STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DIVISION OF PUBLIC UTILITIES AND CARRIERS
89 JEFFERSON BOULEVARD
WARWICK, RHODE ISLAND 02888

IN RE: RULES AND REGULATIONS PRESCRIBING STANDARDS FOR GAS UTILITIES, MASTER METER SYSTEMS AND JURISDICTIONAL PROPANE SYSTEMS	:	DOCKET NO. D-06-15

REPORT AND ORDER

1. Introduction

On April 4, 2006, the Rhode Island Division of Public Utilities and Carriers ("Division") published a "Notice Of Rulemaking And Public Hearing" in the Providence Journal, wherein interested persons were invited to submit data, views, or arguments, orally or in writing, and/or attend a public hearing in response to the proposed adoption of a comprehensive rewrite and consolidation of the following currently effective Division rules and regulations: (1) *Rules and Regulations Prescribing Standards for Gas Utilities*, effective date July 1, 1966; (2) *Regulations Regarding Gas Pipeline Safety Enforcement Procedures*, effective date April 2, 1986; (3) *Control of Drug Use in Natural Gas and Liquified Natural Gas*, effective date May 10, 1990; and (4) *Rules and Regulations Prescribing Standards for Gas Line Abandonment & Leakage Survey Procedures*, effective date May 21, 1986. The proposed rewritten and consolidated rules and regulations are entitled: "*Rules and Regulations Prescribing Standards For Gas Utilities, Master Meter Systems and*

Jurisdictional Propane Systems" (hereinafter: "*New Consolidated and Rewritten Gas Rules*"). The public notice further reflected that the Division also planned to repeal the above-described existing rules and regulations through this rulemaking process.

The notice indicated that the *New Consolidated and Rewritten Gas Rules* will apply to all Local Gas Distribution Companies ("LDC"), Master Meter Systems, and Jurisdictional Propane Systems engaged in the business of manufacturing, distributing, selling or transmitting natural or other gas by pipeline in the State of Rhode Island. Currently, there is one LDC, 40 Master Meter Systems, and 20 Jurisdictional Propane Systems in operation within the State of Rhode Island, all of whom are subject to all or specified portions of the proposed *New Consolidated and Rewritten Gas Rules.*

After preparation of the proposed *New Consolidated and Rewritten Gas Rules* was complete, the Administrator appointed the undersigned hearing officer to conduct a rulemaking proceeding in accordance with the requirements and procedures delineated in R.I.G.L. §§42-35-3 and Rule 12(f)(1) of the Division's *Rules of Practice and Procedure.* The Division thereupon established the instant docket and scheduled and conducted a duly noticed public hearing on the *New Consolidated and Rewritten Gas Rules.* In keeping with the requirements of R.I.G.L. §42-35-3(a)(4), the Division also concluded that the proposed *New Consolidated and Rewritten Gas Rules* would not, if adopted by the Division, have a significant adverse economic impact on any small business or on any city or town.

The Division conducted a public hearing on the proposed *New Consolidated and Rewritten Gas Rules* on May 8, 2006. The hearing was conducted in the Division's hearing room, located at 89 Jefferson Boulevard in Warwick, Rhode Island. The following counsel entered an appearance:

For the Division's Advocacy Section ("Advocacy Section"):	William K. Lueker, Esq. Special Asst. Attorney General
For The New England Gas Company ("Company"):	David L. Black, Esq., and Kevin F. Penders, Esq.

In order to facilitate the Division's discussions and findings relative to the suggested changes articulated by interested persons during this proceeding, the Division has attached a copy of the proposed *New Consolidated and Rewritten Gas Rules* to this report and order as "Appendix 1."

2. Summary of Rulemaking Authority

The Division notes that its authority to promulgate rules and regulations for Gas Utilities, Master Meter Systems and Jurisdictional Propane Systems is derived from the following statutory law:

- R.I.G.L. § 39-3-33, which in pertinent part provides:

> *The division shall make such reasonable rules as will aid in the administration and enforcement of chapters 1 - 5 of this title.*

3. Submitted Data, Views and Arguments (Public Comments)

After the Division's Gas Pipeline Safety Engineer, Mr. Don A. Ledversis, provided testimony in support of the proposed *New Consolidated and Rewritten Gas Rules*, the Company, through counsel, offered comment and concern with

several points raised in the proposed *New Consolidated and Rewritten Gas Rules.* Two of the issues related to "spin testing" and the appropriate "definition" of a "meter". Regarding these issues, the hearing officer directed the Division's Advocacy Section and the Company to meet in a technical session to discuss a possible resolution to the issues in dispute. The parties complied, and ultimately offered a written resolution to these two issues.[1] Specifically, the parties agreed to the following amendment to the definition of a meter as a complete resolution to the "spin testing" and meter definition issues previously in dispute:

> From:
>
> 20. **Meter** means a device, instrument, or any attached device, used by a utility to measure a quantity of gas for billing purposes. The two (2) classes of gas meters consist of:
> Class A meter - A meter having a rated capacity of not more than 500 cubic feet per hour at 1/2 inch water column differential pressure and operating at a gauge pressure of not more than 15 pounds per square inch and not greater than the maximum pressure rating of the meter expressed in pounds per square inch.
> Class B meter - A meter having a rated capacity of more than 500 cubic feet but not more than 1,500 cubic feet per hour at 1/2 inch water column differential pressure and operating at a gauge pressure of not more than 15 pounds per square inch and not

[1] The New England Gas Company sent a letter to the Hearing Officer, dated May 31, 2006, which indicated that "both parties met on May 10, 2006, and were able to resolve those issues to their satisfaction. The...[Advocacy Section] has prepared a memorandum to the Hearing Officer detailing proposed modifications that are satisfactory to both the Division and NEGC, and the Company has signed off on that memorandum and revised language as sufficient for the purposes of the Proposed Standards." The Advocacy Section subsequently submitted the aforementioned memorandum to the hearing officer on August 29, 2006. The memorandum suggests an amendment to the originally proposed definition of a "meter" (Definitions "20"). It also indicates that the parties had agreed that no changes are necessary with respect to the "spin" testing requirements contained in the originally proposed rules (Section 15(e)).

greater than the maximum pressure rating of the meter expressed in pounds per square inch.

To:

20. **Meter** means a device, instrument, or any attached device, used by a utility to measure a quantity of gas for billing purposes. The two (2) classes of gas meters consist of:
Class A meter - A meter having a rated capacity of not more than 500 cubic feet per hour at 1/2 inch water column differential pressure and operating at a gauge pressure of not more than 15 pounds per square inch and not greater than the maximum pressure rating of the meter expressed in pounds per square inch.
Class B meter - A meter having a rated capacity of more than 500 cubic feet per hour. The meter shall not operate at a pressure greater than the maximum pressure rating of the meter expressed in pounds per square inch.

The Company expressed concern with Section 15(a) (v) of the proposed *New Consolidated and Rewritten Gas Rules.* The Company argues that the Rule's requirement that meters in storage over twelve (12) months be tested for accuracy "will create significantly added costs to the Company for no appreciable benefit to its customers."[2] The Company contends that the "likelihood that a meter could be deemed inaccurate when it had been tested and certified to be within compliance when placed on the shelf and then left alone from that time until installation is too remote to warrant such an expense."[3] The Company recommended that this requirement be removed from the proposed *New Consolidated and Rewritten Gas Rules.*

[2] New England Gas Company Exhibit 1, p. 1. The Company relates that testing will cost approximately $990 per meter.
[3] Id.

The Company also expressed concern with "Appendix A" and the requirement that the Company purchase stickers with the date of installation on them rather than the year of install. The Company argues that this requirement is an "unnecessary burden... since all meter testing is based on the meter set date, which is recorded in the system based on the annual date of install." The Company contends that "requiring that the stickers carry this level of specificity means that instead of having the stickers installed on new meters at the factory for no appreciable cost, the Division would instead create a circumstance whereby the Company will be paying labor to put these on for no appreciable value." Regarding the issue of cost, the Company states "that such a proposal would take 90 service techs 15 minutes each month" and cost the Company $10,800. The Company estimates another $1,400 "for collection, retagging, and restocking the trucks." Further, because the Company currently keeps four months of stickers on stock and a year's worth on order, the Company contends that its stock would "become useless and create an added $12,000 cost with no appreciable customer benefit."[4]

The Company also expressed "significant concerns with the estimated read language provided in §5(f), as it relates to §18(c) 'Non-Registration, Does Not Register (DR Meter), or Unaccounted for Gas.'" The Company argues that:

> *Historically, there have been occasions where the Company's customers have been unable or unwilling to allow the Company access to the customer's meters for periods of longer than six months. However, in § 18(c) as proposed, the Company would be prohibited from recovering "billing for unaccounted for gas past (two) 2*

[4] Id., pp. 1-2.

> *months of non registration of the meter, or, if the meter has an attached AMR device, the non registration of the meter and non registration of the AMR device."*[5]

The Company added:

> *We think that the company shouldn't be penalized where the cause of the inability to get an actual read is the refusal or inability of the customer to provide access to the company....We would suggest that the company has to be able to get access either to install [an] AMR on the meter or to get in to get actual reads and so sometimes there are extended periods of time where it's just simply impractical or impossible for the company to gain access.*[6]

The Company observes that under the Rule's proposed language, even though it "is allowed to verify meter reads at least once every six months in §5(b), it is prohibited from collecting more than two months of those estimated reads in §18(c)."[7] The Company accordingly urged the Division to expand the "two months" provision in §18(c) "to at least six months to match up with Section 5(b)."[8]

The Company also offered two "general housekeeping" related comments. First, the Company recommended that "any reference in the document to accuracy limits for the meters of +1.5% should be changed to ±1.5%." Additionally, "as provided in §17, any previously refurbished and installed meters in the field must be grandfathered from this percentage decrease, since

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[5] Id., p. 2.
[6] Tr. 46-47.
[7] New England Gas Company Exhibit 1, p. 2.
[8] Tr. 47.

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The Company observes that under the Rule's proposed language, even though it "is allowed to verify meter reads at least once every six months in §5(b), it is prohibited from collecting more than two months of those estimated reads in §18(c)."[7] The Company therefore urged the Division to expand the "two months" provision in §18(c) "to at least six months to match up with Section 5(b)."[8]

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[5] Id., p. 2.
[6] Tr. 46-47.
[7] New England Gas Company Exhibit 1, p. 2.
[8] Tr. 47.

they were put in the field under a 2.0% standard and will clearly place the Company at a disadvantage with regard to this new 1.5% standard."[9]

Responding to the foregoing issues of concern raised by the Company, the Advocacy Section stood by the Division's proposed rules. The Advocacy Section rejected the Company's objection to the billing prohibitions provided in §18(c). The Advocacy Section argued that two months provides the Company with adequate time to correct a non-registering meter. Accordingly, the Advocacy Section contends that the Company should not be permitted to rely on estimated bills beyond the two-month timeframe.[10] The Advocacy Section further argued:

> *It's a little bit different situation because...in 5(b) we're talking about the company verifying information that's provided by the customer. And [in] 18(c) we're talking about a meter that they know isn't registering at all...We're talking two different situations and it's appropriate to have two different standards apply, particularly if a problem, as the gas company has said, is being caused by a recalcitrant customer.*[11]

The Advocacy Section also rejected the Company's concerns regarding Section 15(a) (v) of the proposed *New Consolidated and Rewritten Gas Rules.* The Advocacy Section argues that the Rule's requirement that meters in storage over twelve (12) months be tested for accuracy is reasonable as it is impossible to know whether a meter stored for that long a period will still operate accurately. Of particular concern to the Advocacy Section is the

[9] New England Gas Company Exhibit 1, p. 3.
[10] Tr. 23-24.
[11] Tr. 47-48.

likelihood that a large commercial meter might be moved around and perhaps "dropped" during a lengthy storage period.[12]

The Advocacy Section also rejected the Company's claim that it would be too costly for the Company to utilize meter stickers that identify the actual date of installation. The Advocacy Section maintains that the Company "could have stickers installed from the factory and perhaps have a marker that they could write when the meter is installed."[13] According to the Advocacy Section, the problem with the Company's current practice is that the stickers being used do not facilitate the enforcement of existing mandatory meter testing rules. For example, the Rules require that the Company test Class B meters every ten years; and without knowing the actual installation date it is impossible to know whether the meter is beyond its ten-year service cycle.[14]

Regarding the "general housekeeping" comments offered by the Company, the Advocacy Section had no objection to changing references to "+1.5%" to "±1.5%." However, the Advocacy Section objected to the Company's recommendation that previously refurbished and installed meters in the field be grandfathered from this percentage decrease. The Advocacy Section opined that "...most of the existing meters out there, even if they are tested at two percent, are probably within the 1.5 percent range..."[15]

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[12] Tr. 37-39.
[13] Tr. 44.
[14] Tr. 45.
[15] Tr. 56.

4. Findings

The Division appreciates the data, views and arguments that were offered by the New England Gas Company during this rulemaking proceeding. The Division has considered the Company's many suggestions and recommendations and has reached a number of related findings, as described below:

a. Section 15 (a) (v) of the proposed *New Consolidated and Rewritten Gas Rules*

The Division finds that the Advocacy Section has offered insufficient reason to compel an LDC to retest meters that have been in storage for more than twelve (12) months. After considering the cost/benefit argument proffered by the Company, the Division finds only minimal justification to warrant the additional expense to ratepayers. The Division has determined that Section 15 (a) (v) ought to be removed from the proposed *New Consolidated and Rewritten Gas Rules.*

b. Appendix A of the proposed *New Consolidated and Rewritten Gas Rules*

The Division has considered the comments and concerns expressed by the Company regarding the issue of having to provide the installation date on its meter stickers and finds the Company's arguments unpersuasive. The Division finds the expenses identified by the Company to implement such a change relatively insignificant in view of the enforcement benefits to be derived from the new requirement. Therefore, the proposed rule will be preserved.

c. Section 18(c) of the proposed *New Consolidated and Rewritten Gas Rules*

The Division has considered the comments and concerns expressed by the Company regarding the issue of access to non-registering meters and finds some merit to the Company's arguments. While the proposed rule is properly designed to encourage the LDC to quickly remedy a known non-functioning meter and/or attached AMR device, the Division believes that the LDC may genuinely find it difficult in some cases to arrange access within the prescribed two-month period. Accordingly, the Division will permit the LDC to seek a waiver from the Division with respect to the two-month billing prohibition contained in §18(c). The waiver request shall include details of the LDC's efforts and experienced difficulties in accessing the customer's property in order to repair the non-registering meter. The waiver shall be filed prior to the expiration of the two-month billing deadline.

d. Accuracy limits in the proposed *New Consolidated and Rewritten Gas Rules* (+1.5% v. ±1.5% and ±1.5% v. ±2%)

The Division shall adopt the Company's recommendation to change all references to +1.5% to ±1.5%. The suggestion is reasonable.

