

White Paper:
Utility Communications with
Residential Customers and Vulnerable Residential Customers
In Response to Severe Weather-Related Outages

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The purpose of this White Paper is to provide information on ways in which utilities have engaged in storm response and storm preparedness actions specifically as those actions relate to public communication with residential customers. Providing adequate communication during storm events is generally found to be a customer service obligation of a state's utilities.¹

In its "Proposed Policy Statement" issued on September 26, 2013, the Pennsylvania Public Utility Commission ("PUC" or "Commission") stated that it was seeking to "identify further best practices in an effort to achieve continuous improvement" and to "continue to enhance its policies as these best practices are further developed and defined." According to the Commission, the Proposed Policy Statement was intended to "memorialize a number of the best practices that were identified in the review, as well as other initiatives that would be of benefit."

Utilities and their regulators can learn from the actions of their counterparts not merely from around the state, but also from around the nation. Accordingly, this White Paper provides a review of communication with residential customers based on more than fifty (50) storm response assessments from around the United States.² These storm response assessments have been prepared regarding a range of severe weather, including wind, rain, thunderstorms, hurricanes, snow, ice and similar events. Illustrative regulations cited in these assessments, as well as illustrative examples of recommendations contained discussed in these state proceedings, are included at the end of this White Paper as Appendices A and B respectively.

1. The Use of Outbound Auto-Dialers

In many states, auto-dialers are viewed as the "best available technology" and are seen to be a cost-effective and efficient means of reaching residential customers before, during and after a storm event. Virginia utilities, for example, developed and operate what they call "COINS" ("Customer Outbound Information Notification System").³ Through COINS, Virginia's utilities automatically call customers as service to geographic areas is restored. The COINS call is to verify that the customers who the utilities expect to have had service restored do, in fact, have their service restored.

¹ See, e.g., New Jersey Administrative Code, Sec. 14:3.3.3(c) (2013). ("If a customer's service is likely to be affected by peculiar or unusual circumstances, the public utility shall inform the customer as to how the customer can minimize the effect of such circumstances in order to secure sufficient and satisfactory service from the utility's system.") See also, Investigation by the Department of Public Utilities on its Own Motion into the Preparation and Response of NSTAR Electric Company to Tropical Storm Irene (August 2011) and the October 29, 2011 snowstorm. Docket No. 11-85-B / 11-119-B, Massachusetts Department of Public Utilities, Order, at 86 (December 11, 2012) ("The ERP Guidelines require electric companies to have an ERP designed to restore service in a safe and reasonably prompt manner. 220 C.M.R. § 19.03(3). Electric companies' obligation to communicate with stakeholders falls within this restoration requirement.")

² The documents that have been reviewed are listed in Appendix A. These documents can be electronically provided on CDROM for the PUC's review in this proceeding upon request.

³ Virginia State Corporation Commission Staff (August 18, 2010). *Preparation for and Response to the December 2009 Snowstorm*, at 52.

Empire District Electric Company (Missouri) does not call all customers in the geographic area thought to be restored (as it is restored). Nonetheless, EDE operates an outbound calling protocol with similar objectives. Following restoration of service, EDE calls customers near the end of the line to verify that restoration is complete.⁴ EDE engages in the assumption that if service at the end of the line has been restored, service to each of the customers along the line has been similarly restored. So, too, did the South Carolina commission staff recommend that outbound automatic calls, both relating to Estimated Times of Restoration (“ETRs”) and to actual restoration of service, be expanded beyond medical needs customers.⁵

Auto-dialers around the nation, however, are not used exclusively to communicate the restoration of service. Kansas City Power and Light Company places an automatic return phone call to all customers reporting outages through the Company’s IVR system.⁶ The customers receive the following prerecorded message: “As an automated service from Kansas City Power & Light, this call confirms we have received the outage report submitted for this address. Crews are currently working to restore service. Thank you for your patience and cooperation as we work to restore your electrical service.” The calls received by the Company’s IVR system are forwarded to a third-party contractor in 30-minute intervals and the customers reporting their outage to TFCC receive a confirmation phone call within 30 minutes.

In New York, Consolidated Edison updates its ETRs on a daily basis. Customers now receive an automatic call-back whenever an ETR has been assigned or modified.⁷ In fact, in June 2012, the New York State Department of Public Service reported that New York’s “utilities continue to expand their use of new technology to communicate with their customers during storm emergencies. During Irene and Lee, many utilized automatic outbound dialing. . .”⁸ Of the state’s electric utilities, the New York State DPS reported the following using automatic outbound dialing.⁹

⁴ Missouri Public Service Commission Staff (June 17, 2008). *Report on the Empire District Electric Company, Final Report on Storm Preparation and Restoration Effort*, Docket No. EO-2008-0215, at 29.

⁵ South Carolina Office of Regulatory Staff (January 31, 2007). *Review of Duke Energy Carolinas December 2005 Ice Storm Recovery*, at 24.

⁶ *Final Report on Kansas City Power and Light Company’s Storm Outage Planning and Restoration Effort following the Ice Storm on December 10 and 11, 2007*, at 31, Case No. EO-2008-0219, Public Service Commission Staff Report (June 17, 2008).

