessary for customers to obtain usage and price

information. The ALJ also did not address the arguments raised by OCA that there are software solutions that can provide data to the customer through a Home Area Network. Ms. Mudd stated that “Aclara offers a TWACS-based Home Area Network and In-Home Display system that utilities ZigBee communication systems which may provide additional ZigBee-based In-Home Display alternatives to the PLC AMI system.” OCA St. 1 at 19. Ms. Mudd also testified that:

There are products from the Apple store, consumption products and what you’re using in terms of your -your heating and cooling systems, so I believe it’s possible to have direct access to information at this time.

Tr. 147.

The OCA submits that the web-based solution presented by OCA witness Mudd will address the needs of consumers for information in a timely manner at this time. Accelerated deployment of second generation advanced metering infrastructure is not necessary to meet the requirements under Act 129 or the Implementation Order. The ALJ’s determination inappropriately dismisses any alternatives short of accelerated deployment of the new system at a cost of \$450 million.

The OCA submits, however, that the current system with its current capabilities for direct access to usage and price information has not presented any impediments to the Company’s ability to meet the objectives of Act 129, such as Time-of-Use rates. The current PLC AMI also has not seemed to have impeded customer switching. OCA witness Mudd testified:

It is difficult to know with any degree of certainty whether customer switching or participation in TOU rate programs would be any different with a more advanced AMI system. Approximately 46 percent of PPL’s customers have switched to a competitive supplier, which is among the highest switching rates in the state. Participation in TOU rates has been relatively low, but this is more likely related to the rate design which does not provide the right incentives to encourage participation. Once PPL’s new redesigned TOU rate is in place, interest in time-sensitive pricing programs may improve. This leads me to conclude that the 48-hour delay in direct access to and use of price information has not impacted customer participation in competitive retail electricity markets.

OCA St. 1 at 11.

The ALJ's Initial Decision also states that the existing first generation metering infrastructure does not meet several of the capabilities identified in the Commission's Implementation Order. I.D. at 24-25. The Commission's Implementation Order identified nine capabilities including: (1) ability to remotely connect and disconnect; (2) ability to provide 15-minute or shorter interval data; (3) on-board meter storage data that complies with open standards and protocols; (4) use of open standards and protocols; (5) ability to upgrade these capabilities; (6) ability to monitor voltage and report data in a manner that allows an EDC to react to the information; (7) ability to remotely re-program the meter; (8) ability to communicate outages and restorations; and (9) ability to support net-metering of customer generators. Implementation Order at 30. The Company stated at pages 14-16 of its Petition that while not optimal, the PLC system is able to provide for four of the nine capabilities, including: (1) remote connect/disconnect; (2) 15-minutes or shorter of interval data; (3) monitor voltage; and (4) monitor outages by polling (pinging) the meter to obtain power status. PPL Exh. 2, Petition at 14-16; see also, OCA St. 1 at 10; Implementation Order at 30; OCA R.B. at 6.

The Implementation Order directs each of the EDCs to examine the incremental costs for the deployment and operation of each of the additional capabilities and whether the costs of such capabilities are justified. Implementation Order at 17. The Implementation Order states:

While the Commission believes that all of the above-listed capabilities will further facilitate the consumer's ability to intelligently control their electric use and costs, **we are cognizant that the costs of some of these added capabilities may exceed any benefit they may provide.** Therefore the Commission reserves the authority to waive the requirement for any of the Commission imposed requirements.

Implementation Order at 17 (emphasis added). The OCA submits that this is especially important where, as is the case here, customers have already invested in smart meter technology. With respect to the remaining Implementation Order capabilities of on-board storage of data, use of open standards and protocols, and the upgradability of the existing smart meter infrastructure, the OCA submits that there has been no demonstrated need that warrants replacement of the existing AMI system on an accelerated basis at a cost of \$450 million. PPL has not attempted to make any demonstration of the cost-effectiveness of achieving each of these additional capabilities through its deployment Plan as indicated by the Implementation Order.

OSBA witness Knecht summarized a critical reason why a costly accelerated deployment should not be pursued to simply meet such capabilities. OSBA witness Knecht testified:

[g]iven the technological change in metering and data systems over the past decade, it would be much more likely that a delay would either reduce implementation costs or improve technical functionality. It is even possible that PPL Electric or its vendors could develop an approach that would allow it to continue to use the PLC technology to meet its legal obligations, and thereby further delay the need for a massive investment project. Delaying the project would also allow PPL Electric to benefit from the experiences of other EDCs, much as other utilities have benefited from the lessons learned from PPL Electric's early implementation of the technology.

