STATEMENTS OF POLICY

Title 52—PUBLIC UTILITIES

PENNSYLVANIA PUBLIC UTILITY COMMISSION [52 PA. CODE CH. 69] [M-2013-2382943]

Utility Service Outage Response, Recovery and Public Notification

The Pennsylvania Public Utility Commission (Commission), on March 6, 2014, adopted a final policy statement which revises existing response, recovery and public notification guidelines with additional storm preparation and response best practices that were developed following hurricanes Irene and Sandy.

Public Meeting held March 6, 2014

Commissioners Present: Robert F. Powelson, Chairperson; John F. Coleman, Jr., Vice Chairperson; James H. Cawley; Pamela A. Witmer, statement follows; Gladys M. Brown

Policy Statement Regarding Utility Service Outage Response, Recovery And Public Notification Guidelines; Doc. No. M-2013-2382943

Final Policy Statement

By the Commission:

On September 27, 2013, the Commission entered a proposed policy statement order inviting comment regarding proposed amendments to the Commission's policy statements regarding electric distribution utility service outage response, recovery and public notification guidelines at 52 Pa. Code §§ 69.1902 and 69.1903, et seq. The amendments included revising section 69.1902 and adding a new section 69.1903 for preparation and response measures, and inviting comment on whether the new preparation and response measures added for electric distribution utilities should apply to water and natural gas utilities as well. Based upon our review and consideration of the many comments filed in this proceeding by the industry, statutory advocates and other interested persons, we shall adopt a final policy statement regarding utility service outage response, recovery and public notification guidelines.

Background and Procedural History

On September 14 and 15, 2008, Hurricane Ike swept through Pennsylvania interrupting electric service to over 450,000 customers. Prompted by this occurrence, on September 25, 2008, the Commission issued a Secretarial Letter to all electric distribution companies (EDCs) operating in Pennsylvania seeking information regarding their service and public notice practices. On the same date, an investigation was initiated into EDCs' service outage responses and restoration practices with the same information requested. Responses were filed by the EDCs. As part of this investigation, the Commission also held two public input hearings in western Pennsylvania and solicited information from EDCs regarding their current and past storm preparation and response practices.

In April 2009, the Commission's Bureau of Conservation, Economics and Energy Planning (this Bureau was reorganized into the Bureau of Technical Utility Services, or TUS) and Office of Communications submitted a report to the Commission entitled, Electric Distribution Company Service Outage Response and Restoration Practices Report (Outage Response and Restoration Report). This report was adopted by the Commission at Public Meeting of April 30, 2009, at Docket No. M-2008-2065532. On the same date, this Commission adopted the Joint Motion of former Vice Chairman Tyrone J. Christy and Commissioner Kim Pizzingrilli to initiate a rulemaking proceeding to revise our regulations on Service Outages at 52 Pa. Code Section 67.1, et seq., and reportable incidents at 52 Pa. Code Sections 57.11, 59.11 and 65.2. The Joint Motion also directed that a Policy Statement be issued.

The Outage Response and Restoration Report summarized the findings of the staff's investigation and recommended the following future actions:

- Utilities should apply the principles of the National Incident Management System (NIMS) and its Incident Command System when managing widespread service outages. Application of NIMS would include:
- 1. Development of written crisis communication plans consistent with national NIMS standards.
- 2. Establishment of a Joint Information System/Joint Information Center to coordinate responses when multiple utilities in the same region are affected by an incident.
- Utility personnel should communicate with the news media and public in a consistent fashion. Common talking points should be distributed to all utility employees who may be in contact with the public and news media.
- During incident management, utilities should establish a schedule for the regular release of information to the news media.
- Utilities should strive to use the best available technology to facilitate the sharing of information, including automated dialing systems, electronic mail and text messaging.
- Utilities should provide a greater level of detail in their written reports to the Commission for unscheduled service interruptions that meet the criteria under 52 Pa. Code § 67.1(b), including the level of damage to utility facilities, number of personnel utilized through mutual aid agreements, and other matters identified in the report.
- The Commission should establish a more uniform approach to reportable accidents involving utility facilities and operations.

Given the communication methods and reaction of consumers from the September 2008 electric outages and subsequent large-scale and extended duration outage events, including those in the late summer and fall of 2011, we subsequently issued a Final Policy Statement on December 15, 2011 for our EDCs and NGDCs. It was similar to the one adopted on November 9, 2006, for our jurisdictional water utilities. Additionally, we revised the policy statement for water to make it consistent with the electric and gas sections. For example, we revised the water section to encourage the use of social media and other emerging technology. We also added the section on the NIMS standards that water utilities should strive to follow.

On September 23, 2011, the Commission issued a Final Rulemaking Order revising 52 Pa. Code Chapters 57, 59,

65 and 67 regarding utilities' service outage response and restorations practices with the goal of having even more effective responses to future unscheduled service outages. In general, under sections 57.11, 59.11 and 65.2, we expanded our regulations to capture more reportable events, such as cyber security attacks, and established deadlines for reporting accidents. Under section 67.1, we expanded our general provisions regarding service outages such that rather than just an approximate number of customers involved in a single incident is reported, the total number of sustained outages during the event are reported. As utilities employ better technology to more accurately count their sustained outages, this information is reportable to the Commission and we should be made aware of it. Other changes to section 67.1 included reporting the number of not only utility workers, but also contract workers specifically assigned to the repair work and mutual aid workers.

Hurricane Irene hit Pennsylvania in August of 2011. On October 12, 2011, the Commission held a Special Reliability Meeting, focusing the discussion on the Commission's role in storm response as well as the preparation and response of the six EDCs that were affected most by Irene. On August 7, 2012, the Commission issued three reports. The first report summarized the preparation and response of the PUC and EDCs to Hurricane Irene. The second report detailed information relating to handling of high-call volumes during major storms and corrective actions currently underway or completed. This report also addressed the need to focus on the increase in severe weather events and whether infrastructure improvements are necessary. The third report summarized outage information submitted by the EDCs for the period from May through November 2011 on full or partial circuit outages greater than 24 hours; between 24 and 48 hours; greater than 48 hours to 72 hours; and greater than 72 hours. This report also considered circuits that were among the worst performing 5 percent of circuits identified in the PUC-filed Quarterly Reliability Reports for the first three quarters of 2011.2

Hurricane Sandy swept through Pennsylvania in October of 2012. Following Hurricane Sandy, the Commission directed the EDCs to work together to share best practices learned from the response to Sandy and to develop best practices to address some of the issues identified during the response to Sandy. On January 10, 2013, the Commission held a Special Reliability Meeting which focused on the preparation and response of the EDCs for Sandy as well as a briefing on the EDC best practices group's progress.³ On March 20, 2013, the EDC Best Practices Team briefed the Commission Reliability staff on the group's progress at a meeting of the Energy Association of Pennsylvania's Electric Transmission and Distribution Committee. On May 7, 2013, the Commission and EDC Best Practices Team briefed the PA Senate Consumer Protection & Professional Licensure Committee on the lessons learned from Sandy and the Best Practice Team's progress. On September 13, 2013, the EDC Best Practices Team updated the Commission's Reliability and Emergency Response Staff on the group's progress.

