

**Report by the Public Utilities Commission to the  
Utilities and Energy Committee Regarding the  
Responsibilities of Electric and Gas Utilities and Their Customers with Respect to  
the Testing, Repair and Replacement of Utility Equipment or Excavation Activity  
and the Protection of Customer Equipment**

**November 5, 2008**

**I. INTRODUCTION**

During the 2008 session, the Legislature enacted Resolve, Regarding Public Safety and Protection Related to Gas and Electric Utilities (“Resolve”).<sup>1</sup> Section 1 of the Resolve states:

That, for the purpose of minimizing potential harm to consumers and other affected persons, the Public Utilities Commission [Commission] shall study and make recommendations for improvements to the statutes and rules governing the responsibilities of electric utilities and their customers with respect to the testing, repair and replacement of electric utility equipment and the protection of customer equipment, and the responsibilities of gas utilities with respect to public safety, with particular attention to excavation activity. The study must address, but is not limited to, notification policies and procedures relating to gas and electric utility work, including persons to be notified, the sufficiency of existing penalties in deterring noncompliance with the statutes and rules, public awareness of the rights and responsibilities of utilities and consumers and, with respect to gas utilities, coordination with any changes in federal rules governing gas safety.

Section 2 of the Resolve directs the Commission to report its findings and recommendations to the Utilities and Energy Committee (“Committee”) on these matters by November 5, 2008, and states that the Committee may submit legislation to the First Regular Session of the 124<sup>th</sup> Legislature relating to the subject matter of the Resolve.

To aid the Commission in responding to the Committee, the Commission contacted electric and gas utilities and asked them to provide various information to the Commission including: a general description of the responsibilities of electric utilities to their customers (residential and business) with respect to situations where the utility is trouble-shooting, testing, repairing or replacing its equipment; a general description of what customers’ responsibilities are regarding protecting their own equipment and how customers are made aware of their responsibilities in this area; an explanation of specifically what the electric utility does to protect customers’ equipment when the utility trouble-shoots, tests, repairs or replaces equipment; a description of the utilities’ (electric and gas) notification policies and procedures to customers regarding electric and gas utility work including persons to be notified, the sufficiency of existing penalties

---

<sup>1</sup> Resolve 2007, ch. 168 (L.D. 2135).

in deterring noncompliance with Maine law and Commission Rules and public awareness efforts of the rights and responsibilities of utilities and customers. With respect to gas utilities, the Commission also requested a description of the responsibilities of gas utilities with respect to public safety with particular attention to excavation activity both prior to excavation (e.g., marking the location of its facilities) and its emergency response in the event of any damage during excavation. Finally, with respect to gas utilities, the Commission sought information regarding coordination with any changes in federal rules governing gas safety.

## **II. CURRENT UTILITY REQUIREMENTS**

The responsibilities of electric and gas utilities and their customers with respect to the testing, repair and replacement of utility equipment or excavation activity and the protection of customer equipment are governed by 23 M.R.S.A. § 3360-A (the "Dig Safe" law); 35-A M.R.S.A. §§ 4516-A and 4705-A (which address penalties for gas safety violations); and Chapter 895, Underground Facility Damage Prevention Requirements; Chapter 815, Consumer Protection Standards for Electric and Gas Transmission and Distribution Utilities; and Chapter 420, Safety of Gas Transmission and Distribution Systems, of the Commission's Rules. A summary of the applicable provisions of the Commission's implementing rules is provided below. In addition, electric and gas utilities must conduct their activities in accordance with general industry standards and procedures, for example, the National Electric Safety Code ("Code").<sup>2</sup>

### **A. Chapter 815, Consumer Protection Standards for Electric and Gas Transmission and Distribution Utilities**

Chapter 815 establishes the minimum consumer protection standards for electric and gas utility service. Section 14 addresses customer notice requirements for planned and unplanned service interruptions due to maintenance or repairs. It defines "interruption" as either a cessation of service or a substantial degradation in the quality of service normally provided. Section 14 further provides that a utility may temporarily interrupt service when it is necessary to repair or maintain the utility delivery system (planned or unplanned); to eliminate an imminent threat to life, health, safety or substantial property damage; or for reasons of local, state or national emergency.

