

ORDER NO. 89260

IN THE MATTER OF THE REVIEW
 OF ANNUAL PERFORMANCE
 REPORTS ON ELECTRIC SERVICE
 RELIABILITY FILED PURSUANT TO
 COMAR 20.50.12.11

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BEFORE THE
 PUBLIC SERVICE COMMISSION
 OF MARYLAND

Case No. 9353

Issue Date: September 6, 2019

ORDER ON ELECTRIC RELIABILITY PERFORMANCE REPORTS

Pursuant to the Maryland Electricity Service Quality and Reliability Act¹ and the Code of Maryland Regulations (“COMAR”) 20.50.12 *et seq.*, the Maryland Public Service Commission (“Commission”) accepts the annual reliability performance reports filed by Baltimore Gas and Electric Company (“BGE”), the Potomac Electric Power Company (“Pepco”), Delmarva Power & Light Company (“Delmarva”), the Potomac Edison Company (“Potomac Edison”), Choptank Electric Cooperative, Inc. (“Choptank”), and Southern Maryland Electric Cooperative, Inc. (“SMECO”) (collectively the “Electric Companies”). The Commission also assesses BGE a civil penalty for non-compliance with COMAR 20.50.12.10 (Periodic Equipment Inspections), and accepts the corrective action plans filed in response to that and other violations discussed below.

¹ Chapter 168 of the Acts of 2011 (codified as Md. Code Ann., Pub. Util. § 7-213 (West 2019)).

I. INTRODUCTION AND PROCEDURAL HISTORY

The Maryland Electricity Service Quality and Reliability Act requires that “each electric company provide its customers with high levels of service quality and reliability in a cost-effective manner, as measured by objective and verifiable standards.”² In accordance with the Act, the Commission established specific service quality and reliability standards that are designed to improve reliability and ensure an objectively high level of performance tailored to each Electric Company. Specifically, the Commission enacted benchmark standards for service quality and reliability through Rule Making 43 (“RM43”); the standards are codified in COMAR 20.50.12 *et seq.*³ The Commission held a second rulemaking session on September 1-2, 2015, which set more stringent system-wide reliability standards for the Electric Companies to meet for years 2016 through 2019. Additionally, in Case No. 9361, Pepco and Delmarva agreed to further reduce their System Average Interruption Duration Index (“SAIDI”) and System Average Interruption Frequency Index (“SAIFI”) scores below what COMAR would otherwise have required as a condition of Commission approval of the merger of their parent corporation, Pepco Holdings, Inc., with Exelon Corporation.⁴

The service quality and reliability standards address a wide range of categories including system-wide reliability, poorest performing feeders, multiple device activation, service interruption, downed wire response, customer communication, and vegetation

² See Section 7-213(b) of the Public Utilities Article (“PUA”) of the Maryland Code.

³ See RM43, *Revisions to COMAR 20.50 – Service Supplied by Electric Companies – Proposed Reliability and Service Quality Standards*. The regulations became effective on May 28, 2012.

⁴ See Order No. 86990 in Case No. 9361, *In the Matter of the Merger of Exelon Corporation and Pepco Holdings, Inc.*

management. The 2018 reporting year, addressed herein, represents the sixth full year since these reliability standards were established in 2012.

COMAR 20.50.12.11 requires that each Electric Company serving 40,000 or more customers in Maryland submit an annual performance report by April 1 of each year that summarizes the electric service reliability results for the preceding year. PUA § 7-213(f) provides that the Commission shall determine whether each Electric Company has met the relevant service quality and reliability standards and authorizes the Commission to take appropriate corrective action where compliance is not met.⁵

On April 1, 2019, the Electric Companies filed their respective annual reports with the Commission, covering the period from January 1, 2018, through December 31, 2018.⁶ On April 3, 2019, the Commission issued a Notice of Hearing and Opportunity to Comment.⁷ The Notice set a legislative-style hearing for Thursday, June 20, 2019, for the purpose of reviewing the Electric Companies' Annual Performance Reports and to determine whether the Electric Companies met their service quality and reliability standards adopted by the Commission for 2018. The Notice also provided an opportunity for parties to file written comments.

On June 6, 2019, several intervening parties filed Comments with the Commission. Those parties include Montgomery County, the Maryland Office of People's Counsel

⁵ For example, PUA §§ 7-213(f)(2)(ii) and 7-213(e)(1)(iii) authorize the Commission to require an Electric Company to file a Corrective Action Plan that delineates specific steps the company will take to meet the standards. PUA §§ 7-213(f)(2) and 13-201 authorize the Commission to impose appropriate civil penalties for noncompliance with the PUA or COMAR.

⁶ The data provided by the Electric Companies in their reports cover the reporting period from January 1, 2018, through December 31, 2018, with the exception of the Poorest Performing Feeder and Multiple Device Activation standards, where outage data is submitted that covers the 12-month period ending on September 30, 2018.

⁷ Mail Log No. 224585.

(“OPC”), and the Commission’s Technical Staff (“Staff”). On June 20, 2019, the Commission conducted the hearing to consider the Performance Reports filed by the Electric Companies and the Comments filed by the intervening parties. Each party made a presentation to the Commission during the hearing and was available to answer Commission questions.

