COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
COMMONWEALTH KEYSTONE BUILDING
400 NORTH STREET, HARRISBURG, PA 17120

BUREAU OF
INVESTIGATION
&
ENFORCEMENT

January 3, 2022

Via Electronic Filing

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

Re: Petition of Westover Property Management Company, L.P. d/b/a Westover Companies for a Declaratory Order Regarding the Applicability of the Gas and Hazardous Liquids Pipeline Act
Docket No. P-2021-3030002
I&E Answer in Opposition to Petition

Dear Secretary Chiavetta:

Enclosed for electronic filing please find the Bureau of Investigation and Enforcement's ("I&E") Answer in Opposition to the Petition for Declaratory Order of Westover Property Management Company, L.P. d/b/a Westover Companies with regard to the above-referenced proceeding. **Due to the public safety concerns expressed in greater detail herein, I&E respectfully requests that this matter be ruled upon expeditiously.**

Copies are being served on the parties of record in accordance with the attached Certificate of Service.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

Stephanie M. Wimer
Senior Prosecutor
Bureau of Investigation and Enforcement
Attorney ID No. 207522
(717) 772-8839
stwimer@pa.gov

SMW/ac
Enclosures

cc: Michael L. Swindler, Deputy Chief Prosecutor (*via email*)
Kayla L. Rost, Prosecutor (*via email*)
As per Certificate of Service

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of Westover Property Management Company, L.P. d/b/a Westover Companies for a Declaratory Order Regarding the Applicability of the Gas and Hazardous Liquids Pipeline Act	:	Docket No. P-2021-3030002

ANSWER OF THE BUREAU OF INVESTIGATION AND ENFORCEMENT IN OPPOSITION TO THE PETITION FOR DECLARATORY ORDER OF WESTOVER PROPERTY MANAGEMENT COMPANY, L.P. d/b/a WESTOVER COMPANIES

Pursuant to Section 5.61(a) of the Commission's regulations, 52 Pa. Code § 5.61(a), the Bureau of Investigation and Enforcement ("I&E") of the Pennsylvania Public Utility Commission ("Commission"), by and through its prosecuting attorneys, files this Answer in Opposition to the Petition for Declaratory Order ("Petition") of the Westover Property Management Company, L.P. d/b/a Westover Companies ("Westover" or "Company") and requests that the Commission deny the Company's Petition, deem Westover to be a pipeline operator subject to the Gas and Hazardous Liquids Pipelines Act, 58 P.S. §§ 801.101, *et seq*. ("Act 127"), and direct Westover to immediately comply with all applicable laws and regulations related to pipeline safety.

Currently, Westover does not follow the requisite Federal pipeline safety laws and regulations in its operation of jurisdictional master meter systems at numerous apartment complexes in central and eastern Pennsylvania. An immediate threat to public safety exists with each and every day that Westover fails to submit to the Commission's jurisdiction and implement the pertinent pipeline safety rules. Accordingly, I&E respectfully requests an **expedited ruling** from the Commission.

On January 3, 2022, I&E separately and concurrently filed a Formal Complaint against Westover alleging violations of Act 127 and Part 192 of the Federal pipeline safety regulations, 49 CFR §§ 192.1-192.1015. Pursuant to 52 Pa. Code § 1.33, I&E hereby incorporates by reference its Formal Complaint dated January 3, 2022.

In support of its Answer, I&E avers as follows:

I. BACKGROUND

On May 22 and 23, 2018, inspectors from the I&E Safety Division[1] visited a property owned and managed by Westover in response to a natural gas leak and service outage reported by PECO Gas. PECO Gas reported that the outage impacted a master meter system at Westover's Jamestown Village Apartments located at 2501 Maryland Road, Willow Grove, PA 19090. After ensuring that the leak was properly repaired and service restored, the I&E Safety Division shifted the focus of its investigation to examine whether the pipeline facilities at the Jamestown Village Apartments constitute a "master meter system" as defined in 49 CFR § 191.3 and thus subject to Commission oversight through Act 127.

The May 2018 leak and service outage alerted the I&E Safety Division to Westover's master meter systems. Prior to that time, the I&E Safety Division was unaware of Westover's pipeline facilities as Westover had not registered as an Act 127 pipeline operator.

[1] The Safety Division serves as an agent of the Federal Pipeline and Hazardous Materials Safety Administration ("PHMSA") and enforces compliance with Pennsylvania laws and regulations as well as Federal pipeline safety laws and regulations governing the transportation of natural gas.

The I&E Safety Division began investigating Westover, which led to an inspection of Westover's facilities and records on December 2, 2020. During the inspection, inspectors from the Safety Division discussed with representatives from Westover the requirements that are necessary for Westover to comply with Act 127 and the Federal pipeline safety regulations in its operation of master meter systems at the apartment complexes that it owns and manages.

On December 17, December 24, and December 31, 2020 as well as on January 11, and January 14, 2021, the Safety Division attempted to schedule a follow-up inspection with Westover that would review the manual and procedures that the Safety Division asked Westover to develop in order to become compliant. Westover did not respond to any of the Safety Division's attempts to communicate.

By letter dated February 3, 2021, the Safety Division issued a non-compliance letter, NC-77-20, finding Westover to be in violation of 49 CFR §§ 192.13 and 192.605 for failing to have a manual as required in Part 192 of the Federal pipeline safety regulations and a procedural manual for Operations, Maintenance and Emergencies ("O&M Manual"). The Safety Division requested that Westover respond to NC-77-20 in writing on or before March 17, 2021, with a response that demonstrates that it developed and implemented an O&M Manual, and a process to document and track all records required by the pertinent manuals and procedures. NC-77-20 is appended to Westover's Petition as Appendix 2. Westover failed to respond to NC-77-20.

By letter dated March 30, 2021, the Safety Division issued a second non-compliance letter, NC-08-21, finding Westover to be in violation of 49 CFR § 190.203(a)

(permitting agents of PHMSA to enter and inspect the records and properties of persons to determine the compliance of such persons with Federal pipeline safety laws and regulations). The Safety Division requested that Westover respond in writing on or before April 29, 2021, with a response that schedules the Safety Division's follow-up inspection of Westover's facilities and records and replies to NC-77-20. In NC-08-21, the Safety Division warned that continued failure to respond would result in I&E taking legal action against Westover, including seeking the imposition of civil penalties. NC-08-21 is appended to Westover's Petition as Appendix 2. Westover failed to respond to NC-08-21.

The Safety Division referred the matter to I&E Enforcement. Prior to initiating a formal complaint proceeding, I&E provided Westover with yet another opportunity to comply with Act 127 and the federal pipeline safety laws and regulations in its issuance of a warning letter dated June 2, 2021. I&E's warning letter is attached hereto as Attachment A.

Subsequent to the issuance of the warning letter, Westover began taking steps to implement I&E's suggested actions, which were designed to guide the Company into compliance with the applicable laws and regulations concerning the safety of its master meter systems without engaging in litigation. On August 6, 2021, Westover filed an Act 127 registration form, and on September 17, 2021, filed an amended Act 127 registration form that included several of its apartment complexes.[2] However, Westover's

[2] *See* Docket No. A-2021-3028141.

compliance efforts abruptly ceased in early November 2021, when I&E received a communication from the Company's outside counsel challenging the applicability of federal pipeline safety laws and regulations on intrastate pipelines.[3]

Though it was under no obligation to do so, I&E explained the jurisdictional framework for pipeline safety regulation of intrastate master meter systems in its letter dated November 22, 2021.[4] Rejecting I&E's legal explanation, Westover filed the instant Petition on December 13, 2021, requesting that the Commission declare that Westover is not subject to Act 127 and that Westover's registration with the Commission as an Act 127 pipeline operator be deemed null and void.

As stated in greater detail herein, Westover's position is legally erroneous and must be swiftly rejected as it contradicts well established law that the intrastate distribution of gas, such as through master meter systems, is subject to the Federal pipeline safety laws and regulations.

II. LEGAL STANDARDS APPLICABLE TO DECLARATORY ORDERS

Section 331(f) of the Public Utility Code ("Code") authorizes the Commission to "issue a declaratory order to terminate a controversy or remove uncertainty."[5] Under Section 331(f), the issuance of a declaratory order is subject to the Commission's discretion.[6]

---

3 *See* Appendix 3 of Westover's Petition.
4 *See* Appendix 4 of Westover's Petition.
5 66 Pa.C.S. § 331(f); s*ee also* 52 Pa. Code § 5.42(a).
6 66 Pa.C.S. § 331(f).

Pennsylvania Courts have determined that Commission orders disposing of controversy or uncertainty through such petitions are adjudications, and when final, result in binding orders like any other Commission order.[7] Thus, the Commission may use its discretion to grant or deny such petitions to achieve finality on a controversy or uncertainty concerning existing rights, status, or legal relations.[8] Moreover, the Commission has determined that a declaratory order should be issued only when there is no outstanding issue of fact.[9]

Westover, as the proponent of a rule or order, has the burden of proof.[10] Such a showing must be by a preponderance of the evidence.[11] Additionally, the Commission's decision must be supported by substantial evidence in the record. More than a mere trace of evidence or a suspicion of the existence of a fact ought to be established.[12]

With respect to the instant matter, I&E requests that the Commission utilize its discretion to issue a Declaratory Order that conclusively determines Westover to be a pipeline operator subject to Act 127. There are no material facts in dispute, rather, the question at issue is a matter of law.

---

7 *Professional Paramedical Services, Inc. v. Pa. Pub. Util. Comm'n*, 525 A.2d 1274, 1276 (Pa. Cmwlth. 1987).

8 *Pennsylvania Indep. Petroleum Producers v. Dep't of Envtl. Res.*, 525 A.2d 829 (Pa. Cmwlth. 1987), *aff'd*, 550 A.2d 195 (Pa. 1988), *cert. denied*, 489 U.S. 1096 (1989).

9 *Petition of the Pennsylvania State University for Declaratory Order Concerning the Generation Rate Cap of the West Penn Power Company d/b/a Allegheny Power; Petition of the West Penn Power Company d/b/a Allegheny Power for Approval of its Retail Electric Default Service Program and Competitive Procurement Plan for Service at the Conclusion of the Restructuring Transition Period for Tariff 37 Providing Service to the Pennsylvania State University*, Docket Nos. P-2007-2001828 and P-2008-2021608 (Order entered September 11, 2008).

10 66 Pa.C.S. § 332(a).

11 *Samuel J. Lansberry, Inc. v. Pa. Pub. Util. Comm'n*, 578 A.2d 600 (Pa. Cmwlth. 1990).

12 *Norfolk & Western Ry. Co. v. Pa. Pub. Util. Comm'n*, 413 A.2d 1037 (Pa. 1980).

The issuance of such a Declaratory Order would send a clear message not only to Westover but also to similarly situated pipeline operators that have not yet registered with the Commission that master meter systems are, without question, subject to the Commission's safety oversight.

III. ANSWER

As further support to deny this Petition, I&E offers the following responses in enumerated fashion:

Introduction

1. Admitted upon information and belief. By way of further response, Westover, and not the local natural gas distribution company ("NGDC"), owns and maintains the pipeline facilities that transport natural gas from the NGDC to Westover's tenants.

2. Admitted in part and denied in part. It is admitted that I&E sent Westover correspondence dated July 28, 2021. This letter speaks for itself, and any interpretation or characterization thereof is denied. It is also denied that I&E *first* notified on July 28, 2021 that it was investigating Westover's compliance with Act 127.

3. Admitted in part and denied in part. It is admitted that I&E sent Westover the correspondence set forth in Appendix 2 of Westover's Petition. The letters speak for themselves, and any interpretation or characterization thereof is denied. It is also admitted that Westover filed an Act 127 pipeline operator registration with the Commission. I&E is without knowledge or information sufficient to form a belief as to the truth of the remaining averments in this Paragraph and, therefore, they are denied.

4. Admitted. By way of further response, Westover's November 4, 2021 letter speaks for itself, and any interpretation or characterization thereof is denied.

5. Admitted. By way of further response, I&E's November 22, 2021 letter speaks for itself, and any interpretation or characterization thereof is denied.

6. Denied. The averment states a conclusion of law and request for relief to which no response is required. To the extent a response is deemed to be required, it is denied.

The Parties

7. Admitted upon information and belief.

8. Admitted upon information and belief.

9. Admitted.

Purported Facts

10. Admitted upon information and belief.

11. Admitted upon information and belief. By way of further response, Westover, not the local NGDC, owns and maintains the pipeline facilities that are located on its property and which transport natural gas to Westover's tenants.

12. Denied. I&E is without knowledge or information sufficient to form a belief as to the truth of the averments in this Paragraph and, therefore, they are denied and strict proof thereof is demanded.

Legal Standard

13. Denied. The averment states a conclusion of law to which no response is required. To the extent a response is deemed to be required, it is denied.

14. Admitted upon information and belief.

Argument

15. Denied. The averment states a conclusion of law to which no response is required. To the extent a response is deemed to be required, it is denied.

16. Denied. The averment states a conclusion of law to which no response is required. To the extent a response is deemed to be required, it is denied. By way of further response, the November 22, 2021 letter speaks for itself, and any interpretation or characterization thereof is denied.

17. Denied. The averment states a conclusion of law to which no response is required. To the extent a response is deemed to be required, it is denied. By way of further answer, it is specifically denied that the Commission lacks authority to regulate Westover pursuant to Act 127.

18. Denied. The averment states a conclusion of law to which no response is required. To the extent a response is deemed to be required, it is denied. By way of further answer, it is specifically denied that selective and discriminatory prosecution is increased absent regulations implementing Act 127. It is also denied that binding norms do not exist as Act 127 provides such binding norms.

19. Denied. The averment states a conclusion of law to which no response is required. To the extent a response is deemed to be required, it is denied. By way of further response, Act 127 speaks for itself, and any interpretation or characterization thereof is denied.

20. Denied. The averment states a conclusion of law to which no response is required. To the extent a response is deemed to be required, it is denied. By way of further response, Act 127 speaks for itself, and any interpretation or characterization thereof is denied.

21. Denied. The averment states a conclusion of law to which no response is required. To the extent a response is deemed to be required, it is denied. By way of further response, Act 127 speaks for itself, and any interpretation or characterization thereof is denied.