OSBA St. 1 at 5-6.

The OCA submits that PPL has failed to show that replacing its existing AMI meters on an accelerated basis is a cost-effective means of achieving the additional capabilities identified in the Implementation Order. In fact, as OSBA witness Knecht described, there may be potential ratepayer benefits by delaying implementation. The OCA submits that the Company continue to evaluate its options over the next two to five years to extend the life of the current AMI system while working towards a more gradual, cost-effective transition to its second-generation AMI system by 2025.

OCA Exception No. 2: The ALJ Erred in the Determination that the 15-Minute Interval Data and the In-Home Display Technological Issues Provide a Basis for Replacing the Existing PLC AMI System on an Accelerated Basis. (I.D. at 25-31; OCA M.B. at 21-25; OCA R.B. at 7-9).

The OCA respectfully submits that the ALJ erred by adopting PPL’s arguments that the need to provide 15-minute interval data and In-Home Displays supports accelerated deployment of the second generation of smart meters. I.D. at 25-31. During the Grace Period, PPL conducted several pilot programs to determine whether the existing PLC technology addressed these elements and found that the existing PLC technology would need to be substantially upgraded even to provide more limited functionality. PPL M.B. at 14-16. The ALJ stated that the 15-minute interval data and the In-Home Display technological issues provide a basis for replacing the existing PLC AMI system on an accelerated basis. I.D. at 25-31. The ALJ then concluded that “[t]here is simply no reason to require the extension of the present technology when the parties recognize that it will be replaced.” I.D. at 31. The OCA submits, however, that it is not just that the technology will need to be replaced but whether the Plan to replace the existing technology is cost-effective and reasonable. See, OCA M.B. at 21-25; OCA R.B. at 7-9.

The Commission’s June 24 Order directed the Company to provide a cost-benefit analysis of the 15-minute interval data for small business and commercial customers and to evaluate the ability to use the In-Home Displays. June 24 Order at 27-29. As discussed at pages 14-19 of the OCA’s Main Brief, OCA witness Mudd examined the related pilot program results. OCA M.B. at 14-19. Ms. Mudd concluded that the potential long-term benefits of the RF Mesh technology to enable 15-minute interval data and In-Home Displays do not support the proposal for accelerated deployment. In response to the OSBA’s interrogatory on this issue, the Company stated that there is no business case for investing in a system to provide 15-minute functionality

because neither the Electric Generation Suppliers (EGSs) nor the PJM Settlement Subcommittee currently make use of the interval data. OCA St. 1 at 17. PPL also stated that it does not plan to build out the 15-minute interval functionality for all customers. Plan at 21. As to the In-Home Display, alternatives to accelerated deployment exist to provide In-Home Displays. OCA witness Mudd testified “Aclara offers a TWACS-based Home Area Network and In-Home Display system that utilizes ZigBee communication systems which may provide additional ZigBee-based In-Home Display alternatives to the PLC AMI system.” OCA St. 1 at 19; OCA M.B. at 25; OCA R.B. at 8.

Given these facts, OCA witness Mudd testified:

PPL should not rush to replace the PLC system on the basis of the limitations for meeting the 15-minute interval data requirements and the problems identified in the In-Home Display pilot evaluation. Given the uncertainty of how and when the 15-minute interval functionality would be utilized with the new system, and considering the continued potential for ZigBee-enabled devices to be used for In-Home Display, these provide weak arguments for replacing the current PLC AMI System at this time with a new RF Mesh System at a cost of nearly \$450 million.

OCA St. 1 at 19-20.

The OCA submits that the ALJ erred in her conclusion that such an accelerated deployment was justified based on these two objectives in the Implementation Order. The conclusion reached by OCA witness Mudd is that neither the 15-minute interval data nor the In-Home Display technological issues provide a basis for replacing the existing PLC AMI system on an accelerated basis at this time. OCA St. 1 at 19-20. The OCA continues to recommend that the Company maintain the existing PLC AMI system and work towards a more gradual, cost-effective transition to a more advanced AMI system by using the full 15-year period provided for by Act 129.