With respect to the Company's argument that previously refurbished and installed meters in the field must be grandfathered from the new ±1.5% standard, since they were put in the field under a 2.0% standard, the Division finds no support in the record to warrant such relief. The proposed rule requires augmented meter accuracy to safeguard the interests of ratepayers. Ratepayers should not be treated differently based on the arbitrary age of the

meter in their homes or businesses. Therefore, the proposed rule will be preserved without the "grandfather" clause requested by the Company.

e. Miscellaneous

The Division notes that it discovered an erroneous legal citation on page 5 of the *New Consolidated and Rewritten Gas Rules*, specifically in paragraph "4" of the Section entitled: "Application of Rules and Regulations." Reference to Section "39-3-3" should have been "39-3-33." The Division will make the necessary correction in the final approved rules (See Appendix 2, infra).[16]

5. Conclusion

The Division has responded to the data, views and arguments offered by the New England Gas Company, who actively participated in the instant rulemaking. Based on the comments offered regarding Section 15 (a) (v), the Division has decided to remove the proposed provision from *New Consolidated and Rewritten Gas Rules.* The Division has also decided to amend Section 18(c) to allow for the possibility of a waiver from the two-month billing prohibition provision. The Division has also agreed to change all references to +1.5% to ±1.5%. However, with respect to the other rules being proposed by the Advocacy Section, the Division finds those proposed rules reasonable and in the public interest. The modified *New Consolidated and Rewritten Gas Rules* are memorialized in "Appendix 2", which is attached to this report and order.

[16] The Division notes that while it adopted the *New Consolidated and Rewritten Gas Rules* proffered by the Advocacy Section, with the modifications described herein, the actual *New Consolidated and Rewritten Gas Rules* being issued by the Division (Appendix 2) also reflect non-substantive formatting and wording changes.

Now, Accordingly, it is

(18705) ORDERED:

1. That predicated upon and modified by the findings contained herein, the Division hereby adopts the "*Rules and Regulations Prescribing Standards For Gas Utilities, Master Meter Systems and Jurisdictional Propane Systems*" as reflected in "Appendix 2" to this report and order.
2. That "Appendix 1" and "Appendix 2" are hereby incorporated by reference.
3. That in view of the Division's formal adoption of the *Rules and Regulations Prescribing Standards For Gas Utilities, Master Meter Systems and Jurisdictional Propane Systems* (Appendix 2), the Division hereby repeals the following currently effective Division rules and regulations: (1) *Rules and Regulations Prescribing Standards for Gas Utilities*, effective date July 1, 1966; (2) *Regulations Regarding Gas Pipeline Safety Enforcement Procedures*, effective date April 2, 1986; (3) *Control of Drug Use in Natural Gas and Liquified Natural Gas*, effective date May 10, 1990; and (4) *Rules and Regulations Prescribing Standards for Gas Line Abandonment & Leakage Survey Procedures*, effective date May 21, 1986.
4. That the Division's Rules Coordinator is hereby instructed to file a certified copy of the attached "*Rules and Regulations Prescribing Standards For Gas Utilities, Master Meter Systems and Jurisdictional Propane Systems*" (Appendix 2) with the Rhode Island Secretary of State as soon as practicable, and also to fully comply with the filing

requirements contained in R.I.G.L. §42-35-3.1 and §42-35-4. The Division's Rules Coordinator is further instructed to file with the Rhode Island Secretary of State the prescribed form(s) for repealing the heretofore-effective Division rules and regulations identified herein. The Division will endeavor to file the instant *Rules and Regulations Prescribing Standards For Gas Utilities, Master Meter Systems and Jurisdictional Propane Systems* and necessary repeal form(s) with the Rhode Island Secretary of State on or before September 15, 2006 in order to facilitate a coinciding effective/repeal date of October 5, 2006.

5. That the new "*Rules and Regulations Prescribing Standards For Gas Utilities, Master Meter Systems and Jurisdictional Propane Systems*" shall take effect on October 5, 2006.

Dated and Effective at Warwick, Rhode Island on September 7, 2006.

John Spirito, Jr., Esq.
Hearing Officer

APPROVED:

Thomas F. Ahern
Administrator

Appendix 1

STATE OF RHODE ISLAND

DIVISION OF PUBLIC UTILITIES & CARRIERS

WARWICK

RULES AND REGULATIONS PRESCRIBING STANDARDS FOR GAS UTILITIES, MASTER METER SYSTEMS AND JURISDICTIONAL PROPANE SYSTEMS

EFFECTIVE DATE: 2006

APPLICATION OF RULES AND REGULATIONS

1. These Rules and Regulations shall apply to all LDC's, Master Meter Systems, and Jurisdictional Propane Systems engaged in the business of manufacturing, distributing, selling or transmitting natural or other gas by pipeline in the State of Rhode Island; currently, there is one LDC, 40 Master Meter Systems, and 20 Jurisdictional Propane Systems in operation within the State of Rhode Island, all of whom are subject to all or specified portions of these rules.

2. These Rules and Regulations replace the following existing Division rules and regulations: (a) *Rules & Regulations Prescribing Standards for Gas Utilities*, effective date June 8, 1966, (b) *Regulations Regarding Gas Pipeline Safety Enforcement Procedures* Docket No. D-86-4, effective date March 13, 1986, (c) *Control of Drug Use in Natural Gas and Liquified Natural Gas,* effective date May 10, 1990, and (d) the *Rules and Regulations Prescribing Standards for Gas Line Abandonment & Leakage Survey Procedures* Docket No. D-86-2, effective date May 21, 1986. These four existing compilations of rules and regulations of the Division are hereby rescinded upon the effective date of this document.

3. These rules and regulations are intended to supplement, and shall be interpreted in a fashion consistent with, the Federal rules set out in the Code of Federal Regulations (CFR), specifically in 49 CFR Parts §40 and §190-§199. The Federal safety standards and regulations, including all subsequent amendments thereto, for the transportation of natural and other gas by pipeline, established pursuant to the Natural Gas Pipeline Safety Act of 1968, as amended (49 U.S.C. 1671, et seq.) by the United States Department of Transportation and contained in 49 CFR Parts §40 and §190-§199 are hereby incorporated by reference. Since the State of Rhode

Island is bound to comply with Federal law concerning gas utilities, and has been delegated enforcement authority by the Federal government, amendments to the Federal rules are incorporated by reference and shall be effective as part of these rules without further action. LDC's shall comply with all of the rules set out herein.

4. These rules shall be amended or repealed, and applications therefore shall be made, in accordance with Rhode Island General Laws, Sections 39-3-3 and 42-35-1 et seq., and the Division of Public Utilities and Carriers "Rules of Practice and Procedure." A written application may be made to the Division for temporary or permanent exemption from any provision of these Rules for good cause shown.

5. "Master Meter Systems" and "Jurisdictional Propane Systems" are *only* required to comply with the safety requirements of 49 CFR Parts §191 - §192 Pipeline Safety Regulations, NFPA 58 Storage and Handling of Liquefied Petroleum Gases and NFPA 59 Storage and Handling of Liquefied Petroleum Gases at Utility Gas Plants, the *Enforcement Procedures* section contained herein, and *Appendix "B"*, the *Natural Gas Telephonic Notice Reporting Requirements* section as contained herein.

DEFINITIONS

The definitions set out in 49 CFR Part §190.3, §191.3, and §192.3 are hereby incorporated by reference, except as augmented or modified below.

Unless the context otherwise requires, the following words as used herein shall have the following meanings:

1. **Abandoned** means that the service line is physically disconnected (cut-off) at the main, or at the distribution line that is the source of supply if the pipe is not a main, and the pipe

is made from material other than plastic or cathodically-protected steel. If the service line is plastic or cathodically-protected steel, it may be cut off at or in close proximity to a property line and made into a stub. When the service line is abandoned, the LDC shall remove the meter and assembly. Should access to these not be readily available, the LDC shall make multiple attempts to gain access for removal. The end of the operator's pipe that is within the customer's building must be cut off below ground and sealed outside the building or must be sealed by inserting a device within the service line to a point that is outside the building wall or foundation. Provisions must be made so that the seal or device cannot be readily removed. When the end of the operator's pipe is located above ground outside the building, the above-ground segment must be removed and the remaining segment below ground sealed. In any case, the pipeline's above or below ground entry point into the building or foundation must be sealed after the pipe has been removed. The pipeline shall be purged and sealed in accordance with 49 CFR Part §192.727(b) or its successor regulation(s).

2. **Accessory** means any meter reading device, which is mechanically or non-mechanically attached to a meter and could affect its accuracy, used to display, record, or transmit meter information to a remote location or any associated meter correction device, either remote or attached, used to adjust the reading of a meter index.

3. **Administrator** means the Administrator of the Rhode Island Division of Public Utilities and Carriers.

4. **AMR** means an automated meter reading device

5. **British thermal unit** (Btu) means a unit of heat equal to the amount of heat required to raise one pound of water one degree Fahrenheit at one atmosphere pressure; equivalent to 251.997 calories

6. **Commission** means the Rhode Island Public Utilities Commission

7. **Cubic Foot**

   a. The term cubic foot shall mean the volume of gas which occupies one (1) cubic foot of space at a temperature of 60° Fahrenheit and an absolute pressure of 14.73 pounds per square inch (known as standard conditions) with deviation there from, for varying pressure and temperature being in accordance with Boyle's Law and Charles' Law.

   b. When gas is metered under the filed domestic rates of the utility a cubic foot shall be taken to mean the amount of gas which occupies one cubic foot under the conditions existing in the customer's meter as and where installed, except that outside meters may be of a temperature compensating type.

   c. When gas is metered in large volumes at pressures and temperatures other than standard, it must be measured by a meter equipped with devices which correct for super-compressibility, pressure and temperature to determine billable volume at standard conditions. When orifice meters are used additional corrections may be made for the super compressibility and expansion effects, in accordance with industry standards.

8. **Cubic Foot Bottle** means a specifically constructed and calibrated bottle that can measure exactly one cubic foot of air. The calibration of the bottle is certified by the National Institute of Standards and Technology.

9. **Degree Days** means a measure of coldness based on the extent to which the daily mean temperature falls below 65 degrees F. For example, on a day when the average temperature is 35 degrees F, there would be 30 degree days experienced.

10. **Distribution Line** means a gas pipeline, other than a gas-gathering or transmission line, that is normally used by utilities for the transportation of natural gas and/or other flammable gas to customers.

11. **Discontinued** means that gas service is no longer provided to the customer and the prevention of gas flow is usually performed by a locking device (valve) located in the service line or in the meter assembly.

12. **Division** means the Rhode Island Division of Public Utilities and Carriers.

13. **DR Meter** means a meter that does not register the consumption of gas.

14. **Fast Meter** means a meter that measures more gas than is actually consumed.

15. **FERC** means the Federal Energy Regulatory Commission.

16. **Inactive** means a service line where gas service to the customer has been discontinued but the service line has not been abandoned.

17. **Jurisdictional Propane System** means a propane system that serves ten or more residential customers, or two or more customers served in a public place, from a single or manifold tank system.

18. **LDC** means a local distribution company, which is also a public utility engaged in the business of manufacturing, distributing, selling, or transporting natural or other gas by pipeline in the State of Rhode Island.

19. **Master Meter System** means a pipeline system for distributing gas within, but not limited to, a definable area, such as a mobile home park, housing project, or apartment

complex, where the operator purchases metered gas from an outside source for resale through a gas distribution pipeline system. The gas distribution pipeline system supplies the ultimate consumer who either purchases the gas directly through a meter or by other means, such as by rents.

20. **Meter** means a device, instrument, or any attached device, used by a utility to measure a quantity of gas for billing purposes. The two (2) classes of gas meters consist of:

Class A meter - A meter having a rated capacity of not more than 500 cubic feet per hour at 1/2 inch water column differential pressure and operating at a gauge pressure of not more than 15 pounds per square inch and not greater than the maximum pressure rating of the meter expressed in pounds per square inch.

Class B meter - A meter having a rated capacity of more than 500 cubic feet but not more than 1,500 cubic feet per hour at 1/2 inch water column differential pressure and operating at a gauge pressure of not more than 15 pounds per square inch and not greater than the maximum pressure rating of the meter expressed in pounds per square inch.

21. **Potentially Hazardous Condition** means any condition which has the potential to become a hazardous condition, but which does not require immediate action. All of the following are examples of potentially hazardous conditions:

a. Customer failure to permit the utility to perform inspections and maintenance on the utility's facilities in or on the customer's premises.

b. Customer alterations or modifications of the utility's facilities located in or on the customer's premises.

c. Customer construction of a structure or appurtenance near or over the main, service line piping, or meter set assembly so that the utility's facilities are not in compliance with the utility's standards.

d. Customer failure to correct or replace gas utilization equipment or gas fuel line piping that has been previously identified and classified as potentially hazardous by the utility.

22. **Public Utility** as defined in RIGL §39-1-2.

23. **Referee Test** means a meter test in which the customer requests to be present for the actual test or to be represented by the Division and/or the customer's agent.

24. **Slow Meter** means a meter that measures less gas than is actually consumed.

25. **Therm** means a unit of heating valve equivalent to 100,000 British thermal units (Btu).

SERVICE PROVISIONS

1. **Filing of Rate Schedules**

All rates, tolls and charges by the LDC shall be filed, posted, and available for public inspection in accordance with the provisions of R.I.G.L. §39-3-10. In addition, each LDC shall post this information on their company website.

2. **Information to Customers**

a. Each LDC shall, upon request, provide its customers such information and reasonable assistance as will help them to select the best use of service at the most advantageous rate. However, the ultimate responsibility for the selection of the best use of service at the most advantageous rate will rest with the customer.

b. Each LDC shall, upon request, explain to its customers the method of reading meters.

c. Meters installed after the effective date of this instruction in a residential or commercial facility with more than one meter on a meter bar assembly must be marked to identify the individual customers. (i.e., apartment 1, apartment 2, second floor, third floor right, etc.)

3. **Deposits/Interest**

An LDC, to protect against loss, may require a deposit before rendering service to any customer. This deposit shall not be more than the two highest actual month's usage of a prior customer or the two highest estimated month's usage of the new customer if a prior customer does not exist. Interest shall be paid on deposits in accordance with applicable rate schedules or the terms and conditions of the LDC. Deposits plus accrued interest thereon, less any amount due the LDC, will be refunded upon termination of service. The company may return a deposit prior to the termination of service if it so desires. A customer may request a return of deposit prior to the termination of service if the customer has established a good payment history and the company agrees to the return of deposit. When an account is terminated, and a deposit or portion thereof is applied against an account that has been terminated, interest shall cease to be accumulated on the balance at the date of termination.

4. **Measurement of Service**

All gas sold by an LDC shall be charged for on a metered basis except when sold under rates on some other basis with the prior approval of the Commission.