22. Admitted in part and denied in part. It is admitted that I&E contends that Westover is a pipeline operator because it operates master meter systems. The remainder of the averment states a conclusion of law to which no response is required. To the extent a response is deemed to be required, it is denied. By way of further response, 49 CFR § 191.3 speaks for itself, and any interpretation or characterization thereof is denied.

23. Denied. The averment states a conclusion of law to which no response is required. To the extent a response is deemed to be required, it is denied. By way of further response, 49 CFR § 191.3 speaks for itself, and any interpretation or characterization thereof is denied.

24. Denied. The averment states a conclusion of law to which no response is required. To the extent a response is deemed to be required, it is denied. By way of further response, 49 CFR § 191.3 speaks for itself, and any interpretation or characterization thereof is denied.

25. Admitted in part and denied in part. Upon information and belief, it is admitted that Westover does not gather, transmit, or store gas. The remainder of the averment states a conclusion of law to which no response is required. To the extent a response is deemed to be required, it is denied.

26. Denied. The minimum Federal pipeline safety standards apply broadly to both interstate and intrastate pipelines through the Federal Pipeline Safety Act, 49 U.S.C. §§ 60101-60143 ("PSA"). Congress originally enacted the PSA in 1968 "to provide adequate protection against risks to life and property posed by pipeline transportation and pipeline facilities by improving the regulatory and enforcement authority of the Secretary of Transportation."[13]

The Commerce clause of the U.S. Constitution[14] is the authority underlying the PSA. It permits, *inter alia*, Federal regulation of the transportation of natural gas by pipeline. Pursuant to that authority, Congress may mandate Federal regulation for the use of the channels of interstate commerce, the instrumentalities of and persons or things in interstate commerce, and any activity that has a substantial effect on interstate commerce.[15] With regard to the third category, Congress is empowered to regulate purely local activities that are part of an economic "class of activities" that have a substantial effect on interstate commerce.[16] Regulation is squarely within Congress'

---

[13] Pipeline Safety Act, Pub. L. 90–481, 82 Stat. 720 (Aug. 12, 1968),[13] currently codified at 49 U.S.C. § 60102(a)(1). A link to the original PSA can be found here: Natural Gas Pipeline Safety Act of 1968.pdf (dot.gov)

[14] U.S. Const. Art. I, § 8, cl. 3.

[15] *Gonzales v. Raich*, 545 U.S. 1, 16-17 (2005).

[16] *Id.* at 17, citing *Perez v. U.S.,* 402 U.S. 146, 151 (1971); *Wickard v. Filburn,* 317 U.S. 111, 128-129 (1942).

commerce power when production of a commodity meant for home consumption, be it wheat or marijuana, has a substantial effect on supply and demand in the national market for that commodity.[17] The transportation of gas by pipeline has a substantial effect on interstate commerce.

Moreover, the legislative history of the PSA demonstrates that Congress clearly intended that the transportation of gas apply to intrastate pipeline systems distributing natural gas. Congress reported as follows when defining the transportation covered under the PSA:

> The term "transportation of gas" is defined as the gathering, transmission or distribution of gas by pipeline or its storage in or affecting interstate or foreign commerce. With exception as to gathering in certain circumstances, this means all aspects of the transportation of gas from the well head to the consumer. As testified by Secretary Boyd:
>
> > 'There is no question but what every element of a gas gathering, transmission, and distribution line is moving gas which is either in or affects interstate commerce. * * * (p. 35).
> >
> > I don't think that it even requires any elasticity of the commerce clause of the Constitution to define 99 44/100 percent of this activity as being clearly within the commerce clause. (p. 36).'

H.R. Rep. No. 90-1390, at 18 (May 15, 1968). The House Report is attached hereto as Attachment B.

[17] *Delta Smelt Consol. Cases v. Salazar*, 663 F. Supp. 2d 922, 937, (E.D. Cal. 2009)(citing *Gonzales v. Raich*, 545 U.S. 1 (2005)).

Indeed, Congress provided PHMSA and States with the authority to regulate the transportation of natural gas by pipeline, including the intrastate transportation of natural gas. The PSA defines "intrastate gas pipeline facility" as a "gas pipeline facility and transportation of gas within a State not subject to the jurisdiction of the [Federal Energy Regulatory] Commission pursuant to the Natural Gas Act, 15 U.S.C. §§ 717, *et seq.*"[18] Notably, the Natural Gas Act limits the jurisdiction of the Federal Energy Regulatory Commission ("FERC") to the transportation and sale of natural gas in interstate and foreign commerce and not merely *affecting* interstate or foreign commerce, as is the case under the PSA.[19] PHMSA has likewise determined that even though the transportation of gas may entirely be within one State, every element of a gas gathering, transmission, and distribution line is moving gas that is either in or affects interstate commerce.[20] Accordingly, pipeline safety jurisdiction is not limited only to interstate pipelines.

Pursuant to the PSA, States may assume responsibility for regulating intrastate pipeline facilities by submitting an annual certification to the Secretary of the U.S. Department of Transportation pursuant to 49 U.S.C. § 60105. A State that has submitted a certification under Section 60105(a) of the PSA may adopt additional or more stringent safety standards for intrastate pipeline facilities and intrastate pipeline transportation only if those standards are compatible with the minimum Federal pipeline safety standards.[21]

---

18 49 U.S.C. § 60101(a)(9).
19 *See* 15 U.S.C. § 717(a); 49 U.S.C. § 60101(a)(8)(A)(ii).
20 PHMSA Interpretation PI-71-036 (March 16, 1971). PI-71-036 is attached hereto as Attachment C.
21 49 U.S.C. § 60104.

Pennsylvania, through the Commission's I&E Safety Division, is certified to regulate the safety of intrastate pipelines.

The Pennsylvania General Assembly adopted the Federal pipeline safety laws and regulations, as well as all amendments thereto, as the safety standards for non-public utility pipeline operators in Pennsylvania by enacting Act 127.[22] Additionally, the Pennsylvania General Assembly authorized the Commission to supervise and regulate pipeline operators within Pennsylvania consistent with (but not more stringent than) Federal pipeline safety laws.[23] In recognition that Federal pipeline safety laws and regulations apply to intrastate pipelines, the definitions of "pipeline" and "pipeline facility" in Act 127 exclude pipelines and pipeline facilities that are subject to the exclusive jurisdiction of FERC.[24] Moreover, "transportation of gas" is defined in Act 127 as "[t]he gathering, transmission or distribution of gas by pipeline or the storage of gas" and lacks any requirement that such transportation be interstate.

a. Admitted in part and denied in part. Upon information and belief, it is admitted that Westover purchases gas in Pennsylvania from an NGDC. The remainder of the averment states a conclusion of law to which no response is required. To the extent a response is deemed to be required, it is denied.

b. Admitted upon information and belief.

---

22 58 P.S. § 801.302.
23 58 P.S. § 801.501.
24 58 P.S. § 801.102.

c. Admitted upon information and belief. By way of further answer, Congress has determined that the purchase, transportation, and sale of natural gas within one state *affects* interstate commerce and triggers the applicability of Federal pipeline safety laws.

27. Denied. It is specifically denied that Westover's transportation of gas does not affect interstate or foreign commerce.

28. Denied. It is specifically denied that Westover is not a "pipeline operator" as defined in Act 127 since it owns and operates facilities regulated under Federal pipeline safety laws.

29. Denied. The averment states a conclusion of law to which no response is required. To the extent a response is deemed to be required, it is denied.

30. Denied. The averment states a conclusion of law to which no response is required. To the extent a response is deemed to be required, it is denied.

31. Denied. It is denied that intrastate natural gas systems are not within the purview of Act 127. To hold otherwise would render Act 127 meaningless. Since 1968, intrastate natural gas systems have been subject to Federal pipeline safety standards. Act 127, which became effective in 2012, adopted such standards and applied them to pipelines operated by non-public utility pipeline operators in Pennsylvania. As the operator of master meter systems at apartment complexes, Westover fits squarely within the definition of "pipeline operator." It is specifically denied that Westover is not engaged in the "transportation of gas" as defined in the Federal pipeline safety laws.

32. Admitted in part and denied in part. It is admitted that PHMSA has issued several letters of interpretation concerning master meter systems. Such letters provide guidance and are persuasive. By way of further response, PHMSA has also issued letters of interpretation finding the definition of "master meter system" to be applicable to an apartment complex in Indiana.[25] The remainder of the averment states a conclusion of law to which no response is required. To the extent a response is deemed to be required, it is denied.

33. Admitted in part and denied in part. It is admitted that landlords operating natural gas systems for compensation to tenants can be construed to be master meter systems subject to Federal pipeline safety laws. It is denied that the General Assembly did not intend to regulate these entities under Act 127 and Westover presents no legislative history to illustrate that the General Assembly omitted master meter systems at apartment complexes from being subject to the Federal pipeline safety standards. I&E is without knowledge or information sufficient to form a belief as to the truth of the averment reflecting the number of master meter systems in Pennsylvania and, therefore, it is denied and strict proof thereof is demanded.

34. Denied. Act 127 authorizes and obligates the Commission to regulate intrastate master meter systems that are subject to Federal pipeline safety laws and regulations, such as Westover's master meter systems. Master meter systems were subject to Federal pipeline safety laws and regulations prior to the enactment of Act

[25] PHMSA Interpretation PI-11-0014 (March 27, 2012) and (August 27, 2012). PI-11-0014 is attached hereto as Attachment D.

127.[26] However, the Commission lacked authority to regulate such master meter systems not operated by public utilities until Act 127 became effective.

35. Denied. It is denied that I&E's correspondence fails to explain how Westover is subject to the Federal pipeline safety laws and regulations. By way of further response, the November 22, 2021 letter speaks for itself, and any interpretation or characterization thereof is denied. The remaining averments state a conclusion of law to which no response is required. To the extent a response is deemed to be required, they are denied.

Conclusion

Denied. The averment sets forth a conclusion and request for relief to which no response is required. To the extent a response is deemed to be required, it is denied.

[26] *See Assessment of the Need for an Improved Inspection Program for Master Meter Systems*, Report of the Secretary of Transportation to Congress, prepared pursuant to Section 108 of Public Law 100-561, January 2002. The Report has been attached hereto as Attachment E.

WHEREFORE, based upon the reasons stated above, the Bureau of Investigation and Enforcement of the Pennsylvania Public Utility Commission respectfully requests that the Commission expeditiously deny the Petition for Declaratory Order of the Westover Property Management Company, L.P. d/b/a Westover Companies, deem Westover to be a pipeline operator subject to the Gas and Hazardous Liquids Pipelines Act, 58 P.S. §§ 801.101, *et seq*., and direct Westover to immediately comply with all applicable laws and regulations related to pipeline safety.

Respectfully submitted,

Stephanie M. Wimer
Senior Prosecutor
PA Attorney ID No. 207522

Kayla L. Rost
Prosecutor
PA Attorney ID No. 322768

Michael L. Swindler
Deputy Chief Prosecutor
PA Attorney ID No. 43319

Bureau of Investigation and Enforcement
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120
(717) 772-8839
stwimer@pa.gov

Dated: January 3, 2022

I&E
Attachment A

COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
COMMONWEALTH KEYSTONE BUILDING
400 NORTH STREET, HARRISBURG, PA 17120

BUREAU OF
INVESTIGATION
&
ENFORCEMENT

June 2, 2021

Via Electronic Mail Only
Mr. Alexander Steffanelli
Westover Property Management Company, L.P.
d/b/a Westover Companies
550 American Avenue
Suite 1
King of Prussia, PA 19406
alex@westovercompanies.com

Re: Westover Property Management Company, L.P. d/b/a Westover Companies
Bp8CaseID# 3025977
I&E-Enforcement Warning Letter

Dear Mr. Steffanelli,

The purpose of this letter is to provide Westover Property Management Company, L.P. d/b/a Westover Companies ("Westover") with one final opportunity to respond to the Bureau of Investigation and Enforcement's ("I&E") request that it comply with the laws and regulations governing its master meter system. If compliance is not achieved within the timeframe set forth herein, I&E is prepared to initiate a formal enforcement action before the Commission that would seek the imposition of **stiff civil penalties** on Westover, up to $225,134 per violation for each day the violation continues, subject to a maximum penalty of $2,251,334 for a related series of violations.

On May 22 and 23, 2018, inspectors from the I&E Safety Division of the Pennsylvania Public Utility Commission[1] visited a property owned and managed by Westover in response to a natural gas leak and service outage reported by PECO Gas. PECO Gas reported that the outage impacted a master meter system at the Jamestown Village Apartments located at 2501 Maryland Road, Willow Grove, PA 19090. After ensuring that the leak was properly repaired and service restored, the Safety Division shifted the focus of its investigation to examine whether the pipeline facilities at the Jamestown Village Apartments constitute a "master meter system" as defined in 49 CFR § 191.3 and subject to Commission oversight through the Gas and Hazardous Liquids Pipelines Act ("Act 127"), 58 P.S. §§ 801.101, *et seq.*

On December 2, 2020, the Safety Division completed an inspection of Westover's facilities and records, and concluded that Westover operates a regulated master meter system. During the inspection, inspectors from the Safety Division discussed with representatives from Westover the requirements that are necessary for Westover to comply with Act 127 and

[1] The Safety Division serves as an agent of the federal Pipeline and Hazardous Materials Safety Administration ("PHMSA") and enforces compliance with Pennsylvania laws and regulations as well as federal pipeline safety laws and regulations governing the transportation of natural gas.

the federal pipeline safety regulations. On December 17, December 24, and December 31, 2020 as well as on January 11, and January 14, 2021, the Safety Division attempted to schedule a follow-up inspection with Westover that would review the manual and procedures that the Safety Division asked Westover to develop in order to become compliant. Westover did not respond to any of the Safety Division's attempts to communicate with it.

By letter dated February 3, 2021, the Safety Division issued a non-compliance letter, NC-77-20, finding Westover to be in violation of 49 CFR §§ 192.13 and 192.605 for failing to have a manual as required in Part 192 of the federal pipeline safety regulations and a procedural manual for Operations, Maintenance and Emergencies ("O&M Manual"). The Safety Division requested that Westover respond to NC-77-20 in writing on or before March 17, 2021, with a response that demonstrates that it developed and implemented an O&M Manual and a process to document and track all records required by the pertinent manuals and procedures. Westover failed to respond to NC-77-20.