As discussed above, over the past three years, the Bureau of Technical Utility Services (TUS) has reviewed several significant service outages, including the Sandy Report prepared in May of 2013.4 Following this review, TUS recommended that the Commission consider revising the Utility Service Outage Public Notification Guidelines for Pennsylvania EDCs so that the efforts that were undertaken by the EDCs to improve their storm response performance following Hurricanes Irene and Sandy can be memorialized.

While this Final Policy Statement focuses mainly on improving coordination, communications, and event forecasting, as well as holding exercises in order to better respond to major service outage events, the Commission will continue to work with various utility working groups to identify further best practices in an effort to continuously improve response capabilities. The Commission will continue to enhance its policies as these best practices are further developed and defined.

Comments have been received from the following: the Pennsylvania State Association of Township Supervisors (PSATS), Broadband Cable Association of Pennsylvania, (BCAP), Pennsylvania Telephone Association (PTA), AT&T Corporation and Teleport Communications America, LLC (collectively, AT&T), Verizon Pennsylvania LLC and Verizon North LLC (collectively, Verizon), Aqua, Pennsylvania, Inc. (Aqua), Pennsylvania-American Water Company (PAWC), Energy Association of Pennsylvania (EAP), National Fuel Gas Distribution Corporation (NFG), PPL Electric Utilities Corporation (PPL), Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company (collectively First Energy), PECO Energy Company (PECO), Duquesne Light Company (Duquesne Light), and the Office of Consumer Advocate (OCA).

Establishment of Critical Infrastructure Interdependency Working Group

In addition to revising this Policy Statement to account for the experience gained in the more recent significant service outages, the Commission recognizes the need to coordinate restoration of critical infrastructure facilities. Coordinating the response among electric, telephone, water, wastewater, and natural gas systems in areas where more than one of those systems may be affected during major service outage events such as hurricanes, tropical storms, major flooding, ice storms, heavy snows, cybersecurity incidents and other similar occurrences is an important component to an effective response. Thus, the Commission has recommended the establishment of a Critical Infrastructure Interdependency Working Group (CIIWG or working group). The Commission also recognizes that non-jurisdictional stakeholders such as municipal water and wastewater systems, mid-stream natural gas companies, wireless telecommunications carriers and cable companies provide vital services and would also benefit from coordination with regulated utilities. To provide a means for all parties to discuss interdependencies and share best practices, the Commission is establishing the CIIWG. We invited comment on the establishment of this CIIWG from all interested persons.

The CIIWG will meet at least once per calendar year. The Commission will invite all jurisdictional EDCs, incumbent telephone, facilities-based competitive telecommunications, water, wastewater, and natural gas distribution utilities with 5,000 or more customers. The Commission will also invite certain non-jurisdictional stakeholders to participate, including non-jurisdictional utilities as well as county and state emergency response officials.

¹ Link to documents from the meeting: http://www.puc.pa.gov/consumer_info/

Link to documents from the meeting: http://www.puc.pa.gov/consumer_info/electricity/aspx.

The reports are available on the Commission's website at: http://www.puc.pa.gov/utility_industry/electricity.aspx.

The presentations from this meeting are available here: http://www.puc.pa.gov/consumer_info/electricity/reliability.aspx.

 $^{^4\,{\}rm The}$ Sandy Report can be found on the Commission's website at http://www.puc.state.pa.us/Electric/pdf/October_2012_Sandy_Report-public.pdf.

One of the goals of the CIIWG will be for parties to come to an understanding of their critical interdependencies and how to coordinate restoration of services where more than one party is affected in a geographic area. This would include identification of mission critical facilities and their interdependencies such as commercial power, natural gas service, telecommunications, and water/sewer service. Also, participants could discuss prioritization of restoration of those mission critical facilities based on their current and projected capabilities such as alternate power generation, water and gas storage, populations served, and other considerations. Many utilities already have relationships in place with critical interdependency partners and those utilities would be encouraged to share the best practices of those relationships with the group. Utilities are also encouraged to work with their trade associations.

Comments

All parties who commented on the Proposed Policy Statement generally supported the establishment of the proposed CIIWG and indicated a willingness to participate. In addition to this overarching support, commenters shared the following thoughts regarding the Working Group.

Verizon supported the creation of a voluntary working group so long as it does not increase regulatory burdens on communications companies and commented that the prioritization of repairs during emergency outages is a good subject for discussion in a voluntary working group. However, Verizon noted that to the extent details about critical infrastructure are shared within the group, the Commission should devise and maintain appropriate safeguards that ensure proprietary data and network infrastructure information remains confidential. In offering support to the establishment of the CIIWG, AT&T commented that periodic meetings open to all interested companies would further the goals identified by the Commission, specifically improving the coordination of response and restoration efforts, identifying and prioritizing the restoration of critical facilities, and sharing best practices.

PAWC added that the discussion of coordination and response in major service outage events will benefit all stakeholders and ultimately the Commonwealth and its citizens. PPL encouraged the Commission to be mindful that there are several ways to achieve positive collaborative results and to recognize the different circumstances that each EDC may face.

The EAP and NFG recommended that the first step of the CIIWG be to meet and develop a charter specifying the Working Group's scope and objectives. The EAP noted that cybersecurity merits discussion and inquiry before it should be included on the list of major service outage events as the Commission proposed. Both the EAP and NFG commented that the CIIWG might be the appropriate body to initially focus on cybersecurity and to distinguish between these outages and weather-related ones. Thus, the Working Group could determine whether any expansion of the 2011 Policy Statement to include cyber security is appropriate.

Duquesne Light commented that the Working Group provides an opportunity for non-EDCs to better understand EDC outage restoration priorities and illustrate how to coordinate restoration efforts where mission critical facilities are affected.

PSATS suggested the following two additions for the Commission's consideration: (1) The Commission may

want to create a subgroup for small utilities which may face unique issues; and (2) The Commission might consider inviting both local emergency response personnel since they are truly in the field and locally elected officials who provide the resources and means for emergency and utility personnel responding to emergencies.

