**PENNSYLVANIA**

**PUBLIC UTILITY COMMISSION**

**Harrisburg, PA 17105-3265**

Public Meeting held July 28, 2011

Commissioners Present:

Robert F. Powelson, Chairman

John F. Coleman, Jr., Vice Chairman

Wayne E. Gardner

James H. Cawley

Pamela A. Witmer

Rulemaking Re Amendment to Docket No. L-2009-2107155

52 Pa. Code §59.18 Meter Location

**PROPOSED RULEMAKING ORDER**

**BY THE COMMISSION:**

In accordance with Section 501 of the Public Utility Code, 66 Pa.C.S. § 501, the Commission formally commences its rulemaking process to amend its existing regulations at 52 Pa. Code § 59.18 “Meter Location” to the proposed language attached in Annex A.

**Background and Procedural History**

On August 21, 2008, the Commission directed the Bureau of Transportation, Gas Safety Division, to institute an investigation into the issue of gas meter placement and relocation in the context of service disputes between gas distribution companies and their customers. Pursuant to the Commission's directive, the Gas Safety Division reviewed existing regulations and tariff language on meter location. The Gas Safety Division concluded that the Commission's existing regulation is vague, inadequate, and out-of-date with respect to the federal standards which the PUC has adopted.

The issue of gas meter placement and relocation in the context of service disputes between NGDCs and their customers came before the Commission in two cases. *Mitchell v. Equitable Gas Company*, Docket No. C‑20077457 (Final Opinion and Order Entered January 22, 2009); *Lucas v. Columbia Gas Company of Pennsylvania, Inc.*, Docket No. C-20065830 (Order entered June 3, 2008). In both cases, the meter relocation occurred due to a discovery and repair of leaking service lines. Each case involved a customer complaint filed after the utility charged for relocating the meter.

Specifically, customers had objected to being charged for the relocation of meters from inside their residences to an exterior location, and sought reimbursement of associated costs. The gas line from the meter outlet valve is considered customer owned property. Therefore, when the meters were relocated outside, the customer line was lengthened. Normally, a homeowner would have to contract with an Operator Qualified plumber to extend the house line outside to the meter. In the instances where the customers objected to the relocation of the meters, the NGDC required the meter to be relocated due to safety concerns.

After reviewing these and other cases, the PUC approved a motion offered by Commissioner Pizzingrilli finding that its regulations and the tariff provisions of gas utilities vary significantly:

[I]t is evident that there is ambiguity with respect to meter placement and relocation…[and] it is critically important that our regulations and company tariffs provide clear direction on meter location issues to ensure safe and reliable service.

As much of Pennsylvania’s natural gas infrastructure is aging and a number of gas utilities are in the process of embarking on significant infrastructure replacement initiatives, it is an opportune time to assess the meter relocation policy to enable gas utilities to more efficiently address this issue in the context of these programs and to ensure safe and reliable service.[[1]](#footnote-1)

The Commission then directed the Gas Safety Division to undertake a review of the regulations and to prepare a report with any recommendations.

**DISCUSSION**

Before discussing the Gas Safety Division's report, it is noteworthy, that the Commission's only regulation governing gas meter location reads:

52 Pa. Code § 59.18 Location of meters.

Meters shall be installed in either of the following locations:

1. Inside the building, preferably in a dry, well-ventilated place not subject to excessive heat, and as near as possible to the point of entrance of the pipe supplying service to the building.
2. Outside the building at a location selected by the utility. A meter cover or housing is required if, in the judgment of the utility, conditions require the physical protection for the meter installation.

The U.S. Department of Transportation (“DOT”) regulations, which the Commission has adopted[[2]](#footnote-2) and has an agreement with the Pipeline and Hazardous Material Safety Administration (“PHMSA”) to enforce, include the following:

49 CFR §192.353 Customer meters and regulators: Location.

(a) Each meter and service regulator, whether inside or outside a building, must be installed in a readily accessible location and be protected from corrosion and other damage, including, if installed outside a building, vehicular damage that may be anticipated. However, the upstream regulator in a series may be buried.