By letter dated March 30, 2021, the Safety Division issued a second non-compliance letter, NC-08-21, finding Westover to be in violation of 49 CFR § 190.203(a) (permitting agents of PHMSA to enter and inspect the records and properties of persons to determine the compliance of such persons with federal pipeline safety laws and regulations). The Safety Division requested that Westover respond in writing on or before April 29, 2021, with a response that schedules the Safety Division's follow-up inspection of Westover's facilities and records and replies to NC-77-20. In NC-08-21, the Safety Division warned that a continued failure to respond would result in I&E taking legal action against Westover, including seeking the imposition of civil penalties. Westover failed to respond to NC-08-21.

The Safety Division referred this matter to I&E-Enforcement, which is the prosecutory arm of the Commission empowered to take legal action to enforce compliance with, *inter alia*, Act 127 and federal pipeline safety laws and regulations. Prior to initiating a formal enforcement proceeding before the Commission, which would entail extensive discovery, an evidentiary hearing, potential travel for witnesses and the filing of post-hearing briefs, I&E-Enforcement deemed it appropriate to make one final attempt to elicit Westover's compliance with the applicable law. I&E requests that Westover perform the following **on or before June 22, 2021**:

- Develop and implement an O&M Manual as required by 49 CFR Part 192;
- Develop a process to document and track all records required by the applicable manuals and procedures;
- Arrange for a follow-up inspection with Safety Division Supervisor T. Cooper Smith and Safety Division Engineer S. Orr at tcsmith@pa.gov and scoorr@pa.gov, respectively; and
- Register as a Pennsylvania pipeline operator pursuant to Act 127.

Should Westover fail to fully perform each of the above-listed items by the date referenced herein, I&E-Enforcement will swiftly file a formal complaint against Westover

that seeks the imposition of a civil penalty. I&E-Enforcement's requested civil penalty would consider Westover's well-documented failure to cooperate with the Safety Division's investigation. Please be advised that I&E is authorized to seek a civil penalty of $225,134 per violation for each day the violation continues, with a maximum penalty of $2,251,334 for a related series of violations.[2] Furthermore, as a corporation, Westover is required to be represented by legal counsel in contested proceedings before the Commission.

Thank you for your immediate attention to this important matter.

Sincerely,

Stephanie M. Wimer
Senior Prosecutor

Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120
(717) 772-8839
stwimer@pa.gov

cc: Michael L. Swindler, I&E Deputy Chief Prosecutor (*via e-mail only*)
Kayla L. Rost, I&E Prosecutor (*via e-mail only*)
Robert D. Horensky, Manager - Safety Division (*via e-mail only*)

[2] *See* 58 P.S. § 801.502 (a); 49 CFR § 190.223, as modified by *Department of Transportation; Civil Penalty Amounts.* 86 Fed. Reg. 23241 (May 3, 2021).

I&E
Attachment B

90TH CONGRESS } HOUSE OF REPRESENTATIVES { REPORT
2d Session } { No. 1390

NATURAL GAS PIPELINE SAFETY ACT OF 1968

MAY 15, 1968.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. STAGGERS, from the Committee on Interstate and Foreign Commerce, submitted the following

REPORT

[To accompany S. 1166]

The Committee on Interstate and Foreign Commerce, to whom was referred the bill (S. 1166) to authorize the Secretary of Transportation to prescribe safety standards for the transportation of natural and other gas by pipeline, and for other purposes, having considered the same, report favorably thereon with an amendment and recommend that the bill as amended do pass.

The amendment is as follows:

Strike out all after the enacting clause and insert in lieu thereof the following:

That this Act may be cited as the "Natural Gas Pipeline Safety Act of 1968".

DEFINITIONS

SEC. 2. As used in this Act—

(1) "Person" means any individual, firm, joint venture, partnership, corporation, association, State, municipality, coopertive association, or joint stock association, and includes any trustee, receiver, assignee, or personal representative thereof;

(2) "Gas" means natural gas, flammable gas, or gas which is toxic or corrosive;

(3) "Transportation of gas" means the gathering, transmission or distribution of gas by pipeline or its storage in or affecting interstate or foreign commerce except that it shall not include the gathering of gas in those rural locations which lie outside the limits of any incorporated or unincorporated city, town, village, or any other designated residential or commercial area such as a subdivision, a business or shopping center, a community development, or any similar populated area which the Secretary may define as a nonrural area;

(4) "Pipeline facilities" includes, without limitation, new and existing pipe, rights-of-way, and any equipment, facility, or building used in the transportation of gas or the treatment of gas during the course of transportation, but "rights-of-way" as used in this Act does not authorize the Secretary to prescribe the location or routing of any pipeline facility;

(5) "State" includes each of the several States, the District of Columbia, and the Commonwealth of Puerto Rico;

(6) "Municipality" means a city, county, or any other political subdivision of a State;

(7) "National organization of State commissions" means the national organization of the State commissions referred to in part II of the Interstate Commerce Act;

(8) "Interstate transmission facilities" means pipeline facilities used in the transportation of gas which are subject to the jurisdiction of the Federal Power Commission under the Natural Gas Act; and

(9) "Secretary" means the Secretary of Transportation.

STANDARDS ESTABLISHED

SEC. 3. (a) As soon as practicable but not later than three months after the enactment of this Act, the Secretary shall, by order, adopt as interim minimum Federal safety standards for pipeline facilities and the transportation of gas in each State the State standards regulating pipeline facilities and the transportation of gas within such State on the date of enactment of the Act. In any State in which no such standards are in effect, the Secretary shall, by order, establish interim Federal safety standards for pipeline facilities and the transportation of gas in such State which shall be such standards as are common to a majority of States having safety standards for the transportation of gas and pipeline facilities on such date. Interim standards shall remain in effect until amended or revoked pursuant to this section. Any State agency may adopt such additional or more stringent standards for pipeline facilities and the transportation of gas not subject to the jurisdiction of the Federal Power Commissioner under the Natural Gas Act as are not incompatible with the Federal minimum standards, but may not adopt or continue in force after the interim standards provided for above become effective any such standards applicable to interstate transmission facilities.

(b) Not later than twenty-four months after the enactment of this Act, and from time to time thereafter, the Secretary shall, by order, establish minimum Federal safety standards for the transportation of gas and pipeline facilities. Such standards may apply to the design, installation, inspection, testing, construction, extension, operation, replacement, and maintenance of pipeline facilities. Standards affecting the design, installation, construction, initial inspection, and initial testing shall not be applicable to pipeline facilities in existence on the date such standards are adopted. Whenever the Secretary shall find a particular facility to be hazardous to life or property, he shall be empowered by order to require the person operating such facility to take such steps necessary to remove such hazards. Such Federal safety standards shall be practicable and designed to meet the need for pipeline safety. In prescribing such standards, the Secretary shall consider—

(1) relevant available pipeline safety data;

(2) whether such standards are appropriate for the particular type of pipeline transportation;

(3) the reasonableness of any proposed standards; and

(4) the extent to which such standards will contribute to public safety.

Any State agency may adopt such additional or more stringent standards for pipeline facilities and the transportation of gas not subject to the jurisdiction of the Federal Power Commission under the Natural Gas Act as are not incompatible with the Federal minimum standards, but may not adopt or continue in force after the minimum Federal safety standards referred to in this subsection become effective any such standards applicable to interstate transmission facilities.

(c) Any standards prescribed under this section, and amendments thereto, shall become effective thirty days after the date of issuance of such standards unless the Secretary, for good cause recited, determines an earlier or later effective date is required as a result of the period reasonably necessary for compliance.

(d) The provisions of subchapter II of chapter 5 of title 5 of the United States Code shall apply to all orders establishing, amending, revoking, or waiving compliance with, any standard established under this Act. The Secretary shall afford interested persons an opportunity to participate fully in the establishment of such safety standards through submission of written data, views, or arguments with opportunity to present oral testimony and argument.

(e) Upon application by any person engaged in the transportation of gas or the operation of pipeline facilities, the Secretary may, after notice and opportunity for hearing and under such terms and conditions and to such extent as he deems appropriate, waive in whole or in part compliance with any standard established under this Act, if he determines that a waiver of compliance with such standard is not inconsistent with gas pipeline safety. The Secretary shall state his reasons for any such waiver. A State agency, with respect to which there is in effect a certification pursuant to section 5(a) or an agreement pursuant to section 5(b), may waive compliance with a safety standard in the same manner as the

Secretary, provided such State agency gives the Secretary written notice at least sixty days prior to the effective date of the waiver. If, before the effective date of a waiver to be granted by a State agency, the Secretary objects in writing to the granting of the waiver, any State agency action granting the waiver will be stayed. After notifying such State agency of his objection, the Secretary shall afford such agency a prompt opportunity to present its request for waiver, with opportunity for hearing, and the Secretary shall determine finally whether the requested waiver may be granted.

TECHNICAL PIPELINE SAFETY STANDARDS COMMITTEE

SEC. 4. (a) The Secretary shall establish a Technical Pipeline Safety Standards Committee. The Committee shall be appointed by the Secretary, after consultation with public and private agencies concerned with the technical aspect of the transportation of gas or the operation of pipeline facilities, and shall be composed of fifteen members each of whom shall be experienced in the safety regulation of the transportation of gas and of pipeline facilities or technically qualified by training and experience in one or more fields of engineering applied in the transportation of gas or the operation of pipeline facilities to evaluate gas pipeline safety standards, as follows:

(1) Five members shall be selected from governmental agencies, including State and Federal Governments, two of whom, after consultation with representatives of the national organization of State commissions, shall be State commissioners;

(2) Four members shall be selected from the natural gas industry after consultation with industry representatives, not less than three of whom shall be currently engaged in the active operation of natural gas pipelines; and

(3) Six members shall be selected from the general public.

(b) The Secretary shall submit to the Committee all proposed standards and amendments to such standards and afford such Committee a reasonable opportunity, not to exceed ninety days, unless extended by the Secretary, to prepare a report on the technical feasibility, reasonableness, and practicability of each such proposal. Each report by the Committee, including any minority views, shall be published by the Secretary and form a part of the proceedings for the promulgation of standards. In the event that the Secretary rejects the conclusions of the majority of the Committee, he shall not be bound by such conclusions but shall publish his reasons for rejection thereof. The Committee may propose safety standards for pipeline facilities and the transportation of gas to the Secretary for his consideration. All proceedings of the Committee shall be recorded and the record of each such proceeding shall be available for public inspection.

(c) Members of the Committee other than Federal employees may be compensated at a rate to be fixed by the Secretary not to exceed $100 per diem (including travel time) when engaged in the actual duties of the Committee. All members, while away from their homes or regular places of business, may be allowed travel expenses, including per diem in lieu of subsistence as authorized by section 5703 of title 5, United States Code, for persons in the Government service employed intermittently. Payments under this section shall not render members of the Committee employees or officials of the United States for any purpose.

STATE CERTIFICATIONS AND AGREEMENTS

SEC. 5. (a) Except as provided in subsection (d) of this section, the provisions of this Act shall not apply to pipeline facilities and the transportation of gas (not subject to the jurisdiction of the Federal Power Commission under the Natural Gas Act) within a State when the safety standards and practices applicable to same are regulated by a State agency (including a municipality) which submits to the Secretary an annual certification that such State agency (1) has regulatory jurisdiction over the safety standards and practices of such pipeline facilities and transportation of gas; (2) has adopted each Federal safety standard applicable to such pipeline facilities and transportation of gas established under this Act as of the date of the certification; (3) is enforcing each such standard; and (4) has the authority to require record maintenance, reporting, and inspection substantially the same as are provided under section 12 and the filing for approval of plans of inspection and maintenance described in section 11; and that the law of the State makes provision for the enforcement of the safety standards of such State agency by way of injunctive and monetary sanctions. Each annual certification shall include a report, in such form as the Secretary may by regula-

tion provide, showing (i) name and address of each person subject to the safety jurisdiction of the State agency; (ii) all accidents or incidents reported during the preceding twelve months by each such person involving personal injury requiring hospitalization, fatality, or property damage exceeding $1,000, together with a summary of the State agency's investigation as to the cause and circumstances surrounding such accident or incident; (iii) the record maintenance, reporting, and inspection practiced by the State agency to enforce compliance with such Federal safety standards, including a detail of the number of inspections made of pipeline facilities by the State agency during the preceding twelve months; and (iv) such other information as the Secretary may require. The report included with the first annual certification need not show information unavailable at that time. If after receipt of annual certification, the Secretary determines that the State agency is not satisfactorily enforcing compliance with Federal safety standards, he may, on reasonable notice and after opportunity for hearing, reject the certification or take such other action as he deems appropriate to achieve adequate enforcement including the assertion of Federal jurisdiction.

(b) With respect to any pipeline facilities and transportation of gas (not subject to the juridsiction of the Federal Power Commission under the Natural Gas Act) for which the Secretary does not receive an annual certification under subsection (a) of this section, the Secretary is authorized by agreement with a State agency (including a municipality) to authorize such agency to assume responsibility for, and carry out on behalf of the Secretary as it relates to pipeline facilities and the transportation of gas not subject to the jurisdiction of the Federal Power Commission under the Natural Gas Act the necessary actions to—

(1) establish an adequate program for record maintenance, reporting, and inspection designed to assist compliance with Federal safety standards;

(2) establish procedures for approval of plans of inspection and maintenance substantially the same as are required under section 11;

(3) implement a compliance program acceptable to the Secretary including provision for inspection of pipeline facilities used in such transportation of gas; and

(4) cooperate fully in a system of Federal monitoring of such compliance program and reporting under regulations prescribed by the Secretary.

Any agreement executed pursuant to this subsection shall require the State agency promptly to notify the Secretary of any violation or probable violation of a Federal safety standard which it discovers as a result of its program.

(c)(1) Upon an application submitted not later than September 30 in any calendar year, the Secretary is authorized to pay out of funds appropriated pursuant to section 15 up to 50 per centum of the cost of the personnel, equipment, and activities of a State agency reasonably required to carry out a safety program under a certification under subsection (a) or an agreement under subsection (b) of this section during the following calendar year. No such payment may be made unless the State agency making application under this subsection gives assurances satisfactory to the Secretary that the State agency will provide the remaining cost of such a safety program and that the aggregate expenditures of funds of the State, exclusive of Federal grants, for gas safety programs will be maintained at a level which does not fall below the average level of such expenditures for the last two fiscal years preceding the date of enactment of this section.

