**PENNSYLVANIA**

**PUBLIC UTILITY COMMISSION**

**Harrisburg, PA 17105-3265**

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|  | Public Meeting held May 19, 2016 |
| Commissioners Present:  Gladys M. Brown, Chairman  Andrew G. Place, Vice Chairman  John F. Coleman, Jr.  Robert F. Powelson, Concurring in result only |  |
| Duquesne Light Company Smart Meter Procurement and Installation Plan | M-2009-2123948 |
| Petition of Duquesne Light Company For Waiver and Suspension of Meter Testing Requirements Under 52 Pa. Code §§ 57.20(e) and 57.21(f) For Deployed Legacy Meters | P-2016-2525790 |

**ORDER**

**BY THE COMMISSION:**

On January 25, 2016, Duquesne Light Company (Duquesne Light) filed the captioned Petition seeking a waiver and suspension of certain meter testing obligations[[1]](#footnote-1) related to legacy meters (*i.e.*, not smart meters) being phased out of service. The Petition was served on the Office of Consumer Advocate (OCA), the Office of Small Business Advocate (OSBA), and the Commission’s Bureau of Investigation and Enforcement (I&E). No one filed an answer to the petition. While we commend Duquesne Light for attempting to reduce its meter testing costs which are ultimately borne by ratepayers, we find that Duquesne Light has not met its burden of proving that a waiver of the meter testing requirements is merited. Accordingly, we shall deny the Petition relative to legacy meter testing and Duquesne Light’s Smart Meter Plan (SMP) without prejudice. We include herewith a list of questions to be answered and data requests should Duquesne Light chose to file a revised petition.

**Background**

Duquesne Light is a jurisdictional electric distribution company (EDC) and default service provider (DSP) certificated to provide electric service in the City of Pittsburgh and in Allegheny and Beaver Counties in Pennsylvania. As of November 30, 2015, Duquesne Light provided electric distribution service to approximately 590,000 customers and was the DSP for approximately 390,000 of those customers. Petition. ¶ 1.

Act 129 of 2008, P.L. 1592, (Act 129), effective November 14, 2008, required EDCs such as Duquesne Light, *inter alia*, to file smart meter plans (SMPs) by August 14, 2009. On June 24, 2009, the Commission established standards that these EDCs must meet for providing smart meter technology to customers and also provided guidance for meeting those standards.[[2]](#footnote-2)

**History of Duquesne Light’s SMP Proceedings**

**Initial SMP**: On August 14, 2009, Duquesne Light filed its Initial SMP. On May 11, 2010, the Initial SMP was approved with certain modifications.[[3]](#footnote-3) *See Petition of Duquesne Light Company for Approval of Smart Meter Technology Procurement and Installation Plan*, Docket No. M-2009-2123948 (May 11, 2010). Thereafter, Duquesne Light implemented its Initial SMP consistent with the May 11, 2010 order.

**2012 SMP**: On June 29, 2012, at Docket No. M-2009-2123948, Duquesne Light petitioned for approval of its 2012 SMP, amending its Initial SMP.[[4]](#footnote-4) Following extensive inquiry by interested stakeholders, Duquesne Light and OCA filed an uncontested Joint Petition for Approval of Full Settlement (2012 Joint Petition). On January 24, 2013, Administrative Law Judge Katrina Dunderdale issued an Initial Decision approving the 2012 Joint Petition. Petition, ¶¶ 6-7.

By order entered May 6, 2013, the Commission approved, in part, the Joint Petition and directed modification of the 2012 SMP. Duquesne Light was directed to make a compliance filing which it did on August 2, 2013.[[5]](#footnote-5) By one of two orders entered on January 9, 2014, at Docket No. M-2009-2123948, we approved the uncontested compliance filing. *See* January 9, 2014 Final Order, Docket No. M‑2009‑2123948.

Also on August 2, 2013, Duquesne Light requested amendment of the May 6, 2013 order and the 2012 SMP (aka its “Final Smart Meter Procurement and Installation Plan”). Duquesne specifically requested recovery of the costs associated with its FOCUS project[[6]](#footnote-6) encompassing upgrades to its information technology system to provide the back-office foundation for smart meters. By the second of two orders entered on January 9, 2014, we granted amendment to permit Duquesne Light to request recovery of its FOCUS costs in base rates, exclusive of costs that are recovered through its smart meter charge. *See* January 4, 2014 Order and Opinion, Docket No. M‑2009-2123948.

