Appendix A – Revisions to COMAR 20.50

Proposed Regulations

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20.50.01.03

20.50.01.03 Definitions.

A. In this subtitle, the following terms have the meanings indicated:

B. Terms Defined.

(1) “Abandoned call” means a telephone call in which the customer has elected to speak to a customer service representative but the call is terminated before the customer service representative answers.

(2) “All-In Vegetation Management Cost” means all vegetation management Capital and Operation and Maintenance expenditures including:

(a)All direct contractual costs and internal staffing associated with yearly scheduled cyclical trimming and all corrective work; and

(b) All indirect costs associated with vegetation management staff, supplies and equipment.

(3) Answer.

(a) “Answer” means rendering assistance to a telephone caller or accepting information necessary to process a telephone call by a customer service representative or an automated voice response system.

(b) “Answer” does not include an acknowledgement that a telephone caller is waiting on the line.

(4) “Baseline annual usage” means:

(a) The total of an eligible customer-generator’s previous 12 months of electric energy use in kilowatt hours at the time of the installation or upgrade of an eligible customer-generator’s generating system; or

(b) An estimate of 12 months electric use in kilowatt hours based on a methodology approved by the Commission for an eligible customer-generator that does not have 12 months of electric energy use in kilowatt hours at the time of the installation or upgrade of an eligible customer-generator’s generating system.

(5) “Billing period” means the period of time covered by a bill issued by an electric company.

(6) “Bordering jurisdiction” means the District of Columbia, Delaware, Pennsylvania, Virginia, and West Virginia.

(7) "Catastrophic major outage event" means a major outage event in which the total number of sustained interruptions is greater than 400,000 or 40 percent of the utility's total number of customers, whichever is less.

(8~~7~~) "Commission" means the Public Service Commission of Maryland.

(9~~8~~) "Contact voltage" means a voltage condition that may result in an object or surface being inadvertently energized.

(10~~9~~) "Contact voltage risk zone (CVRZ)" means the portions of each electric company's service territory that:

(a) Are served by an underground electric distribution plant; and

(b) Have substantial pedestrian traffic or population density, whether permanent, seasonal or varying by time of day.

(11~~10~~) "Contact voltage survey" means a survey performed by an electric company to detect contact voltage consistent with the company's Commission-approved voltage survey plan.

(12~~11~~) "Corrective Maintenance" means maintenance performed to correct system equipment or component conditions that render them incapable of performing their designed function.

(13~~12~~) "Critical facilities" means a utility-specific list of electric system customers essential for public health and safety requiring restoration priority as determined in consultation with state and local jurisdictions.

(14~~13~~) "Cultural control practices" means control of vegetation through the establishment of compatible stable plant communities or the use of crops, pastures, mulching, or other managed landscapes.

(15~~14~~) "Customer" means a person, partnership, association, corporation, or governmental agency being supplied with electric service by a utility.

(16~~15~~) "Customer average interruption duration index (CAIDI)" means the system average interruption duration index (SAIDI) divided by the system average interruption frequency index (SAIFI).

(17~~16~~) "Customers experiencing multiple interruptions (CEMIn)" means the ratio of individual customers experiencing n-or more sustained interruptions to the total number of customers served.

(18~~17~~) "Customer interruption hours" means an amount of time calculated by multiplying a sustained interruption duration by the total number of customers affected by the sustained interruption.

(19~~18~~) “Distribution transformer” has the meaning stated in 10 CFR §431.192, as amended, which is incorporated by reference.

(20~~19~~) “Electric company” has the meaning stated in Public Utilities Article, §1-101, Annotated Code of Maryland.

(21~~20~~) “Electric distribution plant” means all electric company plant used to distribute electricity to its customers, including covers and protective structures and excluding customer meters and meter enclosures.

(22~~21~~) “Electric plant” means a plant and property owned by an electric utility, used in its business operations of providing electric service to its customers.

(23~~22~~) “Eligible customer-generator” has the meaning stated in Public Utilities Article, §7-306, Annotated Code of Maryland.