5. **Meter Reading and Bill Forms**

a. Each service meter shall indicate clearly the billing units (hundreds or thousands of cubic feet of gas, or therms) registered. In cases where the dial readings of a

meter must be multiplied by a constant to obtain the cubic feet or other unit consumed, the proper constant to be applied shall be clearly marked on the customer's meter and the customer's bill. The labeling of meters will apply only to meters installed as of the effective date of these Rules and Regulations. Meters installed prior to the effective date will not have to be modified with labels as described in the 2006 Rules and Regulations. When gas is measured under high pressure and/or high temperature, or when the quantity is determined by calculation from recording devices, the LDC shall upon request supply the customer with the basis and method of computation of the determined quantity.

b. All service meters will be read at regular intervals and on approximately the corresponding day of each meter reading period. In service areas that do not utilize AMR devices, the company must verify meter reads called in by the customer at least once every six (6) months.

c. Bills shall be rendered at regular intervals and shall show the date of the current meter reading and the amount or quantity of service for the billing period.

d. Each LDC shall keep an accurate account of all charges for service billed each customer and shall maintain records showing information from which each bill rendered may be readily computed.

e. The billing date and the postmark date on the bill shall not vary by more than three (3) business days.

f. Estimated bills will not exceed 6 consecutive months on any residential, commercial, or industrial account.

6. **Complaints by Customers**

Each LDC shall make a full and prompt investigation of customer complaints, whether the complaint is directed to the company or through the Division. A record of complaints received, other than those of a minor or routine nature, shall be kept for at least two (2) years, and shall show the name and address of the complainant, the date and character of the complaint, and the disposition thereof. A customer shall have the right to review the record of that customer's complaint(s) upon demand during that two (2) year period. The LDC shall provide the Division with a copy of any or all complaints upon demand. Records shall be provided, whether demanded by a customer or by the Division, within five (5) business days or less.

7. **Change in Character of Service**

Any change made by the LDC in the composition of the gas, the pressure, or other service conditions which would affect efficiency, or operation, or adjustment of appliances, the appliances of all customers in the district affected shall be inspected promptly, and, if necessary, shall be re-adjusted for the new conditions without undue delay by the LDC and without charge to the customer.

8. **Discontinuance of Service**

a. Discontinuance of Service by the Customer

A customer must give reasonable notice of his/her intention to discontinue service in accordance with the provisions of the applicable rate or terms and conditions of service and shall be responsible for all charges until expiration of such notice period. The customer will be given a confirmation number at the time of the termination of service call. The confirmation number shall reflect the date and

time the person called to disconnect service. For purposes of this rule, "reasonable notice" is defined as no less than five (5) business days.

b. Discontinuance of Service by the Company

i. Non-Payment of Bills

In accordance with the provisions of the applicable rate or terms and conditions of service, an LDC may require that bills be paid within a specified time after presentation. Failure to pay bills within the specified time shall be grounds for termination of service. The LDC may then initiate its termination process consistent with the rules established by the Commission for that purpose.

ii. Discontinuance of Service by the company for violation of Rules

No LDC shall discontinue service to a customer for violation of any rule without written notice mailed at least ten (10) business days in advance of discontinuance advising the customer which rule has been violated and describing how that rule was violated, except that service may be discontinued immediately when the violation of the rule is such, in the opinion of the LDC, as to endanger life or property, or when ordered to do so by any governmental agency or official having jurisdiction. The LDC may, with or without notice, shut off the supply of gas to the premises, or make appliances inoperative, where in its opinion a "potentially hazardous condition" exists.

iii. For Fraudulent Use of Service

An LDC may discontinue service without notice whenever a fraudulent use of service by the customer is detected.

QUALITY OF GAS SERVI CE

9. **Heating Value Requirements**

a. Standard of Heating Value

Every LDC shall establish its own standard of heating value which shall be stated in its rate schedule. If the transmission company supplying the LDC files a Federal tariff in compliance with Part 154 of the FERC's "General Rules and Regulations" establishing a lower heating value for the gas it furnishes the utility, then the heating value thus established shall become the standard of the LDC for the gas it furnishes its customers. Resulting decreases in the wholesale rates charged the LDC by its supplier shall be reflected in the concomitant application of the LDC's filed Purchased Gas Price Adjustment to the rates charged its customers.

i. Each LDC, unless specifically directed otherwise by the Division, shall maintain equipment for the determination of the heating value of the gas sold.

ii. Each LDC shall establish the accuracy of all means of determining heating value in normal use by periodic check tests and shall maintain a record of such tests on file for a period of two (2) years. If an LDC uses a calorimeter of the recording type, they shall be checked at least annually.

b. Heating Value Tests (Btu)

i. The (Btu) value of the gas shall be determined at least once daily and more often if necessary to obtain an accurate record of the average (Btu) value and of any fluctuation in the heating value.

ii. To obtain the monthly average (Btu) value, the results of all tests of (Btu) value made on any day during the calendar month shall be averaged, and the average of all daily averages shall be taken as the monthly average. If an LDC's means of determining Btu value is of the recording type, its record shall be the basis for determining the weighted average (Btu) value, providing that the means of determining (Btu) value is tested for accuracy at least annually.

iii. Records of monthly average heating value, as determined under Paragraph (ii) of this Rule shall be retained by the LDC for at least two (2) years and shall be readily available to the Division for inspection.

c. Purity Requirements

i. All gas supplied to customers shall be substantially free of impurities which may cause corrosion of mains or piping or form corrosive or harmful fumes when burned in a properly designed and adjusted burner. No gas shall be stored that is not in conformance with the applicable provisions of the most recent edition of the Federal rules set out in 49 CFR Part §192.475.

ii. Notwithstanding, the provisions of Paragraph (i), above, gas delivered by the LDC shall be odorized by the addition of a malodorous agent in conformance with the applicable provisions of the most recent edition of the Federal rules set out in 49 CFR Part §192.625.

10. **Pressure Requirements**

Pressure Variations

The pressure at the outlet of any customer's service meter shall not normally be less than one-half of the normal pressure at the outlet. The maximum pressure shall not be greater than 12" of water column except by agreement with the customer.

Pressure Surveys and Records

a. Each LDC shall maintain in continuous operation at least one recording pressure device in each area where the LDC maintains a district or division office, either in said office or at some customer's premises.

b. Each LDC shall make a sufficient number of pressure tests in the areas served to indicate compliance with pressure requirements contained herein.

c. All pressure recordings obtained under (a) or (b) shall be retained by the LDC for at least two (2) years and shall be available to the Division for inspection.

11. **Interruption of Service** *(excluding customers purchasing gas on an interruptible basis)*

a. Each LDC shall use all reasonable means to avoid accidental interruptions to service, but should such interruptions occur, service shall be reestablished within the shortest time possible, consistent with safety.

b. Each LDC shall keep a record of all interruptions to service affecting the entire distribution system serving a single community or a major division of a community and shall include in such record the date and time of such interruption, the approximate number of such customers affected, the date and time of service restoration, the cause of such interruption when known, and steps taken to prevent its recurrence.

c. When service is interrupted to perform work on lines or equipment, such work shall be done at a time causing minimum inconvenience to customers consistent with the circumstances. Customers seriously affected by such interruption shall be notified in advance if possible.

d. All accidental interruptions of service will be reported to the Division of Public Utilities & Carriers per the requirements set forth in the attached Appendix "B", *Natural Gas Telephonic Notice Reporting Requirements.*

12. **Abnormal Conditions**

These Rules shall not apply to temporary conditions due to "Acts of God", fire, strikes, riots, terrorism, construction maintenance, interruption of gas supply from the LDC's wholesale supplier, or other disruptions of service beyond the control of the LDC; provided, however, that all LDCs shall initiate immediate action and proceed without delay and perform all necessary work to restore its system to normal operating conditions.

METERS IN GENERAL, INSTALLATIONS, ACCURACY, AND TESTING

13. **Meters in General**

a. All meters removed from service due to a high bill complaint must be held for 60 days after the test to allow the customer ample time to review a second witnessed meter test if so desired. In order to prevent contamination, all meters shall be capped until installation or retirement from service.

b. A meter with an index reading other than zero may be placed in service, provided that meter and billing records are kept in a manner permitting verification of the readings as

of the time of removal from the prior premises and installation at the succeeding premises.

c. Tin case meters shall not be returned to service. Whenever a tin case meter is removed from service for any reason it must be tested for accuracy and held according to the requirements set forth in section (13a) above, if applicable.

d. The capacity of the meter at installation shall be consistent with the reported projected gas requirements of the customer at the time of installation.

14. **Meter Installations**

a. Unless otherwise authorized by the Division, each LDC shall provide and install at its own expense, and shall continue to own, maintain and operate, all equipment necessary for the regulation and measuring of gas to its customers. A charge may be made for additional meters and regulators furnished by the LDC for the convenience of the customer.

b. The customer shall provide and have installed at his/her own expense all customer piping and equipment necessary for relocating the meter when relocation is:

i. requested by a customer;

ii. required because of customer-initiated alterations;

iii. necessary to prevent a recurrence of discovered tampering or damage caused by the customer.

15. **Testing and Calibration of Meters**

a. Gas Meter Accuracy

i. Every gas meter, removed from service for any cause, or repaired, shall be tested for accuracy and adjusted, if necessary, to accuracy limits of 100

percent + 1.5 percent before being installed or reinstalled. In addition, the LDC shall replace any parts found to be worn or damaged in any meter that does not pass the accuracy test, and is subject to repair.

ii. Meters removed from service and/or repaired meters must be subjected to an internal pressure of at least 20 inches water column and checked for the presence of leaks.

iii. Tin case meters shall be subjected to an internal pressure of at least two (2) pounds per square inch when testing to determine the presence of any leaks.

iv. New, remanufactured or refurbished meters that are accompanied by a certified test certificate are not required to be tested before installation in the field if the test results on the certificate are within accepted accuracy limits of section (15.a) above.

v. Any meters in storage over a twelve (12) month period shall be subject to the testing and accuracy requirements as set forth in section (15.a) above, before installation.

b. Method of Testing: General Test Requirement

For the purpose of determining compliance with section (15.a) above, the proof of registration of a displacement meter shall be determined by two tests, one known as the "Check-Rate" test, at a rate of flow at approximately 20% - 40% of the rated capacity of the meter, and one known as the "High-Rate" test, at a rate of flow at approximately 80% - 100% of the rated capacity of the meter. The tests at the two rates of flow, the "Check-Rate" test and the "High-Rate" test shall be comparable to within one (1) percent. If the

tests at the two rates of flow do not agree to within one (1) percent, the meter must be repaired to meet the criteria. Both tests must also pass the accuracy test limits of 100 percent + 1.5 percent as described in section (15.a) above. The Division will require additional tests based on extenuating circumstances. All tests to determine the accuracy of any gas service meter shall be made with made with the appropriate bell, sonic nozzle, or transfer prover or other approved standard meter proving method such as differential testing of rotary meters and field proving of turbine meters.

c. Rotary Tube Meters

Rotary tube meters shall be tested at not less than fifteen percent (15%) of full rated flow. A utility shall not install a rotary meter which is more than one half of one percent (0.5%) fast or more than one and one half percent (1.5%) slow at the points of test.

d. Orifice Meters

Orifice meters shall be manufactured and installed in accordance with all guidelines specified in the current edition of ANSI/API 2530 (AGA Report No. 3), Orifice Metering of Natural Gas. Orifice meters shall be tested at not less fifteen percent (15%) of full rated flow. The meters shall not be more than one half percent (0.5%) fast or more than one and one half percent (1.5%) slow at the points of the test.

e. Turbine Meters

Turbine meters for which the manufacturer has established minimum spin times, may be spin tested to determine their in-service condition. Turbine meters shall be given a spin test at least once every twelve (12) months unless covered under an approved in-service performance testing

program, or the operator receives a written waiver from the customer not to conduct the test per their decision. Any meter found to have a spin time less than the manufacturer's recommended minimum and which cannot be brought up to the minimum by cleaning and lubrication shall be changed and replaced with an accurate meter. Turbine type meters shall be tested at not less than fifteen percent (15%) of full rated flow. The meters shall not be more than one half percent (0.5%) fast or more than one and one half percent (1.5%) slow at the points of the test.

f. Gas Volume Corrections

Gas volume corrections for temperature shall be made in accordance with Charles' law. Gas volume corrections for pressure shall be made in accordance with Boyle's law. Gas volume corrections for supercompressibility shall be made in accordance with either of the following publications of the American Gas Association (AGA):

i. "Manual for the Determination of Supercompressibility Factors for Natural Gas, Project NX-19," (1962) (A.G.A. Catalog No. L00340)

ii. "Compressibility and Supercompressibility for Natural Gas and Other Hydrocarbon Gases, Transmission Measurement Committee Report No. 8," (1992 A.G.A. Catalog)

g. Testing Facilities and Equipment

i. Each LDC shall maintain the equipment and facilities necessary for accurately testing meters used for the measuring of gas delivered to its customers, unless arrangements approved by the Division shall have been made to have the testing done elsewhere. The LDC shall maintain this equipment in good condition and correct adjustment so that it can

determine the accuracy of any service meter to within one half of one percent (0.5%) The area within the meter shop used for the testing of meters shall be designed so that the meters and meter testing equipment are protected from draft and excessive changes in temperature.

ii. Accepted good practice. The following publications are considered to be representative of accepted good practice in matters of metering and meter testing:

1. American National Standard for Gas Displacement Meters (500 Cubic Feet per Hour Capacity and Under (Class A)), ANSI B109.1-2000.
2. American National Standard for Diaphragm Type Gas Displacement Meters (Over 500 Cubic Feet per Hour Capacity (Class B)), ANSI B 109.2-2000.
3. American National Standard for Rotary Type Gas Displacement Meters, ANSI B 109.3-2000.
4. Measurement of Gas Flow by Turbine Meters, ANSI/ASME MFC-4M-1997 and American Gas Association (AGA) Report 7, Sections 8 and 9.
5. Orifice Metering of Natural Gas and Other Related Hydrocarbon Fluids, ANSI/API 2530-1991.

h. Measurement of gas at higher than standard service pressure.

i. Pressure-recording equipment. If gas is measured to customers through meters at a pressure greater than standard service pressure, the meters shall

be equipped with reliable pressure-volume recording gauges or other devices for accurately determining the quantity of gas which has passed through the meter in accordance with contract or tariff provisions.

ii. Determination of multiplier. In computing the volume of gas at a given pressure base from a pressure-volume chart, the multiplier shall be obtained by the weighted average method, which consists of determining the average pressure for each indicated unit volume on the chart.

iii. Fixed pressure factor measurement. If the gas metering pressure can be maintained at a constant level so that it will not vary by more than plus or minus 1.0% of the absolute metering pressure, the quantity of gas corrected for pressure for billing purposes may be determined by multiplying the uncorrected volume by the factor of Metering Pressure Plus Atmospheric Pressure Divided by Base Pressure or by a special index with gearing to perform this calculation. The special index shall meet the specifications of ANSI Standard B109.1, §6.2 (1986) or ANSI Standard B109.1, §6.9 (1986). The ability of the regulator to maintain the constant pressure shall be verified at or prior to installation. Verification will be established by the use of a verified pressure-indicating gauge (accuracy: ANSI B40.1 Grade 3A), or a pressure-recording gauge, at both high and low flow conditions where practicable, but never less than one (1) verification under actual operating conditions. Annual reports of the results of periodic tests will be forwarded to the Division by March 31st for the prior year.

i. AMR Device Verification

All meters with an AMR device shall be tested to verify the AMR reading is in sync with the meter index. AMR devices will be verified at all meter testing and before installation at a customer's premises.