⁷ Vantage Consulting (October 24, 2007). *Final Report, Independent Audit of Consolidated Edison Company, Electric Emergency Outage Response Program*, for the New York State Department of Public Service, at 153.

⁸ New York State Department of Public Service, *Utility Performance Report Following Hurricane Irene and Tropical Storm Lee*, at 28.

⁹ *Id.*, at 29.

Consumer Outreach Methods Used by New York Electric Utilities	
Company	Automated Dialing
Central Hudson	Yes
Con Edison	Yes
National Grid	Yes
NYSEG	Yes
Orange and Rockland	Yes

2. Public Safety and Communications with Special Needs Customers

The residential customer class is not a uniform, monolithic group of customers for whom traditional communications mechanisms can be relied upon to protect public safety. There are special needs residential populations for whom utilities may need to take special care in ensuring adequate communications before, during and after a storm event. Special needs residential populations extend beyond customers who have medically-necessary electric equipment. Special needs populations include, also, the aged, the disabled, the infirm, and others for whom traditional communications may not be adequate and who can reasonably be expected to exhibit particular identified or reasonably foreseeable vulnerabilities in the event of a storm event. The policy need for protection arises from the potential, if not probable, public safety hazards resulting from the loss of service.

Some utilities in the nation focus their use of auto-dialers on special needs customers. New York’s electric utilities, for example, are required to maintain lists of vulnerable customers. Not only do New York utilities make pre-storm calls, but New York utilities also make daily follow-up calls throughout the event and service restoration period.¹⁰ Vulnerable customers are either scheduled for field visits by New York electric utilities or are referred to a third party contractor to make follow-up contacts.

Maine, too, requires specific proactive action by that state’s utilities directed toward special needs customers. The Maine Commission stated in a 2002 Docket, “[d]uring Winter Storm 2002, both [Bangor Hydro and Central Maine Power] employed reactive policies regarding their customers with pre-existing medical emergencies and their customers with life support designations. We find such a reactive policy unacceptable. . .”¹¹ The PUC said “both BHE and

¹⁰ *Utility Performance Report Following Hurricane Irene and Tropical Storm Lee*, supra, at 61.

¹¹ Maine Public Utilities Commission, Docket 2002-151, Investigation into the Adequacy of Utility Services in Maine During Power Outages, Examiner’s Report, at 73 – 74, August 29, 2003. The recommendations of the Examiner’s Report were subsequently adopted by the Commission with limited changes not related to those cited here. Docket 2002-151, Order, at Ordering Paragraph 28 (November 14, 2003).

CMP must implement proactive policies regarding life-support customers whenever they are aware that a lengthy outage is likely to occur, regardless of how the utility categorizes the storm.”¹²

A number of Massachusetts electric utilities use a proactive, inter-active, outbound calling program to reach vulnerable customers. Specifically:

- Western Mass Electric Company’s (WMECO) Emergency Response Plan (“ERP”) requires the company to contact “life support customers” (“LSC”) through an automated dialer before, during and after weather events that could involve significant outages.¹³ One primary message communicated through WMECO’s communication to LSCs is the necessity to call public officials for help; the messaging also provides the way to make such contacts. WMECO provides lists to public officials of LSCs who may benefit from local attention. Finally, WMECO engages in daily calling to all LSCs who are confirmed to be without power until power is restored.
- National Grid in Massachusetts places manual daily “well-being” calls to affected LSCs before, during and after a storm event to determine if they need emergency assistance and to connect them with public officials if necessary.¹⁴ These calls continue until the company confirms that the LSC has power or has power restored. The company provides field visits, or notice to public officials, if company staff cannot reach an LSC live or by voicemail.
- NSTAR, an electric and gas utility in Massachusetts, maintains an up-to-date list of LSCs with whom the company makes contacts before, during and after a storm event.¹⁵ NSTAR’s communication protocol provides that: (1) a day ahead of the storm, the company initiates an automated outbound calling to indicate that a storm is approaching, outages are possible, and the customer should make plans. Between 12 and 24 hours ahead of the storm, NSTAR provides a list of LSCs to local officials (names, addresses, phone numbers). Not more than one day after a storm event begins, NSTAR provides another outbound home call. During the restoration period,

¹² Id., at 75, citing Section 7(C), Chapter 810, Code of Maine Regulations.

¹³ Investigation by the Department of Public Utilities on its Own Motion into the Preparation and Response of Western Massachusetts Electric Company to the October 29, 2011 Snowstorm, Docket No. DPU-11-119-C, at 103 (December 11, 2012).

¹⁴ Investigation by the Department of Public Utilities on its Own Motion into the Preparation and Response of Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid to Tropical Storm Irene (August 2011) and to the October 29, 2011 Snowstorm, Docket No. DPU-11-85-A / 11-119-A, at 134.

¹⁵ Investigation by the Department of Public Utilities on its Own Motion into the Preparation and Response of NSTAR Electric Company to Tropical Storm Irene (August 2011) and the October 29, 2011 Snowstorm. Docket NO. DPU-11-119-B, at 102 – 103.

there is a periodic live monitoring of LSCs to determine whether they are without power. Notice is given to local officials of all LSCs without power.