Section 14(A) requires that when the utility schedules a service interruption for maintenance or repairs (a planned outage), the utility must give reasonable notice of the cause and expected duration of the interruption to customers and occupants who may be affected. The Commission's August 27, 2007 Order

---

<sup>2</sup> Section II(A)(2.01)(2) of Chapter 32, Electric Utilities Service Standards, of the Commission's Rules requires that all new construction, reconstruction, maintenance and operation of electric plant shall be in compliance with the Code.

adopting the Rule<sup>3</sup>, noted that utilities should view these as minimum requirements and strive to provide notice as soon as possible. Chapter 815 further provides that if the service interruption is scheduled to affect more than 10 customers or a single commercial customer on a dedicated line, or last more than 5 hours, reasonable notice means 3 days if feasible, but 24 hours at a minimum. In other cases, reasonable notice means notice as soon as practicable.

Section 14(B) requires that if service is interrupted without notice (an unplanned outage) for more than 3<sup>4</sup> 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. Section 14(B) also requires the utility to make reasonable efforts to notify 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.

Section 14(C) provides that notice required for planned and unplanned outages 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 and that 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.<sup>5</sup>

## **B. Chapter 895, Underground Facility Damage Prevention Requirements**

Title 23 M.R.S.A. § 3360-A (the Dig Safe law) and Chapter 895 govern the protection of underground facilities during excavation. Chapter 895 describes the responsibilities of excavators, underground facility operators and the one-call center (Dig Safe System, Inc.). It establishes notification, marking, and reporting procedures,

---

<sup>3</sup> MPUC *Standards for the Provision of Service, Billing, Credit and Collection, Termination of Service, and Customer Information for Electric and Gas Transmission and Distribution Utilities (Chapter 815)*, Docket No. 2007-71, Order Adopting Rule and Statement of Factual Policy and Basis at 33 (Aug. 27, 2007).

<sup>4</sup> During the rulemaking on Chapter 815 (Docket No. 2007-71), the Commission increased this time period from 3 to 5 hours. This change was made to Section 14(A) but due to a drafting oversight was not made to Section 14(B). The Commission plans to correct this oversight as part of Docket No. 2008-429, the current Notice of Rulemaking (NOR) proceeding making amendments to Chapter 815.

<sup>5</sup> Section 14(D) requires that utilities must solicit applicants and customers to report the presence of life support systems or other special needs pursuant to Section 5(A)(11) and once reported, the utility must identify these customers in its billing system, outage restoration system and at the customer's meter.

defines violations and penalties and describes the process the Commission uses to enforce the program. Essentially, prior to any excavation, the Dig Safe System must be contacted by an excavator to allow for facility owners to properly mark where their facilities are located. Proper markings should prevent the majority of incidents and reduce damage to the utilities' systems and potential damage to customer facilities.

More specifically, section 4(B)(1) and (2) require all excavators to notify all Dig Safe System members (by calling the Dig Safe System) and all non-members (typically town or city water or sewer districts or small local utilities) that have facilities in the area of the proposed excavation 72 hours prior to beginning excavation. With respect to emergency excavations, Section 4(C)(1) requires excavators to take all reasonable steps consistent with an emergency and provide notification to the Dig Safe System and non members as soon as possible. Section 6(B) requires operators upon notice of a proposed excavation to advise the excavator of the location and size of the operator's underground facilities and all underground facilities used in furnishing electric or gas service that are connected to the operator's facilities, located in the public way and known to the operator within the area of the proposed excavation by marking the location of the facilities in accordance with Chapter 895. Operators must generally complete marking no later than 2 business days after receipt of the notice of the proposed excavation.

In addition, for gas utilities only, Section 6(D)(2) requires that before commencing any excavation for the purpose of working on an underground transmission line, a gas operator shall provide notice of any excavation to the Fire Department within the service area that the excavation will occur. The notice must occur at least 3 business days prior to the excavation. Section 6(D)(3) further requires gas operators to provide certain emergency management information to each municipality in which it operates, to each fire department in its service territory, the county emergency management agency where it operates and to the Maine Emergency Management Agency ("MEMA").