(2) Payments under this section may be made in installments, in advance or by way of reimbursement, with necessary adjustments on account of overpayments and underpayments.

(3) The Secretary may, by regulation, provide for the form and manner of filing of applications under this section, and for such reporting and fiscal procedures as he deems necessary to assure the proper accounting for Federal funds.

(d) A certification which is in effect under subsection (a) of this section shall not apply with respect to any new or amended Federal safety standard for pipeline facilities or the transportation of gas, not subject to the jurisdiction of the Federal Power Commission under the Natural Gas Act, established pursuant to this Act after the date of such certification. The provisions of this Act shall apply to any such new or amended Federal safety standard until the State agency has adopted such standard and has submitted an appropriate certification in accordance with the provisions of subsection (a) of this section.

(e) Any agreement under this section may be terminated by the Secretary if, after notice and opportunity for a hearing, he finds that the State agency has failed to comply with any provision of such agreement. Such finding and termination shall be published in the Federal Register, and shall become effective no sooner than fifteen days after the date of publication.

JUDICIAL REVIEW OF ORDERS

SEC. 6. (a) Any person who is or will be adversely affected or aggrieved by any order issued under this Act may at any time prior to the sixtieth day after such order is issued file a petition for a judicial review with the United States Court of Appeals for the District of Columbia or for the circuit wherein such petitioner is located or has his principal place of business. A copy of the petition shall be forthwith transmitted by the clerk of the court to the Secretary or other officer designated by him for that purpose.

(b) Upon the filing of the petition referred to in subsection (a), the court shall have jurisdiction to review the order in accordance with chapter 7 of title 5 of the United States Code and to grant appropriate relief as provided in such chapter.

(c) The judgment of the court affirming or setting aside, in whole or in part, any such order of the Secretary shall be final, subject to review by the Supreme Court of the United States upon certiorari or certification as provided in section 1254 of title 28 of the United States Code.

(d) Any action instituted under this section shall survive, notwithstanding any change in the person occupying the office of Secretary or any vacancy in such office.

(e) The remedies provided for in this section shall be in addition to and not in substitution for any other remedies provided by law.

COOPERATION WITH FEDERAL POWER COMMISSION AND STATE COMMISSIONS

SEC. 7. Whenever the establishment of a standard or action upon application for waiver under the provisions of this Act, would affect continuity of any gas services, the Secretary shall consult with and advise the Federal Power Commission or State commission having jurisdiction over the affected pipeline facility before establishing the standard or acting on the waiver application and shall defer the effective date until the Federal Power Commission or any such commission has had reasonable opportunity to grant the authorizations it deems necessary. In any proceedings under section 7 of the Natural Gas Act (15 U.S.C. 717f) for authority to establish, construct, operate, or extend a gas pipeline which is or will be subject to Federal or other applicable safety standards, any applicant shall certify that it will design, install, inspect, test, construct, operate, replace, and maintain the pipeline facilities in accordance with Federal and other applicable safety standards and plans for maintenance and inspection. Such certification shall be binding and conclusive upon the Commission unless the relevant enforcement agency has timely advised the Commission in writing that the applicant has violated safety standards established pursuant to this Act.

COMPLIANCE

SEC. 8. (a) Each person who engages in the transportation of gas or who owns or operates pipeline facilities shall—

(1) at all times after the date any applicable safety standard established under this Act takes effect comply with the requirements of such standard; and

(2) file and comply with a plan of inspection and maintenance required by section 11; and

(3) permit access to or copying of records, and make reports or provide information, and permit entry or inspection, as required under section 12.

(b) Nothing in this Act shall affect the common law or statutory tort liability of any person.

CIVIL PENALTY

SEC. 9. (a) Whenever the Secretary has reason to believe any person is violating any portion of section 8(a), or any regulation issued under this Act, he shall give notice to such person and permit such person reasonable opportunity to achieve compliance prior to imposing the penalties hereinafter provided. If compliance has not been achieved in a reasonable time, the Secretary may impose a civil penalty not to exceed $500 for each day that such violation persists, except that the maximum civil penalty shall not exceed $100,000 for any related series of violations. In addition, the Secretary may seek injunctive relief under the provisions set forth in section 10.

(b) Any such civil penalty may be compromised by the Secretary. In determining the amount of such penalty, or the amount agreed upon in compromise, the appropriateness of such penalty to the size of the business of the person charged, the gravity of the violation, and the good faith of the person charged

in attempting to achieve compliance, after notification of a violation, shall be considered. The amount of such penalty, when finally determined, or the amount agreed upon in the compromise, may be deducted from any sums owing by the United States to the person charged or may be recovered in a civil action in the United States district courts.

INJUNCTION AND JURISDICTION

SEC. 10. (a) The United States district courts shall have jurisdiction, subject to the provisions of rule 65 (a) and (b) of the Federal Rules of Civil Procedure, to restrain violations of this Act (including the restraint of transportation of gas or the operation of a pipeline facility) or to enforce standards established hereunder upon petition by the appropriate United States attorney or the Attorney General on behalf of the United States. Whenever practicable, the Secretary shall give notice to any person against whom an action for injunctive relief is contemplated and afford him an opportunity to present his views, and, except in the case of a knowing and willful violation, shall afford him reasonable opportunity to achieve compliance. However, the failure to give such notice and afford such opportunity shall not preclude the granting of appropriate relief.

(b) In any proceeding for criminal contempt for violation of an injunction or restraining order issued under this section, which violation also constitutes a violation of this Act, trial shall be by the court or, upon demand of the accused, by a jury. Such trial shall be conducted in accordance with the practice and procedure applicable in the case of proceedings subject to the provisions of rule 42(b) of the Federal Rules of Criminal Procedure.

(c) Actions under subsection (a) of this section and section 9 may be brought in the district wherein any act or transaction constituting the violation occurred, or in the district wherein the defendant is found or is an inhabitant or transacts business, and process in such cases may be served in any other district of which the defendant is an inhabitant or transacts business or wherever the defendant may be found.

(d) In any action brought under subsection (a) of this section and section 9, subpenas for witnesses who are required to attend a United States district court may run into any other district.

INSPECTION AND MAINTENANCE PLANS

SEC. 11. Each person who engages in the transportation of gas or who owns or operates pipeline facilities not subject to the jursidcition of the Federal Power Commission under the Natural Gas Act shall file with the Secretary or, where a certification or an agreement pursuant to section 5 is in effect, with the State agency, a plan for inspection and maintenance of each such pipeline facility owned or operated by such person, and any changes in such plan, in accordance with regulations prescribed by the Secretary or appropriate State agency. The Secretary may, by regulation, also require persons who engage in the transportation of gas or who own or operate pipeline facilities subject to the provisions of this Act to file such plans for approval. If at any time the agency with responsibility for enforcement of compliance with the standards established under this Act finds that such plan is inadequate to achieve safe operation, such agency shall, after notice and opportunity for a hearing, require such plan to be revised. The plan required by the agency shall be practicable and designed to meet the need for pipeline safety. In determining the adequacy of any such plan, such agency shall consider—

(1) relevant available pipeline safety data;

(2) whether the plan is appropriate for the particular type of pipeline transportation;

(3) the reasonableness of the plan; and

(4) the extent to which such plan will contribute to public safety.

RECORDS, REPORTS, AND INSPECTION FOR COMPLIANCE

SEC. 12. (a) Each person who engages in the transportation of gas or who owns or operates pipeline facilities shall establish and maintain such records, make such reports, and provide such information as the Secretary may reasonably require to enable him to determine whether such person has acted or is acting in compliance with this Act and the standards established under this Act. Each such person shall, upon request of an officer, employee, or agent authorized by the Secretary, permit such officer, employee, or agent to inspect books, papers, records,

and documents relevant to determining whether such person has acted or is acting in compliance with this Act and the standards established pursuant to this Act.

(b) The Secretary is authorized to conduct such monitoring of State enforcement practices and such other inspection and investigation as may be necessary to aid in the enforcement of the provisions of this Act and the standards established pursuant to this Act. He shall furnish the Attorney General any information obtained indicating noncompliance with such standards for appropriate action. For purposes of enforcement of this Act, officers, employees, or agents authorized by the Secretary, upon presenting appropriate credentials to the individual in charge, are authorized (1) to enter upon, at reasonable times, pipeline facilities, and (2) to inspect, at reasonable times and within reasonable limits and in a reasonable manner, such facilities. Each such inspection shall be commenced and completed with reasonable promptness.

(c) Accident reports made by any officer, employee, or agent of the Department of Transportation shall be available for use in any civil, criminal, or other judicial proceeding arising out of such accident. Any such officer, employee, or agent may be required to testify in such proceedings as to the facts developed in such investigations. Any such report shall be made available to the public in a manner which need not identify individuals. All reports on research projects, demonstration projects, and other related activities shall be public information.

(d) All information reported to or otherwise obtained by the Secretary or his representative pursuant to subsection (a), (b), or (c) which information contains or relates to a trade secret referred to in section 1905 of title 18 of the United States Code shall be considered confidential for the purpose of that section, except that such information may be disclosed to other officers or employees concerned with carrying out this Act or when relevant in any proceeding under this Act. Nothing in this section shall authorize the withholding of information by the Secretary or any officer, employee, or agent under his control, from the duly authorized committees of the Congress.

ADMINISTRATION

SEC. 13. (a) The Secretary shall conduct research, testing, development, and training necessary to carry out the provisions of this Act. The Secretary is authorized to carry out the provisions of this section by contract, or by grants to individuals, States, and nonprofit institutions.

(b) Upon request, the Secretary shall furnish to the Federal Power Commission any information he has concerning the safety of any materials, operations, devices, or processes relating to the transportation of gas or the operation of pipeline facilities.

(c) The Secretary is authorized to advise, assist, and cooperate with other Federal departments and agencies and State and other interested public and private agencies and persons, in the planning and development of (1) Federal safety standards, and (2) methods for inspecting and testing to determine compliance with Federal safety standards.

ANNUAL REPORT

SEC. 14. (a) The Secretary shall prepare and submit to the President for transmittal to the Congress on March 17 of each year a comprehensive report on the administration of this Act for the preceding calendar year. Such report shall include—

(1) a thorough compilation of the accidents and casualties occurring in such year with a statement of cause whenever investigated and determined by the National Transportation Safety Board;

(2) a list of Federal gas pipeline safety standards established or in effect in such year with identification of standards newly established during such year;

(3) a summary of the reasons for each waiver granted under section 3(c) during such year;

(4) an evaluation of the degree of observance of applicable safety standards for the transportation of gas and pipeline facilities including a list of enforcement actions, and compromises of alleged violations by location and company name;

(5) a summary of outstanding problems confronting the administration of this Act in order of priority;

(6) an analysis and evaluation of research activities, including the policy implications thereof, completed as a result of Government and private sponsorship and technological progress for safety achieved during such year;

(7) a list, with a brief statement of the issues, of completed or pending judicial actions under the Act;

(8) the extent to which technical information was disseminated to the scientific community and consumer-oriented information was made available to the public;

(9) a compilation of—

(A) certifications filed by State agencies (including municipalities) under section 5(a) which were in effect during the preceding calendar year, and

(B) certifications filed under section 5(a) which were rejected by the Secretary during the preceding calendar year, together with a summary of the reasons for each such rejection; and

(10) a compilation of—

(A) agreements entered into with State agencies (including municipalities) under section 5(b) which were in effect during the preceding calendar year, and

(B) agreements entered into under section 5(b) which were terminated by the Secretary during the preceding calendar year, together with a summary of the reasons for each such termination.

(b) The report required by subsection (a) shall contain such recommendations for additional legislation as the Secretary deems necessary to promote cooperation among the several States in the improvement of gas pipeline safety and to strengthen the national gas pipeline safety program.

APPROPRIATIONS AUTHORIZED

SEC. 15. For the purpose of carrying out the provisions of this Act over a period of three fiscal years, beginning with the fiscal year ending June 30, 1969, there is authorized to be appropriated not to exceed $500,000 for the fiscal year ending June 30, 1969; not to exceed $2,000,000 for the fiscal year ending June 30, 1970; and not to exceed $3,000,000 for the fiscal year ending June 30, 1971.

BRIEF STATEMENT OF PURPOSE OF THE BILL

The purpose of the bill as reported is to provide for the prescription and enforcement of minimum Federal safety standards for the transportation of natural and other gas by pipeline and for pipeline facilities.

To achieve this purpose, the bill:

1. Directs (sec. 3) the Secretary of Transportation within 24 months to establish minimum safety standards for the gathering, transmission, and distribution of gas by pipeline or its storage, and for pipeline facilities used in the transportation or treatment of gas. (Provision is made for interim standards.) Certain standards apply retroactively and the Secretary otherwise is empowered to order removal of hazards to life or property.

2. Places a duty (sec. 8) upon each person engaging in the transportation of gas or who owns or operates pipeline facilities to:

(1) comply with these safety standards;

(2) file and comply with a plan of inspection and maintenance required by section 11; and

(3) permit access to records, make reports, and permit entry or inspection as required by section 12.

3. Provides (sec. 5) for the enforcement of these standards:

(1) as to pipeline facilities and the transportation of gas subject to the jurisdiction of the Federal Power Commission, by the Secretary; and

(2) as to all other pipeline facilities and transportation of gas either by the Secretary or by delegation to a State agency through

either: (a) an effective certification by the State agency to the Secretary; or (b) an effective written agreement between the State agency and the Secretary. (As here used a State agency may mean a municipality.)

4. In addition, the bill provides (sec. 4) for the establishment of a technical pipeline safety standards committee; (sec. 6) for the judicial review of orders; (sec. 7) for cooperation with the Federal Power Commission; (sec. 9) for civil penalities; (sec. 10) for injunctions and jurisdiction; (sec. 13) for research; (sec. 14) for reports to the Congress; and (sec. 15) for the authorization of the sums of $500,000, $2 million, and $3 million for the next 3 fiscal years.

Background and Need for Legislation

Authority to improve the public safety as it is affected by transportation by private auto, bus, truck, railroad train, airplane, ship and pipelines which carry products other than gas and water, now exists in the Department of Transportation. The only significant mode of transportation which is presently beyond the reach of effective comprehensive safety regulation is the transportation of gases by pipeline. The anomaly of this exception is that the Department of Transportation now exercises safety regulation over flammable and other hazardous gases moving other than by pipeline, and safety regulation over pipeline movements of many other commodities including petroleum but not of natural gas.