OCA Exception No. 3: The ALJ Erred in Determining that no Disposition Was Needed Regarding Meter Failures at Four Times the Industry Standard.
(I.D. at 31-33; OCA M.B. at 25-28; OCA R.B. at 9-11)

In her Initial Decision, ALJ Colwell concludes that the “[t]he public advocates seek to delay the implementation of the SMP and criticize the claim by PPL Electric that the rate of the failures of the existing meters is gaining speed...There is no real disposition necessary for this section.” I.D. at 33. The Company, however, supports its \$450 million Plan by arguing that the meter failures experienced with the existing PLC AMI technology justify their replacement at ratepayer expense. PPL M.B. at 16-20; PPL R.B. at 17-21; PPL St. 4-R at 2. The meter failure rate experienced by PPL with its existing Aclara meters is four times the industry standard for such AMI technology. Plan at 10-11; OCA St. 1 at 20; Tr. 40; OCA M.B. at 25-28; OCA R.B. at 9-11. The OCA respectfully submits that ALJ Colwell’s determination that no disposition on this issue is in error. The OCA submits that PPL should more fully explore its options to address the costs of the meter failures with Aclara.

The Company is proposing to replace its existing first generation advanced metering infrastructure due to high meter failure rates and is proposing to use Act 129’s funding mechanism to finance the change to a new meter system due to these meter failures. The purpose of Act 129 was to provide customers with access to smart meter technology and not to replace failing meters. PPL has already provided smart meter technology through its existing Aclara meters and is meeting the objectives of the Act. The OCA submits that PPL’s failure to address the meter failures has shifted the risk of premature meter failure to ratepayers through an accelerated second generation smart meter deployment and dollar for dollar recovery through an automatic surcharge mechanism.

PPL has argued that its existing meters are nearing the end of their useful life and no compensation can be provided based on the age of the meters. PPL M.B. at 17. Company witness Ogozaly argued in her Rebuttal Testimony that the “higher than the industry standard” meter failure rates are really just “business as usual” according to the Weibull probability curve. PPL St. 4-R at 2-3; OCA St. 1-S at 5. In the same Rebuttal Testimony, PPL witness Ogozaly acknowledged that one of the core driving factors behind PPL’s decision to replace its existing smart meters under the accelerated deployment plan proposed here is the rate of meter failures experienced with Aclara. PPL St. 4-R at 2. PPL witness Ogozaly stated “PPL’s proposed deployment schedule for RF mesh meters from 2017 through 2019 was established, in part, by the need to minimize investment in PPL meters.” Id.

OCA witness Mudd explained, however, that the Company’s rationale for meter replacement improperly places 100% of meter cost risk on ratepayers in violation of sound ratemaking principles. OCA witness Mudd explained as follows:

According to Ms. Ogozaly, the meter failure rate is a significant driving factor for the accelerated deployment of the proposed RF Mesh system. Additionally, the useful life of the AMI meters and the expectations with respect to acceptable levels of meter failures are important because they set a precedent for how the Company will work with future meter vendors going forward. The AMI surcharge should not be used as a cost recovery mechanism to replace current or future advanced metering systems that did not live up to expectations. One hundred percent of the costs associated with a metering system that underperformed should not sit with ratepayers.

OCA St. 1-S at 6. As discussed at pages 26 to 27 of the OCA’s Proprietary Version Main Brief, the high meter failure rate comes at a cost for ratepayers. OCA M.B. at 26-27 (Proprietary version). The high meter failure rates are at the expense of ratepayers and should not be considered “business as usual” for either the Company or its ratepayers.

The OCA submits that the Company began to experience meter failures in 2008 when the meters were less than ten years old and received only approximately \$1.5 million (or \$10 per meter credit) between 2008 and 2013. Tr. 88-90. The expected useful life of the meters has also changed dramatically since the installation of these meters and continues to change to this day. As discussed at page 27 of the Main Brief and page 10 of the Reply Brief, PPL has adjusted the useful life of the meters from 28 years to 15 years since the meters were installed beginning in 2002. OCA M.B. at 27; OCA R.B. at 10; OCA St. 1-S at 5-6. Some of the existing meters, however, have fallen short of even the 15-year useful life that PPL now uses.

PPL has not aggressively pursued this issue with Aclara but has instead elected to shift this risk to ratepayers through an accelerated second generation smart meter deployment plan and the automatic dollar for dollar cost recovery. The OCA submits that the meter failure rate is not reasonable, and these risks should not be transferred to ratepayers. The OCA submits that PPL should be directed to fully explore its options to address the costs of the meter failures with Aclara.