Section 5(C)(3) requires the Dig Safe System to conduct a public awareness program, including but not limited to making literature available describing the Dig Safe System, and distributing the literature to the public and making it available for purchase and distribution to requesting parties.

Section 8(D)(1)(b) provides that the maximum penalty under the Dig Safe law is \$5,000. In determining the amount of the penalty, the Commission shall take into account the record of the violator; whether the violation resulted in death or personal injury, the degree to which it posed a risk of death or personal injury and the degree to which it caused or posed a risk or public inconvenience; the amount of property damage caused by the violation; the degree of compliance with other provisions of Chapter 895; good faith attempts to comply with the violated provision of Chapter 895; steps to ensure future compliance and the amount necessary to deter future violation.

Section 8(E) provides that in addition to other actions taken by the Commission, the Commission may require an excavator or member operator who is found to have violated Chapter 895 or the Dig Safe law to participate, at the expense of the violator, in an educational program developed and conducted by the Dig Safe System.

**C. Chapter 420, Safety of Gas Transmission and Distribution Systems**

Chapter 420 of the Commission's Rules establishes safety requirements for natural gas transmission and distribution (T&D) systems and provides that Parts 191 and 192 of Title 49 of the Code of Federal Regulations set the minimum standards governing installation, testing and the safety aspects of the operation and maintenance of gas T&D systems. These federal regulations set minimum federal safety standards for the transportation of natural and other gas by pipeline. 49 CFR §§ 191, 192 and Chapter 420 of the Commission's Rules are applicable to certain propane facility operators and all natural gas operators.

The notification requirements included in §192.614, 615 and 616 of the federal regulations, and incorporated by reference in Chapter 420, require gas operators to follow written programs governing damage prevention, minimizing hazards in emergency situations and public awareness efforts. More specifically, Section 192.614 requires operators to carry out a written program to prevent damage to pipelines from excavation activities; Section 192.615 requires operators to establish written procedures to minimize hazards resulting from gas pipeline emergencies and Section 192.616 requires operators to develop and implement a written continuing public education program following guidance provided in the American Petroleum Institute's Recommended Practices. In addition, the customer notification requirements in §192.16 center on a one-time notification requirement to customers that because the operator is not responsible for the buried service line providing gas service, the customer is responsible for maintaining that line. This notification also advises customers to periodically inspect the line for leaks and corrosion, if the piping is metallic, and repair the line if an unsafe condition is discovered. The notice further advises customers that the operator, plumbing contractor or heating contractor can assist in repairing the customer's buried piping.

The public education program required by Section 192.616 must specifically include provisions to educate the public, appropriate government organizations, and persons engaged in excavation related activities on the use of a one-call notification system prior to excavation (in Maine, this is the Dig Safe Program) and other damage prevention activities; possible hazards associated with unintended releases from a gas pipeline facility; physical indications that such a release may have occurred; steps that should be taken for public safety in the event of a gas pipeline release, and procedures for reporting such an event. The program must also include activities to advise affected municipalities, school districts, businesses and residents of pipeline facility locations.

Section 198.31 implements parts of the pipeline safety laws (49 U.S.C. 60101 *et seq.*) which requires each State to adopt a one-call damage prevention program as a condition to receiving a one-call grant for its pipeline safety compliance program. Part 192.614(c) outlines the requirements that a one-call damage prevention program must include. Maine has applied for and received one-call grants and has used them to make changes to the Dig Safe law and Chapter 895 and to bolster enforcement activities (e.g., on site investigations of damage incidents and compliance inspections of excavators).