Resolution

The Commission appreciates that all commenters were generally supportive of the formation of a CIIWG. We look forward to the participation and cooperation of all key stakeholders. We concur with the suggestions by the EAP and NFG regarding the development of a group charter and identification of specific goals and objectives. We believe that the initial meeting of the CIIWG should be used to facilitate development of a group charter, mission statement, code of conduct, and specific functional subgroups to address goals identified in the charter. The Commission will include in the charter of the CIIWG that participation is conditioned on the agreement to non-disclosure of potentially sensitive competitive information and confidential infrastructure and cybersecurity information. In addition, it will be more efficient for smaller subgroups to concentrate on various functional areas rather than to have the whole CIIWG work on all identified goals at once. The subgroups could meet on their own during the course of the year and report out any accomplishments and deliverables at the annual CIIWG meeting. We support the use of collaborative technologies such as Wiki sites that allow participants to provide direct feedback without the need for a physical meeting.

We touched on some functional areas that the CIIWG may consider addressing, such as coordination of restoration of services in geographic areas where more than one infrastructure stakeholder is affected as well as discussions around identification and prioritization of restoration of mission critical facilities given their capabilities. The process to address road closures during major service outage events is another area that may be of interest to the CIIWG. Based on the comments received, cybersecurity is an area that may be best addressed through the CIIWG. However, as outages caused by cybersecurity are already identified in our regulations as a potential trigger for a reportable event, we disagree with commenters that identified the issue as one to be addressed at a later time. We are mindful of the disclosure of any sensitive information and expect any cybersecurity discussions to focus on best practice sharing and joint training and exercising opportunities. We welcome further discussion of functional areas to address at the initial meeting. The Commission's role in the CIIWG is that of a facilitator and we expect the members of the CIIWG to guide the discussion and goal-setting.

The date for the first meeting of the CIIWG is April 30, 2014 to be held at the Commission's Hearing Room 1, 2nd floor, Commonwealth Keystone Building, 400 North Street, Harrisburg, Pennsylvania 17120. A meeting time and agenda will be distributed to participants. We welcome participants from all of our private and public stakeholders. Due to space constraints, we ask that stakeholders limit their participants to two (2) maximum. We ask participants to email their intent to attend to RA-PC-CIIWORKINGGRP@pa.gov by April 11, 2014, and include their name, title, business or agency name, business address, phone number, and email address.

We also plan to notify some stakeholders that were not on the original service list in the September 26, 2013 Proposed Policy Statement Order. Examples of those stakeholders include, but are not limited to: Pennsylvania Rural Electric Association, Pennsylvania Rural Water Association, Pennsylvania Chapter of the American Water Works Association, National Association of Water Companies, Comcast, Marcellus Shale Coalition, American Petroleum Institute, Pennsylvania Independent Oil and Gas Association, County Emergency Managers, Pennsylvania State Association of Township Supervisors, Pennsylvania Municipal Authorities Association, Carnegie Mellon University, Department of Environmental Protection, Pennsylvania Governor's Office of Homeland Security, Pennsylvania State Police Criminal Intelligence Center, Pennsylvania Department of Transportation, Pennsylvania Department of Health, Pennsylvania Department of Public Welfare, Pennsylvania Department of Agriculture, and the three Pennsylvania regional Department of Homeland Security Protective Security Advisors.

Policy Statement

General discussion

We sought comment on whether we should revise the policy statement to apply to other industries including water, wastewater, gas, and telecommunications. In the proposed policy statement, we simply revised Section 69.1702 (NGDC) and Section 69.1602 (Water) to change the name of the Emergency Preparedness Coordinator to Lead Emergency Preparedness Liaison Officer consistent with the proposed revision here in 52 Pa. Code § 69.1902 (EDC).

Further, we invited comment on the cost/benefit analysis regarding what benefits versus what costs the EDCs, and potentially other industries, may incur with implementation of the policy statement. In particular, we invited comment regarding the associated costs in developing storm damage and outage prediction models as outlined in the proposed preparation and response measure at Section 69.1903(f).

Comments

PECO, the EAP, NFG, and First Energy contended that the Commission's Proposed Policy Statement should be less prescriptive and allow EDCs greater discretion to implement best practices. PECO claimed that such a policy would allow (1) greater space for flexibility among varying utilities; (2) room for modifications as new technologies are developed; and (3) EDCs to consider more cost-effective and effective mechanisms to improve storm response performance.

The EAP stated that any expansion made to the current policy should (1) encourage further action in line with recommendations made in the May 2013 Technical Utility Services (TUS) Report; and (2) account for development and adoption of new approaches and technologies applicable to weather-related outages. The EAP also suggested that the Proposed Policy Statement could be revised to encourage the continued development of best practices with regard to preparation and response. The EAP requested that the final policy statement use the word "may" rather than "should" to advance flexibility and innovation.

Outside the implementation of additional storm exercises, changes to its website, and the outage prediction model (discussed below), Duquesne Light stated that the changes in the Proposed Policy Statement do not represent significant costs compared to the benefits that will be provided.

The OCA commented that the Proposed Policy Statement does not account for direct communications by

EDCs with customers or for coordination efforts with local officials regarding vulnerable customers. The OCA identified several initiatives by other states to improve their utilities' communications with customers about outage events and to address the specific needs of vulnerable customers during major storms. The OCA suggested that EDCs develop specific plans to communicate with such customers and advocated the use of auto-dialer systems and using third parties to reach out to vulnerable customers and provide assistance when needed.

In addition to recommending that the Commission encourage EDCs to look at best practices to develop plans to communicate and accommodate vulnerable customers, the OCA suggested improved multi-lingual communication. The OCA proffered an additional subsection to proposed Section 69.1903 regarding customer communications that addressed its comments.

Verizon and the PTA commented that two years ago the Commission rejected extending this policy statement to regulated communications providers and that the Commission should reach that same conclusion again. Verizon, as well as AT&T, contended that the Commission staff's study of service restoration practices was limited to restoration practices in the electric industry. Verizon continued that there has been no finding that current customer notification practices in the communications industry are inadequate. AT&T added that applying the proposed changes and additions in an across-the-board manner to other industries would fail to recognize the differences between EDCs and other utilities.

The PTA opposed the extension of the Commission's policy statement and pointed out that PTA Companies are unlike the gas and energy industries which are fully regulated monopolies regarding transmission and delivery functions and are only competitive at the commodity level. The PTA noted that its Companies operate in an environment where any change in their regulatory burden may negatively impact the ability to remain competitive, and identified their most aggressive competitive challenges as wireless providers, cable companies, and nomadic VoIP service providers.

Similarly, BCAP commented that it would be unnecessary to extend the Commission's policy statement, with the proposed revisions, to telecommunications providers.