16. **Test Schedules**

Periodic Tests of Meters in Service

All gas meters in service shall be tested in accordance with the following schedule and, if necessary, shall be adjusted to register within the tolerance prescribed in Rule 15 (a) above.

a. All meters rated by the manufacturer up to and including five hundred (500) cubic feet per hour (Class A), based on one-half inch (1/2") water pressure differential shall be proof tested not less than once each fifteen (15) year service period.

b. Meters normally rated by the manufacturer in excess of five hundred (500) cubic feet per hour (Class B), based on one-half inch (1/2") water pressure differential, shall be proof tested not less than once in each ten (10) year service period.

c. Each meter so tested shall have affixed the seal prescribed by the Division. (See Appendix "A")

d. In addition the Division retains the right to order the testing of meters on a random basis on behalf of the customer.

17. **Request Tests**

a. Generally, when requested by a customer, or by the Division on behalf of the customer, LDC shall test the accuracy of the customer's meter within fifteen (15) days from the time the request is made or earlier if requested by the Division. If the meter has been tested

during the preceding thirty-six (36) months, the LDC may require the deposit of a customer fee of seventy-five ($75.00) dollars for such a test. If, on testing, the meter is found to be fast by more than 1.5%, the deposit shall be promptly refunded. If the meter is not found to be fast by as much as 1.5%, the LDC shall retain the amount deposited for the test. A report giving the name of the customer requesting the test, the date of the request, the location the meter was in service, the location where the meter test was performed, the type, make, size, the serial number of the meter, the date tested, and the result of the test shall be supplied to each customer within a reasonable time after completion of the test. The LDC shall retain copies of the above reports for at least two (2) years. A customer, the Division, or an agent thereof may be represented in person when the LDC conducts the test on the meter.

b. Referee Tests

The LDC, when notified by a customer that a referee test of the meter is requested, shall notify the Division. The LDC, as herein provided, shall not knowingly remove, interfere with, adjust, or pretest the meter to be tested without the written consent of the customer or approval of the Division. The Division, when notified by a customer that a referee test of the meter is requested, shall notify the LDC to remove and seal the meter in the presence of the consumer or the Division if so requested. If directed to seal the meter, the LDC shall keep the meter in the same condition with the seal unbroken until the test can be made in the presence of the customer, their agent and/or the Division. All referee meter tests shall include an inspection of the meter index by removing the index from the meter body. The dials, gears and all other parts of the index shall be visually inspected for wear, misalignment or other mechanical defects which would affect the accuracy of

the meter on a continuing or sporadic basis. Failure to abide by the above Referee Test procedures will result in the maximum penalty as set forth in R.I.G.L. §39-2-8.

18. **Customer's Billing Adjustments**

a. Fast Meters

i. Whenever, as the result of a test made by the LDC, a gas meter is found to be fast in excess of 1.5% of the correct amount, the LDC shall refund to the customer an amount equal to the charge for gas billed in excess of 100% for the two (2) highest months gas bill multiplied by 6 (six) for the year prior to the test, or the highest two (2) months gas bills multiplied by 6 (six) from the last test date if the test was made within the last twelve (12) months. However, if the time when the error first developed or occurred can be definitely fixed, the amount to be refunded is to be based thereon; the time period for which the LDC is required to adjust, refund or credit the customer's bill shall not exceed five (5) years unless otherwise ordered by the Division.

ii. Under no circumstance will a refund be made to a customer if there is evidence of gas diversion or that the meter has been tampered with. If the meter test is conducted within less than 12 months of service with the present customer of record and the meter test fails resulting in a refund, the refund shall be appointed to customers who received service through the meter found to be registering inaccurately. In the case of a previous customer who is no longer a customer of the LDC, a notice of the refund shall be mailed to his or her last known address.

b. Slow Meters

Whenever, as the result of a test made by the LDC, a gas meter is found to be slow in excess of 2.0% of the correct amount, the LDC shall be required to issue a corrected bill to the customer for an amount equal to the charge for gas that was under billed. If the gas meter is found to be slow less than 2.0% the LDC shall not issue a corrected bill.

c. Non-Registration, Does Not Register (DR Meter), or Unaccountable Gas

If a meter is found which does not register, the bill for the period of non registration shall be based upon information recorded prior or subsequent to the period of non registration and by any other pertinent information supplied by the customer or known to the LDC (such as an active "AMR" device). The company may use a prior year's usage for the same time period of non registration as long as the "degree days" are taken into consideration in the calculation. The company shall act to correct the problem within two (2) months of receiving evidence of a non registering meter. In no case will the LDC be allowed to recover billing for unaccounted for gas past (two) 2 months of non registration of the meter, or, if the meter has an attached AMR device, the non registration of the meter and the non registration of the AMR device.

d. Estimated Bills

Once the LDC has to use estimated bills for a six (6) month period, it will treat the account as if it were one with a non registration meter and shall have no more than two (2) months to obtain an actual read.

e. Adjustments to bills for other meter errors

If a customer has been overcharged or undercharged as a result of an incorrect reading of the meter, incorrect application of the rate schedule, incorrect connection of the meter,

application of an incorrect multiplier or constant or other similar reason, the overcharge shall be refunded to the customer or the undercharge may be billed to the customer.

19. **Records of Meters and Tests**

a. Each LDC shall keep, numerically arranged and properly classified, records giving, for each meter used and owned by the LDC for any purpose, the identification number, date of purchase, name of manufacturer, serial number, type, a history of the premises where the meter was located, a history of the meter testing sites, and the meter's rating. A complete record of the latest test made on a meter shall be retained in the LDC's files for a period of fifteen (15) years in such a manner that it will be readily available to the Division or the ratepayer for inspection, unless the meter is permanently retired in such case the records should be retained for three (3) years after condemnation.

b. Each LDC shall report annually to the Division a summary report of meter tests made during the year. The report will include the number of meters tested, the number of meters considered "DR" or non-registering, the number of meters found to be accurate within the allowable limits, the number of meters found to be fast, and the number of meters found to be slow. In addition to the number of meters found to be outside the allowable limits the LDC shall report how many meters were over 3% fast or slow.

EQUIPMENT AND FACILITIES

20. **Standard Practice**

The gas facilities of the LDC shall be constructed, installed, maintained and operated in accordance with accepted good engineering practice in the gas industry to assure, as far as reasonably possible, continuity of service, uniformity, in the quality of service furnished and the safety of persons and property. In determining standard practice, the

Division has adopted by reference in these rules, and the LDC shall use, the applicable provisions of the most recent editions of 49 CFR Parts §190 - §199 and Part §40 Pipeline Safety Regulations, NFPA 54 National Fuel & Gas Code, NFPA 58 Storage and Handling of Liquefied Petroleum Gases, NFPA 59 Storage and Handling of Liquefied Petroleum Gases at Utility Gas Plants, and NFPA 59A Production Storage and Handling of Liquefied Natural Gas (LNG), except as any of the foregoing may in any particular case be modified by statute, ordinance, orders, rules or regulations by governmental bodies or agencies having jurisdiction. The LDC shall be guided by the following American National Standards Institute (ANSI) publications:

a. ANSI/API 2530, "Orifice Metering of Natural Gas and Other Related Hydrocarbon, A.G.A. Report No. 3," as follows:

b. Part I, "General Equations and Uncertainty Guidelines," (1990) (A.G.A. Catalog No. XQ9017)

c. Part II, "Specification and Installation Requirements," (1991) (A.G.A. Catalog No. XQ9104)

d. Part III, "Natural Gas Applications," (1992) (A.G.A. Catalog No. XQ9210)

e. Part IV, "Background Development, Implementation Procedures, and Sub-Routine Documentation for Emperical Flange-Tapped Discharged Coefficient Equation," (1992) (A.G.A. Catalog No. XQ9211).

f. ANSI B109.1, "Diaphragm Type - Gas Displacement Meters, Under 500 Cubic Feet per Hour Capacity," (1992) (A.G.A. Catalog No. X69218).

g. ANSI B109.2, "Diaphragm Type - Gas Displacement Meters, 500 Cubic Feet per Hour Capacity and Over," (1992) (A.G.A. Catalog No. X69219)

h. ANSI B109.3, "Gas Displacement Meters, Rotary Type," (1992) (A.G.A.Catalog No. X69220).

i. ANSI Z223.1 National Fuel Gas Code

The Division adopts by reference as rules, and the LDC shall use, the following American Society for Testing and Materials (ASTM) publications

j. ASTM specification D-1826 "Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter," (D1826-88).

k. ASTM specification D-1945 "Method for Analysis of Natural Gas by Gas Chromatography," (D1945-91).

l. ASTM specification D-3588 "Method for Calculating Calorific Value and Specific Gravity (Relative Density of Gaseous Fuels)," (D3588-91)

21. **Construction and Maintenance**

Each LDC shall construct, install, operate and maintain its plant, structures, equipment, and gas pipelines in accordance with standard practice, as defined in the paragraphs above, and in such manner as to best accommodate the public and to prevent interference with service provided by other public utilities.

RECORDS AND REPORTS

22. **Physical Plant Records**

Each LDC shall keep sufficient records of the operation of its physical plant to show the characteristics and performance of each unit.

23. **Gas Supply Measurement**

Each LDC shall utilize a suitable measuring device, or otherwise determine production, at each source of supply in order that a record may be maintained of the quantity of gas

produced at each source. Unless the transmission company supplying the gas furnishes sufficient information, each LDC purchasing gas shall maintain adequate instruments and meters to obtain complete information as to such purchases.

24. **System Maps**

Each LDC shall have on file, located within the State, a suitable map, maps or drawings or electronic data, showing the following:

a. Size, character and location of all mains, including valves.

b. Size and location of each service connection, where practicable. In lieu of showing service locations on maps, a card record or other suitable means may be used.

c. Layout of all principal metering and regulator stations, production plants to show size, location and character of all major equipment pipelines, connections, valves and other equipment used.

25. **Preservation of Records**

All records required by these Rules shall be preserved by the LDC for a period of two (2) years unless otherwise designated herein. Such records shall be kept within the State of Rhode Island at the office or offices of the LDC and shall be available for examination by the Division.

26. **Reports to Division**

The LDC shall furnish to the Division, at such times and in such form as the Division may require, the results of any required tests and summaries of any required records. The LDC shall also furnish the Division with any information concerning the LDC's facilities

or operations which the Division may request and need for determining rates or judging the practices of the LDC.

GENERAL/SAFETY

27. **Safety Instructions**

a. Each LDC shall adopt comprehensive instructions for the safety of employees in regard to the operation, construction or maintenance of its plant and facilities, and shall be satisfied that such employees have been properly informed of safe practices and are cognizant of all hazards involved.

b. Except in certain commercial and industrial applications that require a standby fuel the LDC shall have the authority to refuse initial natural gas service to a customer that uses another gaseous fuel, such as liquefied petroleum gas, in the same building.

c. Anytime the existence of a mercury regulator is found in a commercial or residential facility the LDC shall remove said mercury regulator and contract for the disposal of the contents in a safe and acceptable manner consistent with all applicable Federal and State regulations regarding such practice.

28. **Accidents**

Each LDC shall report to the Division as soon as possible after each accident occurring in connection with the operation of its property, facilities, or service, wherein any person shall have been killed, admitted to a hospital, or whereby any property damage shall have been caused. The first report may be preliminary, but, if so, shall be followed later by as full a statement as possible of the cause and details of the accident and the precautions taken, if any, to prevent recurrence.

29. **Penalties**

Any LDC found guilty of violating any provision of these rules shall be subject to the penalties set forth in R.I.G.L. §39-2-8 or §39-3-40 as appropriate.

ABANDONMENT OF GAS SERVICES

ABANDONMENT OF SERVICE LINES THAT BECOME INACTIVE AFTER THE EFFECTIVE DATE OF THESE REGULATIONS

a. All nonplastic and non-cathodically-protected steel inactive service lines and service stubs shall be abandoned within five (5) years, unless such lines have been reactivated prior to that time.

b. All plastic and cathodically-protected steel inactive service lines shall be physically disconnected (cut off) within close proximity of a property line within five (5) years.

c. The LDC should determine whether inactive service lines ought to be abandoned at any prior time. The determination shall be based on such appropriate variables as service line age, location, condition, material, construction methods, leak and maintenance history of the pipe, existence and/or application of cathodic protection, individual and property-owner requests and other criteria selected by the LDC.

ABANDONMENT OF ANY INACTIVE SERVICE LINE

Notwithstanding the above, inactive service lines which shall be abandoned promptly are those:

a. located in, or in close proximity to, excavations; or

b. located in, or in close proximity to, buildings being demolished; or

c. discovered to be leaking gas; or

d. unrecorded or previously unknown lines discovered in the course of leakage surveys, construction, maintenance or inspection of facilities.

RECORDS, REPORTS AND PROCEDURES

a. Readily accessible records of inactive service lines and service stubs shall be maintained by the LDC which shall include the type of pipe material, the service line's location, the date the service line became inactive, and the date the service line was installed. If any information is unavailable to or unobtainable by the LDC, it shall be listed on the record as "unknown".

b. Readily accessible records of the location of any service line that is abandoned after the effective date of these regulations shall be maintained by the LDC for a length of time determined by the LDC but for no less than five (5) years from the date of abandonment.

c. Each LDC shall report to the Division annually the statistical progress of their abandonment program. The report will be due annually from the preceding calendar year.

CONTROL OF DRUG AND ALCOHOL USE

Refer to the Federal Pipeline Safety Regulations rules set out in 49 CFR Part §40 and Parts §199.