(b) Each service regulator installed within a building must be located as near as practical to the point of service line entrance.

(c) Each meter installed within a building must be located in a ventilated place and not less than 3 feet (914 millimeters) from any source of ignition or any source of heat which might damage the meter.

(d) Where feasible, the upstream regulator in a series must be located outside the building, unless it is located in a separate metering or regulating building.

49 CFR §192.357 - Customer meters and regulators: Installation.

(a) Each meter and each regulator must be installed so as to minimize anticipated stresses upon the connecting piping and the meter.

(b) When close all-thread nipples are used, the wall thickness remaining after the threads are cut must meet the minimum wall thickness requirements of this part.

(c) Connections made of lead or other easily damaged material may not be used in the installation of meters or regulators.

(d) Each regulator that might release gas in its operation must be vented to the outside atmosphere.

The Commission’s Gas Safety Division, in conjunction with the Law Bureau, implemented an investigation regarding meter set (meter and regulator) location. The Gas Safety Division issued ten data requests to the ten largest gas utilities under PUC jurisdiction. The data requests included questions related to the number of inside/outside meter sets, inside regulators, tariff language, inside meter set leak calls, reportable incidents associated with inside meter sets, meter relocation charges, inside leak surveys, and local ordinances requiring certain meter locations. All ten gas utilities responded. The data revealed that the Pennsylvania natural gas industry has approximately 27% of all meter sets located inside of residential dwellings. This average has been consistent over the last five years.

All the tariffs for the solicited utilities have tariff rules governing the location of meter sets. Each tariff states that the utility will make the ultimate siting determination. The basis for the utility decision for meter and regulator location is safety. The majority of the tariffs include language that allows for exceptions to outside siting. Allowance for inside meter and regulator sets are based upon historic area prohibitions and areas that have high amounts of vandalism.

The Commission is also concerned about the number of reportable incidents resulting, at least partially, from locating meters and regulators inside structures. The gas distribution utilities reported more than 4,000 leaks occurring on inside meter sets over a five year period. The number of reportable incidents[[3]](#footnote-3) (65) over the past forty years, however, is more alarming. While it appears from the data that the inside meter and regulators were not always the primary factor for accidents, locating meters and regulators inside certainly contributed to these incidents through a release of natural gas. State and federal gas safety regulations require gas utilities to perform leak surveys over service lines periodically; however, several of the utilities reported that they could not comply with the leak survey requirements when the meter and regulator are inside a building, which prevents access. This is troubling because the state and federal regulations require leak surveys up to the meter. By not having access to the meter sets, the NGDCs cannot comply with the state and federal regulations and cannot detect inside leaks.

The state has experienced several gas explosions related to steel service lines being struck and pulled up from their stable position and subsequently pulling the service line from the inside meter set. Plastic service lines with inside meter sets do not pull away since the excavation equipment usually severs the line immediately after being struck. The combination of steel service line and inside meter set is a high risk factor for natural gas incidents.

The responding NGDCs also addressed the cost of moving meter sets from the inside to the outside. In most instances, if the customer requests a meter set relocation, the customer pays for the extension of the customer piping up to the outlet valve of the meter set. But the utilities have multiple exceptions as to who pays. Under federal regulations, Operator Qualified plumbers are the only plumbers who may perform work on service lines and meters. The Operator Qualified plumbers are certified and tested by the specific gas utility.

If a meter set is to be moved outside and the meter set was connected to a steel service line, the NGDC would replace the steel service line and move the meter set outside where practical. The cost of replacing the steel service line and moving the meter set outside is approximately $4,000 per unit. The average cost of moving only a meter set from inside to outside is approximately $500. UGI opined that most of the steel service lines with inside meter sets were connected to bare steel or unprotected steel mains which would also need to be replaced and would increase the cost.