**Current ALJ Proceeding regarding the Proposed 2015 SMP**: On August 4, 2015, at Docket Nos. M-2009-2123948 and P-2015-2497267, Duquesne Light petitioned for approval to modify its 2012 SMP. The modified plan would be Duquesne Light’s 2015 SMP. The proposed 2015 SMP is currently being litigated.[[7]](#footnote-7) Duquesne Light has proposed, *inter alia*, to accelerate the deployment period by one year, such that all residential meter installations would be completed by 2018 and that all commercial and industrial meter installations would be completed by 2019. No party[[8]](#footnote-8) has challenged the proposal to accelerate the deployment schedule. Petition, ¶¶ 9‑10. The transcript of the February 18, 2016 initial hearing was submitted to the ALJ on February 23, 2016. Briefs were filed in March 2016. Reply Briefs were filed in April 2016.

**Current Petition regarding Waiver of Legacy Meter Testing**: Duquesne Light filed the instant Petition on January 25, 2016, and served OCA, OSBA, and I&E. No one filed an answer. The Commission’s Bureau of Consumer Services (BCS) and its Bureau of Technical Utility Services (TUS) have reviewed Duquesne Light’s Petition as well. Pursuant to 52 Pa. Code §§ 5.41 and 5.43, Duquesne Light seeks a waiver and suspension of the meter testing requirements at 52 Pa. Code §§ 57.20(e) regarding watthour meters and 57.21(f) regarding demand meters relative to its deployed legacy meters. Duquesne Light requests the waiver and suspension of meter testing for 2016 and continuing through Duquesne Light’s smart meter deployment period which is proposed to end in

2019.[[9]](#footnote-9) Petition, ¶ 16. Duquesne Light did not cross-caption this Petition to its SMP at Docket No. M-2009-2123948, but we have correlated the two proceedings.

Duquesne Light’s intends to replace all of its currently deployed legacy meters with smart meters within the next 3 to 4 years. Duquesne has alleged that all families of deployed legacy meters within its service territory are within acceptable accuracy tolerances and that none are exhibiting a declining accuracy curve that would indicate replacement is necessary before the legacy meters are replaced with smart meters. Petition, ¶ 15. Duquesne Light asserts that all smart meters are tested for accuracy by the manufacturer prior to installation. Petition, ¶ 17. Duquesne Light further asserts that the requested waiver and suspension of the Section 57.20(e) and 57.21(f) meter testing requirements would save capital costs related to exchanging legacy meters that are to be tested with new legacy meters which would thereafter be replace in the short term. Petition, ¶ 18.

**Existing Section 57.20(h) Waiver**

Duquesne Light cites to the *Implementation Order* as providing a waiver from Section 57.20(h) meter testing. Petition, ¶ 19. The entirety of our discussion in the *Implementation Order* on this limited waiver is set forth below.

FirstEnergy submits that 52 Pa. Code § 57.20(h) provides that “a service watt-hour meter which is removed from service shall be tested for ‘as found’ registration accuracy.” FirstEnergy requests that the Commission provide EDCs with a blanket waiver of this requirement, as the meters are not being replaced due to any perceived malfunction and will not be put back into service. FirstEnergy posits that such a

waiver will eliminate unnecessary costs associated with system-wide smart meter installation.

*Implementation Order* at 10-11.

The Commission agrees with FirstEnergy that the costs of complying with 52 Pa. Code § 57.20(h) are unnecessary and will grant a waiver of this provision for watthour meters that are being replaced with smart meters in accordance with an approved plan. The Commission believes it would add unreasonable and unnecessary costs to require the EDCs to test every meter removed for the purposes of upgrading to a smart meter.

*Implementation Order* at 12.

Therefore, it is ordered: . . . [t]hat all electric distribution companies that are required to install smart meter technology are exempt from compliance with 52 Pa. Code § 57.20(h) for testing watthour meters that are being replaced with smart meters in accordance with an approved smart meter technology procurement and installation plan.

*Implementation Order* at 35.

It must be recognized that FirstEnergy articulated its request for a meter testing waiver in the context of its comments regarding the then-proposed smart meter deployment guidelines. On March 30, 2009, by Secretarial Letter,[[10]](#footnote-10) we had invited comments regarding our proposal to establish minimum smart meter capability and guidance on expectations for smart meter deployment. In its April 20, 2009 comments in the Implementation proceeding at Docket No. M-2009-2092655, FirstEnergy said that:

[The proposed] guidelines contemplate the EDCs providing customers with smart meters upon request. Section . . . 57.20(h) provides that “[a] service watthour meter which is removed from service shall be tested for ‘as found’ registration accuracy.” Inasmuch as meters being replaced with smart meters will, in essence, be obsolete, the FE Companies respectfully ask the Commission to provide EDCs with a blanket waiver of this requirement. Without this waiver, the EDCs will be required to test meters that (i) were not replaced due to any perceived error or malfunction; and (ii) will not be put back into service, thus incurring unnecessary costs that will ultimately be paid by customers.