In addition to utility-initiated communication efforts, utilities in St. Louis, Missouri, work with a community-based partnership called “Operation Weather Survival” (“OWS”).¹⁶ Through OWS, the utilities work to disseminate outage information, as well as to monitor special needs customers, through a network of neighborhood watch groups organized through a joint effort of the utility and the community groups.¹⁷ Created in 1982, OWS is a network involving community groups, utilities, educators, public officials, and the business community.

The use of third party partnerships is also similar to the Missouri-based Empire District Electric Company’s “EASE” program (Empire Action to Support the Elderly).¹⁸ Through EASE, Empire allows customers to preregister in a “special needs registry” for the elderly and disabled. Before a storm event presenting the probability of substantial outages, Empire makes outbound phone calls to inform customers in the registry of what storm preparations to make; the Company also informs registrants of shelter locations and other critical storm-related information. In making these calls, Empire uses company personnel that are familiar with local resources to inform these high risk customers of locally-available emergency resources.¹⁹

So, too, in Washington D.C. does PEPCO use third party partnerships. As PEPCO noted in 2011, “[t]he Company is considering establishing partnerships/task forces with organizations whose primary focus and capability is geared toward re-establishing a level of normalcy in a community to utilize best practices and leverage resources.”²⁰ PEPCO had previously reported to the D.C. Commission that alternatives considered for improving communications included: (1) contacting local “Neighborhood Advisory Commissions” (“ANCs”) “in affected areas so ANCs

¹⁶ Utility partnerships with OWS involve all of the St. Louis utilities, not merely the electric utility. Operation Weather Survival also provides information throughout the community during extreme hot and cold weather conditions. Those efforts are beyond the scope of this discussion.

¹⁷ Missouri Public Service Commission Staff (November 17, 2006). *Report on AmerenUE’s Storm Outage Planning and Restoration Efforts Following the Storms of July 19 and 21, 2006*, at 7; see also, Rhode Island Division of Public Utilities and Carriers (Feb. 2012). *Review of National Grid Storm Preparedness, Response and Restoration Efforts*, at 62 – 53.

¹⁸ Empire District Electric (Missouri), *supra*, at 37.

¹⁹ Kansas City Power and Light (KCP&L) uses its Customer Relations Department to serve as a point of contact for vulnerable customers and/or the organizations that serve them. KCP&L targets the customer groups within the Customer Relations Department and provides a communication channel to the Commission and external “helping organization” by providing information. During the December 2010 ice storm in Missouri, KCP&L’s target groups included, but were not limited to: 1) medical needs customers, 2) gatekeeper customers, 3) assistance agencies / senior centers, 4) nursing homes and hospice organizations, and 5) elderly customer referrals. *Final Report on Kansas City Power and Light Company’s Storm Outage Planning and Restoration Effort following the Ice Storm on December 10 and 11, 2007*, at 40, Case No. EO-2008-0219, Public Service Commission Staff Report (June 17, 2008).

²⁰ D.C. Public Service Commission, “PEPCO Response to Commission Order 16426,” at 15, Formal Case 982, In the Matter of the Investigation of Potomac Electric Power Company Regarding Interruption of Electric Service, August 9, 2011.

can serve as a vehicle to disseminate outage information to their constituents;” and (2) using ANC “listservs” as a means to disseminate outage information.²¹

3. “Blue Sky” Communications with Residential Customers

Working with community-based organizations also occurs on a “Blue Sky” basis. Much storm preparedness communication occurs outside the context of a specific storm event. This between-storm effort focuses on communicating individual household storm preparedness. Empire District’s Blue Sky efforts educate residential customers on what customers might do, as individual households, to prepare for storm-related outages.

In particular, FEMA has two ongoing programs, both of which are specifically designed to advance household preparation in the event of a storm outage (or other emergency). The first program is FEMA’s “Resolve to be Ready” initiative; the second is FEMA’s “Pledge to Prepare” initiative. Local utilities are in a uniquely positive position to help communicate these preparedness campaigns.

- Through the FEMA “Resolve to be Ready” initiative, households are encouraged to prepare (and be ready to implement) a “Family Emergency Plan” (a template for which is available through www.ready.gov). The “Resolve to be Ready” initiative promotes household preparedness ranging from building family emergency kits (one for the home and one for the car), to encouraging placing a “smart phone” in an emergency kit, to arranging for an out-of-state emergency contact through and with whom the family can communicate in the event that local sources of information are unavailable.
- The “Pledge to Prepare” initiative is similar in many ways to “Resolve to be Ready.” Through “Pledge to Prepare,” however, individuals may not merely take individual actions, but may attend trainings on local disaster preparedness; may help organize community events; may help in organizing educational events or drills; and may engage in other public processes through the National Preparedness Coalition

A second type of “Blue Sky” communication/education effort pursued by utilities involves communication regarding the delineation of responsibility between the utility and the customer with respect to service restoration. After a storm event, a customer may be without power either due to problems with the utility infrastructure or due to problems that exist on the customer side of the electric system. When customers do not understand that it is not the utility’s responsibility to repair household-specific problems, the failure of a customer to have power restored to a home

²¹ D.C. Public Service Commission, “Report of the Productivity Improvement Working Group in Response to Order Nos. 15179 and 15220,” at 3 and 4, Formal Case 982, In the Matter of the Investigation of Potomac Electric Power Company Regarding Interruption of Electric Service, (April 7, 2009).

may be unjustly “blamed” on the utility. Not only does this failure give rise to customer dissatisfaction, but in addition, to the extent that the dissatisfied customer communicates with the utility, it may divert scarce utility resources from resolving those problems that are within the province of the utility to correct.