ENFORCEMENT PROCEDURES

I. JURISDICTION

a. The Rhode Island Division of Public Utilities and Carriers, pursuant to R.I.G.L. §39-3-1 et seq. and §39-4-1 et seq., is empowered to prescribe and enforce safety standards and to regulate safety practices of persons engaged in the transportation of natural gas and other gas by pipeline to the extent permitted by the Natural Gas Pipeline Safety Act of 1968 and any amendments thereto.

b. The Federal regulations issued under the Act of 1968, promulgated by the Office of Pipeline Safety of the United States Department of Transportation and published in 49 CFR Parts §40, §190-§199, apply to all LDC's, Master Meter Systems, and Jurisdictional Propane Systems. The Safety Standards of the Act (the Pipeline Safety Regulations) apply to design, installation, inspection, testing, construction, extension, operation, replacement and maintenance of pipeline facilities. Standards affecting the design, installation, construction, initial inspection, and testing, are not applicable to pipeline facilities in existence prior to the act. The Division has adopted the above regulations as state regulations.

c. The Division may prescribe additional safety standards that apply to LDC's, Master Meter Systems, and Jurisdictional Propane Systems. Such safety standards shall be practicable and designed to meet the needs for pipeline safety. When prescribing and enforcing such standards, the Division will consider:

    i. Relevant available pipeline safety data.

    ii. Whether such standards are appropriate for the particular type of pipeline transportation.

    iii. The reasonableness of any proposed standards.

    iv. The extent to which such standards will contribute to public safety.

d. Whenever the Division finds a particular facility to be hazardous to life or property, it is empowered to require the person operating such facility to take steps necessary to remove such hazards.

II. AUTHORITY TO INSPECT

The Division has the power to investigate all methods and practices of the LDC's, Master Meter Systems, or Jurisdictional Propane Systems, to require the maintenance and filing of reports, records, and other information in such form and detail as the Division may prescribe, to enter at all reasonable times to inspect the property, buildings, plants, and offices of such LDC's, Master Meter Systems, or Jurisdictional Propane Systems, and to inspect books, records, papers, and documents relevant to the enforcement of the rules and regulations.

III. INTERVALS OF INSPECTION

a. The Division is authorized to enter upon, inspect and examine, at all reasonable times and in a reasonable manner, the records and properties of the LDC's, Master Meter Systems, or Jurisdictional Propane Systems to the extent such records and properties are relevant to determining the compliance of such entities with Division rules, regulations, or orders.

b. Jurisdictional pipeline facilities have been categorized into four classifications

i. LDC's,

ii. LNG facilities,

iii. Master Meter Systems, and (iv) Jurisdictional Propane Systems. The Divisions inspection frequency of these facilities is as follows:

v. LDC's; annual standard inspections will be conducted of each gas distribution inspection unit. Other than the normal amount of specialized inspections the Division will schedule additional inspections if the results of the standard inspection indicate a need for additional inspections.

vi. LNG; facilities will receive an annual standard inspection. Supplementary periodic inspections may also be conducted.

vii. Master Meter Systems; systems will be inspected at least once a year.

viii. Jurisdictional Propane Systems; systems will receive an annual standard inspection. Supplementary periodic inspections may also be conducted.

c. Inspections are ordinarily conducted pursuant to one or more of the following:

i: Routine scheduling

ii: A complaint received from a member of the public.

iii: Information obtained from a previous inspection.

iv: Pipeline accident or incident.

v: Whenever deemed appropriate by the Division.

IV. INSPECTION OF LDC's, MASTER METER SYSTEMS, & JURISDICTIONAL PROPANE

a. The Division shall attempt to periodically inspect every LDC, Master Meter System, and Jurisdictional Propane System, with priority given to inspecting systems with greater risk potential. In determining the potential risk, the following factors may be considered:

i: The ratio of total steel pipe to coated pipe.

ii: The ratio of total steel pipe to cathodically protected steel pipe.

iii: Leaks per mile of main.

iv: Leaks per number of services.

v: Unaccounted – for gas volumes and percentages.

vi: Number of accidents or incidents.

vii: History of violations discovered.

b. The inspection will include a thorough review of the records concerning inspection, operation, maintenance and emergency procedures. Field inspections will include operational checks of corrosion control provisions, overpressure and regulating equipment, odorization, repaired leaks, emergency valves and any other components of the facility.

V. DISCOVERY AND NOTICE OF ALLEGED VIOLATION

a. When an evaluation of records and facilities indicates an alleged violation with state or federal regulations, the inspector shall review the basis for such alleged violation with the LDC, Master Meter System, or Jurisdictional Propane System before concluding the inspection. The inspector shall then notify the appropriate official of the alleged violation in writing within 90 days of the discovery of the alleged violation. The inspector shall also make an alleged violation report to be retained by the Division.

b. Any documentation or physical evidence necessary to support an alleged violation may be obtained during the inspection or requested in writing immediately after conclusion of the visit.

VI. RESPONSE OPTIONS AVAILABLE

The LDC, Master Meter System, or Jurisdictional Propane System shall respond within twenty (20) business days of mailing a notice of an alleged violation in the following manner:

a. Submit a written plan of action to the Division outlining actions that will be taken to correct the alleged violation, including a schedule and the date when compliance is anticipated; or

b. Request an informal conference with the Division. The alleged violation may be resolved if the plans in option "a" above are accepted by the Division. However, if the LDC, Master Meter System, or Jurisdictional Propane System selects option "b", an informal conference will be scheduled as explained below in section VII. Failure to respond in accordance with this section will result in formal legal or administrative action as setout in Section IX.

VII. INFORMAL CONFERENCE

After receiving the request for an informal conference, a date and time for a conference will be arranged. At the conference, the basis for the alleged violation will be reviewed. The LDC, Master Meter System, or Jurisdictional Propane System may explain its position and may present alternatives for rectifying the problem. Division staff will be represented by the investigator who issued the notice of alleged violation and by others the Division deems necessary. The report generated by the informal conference will be filed with the alleged violation and retained by the Division. If agreement cannot be reached, the enforcement procedure will continue as explained in Section VIII.

VIII. DIVISION ACTION

If the Division is not satisfied with the proposed solution as outlined in Sections VI and VII, the Division can:

a. seek an injunction in Superior Court in cases where immediate action is necessary, or

b. issue a show cause order and/or schedule a evidentiary hearing requiring the operator to demonstrate why the LDC, Master Meter System, or Jurisdictional Propane System should not be subject to the penalties set forth in R.I.G.L. §39-2-8 and/or R.I.G.L. §39-3-40.

c. pursuant to evidentiary hearing, order the LDC, Master Meter System, or Jurisdictional Propane System to take corrective action. Failure to obey such an order will result in the aforementioned penalties.

IX. APPEAL

Any LDC, Master Meter System, or Jurisdictional Propane System aggrieved by a final decision of the Division may appeal to the Rhode Island Superior Court under R.I.G.L. §42-35-15.

X. ADDENDUM

a. Under the Rhode Island Administrative Procedures Act, specifically, R.I.G.L.§42-35-3(3) and (4), the Rhode Island Division of Public Utilities and Carriers is mandated to provide two statements with reference to the Rules and Regulations attached hereto.

b. The first statement, made pursuant to R.I.G.L.§42-35-3(3), supra, is designed to demonstrate the need for the adoption of the instant rules and regulations. The Division of Public Utilities and Carriers asserts that the Rules and Regulations, as filed, satisfy the federal requirements contained in Section 5 of the Natural Gas Pipeline Safety Act of 1968, as amended.

c. The second statement, made pursuant to R.I.G.L.§42-35-3(4), supra, addresses whether the instant Rules and Regulations would have a significant adverse economic impact on small business. The Division of Public Utilities and Carriers maintains that this section is inapplicable to the present rulemaking procedures, as the business entities that would be subject to these Rules and Regulations are not small businesses as defined in the Rhode Island Administrative Procedures Act. R.I.G.L. §42-35-1(h)(1).

APPENDIX A

METER LABELING

1. There shall be provided and affixed to the front of each customer's gas meter a waterproof decalcomania having a bright yellow background enclosed by black border lines not less than 1/16" in width.

2. Within the border lines there shall be printed on the label with black ink in characters not less than 3/16" high arranged in three lines with the third line not less than 1/4" high indicating the month and year the meter was last installed in accordance with the following label arrangement:

TESTED AND ADJUSTED

TO R.I.D.P.U. STANDARDS

INSTALLATION DATE:

Each "Decal" label shall not be less than 2 1/4" in length by 7/8" in width in size. The coloring or printing shall be of a material that is suitable for New England climatic exposure. Any meter removed from service due to a high bill complaint must maintain the meter decal label until the required two (2) month holding period has ended.

APPENDIX B

TELEPHONIC NOTICE OF CERTAIN GAS INCIDENTS

1. At the earliest practicable moment following discovery each LDC, Master Meter System, or Jurisdictional Propane System shall give notice of any gas incident. "Incident" means any of the following events that results:

1.) In the involvement of an unanticipated release of gas
   a) from a pipeline or
   b) an LNG facility or
   c) of a liquefied natural gas or
   d) a death or personal injury or
   e) property damage
2.) From the excavating operations of another party
3.) In an emergency shutdown of an LNG facility
4.) In the involvement by police, fire, or media personnel
5.) In a house or building being evacuated (public or private)
6.) In any other situation that is significant, in the judgement of the operator, even though it did not meet the above criteria, such as but not limited to, overpressure, loss of system pressure, outages, etc.

Between the hours of 8:30 A.M. and 4:00 P.M., Monday - Friday, call the Division of Public Utilities & Carriers engineering section office numbers until a person is contacted. **Do not leave an emergency notice on voice mail. If the personnel list is exhausted, please dial "0" for operator and you will be transferred to another staff member.**

After working hours call the phone numbers in the order listed on your "Emergency Response Chart" until a person is contacted. If there is no response, continue to call every hour until someone answers. If a written report of the incident is requested by the Division, it must be submitted within one week. Appropriate personnel within your respective gas companies must have a copy of these phone numbers and a copy must be inserted in your companies' O&M manual.

Appendix 2

STATE OF RHODE ISLAND

DIVISION OF PUBLIC UTILITIES AND CARRIERS

RULES AND REGULATIONS PRESCRIBING STANDARDS FOR GAS UTILITIES, MASTER METER SYSTEMS AND JURISDICTIONAL PROPANE SYSTEMS

EFFECTIVE DATE: OCTOBER 5, 2006

INDEX PAGE No.

A. APPLICATION OF RULES AND REGULATIONS

1. These Rules and Regulations shall apply to all LDC's, Master Meter Systems, and Jurisdictional Propane Systems engaged in the business of manufacturing, distributing, selling or transmitting natural or other gas by pipeline in the State of Rhode Island; currently, there is one LDC, 40 Master Meter Systems, and 20 Jurisdictional Propane Systems in operation within the State of Rhode Island, all of whom are subject to all or specified portions of these rules.

2. These Rules and Regulations replace the following existing Division rules and regulations: (a) *Rules & Regulations Prescribing Standards for Gas Utilities*, effective date June 8, 1966, (b) *Regulations Regarding Gas Pipeline Safety Enforcement Procedures* Docket No. D-86-4, effective date March 13, 1986, (c) *Control of Drug Use in Natural Gas and Liquified Natural Gas,* effective date May 10, 1990, and (d) the *Rules and Regulations Prescribing Standards for Gas Line Abandonment & Leakage Survey Procedures* Docket No. D-86-2, effective date May 21, 1986. These four existing compilations of rules and regulations of the Division are hereby rescinded upon the effective date of this document.

3. These rules and regulations are intended to supplement, and shall be interpreted in a fashion consistent with, the Federal rules set out in the Code of Federal Regulations (CFR), specifically in 49 CFR Parts §40 and §190-§199. The Federal safety standards and regulations, including all subsequent amendments thereto, for the transportation of natural and other gas by pipeline, established pursuant to the Natural Gas Pipeline Safety Act of 1968, as amended (49 U.S.C. 1671, et seq.) by the United States Department of Transportation and contained in 49 CFR Parts §40 and §190-§199 are hereby

incorporated by reference. Since the State of Rhode Island is bound to comply with Federal law concerning gas utilities, and has been delegated enforcement authority by the Federal government, amendments to the Federal rules are incorporated by reference and shall be effective as part of these rules without further action. LDC's shall comply with all of the rules set out herein.

4. These rules shall be amended or repealed, and applications therefore shall be made, in accordance with Rhode Island General Laws, Sections 39-3-33 and 42-35-1 et seq., and the Division of Public Utilities and Carriers "Rules of Practice and Procedure." A written application may be made to the Division for temporary or permanent exemption from any provision of these Rules for good cause shown.

5. "Master Meter Systems" and "Jurisdictional Propane Systems" are *only* required to comply with the safety requirements of 49 CFR Parts §191 - §192 Pipeline Safety Regulations, NFPA 58 Storage and Handling of Liquefied Petroleum Gases and NFPA 59 Storage and Handling of Liquefied Petroleum Gases at Utility Gas Plants, the *Enforcement Procedures* section contained herein, and *Appendix "B"*, the *Natural Gas Telephonic Notice Reporting Requirements* section as contained herein.

B. DEFINITIONS

The definitions set out in 49 CFR Part §190.3, §191.3, and §192.3 are hereby incorporated by reference, except as augmented or modified below. Unless the context otherwise requires, the following words as used herein shall have the following meanings:

1. **Abandoned** means that the service line is physically disconnected (cut-off) at the main, or at the distribution line that is the source of supply if the pipe is not a main, and the pipe is made from material other than plastic or cathodically-protected steel. If the

service line is plastic or cathodically-protected steel, it may be cut off at or in close proximity to a property line and made into a stub. When the service line is abandoned, the LDC shall remove the meter and assembly. Should access to these not be readily available, the LDC shall make multiple attempts to gain access for removal. The end of the operator's pipe that is within the customer's building must be cut off below ground and sealed outside the building or must be sealed by inserting a device within the service line to a point that is outside the building wall or foundation. Provisions must be made so that the seal or device cannot be readily removed. When the end of the operator's pipe is located above ground outside the building, the aboveground segment must be removed and the remaining segment below ground sealed. In any case, the pipeline's above or below ground entry point into the building or foundation must be sealed after the pipe has been removed. The pipeline shall be purged and sealed in accordance with 49 CFR Part §192.727(b) or its successor regulation(s).

2. **Accessory** means any meter reading device, which is mechanically or non-mechanically attached to a meter and could affect its accuracy, used to display, record, or transmit meter information to a remote location or any associated meter correction device, either remote or attached, used to adjust the reading of a meter index.

3. **Administrator** means the Administrator of the Rhode Island Division of Public Utilities and Carriers.

4. **AMR** means an automated meter-reading device.

5. **British thermal unit** (Btu) means a unit of heat equal to the amount of heat required to raise one pound of water one degree Fahrenheit at one atmosphere pressure; equivalent to 251.997 calories.

6. **Commission** means the Rhode Island Public Utilities Commission.

7. **Cubic Foot**

a. The term cubic foot shall mean the volume of gas which occupies one (1) cubic foot of space at a temperature of 60° Fahrenheit and an absolute pressure of 14.73 pounds per square inch (known as standard conditions) with deviation there from, for varying pressure and temperature being in accordance with Boyle's Law and Charles' Law.

b. When gas is metered under the filed domestic rates of the utility a cubic foot shall be taken to mean the amount of gas which occupies one cubic foot under the conditions existing in the customer's meter as and where installed, except that outside meters may be of a temperature compensating type.

c. When gas is metered in large volumes at pressures and temperatures other than standard, it must be measured by a meter equipped with devices that correct for super-compressibility, pressure and temperature to determine billable volume at standard conditions. When orifice meters are used additional corrections may be made for the super compressibility and expansion effects, in accordance with industry standards.