FirstEnergy Comments at 16, Docket No. M-2009-2092655, April 9, 2009. FirstEnergy’s request for waiver of Section 57.20(h) meter testing was constrained to legacy watthour meters being replaced by smart meters *at customer request* *ahead of an EDC’s AMI deployment schedule*.

The cost of testing meters selected by statistical sampling or selected by the periodic schedule is not separately borne by the specific meter user. Forgoing that testing does not result in savings to a specific customer. That cost is built into rates. That testing assures customers, the EDCs, and this Commission that meters are working within acceptable parameters. The prudent and reasonable cost, as determined by this Commission, of providing smart meter technology, less operating and capital cost savings, may be recovered by an EDC through either base rates or a Section 1307 reconcilable rider. 66 Pa. C.S. §§ 1307 & 2807(f)(7). Customers that request accelerated deployment of smart meters, however, incur costs for the installation of the smart meter. The *Implementation Order* recognized that waiving legacy meter testing when the *customer requests* accelerated smart meter deployment would provide an *offset to the customer cost* against the cost of the requested accelerated deployment.

Thus, both our agreement with FirstEnergy’s position and our waiver of Section 57.20(h) granted in the Implementation Order are clearly limited. The watthour meters excused, pursuant to the *Implementation Order*, from testing upon removal are only those that have been removed and replaced by smart meters *at the request of the customer* *ahead of Duquesne Light’s AMI deployment schedule*. The limited waiver in the *Implementation Order* clearly does not apply to all watthour meters being replaced by smart meters. It is not a blanket waiver of Section  57.20(e). It is not a waiver of periodic or statistical sampling testing. Further, there is no waiver of Section 57.21(f) relative to demand meters in the Implementation Order.

To the best of our knowledge and recollection, no other EDC has asked for (or received) a complete waiver of statistical sample or periodic testing of legacy meters slated for AMI deployment replacement.[[11]](#footnote-11) Further, Subchapter O., relating to advanced meter deployment, does not address waiver of testing of legacy meters being replaced by smart meters. 52 Pa. Code §§ 57.251 – 57.259.

**Discussion**

There are two aspects to our discussion of Duquesne Light’s specific request for waiver of legacy meter testing. The first pertains to requests for waivers; the second pertains to the substance of the instant request for waiver.

**Prerequisites for and limitations on waivers:** Section 5.43(a) of our regulations permits a utility to petition for waiver of a regulation. Section 5.43(b) requires that such petitions be served on “all persons directly affected and on other partiers who petitioner believes will be affected by the petition.” 52 Pa. Code § 5.43, relating to petitions for issuance, amendment, repeal, or waiver of Commission regulations.

Chapter 57 does not have express provisions for waiver of its requirements. Accordingly, because the majority of the meters that would be affected if we were to grant Duquesne Light’s request for waiver measure residential service, we shall also look to the requirements for waiver in Chapter 56 relating to standards and billing practices for residential utility service. Section 56.452(b) requires the utility to provide notice to persons who may be affected by the modification or temporary waiver. Such notice may be by bill insert or other reasonable manner. 52 Pa. Code § 56.452(b), relating to standards and billing practices for residential utility service, applications for modification or exception.

Clearly, all of Duquesne Light’s customers, whether residential or commercial/industrial, are affected by the accuracy of its meters. Duquesne Light’s petition does not indicate that its customers received any direct notice, as required by Sections 5.43(b) and 56.452(b), of this request for waiver. The Petition was, however, served on OCA, OSBA, and I&E, none of which have raised the issue that Duquesne Light should have notified it customers of the requested waiver.

In limited instances on occasion in the past, we have considered notice to OCA, OSBA, and I&E as proxy for notice to customers who would be affected by a waiver of Commission regulations. In this case, however, we conclude that customers whose legacy meters would not be tested should have been provided with direct notice of this request for waiver and suspension of Commission regulations. Duquesne Light did not explain its reason for not attempting broad public notice to its customer base.

We shall now consider the merits and extent of Duquesne Light’s specific request for a waiver of its Chapter 57 obligations. As noted above, we find it beneficial to evaluate the waiver request with reference to the Chapter 56 standard for waiver inasmuch as the vast majority of customers that would be affected by the waiver are residential customers. *See* Table 1 below relative to the number of affected customers.