Some utilities periodically communicate to their customers where the line of repair responsibility lies. In particular, customers are told that, particularly if neighbors and immediate abutters have power but the customer’s power is still “out,” it is possible that there is damage to the customer’s electric system. On the other hand, a utility might facilitate customer repair efforts to respond to these problems. New Hampshire and Maine utilities, for example, post on their web sites non-endorsed electricians that can respond to household-specific outage problems along with the geographic service territories that these electricians serve.

4. Multi-Lingual and Multi-Cultural Communications

The Pennsylvania State Data Center (Penn State—Harrisburg) reported in March 2011 that “Pennsylvania’s Hispanic population is the fastest-growing minority group in the state. . . The population (of any race) who is Hispanic or Latino grew by 82.6 percent between 2000 and 2010, an increase of 325,572 people. The Hispanic (or Latino) population now accounts for 5.7 percent of the state’s population.”²² The State Data Center subsequently reported that, by 2012, “Pennsylvania’s racial and ethnic composition continues to grow more diverse. The minority population in Pennsylvania increased by 115,664, or 4.5 percent, since the 2010 Census. According to the 2012 Population Estimates, the commonwealth’s minority population has eclipsed the 2.7 million mark.”²³

North Carolina identified some best practices in reaching multi-lingual customers following a snow and ice storm in 2002.²⁴ As in Pennsylvania, that state has a large and growing non-English-speaking population. North Carolina’s review of utility responses to a 2002 ice storm reported that that state’s utility effort to communicate with its Spanish-speaking customers was “commendable.” Communication efforts that North Carolina’s utilities, most notably Progress Energy and Duke Power, made with respect to its non-English-speaking populations included:

²² Pennsylvania State Data Center (March 11, 2011). *Research Brief: Census 2010 Shows Hispanic Population the Fastest Growing Minority Group in Pennsylvania*.

²³ Pennsylvania State Data Center (June 13, 2013). *Detailed State and County Population Estimates Released for Pennsylvania: State’s Elderly Population Surpasses Two Million; Minority Population Continues Growth*.

²⁴ North Carolina Utilities Commission and Public Staff (September 2003). *Response of Electric Utilities to the December 2002 Ice Storm, Report to the North Carolina Natural Disaster Preparedness Task Force*, at 32 – 35. See also, Dan O’Neill (May 10, 2006). *Regulatory Trends in Emergency Preparedness and Storm Restoration*, at 6 (“In these post-storm audits, there were common themes. . . inadequate multi-language media messaging and appropriately fluent service/field representatives.”)

- Establishing a unique toll-free number for Spanish-speaking customers, thus providing those customers an additional channel to access Spanish-speaking specialists and enabling them to hear the same storm information messages that English-speaking customers heard;
- Promoting the new toll-free number on radio stations targeted to Spanish-speaking customers;
- Utilizing Spanish-speaking company employees to provide translations, information and interviews to major Latino news outlets;
- Translating all storm restoration news releases into Spanish and distributing them to Spanish-language media outlets, while also including them on the company’s website;
- Providing enhancements to the companies’ automated outage reporting systems enabling Spanish-speaking customers to have the exact outage reporting functionality that is provided to English-speaking callers, including the option of receiving a Spanish-speaking callback. Progress Energy, for example, has in-place a callback functionality allowing customers to receive a callback confirmation message in the same language in which the outage was reported, even if the confirmation call is answered by an answering machine. Duke Power reported that it was considering incorporating a similar callback function into its Spanish Outage Reporting application.

References to “culturally appropriate” communications during storm events refers to the observation that effective communications must consider the medium as well as the message. Multi-lingual media messaging provides less benefit if used with communication channels that customers do not turn to for information. Enlisting and engaging the communication channels that are appropriate to the populations which the communication is intended to reach is one important aspect of storm-related communication.

5. Tracking the Effectiveness of Storm Communications.

As with any other program or process, planning and management principles can be applied to measure the operational efficiency and effectiveness of severe weather communications. “Communication” is a process that is particularly subject to measurable outcomes, by determining whether the information/message that a utility has sought to communicate has actually been received and understood by the intended audience.

Storm preparedness planning standards have been established in other jurisdictions. In Washington D.C., the D.C. PUC told Potomac Electric Power Company (“PEPCO”) that it should develop performance metrics that rate in-bound calls as to media messaging

effectiveness.²⁵ This information gathering, bounded by the metrics that were developed to measure effectiveness, would determine whether the information and messages that a utility was intending to impart through public communications were being received and comprehended by the public. According to the D.C. assessment, these performance metrics should measure both the effectiveness of the medium and the efficacy of the message.