Growth of Natural Gas Industry

There are now over 800,000 miles of gas pipeline in the United States including approximately 63,000 miles of gathering lines, 224,000 miles of transmission lines, and 536,000 miles of distribution lines. These lines range in diameter from less than 1 inch to 42 inches with 48-inch lines under consideration. They vary in condition from old, unprotected lines to new, well-protected lines. They differ in function from low-pressure distribution lines operated at one-fourth pound per square inch to high-pressure transmission lines operated at 1,300 pounds per square inch, which is equivalent to a force of over 93 tons pushing against the pipeline wall over every square foot. Most of this pipeline system is of recent development.

Since World War II there has been—

1. A tremendous increase in the mileage of interstate transmission lines;
2. An increase in the number of these lines which now traverse populous areas;
3. Introduction of natural gas into city distribution mains originally constructed for manufactured gas; and
4. A tremendous increase in the number of city distribution mains to distribute natural gas.

In 1945 there existed some 27,000 miles of gathering lines. This has more than doubled.

In 1945 there existed some 77,000 miles of transmission lines. This has tripled.

In 1945 there were some 68,000 miles of distribution lines for manufactured gas. The total now is less than 1,000.

In 1945 there existed some 113,000 miles of natural gas distribution lines. This is now nearly five times greater.

In summary, while in 1945 natural gas supplied something like one-eighth of the Nation's total consumption of the energy fuels and energy, today it supplies one-third. The population of the Nation at the same time has grown, but even so, the per capita consumption of natural gas has increased from 30 to 88 million British thermal units.

This tremendous increase in the use of natural gas and the concurrent increase in the number of miles of gaslines makes consideration of the industry's safety record and standards most important. The tremendous growth in the population in the United States during the same period; that is, from 132 to over 200 million, immeasurably increases the need for that consideration.

Natural gas safety

The testimony of the Secretary of Transportation and the Chairman of the Federal Power Commission is that the safety record of the transmission industry has been a relatively good one. Studies made by the Federal Power Commission for the 18 years, 1950 up to November 15, 1967, show that only 67 people have been killed during this time of whom 31 were nonemployees and 36 were employees. Of these 31 of the general public, 17 were killed in one accident. Of the remainder, eight were killed as a result of their bulldozer or plow or road grader cutting the pipeline, and two were killed as a result of a runaway truck smashing into a pipeline metering station.

While the number of deaths has been low in relation to other industries, the recital of this fact alone, however, does not indicate adequately the seriousness of transmission systems failures. Over this period there has been an operational failure about every 5 days and a large number of failures during testing. In most cases the gas which escaped as a result of those failures did not ignite. In addition, the danger of injury and death has not been as great in the case of transmission lines which have been located away from areas of population density. When a transmission line failure occurs in a populated locale and ignition follows, the resulting explosion can be highly destructive. For example, the rupture and explosion at Natchitoches, La., in March 1965, gutted a 13-acre area, killed 17 people, burned five houses, and melted cars and rocks in the vicinity.

As to the safety record of distribution systems Secretary Boyd further testified:

> Problems of the distribution lines are more complicated. Distribution systems have been in existence for many years and much of the original pipe is still in use even though it is now 30 or 40 years old. In some instances, it may be twice as old as that. There is no readily available information concerning past accidents in distribution systems as there is with transmiss on pipelines. However, in the first few months of this year, there were several major accidents in distribution systems. On January 13, there was a fire which engulfed an area equivalent to an entire block in Queens, Long Island, in which seven people were injured and 19 families left homeless. On February 19, there was an explosion in a rehearsal hall in South Milwaukee, Wis., where 250 people had been located just 20 minutes prior to the explosion, 14 people were injured. Simple chance and the heroic action of the police prevented loss of life in both these incidents.

On February 27, in Hastings, N.Y., one person was killed and 15 injured and 35 families left homeless. On March 14, a crack in a main located in Logansport, Ind., caused a blowup leaving eight injured. Another recent accident occurred in Fort Worth, Tex., where a gas main failed during a test, resulting in a blowup in which 12 were injured. The most recent incident of which we are aware occurred less than a month ago, on November 11, in St. Louis. Fortunately, the office building, which reportedly was leveled, was unoccupied since the blast occurred at night. However, records and documents were destroyed and two passersby were slightly injured.

How many major accidents have occurred in past years and how many minor ones this year is pure conjecture, but this emphasizes the need for safety jurisdiction over distribution lines to help prevent accidents of the type I have related (pp. 14–15).

As to the gathering lines, Mr. C. W. Miller, president, Natural Gas Processors Association, testified before the committee:

Since we testified before the Senate committee, we have supplemented the data there in evidence with another full year of safety information on gathering lines and can now inform the subcommittee that in 1966 forty-six members of this association who, in the aggregate handle more than 90 percent of all gas liquids produced in the Nation, gathered, through 61,956.23 miles of pipeline, 86.91 percent of the nearly 17.5 trillion cubic feet of gas produced in the United States.

Of these lines, 19.42 percent operated at pressures between 50 and 200 psig and 40 percent at pressures lower than psig. No lost-time accidents occurred on these two categories of pipelines during the six years ended December 31, 1967. Of these lines, 98.05 percent were rurally located. The remaining 40.58 percent of gathering lines carrying pressures exceeding 200 psig, were 98.42 percent rural and the three lost-time accidents which occurred on this category of lines during the six years ended December 31, 1967, resulted from man-failures which no code or regulation could have prevented. No lost-time accidents on any of this 61,956.23 miles of line occurred in 1966 or 1967 (p. 255).

Federal interest in natural gas safety

In 1950 a member of this committee, Mr. John Heselton, of Massachusetts, introduced in the 81st Congress H.R. 5933, which would authorize the Federal Power Commission to prescribe safety requirements for natural gas companies. He reintroduced the bill in the 82d and 83d Congresses. He indicated that his attention had been called to certain explosions on transmission lines that had led to his making inquiries as to the frequency of such accidents, and that in cooperation with many of the gas transmission lines and the Federal Power Commission he was able to develop a considerable amount of data which led to his originally filing the bill.

In a hearing in the 83d Congress on his bill, H.R. 134, Mr. Heselton on June 10, 1954, testified that after he had filed his original bill:

> Certain representatives of the industry came to see me and told me very frankly and honestly, that they felt there was a need for an improved and revised code and asked whether I would be willing to defer any action on the legislation pending an effort on their part to develop such a code. I told them I would be very glad to do so.
>
> Since that time there has been, as will appear from the testimony, a very considerable effort on the part of the industry, with certain representatives from Government to develop that code.
>
> * * * * * * *
>
> I have been told that probably that will take the balance of the year before that can be done.
>
> Therefore, I am not interested in having the bill enacted until that action is completed.
>
> Then, it seems to me, it will be useful from everybody's point of view to have some action on this bill, or some similar type of bill, so that it would have Federal sanction.

The activity on the part of the industry and of the regulatory agencies led to the adoption in 1955 of a substantially improved revision of the industry code B–31.8. Further revisions have been made in the code in 1958, 1961, 1963, and 1967.

During the course of these years the Federal Power Commission actively engaged in the work on an improved code. The Commission first in 1953 expressed a position favoring some Federal authority over the promulgation of standards although then expressing opposition to the Commission's enforcement of any standards. In ensuing years with changing circumstances the Commission has recommended that the Natural Gas Act be amended to give it authority in the field. Lately the Commission has used the authority which it has under section 7 of the Natural Gas Act in the granting of certificates of convenience and necessity for the construction of new interstate pipelines to impose certain requirements that the construction be in accordance with the specifications of the industry code.

In 1963 the Report on the Movement of Dangerous Cargoes, an interagency study coordinated by the Office of the Under Secretary of Commerce for Transportation, recommended:

> The Federal Power Commission should be given specific statutory authority and responsibility for safety regulation of gas pipelines operating in interstate or foreign commerce.

In 1965 the Senate committee conducted hearings on a bill assigning additional safety responsibility to the Federal Power Commission, during the course of which the Commission was directed to make a study of the safety of transmission lines referred to above. This study was subsequently printed by that committee.

On February 16, 1967, President Lyndon B. Johnson, in his consumer message, stated:

> With the creation of the Department of Transportation, one agency now has responsibility for Federal safety regulations of air, water, and land transportation, and oil pipe-

lines. It is time to complete this comprehensive system of safety by giving the Secretary of Transportation authority to prescribe minimum safety standards for the movement of natural gas by pipeline.

I recommend the Natural Gas Pipeline Safety Act of 1967.

State interest in natural gas safety

Over the years a number, but far from all, of the States, has prescribed pipeline safety standards by legislative or State commission action.

By the time of the report of the Federal Power Commission to the Senate committee of March 25, 1966, 26 States had adopted safety codes and of these, 25 used ASA B.31–8 as their basic code.

The creation of the Department of Transportation and the interest of that Department in natural gas pipeline safety resulted in many more States adopting safety standards, and in response to the questionnaire submitted by the National Association in April 1967, the 40 of the 51 States (including the District of Columbia) which replied indicated they had authority to establish safety standards. The association stated they understood that three more of the remaining 11 had regulations while the others did not have any codes.

At the time of testifying before our committee in February of 1968, the National Association stated that 47 States had adopted programs for the regulation of gas safety which was a gain of 20 States in 18 months, and that an additional two States were expected shortly to be added to this number.

While it is evident that the States recently have enlarged their jurisdiction in the field, their adoption of the codes is not uniform. Some have stricter standards than the codes and others have much less. This situation is described in the FPC report of 2 years ago to the Senate committee as follows:

> Some of the States have prescribed pipeline safety standards by legislative or State commission action in most cases making the ASA Code mandatory for pipelines within their jurisdiction. Twenty-six States have safety codes, and of these 25 use the ASA Code either unchanged or with amendments. Although a few of the remaining States require odorization of gas, most have no transmission line safety regulations at all. Even in States where a State safety code is in force, limitations of State law restrict some of the code applications to intrastate facilities. Thus, a State may be unable to regulate much of the transmission line mileage within its borders if it is part of an interstate facility.
>
> Despite adoption of the ASA Code in half the States, 58 percent of the Nation's transmission line mileage [1] is not subject to State safety regulation and even greater mileage was not subject to regulation when installed. In 1964, 85,310 miles of transmission pipeline were in the ground in States having safety codes, while lines in nonregulating States totaled 119,420 miles. Of the 5,100 miles of net increase in pipelines installed during 1963, 3,470 miles—more than two-thirds of the total—were in States without a safety code.

[1] Both interstate and intrastate pipelines.

Most of the States which have basically adopted the ASA Code deviate considerably from it in many particulars. Several have found the ASA Code insufficiently strict, and have made extensive additions and amendments. Thus Connecticut has, among other changes, prescribed minimum electric resistivity standards for pipe coatings to protect pipe from corrosion and required the use of cathodic protection; the importance of these matters is recognized, but left to the pipeline operator's discretion by the ASA Code. For a further example, the ASA Code does not require that any welds made in the field be examined by X-rays. New York, on the other hand, requires X-ray examination of at least a prescribed minimum sample of the welds in each project. Moreover, nine States have added the requirement, absent in the ASA Code, that accidents be reported immediately.

An example of the diversity existing among the States can be found in their provisions concerning automatic shutoff valves. Of the States which have added to the ASA Code in this respect, two, Connecticut and Rhode Island, require automatic valves under certain circumstances, while New Jersey, New York, and Washington forbid them unless it can be shown in each case that they will contribute to safer operation.

Despite the extensive additions found desirable in some States, eight jurisdictions have adopted the ASA Code virtually without change; and one has made a number of amendments relaxing the code requirements. In addition, at least six States have made no provision for incorporating revisions in the code as these are promulgated by the ASA. Thus, in some States the less stringent 1955 version of the ASA Code is still in force, although the association has revised it twice since that time. And while many, if not most, of the code's provisions are expressed as recommendations rather than requirements, only one State, California, has so drafted its regulations as explicitly to translate the code provisions into mandatory language.

Most long-distance natural gas transmission companies operate in several States and in hundreds of different local government subdivisions. Thus the applicable legal safety restraints are frequently not uniform in respect to various segments of a single pipeline company system.

(Committee print, pp 9–10, Senate Commerce Committee, "Safety of Interstate Natural Gas Pipelines," 89th Cong., second sess., Apr. 19, 1966.)

The analysis of the natural gas safety questionnaire conducted at the request of the Department of Transportation by the National Association of Regulatory Utility Commissioners a year ago shows that while the authority to establish standards exists, this authority has been exercised in a variety of forms. For example, of the 40 commissions replying, only 10 had authority to establish standards for publicly owned gas utilities; only 31 of the 40 had adopted the USASI code, of whom 14 had modified sections of the code and 18 had adopted additional or other safety standards. Only 21 of the 40 had a staff to provide for inspection. The analysis of the varying degree of exercise of

authority is set forth herein in appendix A. The authority of State commissions to have their orders enforced by court injunction and the amount of fine which may be imposed for willful violation of commission orders is set out in appendix B.

One of the matters on which the committee had most difficulty in ascertaining the facts was that of the extent to which the State regulatory bodies exercised their jurisdiction to prescribe safety standards for gathering lines. Since gathering lines as such are not present in a number of States, the statistics as to the total are not meaningful. It does appear, however, that in some of the primary producing States, there is no State regulation. A summary of the situation is included as appendix C.

The industry code

The Industry Code B–31.8 was created by the American Society of Mechanical Engineers and the U.S.A. Standards Institute. It was first published in 1935 and since 1952 there have been 4 complete new editions and numerous supplements and amendments.

Primary responsibility for its development has centered in the code committee, made up of representatives of professional engineering societies, associations, and governmental agencies such as the National Safety Council, the Bureau of Ships, U.S. Coast Guard, the American Society of Safety Engineers, the American Society for Testing & Materials, the American Insurance Association, and the American Institute of Mining, Metallurgical & Petroleum Engineers, as well as industry groups such as the American Gas Association, American Iron & Steel Institute, and the American Petroleum Institute.