II. DISCUSSION

A. System-Wide Reliability Standards

COMAR 20.50.12.02D(1) sets forth the minimum standards with which each Electric Company must comply regarding system-wide reliability. Specifically, those regulations set targets for each Electric Company for their SAIFI⁸ and SAIDI⁹. In the case of Pepco and Delmarva, their merger-commitment targets currently supersede the COMAR targets.¹⁰ The system-wide reliability data reported by the Electric Companies exclude Major Outage Events (“MOEs”), as required by COMAR 20.50.12.02D. In 2018, multiple storm events were recorded in Maryland that were considered MOEs, and all six Electric Companies were affected by one MOE in particular, Winter Storm Riley.¹¹

All six Electric Companies met their respective system-wide reliability standards.¹² At the time of filing, Choptank reported that it did not meet its 2018 SAIFI target.¹³

⁸ SAIFI represents how often customers on average experience an interruption in a given year. Mathematically, it is equal to the number of customer interruptions divided by the total number of customers serviced on the electric system.

⁹ SAIDI measures the total time that customers on average face interrupted service in a given year. It is equal to the number of customer interruption minutes divided by the total number of customers serviced on the electric system.

¹⁰ See Engineering Division Review of 2018 Annual Performance Reports on Electric Service Reliability (“Staff Review”) at 16; see also Case No. 9361, Order No. 86990, Appendix A, Condition 8.

¹¹ Staff Review at 17.

¹² Staff Review at 18.

¹³ Choptank 2018 Annual Performance Report at 1; see also Staff Review at 18.

However, during the hearings, Choptank corrected its previously reported SAIFI of 1.44 to a SAIFI of 1.34,¹⁴ which satisfied its target of 1.37. Choptank also reported a SAIDI of 144.7 minutes, which is below its target of 149.4.¹⁵ BGE reported a SAIFI of 0.99 against a target of 1.22, and a SAIDI of 105.6, well below its target of 162.6.¹⁶ Delmarva reported a SAIFI of 1.12 against a target of 1.32, and a SAIDI of 100.0, below its target of 139.0.¹⁷ Likewise, Potomac Edison reported a SAIFI of 0.89 against a target of 1.08, and a SAIDI of 145.4, with its target being 160.2.¹⁸ Pepco reported a SAIFI of 0.80 against a target of 1.04, and a SAIDI of 60.0, well below its target of 109.0.¹⁹ Finally, SMECO reported a SAIFI of 1.30 against a target of 1.34, and a SAIDI of 112.6, below its target of 136.2.²⁰ This is the first year where all Electric Companies have met their respective SAIFI and SAIDI standards.²¹

Staff conducted several trend analyses for the reporting year to measure how the Electric Companies' system-wide reliability has changed over time. Staff observes that "both SAIFI and SAIDI performances have generally improved from 2013 to 2018."²² Staff further states that Pepco posted the best SAIFI and SAIDI scores among all Electric Companies for 2018.²³ Staff notes that compared to 2017, BGE, Pepco, and Choptank "experienced reduced SAIFI performances in 2018."²⁴ "Similarly, compared to 2017,

¹⁴ Case No. 9353 Hr'g. Tr. at 127 (Trautman).

¹⁵ Choptank 2018 Annual Performance Report at 2.

¹⁶ BGE 2018 Annual Performance Report at 3.

¹⁷ Delmarva 2018 Annual Performance Report at 4.

¹⁸ Potomac Edison 2018 Annual Performance Report at 2.

¹⁹ Pepco 2018 Annual Performance Report at Attachment A, Table 1.

²⁰ SMECO 2018 Annual Performance Report at 1.

²¹ Compare Staff Review at 22, Table 3, with 2016 Staff Review at 14, Figure 6 (together showing reported SAIFI and SAIDI data from 2012-2018).

²² Hr'g Tr. at 16. (Dererie).

²³ Staff Review at 23-24.

²⁴ Staff Review at 21.

BGE, Potomac Edison, and Choptank experienced reduced SAIDI performances in 2018.”²⁵ The Electric Companies generally attributed this performance decline to challenging weather conditions.²⁶ For 2018, Pepco, Delmarva, and Potomac Edison performed better than their three-year average SAIFI, while Potomac Edison showed continuous improvement for each of the past three years.²⁷ Pepco, Delmarva, and SMECO performed better than their three-year average SAIDI, while Pepco showed continuous improvement in SAIDI for each of the past three years.²⁸

Staff also evaluated the Electric Companies using the Customer Average Interruption Duration Index (“CAIDI”). CAIDI measures the average time required to restore service to customers per interruption.²⁹ For 2018, Choptank, Delmarva, BGE, Pepco, and SMECO performed at or better than their three-year average CAIDI,³⁰ while Potomac Edison performed worse than its three-year average.³¹ Staff also performed a rolling two-year trend analysis for CAIDI. From the 2015-2016 two-year period, to the 2017-2018 two-year period, Choptank, SMECO, and Pepco demonstrated improved CAIDI performances; BGE’s performance stayed steady; and Potomac Edison’s and

²⁵ Staff Review at 21.