In addition, in 2013, Jersey Central Power and Light (JCP&L) reported that:

. . .after Hurricane Irene and the October Snowstorm, Jersey Central Power & Light Company (“JCP&L”) had research conducted into both how it was communicating and what communication outlets customers were using.²⁶ The research can be summarized as follows:

The research found customers in the northern service territory were much less satisfied than customers in the central service territory. . .As expected, the research confirmed some expectations and challenged others. For example, customers expected reliable service and wanted estimated restoration times during an outage. That was known beforehand. However, the research showed that customers were not interested in hearing about the process and mechanics of restoration. Even though presentations regarding the restoration process were requested by local officials, such meetings were to allow local constituents to vent their anger towards JCP&L. The participants in the focus groups overwhelmingly wanted to hear what JCP&L was going to do for the future.

When it came to the delivery of information, the top choices for receiving messages were (in order of preference): the JCP&L hotline (1-888-LIGHTSS call center number), the JCP&L website, local radio and social media like Twitter and Facebook. Local TV news was lower than social media, and print

²⁵ James Lee Witt Associates (2003). *PEPCO Holdings, Inc. Hurricane Isabel Response Assessment*, at 107, recommendations adopted and ordered, Order 13381 (September 15, 2004). Formal Case 982, In the Matter of the Investigation of Potomac Electric Power Company Regarding Interruption to Electric Energy Service, at 34, 36.

²⁶ The following was “Footnote 1” in the JCPL discussion. “The research was conducted, concluded and analyzed in early 2012 by Maslansky Luntz & Partners and was done in two parts: (i) one dial session for people in the northern service territory and (ii) two focus groups in the central service territory. The dial session recorded the audience’s instant response to existing and proposed JCP&L messages using dials to show positive or negative reactions. The focus groups tested messages and went into greater detail about how the audience would like JCP&L to communicate with them. The messages were developed by talking to JCP&L executives. All participants were JCP&L customers and many were without power for significant amounts of time in both Hurricane Irene and the October Snowstorm. Care was taken to choose participants from each area of the JCP&L service territory, evenly split between those who are actively engaged with public officials and media, and those who lost power for at least three days.”

news was last. In part, this data demonstrated the growing influence of smart phones as a primary means for receiving information. (notes omitted).²⁷

As indicated in the JCP&L discussion, the focus of the inquiry was on both the substance of the message and the means of delivery.

Summary and Conclusions

The areas discussed herein are based on a review of more than 50 assessments of severe weather responses by public utilities from around the country. Improved communication with customers, including targeted communication with vulnerable customers, should work to improve public safety.

²⁷ In the Matter of the Verified Petition of Jersey Central Power & Light Company for Review and Approval of Increases In and Other Adjustments to its Rates and Charges for Electric Service, and For Approval of Other Proposed Tariff Revisions in Connection Therewith; and for Approval of an Accelerated Reliability Enhancement Program (“2012 Base Rate Filing”), BPU Docket No. ER12111052 / OAL Docket No. PUC 16310-2012N, JCPL Response to Rate Counsel Data Request 112.

Appendix A: Illustrative State PUC Outage Regulations

New York Regulation Regarding Special Needs Customers 16 NYCRR Sec. 105.4(b)(9) (emphasis added)

Customer contacts. Provide the corporation's procedures and facilities for handling the extraordinary volume of customer calls that are normally placed during emergency events. Include a description of the type of messages that may be given to call-in customers regarding projections for service restoration or other pertinent information. State the overall corporate goals for answering customer calls during electric emergencies including, but not limited to, plans for staffing levels, number of positions activated, use of pre-recorded messages, means of providing updated information to customer service representatives, and the means of monitoring calls received and answered at the utility's office and, to the extent possible, at telephone company switching offices serving the utility's office. State the procedures for contacting within 24 hours, and policies for responding to the needs of, life support customers (those who require electrically operated machinery to sustain basic life functions) during an electrical emergency. State the procedures for contacting other special needs customers such as the elderly, the vision-impaired, the hearing and speech-impaired, the mobility impaired and human service agencies representing these customers, along with policies for handling inquiries and requests for assistance from them. Describe the corporation's method for estimating dry ice needs during an emergency period projected to last more than 48 hours and arrangements for obtaining and distributing dry ice to designated customer groups. State also the means of making out-of-service customers aware of the availability and the location, dates, hours and amounts of dry ice to be distributed.

Massachusetts Regulations Regarding Special Needs Customers 220 C.M.R. Sec. 19.04(1)(c) (emphasis added)

19.04: Emergency Response Plans

(1) Each Company shall submit to the Department an ERP that shall be designed for the safe and reasonably prompt restoration of service associated with an Emergency Event. The ERP shall include, but not be limited to, the following:

(a) * * *;

(b) * * *;

(c) for electric distribution companies, procedures for maintaining an updated list of Life Support Customers, including a process to immediately update a Company's Life Support Customer list when a customer notifies the Company of a medical need for electric service, communicating with Life Support Customers before, during and after an Emergency Event, and providing information to public safety officials regarding the status of electric service to Life Support Customers' homes;

Maine Regulations Regarding Special Needs Customers
Code Me. R. 65-407 Ch. 815, § 14 (emphasis added)

B. Notification of affected customers

When service is interrupted without notice for more than five hours, the utility must attempt to notify directly those customers who have informed the utility of the presence of life support systems or other special needs that depend on utility service of the cause and expected duration of the outage. Utilities must make reasonable efforts to notify other affected customers and occupants of the cause and expected duration of the interruption through general notification means such as posting outage information on a website and making outage information available to customers that call the utility.