**Substance of Duquesne Light’s Waiver Request**: Duquesne Light has requested that we excuse it from the express and detailed testing requirements of statistical sample and periodic testing set out in Section 57.20(e) relating to watthour meter testing and Section 57.21(f) relating to demand meter testing. Duquesne Light anticipates that the legacy watthour and demand meters subject to this waiver request will likely be replaced by the end of 2019. In particular, Duquesne Light asserts that:

Continuing the testing programs concurrently with the AMI Deployment project would result in many legacy meters exchanged under the testing programs being exchanged again for an AMI meter within 0-24 months. This duplication of meter exchanges results in significant additional capital costs to both Duquesne Light and its customers, with no significant improvement in validation of meter accuracy.

Petition, ¶ 19.

Duquesne Light provides the following data regarding meter counts and affected customers:

|  |  |  |
| --- | --- | --- |
|  | **Table 1** |  |
|  | **Meters per year** |  |
| Legacy meters to be tested each year absent a waiver, based on average number of legacy meters in service[[12]](#footnote-12) | 4,000 watthour meters | Single-phase meters selected by statistical sampling for testing throughout specified testing cycles |
| 2,000 demand meters | All polyphase meters tested over specified testing cycles |
| Legacy meters to be replaced each year during the AMI project | 150,000 watthour meters | Residential meters from 2015 through 2018 |
| 7,5000 demand meters | Commercial & Industrial meters from 2016 through 2019 |
| Legacy meters Duquesne Light expects to test “as found” in 2016 | 12,000 meters[[13]](#footnote-13) | Legacy meters removed from service for non-AMI deployment reasons |

Petition, ¶¶ 14, 16, &19.

Duquesne Light also notes that it will continue periodic testing of approximately 3,000 MV 90 interrogation scope meters not being exchanged under the AMI deployment project. Petition, ¶ 20. Duquesne does not indicate the length of the testing cycle for these 3,000 MV 90 interrogation scope meters or how many of them will be tested each year. That they are being tested periodically means that all of them are tested during a given testing cycle.

In support of its request, Duquesne Light asserts its historical record of meter accuracy and a potential for significant costs savings. Duquesne Light asserts that testing would not result in a “significant improvement in validation of meter accuracy. Petition, ¶¶ 15 & 18. Further, to test the legacy meters currently in service, Duquesne Light usually replaces the meter being tested with another legacy meter. Petition, ¶ 18.

Duquesne Light is correct that forgoing legacy meter testing would save money, but Duquesne Light has not indicated how individual customers or customer classes would benefit from such a savings. Duquesne Light has not addressed the fact that cost of statistical sampling and periodic meter testing of the legacy meters (*i.e.*, Section 57.20(e) watthour and Section 57.21(f) demand meter testing) has been built into the rates it currently charges its customers, nor has it quantified any potential savings to be gleaned from forgoing any or all of the legacy meter testing. Capital cost savings realized by an EDC’s installation and use of smart meter technology must be recognized by the EDC, and saving is a line item in the SMC calculation. 66 Pa. C.S. § 2807(f). Duquesne has not indicated either the amount or the nature of any potential savings that might stem from the waiver it has requested.

Duquesne Light has not indicated that compliance would increase its fixed costs. Further, Duquesne Light will still need to maintain a meter testing protocol during the AMI deployment (*e.g.*, for the “as found” testing – See Table 1) and after the AMI deployment (*e.g.*, for the smart meters). Meter testing is not being eliminated.

Further, Duquesne Light has not provided any details or test results to support its assertion of a historical record of meter accuracy. Watthour and demand meters are tested in conjunction with being placed into service, upon certain customer or Commission requests, after a specific period of time in service, and/or upon removal from service. There are two significant billing aspects to this testing which are highlighted by Section 57.24(b) relating to fast meters and Section 57.24(c) relating to slow meters. 52 Pa. Code §§ 57.24(b) & (c). Meter testing works to assure the accuracy of a meter going forward, but it also provides information relative to past billing. Duquesne Light has failed to address customer issues related to fast (or slow) legacy meters that would escape testing pursuant to a waiver as requested. Generally speaking, a customer is unlikely to complain about a slow legacy meter. Duquesne Light’s request for waiver indicates its willingness to forgo any ability to reconcile a significant underbilling in a legacy meter due to a slow meter. This does not mean, however, that a customer would be equally willing to forgo the potential to recoup a significant overbilling due to a legacy meter found to be fast upon testing.

Duquesne Light has also failed to indicate whether there have been any customer concerns about usage consistency for those accounts that have already been converted to smart meters. Without the ability to compare pre- and post-AMI usage accuracy (whether statistically or actually verified), one has no basis for merely presuming that a significant difference in usage between the two periods is truly due to usage patterns and not to an anomaly in legacy meter accuracy should a question arise.