(24~~23~~) “Environmental surcharge” means the charge in dollars and cents billed by an electric company under Public Utilities Article, §7-203, Annotated Code of Maryland.

(25~~24~~) “Excess generation” means the amount of electricity produced by an eligible customer-generator that exceeds the electricity used by the eligible customer-generator in a monthly billing period.

(26~~25~~) “Feeder” means an electric plant that emanates from a substation, serves customers, and is normally electrically isolated at all endpoints.

(27~~26~~) “Global ETR” means a single estimated time for restoration for the entire service territory or the area of the service territory affected by the major outage event. The Global ETR should represent the time when at least 90 percent of all affected customers will have been restored.

(28~~27~~) “Government emergency responder” means fire and police personnel and government employees who:

(a) Are working at the direction of fire, police, or 911 emergency dispatcher personnel to respond to an emergency; or

(b) Have been identified by fire, police, or 911 dispatcher personnel as responding to an emergency.

(29~~28~~) “Hazard tree” means a structurally unsound tree or tree limb that could strike poles, substations, or energized overhead electric plant when it falls.

(30~~29~~) “Institute of Electrical and Electronics Engineers’ (IEEE) major event day” means a day determined to be a major event day using the IEEE method of determining excludable data for calculation of reliability indices under IEEE Std 1366TM — 2003.

(31~~30~~) “Interruption duration” means the period of time, truncated or rounded to the nearest minute, during which a sustained interruption occurs.

(32~~31~~) “Maintenance” means an inspection, diagnostics test and or physical maintenance performed with the intent of assessing or predicting equipment failure before it occurs or improving equipment condition and thus preventing an equipment component or sub-component performance failure.

(33~~32~~) “Major outage event” means an event where ~~the following occurs~~:

~~(a) Before January 1, 2020:~~

~~(i) More than 10 percent or 100,000, whichever is less, of the electric utility’s Maryland customers experience a sustained interruption of electric service and restoration of electric service to any of these customers takes more than 24 hours; or~~

~~(ii) The federal, State, or local government declares an official state of emergency in the utility’s service territory and the emergency involves interruption of electric service; or~~

~~(b) Beginning January 1, 2020:~~

(a~~i~~) More than 10 percent or 100,000, whichever is less, of the electric utility’s Maryland customers experience a sustained interruption of electric service; and

(b~~ii~~) Restoration of electric service to any of these customers takes more than 24 hours.

(34~~33~~) “Major outage event interruption data” means all electric customer interruption occurrence and duration information collected by the utility during a major outage event.

(35~~34~~) “Mature tree” means a tree, whether or not previously pruned by the utility, that is well-established with a defined crown and that is at least 20 feet tall or 6 inches in diameter at breast height. Mature tree does not include a hazard tree.

(36~~35~~) “Meter” means unless otherwise qualified, a device of the utility used in measuring watts, watt-hours, vars, var-hours, volt-amperes, or volt-ampere-hours.

(37~~36~~) “Micro combined heat and power” has the meaning stated in Public Utilities Article, §7-306, Annotated Code of Maryland.

(38~~37~~) “Momentary average interruption frequency index (MAIFIE)” means the ratio of the total number of customer momentary interruption events divided by the total number of customers served.

(39~~38~~) Momentary Interruption.

(a) “Momentary interruption” means the loss of electric service of a duration limited to the time required to restore electric service by:

(i) Automatic or supervisory-controlled switching operations; or

(ii) Manual switching at locations where an operator is immediately available.

(b) “Momentary interruption” does not include a loss of electric service which takes more than 5 minutes to restore.

(40~~39~~) “Net energy metering” has the meaning stated in Public Utilities Article, §7-306, Annotated Code of Maryland.

(41~~40~~) “Net Excess Generation” has the meaning stated in Public Utilities Article, §7-306, Annotated Code of Maryland.

(42~~41~~) “Normal conditions” means conditions other than a major outage event.

(43~~42~~) “Number of customer interruptions” means the number of customers without electric service during a sustained interruption.