PAWC and Aqua stated that it is not necessary presently to apply the proposed policy statement to the water and wastewater industries because the industry is unique in their pipes being underground. PAWC acknowledges the importance of communications with the electric industry during outages, but believes that coordination can be achieved outside the proposed statement.

PECO offered general support to extending the Proposed Policy Statement's applicability to other jurisdictional utilities, but acknowledged that some aspects may not be relevant or practicable for other industries.

Neither the EAP nor NFG supported extending the Proposed Policy Statement to include other fixed utilities, especially natural gas distribution companies (NGDCs). Similar to the communications companies above, the EAP and NFG pointed to the fact that the Proposed Policy Statement addressed issues unique to EDCs and was the result of investigations, meetings and reports directed at EDCs. Both parties expressed that it would be beneficial to first engage stakeholders who would be able to contribute to the dialogue operational differences between electric utilities and natural gas utilities. The EAP and NFG identified that the majority of NGDC facilities are under-

ground and that NGDCs have outage response and notification obligations to the U.S. Department of Transportation. NFG added that NGDCs have specific safety concerns after restoring service that are not relevant to EDCs and noted that NGDCs' most common outage scenarios involved line hits unrelated to weather.

Duquesne Light and First Energy offered no comments on whether the Proposed Policy Statement should be applied to other industries. However, Duquesne suggested that the Commission should receive specific feedback from impacted industries and First Energy stated that the possible extension to other industries only underscored the importance of the Proposed Policy Statement being less rigid.

Resolution

The Commission agrees with the commenters and will not further revise the policy statement to apply to other industries including water, wastewater, gas, and telecommunications. We note that those utilities not included within the scope of the policy statement are expected to work cooperatively on interoperability issues related to major service outage events at the time of the event as well as through the CIIWG.

In addition, while OCA suggested that EDCs develop specific plans to communicate with vulnerable customers and advocated the use of auto-dialer systems and using third parties to reach out to these customers and provide assistance when needed, the Commission did not revise the policy statement to include this as it is outside of the scope of this policy statement and may involve significant costs, especially the use of auto-dialer systems.

§§ 69.1602, 69.1702, and 69.1902

We proposed revising §§ 69.1602, 69.1702, and 69.1902 to change the name of the Emergency Preparedness Coordinator to Lead Emergency Preparedness Liaison Officer (Lead EPLO). This is based upon an internal administrative decision. This was not a substantive change to the administrative duties of this position but it is a different title. The Commission proposed changing the title to Lead EPLO to be consistent with other Pennsylvania state agencies that use this same title.

Resolution

Commenters agreed with changing the name of the Emergency Preparedness Coordinator to Lead Emergency Preparedness Liaison Officer (Lead EPLO) to be consistent with other Pennsylvania state agencies that use this same title.

§ 69.1903(a)

Subsection 69.1903(a) states that EDCs should offer company liaisons to counties including County Emergency Operations Centers or 9-1-1 Centers, depending on the county's preference, in the EDCs' service territories during high impact and major service outage events.

AT&T and BCAP noted that dedicating personnel to act as liaisons to multiple county agencies under Section 1903(a), or to participate in multiple regional conference calls pursuant to Section 1903(b), would dilute the personnel available to restore service when utility companies are not as large as most EDC operations and lack the available personnel to meet the proposed requirements.

PPL commented that the proposed policy does not account for future advances in technology and that Subsection 69.1903(a)(1) be modified so that EDCs are encouraged to adapt their notification methods to consider advances in technology and implement procedures that

suit each individual EDC and its customers. PPL stated that a utility liaison should not be requested by a 9-1-1 call center and remarked that Subsection 69.1903(a) is unclear about when an EDC should send a liaison to these call centers or the liaison's role upon arrival. PPL also noted that the company could incur significant additional expenses for equipment purchases for liaisons.

Regarding Subsection 69.1903(a)(2), PPL expressed concern that the proposed guidelines do not address conflicts between counties and EDCs that do not agree on threshold criteria for sending a liaison. Similarly, for Subsection 69.1903(a)(3), PPL contended that it is unclear whether an EDC must provide a requested liaison for events that do not meet an established threshold or whether an EDC could refuse or postpone the request under extenuating circumstances. PPL also sought clarification, under Subsection 69.1903(a)(4), about what constitutes an acceptable response to a county's request for a liaison and whether an EDC must respond affirmatively.

PECO noted its current practice of providing company liaisons to 9-1-1 call centers and supported this guideline's inclusion in the Proposed Policy Statement.

First Energy generally supported the concept of ensuring an open dialogue and coordination between an EDC and the county it serves along with staffing counties on an as-needed basis. However, First Energy proposed modifications of this Subsection to promote appropriate flexibility and stressed the importance of practices that are agreed on by EDCs and counties. First Energy identified at least one ambiguity, as did PPL directly above, regarding Subsection (a)(4) and an EDC's duty to respond to a county's request for a liaison; while First Energy makes best efforts to respond to all requests, the companies argue that EDCs should have discretion to make placement determinations.

Resolution

In response to comments from PPL, First Energy, and EAP, concerning when the EDC should send a company liaison to counties, the Commission agrees to change § 69.1903(a) to limit the times that an EDC provides liaisons to counties in its service territory to only those counties that are "significantly impacted." We also defined "significantly impacted" to include those counties in which at least 10 percent of customers are expected to experience an outage for over 48 hours.

Additionally, the Commission agrees to include additional limiting language that EDCs should make a "best effort" to respond to a county's request for a company liaison for events that do not meet the established threshold and that this would be "subject to operational and safety considerations." The Commission agrees to this additional language in response to the comments from the EDCs that it was unclear if the EDCs were directed to respond for such instances, or whether it was at the discretion of the EDC. The Commission eliminated the former subsection 69.1903(a)(5) since it was duplicative of subsection (a)(1) where it states that the Commission should inform the Commission's Lead EPLO of the counties in which the company has placed liaisons. The Commission further agreed to limiting language in subsection (a)(1) indicating that the requirement to inform the Lead EPLO only has to be done, "when this information is available.'

§ 69.1903(b)

Subsection 69.1903(b) states that EDCs should offer regional conference calls for state and local elected officials and local emergency managers for major service

outage events. We defined major service outage events to include hurricanes, tropical storms, major flooding, ice storms, heavy snows, and other similar occurrences.

PPL and Duquesne Light supported EDCs offering regional conference calls for state and local elected officials, but objected to the rigidity of the Commission's proposed policy statement requiring calls to begin at least 2 days prior to an expected major service outage under Subsection 60.1903(b)(3). PPL recommended that the guidelines use either (1) a "1 day" standard; or (2) state simply that prior to a major service outage event the EDC should begin conference calls. Duquesne Light only suggested that no specific time frame should be provided.