Other parts of the federal gas safety regulations included in Chapter 420 help protect customers by ensuring that the gas utilities are operating properly and maintaining proper records. The lack of proper records makes it difficult to properly mark facilities increasing the chance of the utility's facilities being struck during excavation activities. For example, Section 192.614(c)(5) of the federal regulations requires that the damage prevention program must provide for temporary markings of buried pipelines in the area of excavation activities before the activity begins. Moreover, the federal law and Maine statute provide for substantial monetary penalties when a utility has not properly complied with these regulations. These penalties are higher than those that can be imposed by other Commission rules (e.g., the Dig Safe law described in Section B) and therefore, likely increase the compliance rates with these rules. More specifically, gas safety violations of the federal gas safety code (49 CFR Parts 190-192) and the Commission's gas safety rule (Chapter 420) are subject to penalty amounts set in 35-A M.R.S.A. §§ 4516-A and 4705-A. The federal maximum penalties allowed that apply to the state gas safety enforcement program are up to \$100,000 per violation per day up to \$1,000,000 and the level of the fine may be influenced by considerations such as the nature, circumstances and gravity of the violation; the degree of the utility's culpability; the utility's history of prior offenses; the utility's ability to pay and any good faith by the utility in attempting to achieve compliance.

### **III. COMMISSION FINDINGS AND RECOMMENDATIONS**

#### **A. Chapter 815, Consumer Protection Standards for Electric and Gas Transmission and Distribution Utilities**

When the Commission testified on the bill that led to the Resolve, we noted that situations where a utility outage or other utility testing, repair, or equipment replacement activity results in a customer claim for property damage are fairly uncommon. The Commission's Consumer Assistance Division (CAD) statistics regarding the number of property damage claims received by CAD in these instances helps to illustrate this point. For example, in 2007, CMP's total number of service interruptions was 7,946 which impacted over 1.2 million customers. CAD received 11 CAD damage claim cases involving CMP. CAD mediated a resolution in one case, found that the utility had violated its own policy regarding when to pay damage claims when it rejected a damage claim filed as a result of damage caused by a piece of equipment that the utility had not maintained properly in another, and that the utility had

not violated industry standards, Commission Rules or the utility's terms and conditions in the remaining nine cases. While there may have been other instances not reported to CAD, the Commission has no way to track that information.

As a general matter, customer premises or electric equipment should not be damaged, nor public safety jeopardized, as a result of an outage and restoration of power or other utility testing, repair, or equipment replacement activities, as long as procedures followed by utility crews conform with applicable electric industry standards. For these reasons, the Commission believes that the current notice requirements for planned and unplanned outages contained in Chapter 815 are adequate and that requiring utilities to notify customers each time the utility performs maintenance or repair work, for example, is neither practical nor likely to provide net benefits to customers. In fact, such a requirement could unnecessarily alarm customers that their equipment may be damaged or their personal safety is at risk because of the maintenance work the utility is doing.

However, educating electric customers about ways to better protect their equipment may further reduce damage incidents. While many product manufacturers or companies selling electric products often advise customers of the need to install protective equipment such as surge protectors to protect their products from damage, Chapter 815 currently does not require the utility to provide recommendations to electric customers on ways to avoid damaging equipment. Section 5(A), however, does require utilities to provide all new customers with a written summary of their rights and responsibilities including the utility's limitations on liability for service interruptions contained in the utility's tariff on file with the Commission and how a customer can submit a claim for damages due to service interruptions. This language could be expanded to increase public awareness of the need for electric customers to protect their equipment from power surges and the Commission has proposed changes to Chapter 815 in this area, which are described below, in a recently initiated rulemaking proceeding.

On October 28, 2008, the Commission issued a Notice of Rulemaking (NOR) in Docket No. 2008-429 to make amendments to Chapter 815. The Commission is proposing to amend Section 5(A) to require that each electric utility, as part of the information they are required to provide new customers, include information about the need to protect sensitive electric equipment from power surges and power spikes through the use of surge protectors and other protective devices.

The Commission is also proposing in the rulemaking to amend Section 14 to require that whenever an electric or gas utility temporarily interrupts service, as described in that section, the utility must take all reasonable measures to ensure the safety of its customers and to protect customer property against damage. The Commission will hold a public hearing on the proposed changes and seek written comments from interested persons. A copy of the proposed changes to Sections 5(A) and 14 of Chapter 815 is attached as Appendix A. The full text of the proposed

revisions to Chapter 815 is available on the Commission's website, [www.maine.gov/mpuc](http://www.maine.gov/mpuc) by clicking on the "Online Documents and Services" icon and then the "Virtual Case File" icon and entering "2008429" in the Case ID box.