(44~~43~~) “Off Right-of-Way Tree" means a tree or part of a tree where the utility does not typically perform routine tree trimming maintenance and may not have the rights to perform tree trimming to improve electric service reliability.

(45~~44~~) “On Right-of-Way Tree" means a tree or part of a tree where the utility typically performs routine tree trimming maintenance, and may or may not, have the rights to perform tree trimming to improve electric service reliability.

(46~~45~~) “Operating district” means a distinct geographic area for which a cooperatively owned electric utility provides customer services from a decentralized office.

(47~~46~~) Outside Assistance.

(a) “Outside assistance” means resources not routinely used by a utility for service restoration.

(b) “Outside assistance” does not include resources transferred among utility operating areas.

(48~~47~~) “PJM” has the meaning stated in COMAR 20.52.01.02B.

(49~~48~~) “Premises” means a tract of land or real estate, including buildings and other appurtenances on it.

(5049) “Primary distribution system” means the alternating current distribution lines supplying the primaries of distribution transformers.

(5150) “Protective devices” means substation breakers and reclosers, line reclosers, line sectionalizing equipment, and line fuses.

(52) “Qualified line personnel” means electric company full time employees who are fit for duty, qualified to perform service restoration involving electric primary distribution systems and secondary distribution systems. This does not include employees who are unable to work due to injury, disability, sickness, military leave, suspension, vacation, FMLA leave, bonding leave, bereavement, jury duty, or an excused absence.

(5351) "Resilience plan" means a plan or plans to prepare for and recover from pandemics, physical attacks, cyber attacks, electric supply shortages, weather events, significant infrastructure failures and other credible disturbances with the potential to lead to large and widespread electric outages or loss of critical facilities essential for public health and safety.

(5452) “Secondary distribution system” means the alternating current system which connects the secondaries of distribution transformers to the customers' services.

(5553) “Sustained interruption” means the loss of electric service that is not classified as a momentary interruption.

(5654) “System average interruption duration index (SAIDI)” has the meaning stated in Public Utilities Article, §7-213(a)(2), Annotated Code of Maryland.

(5755) Utilities Article, §7-213(a)(3), Annotated Code of Maryland.

(5856) “Test current” means the current marked on the nameplate of a watt-hour meter by the manufacturer (identified as "TA" on meters manufactured since 1960). This is the current in amperes which is used as the base for adjusting and determining the accuracy of a watt-hour meter at heavy and light loads.

(5957) “Total number of customers served” means the number of customers provided with electric service by the distribution facility on the last day of the time period for which a reliability index is being calculated.

(6058) “Utility” means an “electric company” as defined in Public Utilities Article, §1-101, Annotated Code of Maryland.

(6159) “Utility crew” means personnel and equipment routinely used by a utility for service restoration.

(6260) “Voltage survey plan” means an electric company plan approved by the Commission governing the electric company’s contact voltage detection and testing equipment and voltage detection and testing procedures to be used when conducting contact voltage surveys.

(63~~61~~) “Vulnerable individual” means a customer who is certified to the utility as having a serious illness or the need for life support pursuant to COMAR 20.31.03.01.

(64~~62~~) Zonal ETR means the estimated time for restoration when at least 90 percent of all affected customers in the sub-area will have been restored to service.

Rationale for Regulation Modification Proposal

A new definition is proposed to support new regulation proposals in this report.

The proposed new COMAR 20.50.01.03B(7) definition of “Catastrophic major outage event” rationale is explained later in this document in the section on proposed changes to the COMAR 20.50.12.06 Service Interruption Standard.

The proposed new COMAR 20.50.01.03B(53) definition of “Qualified line personnel” references the definitions of electric company, primary distribution systems and secondary distribution systems already defined in COMAR 20.50.01.03B(19), COMAR 20.50.01.03B(49) and the existing COMAR 20.50.01.03B(53), respectively. The rationale for this change is explained later in this document in the section on proposed changes to the COMAR 20.50.12.06 Service Interruption Standard.