²⁶ For example, BGE stated that its service territory recorded “record setting rain” in 2018 – nearly doubling what the utility experienced in 2017. BGE asserted that the rain “has an effect on the system with vegetation, a lot more susceptible for whole trees coming over with very wet soil and puts more moisture into the air which provides more energy, more afternoon thunderstorms that can happen.” Hr’g Tr. at 93-94 (Summerson).

²⁷ Staff Review at 22.

²⁸ Staff Review at 22-23.

²⁹ CAIDI is calculated by dividing SAIDI by SAIFI.

³⁰ Staff Review at 24.

³¹ Staff Review at 24.

Delmarva's performances declined.³²

As noted above, all of the Electric Companies met their system-wide reliability standards. Since the inception of these standards, customers have generally experienced improved reliability, both during blue sky events and after MOEs.³³ As discussed during the hearing, Choptank's "aggressive" overhead transformer replacement program may have temporarily impaired the Company's performance on its reliability metrics—though Choptank still met its required SAIDI and SAIFI targets. Because Choptank testified that it would be a simple and low-cost measure to establish an outage code to track the outages related to its overhead transformer replacement program, the Commission hereby directs Choptank to begin separately tracking outages that can be attributed to this program going forward.³⁴

B. Poorest Performing Feeder Standards

On September 7, 2016, by Order No. 87754, the Commission established a Poorest Performing Feeder ("PPF") Workgroup to examine issues related to PPFs and Repeat PPFs and report its recommendations to the Commission. The PPF Workgroup released a final report which led to the Commission's revision of COMAR 20.50.12.03.³⁵ The newly adopted PPF standard is in its first year since the Commission adopted the COMAR

³² Staff noted that it also analyzed reliability data based on the Institute of Electrical and Electronics Engineers ("IEEE") 2.5 Beta Method for setting future reliability standards, which excludes Major Event Days ("MEDs") instead of MOEs, and is the subject of the Commission's Rule Making 67 ("RM67") proceeding addressing COMAR 20.50.01, 20.50.02, 20.50.03, and 20.50.12. Staff stated that using the IEEE 2.5 Beta Method, the Electric Companies' historical SAIFI and SAIDI performances, with MEDs excluded, is generally "very similar" to their performances with MOEs excluded. Staff Review at 30-32.

³³ See Staff Review at 89 (stating "overall Maryland electric system reliability has steadily improved since the promulgation of RM43").

³⁴ Hr'g Tr. at 133-135 (Bireley).

³⁵ See PPF WG's Final Report, Mail Log No. 218774.

revisions in Rule Making 63 (“RM63”)³⁶ and now states that, “the feeders with poorest reliability shall be all feeders having circuit reliability performance 250 percent or more above the utility’s System-Wide SAIFI and SAIDI[.]”³⁷ Additionally, the repeat PPF standard was revised to require that “no feeder shall appear in a utility’s list of poorest performing feeders during three consecutive 12-month reporting periods, unless the utility has undertaken reasonable remediation measures to improve the performance of the feeder.”³⁸

In 2018, the Electric Companies continued to report on three percent of the total number of feeders in Maryland. In that regard, 91 of the 2,887 feeders were identified as the three percent PPFs.³⁹ The 91 feeders reported SAIFI and SAIDI values from 134 percent to 421 percent above the Company averages for Delmarva, Potomac Edison, Pepco, and BGE; whereas the PPFs for SMECO and Choptank reported SAIFI and SAIDI values from 45 percent to 151 percent above the Company averages.⁴⁰ Using the new performance-based standards set forth in RM63, the Electric Companies reported far fewer PPFs than under the three percent methodology.⁴¹ According to Staff’s calculations, this new reporting method better identifies feeders that are significant outliers in performance.⁴²

³⁶ See COMAR 20.50.12.03, revision October 2018.

³⁷ COMAR 20.50.12.03A(3).

³⁸ COMAR 20.50.12.03A(4).

³⁹ Staff Review at 33.

⁴⁰ Staff Review at 33.

⁴¹ Staff Review at 33.

⁴² See Staff Review at 34. “The average performance of all of these feeders [reported by the new methodology] represents a selective group of feeders of much worse than average reliability.” Reporting under the revised COMAR standard shows that PPFs reported would have a SAIFI range from 285 percent to 331 percent above the Company averages, and a corresponding SAIDI range from 293 percent to 683 percent above the Company averages. *Id.*

In 2018, none of the Electric Companies reported having repeat PPFs under the new performance-based standard.⁴³ As Staff pointed out, that result is not unexpected.⁴⁴ “To be identified as a repeat PPF in 2018, a PPF would have needed to have been previously identified as a PPF in 2016 and 2017, by the three percent methodology, and also be identified as a PPF with the performance-based methodology in 2018.”⁴⁵

With regard to the remediation work being done on PPFs that were reported during last year’s annual reporting period, BGE reported that all remediation work for its 2017 PPFs has been completed except for two 4 kV feeders.⁴⁶ Delmarva⁴⁷ and Pepco⁴⁸ each reported that work on two of their 2017 PPFs is still being completed. Potomac Edison and SMECO reported that their respective remediation work for 2017 PPFs has been completed.⁴⁹ Choptank did not report on 2017 PPF remediation, as it had no repeat PPFs in 2017.⁵⁰

Finally, Staff recommends that the PPF Workgroup be disbanded. Staff stated during the hearing that the purpose of the PPF Workgroup was to promulgate recommendations for RM63 and that since the promulgation of the RM63 regulations, “the group has not been functioning.”⁵¹ The Commission finds that the PPF Workgroup was

⁴³ Staff Review at 35.