Generally speaking, a meter will be removed from service during Duquesne Light’s AMI deployment of smart meters for one of four reasons: (1) To replace the legacy meter with a smart meter as part of the AMI deployment; (2) To replace the legacy meter for some non-AMI deployment reason;[[14]](#footnote-14) (3) To replace the legacy meter pursuant to customer request[[15]](#footnote-15) earlier than called in the AMI deployment; or (4) To test a meter selected for Section 57.20(e) or Section 57.21(f) testing.

Meters are tested upon removal to ensure that they have operated accurately. For meters going back into service, the test indicates whether a meter has operated accurately and whether it will be accurate going forward. In some case, every meter in a family is tested during the testing cycle. In other cases, testing of a statistical sampling of the total number of meters in service during the testing cycle provides acceptable indicia of accuracy reflecting on the meter family. Selection for testing by statistical sampling only applies to single-phase meters. Thus, it is clear that the generally accepted rationale is that not all single-phase meters need to be tested over the relevant period in order to make inferences as to accuracy relative to the entire family of single-phase meters over time and family member. The entire family of polyphase meters, however, is tested over the relevant period. Thus, there is less confidence that testing some but not all polyphase meters supports similar inferences as to accuracy relative to the entire polyphase family over time and among family members.

The crux is “What of the meter that does not test as accurate?” It might be reading high or low, outside of permissible tolerances. Further, when a legacy meter has been removed for testing and later rotated back into service, continued accuracy has a second verification, *i.e.*, pre-installation testing. If we permit suspension of the testing of all legacy meter replaced for AMI deployment purposes, then we lose these further safeguards of meter accuracy relative to meters that have been in service, especially those that are approaching the end of their testing interval.

Meter accuracy is the bedrock of utility billing. But for the AMI deployment, Duquesne Light would otherwise annually test approximately 12,000 meters for “as found” reasons and 6,000 meters for statistical sampling or periodic reasons. See Table 1 above. Further, if for no other reason than to retain the confidence that its legacy meters have been “accurate” as asserted by Duquesne Light, we find that these 6,000 annual legacy meter tests must be performed. If the only legacy testing that continues throughout the AMI deployment period is the “as found” testing, however, the potential exists that Duquesne Light’s meter accuracy rating could fall as one of the reasons for “as found” testing is suspected meter irregularity. Without also testing some portion of legacy meters on a statistical sample or periodic basis, there is no basis to extrapolate from the “as found” set of meters to the full set of meters.

Because we are unable to thoroughly consider the potential customer impacts of granting the waiver as it is currently crafted, we are unable to approve the Petition. That being said, should Duquesne wish to pursue its request, we would appreciate answers to the questions contained in Appendix B to this Order.[[16]](#footnote-16)

**Future Testing of AMI Meters**

Duquesne Light proposes to “resume its statistical sample meter testing program for watthour meters starting in 2019 to include the new deployed AMI single phase family of meters.” Petition, ¶ 21. Duquesne Light further proposes to “resume the periodic testing program starting in 2020 to include the new deployed AMU poly phase family of meters.” Petition, ¶ 22.

We find this provision ambiguous and potentially to have a shortcoming. By 2019, some of the single-phase meters will have been in service since 2015. By 2020, some of the poly phase meters will have been in service since at least 2016. The Petition is unclear whether Duquesne Light plans to consider 2019 and 2020 as the start date for the respective AMI meter testing cycles or whether the first testing cycles for the AMI meters will be elongated by the years when Duquesne Light proposes to conduct no Section 57.20(e) and Section 57.21(f) testing.

**Disposition:** Accordingly, Duquesne Light shall commence the statistical sample meter testing cycle(s) based on the initial in-service date(s) of the newly deployed single-phase AMI meters. Duquesne Light shall not wait until 2019 to start the testing cycle(s) for these single-phase meters. Similarly, Duquesne Light shall commence the periodic meter testing cycle(s) based on the in-service date(s) of the newly deployed polyphase AMI meters. Duquesne shall not wait until 2020 to start the testing cycle(s) for these polyphase meters. To be clear, we are not granting a waiver herein of any testing of AMI meters. We shall not consider the question of alternate start dates for AMI meter testing cycles unless Duquesne Light responds to the questions in Appendix B regarding future AMI meter testing.

**Conclusion**

We conclude that Duquesne Light has not established that compliance with Section 57.20(e) and Section 57.21(f) would result in an unreasonable hardship or burden, that the waiver would result in an enhanced level of customer service, or that any other criteria justify granting the waiver as proposed. Duquesne Light has not persuaded us that its requests as proposed in the Petition are in the public interest or that they are just and reasonable.