Therefore, if an NGDC is replacing a natural gas main in accordance with its main replacement program, NGDC’s should make all reasonable efforts to replace the bare or unprotected steel service lines in addition to relocating the meter set. In 2008, Columbia Gas of Pennsylvania, Inc. requested limited waivers of the tariff rules relating to customer service line replacement.[[4]](#footnote-4) According to Columbia’s existing tariff, certain customers are responsible for the installation, maintenance and replacement of their service lines. We agreed it would be inequitable to require these customers to replace their service lines at the customers' expense when the replacement was required by Columbia’s main replacement and upgrade project. Thus, it would be prudent and more cost effective for NGDCs to coordinate their meter set relocation program (including steel service line replacement when necessary) with their main replacement program.

There are several alternatives, however, to relocating and replacement of inside meter sets and steel service lines. One alternative is to retrofit existing service lines with Excess Flow Valves. Excess Flow Valves (EFV) are currently mandated for all new and replaced service lines by federal law. *See* 49 U.S.C. 60110, 49 CFR § 192.381. The cost of retrofitting a steel service line with EFV is approximately $1,500. Another alternative to relocation and replacement is to relocate the inside regulator to the outside. The majority of gas distribution utilities do not allow inside regulators, however the companies that do allow them include UGI, PECO, and PGW. The relocation of the inside regulator costs approximately $450.

Finally, several utilities provide service in historic districts where municipal laws require the meter set to be located inside structures. In many of these instances, the utilities are able to locate the regulator outside; however, there are instances when the utility must locate the entire meter set inside due to zoning ordinances. In addition, some utilities must locate meter sets inside due to vandalism concerns.

After review of the state and federal regulations pertaining to meter set location, gas distribution tariffs, and after meeting with the gas utilities, the Gas Safety Section concluded:

1. The Pennsylvania regulations at §59.18 are silent as to reimbursement costs related to relocation of meters.

2. The Commission has adopted provisions of the Code of Federal Regulations, which address the safety issues related to meter set location and installation and thus are in conflict with the existing Pennsylvania regulations.

3. The collected data show that Pennsylvania has experienced 65 reportable incidents associated with inside meter sets and inside regulators over the last 40 years.

4. The gas distribution utilities have had more than 4,000 leaks related to inside meter sets over the last five years.

5. Several of the gas distribution utilities cannot comply with the state and federal regulations pertaining to leakage surveys because they cannot get access to inside meter sets.

6. Inside meter sets with inside regulators are a major concern due to the possibility of high pressure gas flowing into a structure if the inside meter or inside regulator is detached from the service line. Three gas distribution utilities have high numbers of inside meter sets with inside regulators that are at higher risk for failure because the inside meter and regulator are connected to a steel service line. Steel service lines are susceptible to pulling from excavation equipment. Pennsylvania has experienced several catastrophic explosions due to steel service lines pulling away from inside meter sets and inside regulators.

**CONCLUSION**

The Commission, therefore, formally commences its rulemaking process to amend its existing regulations by amending 52 Pa. Code § 59.18 consistent with Annex A to this Order, so that the state regulations are consistent with the federal regulations that the Commission has adopted. The new regulation includes language that allows the natural gas utilities to have sole determination for meter set (meter and regulator) location. The determination should be based upon the interest of public safety. The proposed language also requires NGDCs to relocate current inside regulators, which are connected to steel service lines, to the outside with the exception of historic districts and high risk vandalism districts within 10 years.

The proposed amended language also provides for alternatives to relocating inside meter sets outside. These alternatives include installation of an Excess Flow Valve on steel service lines or relocating inside regulators to the outside if the meter set is connected to a steel service line. The proposed amended language imposes no additional regulatory requirements upon NGDCs that these utilities are not already subject to under the federal regulations. The Commission seeks comments from all interested parties on this proposed regulation amendment, which is found at Annex A to this Order.