⁴⁴ Staff Review at 35.

⁴⁵ Staff Review at 35.

⁴⁶ Staff Review at 36.

⁴⁷ Delmarva reported that one 2017 PPF is having a new line extension added as part of a bigger area plan, while work on the other 2017 PPF has been delayed due to a tree trimming prohibition during the summer wildlife habitat time frame. *See* Staff Review at 36.

⁴⁸ Pepco reported that one 2017 PPF had 80 percent of its work completed in 2018, while the other 2017 PPF is being delayed until the third quarter of 2019 as part of a larger coordination and proposed work schedule. *See* Staff Review at 36.

⁴⁹ Staff Review at 36.

⁵⁰ *See* Order No. 88814, *In the Matter of the Review of Annual Performance Reports on Electric Service Reliability Filed Pursuant to COMAR 20.50.12.11*, Case No. 9353 (Sep. 4, 2018) at 13.

⁵¹ Hr’g Tr. at 54 (Borkoski).

created with a specific purpose, and that purpose is now complete. Therefore, the Commission directs that the PPF Workgroup be disbanded.

C. Multiple Device Activation Standards

COMAR 20.50.12.04 requires each Electric Company to report the number of protective devices that activated five or more times during the applicable reporting period which caused sustained interruptions in electric service, including during MOEs, to more than ten Maryland customers.⁵² The Electric Companies are required to implement reasonable remediation measures to reduce the number of activations and describe these measures in their annual performance reports. COMAR 20.50.12.04D provides that the protective devices reported under this standard shall not exceed the standard during either of the two subsequent 12-month reporting periods, after allowing one 12-month reporting period for remediation measures. Any Electric Company that fails to meet this standard is required to file with the Commission a remedial plan setting forth its proposed corrective actions.

In 2018, Pepco, SMECO, Potomac Edison, and Choptank did not have any protective devices that activated five or more times that were repeats from 2015 or 2016,⁵³ while Delmarva reported not having a single protective device that activated five or more times in 2018.⁵⁴ BGE reported two protective devices that are repeats—one from 2015 and one from 2016.⁵⁵

⁵² Per COMAR 20.50.01.03B(43), protective devices include substation breakers and reclosers, line reclosers, line sectionalizing equipment, and line fuses.

⁵³ Staff Review at 37.

⁵⁴ See Staff Review at 37 n.44.

⁵⁵ Staff Review at 37.

This is the second year in a row, and third year out of the past five years, that BGE has failed the Multiple Device Activation Standard.⁵⁶ BGE's Corrective Action Plan describes the situation for each of the two device failures.⁵⁷ The first failure, device #11415203502, is a circuit breaker for Finksburg Substation Feeder 7241 and was included in BGE's 2016 Annual Performance Report as a result of underground cable failures. During the 2017 grace period, a reactive cable replacement project was completed by BGE.⁵⁸ In the 2018 reporting year, there have been five outage events resulting in sustained customer interruptions for this circuit breaker.⁵⁹ BGE replaced the remainder of the underground cable in September of 2018.⁶⁰ Since the completion of the cable replacement, there have been no additional underground failures on this circuit breaker.⁶¹ Going forward, BGE's Corrective Action Plan proposes monthly monitoring for potential multiple activations.

The second failure, device #42407402514 Fuse, was reported as being activated five times in 2015. In BGE's 2015 Annual Performance Report, the Company proposed remediation measures of conducting a feeder inspection, routine tree trimming, and continuous monitoring of the device.⁶² In the fourth quarter of 2018, due to the same device being identified as a potential repeat, BGE engineered a large, selective undergrounding project, which includes the installation of approximately 1,300 feet of #2 underground cable.⁶³ The project will include installing one cutout device, one splice box, and renewing

⁵⁶ Staff Review at 39.

⁵⁷ BGE Report, Attach. I, at 2; Staff Review at 39.

⁵⁸ BGE Report, Attach. I, at 2; Staff Review at 39.

⁵⁹ BGE Report, Attach. I, at 2; Staff Review at 39.

⁶⁰ BGE Report, Attach. I, at 2.

⁶¹ BGE Report, Attach. I, at 3.

⁶² Staff Review at 38.

⁶³ BGE Report, Attach. I, at 3; *see* Staff Review at 38-39.

two poles.⁶⁴ By January 31, 2019, BGE completed engineering, completed its one-line diagram, and sent the project to its design department.⁶⁵ Going forward, BGE's Corrective Action Plan proposes to execute the proposed project work plan, with construction expected to be completed in the second quarter of 2019.

The Commission accepts both of BGE's Corrective Action Plans regarding the Multiple Device Activation Standards. However the Commission is concerned that BGE reported 36 devices on its Multiple Device Activation list this year, which is an increase of 16 from 2017's reporting period.⁶⁶ Montgomery County observes that 18 of these devices serve Special Needs Facilities,⁶⁷ which is twice the number of devices that activated in this category than was reported last year.⁶⁸ Due to this increase, the Commission directs BGE in its remediation plans involving multiple device activations to focus particular attention on devices that activate serving Special Needs Facilities.