PECO noted its support of regional conference calls as a best practice. PECO suggested that the definition of "major service outage events" be moved to an introductory section for purposes of clarity rather than remaining in Subsection (b)(1). PECO also recommended that the Commission remove "cybersecurity incidents" as an event to which the Statement applies due to the differences between cybersecurity and weather-related events, and commented that the Commission might instead include a catch-all provision such as "other event that may cause a major service outage."

First Energy supported the concept of ensuring communications and information sharing, but also emphasized the need for flexibility in the execution. First Energy contended that plans already in place aimed at ensuring that affected stakeholders are informed should be taken into account by the Proposed Policy Statement. First Energy suggested the elimination of Subsections (b)(2)—(b)(6).

PSATS inquired about whether the term "local official" includes both county and municipal officials.

Resolution

The Commission agrees with the comments received from NFG, EAP, and PECO that preparations and restoration practices for responding to cybersecurity incidents largely differs from those practices for the other events listed. However, the Commission finds that the differences between cybersecurity incidents and the other events is precisely why it should remain on this list. Major service outage events can have any number of causes and it is no less important to communicate updates to municipal partners when thousands may be without power during a cybersecurity incident. We further agree with the suggestions of the EAP that cybersecurity incidents should be included as a functional sub-group in the CIIWG.

In addition, the Commission will revise subsection 69. 1903(b)(3) in light of Duquesne Light, and PPL's concerns about the holding regional conference calls with reference to a specific timeframe prior to the event. We removed the "at least 2 days prior" requirement and left it simply as "prior to" an expected major service outage event. Additionally, we added more flexibility to allow for continuing these conference calls "daily" as "warranted by the needs of the parties on the calls."

§ 69.1903(c)

Subsection 69.1903(c) states that EDCs should develop and hold a storm restoration exercise at least once each calendar year and should notify the counties in their service territories of the dates and times of such exercises at least 3 months in advance and invite the counties to participate in the exercise. Although these storm restoration exercises may already be a part of the normal

emergency response or business continuity exercise programs required of EDCs under 52 Pa. Code § 101.3(b), we proposed in this subsection that EDCs bring in other stakeholders to this process as participants.

AT&T stated that requiring all utilities to separately conduct storm restoration exercises would unduly burden utilities, as well as state and local officials, by requiring them to participate in and/or attend numerous exercises. AT&T continued that it currently conducts these exercises on a regional basis leading to greater efficiency and effectiveness. BCAP advocated that if the Commission decides to require storm restoration exercises for other utility industries, then such exercises should be done on a statewide basis because most companies' service territories do not align with those of EDCs.

PPL commented that, while it is their intent to conduct an annual exercise using external participants, based on actual storm activity in a given year, PPL may not hold an annual drill if the planning and execution are impacted by live storm events. As far as notification to the counties and other utilities in its service territory, PPL, PECO, and First Energy voiced concerns that the duty to alert such parties 3 months in advance is too great due to potential schedule changes and unforeseen conflicts. Thus, PECO recommended that the Commission add "where practicable" or similar language be added to Subsection (c)(1). First Energy proposed a more limited time frame for advance notice, two weeks.

PECO suggested that EDCs retain discretion over how to structure storm restoration exercises so that PECO might continue to determine the parties it wishes to include in a particular drill and the extent of their participation.

Duquesne Light requested that the Commission provide clarification with respect to stakeholders other than county officials and designated representatives that should be involved, including the nature and level of their involvement and the type of coordination that is being encouraged. Also, Duquesne proposed that the language of Subsection 96.1903(c) be revised so that regional restoration drills could qualify as the required storm exercise. Duquesne Light suggested that the Lead Emergency Preparedness Liaison Officer be consulted about any lesson learned or best practice discovered as a result of the storm exercise.

First Energy stated that its companies typically schedule their events at times in the year when weather events are less likely to directly interfere and stated the difficulty of coordinating with the Pennsylvania Emergency Management Agency (PEMA) because their drills usually take place when First Energy is entering a period where significant weather events occur. Also, First Energy shared that requiring EDCs to develop after action reports and submit them creates a regulatory reporting obligation where this type of drill should remain an operational exercise. Thus, First Energy suggested the removal of Subsections (c)(1), (c)(3), (c)(4), and (c)(6).

PSATS recommended that, in addition to counties being invited to participate in storm restoration exercises, municipalities contribute to the discussion and be invited to participate in exercises. Also, PSATS suggested that the Commission define the term "smaller-scale exercises."

Resolution

We agree with the comments of First Energy, PPL, and PECO that the proposed 3 month lead time for EDCs to notify the counties and other utilities in its service territory of the dates and times of storm restoration exercises in subsection (1) is too long. We have changed this requirement to "3 weeks in advance, if possible." The Commission has also deleted the proposed subsection (3) in response to comments from First Energy, Duquesne, PECO, and EAP that this was problematic. Additionally, in response to concerns expressed by First Energy, PECO, and Duquesne, we revised subsection (4), changing "should" to "may" to provide for more flexibility.

§ 69.1903(d)

Subsection 69.1903(d) states that both large and small EDCs should provide outage information on their websites. However, dependent on the size of the EDC, as defined by 52 Pa. Code § 57.195(b), different requirements for the website are stated as well as different times for updating the information listed.

AT&T commented that the reporting requirements proposed for EDCs in this section are not reflective of the nature of outages suffered by utilities in other industries or of the necessary responses to other such outages. AT&T also argued that it would be neither efficient nor effective for communications companies to provide outage or restoration information hourly because service is often restored through a central office versus restoration in smaller geographic increments for EDCs.

PPL presented a concern that Subsection 69.1903(d)(1) would require information to be reported on the company's website that it cannot currently provide. PPL allows customers to access estimated times of restoration (ETRs) in their individual accounts once they are available, but do not post ETRs on its outage map. PPL stated that the proposed policy should permit EDCs to suppress ETRs until reliable restoration times are received. Also, PPL noted that the Commission's guidelines do not indicate when ETRs should be posted, the frequency at which they should be updated, or the areas to be covered (e.g., should ETRs be posted at the county or municipal level). PPL commented that EDCs should have discretion to provide restoration information down to the individual job level so that customers are provided with the most accurate information. PPL mentioned that providing on their website the number of customers served would require new functionality and additional costs.

PECO expressed certain cost/benefit concerns regarding Subsection (d) as it relates to the Company's outage website. First, PECO posited that companies should be extended the flexibility and latitude to structure outage websites in a way that best serves the needs of their service territory. PECO noted that it would be inclined to post ETRs only on a global basis and stated that it does not currently provide a breakdown of outages by municipality or borough on its graphic outage map, as the Statement describes in Subsection (d)(1)(i).