The proposed COMAR 20.50.01.03B(34) definition modification of “Major outage event” to the existing COMAR 20.50.01.03B(32) definition reflects the fact that old references to “pre” and “post” January 1, 2020 are no longer applicable. The proposed COMAR 20.50.01.03B(55) definition of “Safe restoration” has been added to indicate when it is safe for Electric Utilities to operate bucket trucks and travel the roads.

20.50.12.06

20.50.12.06 Service Interruption Standard.

A. During each calendar year, a utility shall restore service within 8 hours, measured from when the utility knew or should have known of the outage, to at least 92 percent of its customers experiencing sustained interruptions during normal conditions.

B. During each major outage event where the total number of sustained interruptions is less than or equal to 400,000 or 40 percent of the utility's total number of customers, whichever is less, a utility shall restore service within 50 hours, measured from when the utility knew or should have known of the outage, to at least 95 percent of its customers experiencing sustained interruptions during the major outage event.

~~C. If more than one major outage event subject to the standard set forth in §B of this regulation occurs during a calendar year, the restoration percentage shall be calculated by giving equal weight to all sustained interruptions occurring during the major outage events.~~

~~D. During each major outage event where the total number of sustained interruptions is less than or equal to 400,000 or 40 percent of the utility's total number of customers, whichever is less, a utility shall restore service within 50 hours, measured from when the utility knew or should have known of the outage, to at least 95 percent of its customers experiencing sustained interruptions.~~

C~~E~~. ~~During each calendar year, A~~a utility shall restore service as quickly and safely as permitted to its customers experiencing sustained interruptions during ~~each~~ a catastrophic major outage event. ~~in which the total number of sustained interruptions is greater than 400,000 or 40 percent of the utility's total number of customers, whichever is less~~.

D~~F~~. If a utility fails to satisfy the standard in §A, B, or C of this regulation during the previous calendar year, it shall provide a corrective action plan, preferably in its annual performance report but by no later than April 1.

~~F. In the calendar year these regulations become effective, §§A and B of this regulation shall apply from the effective date of the regulations until the end of the calendar year.~~

Rationale for Regulation Modification Proposal

Staff proposes a new service restoration standard regulation to ensure that utilities are held accountable for service restoration standards for each individual major outage event that occurs throughout the calendar year, as opposed to current requirements which applies a service restoration standard on a calendar year basis.

During a catastrophic major outage event, it may not be reasonable to expect a utility to restore 95% of its incurred customer outages within 50 hours since these type events often result in severe system damage. The existing COMAR 20.50.12.06D regulation does not specifically define a catastrophic major outage event but recognizes that a different service interruption

standard should exist exempting a utility from the requirement to “restore 95% of its incurred customer outages within 50 hours” when a major outage event results in outages to “400,000 or 40 percent of the utility's total number of customers.” Staff proposes to define a catastrophic major outage event in COMAR, eliminate the calendar year requirement and modify the threshold for exempting a utility’s Service Interruption Standard performance in a catastrophic major outage event as proposed in the proposed COMAR 20.50.12.06D.

The new proposed definition of a catastrophic major outage event is a major outage event in which the total number of sustained interruptions is greater than 40 percent of the utility's total number of customers. This proposed 40% threshold is useful for applying a different restoration standard for a catastrophic major outage event than a regular major outage event. Staff concludes that a 40 percent exemption threshold from the requirement to “restore 95% of incurred customer outages within 50 hours” will result in a uniform standard applied equally to all utilities for a catastrophic major outage event and therefore, recommends eliminating the 400,000 utility total number of customers clause in the existing COMAR 20.50.12.06B.

BGE does not agree with the Commission’s rejection of the standards agreed to by the work group in the November 1, 2024 Final Report, but we agree that the COMAR changes reflect what the Commission decided in Order No. 91583.

20.50.12.07

20.50.12.07 Downed Wire Response Standard.

A. Considering data for normal ~~and major outage event~~ conditions for a calendar year, each utility shall respond to a government 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.

B. During each major outage event, where the total number of sustained interruptions is less than or equal to 400,000 or 40 percent of the utility's total number of customers, whichever is less, each utility shall respond to a government 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.