OCA Exception No. 4: The ALJ Erred in Her Approval of the Company’s Proposed Accelerated Second Generation Smart Meter Deployment Timeline. (I.D. at 33-38; OCA M.B. at 29-31; OCA R.B. at 11-14)

PPL’s Plan provides for an implementation timeline for full smart meter deployment beginning in 2017 and concluding in 2019. Plan at 19. While the Company proposes to complete the deployment by 2019, the Commission’s Implementation Order and Act 129 provide for the opportunity for a 15-year period for deployment upon Plan approval, or for PPL, until 2025. Implementation Order at 14-15; 66 Pa. C.S. §§ 2807(f)(1)-(2).

The ALJ adopted the Company's proposed accelerated timeline for PPL's second generation smart meter deployment. The ALJ stated that she based her decision, in part, on the chart presented by the Company which showed the implementation of PPL's smart meter deployment as compared to other EDCs in the Commonwealth. I.D. at 38. ALJ Colwell stated:

There has been a great deal of conflict regarding the timing of this Plan, and while there are real concerns addressed by the public advocates' interest in reducing the charge to the customer bills to pay for the implementation by stretching those costs over a longer time period, there are solid reasons for implementing the plan more quickly than required if it can be done well and reasonably. This is supported by the chart provided by the Company which shows its implementation as compared to the other EDCs in the Commonwealth. It is important to remember that the smart meter program is, at its very basis, meant to enable the intelligent use of a variety of energy packages at the supplier level. It only makes sense to have all of the Commonwealth's EDCs capable of providing the necessary hardware for the packages that can be offered in PA EDC's service territories.

I.D. at 38. The OCA submits that the ALJ has overlooked two key factors in her determination: (1) that PPL is not similarly situated to other EDCs in Pennsylvania and (2) that no evidence has been presented that show that PPL is somehow limited in its ability to offer similar services and rate plans across the Commonwealth. In light of these factors and those discussed in the OCA's Main Brief and Reply Brief, the OCA continues to recommend that the Company use the full 15-year deployment period available. In that time, the Company should evaluate its options over the next two to five years to extend the life of the current AMI system while working towards a more gradual, cost-effective transition to a more advanced AMI system.

The ALJ adopted PPL's argument that the Commission has authorized more accelerated deployment schedules for other EDCs. I.D. at 38. The OCA submits that PPL is not similarly situated to other Pennsylvania EDCs. PPL already has its first generation advanced meter infrastructure, whereas the other EDCs did not have these capabilities when they filed their deployment plans. OSBA witness Knecht testified:

The other Pennsylvania EDCs currently have little or no smart metering capabilities for residential and commercial customers. In contrast (as I noted, to its credit), PPL has had smart meters in place for over a decade, and some smart metering infrastructure in place for several years. Moreover, PPL Electric is already substantially compliant with the requirements of Act 129, whereas other Pennsylvania EDCs are not. Thus, the benefits for ratepayers of accelerating the implementation of smart meters at other EDCs are substantially greater than the benefits associated with PPL Electric's proposal in this proceeding.

OSBA St. 1 at 5. While other EDCs have operated under shorter deployment timelines, the facts of this case support utilizing a longer deployment period as recommended by OCA witness Mudd and OSBA witness Knecht. OCA St. 1 at 24-25; OSBA St. 1 at 3, 5.

Importantly, there are both implementation and technological benefits to taking a measured approach to install new smart meters. OCA witness Mudd testified:

Since PPL's existing system already meets the core Act 129 requirements, there is less urgency to move forward to deploy a subsequent AMI technology. PPL has the benefit of being able to observe and study the RF Mesh AMI deployments of other utilities, allowing for further technological advancements and development of best practices.

OCA St. 1 at 24. OCA witness Mudd also explained:

The timeline is fairly aggressive and assumes prompt resolution of any concerns raised through this proceeding to move forward with vendor selection in the first quarter of 2015. Despite the concerns outlined by PPL in their filing and SMP, specifically the challenges presented in upgrading aging technologies and higher-than-expected meter failure rates, a more prudent approach would be to take the time necessary to identify what, if any, interim solutions might be employed.

OCA St. 1 at 24-25.

The ALJ's discussion of the issue did not address or acknowledge the OCA's or OSBA's arguments with respect to this issue. I.D. at 35; OCA R.B. at 11-14; OSBA R.B. at 19-20; OSBA St. 1 at 5. Here, PPL has not shown that the costs of abandoning its existing smart meters are outweighed by the benefits of accelerating the deployment of the second generation of smart

meters in advance of the 2025 deadline established in the Commission's Implementation Order. OCA St. 1 at 24-25.