Duquesne Light encouraged the Commission to add language to acknowledge the different technologies used by various EDCs and suggested that the Commission add the words "as technology permits" to the end of Subsection 69.1903(d)(1). First Energy supports the proposed outage maps as a means to disseminate timely and accurate information to customers during outage events.

PSATS contended that where the Commission uses the phrase "municipality or borough" that only the term "municipality" is needed.

The OCA recommended that EDCs' websites be utilized to provide additional information to customers as these websites receive large volumes of traffic during major service outage events by customers turning to EDCs to obtain outage information. The OCA suggested that

EDCs' websites provide information on storm preparation, safety advice, and information regarding shelters and community agencies that will offer assistance during the outage event. Additionally, the OCA commented that EDCs should offer secondary language options on their websites.

Resolution

The Commission agrees to change subsection (d)(1) in response to Duquesne Light, PECO, and PPL's concerns about technology to add, "technology permitting" for the large EDCs. Additionally, PPL and PECO reported concerns about subsection (1)(ii) that some of the estimated restoration time information would not be available. In light of this concern, we agree to add the language, "when available" to this section.

§ 69.1903(e)

Subsection 69.1903(e) states that after a major service outage event, EDCs should coordinate after action review with each other as well as solicit input from each county and other utilities as to the companies' performance during the event and any suggested improvements or comments on successful initiatives.

PPL commented that Subsection 69.1903(e) provides that each EDC should conduct "post-storm after action reviews" and requires certain meeting and reporting obligations that extend further than PPL's practice of conducting internal reviews depending on the number of customers affected and the duration of the outages. PPL encourages the Commission to seek feedback only from the counties that are most significantly impacted.

PECO supported the inclusion of this best practice and currently undertakes such reviews. However, because the proposed language establishes a reporting commitment with deadlines for completion, PECO recommends that this reporting be completed on an as-requested basis by the Commission.

First Energy also supported the general goal of these reviews to encourage dialogue and share experiences. However, First Energy objected to the formality of the proposed process and contended that the Proposed Policy Statement may chill what has been until now an open sharing of information and experience. First Energy recommended that Subsection (e) be modified to call for a revival of the Best Practices Working Group under its current practice in the aftermath of major service outage events.

PSATS suggested that municipal input be solicited in addition to the county. The OCA recommended that EDCs develop metrics that allow them to track the effectiveness of their storm communications with customers and include an assessment in their reports to the Commission.

Resolution

The Commission agrees with First Energy's comments that subsections (1) and (2) should be revised to include that after action reviews be coordinated with other EDCs through the EDC Best Practices Working Group. We agree to eliminate the proposed subsection (3) consistent with the revisions to subsection (1) and (2). We also changed the term "post storm" to "major service outage event" to make this subsection consistent with the other subsections in § 69.1903.

§ 69.1903(f)

Subsection 69.1903(f) states that all EDCs should develop a storm damage and outage prediction model that provides a means for the EDC to estimate expected storm

damage and the potential number of service outages given inputs such as weather data, service territory geography/topography, historical data on similar storms, customer density, and location of crew and service centers.

AT&T and BCAP commented that the use of weather prediction models to assist in establishing response and recovery plans several days in advance of a major storm should not be applied to other utilities.

PPL supported the requirement that EDCs develop storm damage and outage prediction models. However, with respect to Subsection (f)(5) that the Commission's Lead EPLO and county emergency managers receive the prediction models, PPL had two concerns: (1) That an event may not rise to the level of a major event that the guideline contemplates; and (2) That releasing the data to either the Officer or county managers prior to the event may be counterproductive because data changes frequently during storms.

PECO expressed certain cost/benefit concerns regarding Subsection (f) as it relates to the Company's storm prediction models. PECO stated that to implement the kind of model the Commission describes in Subsection (f)(1), it would utilize capital and resources that could significantly outweigh the benefits since these models tend to be flawed and inaccurate. PECO also cautioned against reporting predictions because of the detriment that may occur if those predictions are incorrect. PECO suggested rewording Subsection (f) to state that "An EDC is encouraged to utilize a storm damage and outage prediction model."

NFG stated that it would incur significant costs if required to develop a storm outage prediction model and argued that there would be minimal benefit because NGDCs are less susceptible to such outage events than their electric counter parts. Duquesne Light supported the development of outage prediction models to enhance utilities' ability to prepare for severe events and forecast potential outages, and acknowledged that such modeling can be achieved in a multitude of ways.

First Energy noted that its companies are actively developing prediction models and support the Commission's outlined principles. First Energy called attention to Subsection (f)(5) that specifically ties the provision of predictions associated with these models to Section 67.1(b) of the regulations (calling for reports to be provided where sustained interruptions lasting six hours or longer are experienced by either 2,500 customers or 5% of their total customers) and stated that it is unlikely that prediction models would be required for an event that might meet the Section 67.1(b) threshold. First Energy suggests modifying Subsection (f) to be consistent with the remainder of the Proposed Policy Statement, applying the major service outage event as the threshold, as defined in Subsection (b)(1). First Energy also stated that it is doubtful that an input specifying the location of crews and service centers in a territory will contribute to an accurate prediction of the damages.

Resolution

We agree with the concerns expressed by First Energy, regarding subsection (1), regarding the location of crews and service centers, and have deleted this from the information under the storm outage prediction models. Additionally, we have revised subsection (5) in response to concerns expressed by PECO, PPL, and First Energy about providing this information to county emergency managers. We have also revised this subsection to make

it consistent with the subsection (b)(1). We disagree with PECO's comments that implementing this storm prediction model would involve significant costs as we did not expect EDCs to expend large capital outlays to develop such a model. There are EDCs that currently have models, or are already developing models, as well as possible collaborations with academic institutions within the Commonwealth, which Duquesne Light notes they have already begun exploring (Duquesne Light comments at 6).

§ 69.1903(g)

Subsection 69.1903(g) states that EDCs should continue their work on improving the process of providing timely and accurate ETRs during all service outages, but especially during major service outage events. PPL, PECO, and First Energy simply stated their support for a requirement that EDCs continue providing timely and accurately estimated ETRs.

Resolution

The Commission agrees with the commenters and has kept this section the same as in the proposed policy statement. However, we added the word "service" simply to clarify that this involves "major service outage events" and to make this consistent with other subsections in § 69.1903.

Conclusion

The Commission appreciates that all commenters were generally supportive of the formation of a CIIWG. We look forward to the participation and cooperation of all key stakeholders beginning with the first meeting on April 30, 2014 to be held at the Commission. This Final Policy Statement identifies best practices learned from Hurricane's Irene and Sandy, including improving coordination, communications, event forecasting, and holding exercises in order to better respond to major storms.