C~~B~~. If a utility fails to satisfy the standard in §A or §B of this regulation during the previous calendar year, it shall provide a corrective action plan, preferably in its annual performance report but by no later than April 1.

D~~C~~. Each utility shall coordinate its response to a government emergency responder guarded downed electric wire consistent with any program established by a fire department, police department, or 911 emergency dispatcher.

E~~D~~. Each utility shall exercise reasonable care to reduce the potential hazard caused by a downed electric wire to which its employees, its customers, and the general public may be subjected.

Rationale for Regulation Modification Proposal

Staff proposes a new downed wire response standard regulation to ensure that utilities are held accountable for downed wire response for each individual major outage event that occurs as opposed to current requirements which applies a downed wire response standard on a calendar year basis.

Staff proposes this new standard because the importance of relieving government emergency responders from guarding downed wires is heightened during major outage events since these responders are also often dealing with multiple public health and safety priorities during these critical restoration periods.

While Staff is proposing this regulation due to the failure of utilities to achieve a 3-hour response 90% of the time in half[1] of the six MOEs in CY2022, Staff also notes that this proposed standard may be a challenging standard for utilities. Many utilities rely on downed wire stand-by

[1] BGE did not achieve a 3-hour response 90% of the time in 2 out of 3 major outage events in 2022. PE did not achieve a 3-hour response 90% of the time in its only major outage events in 2022.

personnel ("Stand-by Personnel") for public safety to relieve government emergency responders. These personnel are often not trained to have extensive electric distribution system knowledge, but they are trained to keep the public away from downed wires. Stand-by Personnel are also trained to establish a safety perimeter with ropes, safety cones, safety tapes or other means. For personnel safety and to ensure continual public safety coverage even accounting for rest room and meal breaks, these may be two person crews. Utilities that can pre-mobilize Stand-by Personnel in advance of a storm should easily be able to meet this proposed standard. However, if Stand-by Personnel are mobilized after the storm impacts a utility, it will likely take longer than three hours to mobilize and dispatch these Stand-by Personnel to a specific location to relieve government emergency responders from guarding downed wires. In these cases, utilities may need to use service restoration crews, operators, "cut and clear" crews[2] or even line patrollers ("Patroller")[3] to perform public safety stand-by functions, which may detract from their ability to perform their primary storm functions. While Staff does not want this proposed regulation to detract from primary storm functions, we also don't want the current standard to detract from government emergency responders' ability to perform their primary public safety functions. Therefore, Staff proposes this regulation in recognition that there are trade-offs.

BGE does not agree with the Commission's rejection of the standards agreed to by the work group in the November 1, 2024 Final Report, but we agree that the COMAR changes reflect what the Commission decided in Order No. 91583.

[2] "Cut and clear" crews will cut wires clear instead of repairing them so they can move on to the next assignment.

[3] A Patroller is essential to restoration in that they are trained to identify circuit damage and hazards allowing for dispatch of the correct type of restoration crew and materials to restore a damaged circuit.

20.50.12.08

20.50.12.08 Customer Communications Standards.

A. Customer Telephone Call Answer Time Standard. Each utility shall answer within 30 seconds, ~~on an annual basis~~ for each major outage event, at least 75 percent of all calls offered to the utility for customer service or outage reporting purposes.

B. Abandoned Call Rate Standard. Each utility shall achieve an ~~annual~~ abandoned call percentage rate of 5 percent or less, calculated by dividing the total number of abandoned calls by the total number of calls offered to the utility for customer service or outage reporting purposes for each major outage event.

C. Busy Signals. Each utility shall design its telecommunications systems to accommodate expected volumes of customer calls with minimal or, if possible, no customer busy signals during both normal conditions and major outage events.

D. Other Customer Communications Information. Each utility shall state in its supplemental annual performance report:

(1) Based solely upon those calls offered to its customer service representatives:

(a) The percentage of calls that are answered within 30 seconds; and

(b) The abandoned call percentage rate; and

(2) The average speed of answer, which shall be calculated by dividing the total amount of time callers spend in queue after requesting to speak to a customer service representative through the automated voice response system by the total number of calls handled, including calls handled by the automated voice response system.