C. Method of notification

Notice required by paragraphs A and B can be given by the method best suited to the nature of the interruption, the size of the area affected, the time of year, and the resources available to the utility. In any case, the utility must take all reasonable steps to notify directly those customers who have informed the utility of the presence of life support systems or other special needs that depend on utility service that a planned or scheduled interruption will occur.

D. Identification of customers on life support

A utility must solicit applicants and customers to report the presence of life support systems or other special needs, pursuant to Section 5(A)(11). Once reported, the utility must identify these customers in its billing system, outage restoration system, and at the customer's meter.

Appendix B:
Illustrative State PUC Storm Communication Recommendations

Washington D.C. Recommendations Regarding Communications
“Witt Report”²⁸ and Subsequent PUC Order²⁹ following Hurricane Isabel

“Special-Needs Customers Recommendations

“Develop a written program for meeting PHI life support customer obligations. Apply quality controls to the program to assure the program meets all obligations and is complied with continuously.

“In cooperation with local government and volunteer agencies, educate life support customers, other special-needs populations, and their caretakers on their responsibilities to make alternate arrangements for powering life sustaining equipment and where to call to receive community assistance because of a medical concern during an extended outage.

“Provide clear information (working with communities-particularly with emergency management officials, emergency service agencies, and the Red Cross), on restoration priorities, and how life support customers and other populations with special needs seek assistance.”³⁰

* * *

“Public Education

“Local governments believe that local citizens need more preparedness information dealing specifically with power outages. While press releases from Pepco and local governments are necessary, they are not sufficient to get important preparedness messages across to residential customers.

“Among the topics that should be addressed by a public education campaign are the following: the mechanics of the distribution system and the restoration process; mitigating the vulnerability of the electrical connections on private property; reducing the electrical load in private residences by turning off appliances and knowing how to restart them safely; responsibly planting trees that are power line friendly; reporting to the utility or the local government trees that are in imminent danger of damaging power lines; safely employing generators on

²⁸ James Lee Witt Associates (2003). *PEPCO Holdings, Inc. Hurricane Isabel Response Assessment*, at 107.

²⁹ Each recommendation in the *Witt Report* was subsequently adopted and ordered by the DC Commission. Order 13381 (September 15, 2004). Formal Case 982, In the Matter of the Investigation of Potomac Electric Power Company Regarding Interruption to Electric Energy Service, at 34, 36.

³⁰ *Witt Report*, at 109

residential property; stockpiling emergency supplies, including nonperishable foods, water, and ice; educating the public on the process for reporting outages as distinct from the reporting process for downed wires; and helping arm citizens with ideas on how to cope without power (games for children, meal preparation without power, fire safety, food and water safety, etc.).”³¹

* * *

“Customer Information and Service Recommendations

“Develop a performance algorithm that attempts to ascertain and quantify the effectiveness of media relation's information by measuring the volume of non-outage calls coming into the Call Center. If media relations can educate the public regarding the reasons to call and when it is appropriate to call, it should result in fewer complaint calls to the Call Centers during large outage events.”³²

Missouri Recommendations Regarding Community-based Collaborations (AmerenUE)

AmerenUE (2006 Wind and Thunderstorms):

“Customer comments during the public hearings in this case highlighted the need for specific efforts to take care of special customer populations, such as those customers with medical needs and the elderly. It should be noted that in this investigation, Staff came across numerous acts of heroism by people who were helping their neighbors. Several customers at these hearings communicated to Staff their belief that neighbors should take a more active role during an outage in assisting citizens that are elderly, alone or dealing with medical needs. The ideas expressed here are nearly identical to those that resulted in the establishment of the current Operation Weather Survival (OWS) network system in St. Louis. The concept of a neighborhood “watch group” was discussed with customers at several public hearings, after testimony was heard regarding concerns for the elderly and medical situations. These citizens could ensure that these customers are safe and, if needed, are transported to a location with power. Major widespread outages become emergency situations, especially in the weather conditions that existed on July 20th, and require the cooperation and participation of all interested citizens.

“AmerenUE’s efforts to restore power following a major storm should be a priority. Customers should not be involved in the discovery of technical and dangerous conditions. But given appropriate direction, customers can play an

³¹ *Witt Report*, at 96 – 97.

³² *Witt Report*, at 108.

important role in the restoration process. This direction can come through a joint effort of AmerenUE and community agencies.

“The Company can continue to work with city and county agencies to identify customers that may be at risk during an outage. These agencies could utilize this information to develop neighborhood groups that have responsibility for checking on these customers during an extended outage. The information that AmerenUE receives through its medical registry program could be a good way to start such a program.