Accordingly, under sections 501 and 1501 of the Public Utility Code, 66 Pa.C.S. § 501 and 1501; sections 201 and 202 of the Act of July 31, 1968, P.L. 769 No. 240, 45 P.S. §§ 1201-1202, 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 are considering adopting the proposed regulations set forth in Annex A, attached hereto; **THEREFORE**,

**IT IS ORDERED:**

1. That a proposed rulemaking be opened to consider the regulations set forth in Annex A.

2. That the Secretary shall submit this proposed rulemaking Order and Annex A to the Office of Attorney General for review as to form and legality and to the Governor’s Budget Office for review of fiscal impact.

3. That the Secretary shall submit this proposed rulemaking Order and Annex A for review and comments to the Independent Regulatory Review Commission and the Legislative Standing Committees.

4. That the Secretary shall certify this proposed rulemaking Order and Annex A and deposit them with the Legislative Reference Bureau to be published in the *Pennsylvania Bulletin*.

5. That an original and 15 copies of any written comments referencing the docket number of the proposed regulations be submitted within 30 days of publication in the *Pennsylvania Bulletin* to the Pennsylvania Public Utility Commission, Attn: Secretary, P.O. Box 3265, Harrisburg, PA 17105-3265.

6. That a copy of this proposed rulemaking Order and Annex A shall be served on the Office of Trial Staff, the Office of Consumer Advocate, and The Office of Small Business Advocate, and all Natural Gas Distribution Companies.

7. That the contact person for this proposed rulemaking is Adam D. Young, Assistant Counsel, Law Bureau, (717) 787-5000. Alternate formats of this document are available to persons with disabilities and may be obtained by contacting Sherri DelBiondo, Regulatory Coordinator, Law Bureau, 717-772-4579.

****

**BY THE COMMISSION**,

Rosemary Chiavetta

Secretary

(SEAL)

ORDER ADOPTED: July 28, 2011

ORDER ENTERED: July 28, 2011

**ANNEX A**

**TITLE 52. PUBLIC UTILITIES**

**PART I. PUBLIC UTILITY COMMISSION**

**Subpart C. FIXED SERVICE UTILITIES**

**CHAPTER 59. GAS SERVICE**

\* \* \* \* \*

§ 59.18. [Location of meters.] Meter and regulator location.

[Meters shall be installed in either of the following locations:

1. Inside the building, preferably in a dry, well-ventilated place not subject to excessive heat, and as near as possible to the point of entrance of the pipe supplying service to the building.
2. Outside the building at a location selected by the utility. A meter cover or housing is required if, in the judgment of the utility, conditions require the physical protection for the meter installation.]

(a) *General requirements.*

(1) When practical, a building may not have more than one service line. Service lines must terminate in the building in which the service line enters.

(2) Meters shall be installed at the service regulator. When more than one meter is set on a particular premises, they shall be set at one location. When it is necessary to install meters at multiple locations on the premises, the utility operator shall provide a tag or other means to indicate there are multiple meter locations.

(3) An outside, above-ground meter location shall be used when availability of space and other conditions permit.

(4) When selecting a meter or service regulator location, a utility shall consider potential damage by outside forces, including:

(i) Vehicles.

(ii) Construction equipment.

(iii) Tools or other materials which could be placed on the meter.

(iv) Falling objects, such as packed snow or ice from a roof.

(5)When potential damage is evident, the meter or service regulator shall be protected or an alternate location selected.

(6) Meters and service regulators may not be installed in contact with the soil or other potentially corrosive materials. A utility shall consider the potential for shorting out the insulating fitting when choosing a location.

(7) The meter location must accommodate access for meter reading, inspection, repairs, testing, changing, and operation of the gas shut-off valve.

(8) The meter location must accommodate for the installation of the service line in a straight line perpendicular to the main.