D. Additional Reliability Indices

In addition to reporting SAIDI, SAIFI, and CAIDI, COMAR 20.50.12.05 requires that the Electric Companies calculate and report to the Commission two additional reliability indices. Specifically, Electric Companies must report Customers Experiencing Multiple Interruptions ("CEMI_n") and Momentary Average Interruption Frequency Index ("MAIFI_E"). CEMI_n measures the ratio of customers experiencing multiple sustained interruptions against the total number of customers served on the system⁶⁹ and MAIFI_E

⁶⁴ BGE Report, Attach. I, at 3.

⁶⁵ BGE Report, Attach. I, at 3; *See* Staff Review at 39.

⁶⁶ Montgomery County Comments at 5.

⁶⁷ Montgomery County Comments at 5.

⁶⁸ The Commission observes that in Order No. 88814, it directed BGE "to pay particular attention to devices that activate that serve Special Needs Facilities."

⁶⁹ This number includes customers experiencing three or more, five or more, seven or more, or nine or more interruptions.

measures the ratio of the total number of momentary interruption events against the total number of customers served on the system. If an Electric Company is unable to provide either of these calculations, it must present to the Commission a reason why, as well as an estimation of the cost to provide the information in the future.⁷⁰

All Electric Companies reported CEMI_n data in 2018. From 2013, the first year since the implementation of RM43, to 2017, the number of customers experiencing multiple interruptions decreased.⁷¹ However, reporting from 2017 to 2018 showed an increase in the number of customers experiencing multiple service interruptions in all CEMI categories.⁷² Five of the six Electric Companies attributed the increase to challenging weather, specifically Winter Storm Riley, while Choptank attributed the increase to the transformer maintenance program that the Company initiated in 2018.⁷³

Regarding MAIFI_E, BGE, Pepco, Delmarva, and Choptank⁷⁴ reported performance data related to this metric for 2018.⁷⁵ BGE reported a 7.65 MAIFI_E in 2018, with Delmarva and Pepco reporting 0.47 and 1.16 respectively.⁷⁶ Both Potomac Edison and SMECO stated that they did not have the capability to calculate MAIFI_E data in 2018 and provided

⁷⁰ See COMAR 20.50.12.05B; *see also* COMAR 20.50.12.05C.

⁷¹ See Order No. 88814 at 16.

⁷² Staff Review at 44.

⁷³ Staff Review at 44.

⁷⁴ Choptank discovered that all of its data from January 1, 2018, through April 12, 2018, had been lost due to an overwritten storage drive. Choptank has put in place procedures to avoid losing MAIFI_E data in the future. See Staff Review at 40 n. 46.

⁷⁵ Staff Review at 40. The Commission agrees with Staff's assessment that MAIFI_E data is helpful because it enables Staff and the Commission "to determine whether companies that report lower SAIFI are doing so at the expense of increased momentary outages." Staff Review at 42.

⁷⁶ Staff Review at 43.

explanations as required by COMAR 20.50.12.05C.⁷⁷

E. Service Interruption Standards

COMAR 20.50.12.06A requires that Electric Companies restore service within eight hours, from the time when the utility knew or should have known of an outage, to at least 92 percent of their customers that experienced sustained interruptions during normal conditions. Additionally, COMAR 20.50.12.06B provides that Electric Companies must restore service within 50 hours to at least 95 percent of their customers experiencing sustained interruptions during MOEs, where the total number of sustained interruptions is less than or equal to 400,000 or 40 percent of the Electric Company's total number of customers, whichever is less.

For 2018, all six Electric Companies met the Service Interruption Standard for normal conditions. SMECO showed the highest percentage restoration rate of customers experiencing sustained interruptions during normal conditions, restoring 99.50 percent of customers within the time frame provided.⁷⁸ The lowest restoration rate was 95.90 percent, well above the 92 percent standard.⁷⁹ Additionally, all six Electric Companies reported meeting the standard for customers experiencing sustained interruptions during MOEs in 2018.⁸⁰

⁷⁷ SMECO expects to have the full capability to report MAIFI_E data beginning in April 2021. *See* Staff Review at 40 n. 47. Potomac Edison stated that because it did not implement smart meters in its service territories, it lacks the ability to differentiate between momentary outage events occurring immediately after one another and those separated by longer periods of time. Without this information, Potomac Edison cannot accurately report MAIFI_E. *See* Staff Review at 40 n. 48; Potomac Edison response to Staff No. 1.1.

⁷⁸ Staff Review at 46.

⁷⁹ Staff Review at 46.

⁸⁰ Staff Review at 46-47. BGE's and SMECO's performance during Winter Storm Riley was excluded from reporting due to the number of sustained interruptions experienced being greater than the exceptions listed in COMAR 20.50.12.06B. *See* Order No. 88813, Case No. 9485, *In the Matter of the Performance of Potomac Electric Power Co. and Balt. Gas and Elec. Co. During the March 2, 2018 Winter Storm Riley*, (discussing BGE's performance during Winter Storm Riley and how it relates to the COMAR Service Interruption Standards).