“Recommendation: City and county agencies, in conjunction with AmerenUE, should facilitate the development of neighborhood watch groups, or assess the ability of the current Operation Weather Survival (OWS) network system, to check on special needs customers during an extended outage.”³³

AmerenUE (2007 Ice Storm):

“AmerenUE offers a Medical Equipment Registry program for its customers that depend upon electrically operated medical equipment. The Company utilizes a medical equipment registry enrollment form to allow customers that require the use of electrically-operated medical equipment in their home to register with them. The form includes information that is to be completed by the customer’s physician. Medical equipment is categorized as critical or cautionary. If classified as critical, a special tag is added to the meter to alert field personnel. The letter sent to these customers clearly states that the Company cannot guarantee the provision of uninterrupted electric service and that the customer needs to develop a back-up plan to ensure their own safety and welfare. A confirmation letter is sent to the customer to confirm their registration. On an annual basis, these customers are sent a notice asking if they need to continue on this registry. The Company repeats its message that it cannot guarantee uninterrupted electric service in this notice. Once registered, there is a special note on that customer’s account indicating they are on the medical registry.

“At the present time, 2,243 customers are currently enrolled in the program. These customers, once enrolled, are given a special phone number to report an outage. This information is immediately conveyed to field crews to ensure the most expedient response possible.

“Staff noted in the July 2006 Storm Report that many customers raised concerns during public hearings not just for their own circumstances during the outages, but also serious concern for special customer populations, such as the elderly and medical needs customers. These concerns led Staff to make a recommendation regarding the importance of a coordinated effort led by city and county agencies

³³ Missouri Public Service Commission Staff, Case No. EO-2007-0037, *Report on AmerenUE’s Storm Outage Planning and Restoration Effort Following the Storms on July 19 and 21, 2006*, at 57 (November 17, 2006).

to facilitate the development of neighborhood watch groups to check on special needs customers during an extended outage. In its status report, the Company has indicated it has not taken any action on this.

“Staff understands that it should be AmerenUE’s first priority to restore service to customers during a major outage, regardless of medical needs. However, Staff also believes that the Company can play a vital role prior to these outages to facilitate efforts to protect these customers and ensure they are not overlooked. Ideally, such advance interaction and planning could be facilitated by an outreach or community relations function within the Company. Staff is encouraged by learning of the existence of some similar outreach programs in use at other utilities during major extended outages.

“5. Recommendation: Develop and utilize a Company community outreach function to participate with city and county agencies in an active role in assisting citizens that have special needs during an outage.”³⁴

³⁴ Missouri Public Service Commission Staff, Case No. EO-2008-0218, *Missouri Public Service Commission Staff Final Report of the Investigation of Union Electric Company d/b/a AmerenUE’s Storm Preparation and Restoration Efforts following the Major Ice Storm in December 2007*, at 42 – 43 (June 17, 2008).

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State	Date	Docket	Report
Connecticut			Report of the Two Storm Panel: Presented to Governor Daniel P. Malloy
Connecticut	August 1, 2012	Docket 11-09-09	Decision and Order: PURA Investigation of Public Service Companies Response to 2011 Storms
Generic			Best Practice for Storm Response on U.S. Distribution Systems
Generic	May 10, 2006		Regulatory Trends in Emergency Preparedness and Storm Restoration
Illinois	August 15, 2008		Final Report on the Investigation of Wind and Ice Storm Preparedness and Restoration of the Ameren Illinois Companies
Kentucky	February 6, 2004		Assessment of Electric Utilities Response to the February 2003 Ice Storm
Kentucky	November 19, 2009		Ike and Ice: The Kentucky Public Service Commission Report on the September 2008 Wind Storm and January 2009 Ice Storm
Maine	March 23, 1999	Docket No. 98-026	Order: Public Utilities Commission Inquiry into the Response by Public Utilities in Maine to the January 1998 Ice Storm
Maine	November 14, 2003	Docket No. 2002-151	Order: Public Utilities Commission Investigation into the Adequacy of Utility Services in Maine During Power Outages.
Maryland	December 10, 1999	Case No. 8826	Order 75823: Final Order: In the Matter of the Investigation into the Preparedness of Maryland Utilities for Responding to Major Outages (and subsequent reports)
Maryland	October 20, 2003		PEPCO: Report of Electric System Damage and Restoration Following Major Storms of August 26-30, 2003 and Hurricane Isabel, September 18-19, 2003.
Maryland	September 24, 2012	Executive Order 01.01.2012.15	Weathering the Storm: Report of the Grid Resiliency Task Force
Massachusetts	December 11, 2012	DPU 11-85-A/11-119-A	Final Order: Investigation by the Department of Public Utilities on its Own Motion into the Preparation and Response of Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid to Tropical Storm Irene (August 2011) and to the October 29, 2011 snowstorm.
Massachusetts	December 11, 2012	DPU 11-85-B/11-119-B	Final Order: Investigation by the Department of Public Utilities on its Own Motion into the Preparation and Response of NSTAR Electric Company to Tropical Storm Irene (August 2011) and the October 29, 2011 snowstorm.
Massachusetts	December 11, 2012	DPU-119-C	Final Order: Investigation by the Department of Public Utilities on its Own Motion into the Preparation and Response of Western Mass Electric Company to Tropical Storm Irene (August 2011) and the October 29, 2011 snowstorm.