Accordingly, we shall deny the Petition, without prejudice. If Duquesne Light wishes to file a revised petition, Appendix B contains a list of questions and data requests to be addressed in a revised petition relative to the waiver request and to the start date(s) of the testing cycles for the newly deployed smart meters. Duquesne Light shall keep this Commission, as well as the Parties in this proceeding, and the parties and ALJ in the 2015 SMP proceeding, informed of its AMI deployment decisions regarding a revised petition, legacy meter testing, and the testing cycle state dates for its newly deployed smart meters.

We do not believe that there is enough factual information included in Duquesne Light’s Petition to allow us to thoroughly consider how granting a waiver would affect rates. Meter testing costs are embedded in current rates. This fact begs a number of questions such as: How much money would be saved by not carrying out statistical sampling of meters? Whether Duquesne Light plans to refund the savings to ratepayers? How will Duquesne Light refund savings to ratepayers, *e.g.*, through rates or through the AMI surcharge? Would the chosen refund method avoid the prohibition against single-issue ratemaking?

Absent Duquesne Light responding to our questions regarding the timing of statistical and periodic testing cycles and other considerations and our approval of any deviation, Duquesne Light shall commence the meter testing cycles based on the initial in-service dates of the newly deployed single-phase and polyphase AMI meters; **THEREFORE,**

**IT IS ORDERED:**

That the Petition of Duquesne Light Company for Waiver and Suspension of Meter Testing Requirements Under 52 Pa. Code §§ 57.20(e) and 57.21(f) For Deployed Legacy Meters is denied, consistent with this Order.

2. That a copy of this Final Order be served on Duquesne Light Company, the Office of Consumer Advocate, the Office of Small Business Advocate, the Commission’s Bureau of Investigation and Enforcement, and the Energy Association of Pennsylvania.

3. That a copy of this Order be served on the parties to Duquesne Light Company’s *Petition to Modify Its [2012] Smart Meter Plan and [Implement Its 2015 Smart Meter Plan]*, Docket Nos. M-2009-2123948 and P-2015-2497267.

4. That this matter be correlated with *Duquesne Light Company’s Smart Meter Plan*, Docket No. M-2009-2123948.

5. That quality of service questions regarding this Order may be directed to Dan Mumford, [dmumford@pa.gov](mailto:dmumford@pa.gov) or 717-783-1957, in the Commission’s Bureau of Consumer Services/Office of Competitive Market Oversight. Technical questions regarding this Order may be directed to David Washko, [dawashko@pa.gov](mailto:dawashko@pa.gov) or 717‑425‑7401, in the Commission’s Bureau of Technical Utility Services. Legal questions may be directed to Louise Fink Smith, [finksmith@pa.gov](mailto:finksmith@pa.gov) or 717-787-5000, in the Commission’s Law Bureau.

**BY THE COMMISSION,**



Rosemary Chiavetta

Secretary

(SEAL)

ORDER ADOPTED: May 19, 2016

ORDER ENTERED: June 23, 2016

**Appendix A**

**Text of Section 57.20(e), relating to watthour meter testing 52 Pa. Code § 57.20(e):**

(e) A public utility shall make periodic tests of its watthour meters in service as follows:

(1) Two and three-wire single-phase and network-induction-type meters, up to and including 50 amperes rated test current, shall be tested at least once in each of the following periods:

(i) If manufactured prior to January 1, 1940, and the meters are not Class I and II temperature compensated and are not equipped with surge-proofed magnets or surge shields—3 years.

(ii) If the meters are Class I and II temperature compensated and are equipped with surge-proofed magnets or surge shields—15 years.

(iii) If manufactured since January 1, 1959, and the meters are Class I and II temperature compensated and are equipped with surge-proofed magnets, surge discharge gaps and a shielded magnetic bearing system—20 years.

(2) An an [*sic*] alternative, meters described in paragraph (1)(ii) and (iii) shall be tested according to statistical procedure in Section 8.1.8.6 of the current edition of the *ANSI C‑12 Code for Electric Meters*, Fifth Edition.

(i) Groups which meet the accuracy requirements of the applied statistical procedure shall continue in service without test or adjustment until a subsequent annual statistical analysis indicates the need for corrective action or the Commission on its own motion requests retest of either entire groups or individual meters. Test results affecting billing shall be furnished to customers without charge.