The ALJ also states that ratepayers should have access to the same type of energy packages as other customers across the Commonwealth. I.D. at 38. The OCA submits that no evidence has been submitted to support the conclusion that the current system has presented any impediments to the Company's ability to meet the objectives of Act 129 and the Implementation Order, or to otherwise impede an EGS's ability to offer any packages. There is robust customer switching in PPL's service territory, and TOU rates are offered by PPL. OCA St. 1 at 11.

The OCA submits that for the reasons set forth above and in the OCA's Main Brief and Reply Brief, the timeline for deployment should utilize the statutory period. OCA M.B. at 14-30; OCA R.B. at 4-14. The OCA submits that ALJ's acceptance of the accelerated timeline for the second generation smart meter deployment should not be adopted. The OCA recommends that the Company be directed to evaluate the costs associated with maintaining and enhancing the current system for an additional two to five years before engaging in a \$450 million second generation smart meter deployment that is not cost justified. OCA M.B. at 14-30; OCA R.B. at 4-14.

OCA Exception No. 5: The ALJ Erred By Not Adopting The OCA's Recommendation Regarding the Requirement for PPL to File an Amended Plan With the Commission if the Company Intends to Use the Remote Disconnect Function for Involuntary Terminations, the Service Limiting Function or the Prepayment Metering Function. (I.D. at 63-66; OCA M.B. at 49-53; OCA R.B. at 21-22)

The OCA respectfully submits that the ALJ erred in not explicitly finding in her Initial Decision that PPL is not authorized to use remote disconnect for involuntary terminations, or service limiting and prepayment metering technology as part of this Plan. I.D. at 66. In its

current Plan, PPL has stated that it will not use remote disconnection for involuntary termination, and it will not use service limiting or prepayment. The OCA strongly agrees with these commitments. PPL's Plan also limits the use of the remote connection and disconnection function of the smart meters as a voluntary tool for such actions as a customer request for a move-in or move-out. I.D. at 66. The OCA also agrees with this aspect of PPL's Plan. PPL, however, has suggested that it can reverse these commitments without any further review and approval of the Commission. The OCA submits that any further use of these functionalities beyond those contained in the Plan must be submitted to the Commission for review and approval as an amendment to the Plan. See OCA M.B. at 51-53; OCA R.B. at 21-22.

The ALJ stated in her Initial Decision:

It is important to note that the Commission regulations do not now permit the implementation of any of these functions. Termination requirements are clear and quite stringent, and the use of pre-paid metering is prohibited without prior Commission approval...Therefore, the opportunity for the involvement of the public advocates and CAUSE-PA will be during the evaluation of a proposed rulemaking to change the regulation itself.

I.D. at 66. While the OCA appreciates the ALJ's recognition of this point, reliance on a regulatory change as the opportunity for involvement in these issues is insufficient. The Commission has specifically stated as to service-limiting and prepayment that Commission approval for an individual EDC Plan is required before an EDC can utilize these technologies.

The Commission provided:

[t]he Commission agrees that the significant policy implications of service limiting and prepaid service should be addressed in another proceeding prior to requiring such capability in smart meters. Therefore, we have removed support for service-limiting, and prepaid service as a minimum capability requirement. This does not preclude EDCs from including these capabilities, however, **an EDC cannot employ these capabilities unless it is approved by the Commission** and consistent with the regulations governing such programs, such as 52 Pa. Code § 56.17.

Implementation Order at 18 (emphasis added). As to remote disconnection for involuntary termination, significant policy and regulatory implications exist that require explicit Commission approval.

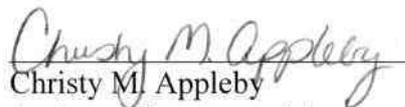
The OCA submits that PPL should not be permitted to alter the commitments in this Plan without a thorough review and determination by the Commission. In this proceeding, OCA witness Nancy Brockway testified that termination of electric service puts serious risk on customers, households and communities. OCA St. 3 at 15-16. As such, any plans to use remote disconnect as a tool for terminating service for involuntary terminations should be reviewed by the Commission to ensure that the protections contained within Chapter 14 and Chapter 56 are preserved. Similarly, any plans to use service limiting and prepayment should be reviewed and approved by the Commission.