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State	Date	Docket	Report
Michigan	August 22, 2008	U-15605	Outage Investigation Staff Report
Missouri	November 17, 2006	EO-2007-0037	Report on Ameren UE's Storm Outage Planning and Restoration Effort Following the Storms on July 19 and 21, 2006
Missouri	June 17, 2008	EO-2008-0215	Final Report on the Empire District Electric Company Storm Preparation and Restoration Effort
Missouri	June 17, 2008	EO-2008-0218	Staff Final Report of the Investigation of Union Electric Company d/b/a Ameren UE's Storm Preparation and Restoration Effort Following the Major Ice Storm in December 2007
Missouri	June 17, 2008	EO-2008-0219	Final Report on Kansas City Power & Light Company's Storm Outage Planning and Restoration Efforts following the Ice Storm on December 10 and 11 2007
Missouri	June 17, 2008	EO-2008-0220	Staff Final Report of the Investigation of Aquila Inc.'s Storm Preparation and Restoration Efforts Following the Major Ice Storm in December 2007.
National	August 7, 2008	Department of Homeland Security	National Emergency Communications Plan ("NECP")
National	July 2009	Department of Homeland Security	NECP: Memoranda of Understanding: State to Local, Template Suite.
New Hampshire	December 1, 2009		December 11-12 2008 Ice Storm: State Response After-Action Report
New Hampshire	December 3, 2009		After Action Review December '08 Ice Storm Final Report
New Jersey	December 14, 2011	Docket No. EO11090543	Order Accepting Staff's Report and Requiring Electric Utilities to Implement Recommendations
New Jersey	August 4, 2012		Performance Review of EDCs in 2011 Major Storms
New Jersey	January 23, 2013	Docket No. EO11090543	Order Accepting Consultant's Report and Additional Staff Recommendations and Requiring Electric Utilities to Implement Recommendations
New Mexico	December 21, 2011		Severe Weather Event of February 2011 and its Cascading Impacts on NM Utility Service
New York	October 24, 2007		Final Report to the New York State Department of Public Service: Independent Audit of Consolidated Edison Company: Electric Emergency Outage Response Program
New York	August 1, 2010		February and March 2010 Storms: A Report on Utility Performance
New York	June 1, 2012		Utility Performance Report following Hurricane Irene and Tropical Storm Lee
New York	June 1, 2012		Utility Performance Report Following the October 2011 Nor-Easter
New York	June 22, 2013		Moreland Commission: Final Report on Utility Storm Preparation and Response

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State	Date	Docket	Report
North Carolina	September 1, 2003		Report of the North Carolina Utilities Commission and the Public Staff to the North Carolina Natural Disaster Preparedness Task Force
Pennsylvania	April 1, 2009		Electric Distribution Company Service Outage Response and Restoration Practices Report
Pennsylvania	December 14, 2011	Docket NO. M-2008-2065532	Policy Statement Regarding Utility Service Outage Public Notification Guidelines: Final Policy Statement
Pennsylvania	February 1, 2012		Summary Report of Electric Companies Handling of High-Call Volumes During Storms and Analysis of Storm and Severe Weather Data
Rhode Island	March 5, 2012		Review of National Grid Storm Preparedness, Response and Restoration Efforts
South Carolina	January 31, 2007		Review of Duke Energy Carolina's December 2005 Ice Storm Recovery
Virginia	September 20, 2004		Special Report of Division of Energy Regulation: Preparation for and Response to Hurricane Isabel by Virginia's Electric Utilities
Virginia	August 8, 2010		Preparation and Response to the December 2009 Snowstorm
Virginia	April 3, 2012		Special Report of Division of Energy Regulation: Preparation for and Response to Hurricane Irene
Washington	July 2, 2007		Windstorm of December 14-15, 2006: Puget Sound Energy: Storm Restoration and Readiness Review
Washington	November 28, 2007		Windstorm of December 14-15, 2006: KEMA Recommendations and Subsequent Actions Taken by Puget Sound Energy
Washington D.C.	December 30, 1999	Formal Case 982	Staff Review of Potomac Electric Power Company's Emergency Response Plan and Related Processes to Assess its Effectiveness in Responding to Interruptions to Electric Energy Service During the January 1999 Ice Storm, Hurricane Floyd and Potential Y2K Power Outages
Washington D.C.	January 12, 2004	Formal Case 982	Investigation of Potomac Electric Power Company Regarding Interruption to Electric Energy Service: Witt Report; PEPCO Holdings, Inc. Hurricane Isabel Response Assessment;
Washington D.C.	Varied	Formal Case 982	Investigation of Potomac Electric Power Company Regarding Interruption to Electric Energy Service: (1) Order 13381 and Report of Potomac Power Company in Response to Commission Order 13381; (2) Order 16426 and responses thereto; (3) Order 16262 and responses thereto; (4) Order 15755 and Responses thereto; (5) Order 15179 and responses thereto; (6) Order 13947 and responses thereto.
Washington D.C.	November 2012 - January 2013	Formal Case 982	PEPCO Major Outage Restoration Plan; OPC comments on PEPCO Plan; PEPCO Reply Comments.