**B. Chapter 895, Underground Facility Damage Prevention Requirements**

As discussed above, Chapter 895 has a number of notification requirements for excavators to notify the Dig Safe System, non-Dig Safe members and in certain circumstances local fire departments, the county emergency management agency and MEMA. In addition, while the Rule and federal regulations do require the Dig Safe System and gas operators to conduct public awareness programs about Dig Safe, it does not require notification to residents living nearby of every proposed excavation. The requirements and guidelines established, when complied with, serve to prevent damage from happening in most situations and help to ensure the public's safety and protect personal property. In addition, the notification to nearby residents of any excavation activity is unnecessary to protecting public safety and could cause unnecessary anxiety and fear in residents without any real benefit.

One area that the Commission is currently considering, however, is whether the current penalties are sufficient to deter noncompliance with the Dig Safe law and Chapter 895. As discussed above, the maximum penalty under the Dig Safe law is \$5,000. Because the maximum penalty amount is set by statute, legislative action would be needed to change the amount.

**C. Chapter 420, Safety of Gas Transmission and Distribution Systems**

The Commission is currently in the process of rewriting its gas safety standards rule, Chapter 420. The Commission contemplates that the new rule will be more detailed and contain additional requirements for gas facility operators that will improve public safety. The Commission expects a draft of the proposed changes to be issued by the end of the year and plans to finalize the rule prior to the start of the 2009 construction season.

At this time, it is too early to say what changes, if any, may be made to the gas safety rule with regards to notifying customers of gas utility work or efforts to increase public awareness regarding the responsibilities of gas utilities during excavation activities. As the Commission testified during consideration of the bill that led to the Resolve, gas utility work on gas facilities by the utility operator does not usually create a hazardous situation for nearby residents. Accordingly, notifying nearby residents when any work on gas facilities is being done may simply create unnecessary fear and anxiety for nearby residents and an undue financial burden on utilities without any real benefit. Circumstances where a hazard is created is typically where an excavator (usually not the gas utility) hits and breaks open a gas pipe unexpectedly. The release of gas, if not handled properly, can create a hazard to nearby residents when gas released underground seeps along the channels for piping into houses. In

these circumstances, residents will be evacuated as a cautionary measure while the gas level of the buildings is checked and confirmed to be within safe levels.

Moreover, when a gas hit does occur, the hazard is not immediate. There is time for public safety officials or gas utility personnel that are responding to the event to notify residents in the immediate area and advise them of any necessary actions. However, the Commission will continue to consider these issues as it moves forward with the Chapter 420 rulemaking process as ensuring public safety is the Commission's primary duty in overseeing public utilities.

Finally, gas equipment is not likely to be damaged by interruption of gas supply. This is because the resumption of gas supply is managed by utility personnel so that the pressure within the pipeline that feeds customer equipment is at a properly controlled level. In addition, utility personnel enter each service premise to relight gas equipment pilots and to guide and monitor the resumption of safe gas service.

**D. Gas Utility Operation and Maintenance (O&M) Procedures and Coordination with Changes to Federal Law**

Finally, regarding gas utilities' coordination with any changes in federal law governing gas safety, the three Maine Local Distribution Companies (LDCs)<sup>6</sup> all have written operating procedures that incorporate requirements of federal laws and regulations. The gas operator must revise these written procedures to be consistent with any changes in gas safety regulations.