The code committee includes approximately 70 to 75 members; representatives of the Federal Power Commission, the Bureau of Mines, State public service commissions, university engineering departments, research institutes, consulting engineers, contractors, inspection services, manufacturers, pipeline companies, the National Energy Board of Canada, the American Gas Association, and others.

In addition, the B–31.8 code incorporates many standards and specifications by reference from other organizations, such as the American Society for Testing & Materials, American Standards Association, American Petroleum Institute, ASME Boiler and Pressure Vessel Code, and the National Board of Fire Underwriters.

Chairman White has referred to the code committee as "made up of technical experts, people who are the best this country has produced." Secretary Boyd referred to the members of the B–31.8 code committee with these words:

> I believe that they have performed a meritorious and public-spirited task over these past years. A counterpart in other industries is difficult to find. Few industries have devoted the time and attention to safety procedures as has this one.

Secretary Boyd went on to say, however, that he felt there were shortcomings in the code.

> Yet pipeline transportation of the commodity in which this industry deals is inherently dangerous. The examples of pipeline accidents which I described to you a few moments ago gives us some idea of the magnitude of the destruction which results from such accidents. The steadily and rapidly

increasing population densities where gas is used presents, in my judgment, a compelling and convincing case for assuring that additional measures to protect the public are taken. Clear authority to establish comprehensive safety standards must be enacted; we believe that the exercise of such authority by the Federal Government will assure the best framework within which the standards can be developed and implemented.

I do not believe that we can provide such protection through the enactment of the present code. I have attached to my statement a list of some of the major areas where the code would not provide the kind of protection which we believe is essential (p. 15).

APPENDIX TO STATEMENT OF HON. ALAN S. BOYD, SECRETARY, DEPARTMENT OF TRANSPORTATION

Some of the major areas where the USASI B31.8 Code does not provide the safety standards essential for gas pipeline systems:

1. The Code does not provide for a systematic testing or evaluation of pipe already in the ground.

2. The code does not require a pressure test for all upgrading of pipeline systems.

3 The code mentions use of varying types of construction materials to be used in cold climates, but offers no positive specifications to insure materials with special properties are used.

4. The code does not require uniform marking of the exact location of lines.

5. The code does not define welding inspection procedures; specifically, the frequency of inspection of welds by radiographic methods.

6. The code does not specify uniform construction specifications for new pipeline.

7. The code requires that companies have a plan for pipeline maintenance, but it does not specify the extent, thoroughness, or any specific points of such a plan.

8. The code establishes design factor requirements for pipeline according to location. In rural areas, the code limits the operating pressure to 72 percent of the design stress. In urban areas, the code limits the operating pressure to 40 percent of the design stress, i.e., giving a greater safety factor.

It does not provide a method for changing these requirements as population density changes. Consequently, we now have suburban homes, office buildings, and shopping centers in close proximity to pipelines originally designed to operate at a higher percent of design stress.

9. The code does not give inspection procedures during construction for each type of pipeline.

10. The procedures for revision of the code are extremely time consuming. The time required for a revision can be 2 years or more. This timelag is too great when the public safety is concerned (pp. 19–20).

Need for Federal regulation

In summary, the accident record of the industry has been a spotty one. In certain areas it has been good; in other areas, statistics are lacking but many illustrations can be given of unfortunate and disastrous failures.

Present regulation by State commissions is varied and indeed there is difficulty in determining the effectiveness of State enforcement inasmuch as many of the States only recently have prescribed safety standards.

The primary problem results from the fact that whatever standards have been applied, have been applied primarily to new pipe and to new construction. Secretary Boyd testified that he considered the major shortcoming of the code which has been adopted by most of the States and by the industry is that it does not provide for systematic testing or evaluation of pipe already in the ground.

The tremendous increase in the number and location of pipelines has great bearing on the potential danger associated with pipeline failures. Such of these failures as have occurred in the past on our transmission lines up to now have not been accompanied by too many disasters. Most of these lines were laid to code specifications, but the code deviated between populated and unpopulated areas and today we now have pipe in the ground that does not necessarily meet today's standards under today's conditions of growing population. Grave as may be this hazard, it is small compared with that resulting from the introduction of natural gas into the distribution mains of our cities, many of which were laid years ago for the handling of manufactured gas, and the tremendous growth of the natural gas distribution industry itself. The industry growth plus population growth enhances the need for adequate safety standards and enforcement.

Hearings

Hearings on S. 1166, the bill here being reported, and on H.R. 6551, a bill which was the reintroduction of the recommendation made by the Federal Power Commission in previous years for authority being placed with it for the regulation of interstate transmission lines safety, were held by the Subcommittee on Communications and Power starting December 6, 1967, and continuing during the latter part of February until March 1 of this year.

S. 1166 was supported as to principle, with several amendments suggested, by the Department of Transportation, the Federal Power Commission, and the Bureau of the Budget. Other persons testified that they would have no objection to the bill if amended in the fashion they indicated; namely American Petroleum Institute, Independent Natural Gas Association of America, American Gas Association, Natural Gas Producers Association, American Public Gas Association, certain gas companies, National Association of Regulatory Utility Commissioners, and State Commissions. Representatives of unions also appeared for or filed statements urging the adoption of a bill. No one appeared in opposition.

Scope of the Bill

The reported bill provides for the establishment and enforcement of minimum Federal safety standards for pipeline facilities and the transportation of natural and other gases.

Section 2 contains definitions which describe the persons, gas, transportation, and facilities covered.

Persons covered

Each person who engages in the transportation of gas or who owns or operates pipeline facilities comes within the jurisdiction of the bill. "Person" means any individual, State or municipality, including personal representatives therefor. The jurisdiction extends to operations of public bodies, for example, municipally owned distribution companies, but the Secretary has indicated it was not the intent that its provisions apply to federally operated facilities, including the military (p. 335).

Gas covered

Gas is defined as meaning natural gas, flammable gas, or gas which is toxic or corrosive. Thus gases other than natural gas are covered by the bill, including what might be liquids when they are transported in gaseous form. (The Department of Transportation has certain other authority over transportation in liquid form.) The jurisdiction extends even to manufactured gas (testimony of Secretary Boyd, p. 36).

The bill as referred used the phrase "or nonflammable hazardous gas." The committee has amended this to "or gas which is toxic or corrosive." The original language could have implied jurisdiction over any gas when under a pressure creating a hazard such as steam or even compressed air. The Secretary testified that it was not the intent to provide for such coverage but for toxic and corrosive gases, chlorine, for example (p. 16).

Transportation covered

The term "transportation of gas" is defined as the gathering, transmission or distribution of gas by pipeline or its storage in or affecting interstate or foreign commerce. With exception as to gathering in certain circumstances, this means all aspects of the transportation of gas from the well head to the consumer. As testified by Secretary Boyd:

> There is no question but what every element of a gas gathering, transmission, and distribution line is moving gas, which is either in or affects interstate commerce. * * * (p. 35).
>
> I don't think that it even requires any elasticity of the commerce clause of the Constitution to define 99 44/100 percent of this activity as being clearly within the commerce clause (p. 36).

It should be noted that storage of gas "in or affecting interstate commerce" is included in the coverage.

Gathering

During the course of the hearings much testimony was presented as to the need for the establishment of Federal standards over gathering pipelines. This jurisdiction had not been in the bill as reported by the Senate committee, but had been added on the floor of the Senate. There is no question that there exist certain gathering lines which are located in populous areas but the tremendous bulk of such lines is located in rural areas. Testimony was offered as to the safety record

of these lines and that no man-days had been lost as the result of accidents on gathering lines during the past 6 years. The safety record is impressive.

On the other hand, as the Secretary of Transportation testified, many of these lines originally were located in rural areas which since have become populated and it can be expected that gathering lines in the future also may become surrounded by people. The committee, accordingly, in the reported bill has provided an exception for the Federal jurisdiction over the prescription of safety standards for gathering lines where gathering occurs in rural locations which lie outside the limits of an incorporated or unincorporated city, town, village, or other designated residential or commercial area such as a subdivision, a business or shopping center, a community development, or similar populated area.

Since the population within an area can change in the future and since the illustrations of populated areas set forth in the language may not cover all situations and are subject to interpretation as well, the Secretary is given the authority to define from time to time what is a nonrural area. The committee wishes it to be clear that its thought as to a populated area does not mean that it must be one with a total of a large number of people. It is evident that to a few the safety standards pertaining to a pipeline passing near their houses, their school, or their place of employment is of as much concern as though they were part of a large group.

Pipeline facilities covered—treatment plans

The term "pipeline facilities" is defined to include any new or existing pipe, rights-of-way, and equipment, facilities, or buildings used in the transportation of gas or the treatment of gas during the course or transportation. There is a qualification contained in this definition which provides that the term "rights-of-way" as used in the legislation does not authorize the Secretary of Transportation to prescribe the location or routing of any pipeline facility, which is discussed later in this report.

The bill as referred included all pipeline facilities used in the treatment of gas just as it included all gathering lines. Consistent with the amendment which the committee has made for an exemption of gathering lines where gathering occurs in rural locations lying outside populated areas, the committee has modified the coverage over facilities used in the treatment of gas so that facilities located on the exempted gathering lines are excluded from coverage of the bill. This is accomplished by providing that the jurisdiction applies to the facilities used in the treatment of gas during the course of transportation, and transportation has been defined to exclude certain gathering lines.

Other definitions

Other definitions are included in this section covering what is meant by State (includes District of Columbia and the Commonwealth of Puerto Rico); municipality (includes county or other political subdivision of a State as well); and a few other terms as used in the bill.

Duty of Secretary of Transportation To Establish Federal Safety Standards

The basic tool created by this bill to improve the safety of gas pipelines and facilities is the direction given to the Secretary of Transportation in section 3 to set minimum safety standards to be

observed by all persons engaged in the transportation of gas or owning or operating pipeline facilities.

Not more that 2 years after enactment of this legislation, the Secretary is required to establish permanent minimum Federal safety standards for the transportation of gas and pipeline facilities. New or amended standards may be established from time to time thereafter. Such standards may apply to the design, installation, inspection, testing, construction, extension, operation, replacement, and maintenance of pipeline facilities. Such standards necessarily will take into account geology and above-surface conditions and structures, although the Secretary may not prescribe the location or routing of any pipeline facility.

To assure that Federal safety standards will be practicable and designed to meet the need for pipeline safety, the Secretary of Transportation, in prescribing such standards, is required to take into consideration (1) relevant available pipeline safety data, (2) whether such standards are appropriate for the particular type of pipeline transportation, (3) the reasonableness of proposed standards, and (4) the extent to which such standards will contribute to public safety.

With respect to both interim and permanent Federal safety standards, a State agency may adopt additional or more stringent standards not incompatible with the Federal standards. Additional or more stringent State standards are prohibited as to interstate transmission facilities, that is, pipeline facilities used in the transportation of gas which are subject to the jurisdiction of the Federal Power Commission under the Natural Gas Act. With respect to these facilities, the Federal standards will apply, providing for uniformity of regulation where the lines of a single company may traverse a number of States.

INTERIM STANDARDS

The committee believes that the need for meaningful pipeline safety regulation is serious enough that no vacuum should be permitted to exist during the period in which the Secretary is developing standards. Therefore, he is required by section 3(a) to establish interim Federal safety standards within 3 months after enactment. As noted elsewhere in this report, not all States have safety codes or regulations applying to all phases of pipeline operation. To fill these gaps quickly, the Secretary shall establish as the Federal mandatory interim standards existing State standards. Where all or part of the distribution and transmission operations in any State are not covered by State standards, the Secretary must develop and establish interim standards which will consist of the standards common to a majority of existing State standards. To further guard against gaps in the standards, any interim standard will remain in effect until specifically amended, or revoked, even if this is not done until more than 24 months after enactment of this bill.

APPLICATION OF STANDARDS TO, AND REMOVAL OF, HAZARDS IN EXISTING PIPELINE FACILITIES

The standards to be developed by the Secretary under section 3(b) may apply to the design, installation, inspection, testing, construction, extension, operation, replacement, and maintenance of

pipeline facilities except that those standards affecting the design, installation construction, initial inspection, and initial testing shall not be applicable to pipeline in existence on the date such standards are adopted. In other words, any Federal standard leading to inspection and testing (other than initial inspecting and testing), extension, operation, replacement, and maintenance may be applied to existing pipe as well as new pipe. In addition, although certain standards established for the laying of new pipe may not apply to existing pipe, the Secretary of Transportation nevertheless is given the authority to require the removal of hazards whenever he finds a particular facility to be hazardous to life or property.

A designation of the type of standards which would and would not apply to existing pipe was contained in the bill as it was referred to this committee. The reasons prompting such designation as set out in the Senate report on the bill is as follows:

> The committee appreciates the fear of the industry that it might be required to bear the expense of removing large quantities of pipeline laid before a standard becomes effective for no other reason than that it does not comply with the Federal standard, irrespective of whether the pipe is sound and safe. For this reason, the committee has provided that standards affecting the design, installation, construction, initial inspection, and initial testing shall not be applicable to pipeline facilities in existence on the date such standard is adopted, unless the Secretary finds that a potentially hazardous situation exists, in which case, he may by order require compliance with any such standard. This provision requires the Secretary to make a finding of potential hazard before applying certain standards to existing pipe. When such finding and order has been issued, the standards can be made immediately applicable to remedy the potentially hazardous situation (subject to judicial review of the order) since all of the requirements of the rulemaking will have previously been satisfied.

In the course of the hearings before this committee, the Secretary urged an amendment to this section which would strike this provision differentiating the standards to be applied to existing pipe. He said that he felt that the fears of the industry were unjustified, that the bill contained adequate restraints on the authority of the Secretary in establishing standards; that it imposed obligations to consider criteria, and that the action of the Secretary was subject to procedural requirements of the Administrative Procedure Act and eventually to judicial review.

During the course of the hearings, representatives of the Independent Natural Gas Association asserted a need for the exemption of the application of standards to those activities which had been completed prior to the effective date of any new standard on the ground that it might be contended that all existing facilities technically would become nonconforming immediately upon adoption of any new standard and that under such interpretation this would occur not only on adoption of initial standards but would recur whenever any new or amended standards were adopted in the future. These representatives argued that the language in the bill as referred might

be interpreted to permit the Secretary to wipe out the exemption in its entirety as to existing facilities by a finding that all facilities not constructed in accordance with the newly adopted standards created a potentially hazardous situation. They urged that this language be amended.