F. Downed Wire Response Standard

COMAR 20.50.12.07 requires that each Electric Company respond to a government emergency responder guarded downed electric utility wire within four hours after notification by a fire department, police department, or 911 emergency dispatcher at least 90 percent of the time. Pepco, Delmarva, Potomac Edison, Choptank, and SMECO all exceeded this standard for the 2018 reporting year.⁸¹ Pepco, Potomac Edison, and Choptank responded to 95 percent or more of guarded downed electric wires within the allotted four hours, with Choptank posting a perfect score of responding within the timeframe 100 percent of the time.⁸²

2018 is the first year that BGE failed to meet the downed wire response standard.⁸³ BGE's Corrective Action Plan largely attributes the Company's inability to meet the COMAR downed wire response requirements to Winter Storm Riley.⁸⁴ BGE stated that it did not accurately predict the intensity or duration of the storm, and thus "did not prepare for the level of destruction that Winter Storm Riley produced."⁸⁵ In BGE's Corrective Action Plan, it committed to incorporating the National Weather Service forecasts into its current territory forecasts.⁸⁶ Additionally, BGE reviewed its public safety stand-by contracts to verify the availability of contractors and set expectations for response times.⁸⁷ The Commission accepts BGE's Corrective Action Plan and reemphasizes the importance

⁸¹ Staff Review at 48.

⁸² Staff Review at 48-49.

⁸³ Staff Review at 50.

⁸⁴ Winter Storm Riley was considered an MOE and BGE filed its MOE report on April 2, 2018. Additionally, per Order No. 88813, BGE submitted its CAP for Winter Storm Riley on October 15, 2018.

⁸⁵ BGE 2018 Performance Report, Attach. H at 2.

⁸⁶ BGE 2018 Performance Report, Attach. H at 2.

⁸⁷ BGE 2018 Performance Report, Attach. H at 3.

of meeting the standard for quick response times with regard to downed wires.⁸⁸ As the Commission has previously stated, “Given the potentially life-threatening nature of downed wires, compliance with this standard is imperative.”⁸⁹

G. Customer Communications Standards

COMAR 20.50.12.08 sets standards for customer communications metrics, to include standards for the percentage of calls answered within 30 seconds, and for the percentage of calls abandoned by the customer. COMAR 20.50.12.08A requires that each Electric Company answer within 30 seconds, on an annual basis, at least 75 percent of all calls placed to the Electric Company for customer service or outage reporting purposes. All Electric Companies met this standard in 2018,⁹⁰ with Delmarva reporting the highest answered-call rate this year. Specifically, Delmarva answered 94.20 percent of all calls reporting customer service or outage matters within 30 seconds.⁹¹

COMAR 20.50.12.08 provides that each Electric Company must achieve an annual average abandoned call rate of five percent or less. In 2018, all Electric Companies met this standard,⁹² with Delmarva reporting the lowest abandoned call percentage of 0.18 percent.⁹³

⁸⁸ Highlighting the importance of this standard, the Commission acted to reduce the response times of Electric Companies to reports of downed wires by promulgating new regulations in the RM67 rulemaking proceeding, which revised COMAR 20.50.12.7 to state that when “considering data for normal and major outage event conditions for a calendar year, each utility shall respond to a government aid emergency responder guarded downed electric utility wire *within 3 hours* after notification by a fire department, police department, or 911 emergency dispatcher, at least 90 percent of the time.” (Emphasis added).

⁸⁹ Order No. 89056, *In the Matter of the Review of Annual Performance Reports of Electric Service Reliability Filed Pursuant to COMAR 20.50.12.11*, Case No 9353, (March 6, 2019) at 26.

⁹⁰ Staff Review at 49-50.

⁹¹ Staff Review at 50.

⁹² Staff Review at 49-50.

⁹³ Staff Review at 50.

OPC notes that “aside from a reporting requirement, COMAR does not currently mandate minimum standards for calls fielded by CSRs [customer service representatives] working on behalf of a utility” and that the Electric Companies’ performance for calls made to CSRs “was generally much worse than it was for the overall number of calls fielded directly by the utilities.”⁹⁴ OPC asserts that while other standards may be appropriately tailored to each utility, “the responsive customer communication performance should be provided at essentially a uniform level throughout the state.”⁹⁵ OPC further contends that the discrepancy between CSRs and interactive voice response (“IVR”)-fielded calls should be addressed and that the Commission should establish enhanced customer communications standards. Montgomery County observes that the response times have deteriorated over the last few years, and asks that the Commission direct the Electric Companies “to review their internal procedures to prevent further backsliding.”⁹⁶

The Commission finds that the current Customer Communication metrics do not fully demonstrate whether a customer’s concerns are being resolved during the communication process. While the Commission declines to accept OPC’s recommendations to establish new, more stringent customer communication standards at this time, the Commission finds that it is important to prevent backsliding regarding the Customer Communication standards. Accordingly, the Commission directs Staff to convene a workgroup to address the Customer Communication standards.⁹⁷ This

⁹⁴ OPC Comments at 17.

⁹⁵ OPC Comments at 17 at 18.

⁹⁶ Montgomery County Comments at 12.

⁹⁷ The Workgroup will be led by Staff, will include all six of the Electric Companies, and will be open to all other interested parties, including OPC and Montgomery County. The Workgroup will examine those issues outlined by OPC in its Comments and discussed during the hearing in this matter.