8. **Cubic Foot Bottle** means a specifically constructed and calibrated bottle that can measure exactly one cubic foot of air. The calibration of the bottle is certified by the National Institute of Standards and Technology.

9. **Degree Days** means a measure of coldness based on the extent to which the daily mean temperature falls below 65 degrees F. For example, on a day when the average temperature is 35 degrees F, there would be 30 degree days experienced.

10. **Distribution Line** means a gas pipeline, other than a gas-gathering or transmission line, that is normally used by utilities for the transportation of natural gas and/or other flammable gas to customers.

11. **Discontinued** means that gas service is no longer provided to the customer and the prevention of gas flow is usually performed by a locking device (valve) located in the service line or in the meter assembly.

12. **Division** means the Rhode Island Division of Public Utilities and Carriers.

13. **DR Meter** means a meter that does not register the consumption of gas.

14. **Fast Meter** means a meter that measures more gas than is actually consumed.

15. **FERC** means the Federal Energy Regulatory Commission.

16. **Inactive** means a service line where gas service to the customer has been discontinued but the service line has not been abandoned.

17. **Jurisdictional Propane System** means a propane system that serves ten or more residential customers, or two or more customers served in a public place, from a single or manifold tank system.

18. **LDC** means a local distribution company, which is also a public utility engaged in the business of manufacturing, distributing, selling, or transporting natural or other gas by pipeline in the State of Rhode Island.

19. **Master Meter System** means a pipeline system for distributing gas within, but not limited to, a definable area, such as a mobile home park, housing project, or apartment complex, where the operator purchases metered gas from an outside source for resale through a gas distribution pipeline system. The gas distribution pipeline system

supplies the ultimate consumer who either purchases the gas directly through a meter or by other means, such as by rents.

20. **Meter** means a device, instrument, or any attached device, used by a utility to measure a quantity of gas for billing purposes. The two (2) classes of gas meters consist of:

Class A meter - A meter having a rated capacity of not more than 500 cubic feet per hour at 1/2 inch water column differential pressure and operating at a gauge pressure of not more than 15 pounds per square inch and not greater than the maximum pressure rating of the meter expressed in pounds per square inch.

Class B meter - A meter having a rated capacity of more than 500 cubic feet but not more than 1,500 cubic feet per hour at 1/2 inch water column differential pressure and operating at a gauge pressure of not more than 15 pounds per square inch and not greater than the maximum pressure rating of the meter expressed in pounds per square inch.

21. **Potentially Hazardous Condition** means any condition which has the potential to become a hazardous condition, but which does not require immediate action. All of the following are examples of potentially hazardous conditions:

a. Customer failure to permit the utility to perform inspections and maintenance on the utility's facilities in or on the customer's premises.

b. Customer alterations or modifications of the utility's facilities located in or on the customer's premises.

c. Customer construction of a structure or appurtenance near or over the main, service line piping, or meter set assembly so that the utility's facilities are not in compliance with the utility's standards.

d. Customer failure to correct or replace gas utilization equipment or gas fuel line piping that has been previously identified and classified as potentially hazardous by the utility.

22. **Public Utility** as defined in RIGL §39-1-2.

23. **Referee Test** means a meter test in which the customer requests to be present for the actual test or to be represented by the Division and/or the customer's agent.

24. **Slow Meter** means a meter that measures less gas than is actually consumed.

25. **Therm** means a unit of heating valve equivalent to 100,000 British thermal units (Btu).

C. SERVICE PROVISIONS

1. Filing of Rate Schedules

All rates, tolls and charges by the LDC shall be filed, posted, and available for public inspection in accordance with the provisions of R.I.G.L. §39-3-10. In addition, each LDC shall post this information on their company website.

2. Information to Customers

a. Each LDC shall, upon request, provide its customers such information and reasonable assistance as will help them to select the best use of service at the most advantageous rate. However, the ultimate responsibility for the selection of the best use of service at the most advantageous rate will rest with the customer.

b. Each LDC shall, upon request, explain to its customers the method of reading meters.

c. Meters installed after the effective date of this instruction in a residential or commercial facility with more than one meter on a meter bar assembly must be

marked to identify the individual customers. (i.e., apartment 1, apartment 2, second floor, third floor right, etc.)

3. **Deposits/Interest**

An LDC, to protect against loss, may require a deposit before rendering service to any customer. This deposit shall not be more than the two highest actual month's usage of a prior customer or the two highest estimated month's usage of the new customer if a prior customer does not exist. Interest shall be paid on deposits in accordance with applicable rate schedules or the terms and conditions of the LDC. Deposits plus accrued interest thereon, less any amount due the LDC, will be refunded upon termination of service. The company may return a deposit prior to the termination of service if it so desires. A customer may request a return of deposit prior to the termination of service if the customer has established a good payment history and the company agrees to the return of deposit. When an account is terminated, and a deposit or portion thereof is applied against an account that has been terminated, interest shall cease to be accumulated on the balance at the date of termination.

4. **Measurement of Service**

All gas sold by an LDC shall be charged for on a metered basis except when sold under rates on some other basis with the prior approval of the Commission.

5. **Meter Reading and Bill Forms**

a. Each service meter shall indicate clearly the billing units (hundreds or thousands of cubic feet of gas, or therms) registered. In cases where the dial readings of a meter must be multiplied by a constant to obtain the cubic feet or other unit consumed, the proper constant to be applied shall be clearly marked on

the customer's meter and the customer's bill. The labeling of meters will apply only to meters installed as of the effective date of these Rules and Regulations. Meters installed prior to the effective date will not have to be modified with labels as described in the 2006 Rules and Regulations. When gas is measured under high pressure and/or high temperature, or when the quantity is determined by calculation from recording devices, the LDC shall upon request supply the customer with the basis and method of computation of the determined quantity.

b. All service meters will be read at regular intervals and on approximately the corresponding day of each meter-reading period. In service areas that do not utilize AMR devices, the company must verify meter reads called in by the customer at least once every six (6) months.

c. Bills shall be rendered at regular intervals and shall show the date of the current meter reading and the amount or quantity of service for the billing period.

d. Each LDC shall keep an accurate account of all charges for service billed each customer and shall maintain records showing information from which each bill rendered may be readily computed.

e. The billing date and the postmark date on the bill shall not vary by more than three (3) business days.

f. Estimated bills will not exceed 6 consecutive months on any residential, commercial, or industrial account.

6. **Complaints by Customers**

Each LDC shall make a full and prompt investigation of customer complaints, whether the complaint is directed to the company or through the Division. A record of

complaints received, other than those of a minor or routine nature, shall be kept for at least two (2) years, and shall show the name and address of the complainant, the date and character of the complaint, and the disposition thereof. A customer shall have the right to review the record of that customer's complaint(s) upon demand during that two (2) year period. The LDC shall provide the Division with a copy of any or all complaints upon demand. Records shall be provided, whether demanded by a customer or by the Division, within five (5) business days or less.

7. **Change in Character of Service**

Any change made by the LDC in the composition of the gas, the pressure, or other service conditions which would affect efficiency, or operation, or adjustment of appliances, the appliances of all customers in the district affected shall be inspected promptly, and, if necessary, shall be re-adjusted for the new conditions without undue delay by the LDC and without charge to the customer.

8. **Discontinuance of Service**

a. Discontinuance of Service by the Customer

A customer must give reasonable notice of his/her intention to discontinue service in accordance with the provisions of the applicable rate or terms and conditions of service and shall be responsible for all charges until expiration of such notice period. The customer will be given a confirmation number at the time of the termination of service call. The confirmation number shall reflect the date and time the person called to disconnect service. For purposes of this rule, "reasonable notice" is defined as no less than five (5) business days.

b. Discontinuance of Service by the Company

i. Non-Payment of Bills

In accordance with the provisions of the applicable rate or terms and conditions of service, an LDC may require that bills be paid within a specified time after presentation. Failure to pay bills within the specified time shall be grounds for termination of service. The LDC may then initiate its termination process consistent with the rules established by the Commission for that purpose.

ii. Discontinuance of Service by the company for violation of Rules

No LDC shall discontinue service to a customer for violation of any rule without written notice mailed at least ten (10) business days in advance of discontinuance advising the customer which rule has been violated and describing how that rule was violated, except that service may be discontinued immediately when the violation of the rule is such, in the opinion of the LDC, as to endanger life or property, or when ordered to do so by any governmental agency or official having jurisdiction. The LDC may, with or without notice, shut off the supply of gas to the premises, or make appliances inoperative, where in its opinion a "potentially hazardous condition" exists.

iii. For Fraudulent Use of Service

An LDC may discontinue service without notice whenever a fraudulent use of service by the customer is detected.

D. QUALITY OF GAS SERVI CE

1. Heating Value Requirements

a. Standard of Heating Value

Every LDC shall establish its own standard of heating value, which shall be stated in its rate schedule. If the transmission company supplying the LDC files a Federal tariff in compliance with Part 154 of the FERC's "General Rules and Regulations" establishing a lower heating value for the gas it furnishes the utility, then the heating value thus established shall become the standard of the LDC for the gas it furnishes its customers. Resulting decreases in the wholesale rates charged the LDC by its supplier shall be reflected in the concomitant application of the LDC's filed Purchased Gas Price Adjustment to the rates charged its customers.

i. Each LDC, unless specifically directed otherwise by the Division, shall maintain equipment for the determination of the heating value of the gas sold.

ii. Each LDC shall establish the accuracy of all means of determining heating value in normal use by periodic check tests and shall maintain a record of such tests on file for a period of two (2) years. If an LDC uses a calorimeter of the recording type, they shall be checked at least annually.

b. Heating Value Tests (Btu)

i. The (Btu) value of the gas shall be determined at least once daily and more often if necessary to obtain an accurate record of the average (Btu) value and of any fluctuation in the heating value.

ii. To obtain the monthly average (Btu) value, the results of all tests of (Btu) value made on any day during the calendar month shall be averaged, and the average of all daily averages shall be taken as the monthly average. If an LDC's means of determining Btu value is of the recording type, its record shall be the basis for determining the weighted average (Btu) value, providing that the means of determining (Btu) value is tested for accuracy at least annually.

iii. Records of monthly average heating value, as determined under Paragraph (ii) of this Rule shall be retained by the LDC for at least two (2) years and shall be readily available to the Division for inspection.

c. Purity Requirements

i. All gas supplied to customers shall be substantially free of impurities which may cause corrosion of mains or piping or form corrosive or harmful fumes when burned in a properly designed and adjusted burner. No gas shall be stored that is not in conformance with the applicable provisions of the most recent edition of the Federal rules set out in 49 CFR Part §192.475.

ii. Notwithstanding, the provisions of Paragraph (i), above, gas delivered by the LDC shall be odorized by the addition of a malodorous agent in conformance with the applicable provisions of the most recent edition of the Federal rules set out in 49 CFR Part §192.625.

2. **Pressure Requirements**

a. Pressure Variations

i. The pressure at the outlet of any customer's service meter shall not normally be less than one-half of the normal pressure at the outlet. The maximum pressure shall not be greater than 12" of water column except by agreement with the customer.

b. Pressure Surveys and Records

i. Each LDC shall maintain in continuous operation at least one recording pressure device in each area where the LDC maintains a district or division office, either in said office or at some customer's premises.

ii. Each LDC shall make a sufficient number of pressure tests in the areas served to indicate compliance with pressure requirements contained herein.

iii. All pressure recordings obtained under (i.) or (ii.) above, shall be retained by the LDC for at least two (2) years and shall be available to the Division for inspection.

3. **Interruption of Service** *(excluding customers purchasing gas on an interruptible basis)*

a. Each LDC shall use all reasonable means to avoid accidental interruptions to service, but should such interruptions occur, service shall be reestablished within the shortest time possible, consistent with safety.

b. Each LDC shall keep a record of all interruptions to service affecting the entire distribution system serving a single community or a major division of a community and shall include in such record the date and time of such interruption,

the approximate number of such customers affected, the date and time of service restoration, the cause of such interruption when known, and steps taken to prevent its recurrence.

c. When service is interrupted to perform work on lines or equipment, such work shall be done at a time causing minimum inconvenience to customers consistent with the circumstances. Customers seriously affected by such interruption shall be notified in advance if possible.

d. All accidental interruptions of service will be reported to the Division of Public Utilities & Carriers per the requirements set forth in the attached Appendix "B", *Natural Gas Telephonic Notice Reporting Requirements.*

4. **Abnormal Conditions**

These Rules shall not apply to temporary conditions due to "Acts of God", fire, strikes, riots, terrorism, construction maintenance, interruption of gas supply from the LDC's wholesale supplier, or other disruptions of service beyond the control of the LDC; provided, however, that all LDCs shall initiate immediate action and proceed without delay and perform all necessary work to restore its system to normal operating conditions.

E. METERS IN GENERAL, INSTALLATIONS, ACCURACY, AND TESTING

1. **Meters in General**

a. All meters removed from service due to a high bill complaint must be held for 60 days after the test to allow the customer ample time to review a second witnessed meter test if so desired. In order to prevent contamination, all meters shall be capped until installation or retirement from service.

b. A meter with an index reading other than zero may be placed in service, provided that meter and billing records are kept in a manner permitting verification of the readings as of the time of removal from the prior premises and installation at the succeeding premises.

c. Tin case meters shall not be returned to service. Whenever a tin case meter is removed from service for any reason it must be tested for accuracy and held according to the requirements set forth in section 1 (a) above, if applicable.

d. The capacity of the meter at installation shall be consistent with the reported projected gas requirements of the customer at the time of installation.

2. **Meter Installations**

a. Unless otherwise authorized by the Division, each LDC shall provide and install at its own expense, and shall continue to own, maintain and operate, all equipment necessary for the regulation and measuring of gas to its customers. A charge may be made for additional meters and regulators furnished by the LDC for the convenience of the customer.

b. The customer shall provide and have installed at his/her own expense all customer piping and equipment necessary for relocating the meter when relocation is:

i. requested by a customer;

ii. required because of customer-initiated alterations; or

iii. necessary to prevent a recurrence of discovered tampering or damage caused by the customer.