These procedures contain more detailed guidelines for utility personnel to follow in certain circumstances. The guidelines include general customer public awareness efforts usually focusing on providing information on how to recognize potential gas leaks and what to do if gas is detected. For example, Northern Utilities' O&M procedures include providing a "Scratch and Sniff" card which provides the actual smell that would occur if there was a gas leak.<sup>7</sup> In addition, the utilities focus on notifying their customers and the general public of the Dig Safe requirements and providing information on how to contact Dig Safe when any excavation is planned. This information is provided in many ways, including notices on customer bills as well as through general advertisements through Dig Safe itself. In some cases, the utility's procedures indicate that it may issue general notice through newspaper ads of planned gas work in a general area if the individual project warrants it. The O&M procedures also include the process utilities follow in notifying local officials, including the fire and police departments, where the situation warrants it, if otherwise not required by law.

---

<sup>6</sup> Maine's LDCs are: Bangor Gas, Northern Utilities and Maine Natural Gas.

<sup>7</sup> Chapter 420 Section 5(B) of the Commission's Rules requires that gas be odorized to ensure that the public can be aware of potential leaks.

The second area of customer notification outlined in the gas operators O&M procedures is when the utility is contacted regarding the detection of gas odor and therefore, a potential leak. All three LDC's have specific procedures to follow when notified of the detection of gas odor. The extent of the customer notification will depend on the individual situation but if necessary, could involve door-to-door customer notification, gas level readings within each premise, and evacuation of buildings. The procedures also include the procedures to follow at the conclusion of the leak process. This also includes customer notification, especially if gas service had to be interrupted. These notifications are necessary to ensure that gas utility technicians are granted access to relight all gas equipment properly after an outage has occurred. The gas utility O&M procedures are reasonable and meet the requirements of both the federal and state regulations and in some cases go above and beyond what is required.

#### **IV. CONCLUSION**

Based on the Commission's review of the relevant statutes and Commission rules governing the responsibilities of electric and gas utilities and their customers with respect to the testing, repair and replacement of utility equipment or excavation activity and the protection of customer equipment, the Commission concludes the following.

First, situations where a utility outage, or utility testing, repair or equipment replacement results in property damage or injury to a customer are fairly uncommon. Second, utilities are required to conduct these activities in accordance with standard procedures designed to prevent damage to customer equipment or risk to public safety. As a result, the Commission concludes that the current notice requirements regarding planned and unplanned utility outages required by Chapter 815 of the Commission's Rules are adequate and that additional notice requirements to customers each time the utility performs maintenance or repair work, for example, is neither practical nor likely to provide net benefits to customers. In fact, such a requirement could unnecessarily alarm customers that their equipment may be damaged or their personal safety is at risk because of the maintenance work the utility is doing. However, educating electric customers about ways to better protect their equipment may further reduce damage incidents. The current language in Chapter 815 can be expanded to increase public awareness of the need for electric customers to protect their equipment from power surges and the Commission has proposed changes to Chapter 815 in this area in a recently initiated rulemaking proceeding. Specifically, the Commission has proposed:

- 1) amending Section 5(A) to require that each electric utility, as part of the information they are required to provide new customers, include information about the need to protect sensitive electric equipment from power surges and power spikes through the use of surge protectors and other protective devices; and
- 2) amending Section 14 to require that whenever an electric or gas utility temporarily interrupts service, as described in that section, the utility must take all reasonable measures to ensure the safety of its customers and to protect customer property against damage.

Second, the requirements and guidelines established in the Dig Safe law and Chapter 895 of the Commission's Rules are intended to minimize damage to underground utility facilities and help to ensure the public's safety and protect personal property. Notification to nearby residents of all excavation activity is impractical, and unlikely to provide net public safety benefits. It could also cause unnecessary anxiety and fear in residents. The Commission is currently considering, however, whether the current penalties are sufficient to deter noncompliance with the Dig Safe law and Chapter 895.

Finally, with respect to the responsibilities of gas utilities regarding public safety, particularly during excavation activities, the Commission is currently in the process of revising its gas safety standards rule, Chapter 420, including revisions to include additional gas safety requirements to improve public safety. As that process continues, the Commission will consider whether additional notification requirements to nearby residents during excavation activities or other requirements to increase public awareness should be added to the Rule. The Commission is pleased to keep the Committee apprised of the status of both the Chapter 420 and Chapter 815 rulemaking proceedings if that would be helpful to the Committee.