(9) Meters and service regulators may not be installed in the following locations:

1. Directly beneath or in front of windows or other building openings which may be used as emergency fire exits.
2. Under interior or exterior stairways.
3. A crawl space with limited clearance.
4. Near building air intakes.

(10) When the Commission or a utility determines that a meter or regulator must be moved for safety reasons, all costs associated with the relocation of such meter or regulator shall be borne by the utility. When a utility moves a meter in addition to the regulator, pursuant to this section, the cost of extending customer-owned facilities to the new meter location shall be borne by the utility.

(11) A customer requesting that a meter or regulator be moved shall pay the costs associated with such relocation when the meter and regulator are currently situated in a suitable location pursuant to state and federal guidelines,

(12) Utilities shall address meter location in their tariffs.

(b) *Outside meter or service regulator locations.* Outside meters or service regulators shall be installed in the following locations:

(1) Above ground in a protected location, adjacent to the building served.

(2) In a properly designed buried vault or meter box.

(i) The vault or meter box shall be located on a customer's property, either adjacent to the building served or near the gas main.

(ii) Vaults may be located in a public right of way. Consent of local jurisdictions may be required.

(3) A utility shall consider proper design and location criteria for a meter box, including the following:

(i) Ventilation.

(ii) Vehicular traffic.

(iii) Potential for soil accumulation.

(iv) Surface water runoff.

(v) High water table.

(vi) Proximity to building air intakes or openings.

(vii) Proximity to an excessive heat source.

(4) Piping installed through vault walls shall be properly coated to protect from corrosion.

(5) Vaults containing gas piping may not be connected by means of a drain connection to any other underground structure.

(6) When a meter box is located outside a paved surface, a utility shall consider the potential for fill, topsoil, or sod being placed over the vault, and when practical, choose an alternate location.

(7) A utility shall refer to the guide material under 49 C.F.R. § 192.355 (relating to considerations involving service regulator and relief vents in vaults).

(c) *Inside meter or service regulator locations.*

(1) Inside meter locations shall be considered only when:

(i) An acceptable outside location is not available due to restrictions in Federally approved Historic Districts or in high risk vandalism districts.

(ii) Protection from ambient temperatures is necessary to avoid meter freeze-ups.

(2) Regulators shall be located outside when a meter is located inside.

1. All installed inside meters shall be attached to an operable outside shut off valve.

(4) All regulators, connected to steel service lines, shall be relocated to the outside by year end 2020.

(6) Meters and service regulators may not be located in engine, boiler, heater, or electrical equipment rooms, living quarters, closets, restrooms, bathrooms, or similar confined locations.

(7) Each service regulator installed within a building shall be located as near as practical to the service line entry point. When selecting the service regulator location, venting requirements and the vent piping location and length shall be considered.

(8) When a meter or service regulator is located inside a building, a utility shall comply with 49 CFR §192.365 (relating to valve locations). A utility shall install a readily accessible shut-off valve outside the building.

(d) *Other meter or service regulator locations.* A utility may consider a specially constructed cabinet recessed in the building wall, sealed from inside the building and vented to, and accessible from, outside the building.

1. *Gas Meter Location,*Docket No. M-2008-2058386, Motion of Commissioner Kim Pizzingrilli (August 21, 2008). [↑](#footnote-ref-1)
2. *See Ratification and Adoption of Amendments to Part 192 of Title 49 of the Code of Federal Regulations*, Docket No. M- 00001347, Order entered March 16, 2000, 2000 Pa. PUC LEXIS 4; 52 Pa. Code § 59.33, safety. [↑](#footnote-ref-2)
3. A reportable incident exists where there was a release of gas and (1) greater than $50,000 in damages; (2) death or injury; or (3) a significant event in the determination of the distribution utility. [↑](#footnote-ref-3)
4. Petition of Columbia Gas of Pennsylvania, Inc. for Limited Waivers of Certain Tariff Rules Related to Customer Service Line Replacement, Docket No. P-00072337. [↑](#footnote-ref-4)