As noted, the OCA fully agrees with PPL's decision to not implement involuntary remote disconnection, service-limiting or a pre-payment metering program and commends the Company for its willingness to commit to engage in a stakeholder process if the Company ever determines to move forward with these functionalities. The OCA submits that the Order to this proceeding must specifically recognize that PPL is not authorized to use remote disconnect for involuntary termination, service limiting technology, or a prepayment metering program as part of the Plan. Further, the OCA recommends that due to the potential implications of Chapter 56 and Chapter 14, that any proposals in the future should be considered an amendment to the instant Plan and should be filed with the Commission for review and approval. The Commission should also memorialize the Company's commitment to bring any future proposals to a stakeholder group of interested parties for further discussion and extend that commitment to include service limiting technology, or a pre-payment metering program.

IV. CONCLUSION

For the reasons set forth above, and for the reasons set forth in the Office of Consumer Advocate's Main Brief and Reply Brief, the OCA respectfully submits that the ALJ erred in her recommendation to approve PPL's proposed \$450 million accelerated deployment Plan. The OCA requests that the Commission grant these Exceptions and adopt the modifications and recommendations herein and in the OCA's Main Brief and Reply Brief.

Respectfully Submitted,


Christy M. Appleby

Assistant Consumer Advocate
PA Attorney I.D. # 85824

E-Mail: CAppleby@paoca.org

Amy Hirakis

Assistant Consumer Advocate
PA Attorney I.D. #310094

E-Mail: AHirakis@paoca.org

Hobart J. Webster

Assistant Consumer Advocate
PA Attorney I.D. #314639

E-Mail: HWebster@paoca.org

Aron J. Beatty

Senior Assistant Consumer Advocate
PA Attorney I.D. # 86625

E-Mail: ABeatty@paoca.org

Counsel for:

Tanya J. McCloskey

Acting Consumer Advocate

Office of Consumer Advocate
5th Floor, Forum Place
555 Walnut Street
Harrisburg, PA 17101-1923
Phone: (717) 783-5048
Fax: (717) 783-7152
DATE: May 20, 2015
206956

CERTIFICATE OF SERVICE

Petition of PPL Electric Utilities Corporation :
for Approval of Its Smart Meter Technology : Docket No. M-2014-2430781
Procurement and Installation Plan :
:

I hereby certify that I have this day served a true copy of the foregoing document, the Office of Consumer Advocate's Exceptions, upon parties of record in this proceeding in accordance with the requirements of 52 Pa. Code Section 1.54 (relating to service by a participant), in the manner and upon the persons listed below:

Dated this 20th day of May 2015.

SERVICE BY E-MAIL and FIRST CLASS MAIL

Anthony D. Kanagy, Esquire*
Post & Schell PC
17 North Second Street
12th Floor
Harrisburg, PA 17101-1601

Paul E. Russell, Esquire*
PPL Electric Utilities Corporation
Two North Ninth Street
Allentown, PA 18101

Steven Gray, Esquire*
Office of Small Business Advocate
Commerce Building, Suite 1102
300 North Second Street
Harrisburg, PA 17101

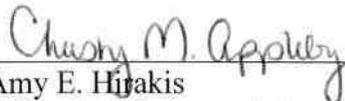
Adeolu A. Bakare, Esquire*
McNees Wallace & Nurick, LLC
100 Pine Street
P.O. Box 1166
Harrisburg, PA 17108-1166

Harry S. Geller, Esquire*
Elizabeth R. Marx, Esq.*
Pennsylvania Utility Law Project
118 Locust Street
Harrisburg, PA 17101

David B. MacGregor, Esquire*
Post & Schell PC
Four Penn Center
1600 John F Kennedy Blvd.
Philadelphia, PA 19103-2808

Scott J. Rubin, Esq.*
333 Oak Lane
Bloomsburg, PA 17815-2036

Mr. Robert D. Knecht*
Industrial Economics Inc.
2067 Massachusetts Avenue
Cambridge, MA 02140



Amy E. Hirakis
Assistant Consumer Advocate
PA Attorney I.D. # 310094
E-Mail: AHirakis@paoca.org

Christy M. Appleby
Assistant Consumer Advocate
PA Attorney I.D. # 85824
E-Mail: CAppleby@paoca.org

Hobart J. Webster
Assistant Consumer Advocate
PA Attorney I.D. # 314639
E-Mail: HWebster@paoca.org

Counsel for
Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101-1923
Phone: (717) 783-5048
Fax: (717) 783-7152
186853

*Receiving Proprietary Information Where Applicable