Accordingly, pursuant to Sections 501, 504, 505, 506, 1501, and 2801, et seq., and the regulations promulgated thereunder at 52 Pa. Code §§ 57.191—57.197 and Sections 201 and 202 of the act of July 31, 1968 P. L. 769, No. 240, 45 P. S. §§ 1201 and 1202, and the regulations promulgated thereunder at 1 Pa. Code §§ 7.1, 7.2 and 7.5; Section 204(b) of the Commonwealth Attorneys Act, 71 P. S. § 732.204(b); Section 745.5 of the Regulatory Review Act, 71 P. S. § 745.5 and Section 612 of the Administrative Code of 1929, 71 P. S. § 232, and the regulations promulgated thereunder at 4 Pa. Code §§ 7.231—7.234, we will adopt as final the proposed revisions to Section 69 as set forth in Annex A; *Therefore*,

It Is Ordered That:

- 1. The regulations of the Commission, 52 Pa. Code Chapter 69, are amended by adding § 69.1903 and amending §§ 69.1602, 69.1702 and 69.1902 to read as set forth in Annex A with ellipses referring to the existing text of the regulations.
- 2. The Secretary shall submit this Order and Annex A to the Governor's Budget Office for review of fiscal impact.
- 3. The Secretary shall certify this order and Annex A with the Legislative Reference Bureau for publication in the *Pennsylvania Bulletin*.
- 4. This policy statement shall become effective upon publication in the *Pennsylvania Bulletin*.
- 5. This Final Order and Annex A be posted on the Commission's website.

- 6. The contact persons for this are Daniel Searfoorce, Bureau of Technical Utility Services, dsearfoorc@pa.gov, (717) 783-6159, Jennifer Kocher, Office of Communications, jekocher@pa.gov, (717) 783-6152, and Patricia Wiedt, Law Bureau, (717) 787-5755, pwiedt@pa.gov.
- 7. A copy of this order and Annex A be served on all parties that filed comments at Docket No. M-2013-2382943 Utility Service Outage Response, Recovery and Public Notification Guidelines, the Office of Small Business Advocate, the AFL-CIO Utility Caucus, the Pennsylvania Utility Contractors Association, the Energy Association of Pennsylvania, the Director of the Pennsylvania Emergency Management Agency (PEMA), the County Commissioners Association, and the three Area Directors of PEMA.

ROSEMARY CHIAVETTA, Secretary

Fiscal Note: Fiscal Note 57-300 remains valid for the final adoption of the subject regulations.

Statement of Commissioner Pamela A. Witmer

Before the Public Utility Commission (Commission) today is the Final Order approving revisions to our Proposed Policy Statement regarding Utility Service Outage Response, Recovery and Public Notification Guidelines. The updated Policy Statement establishes guidance for additional preparation and response measures by electric distribution companies (EDCs) during major service outage events. Some of the additional measures provide for regional conference calls for state and local government officials including local emergency managers, annual storm restoration exercises, and up-to-date outage information reported on websites, as available. I fully support this Final Policy Statement because it incorporates and consolidates many best practices developed through the utilities' storm response to date from events occurring in Pennsylvania over the last three years.

We have learned many lessons, and will continue to learn, from weather events ranging from Superstorm Sandy to the most recent snow and ice storms in terms of better managing major service outages to mitigate the serious impacts that may occur to the lives and property of Pennsylvania's residents and businesses. Ensuring safe and reliable service is a basic responsibility of the Commission. Whether the cause of an outage is an anticipated major storm or an unexpected cybersecurity incident, today's action represents further progress on the part of the Commission, utilities, statutory advocates, and interested partners in assuring that significant measures are in place to expedite the restoration of electric service for all customers.

Specifically, I have had a keen interest in the interdependency between all utility sectors from both a physical and cybersecurity perspective and in the development of interoperability best practices so that certain utility services can be maintained during a major service outage. Thus, I fully support the establishment of the Critical Infrastructure Interdependency Working Group (CIIWG) and its mission to further develop additional best practices to address the needs of all customers during major outages. During these outage events, it is critical that our utilities work cooperatively across various utility and government sectors so that power is restored as quickly and safely as possible. The safe and reliable operation of one or several utilities may be dependent upon the quick restoration of service by another sector.

Having all of our utilities and non-jurisdictional partners in one room discussing best practices can only lead to greater cooperation and procedures that benefit all residential and business customers in this Commonwealth.

I am confident that the outcomes from this Working Group will enhance our outage response capabilities during future major service outage events and will help companies share lessons learned throughout the Commonwealth for the good of all customers. I look forward to attending the first meeting of the CIIWG to help effectuate these goals.

PAMELA A. WITMER, Commissioner

Annex A

TITLE 52. PUBLIC UTILITIES

PART I. PUBLIC UTILITY COMMISSION

Subpart C. FIXED SERVICE UTILITIES

CHAPTER 69. GENERAL ORDERS, POLICY STATEMENTS AND GUIDELINES ON FIXED UTILITIES

UNSCHEDULED WATER SERVICE INTERRUPTIONS AND ASSOCIATED ACTIONS

§ 69.1602. Public notification guidelines.

- (a) Acceptable methods of public notification. In the event of an unscheduled water service interruption, the following acceptable methods of public notification should be considered and utilized as appropriate:
- (1) Mass media. Facsimile/electronic mail notification to local radio and television stations, cable systems, newspapers and other print and news media as soon as possible after the event occurs. These notifications must provide relevant information about the event, such as the affected locations, its potential impact including the possible duration of the outage, the possible adverse health effects and the population or subpopulation particularly at risk, and a description of actions affected ratepayers/occupants should take to ensure their safety, with updates as often as needed. Updates should be provided on a predictable, regular schedule for the duration of the event. The Commission's Office of Communications and Lead Emergency Preparedness Liaison Officer should also receive these notifications.

UTILITY SERVICE OUTAGE PUBLIC NOTIFICATION GUIDELINES—NATURAL GAS DISTRIBUTION MARKET

§ 69.1702. Notification guidelines.

- (a) Acceptable methods of public notification. In the event of a service interruption, the following acceptable methods of public notification should be considered and utilized as appropriate:
- (1) Mass media. Facsimile/electronic mail notification to local radio and television stations, cable systems, newspapers and other print and news media as soon as possible after the event occurs. These notifications must provide relevant information about the event, such as the affected locations, its potential impact including the possible duration of the outage, and a description of actions affected ratepayers/occupants should take to ensure their safety, with updates as often as needed. Updates should

be provided on a predictable, regular schedule for the duration of the event. The Commission's Office of Communications and Lead Emergency Preparedness Liaison Officer should also receive these notifications.