(3) First Call Resolution. Each utility shall measure the percentage of customer issues resolved that are reported to the utility in a single interaction with its customer service representatives.

(4) Average Handling Time. Each utility shall measure an average amount of time needed to resolve a customer's request. This includes any time spent on holds, delays, or follow-up actions necessary to fulfill the customer's needs.

(5) Vulnerable Individuals Notified Before Storms. Each utility shall measure the percentage of vulnerable individual customers notified in advance of a storm event.

E. Customer Communications Standards Period.

(1) Each standard in this regulation is measured using the 12-month period ending December 31, for the exception of the standard in §A or B.

(2) For the calendar year in which the regulations become effective, the standards shall be measured from the date the regulations are effective until and including December 31 of that year for reporting purposes only, for the exception of the standard in §A or B.

F. Reporting. Each utility shall report its year-ending performance in its annual performance report.

G. Except as otherwise set forth in §D of this regulation, the standards in this regulation shall apply to customer calls offered to or received by a utility's call overflow system or a third-party vendor retained by the utility.

H. Corrective Action Plan. If a utility fails to satisfy the standard in §A, B or C, of this regulation, it shall provide a corrective action plan, preferably in its annual performance report but by no later than April 1.

Rationale for Regulation Modification Proposal

In Commission Order No. 91307 on 2023 Electric Reliability Performance Reports,[4] the Commission directed Staff to make recommendations to apply the existing customer communications standards to each MOE, rather than using an average on a calendar year basis, to improve customer communications accountability during MOEs.

BGE does not agree with the Commission's rejection of the standards agreed to by the work group in the November 1, 2024 Final Report, but we agree that the COMAR changes reflect what the Commission decided in Order No. 91583.

[4] ML 312076.

20.50.12.12

20.50.12.12 Major Outage Event Plan.

A. Within 60 days of the effective date of this regulation, each utility shall file a major outage event response plan providing a description of and procedures for its response to major outage events, and performance measures associated with the assessment of the implementation of the major outage event response plan, including, but not limited, to the following topics and issues:

(1) Preparation, training, and drills;

(2) Early warning and storm tracking;

(3) Emergency organization structure;

(4) Activation and mobilization;

(5) Materials management and logistics;

(6) Major outage event restoration priorities, including, but not limited to:

(a) How the utility prioritizes restoration customers; and

(b) How the utility communicates with customers that are identified as high priority due to medical needs for electricity and how it schedules restoration actions for such customers;

(7) Damage assessment;

(8) Public safety, including wire down response;

(9) Crew deployment;

(10) External communications, including communications with emergency officials, the public, and other persons;

(11) Internal communications;

(12) Communications technology use, including high call volume capability and capacity;

(13) Development of estimated times of restoration and assessment of estimated times of restoration accuracy;

(14) Ramp-down; and

(15) Major outage event performance review.

B. Each utility shall file with the Commission any material change to its major outage event response plan at least 60 days prior to implementation, unless it will delay implementation of the change in a manner inconsistent with restoring service in the shortest time practicable, in which case the change shall be filed by no later than 30 days after implementing the change.

C. Each utility shall comply with its major outage event response plan when preparing for and responding to major outage events.

D. The major outage event response plan shall be filed as a publicly available document. To the extent that some information may be considered confidential, a redacted version shall also be filed.

E. Major outage event response plan information may be shared without restriction with state officials that participate in a Maryland Department of Emergency Management activation of the State Emergency Operations Center.

F. Each utility shall file with the Commission written policies for the availability of qualified line personnel and provide a new filing whenever there are material changes made to the policy.

Rationale for Regulation Modification Proposal

Commission Order No. 91583 directs that electric companies establish and file written policies for the availability of qualified line personnel, within their companies with the Commission, for use by Staff and OPC in evaluating the cost and restoration impacts of electric company adherence to their policies in MOE performance reports and rate cases.