Workgroup is tasked with proposing “shared best practices” for Electric Companies when handling customer communications, and with recommending to the Commission which metrics would be best suited for measuring a Company’s overall performance with regard to customer issue resolution. The Commission directs Staff to file within 60 days of this Order a recommended timeline for returning to the Commission with the aforementioned recommendations.

H. Vegetation Management Standards

COMAR 20.50.12.09 addresses vegetation management standards and requires that each Electric Company trim vegetation on a certain percentage of the Electric Company’s total distribution miles each year. The regulation requires that each Electric Company develop its own vegetation management program to address tree pruning and removal; vegetation management around poles, substations, and overhead electric plant; vegetation management along rights-of-way; inspections; and public education regarding vegetation management practices, among other requirements.⁹⁸

Pursuant to COMAR 20.50.12.09F, each Electric Company must adopt either a four-year or five-year trim cycle. Based on the Company’s chosen trim cycle, it is then required to perform no less than a specified amount of vegetation management to its electric distribution system each year. BGE, Delmarva, Pepco, and SMECO adopted a four-year trim cycle, while Choptank and Potomac Edison elected a five-year trim cycle.⁹⁹ In 2018, all of the Electric Companies met or exceeded their minimum vegetation

⁹⁸ COMAR 20.50.12.09B(2).

⁹⁹ In its 2014 Corrective Action Plan addressing its non-compliance with certain reliability metrics, Delmarva accelerated its vegetation management program and completed its first four-year trim cycle in mid-2015. At the completion of its first trim cycle, Delmarva began its second four-year trim cycle the same year. Mail Log No. 159096, Delmarva Corrective Action Plan.

management requirements to combine for a total of 6,727 miles of vegetation management trimming across the State of Maryland.¹⁰⁰

As has been the case in the past, the Commission continues to be concerned about the relatively high per-mile cost of Pepco's vegetation management program. Pepco reported that the cost per mile of its vegetation management program is \$18,254, while the next highest cost per mile was BGE's program at \$11,009.¹⁰¹ It is the Commission's expectation that as Pepco renegotiates its vegetation management contracts during the Exelon-wide renegotiation process, its costs will become less of an outlier when compared to the other Electric Companies in Maryland.

The Commission notes that all of the Electric Companies have met their vegetation management targets. The Companies should continue to place priority on vegetation management, on communicating effectively with customers, and on addressing customer concerns as they carry out their vegetation management programs. In future Annual Reports, the Commission directs Electric Companies to report to Staff whether the cost per mile of vegetation management being reported is RM43-specific or whether the cost per mile being reported is an "all-in" cost associated with all vegetation management.¹⁰²

Additionally, the Commission accepts Staff's recommendation to disband the Vegetation Management Workgroup. The Workgroup has held several meetings and conference calls, evaluated COMAR 20.50.12, and discussed the implementation of shared best practices.¹⁰³ The Workgroup's last meeting was on December 4, 2018. So far, four

¹⁰⁰ Staff Review at 54.

¹⁰¹ See Staff Review at 55.

¹⁰² See Hr'g Tr. at 70-75 (discussing an apparent reporting discrepancy between Electric Companies reporting all vegetation management costs and those reporting vegetation management costs related only to RM43).

¹⁰³ Staff Review at 82.

of the six Electric Companies have fully implemented all eight of the recommended vegetation management best practices that were established.¹⁰⁴ Staff confirms that the Workgroup has “successfully met its intended goal.”¹⁰⁵ The Commission agrees with Staff’s assessment and expects that future vegetation management related issues will be discussed at the Maryland Electric Tree Trimming Council.

I. Periodic Equipment Inspections

COMAR 20.50.12.10A requires that each utility adopt and follow written operation and maintenance (“O&M”) procedures for its electric plant in order to maintain safe and reliable service. The programs should be designed to achieve, at a minimum, the level of reliability established by the Commission’s regulations. In accordance with those requirements, each of the Electric Companies filed O&M plans with the Commission in August 2012, detailing their procedures for the inspection and maintenance of wood poles, overhead circuits and equipment, pad-mounted transformers and underground equipment, line capacitors, and substations. BGE, Pepco, Delmarva, Choptank, and SMECO have all filed revised O&M program manuals for changes that took effect during the 2018 calendar year.¹⁰⁶

For the 2018 compliance period, all of the Electric Companies, with the exception of BGE, demonstrated that they completed their inspection and maintenance activities in accordance with their filed plans, and therefore met the Periodic Equipment Inspections standard. In 2018, BGE self-reported missing 21 preventative maintenance inspections by

¹⁰⁴ Choptank and SMECO have not yet fully implemented all eight of the recommendations and shared best practices. *See* Staff Review at 85.

¹⁰⁵ Staff Review at 86.