Although the committee is of belief that the fears of the Secretary as to the possible restrictive effect of the language of the bill as referred, and the fears of the industry as to the possibly unrestrained authority contained in such language are unfounded, the committee in the reported bill has adopted language which it thinks makes completely clear that it is the committee's intent that hazards in the pipe in the ground are to be removed, regardless of applicability or nonapplicability of any given standards.

The representatives of the gas industry in speaking to the question of existing pipe made the following observations as to safety.

> In other governmental codes covering ships, planes, buildings, and other structures, the incorporation of new requirements for construction, design, etc., has never been felt to render all ships, planes, buildings, etc., previously constructed, obsolete and unsafe. This is particularly true of airplanes where the rapidly developing science of design has created new and better planes but this has not required the scrapping of all older planes which have been proven safe for operation within their prescribed limitations (p.166).

The committee believes that the gas industry reference to the aviation industry is especially apt. The committee feels that it is not necessary that the adoption of new standards automatically must be made applicable to existing pipelines or to existing aircraft; but the committee does feel that when it develops that existing pipelines, just like existing aircraft, develop hazards, these must be corrected and corrected promptly.

Depending upon the severity or degree of the hazard ascertained to exist in one of a given type of aircraft, to any part of or equipment used in the aircraft or to the entire plane itself, the Federal Aviation Administrator can direct that all such parts or all such aircraft must be inspected for a similar hazard within a certain number of hours, can order the parts modified, strengthened, or replaced within a given time, or can even order all such planes grounded until such inspection, modification, strengthening, or replacement has been made.

An examination of some representative actions taken by the Administrator shows that he has required the replacement of a defective drive system coupling, new design parts for torsion strap assemblies and main rotor hub clevis bearing, and modification of longitudinal control difficulties, in each case before further flight. He has required a flap system modification within 10 flight hours, an elevator train tab flutter modification within 5 hours, modification of cyclic input swash plate ring within 25 hours, and inspection of tail rotor blades prior to first flight each day and later modification. He has required inspection of drive system component within 15 hours, tail rotor shaft drive failure within 10 hours, selective valve control cables within 10 hours, aileron control idler within 15 hours. He has required deactivation of a yaw damper within 10 hours, deactivation

of a passenger cabin blanket heater switch, and prohibited use of propeller reverse, until modifications were made. Many other illustrations could be given.

Just so, when the Secretary finds that a particular type of pipeline valve is hazardous, the Secretary should have and the bill does give to him, the authority to require the removal of this hazard by removing or replacing this type of valve wherever it exists. If the Secretary finds that a particular kind of pipe has a metallurgical specification when located in a particular type of soil which leads to accelerated corrosion, the Secretary should have the authority to require, and the reported bill gives him this authority to require, the replacement of this type of pipe wherever the same soil conditions exist.

The Secretary's action shall be taken by order which is subject to procedures contained elsewhere in the act, as well as to judicial review in the event it should be necessary, but the committee wishes it to be quite clear that this order can be issued to any person operating the particular type of facility which the Secretary has found to be hazardous.

The committee believes that in giving the Secretary this authority to move directly to remove a hazard, the Secretary has the power permitting him to achieve protection to the public much more quickly and effectively than he might have were he to invoke the cumbersome and more restrictive route of attempting to apply standards of general universality to a given situation.

Company Duty To Comply With Safety Standards

Section 8 places the duty to comply with the safety standards established by the Secretary of Transportation under section 3 upon each person who engages in the transportation of gas or who owns or operates pipeline facilities. These sections plus section 5 are the basic framework for the achievement of greater safety.

Under section 8, each person who engages in the transportation of gas or who owns or operates pipeline facilities shall—

(1) at all times after the date any applicable safety standard established under this act takes effect, comply with the requirements of such standard; and

(2) file and comply with a plan of inspection and maintenance required by section 11; and

(3) permit access to or copying of records, and make reports or provide information, and permit entry or inspection, as required under section 12.

The bill as reported here differs from the bill as referred in that it is made clear that owners and operators of facilities as well as those engaged in transportation have the duty to comply.

Tort liability

Section 8(b) of the bill provides that nothing in this legislation will affect the common law or the statutory tort liability of any person. This language is designed to assure that the tort liability of any person existing under common law or any statute will not be relieved by reason of the enactment of this legislation or compliance with its provisions.

COMPANY PLANS FOR INSPECTION AND MAINTENANCE

An important part of the program proposed by this legislation to achieve pipeline safety is the plan of inspection and maintenance according to which the company maintains surveillance of its lines and facilities.

Section 11 of the reported bill requires each person who engages in the transportation of gas or owns or operates pipeline facilities to file a plan for inspection and maintenance with the Secretary of Transportation, or with the State agency where a certification under section 5(a) or an agreement under section 5(b) is in effect. The filing of such plans is mandatory under the bill as to all gathering, transmission, and distribution pipelines and pipeline facilities which are not under the jurisdiction of the Federal Power Commission under the Natural Gas Act. The filing by interstate transmission lines subject to Commission jurisdiction is optional with the Secretary.

If the agency with responsibility for enforcement of compliance with the standards established under this legislation finds that such plan is inadequate to achieve safe operation, such agency must (after notice and hearing) require that such plan be revised. In determining the adequacy of any such plan, and to assure that it will be practicable and designed to meet the need for pipeline safety, such agency is required to take into consideration (1) relevant available pipeline safety data, (2) whether the plan is appropriate for the particular type of pipeline transportation, (3) the reasonableness of the plan, and (4) the extent to which the plan will contribute to public safety.

The bill as reported here differs from the bill as referred in that it is made clear that owners and operators of facilities as well as those engaged in transportation have the duty to comply.

RECORDS, REPORTS, AND INSPECTIONS

Section 12 provides that the Secretary of Transportation may require the maintenance of such records, reports, and information as he deems reasonably necessary to enable him to determine whether persons subject to this legislation are acting in compliance with this legislation and the standards established thereunder. Each such person must permit authorized agents of the Secretary to inspect records and documents for the purpose of determining whether such person is acting in compliance with this legislation and the standards established thereunder.

The section authorizes the Secretary of Transportation to monitor State enforcement practices and authorized agents of the Secretary may, at reasonable times, enter upon pipeline facilities for the purpose of conducting an inspection of such facilities. The Secretary is required to furnish the Attorney General any information obtained indicating noncompliance with standards established under this legislation.

In requiring that accident reports and facts developed in accident investigations be available for use in both civil and criminal judicial proceedings, the committee does not intend to predetermine its admissibility as evidence. That determination is, of course, a prerogative of the courts and a decision each court must make for itself under

applicable rules of evidence. The section does preclude the Secretary from withholding any such report.

The section further provides that any information obtained by the Secretary of Transportation or his representative which contains or relates to a trade secret will be considered confidential for the purpose of section 1905 of title 18, United States Code, which provides criminal penalties for the disclosure by an officer or employee of the United States of information relating to trade secrets in any manner or to any extent not authorized by law. The section authorizes disclosure to other officers or employees of the Department of Transportation concerned with carrying out this legislation and also when relevant in any proceeding under this legislation. Nothing in this provision of the bill is to be construed as authorizing the withholding of information from duly authorized committees of the Congress.

Enforcement of the Safety Standards

The relationship of Federal-State regulatory authority created by this bill differs as between local pipelines and interstate transmission lines. In the latter area, the lines of a single transmission company may traverse a number of States and uniformity of regulation is a desirable objective. For this reason, section 3 provides for a Federal preemption in the case of interstate transmission lines.

On the other hand, in the case of local lines exempted from the economic regulatory authority of the Federal Power Commission under the Natural Gas Act, States may establish additional or more stringent standards, provided they are not inconsistent with the Federal minimum standards. The committee has provided for this different treatment because each State authority is uniquely equipped to know best the special aspects of local pipeline safety which are particularly applicable to that community.

This bill also gives the States an important role in enforcement, as well. Because of preemption, the safety standards for interstate transmission lines will always be Federal standards, and enforcement will be a Federal responsibility. Consistent, however, with the role this bill gives the States in amplifying distribution standards, the committee has sought to give the States a primary role in enforcement of local pipeline safety standards.

Section 5 envisions that the States may substitute State for Federal enforcement of the safety standards as they apply to gathering, distribution and local transmission lines in one of two ways, either (1) by the submission to the Secretary of an annual certification by a State agency regarding its authority and enforcement activities, or (2) in situations when the State agency does not or cannot submit such certification, through a written agreement with the Secretary for the State agency to carry out on behalf of the Secretary the administration of the Federal standards.

State agency certification

Under section 5(a) of the reported bill an arrangement is provided whereby the provisions of this legislation will not apply to pipeline facilities and the transportation of gas (other than interstate transmission facilities) within a State when the safety standards and

practices applicable to such facilities and transportation are regulated by a State agency (including a municipality) which submits annually to the Secretary of Transportation a certification that such State agency—

(1) has regulatory jurisdiction over safety standards and practices of such facilities and transportation;

(2) has adopted each Federal safety standard applicable to such facilities and transportation as of the date of the certification;

(3) is enforcing each such standard; and

(4) has authority to require record maintenance, reporting, and inspection substantially the same as provided under section 12 and filing for approval of plans of inspection and maintenance described in section 11.

The State agency must also certify that the law of the State provides for the enforcement of the safety standards of such State agency by way of injunctive and monetary sanctions.

Each annual certification must include a report showing—

(1) the name and address of each person subject to the jurisdiction of the State agency;

(2) all accidents or incidents reported during the preceding 12 months by each such person involving personal injury requiring hospitalization, fatality, or property damage exceeding $1,000, together with a summary of the State agency's investigation as to the cause and circumstances surrounding each such accident or incident;

(3) the record maintenance, reporting, and inspection practiced by the State agency to enforce compliance with Federal safety standards, including a detail of the number of inspections made of pipeline facilities by the State agency during the preceding 12 months; and

(4) such other information as the Secretary may require.

State agency agreement

Section 5(b) provides that in the case of pipeline facilities and transportation of gas (not subject to the jurisdiction of the Federal Power Commisson) for which the Secretary does not receive an annual certification, he is authorized to enter into an agreement with a State agency (including a municipality) under which such agency will carry out on behalf of the Secretary such actions as may be necessary to—

(1) Establish an adequate program for record maintenance, reporting, and inspection designed to assist compliance with Federal safety standards;

(2) Establish procedures for approval of plans of inspection and maintenance substantially the same as required under section 11;

(3) Implement a compliance program acceptable to the Secretary, including provision for inspection of pipeline facilities used in the transportation of gas; and

(4) Cooperate fully in a system of Federal monitoring of such compliance program and reporting under regulations prescribed by the Secretary.

Any such agreement will require the State agency to promptly notify the Secretary of any violation or probable violation of a Federal safety standard which it discovers as a result of its program.

Grants to aid State enforcement

Under section 5(c) of the reported bill, the Secretary is authorized to make grants from appropriated funds. In the case of a State agency which submits an application not later than September 30 in any calendar year, the Secretary may pay up to 50 percent of the cost of a State safety program, whether carried out pursuant to a certification under section 5(a) or an agreement under section 5(b). The State agency must assure the Secretary that it will provide for the payment of that portion of the cost of such safety program which exceeds the amount of the Federal grant. At the request of the Secretary the committee amended the bill to require that such State agency must also provide assurances that State expenditures for gas safety programs (excluding Federal grants) will not fall below the average level of such expenditures for the last 2 fiscal years preceding the date of enactment of this legislation.

Recertification

Section 5(d) provides that a certification which is in effect under section 5(a) will not apply to any new or amended Federal safety standard established after the date of such certification. The provisions of this legislation will apply to any new or amended Federal safety standard until the State agency has adopted such standard and submitted an appropriate certification under section 5(a).

Rejection of certification or termination of agreement

Section 5(a) provides that if the Secretary determines, after receipt of an annual certification, that the State agency is not satisfactorily enforcing compliance with Federal safety standards, he may reject the certification or take such other action as he deems appropriate to achieve adequate enforcement, including the assertion of Federal jurisdiction.

Section 5(e) provides that the Secretary may terminate any agreement in effect under section 5(b) if he finds that the State agency has failed to comply with any provision of such agreement. Such termination is required to be published in the Federal Register and will become effective no sooner than 15 days after the date of such publication.

In either case, whether rejection or termination, the Secretary's action must be after notice and hearing.

Committee changes

The bill as referred provided for two types of agreements between the Secretary and a State agency. The committee has retained the second type, but substituted a certification procedure for the other.

In the bill as referred, section 5(a) authorized the Secretary—

> by written agreement with a State agency to exempt from the Federal safety standards pipeline facilities and the transportation of gas not subject to the jurisdiction of the Federal Power Commission under the Natural Gas Act, under which agreement such State agency—

(1) adopts each Federal safety standard applicable to such transportation of gas and pipeline facilities and any amendment to each such standard, established under this act;

(2) undertakes a program satisfactory to the Secretary, designed to achieve adequate compliance with such standards and with the plans of inspection and maintenance required by section 11; and

(3) agrees to cooperate fully in a system of Federal monitoring of such compliance program and reporting under regulations prescribed by the Secretary.

No such agreement may be concluded with any State agency which does not have the authority (i) to impose the sanctions provided under sections 9 and 10, (ii) to require record maintenance, reporting, and inspection responsibilities substantially the same as are provided under section 12, and (iii) to require the filing for approval of plans of inspection and maintenance described in section 11.

The Senate report describes the intent of this provision as follows:

Section 5(a) envisions a series of agreements between the Secretary and the States, substituting State for Federal enforcement for gas distribution and local transmission lines.

To obtain such substitution, the State must adopt the Federal standards as its own; impose the same sanctions as would the Federal Government (including requiring records, reports, inspections, and the filing of plans of inspection); implement an effective compliance program; and agree to cooperate in Federal monitoring of its compliance program. Under these agreements, in effect, State law and State enforcement responsibility replace the Federal law for local facilities because the State has undertaken to do the job conscientiously and effectively. Thus, this subsection creates a mechanism whereby the States may participate to the utmost in establishing and enforcing gas pipeline safety standards for distribution lines and local transmission lines.

In the course of the hearings before the committee it was pointed out that whereas a condition precedent to a written agreement was that the State agency had authority to impose the penalties provided under section 9 and seek the injunction relief provided by section 10, most State agencies did not have such authority as to penalties, although most of them could seek enforcement through injunctions (see app. B). It thus appeared that some amendment to section 5(a) must be made if any such State enforcement program were to be initiated.