(ii) Groups which fail to meet the accuracy requirements of the applied statistical procedure are subject to one of the following immediate corrective measures:

(A) Meters within the group affected shall be removed from service upon notification to the Commission and in compliance with a program acceptable to the Commission. A customer’s accounts billed according to registration by these meters shall be retained by the public utility from 2 years prior to discovery of registration error until date of meter removal or adjustment. Test results affecting billing shall be furnished to customers without charge and shall be retained by the public utility for at least 2 years after the meter is retired.

(B) Meters within groups affected shall be placed on an accelerated program of testing and maintenance until subsequent annual statistical analysis indicates that the affected groups again meet the accuracy requirements of the statistical testing program. Records of customer accounts and of test results affecting billing shall be retained by the public utility and furnished to customers under clause (A).

(3) Two and three-wire single-phase and network-induction-type meters, of over 50 amperes rated test current, shall be tested at least once every 8 years.

(4) Single-phase meters connected through current transformers or current and voltage transformers shall be tested as follows:

(i) Meters without surge-proof magnets, at least once every 8 years.

(ii) Meters with surge-proof magnets, at least once every 16 years.

(5) Self-contained polyphase meters shall be tested as follows:

(i) Meters without surge-proof magnets, at least once every 8 years.

(ii) Meters with surge-proof magnets, at least once every 16 years or according to statistical procedures as described in paragraph (2).

(6) Polyphase meters connected through current transformers or current and voltage transformers shall be tested as follows:

(i) Meter without surge-proof magnets, at least once every 8 years.

(ii) Meters with surge-proof magnets, at least once every 16 years.

**Text of Section 57.21(f), relating to demand meter testing, 52 Pa. Code § 57.21(f):**

(f) A utility shall make periodic test of its demand meters in service, as follows:

(1) Self-contained thermal demand meters, up to and including 50 amperes rated test current, shall be tested on the same schedule as the watthour meters with which they are associated.

(2) Self-contained thermal demand meters, of over 50 amperes rated test current, shall be tested at least once every 96 months.

(3) Thermal demand meters connected through current transformers or current and potential transformers shall be tested at least once every 48 months.

(4) Curve drawing watt meters used for determining demands shall be tested at least once every 24 months.

(5) Demand meters of the block interval type shall be tested on the same schedule as the watthour meters with which they are associated.

Appendix B

Questions and data requests to be addressed should Duquesne Light choose to file a revised petition regarding waiver of legacy meter testing:

1. What are Duquesne Light’s acceptable tolerance levels, and how many legacy meters are estimated to be out of tolerance annually, based on the approximately 6,000 legacy meters sampled every year?

2. Provide the annual accuracy curves for each make and model of legacy meters for at least five (5) years. Also, provide details or test results to support the assertion of a historical record of meter accuracy.

3. What are the per-customer legacy meter testing costs for Duquesne Light’s meters? What are the replacement legacy meter capital costs?

4. Provide the estimated operation and capital cost savings for each of the next four (4) years related to:

a. Not testing the legacy meters upon replacement;

b. Discontinuing the annual 6,000 legacy meter statistical sampling and periodic testing program; and

c. Not testing for non-AMI reasons unrelated to meter accuracy issues.

5. Describe for each of the cost estimates in Question 3 above, how customers will benefit from such cost savings.

6. Once smart meters are installed at each location, does Duquesne Light propose to immediately begin statistical and periodic testing for all new meters, or does Duquesne Light propose to only commence such testing beginning in 2019? If the latter, describe how such savings, if applicable, will be credited to customers, and the projected smart meter accuracy data for four (4) years in support of this approach.

7. Provide the reasoning why affected customers should not be given notice of this waiver. What issues would arise if Does Duquesne Light were required to allow customers to opt into (or out of) legacy meter testing upon smart meter replacement?

8. If legacy meters are not tested, what are the estimated costs of storage per month for legacy meters so that such untested meters would be available for testing in the event of a complaint regarding changes in metered usage before and after meter replacement?

9. How will Duquesne Light track operational and capital cost savings to the extent it proposes to pass such savings onto customers?