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UTILITY SERVICE OUTAGE RESPONSE RECOVERY AND PUBLIC NOTIFICATION GUIDELINES—ELECTRIC DISTRIBUTION MARKET

§ 69.1902. Notification guidelines.

- (a) Acceptable methods of public notification. In the event of a service interruption, the following acceptable methods of public notification should be considered and utilized as appropriate:
- (1) Mass media. Facsimile/electronic mail notification to local radio and television stations, cable systems, newspapers and other print and news media as soon as possible after the event occurs. These notifications must provide relevant information about the event, such as the affected locations, its potential impact including the possible duration of the outage, and a description of actions affected ratepayers/occupants should take to ensure their safety, with updates as often as needed. Updates should be provided on a predictable, regular schedule for the duration of the event. The Commission's Office of Communications and Lead Emergency Preparedness Liaison Officer (Lead EPLO) should also receive these notifications

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§ 69.1903. Preparation and response measures.

- (a) *EDC liaisons to counties*. An electric distribution company (EDC) should offer a company liaison to counties (County Emergency Operations Centers or 9-1-1 Centers, depending on the county's preference) in its service territory that are significantly impacted, meaning those with at least 10% of customers in the county experiencing an outage for over 48 hours, during high-impact and major service outage events such as those listed in subsection (b)(1).
- (1) An EDC should inform the Commission's Lead Emergency Preparedness Liaison Officer (EPLO) of the counties in which the company has placed liaisons when this information is available.
- (2) The threshold for when a company liaison is offered should be determined in agreement with the counties.
- (3) A county may request a company liaison for events that do not meet the established threshold subject to operational constraints.
- (4) An EDC should make a best effort to respond to a county's request for a company liaison under paragraph (3), subject to operational and safety considerations.
- (5) In a county served by more than one EDC, the EDCs should coordinate their response to the county so that the county has representation from the desired EDCs.
- (6) An EDC should meet at least yearly with each county to review the liaison program and other emergency response issues.
- (b) *EDC regional conference calls*. An EDC should offer regional conference calls for State and local elected officials and local emergency managers for major service outage events.

- (1) Examples of major service outage events include:
- (i) Hurricanes.
- (ii) Tropical storms.
- (iii) Major flooding.
- (iv) Ice storms.
- (v) Heavy snows.
- (vi) Cybersecurity incidents.
- (2) Regions should be determined based on the geographic locations affected by the major service outage event.
- (3) An EDC should begin conference calls prior to an expected major service outage event and should offer to continue the conference calls daily as warranted by the needs of the parties on the calls.
- (4) An EDC should ensure participants on the conference call have the required call-in information prior to initiating the calls.
- (5) EDCs should work together to share best practices on how to structure and manage the regional conference calls, especially in those areas that are served by multiple EDCs.
- (6) An EDC should notify the Commission's Lead EPLO when initiating regional conference calls.
- (c) *EDC storm exercises*. An EDC should develop and hold a storm restoration exercise at least once each calendar year.
- (1) An EDC should notify the counties and other utilities in its service territory of the dates and times of storm restoration exercises at least 3 weeks in advance, if possible.
- (2) An EDC should invite counties in its service territory to participate in its storm restoration exercises.
- (3) An EDC that has a large service territory may hold several smaller-scale exercises on a regional level.
- (4) An EDC should inform the Commission's Lead EPLO of the dates and times of its storm restoration exercises.
- (5) An EDC should review its exercise After Action Reports with the Commission, including corrective actions or best practice implementations planned as a result.
 - (d) EDC outage web sites.
- (1) Large EDCs. A large EDC, as defined in § 57.195(b) (relating to reporting requirements), should have an outage information section or portal on its web site. The outage information should be updated on a periodic basis of at least once per hour. The outage section or portal should provide one of the following as technology permits:
- (i) A graphic outage map of the service territory with county boundaries clearly defined that shows current service outages for the entire service territory and current outages in each county using text, colors or some other means. The outage map should:
- (A) Allow users to click on a specific county and view the total number of customers out of service for the county.
- (B) Indicate the current number of customers out of service by municipality or borough.
- (C) Provide estimated times of restoration when available.

- (D) Include the number of customers served in each county and municipality or borough.
- (ii) A summary tab that allows users to view the total number of customers out of service for the municipality or borough in each county along with an option to view the total number of customers out of service for the municipality or borough in each county along with estimated times of restoration, when available, and the number of customers served in each county and municipality or borough.
- (2) Small EDCs. A small EDC, as defined in § 57.195(c), should provide an outage section on its web site that provides:
- (i) Outage and estimated restoration information by county and municipality or borough for service outages that meet the reporting criteria as defined in § 67.1(b) (relating to general provisions).
- (ii) Outage and estimated restoration information, updated at least twice daily, and noting the next update time for each posting.
- (3) *Duration*. Outage information for large and small EDCs should be provided until the last customer's service affected by the outage event is restored.
- (e) *EDC major service outage event after action reviews*. After major service outage events as defined in subsection (b)(1), an EDC should:
- (1) Coordinate after action reviews with other EDCs through the EDC Best Practices Working Group and solicit input from each significantly impacted county and other utilities as to the EDC's performance during the event and suggested improvements or comments on successful initiatives.
- (2) The EDC Best Practices Working Group should report to the Commission on best practices identified and areas for improvement along with a timeline of imple-

- mentation of those best practices and corrective actions for the areas of improvement. The best practices report should be reported to the Commission within 1 calendar year of the major service outage event's occurrence.
- (f) EDC storm outage prediction models. An EDC should develop a storm damage and outage prediction model.
- (1) A storm outage prediction model should be a means for an EDC to estimate expected storm damage and the potential number of service outages given inputs such as weather data, service territory geography/topography, historical data on similar storms, customer density and other relevant factors.
- (2) An EDC should provide the Commission with an overview of its model when it is completed. An EDC is encouraged to work together with other EDCs throughout the county and with academic institutions to develop its prediction model.
- (3) An EDC that already has a working model is encouraged to share its best practices with other EDCs while respect is given to proprietary elements in its model.
- (4) An EDC should provide an overview of its developed and implemented model to the Commission and county emergency managers in its service territory.
- (5) An EDC should provide the Commission's Lead EPLO with its model's predictions prior to expected major service outage events as defined in subsection (b)(1).
- (g) EDC estimated time of restoration messaging. An EDC should continue its work on improving the process of providing timely and accurate estimated times of restoration during service outages, especially during major service outage events as defined in subsection (b)(1).

 $[Pa.B.\ Doc.\ No.\ 14\text{-}816.\ Filed\ for\ public\ inspection\ April\ 18,\ 2014,\ 9\text{:}00\ a.m.]$