3. **Testing and Calibration of Meters**

a. Gas Meter Accuracy

i. Every gas meter, removed from service for any cause, or repaired, shall be tested for accuracy and adjusted, if necessary, to accuracy limits of 100 percent ±1.5 percent before being installed or reinstalled. In addition, the LDC shall replace any parts found to be worn or damaged in any meter that does not pass the accuracy test, and is subject to repair.

ii. Meters removed from service and/or repaired meters must be subjected to an internal pressure of at least 20 inches water column and checked for the presence of leaks.

iii. Tin case meters shall be subjected to an internal pressure of at least two (2) pounds per square inch when testing to determine the presence of any leaks.

iv. New, remanufactured or refurbished meters that are accompanied by a certified test certificate are not required to be tested before installation in the field if the test results on the certificate are within accepted accuracy limits of section 3 (a) above.

b. Method of Testing: General Test Requirement

For the purpose of determining compliance with section 3 (a) above, the proof of registration of a displacement meter shall be determined by two tests, one known as the "Check-Rate" test, at a rate of flow at approximately 20% - 40% of the rated capacity of the meter, and one known as the "High-Rate" test, at a rate of flow at approximately 80% - 100% of the rated capacity of the meter. The tests at

the two rates of flow, the "Check-Rate" test and the "High-Rate" test shall be comparable to within one (1) percent. If the tests at the two rates of flow do not agree to within one (1) percent, the meter must be repaired to meet the criteria. Both tests must also pass the accuracy test limits of 100 percent ± 1.5 percent as described in section 3 (a) above. The Division will require additional tests based on extenuating circumstances. All tests to determine the accuracy of any gas service meter shall be made with the appropriate bell, sonic nozzle, or transfer prover or other approved standard meter proving method such as differential testing of rotary meters and field proving of turbine meters.

c. Rotary Tube Meters

Rotary tube meters shall be tested at not less than fifteen percent (15%) of full rated flow. A utility shall not install a rotary meter that is more than one half of one percent (0.5%) fast or more than one and one half percent (1.5%) slow at the points of test.

d. Orifice Meters

Orifice meters shall be manufactured and installed in accordance with all guidelines specified in the current edition of ANSI/API 2530 (AGA Report No. 3), Orifice Metering of Natural Gas. Orifice meters shall be tested at not less fifteen percent (15%) of full rated flow. The meters shall not be more than one half percent (0.5%) fast or more than one and one half percent (1.5%) slow at the points of the test.

e. Turbine Meters

Turbine meters for which the manufacturer has established minimum spin times, may be spin tested to determine their in-service condition. Turbine meters shall be given a spin test at least once every twelve (12) months unless covered under an approved in-service performance-testing program, or the operator receives a written waiver from the customer not to conduct the test per their decision. Any meter found to have a spin time less than the manufacturer's recommended minimum and which cannot be brought up to the minimum by cleaning and lubrication shall be changed and replaced with an accurate meter. Turbine type meters shall be tested at not less than fifteen percent (15%) of full rated flow. The meters shall not be more than one half percent (0.5%) fast or more than one and one half percent (1.5%) slow at the points of the test.

f. Gas Volume Corrections

Gas volume corrections for temperature shall be made in accordance with Charles' law. Gas volume corrections for pressure shall be made in accordance with Boyle's law. Gas volume corrections for supercompressibility shall be made in accordance with either of the following publications of the American Gas Association (AGA):

i. "Manual for the Determination of Supercompressibility Factors for Natural Gas, Project NX-19," (1962) (A.G.A. Catalog No. L00340)

ii. "Compressibility and Supercompressibility for Natural Gas and Other Hydrocarbon Gases, Transmission Measurement Committee Report No. 8," (1992 A.G.A. Catalog)

g. Testing Facilities and Equipment

i. Each LDC shall maintain the equipment and facilities necessary for accurately testing meters used for the measuring of gas delivered to its customers, unless arrangements approved by the Division shall have been made to have the testing done elsewhere. The LDC shall maintain this equipment in good condition and correct adjustment so that it can determine the accuracy of any service meter to within one half of one percent (0.5%). The area within the meter shop used for the testing of meters shall be designed so that the meters and meter testing equipment are protected from draft and excessive changes in temperature.

ii. Accepted good practice. The following publications are considered to be representative of accepted good practice in matters of metering and meter testing:

1. American National Standard for Gas Displacement Meters (500 Cubic Feet per Hour Capacity and Under (Class A)), ANSI B109.1-2000.
2. American National Standard for Diaphragm Type Gas Displacement Meters (Over 500 Cubic Feet per Hour Capacity (Class B)), ANSI B 109.2-2000.
3. American National Standard for Rotary Type Gas Displacement Meters, ANSI B 109.3-2000.

4. Measurement of Gas Flow by Turbine Meters, ANSI/ASME MFC-4M-1997 and American Gas Association (AGA) Report 7, Sections 8 and 9.

5. Orifice Metering of Natural Gas and Other Related Hydrocarbon Fluids, ANSI/API 2530-1991.

h. Measurement of gas at higher than standard service pressure.

i. Pressure-recording equipment. If gas is measured to customers through meters at a pressure greater than standard service pressure, the meters shall be equipped with reliable pressure-volume recording gauges or other devices for accurately determining the quantity of gas that has passed through the meter in accordance with contract or tariff provisions.

ii. Determination of multiplier. In computing the volume of gas at a given pressure base from a pressure-volume chart, the multiplier shall be obtained by the weighted average method, which consists of determining the average pressure for each indicated unit volume on the chart.

iii. Fixed pressure factor measurement. If the gas metering pressure can be maintained at a constant level so that it will not vary by more than plus or minus 1.0% of the absolute metering pressure, the quantity of gas corrected for pressure for billing purposes may be determined by multiplying the uncorrected volume by the factor of Metering Pressure Plus Atmospheric Pressure Divided by Base Pressure or by a special index with gearing to perform this calculation. The special index shall meet the specifications of ANSI Standard B109.1, §6.2 (1986) or ANSI Standard

B109.1, §6.9 (1986). The ability of the regulator to maintain the constant pressure shall be verified at or prior to installation. Verification will be established by the use of a verified pressure-indicating gauge (accuracy: ANSI B40.1 Grade 3A), or a pressure-recording gauge, at both high and low flow conditions where practicable, but never less than one (1) verification under actual operating conditions. Annual reports of the results of periodic tests will be forwarded to the Division by March 31st for the prior year.

i. AMR Device Verification

All meters with an AMR device shall be tested to verify the AMR reading is in sync with the meter index. AMR devices will be verified at all meter testing and before installation at a customer's premises.

4. **Test Schedules**

a. Periodic Tests of Meters in Service

All gas meters in service shall be tested in accordance with the following schedule and, if necessary, shall be adjusted to register within the tolerance prescribed in Rule 15 (a) above.

i. All meters rated by the manufacturer up to and including five hundred (500) cubic feet per hour (Class A), based on one-half inch (1/2") water pressure differential shall be proof tested not less than once each fifteen (15) year service period.

ii. Meters normally rated by the manufacturer in excess of five hundred (500) cubic feet per hour (Class B), based on one-half inch (1/2") water

pressure differential, shall be proof tested not less than once in each ten (10) year service period.

iii. Each meter so tested shall have affixed the seal prescribed by the Division. (See Appendix "A")

iv. In addition the Division retains the right to order the testing of meters on a random basis on behalf of the customer.

5. **Request Tests**

a. Generally, when requested by a customer, or by the Division on behalf of the customer, LDC shall test the accuracy of the customer's meter within fifteen (15) days from the time the request is made or earlier if requested by the Division. If the meter has been tested during the preceding thirty-six (36) months, the LDC may require the deposit of a customer fee of seventy-five ($75.00) dollars for such a test. If, on testing, the meter is found to be fast by more than 1.5%, the deposit shall be promptly refunded. If the meter is not found to be fast by as much as 1.5%, the LDC shall retain the amount deposited for the test. A report giving the name of the customer requesting the test, the date of the request, the location the meter was in service, the location where the meter test was performed, the type, make, size, the serial number of the meter, the date tested, and the result of the test shall be supplied to each customer within a reasonable time after completion of the test. The LDC shall retain copies of the above reports for at least two (2) years. A customer, the Division, or an agent thereof may be represented in person when the LDC conducts the test on the meter.

b. Referee Tests

The LDC, when notified by a customer that a referee test of the meter is requested, shall notify the Division. The LDC, as herein provided, shall not knowingly remove, interfere with, adjust, or pretest the meter to be tested without the written consent of the customer or approval of the Division. The Division, when notified by a customer that a referee test of the meter is requested, shall notify the LDC to remove and seal the meter in the presence of the consumer or the Division if so requested. If directed to seal the meter, the LDC shall keep the meter in the same condition with the seal unbroken until the test can be made in the presence of the customer, their agent and/or the Division. All referee meter tests shall include an inspection of the meter index by removing the index from the meter body. The dials, gears and all other parts of the index shall be visually inspected for wear, misalignment or other mechanical defects that would affect the accuracy of the meter on a continuing or sporadic basis. Failure to abide by the above Referee Test procedures will result in the maximum penalty as set forth in R.I.G.L. §39-2-8.

6. **Customer's Billing Adjustments**

a. Fast Meters

i. Whenever, as the result of a test made by the LDC, a gas meter is found to be fast in excess of 1.5% of the correct amount, the LDC shall refund to the customer an amount equal to the charge for gas billed in excess of 100% for the two (2) highest months gas bill multiplied by 6 (six) for the year prior to the test, or the highest two (2) months gas bills

multiplied by 6 (six) from the last test date if the test was made within the last twelve (12) months. However, if the time when the error first developed or occurred can be definitely fixed, the amount to be refunded is to be based thereon; the time period for which the LDC is required to adjust, refund or credit the customer's bill shall not exceed five (5) years unless otherwise ordered by the Division.

ii. Under no circumstance will a refund be made to a customer if there is evidence of gas diversion or that the meter has been tampered with. If the meter test is conducted within less than 12 months of service with the present customer of record and the meter test fails resulting in a refund, the refund shall be appointed to customers who received service through the meter found to be registering inaccurately. In the case of a previous customer who is no longer a customer of the LDC, a notice of the refund shall be mailed to his or her last known address.

b. Slow Meters

Whenever, as the result of a test made by the LDC, a gas meter is found to be slow in excess of 2.0% of the correct amount, the LDC shall be required to issue a corrected bill to the customer for an amount equal to the charge for gas that was under billed. If the gas meter is found to be slow less than 2.0% the LDC shall not issue a corrected bill.

c. Non-Registration, Does Not Register (DR Meter), or Unaccountable Gas

If a meter is found which does not register, the bill for the period of non-registration shall be based upon information recorded prior or subsequent to the

period of non registration and by any other pertinent information supplied by the customer or known to the LDC (such as an active "AMR" device). The company may use a prior year's usage for the same time period of non-registration as long as the "degree days" are taken into consideration in the calculation. The company shall act to correct the problem within two (2) months of receiving evidence of a non-registering meter. In no case will the LDC be allowed to recover billing for unaccounted for gas past (two) 2 months of non-registration of the meter, or, if the meter has an attached AMR device, the non-registration of the meter and the non-registration of the AMR device. However, the Division will permit the LDC to seek a waiver from the Division with respect to the foregoing billing prohibition. The waiver request shall include details of the LDC's efforts and experienced difficulties in accessing the customer's property in order to repair the non-registering meter. The waiver shall be filed with the Division prior to the expiration of the two-month billing deadline.

d. Estimated Bills

Once the LDC has to use estimated bills for a six (6) month period, it will treat the account as if it were one with a non-registration meter and shall have no more than two (2) months to obtain an actual read.

e. Adjustments to bills for other meter errors

If a customer has been overcharged or undercharged as a result of an incorrect reading of the meter, incorrect application of the rate schedule, incorrect connection of the meter, application of an incorrect multiplier or constant or other

similar reason, the overcharge shall be refunded to the customer or the undercharge may be billed to the customer.

7. **Records of Meters and Tests**

a. Each LDC shall keep, numerically arranged and properly classified, records giving, for each meter used and owned by the LDC for any purpose, the identification number, date of purchase, name of manufacturer, serial number, type, a history of the premises where the meter was located, a history of the meter testing sites, and the meter's rating. A complete record of the latest test made on a meter shall be retained in the LDC's files for a period of fifteen (15) years in such a manner that it will be readily available to the Division or the ratepayer for inspection, unless the meter is permanently retired in such case the records should be retained for three (3) years after condemnation.

b. Each LDC shall report annually to the Division a summary report of meter tests made during the year. The report will include the number of meters tested, the number of meters considered "DR" or non-registering, the number of meters found to be accurate within the allowable limits, the number of meters found to be fast, and the number of meters found to be slow. In addition to the number of meters found to be outside the allowable limits the LDC shall report how many meters were over 3% fast or slow.

F. EQUIPMENT AND FACILITIES

1. **Standard Practice**

a. The gas facilities of the LDC shall be constructed, installed, maintained and operated in accordance with accepted good engineering practice in the gas

industry to assure, as far as reasonably possible, continuity of service, uniformity, in the quality of service furnished and the safety of persons and property. In determining standard practice, the Division has adopted by reference in these rules, and the LDC shall use, the applicable provisions of the most recent editions of 49 CFR Parts §190 - §199 and Part §40 Pipeline Safety Regulations, NFPA 54 National Fuel & Gas Code, NFPA 58 Storage and Handling of Liquefied Petroleum Gases, NFPA 59 Storage and Handling of Liquefied Petroleum Gases at Utility Gas Plants, and NFPA 59A Production Storage and Handling of Liquefied Natural Gas (LNG), except as any of the foregoing may in any particular case be modified by statute, ordinance, orders, rules or regulations by governmental bodies or agencies having jurisdiction. The LDC shall be guided by the following American National Standards Institute (ANSI) publications:

i. ANSI/API 2530, "Orifice Metering of Natural Gas and Other Related Hydrocarbon, A.G.A. Report No. 3," as follows:

ii. Part I, "General Equations and Uncertainty Guidelines," (1990) (A.G.A. Catalog No. XQ9017).

iii. Part II, "Specification and Installation Requirements," (1991) (A.G.A. Catalog No. XQ9104).

iv. Part III, "Natural Gas Applications," (1992) (A.G.A. Catalog No. XQ9210).

v. Part IV, "Background Development, Implementation Procedures, and Sub-Routine Documentation for Empirical

Flange-Tapped Discharged Coefficient Equation," (1992) (A.G.A. Catalog No. XQ9211).

vi. ANSI B109.1, "Diaphragm Type - Gas Displacement Meters, Under 500 Cubic Feet per Hour Capacity," (1992) (A.G.A. Catalog No. X69218).

vii. ANSI B109.2, "Diaphragm Type - Gas Displacement Meters, 500 Cubic Feet per Hour Capacity and Over," (1992) (A.G.A. Catalog No. X69219).

viii. ANSI B109.3, "Gas Displacement Meters, Rotary Type," (1992) (A.G.A.Catalog No. X69220).

ix. ANSI Z223.1 National Fuel Gas Code

x. The Division adopts by reference as rules, and the LDC shall use, the following American Society for Testing and Materials (ASTM) publications:

1. ASTM specification D-1826 "Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter," (D1826-88).

2. ASTM specification D-1945 "Method for Analysis of Natural Gas by Gas Chromatography," (D1945-91).

3. ASTM specification D-3588 "Method for Calculating Calorific Value and Specific Gravity (Relative Density of Gaseous Fuels)," (D3588-91).