1. 52 Pa. Code § 57.20(e), relating to watthour meter testing, and § 57.21(f), relating to demand meter testing, are set out in Appendix A to this Order. [↑](#footnote-ref-1)
2. *Smart Meter Procurement and Installation*, Docket No. M-2009-2092655 (June 24, 2009) (*Implementation Order*). [↑](#footnote-ref-2)
3. The Commission approved Duquesne Light’s proposal to recover its smart meter costs through a reconcilable cost recovery mechanism and set forth the details of how this mechanism would work. Petition, ¶ 5. In particular, the May 11, 2010 order approved the Initial SMP subject to the following further conditions that: (1) smart meter common costs be allocated based on the number of meters in each group (at 11); (2) interest on over- and under-collections of plan costs be calculated at the “legal rate” (at 14); (3) the smart meter charge (SMC) rate be based on projected average plant balances rather than actual costs (at 16); annual reconciliations shall include monthly breakdowns (at 17); (4) Duquesne Light need not install smart meters with home area network (HAN) capabilities at that time (at 27); and (5) Duquesne Light need not provide 15-minute interval data at that time (at 32). The May 11, 2010 order also addressed capital rate structure if Duquesne Light’s last litigated base rate case was more than three years old or if its capital structure in the Commission’s most recent Quarterly Earnings Report was “outside the zone of reasonableness for the electric utility industry” (at 19-20). [↑](#footnote-ref-3)
4. Included with Duquesne Light’s proposed 2012 SMP (alternatively referred to as Duquesne Light’s “2012 Smart Meter Deployment Plan” or as the “Final SMP” in the 2012 petition) were Duquesne Light’s plans to replace its Advanced Meter Reading (AMR) system with an Advance Metering Infrastructure (AMI) and to deploy smart meters over a seven year period from 2014-2020. As detailed in the 2012 SMP, Duquesne Light’s AMI project included four components: (1) Itron Smart Meters, (2) Local Area Network, (3) Wide Area Network, and (4) the Head-End Collection System. The 2012 SMP also specified a phased-in approach to implementing the functionality required by Act 129 and this Commission’s *Implementation Order.* Petition, 6. [↑](#footnote-ref-4)
5. Duquesne Light was directed, *inter alia*, to provide data regarding the cost effectiveness of voltage monitoring and communication of outages and restorations capabilities. No one filed comments to the compliance filing. [↑](#footnote-ref-5)
6. FOCUS stands for “For Our CUStomers.” [↑](#footnote-ref-6)
7. *See Petition of Duquesne Light for Approval to Modify Its Smart Meter Procurement and Installation Plan*, Docket Nos. M-2009-2123948 and P-2015-2497267. [↑](#footnote-ref-7)
8. The parties to the litigation in the 2015 SMP proceeding are Duquesne Light, OCS, OSBA, I&E, and Citizen Power, Inc. [↑](#footnote-ref-8)
9. Under Duquesne Light’s currently approved 2012 SMP, the deployment period is scheduled to end in 2020. As part of the currently contested proceeding at Docket No. P-2015-2497267 for approval of its 2015 SMP, Duquesne Light has proposed to accelerate smart meter deployment by one year, ending in in 2018 for residential customers and in 2019 for commercial and industrial customers. No party has contested the proposal to accelerate meter deployment in that proceeding. [↑](#footnote-ref-9)
10. That request for comments ultimately led to entry of the *Implementation Order* at Docket No. M‑2009‑2092655. [↑](#footnote-ref-10)
11. We do note that we have granted a city natural gas distribution company (CNGDC) a partial limited temporary waiver in conjunction with its request to extend its eight-year meter testing cycle in conjunction with its AMR replacement schedule. *See PGW Petition for FOI Implementation Plan and Restructuring Surcharge*, Docket No. M-00021612 (September 8, 2003) (PGW AMR Waiver Order). In that proceeding, we did not waive the legacy meter testing but rather extended the testing cycle length within which meters would be tested to accommodate the AMR replacement schedule. We did require reporting on the pass/fail and fast/slow results of meters for which testing was delayed. While meter testing for accuracy might present parallels between gas meters and electric meters, no one has addressed the comparability of safety-related issues underlying meter testing for the two energy sources. [↑](#footnote-ref-11)
12. We presume these numbers will decrease yearly as more legacy meters are removed from service. [↑](#footnote-ref-12)
13. Duquesne Light does not indicate how many of these are expected to be watthour meters and how many would be demand meters. [↑](#footnote-ref-13)
14. Non-AMI-deployment meter-replacement reasons include discontinuance of service, rate changes, service type changes, load increases, housing damage, communications failures, or other reasons. Duquesne Light has committed to continue this testing protocol. Petition, ¶ 19. [↑](#footnote-ref-14)
15. As noted above, Duquesne Light need not test pursuant to Section 57.20(h) watthour meters *removed from service and replace by smart meters at customer request*. [↑](#footnote-ref-15)
16. Regardless of whether Duquesne chooses to pursue the waiver, we wish to clarify that a legacy watthour meter replaced ahead of the AMI deployment schedule at the customer’s request will not be subject to Section 57.20(h) testing, consistent with the *Implementation Order*. [↑](#footnote-ref-16)