¹⁰⁶ Mail Log Nos. 21628, 218032, 218033, 218834, 221076.

the defined intervals contained in its revised O&M manual. Specifically, BGE overlooked inspections related to its Substation Maintenance program (Bulk Power Class), missing four monthly inspections. BGE also failed to make timely inspections related to its Power Transformers program (DGA, Oil Analysis & Incipient Gas-34kV, 115kV, 230kV), neglecting 14 inspections. Finally, BGE missed inspections related to its Load Tap Changers program (DGA & Oil Analysis-34kV, 115kV, and 230kV), overlooking three inspections.¹⁰⁷

This is the third year, out of the past four, that BGE has failed to meet the Periodic Equipment Inspections standard.¹⁰⁸ The Commission views BGE's repeated noncompliance with the Periodic Equipment Inspection standard as a significant failure. This noncompliance not only has reliability implications, but also raises significant health and safety concerns. The Commission created the Periodic Equipment Inspection standard in part because equipment failure is a leading cause of outages¹⁰⁹ and failure to meet scheduled equipment inspections poses a serious risk to reliability. The Commission also emphasized that "equipment failure can pose significant risks to the health of the public and to ... [BGE] personnel."¹¹⁰ As stated in Order No. 88814, the Commission "takes seriously violations of the Periodic Equipment Inspection standard."¹¹¹

As discussed above, the 2018 violation is not the first time that BGE has failed the Periodic Equipment Inspections standard. In 2017, BGE self-reported to Staff that its periodic equipment inspection work scheduled for 2015 and 2016 was not fully completed

¹⁰⁷ BGE 2018 Performance Report at 24, Attachment J. *See also* Staff Review at 58-60.

¹⁰⁸ Staff Review at 59-60.

¹⁰⁹ Order No. 88814 at 23.

¹¹⁰ Order No. 88814 at 23.

¹¹¹ Order No. 88814 at 23.

and that a total of at least 3,111 missed periodic equipment inspections had been discovered as of July 12, 2017.¹¹² BGE attributed the noncompliance to “human error” and “lost equipment records” experienced as a result of transitioning to a new work management system in 2015. The Commission found that BGE’s error constituted “a serious omission” that could implicate the health of the public and Electric Company personnel, and categorized the number of missed inspections as “alarming.”¹¹³ The Commission further warned that “failure to come into full compliance with this standard will not be taken lightly by the Commission and may result in further actions beyond those contained in this Order.”¹¹⁴ Finally, the Commission required BGE to file a Corrective Action Plan that, *inter alia*, described “how the company will avoid any such error in the future and prevent recurrence of failure to comply with this standard.”¹¹⁵

Pursuant to PUA § 7-213(f)(2), the Commission may take appropriate corrective action against an Electric Company that fails to meet any or all of the applicable service quality and reliability standards, including through the imposition of civil penalties. In the present proceeding, the Commission agrees with Staff that a civil penalty is warranted under PUA § 13-201, due to BGE’s noncompliance with the established reliability standards.¹¹⁶ PUA § 13-201(b)(1) and PUA § 13-201(c) allow for civil penalties to be imposed of up to \$25,000 per offense, per day, that a Company is in violation of a Commission regulation.¹¹⁷

¹¹² Order No. 88406 at 24.

¹¹³ Order No. 88406 at 24.

¹¹⁴ Order No. 88406 at 25.

¹¹⁵ Order No. 88406 at 25.

¹¹⁶ Staff Review at 93.

¹¹⁷ The statute provides that each violation is a separate offense and that each day that the violation continues is a separate offense. PUA § 13-201(c).

Notwithstanding BGE's prior history of noncompliance with this inspection requirement, BGE has admitted to missing 21 preventative maintenance inspections in the current reporting cycle. While the Commission's assessment of this civil penalty is informed by the gravity of the violation as well as the fact that this is the third year in which BGE has failed to meet the standard, the Commission also considers BGE's diligence in reporting the missed inspections to the Commission's attention as soon as they were discovered.¹¹⁸ In this instance, the Commission finds that a downward departure from the maximum penalty is warranted and that a civil penalty of \$10,000 per violation is appropriate, given the nature and history of BGE's noncompliance.¹¹⁹ Consequently, the Commission assesses BGE a civil penalty of \$210,000 payable to the Maryland Public Service Commission to be deposited into the Electric Reliability Remediation Fund established pursuant to PUA § 7-213(j).

IT IS, THEREFORE, this 6th day of September, in the year Two Thousand Nineteen,

ORDERED: (1) That the service quality and reliability annual reports of BGE, Pepco, Delmarva, Potomac Edison, Choptank, and SMECO are accepted;

(2) That the Corrective Actions Plans submitted are hereby noted;

(3) That Choptank shall begin separately tracking outages that can be attributed to its overhead transformer replacement program going forward;

¹¹⁸ Staff testified that "the company has been very transparent with Staff... I think that they've been very open and sharing the information, self-reporting the information." Hr'g Tr. at 49. (Borkoski).

¹¹⁹ In this case, the Commission declines to issue a separate fine for each day that the violation continued.

(4) That Staff shall convene a Customer Communication Workgroup and shall file with the Commission, within 60 days of this Order, a recommended timeline for returning to the Commission with recommendations;

(5) That the Poorest Performing Feeder Workgroup is disbanded;

(6) That the Vegetation Management Workgroup is disbanded; and

(7) That BGE is assessed a civil penalty of \$210,000 payable to the Maryland Public Service Commission to be deposited into the Electric Reliability Remediation Fund established under PUA § 7-213(j).

/s/ Jason M. Stanek

/s/ Michael T. Richard

/s/ Anthony J. O'Donnell

/s/ Odogwu Obi Linton

/s/ Mindy L. Herman

Commissioners