2. **Construction and Maintenance**

Each LDC shall construct, install, operate and maintain its plant, structures, equipment, and gas pipelines in accordance with standard practice, as defined in the paragraphs above, and in such manner as to best accommodate the public and to prevent interference with service provided by other public utilities.

G. RECORDS AND REPORTS

1. **Physical Plant Records**

Each LDC shall keep sufficient records of the operation of its physical plant to show the characteristics and performance of each unit.

2. **Gas Supply Measurement**

Each LDC shall utilize a suitable measuring device, or otherwise determine production, at each source of supply in order that a record may be maintained of the quantity of gas produced at each source. Unless the transmission company supplying the gas furnishes sufficient information, each LDC purchasing gas shall maintain adequate instruments and meters to obtain complete information as to such purchases.

3. **System Maps**

Each LDC shall have on file, located within the State, a suitable map, maps or drawings or electronic data, showing the following:

a. Size, character and location of all mains, including valves.

b. Size and location of each service connection, where practicable. In lieu of showing service locations on maps, a card record or other suitable means may be used.

c. Layout of all principal metering and regulator stations, production plants to show size, location and character of all major equipment pipelines, connections, valves and other equipment used.

4. **Preservation of Records**

The LDC shall preserve all records required by these Rules for a period of two (2) years unless otherwise designated herein. Such records shall be kept within the State of Rhode Island at the office or offices of the LDC and shall be available for examination by the Division.

5. **Reports to Division**

The LDC shall furnish to the Division, at such times and in such form as the Division may require, the results of any required tests and summaries of any required records. The LDC shall also furnish the Division with any information concerning the LDC's facilities or operations which the Division may request and need for determining rates or judging the practices of the LDC.

H. GENERAL/SAFETY

1. **Safety Instructions**

a. Each LDC shall adopt comprehensive instructions for the safety of employees in regard to the operation, construction or maintenance of its plant and facilities, and shall be satisfied that such employees have been properly informed of safe practices and are cognizant of all hazards involved.

b. Except in certain commercial and industrial applications that require a standby fuel the LDC shall have the authority to refuse initial natural gas service

to a customer that uses another gaseous fuel, such as liquefied petroleum gas, in the same building.

c. Anytime the existence of a mercury regulator is found in a commercial or residential facility the LDC shall remove said mercury regulator and contract for the disposal of the contents in a safe and acceptable manner consistent with all applicable Federal and State regulations regarding such practice.

2. **Accidents**

Each LDC shall report to the Division as soon as possible after each accident occurring in connection with the operation of its property, facilities, or service, wherein any person shall have been killed, admitted to a hospital, or whereby any property damage shall have been caused. The first report may be preliminary, but, if so, shall be followed later by as full a statement as possible of the cause and details of the accident and the precautions taken, if any, to prevent recurrence.

3. **Penalties**

Any LDC found guilty of violating any provision of these rules shall be subject to the penalties set forth in R.I.G.L. §39-2-8 or §39-3-40 as appropriate.

I. ABANDONMENT OF GAS SERVICES

1. **Abandonment of Service Lines That Become Inactive after the Effective Date of these Regulations:**

a. All non-plastic and non-cathodically-protected steel inactive service lines and service stubs shall be abandoned within five (5) years, unless such lines have been reactivated prior to that time.

b. All plastic and cathodically-protected steel inactive service lines shall be physically disconnected (cut off) within close proximity of a property line within five (5) years.

c. The LDC should determine whether inactive service lines ought to be abandoned at any prior time. The determination shall be based on such appropriate variables as service line age, location, condition, material, construction methods, leak and maintenance history of the pipe, existence and/or application of cathodic protection, individual and property-owner requests and other criteria selected by the LDC.

2. **Abandonment of any Inactive Service Line**

a. Notwithstanding the above, inactive service lines, which shall be abandoned promptly, are those:

i. located in, or in close proximity to, excavations; or

ii. located in, or in close proximity to, buildings being demolished; or

iii. discovered to be leaking gas; or

iv. unrecorded or previously unknown lines discovered in the course of leakage surveys, construction, maintenance or inspection of facilities.

3. **Records, Reports and Procedures**

a. Readily accessible records of inactive service lines and service stubs shall be maintained by the LDC which shall include the type of pipe material, the service line's location, the date the service line became inactive, and the date the service line was installed. If any information is unavailable to or unobtainable by the LDC, it shall be listed on the record as "unknown".

b. Readily accessible records of the location of any service line that is abandoned after the effective date of these regulations shall be maintained by the LDC for a length of time determined by the LDC but for no less than five (5) years from the date of abandonment.

c. Each LDC shall report to the Division annually the statistical progress of their abandonment program. The report will be due annually from the preceding calendar year.

J. CONTROL OF DRUG AND ALCOHOL USE

Refer to the Federal Pipeline Safety Regulations rules set out in 49 CFR Part §40 and Parts §199.

K. ENFORCEMENT PROCEDURES

1. Jurisdiction

a. The Rhode Island Division of Public Utilities and Carriers, pursuant to R.I.G.L. §39-3-1 et seq. and §39-4-1 et seq., is empowered to prescribe and enforce safety standards and to regulate safety practices of persons engaged in the transportation of natural gas and other gas by pipeline to the extent permitted by the Natural Gas Pipeline Safety Act of 1968 and any amendments thereto.

b. The Federal regulations issued under the Act of 1968, promulgated by the Office of Pipeline Safety of the United States Department of Transportation and published in 49 CFR Parts §40, §190-§199, apply to all LDC's, Master Meter Systems, and Jurisdictional Propane Systems. The Safety Standards of the Act (the Pipeline Safety Regulations) apply to design, installation, inspection, testing, construction, extension, operation, replacement and maintenance of pipeline

facilities. Standards affecting the design, installation, construction, initial inspection, and testing, are not applicable to pipeline facilities in existence prior to the act. The Division has adopted the above regulations as state regulations.

c. The Division may prescribe additional safety standards that apply to LDC's, Master Meter Systems, and Jurisdictional Propane Systems. Such safety standards shall be practicable and designed to meet the needs for pipeline safety. When prescribing and enforcing such standards, the Division will consider:

i. Relevant available pipeline safety data.

ii. Whether such standards are appropriate for the particular type of pipeline transportation.

iii. The reasonableness of any proposed standards.

iv. The extent to which such standards will contribute to public safety.

d. Whenever the Division finds a particular facility to be hazardous to life or property, it is empowered to require the person operating such facility to take steps necessary to remove such hazards.

2. **Authority to Inspect**

a. The Division has the power to investigate all methods and practices of the LDC's, Master Meter Systems, or Jurisdictional Propane Systems, to require the maintenance and filing of reports, records, and other information in such form and detail as the Division may prescribe, to enter at all reasonable times to inspect the property, buildings, plants, and offices of such LDC's, Master Meter Systems, or Jurisdictional Propane Systems, and to inspect books, records, papers, and documents relevant to the enforcement of the rules and regulations.

3. **Intervals of Inspection**

a. The Division is authorized to enter upon, inspect and examine, at all reasonable times and in a reasonable manner, the records and properties of the LDC's, Master Meter Systems, or Jurisdictional Propane Systems to the extent such records and properties are relevant to determining the compliance of such entities with Division rules, regulations, or orders.

b. Jurisdictional pipeline facilities have been categorized into four classifications

i. LDC's,

ii. LNG facilities,

iii. Master Meter Systems, and

iv. Jurisdictional Propane Systems.

c. The Divisions inspection frequency of these facilities is as follows:

i. LDC's; annual standard inspections will be conducted of each gas distribution inspection unit. Other than the normal amount of specialized inspections the Division will schedule additional inspections if the results of the standard inspection indicate a need for additional inspections.

ii. LNG; facilities will receive an annual standard inspection. Supplementary periodic inspections may also be conducted.

iii. Master Meter Systems; systems will be inspected at least once a year.

iv. Jurisdictional Propane Systems; systems will receive an annual standard inspection. Supplementary periodic inspections may also be conducted.

d. Inspections are ordinarily conducted pursuant to one or more of the following:

i. Routine scheduling

ii. A complaint received from a member of the public.

iii. Information obtained from a previous inspection.

iv. Pipeline accident or incident.

v. Whenever deemed appropriate by the Division.

4. **Inspection of LDC's, Master Meter Systems, and Jurisdictional Propane**

a. The Division shall attempt to periodically inspect every LDC, Master Meter System, and Jurisdictional Propane System, with priority given to inspecting systems with greater risk potential. In determining the potential risk, the following factors may be considered:

i. The ratio of total steel pipe to coated pipe.

ii. The ratio of total steel pipe to cathodically protected steel pipe.

iii. Leaks per mile of main.

iv. Leaks per number of services.

v. Unaccounted – for gas volumes and percentages.

vi. Number of accidents or incidents.

vii. History of violations discovered.

b. The inspection will include a thorough review of the records concerning inspection, operation, maintenance and emergency procedures. Field inspections will include operational checks of corrosion control provisions, overpressure and

regulating equipment, odorization, repaired leaks, emergency valves and any other components of the facility.

5. **Discovery and Notice of Alleged Violation**

a. When an evaluation of records and facilities indicates an alleged violation with state or federal regulations, the inspector shall review the basis for such alleged violation with the LDC, Master Meter System, or Jurisdictional Propane System before concluding the inspection. The inspector shall then notify the appropriate official of the alleged violation in writing within 90 days of the discovery of the alleged violation. The inspector shall also make an alleged violation report to be retained by the Division.

b. Any documentation or physical evidence necessary to support an alleged violation may be obtained during the inspection or requested in writing immediately after conclusion of the visit.

6. **Response Options Available**

a. The LDC, Master Meter System, or Jurisdictional Propane System shall respond within twenty (20) business days of mailing a notice of an alleged violation in the following manner:

i. Submit a written plan of action to the Division outlining actions that will be taken to correct the alleged violation, including a schedule and the date when compliance is anticipated; or

ii. Request an informal conference with the Division. The alleged violation may be resolved if the plans in option "i." above, are accepted by the Division. However, if the LDC, Master Meter System, or

Jurisdictional Propane System selects this option (ii.), an informal conference will be scheduled as explained below in Section K7. Failure to respond in accordance with this section will result in formal legal or administrative action as setout in Section K9.

7. **Informal Conference**

a. After receiving the request for an informal conference, a date and time for a conference will be arranged. At the conference, the basis for the alleged violation will be reviewed. The LDC, Master Meter System, or Jurisdictional Propane System may explain its position and may present alternatives for rectifying the problem. The investigator who issued the notice of alleged violation will represent division staff and by others the Division deems necessary. The report generated by the informal conference will be filed with the alleged violation and retained by the Division. If agreement cannot be reached, the enforcement procedure will continue as explained in Section K8.

8. **Division Action**

a. If the Division is not satisfied with the proposed solution as outlined in Sections K6 and K7, the Division can:

i. Seek an injunction in Superior Court in cases where immediate action is necessary, or

ii. Issue a show cause order and/or schedule a evidentiary hearing requiring the operator to demonstrate why the LDC, Master Meter System, or Jurisdictional Propane System should not be subject to the penalties set forth in R.I.G.L. §39-2-8 and/or R.I.G.L. §39-3-40.

iii. Pursuant to evidentiary hearing, order the LDC, Master Meter System, or Jurisdictional Propane System to take corrective action. Failure to obey such an order will result in the aforementioned penalties.

9. **Appeal**

a. Any LDC, Master Meter System, or Jurisdictional Propane System aggrieved by a final decision of the Division may appeal to the Rhode Island Superior Court under R.I.G.L. §42-35-15.

10. **Addendum**

a. Under the Rhode Island Administrative Procedures Act, specifically, R.I.G.L.§42-35-3(3) and (4), the Rhode Island Division of Public Utilities and Carriers is mandated to provide two statements with reference to the Rules and Regulations attached hereto.

b. The first statement, made pursuant to R.I.G.L.§42-35-3(3), supra, is designed to demonstrate the need for the adoption of the instant rules and regulations. The Division of Public Utilities and Carriers asserts that the Rules and Regulations, as filed, satisfy the federal requirements contained in Section 5 of the Natural Gas Pipeline Safety Act of 1968, as amended.

c. The second statement, made pursuant to R.I.G.L.§42-35-3(4), supra, addresses whether the instant Rules and Regulations would have a significant adverse economic impact on small business. The Division of Public Utilities and Carriers maintains that this section is inapplicable to the present rulemaking procedures, as the business entities that would be subject to these Rules and

Regulations are not small businesses as defined in the Rhode Island Administrative Procedures Act. R.I.G.L. §42-35-1(h)(1).

APPENDIX A

METER LABELING

1. There shall be provided and affixed to the front of each customer's gas meter a waterproof decalcomania having a bright yellow background enclosed by black border lines not less than 1/16" in width.

2. Within the border lines there shall be printed on the label with black ink in characters not less than 3/16" high arranged in three lines with the third line not less than 1/4" high indicating the month and year the meter was last installed in accordance with the following label arrangement:

TESTED AND ADJUSTED

TO R.I.D.P.U. STANDARDS

INSTALLATION DATE:

Each "Decal" label shall not be less than 2 1/4" in length by 7/8" in width in size. The coloring or printing shall be of a material that is suitable for New England climatic exposure. Any meter removed from service due to a high bill complaint must maintain the meter decal label until the required two (2) month holding period has ended.

APPENDIX B

TELEPHONIC NOTICE OF CERTAIN GAS INCIDENTS

1. At the earliest practicable moment following discovery each LDC, Master Meter System, or Jurisdictional Propane System shall give notice of any gas incident. "Incident" means any of the following events that results:

    a. In the involvement of an unanticipated release of gas:

        i. from a pipeline or
        ii. an LNG facility or
        iii. of a liquefied natural gas or
        iv. a death or personal injury or
        v. property damage

    b. From the excavating operations of another party
    c. In an emergency shutdown of an LNG facility
    d. In the involvement by police, fire, or media personnel
    e. In a house or building being evacuated (public or private)
    f. In any other situation that is significant, in the judgment of the operator, even though it did not meet the above criteria, such as but not limited to, overpressure, loss of system pressure, outages, etc.

2. **Between the hours of 8:30 A.M. and 4:00 P.M., Monday – Friday** - call the Division of Public Utilities & Carriers engineering section office numbers until a person is contacted. **Do not leave an emergency notice on voice mail. If the personnel list is exhausted, please dial "0" for operator and you will be transferred to another staff member.**

3. **After work hours** call the phone numbers in the order listed on your "Emergency Response Chart" until a person is contacted. If there is no response, continue to call every hour until someone answers. If the Division requests a written report of the incident, it must be submitted within one week. Appropriate personnel within your respective gas companies must have a copy of these phone numbers and a copy must be inserted in your companies' O&M manual.