During the hearings also the National Association of Regulatory Utility Commissioners appeared, and numerous State agencies filed statements, in support of H.R. 6551, a bill amending the Natural Gas Act which would have placed safety regulation over interstate transmission lines in a Federal agency (the Federal Power Commission) but clearly, by reason of section 1(c) of that act preserved a traditional line of demarcation between Federal and State regulatory respon-

sibilities in the natural gas industry.[1] The association urged as an alternative approach an amendment to S. 1166 along the lines of section 1 (c) which would provide for State regulation upon an annual certification covering its authority and activities in the field.[2] It urged its amendment as creating "a Federal safety floor below which no State could fall, yet the enforcement burden would remain with the State commissioners. Direct Federal regulation would only apply to those systems not subject to effective State regulation."

In the bill as reported, the committee incorporates the results of its consideration of the need to amend the agreement conditions and the alternative proposal.

The language adopted by the committee indicates a reaffirmation of the intent that State law and State enforcement replace the Federal law for local facilities where the State agency has undertaken conscientiously and effectively to adopt and enforce the Federal standards.

It should be clear that the committee language while adopting the certification (instead of agreement) suggestion, otherwise departs radically from the NARUC proposal. The committee in nowise accepts the declaration that gas safety matters are primarily of local concern and subject to regulation by the States. On the contrary, it is the Federal safety standards which are in effect and the ultimate responsibility for establishment and enforcement of the Federal safety standards is the responsibility of the Secretary. The bill reported gives to the States in certain circumstances, a role in the enforcement of these standards. This role not only initially but annually is up for review. If the Secretary is not satisfied with the State's performance of the role, he is not bound by the State's certification, but may reject it.[3]

---

[1] (C) The provisions of this act shall not apply to any person engaged in or legally authorized to engage in the transportation in interstate commerce, or the sale in interstate commerce for resale, of natural gas received by such person from another person within or at the boundary of a State if all the natural gas so received is ultimately consumed within such State, or to any facilities used by such person for such transportation or sale, provided that the rates and service of such person and facilities be subject to regulation by a State commission. The matters exempted from the provisions of this act by this subsection are hereby declared to be matters primarily of local concern and subject to regulation by the several States. A certification from such State commission to the Federal Power Commission that such State commission has regulatory jurisdiction over rates and service of such person and facilities and is exercising such jurisdiction shall constitute conclusive evidence of such regulatory power or jurisdiction. [68 Stat. 36 (1954); 15 U.S.C. sec. 717(c). Natural Gas Act.]

[2] "Basically, this proposal may be accomplished by striking subsec. (a) of section 5 of S. 1166 and inserting in lieu thereof the following provision modeled after the 'Hinshaw' amendment (sec. 1c of the Natural Gas Act):

"SEC. 5. (a) The provisions of this Act shall not apply to pipeline facilities and the transportation of gas within a State when the safety standards and practices applicable to same are subject to regulation by a State agency which submits to the Secretary an annual certification that such State agency: (i) has regulatory jurisdiction over the safety standards and practices applicable to such pipeline facilities and transportation of gas; (ii) has adopted each Federal safety standard applicable to such pipeline facilities and transportation of gas established under this Act as of the date of certification; and (iii) is enforcing each such standard. The certificate shall constitute conclusive evidence of such regulatory jurisdiction for one year following the date of each such certification. The matters exempted by this subsection ,from the pro visions of this Act are hereby declared to be matters primarily of local concern and subject to regulation by the several States. Any State may adopt such additional or more stringent standards for such pipeline facilities and the transportation of gas as are not incompatible with the Federal minimum standards."

[3] State regulation and enforcement in a Federal field is not new. This committee reported and the Congress enacted the Securities Acts Amendments of 1964, which provided in sec. 12(g)(2) of the Securities Exchange Act of 1934 for the enforcement of certain Federal programs by the commissioners of insurance of the several States—

"(2) The provisions of this subsection shall not apply in respect of—

"(G) any security issued by an insurance company if all the following conditions are met:

"(i) Such insurance company is required to and does file an annual statement with the Commissioner of Insurance (or other officer or agency performing a similar function) of its domiciliary State, and such annual statement conforms to that prescribed by the National Association of Insurance Commissioners or in the determination of such State commissioner, officer or agency substantially conforms to that so prescribed.

"(ii) Such insurance company is subject to regulation by its domiciliary State of proxies, consents, or authorizations in respect of securities issued by such company and such regulation conforms to that prescribed by the National Association of Insurance Commissioners.

"(iii) After July 1, 1966, the purchase and sales of securities issued by such insurance company by beneficial owners, directors or officers of such company are subject to regulation (including reporting) by its domiciliary State substantially in the manner provided in section 16 of this title."

See also sec. 204(a)(4)(a) of the Interstate Commerce Act regarding State regulation of interstate motor carriers.

The committee language also takes from the States and gives to the Secretary the regulation of safety of the interstate transmisson lines.

The committee believes the certification route to be more feasible and fully as effective in achieving the ends here sought as the agreement route. The committee feels observance of the Federal standards will be obtained more quickly.

In addition the American Public Gas Association proposed that municipalities be treated the same as State regulatory agencies where State law provides that they are exempt from the jurisdiction of such agencies. The committee has accepted the association's suggestion as to an amendment, namely, the indication that as to this section the term State agency includes a municipality. The committee points out however that under the conditions set forth in the section only municipalities which have franchise or similar authority to regulate private gas companies would stand in such stead where the State law makes provision for enforcement by monetary sanctions and injunctive relief.

It would seem impractical as well as inappropriate for municipalities owning their own systems to fine or enjoin themselves. Therefore this would seem to come under the direct jurisdiction of the Secretary until such time as State law might provide for their safety regulation by a State agency.

Other Provisions of the Bill

PROCEDURES APPLYING TO SAFETY STANDARDS

Effectiveness of standards

Under section 3(c) of the reported bill standards prescribed by the Secretary of Transportation, including amendments thereto, become, effective 30 days after date of their issuance. The Secretary may however, prescribe an earlier or later effective date if he determines a different date is required because of the period of time reasonably necessary for compliance.

Obviously in instances such as the promulgation of any set of standards far-reaching enough to involve considerable leadtime for the design of the equipment or the production of materials to the specification involved, a much longer period may be necessary. On the other hand where it may be a simple change in operation or in equipment, a shorter time may be feasible. Inasmuch as the committee change to section 3(b) relative to the authority of the Secretary to meet hazardous situations has been to give him the power to move directly to remove the hazards, rather than to do so by applying safety standards to the situation, the need for the shorter effective date would appear less pressing.

Administrative procedures

In establishing standards, the Secretary is required to comply with the provisions of subchapter II of title 5, United States Code relating to administrative procedure (formerly part of the Administrative Procedure Act). Under these provisions the Secretary would normally have the discretion to proceed with rulemaking with or without oral argument but the bill requires the Secretary to provide opportunity to present oral testimony and argument.

Technical Pipeline Safety Standards Committee

Under section 4 of the reported bill, the Secretary of Transportation is required to establish a Technical Pipeline Safety Standards Committee composed of 15 members. Five members must be selected from governmental agencies (including State and Federal Governments) two of whom must be State commissioners, selected after consultation with the national organization of State commissions. Four members must be selected from the natural gas industry, after consultation with industry representatives, not less than three of whom must be currently engaged in the actual operation of natural gas pipelines. Six members must be selected from the general public. Each of the 15 members must be experienced in the safety regulation of the transportation of gas and of pipeline facilities or technically qualified by training and experience in one or more fields of engineering applied in the transportation of gas or the operation of pipeline facilities.

There was substantial testimony as to the highly complicated and technical nature of developing and applying safety standards to gas pipelines. Therefore, the bill creates the committee described above and requires the Secretary to obtain their counsel before formally proposing any safety standard. The committee did revise the structure of the committee to provide that persons experienced in safety regulation of the transportation of gas and pipeline facilities would be eligible to serve as well as persons technically qualified by formal training. Also, recognizing that State commissions have amassed the most expertise in this field, the committee provided that two of the five members selected from governmental agencies must be State commissioners. To assure that the general public would be adequately represented, the committee increased the members selected from the general public from five to six and reduced the number selected from the natural gas industry from five to four.

Waivers

Under section 3(e), whenever the Secretary of Transportation determines that a waiver of compliance with any standard is not inconsistent with pipeline safety, he may waive compliance (in whole or in part) under such terms and conditions as he deems appropriate, and after notice and opportunity for hearing. He is also required to state his reasons for granting any such waiver. Elsewhere in this report, there is described procedures under which States may be exempt from Federal standards or agree to enforce Federal standards (sec. 5). Where such an exemption exists, or such an agreement is in effect, a State agency will have the same waiver authority as the Secretary. The waiver authority of the State agency is limited in that it must give the Secretary at least 60 days advance notice, and the Secretary may stay the proposed grant of a waiver by a State agency and afford such agency a hearing on the matter. After opportunity for such hearing, the Secretary will make the final determination as to whether the requested waiver may be granted.

Judicial review

Section 6 of the reported bill provides that any person adversely affected or aggrieved by any order issued by the Secretary of Transportation may, within 60 days after such order is issued, file a petition for judicial review with the U.S. Court of Appeals for the District of

Columbia or the court of appeals for the circuit in which the petitioner is located or has his principal place of business. The court in which the petition is filed will have jurisdiction to review the order in accordance with chapter 7 of title 5 of the United States Code which provides, among other things, for the scope of the review and the granting of appropriate relief, including relief pending review. The judgment of the court will be final, subject to review by the Supreme Court of the United States as provided in section 1254 of title 28 of the United States Code. Any change or vacancy in the office of the Secretary of Transportation will not affect any action initiated under this section. The provisions of this section will not affect any other remedies which an aggrieved party may have under any other provision of law.

The bill as referred to the committee defined the term "adversely affected" to include exposure to personal injury or property damage. The reported bill omits this definition. The judicial review provision of the bill, as noted above, provides that any person "adversely affected or aggrieved" by an order of the Secretary may obtain judicial review of such order. This is a description of the persons who have legal standing to seek such review. This term is frequently used in statutes to describe persons who may obtain judicial review of administrative action. The meaning of the term has been judicially defined by the gradual process of inclusion and exclusion based in part on the judgment of the courts with respect to the legislative intent of a particular statutory scheme. The committee feels that definition of the term should continue to rest with the courts.

Cooperation with other agencies

The Federal Power Commission and some States issue certificates of public convenience and necessity authorizing gas transportation. Establishment of a standard by the Secretary of Transportation, or action on a waiver, could affect the continuity of service under one of these certificates. If that appears to be the case, the Secretary is required by section 7 to consult with the Federal Power Commission or the State commission, as the case may be, before establishing the standard or acting on a waiver and will be required to defer his action until the appropriate commission has had reasonable opportunity to grant the authorizations it deems necessary to preserve continuity of service.

CIVIL PENALTY

Under section 9(a) of the reported bill the Secretary is required to give notice to any person he has reason to believe is violating any provision of section 8(a), or any regulation issued under this legislation, before imposing any penalty. If compliance has not been achieved within a reasonable time, the Secretary may then impose a civil penalty of not more than $500 for each day a violation persists. The maximum penalty may not exceed $100,000 for any related series of violations. Also, the Secretary may seek injunctive relief under the provisions of section 10. The bill as referred to the committee provided for a civil penalty of $1,000 per day for each day a violation continued, with a maximum of $400,000 for a related series of violations, and did not provide for notice of a violation or for any opportunity to come into compliance before the penalty could be imposed. The committee feels that continuity of service is an extremely important consideration and service to the consuming public should not be

unnecessarily disrupted. The imposition of severe penalties without notice because of an unknowing violation which may be of a minor technical nature could very well result in an unnecessary disruption of service to the consuming public. The committee believes the reported bill provides adequate penalties for enforcement and at the same time provides procedures to assure continuity of service wherever possible.

Under section 9(b), any civil penalty imposed by the Secretary may be compromised by him. In determining the amount of any compromise penalty, the Secretary is required to consider the appropriateness of the penalty in relation to the size of the business of the person charged, the gravity of the violation, and the good faith of the person charged in attempting to achieve compliance. The amount of any penalty imposed may be deducted from any sums owed by the United States to the person charged or recovered in a civil action in the U.S. district courts.

INJUNCTION AND JURISDICTION

Section 10(a) of the reported bill gives the U.S. district courts jurisdiction (subject to rule 65(a) and (b) of the Federal Rules of Civil Procedure) to restrain violations of this legislation or to enforce standards established thereunder. The Secretary of Transportation is required to give notice, whenever practicable, to any person against whom injunctive relief is contemplated and afford him reasonable opportunity to achieve compliance. Failure to give such notice will not preclude the granting of appropriate relief.

As noted earlier in this report, the committee revised the penalty provisions of the bill to assure that continuity of service could be preserved wherever possible. In view of this change, the committee feels that the injunction authority described above becomes a most necessary tool to provide for effective enforcement whenever prompt action becomes necessary to prevent personal injury or property damage. The committee realizes that while continuity of service is important it is necessary to recognize that safety is ultimately a primary consideration and that the Secretary must be given adequate authority to assure safety.

Section 10(b) of the reported bill assures any person charged with criminal contempt for violation of an injunction or restraining order issued under section 10 the right to demand a trial by jury. Under the provisions of rule 42(b) of the Federal Rules and Criminal Procedure relating to criminal contempt, a defendant is entitled to a jury trial only if an act of Congress so provides.

ADMINISTRATION BY THE SECRETARY

Under section 13(a) of the reported bill, the Secretary of Transportation is required to conduct research, testing, development, and training necessary to carry out the provisions of this act. He is authorized to carry out this provision by contract, or by grants to individuals, States, and nonprofit institutions.

Section 13(b) provides that the Secretary must, upon request, furnish to the Federal Power Commission information concerning the safety of materials, operations, devices, or processes relating to the transportation of gas or the operation of pipeline facilities.

Section 13(c) gives the Secretary authority to cooperate with Federal, State, and other interested public and private agencies and persons in the planning and development of Federal safety standards and methods for inspecting and testing to determine compliance therewith.

ANNUAL REPORT OF THE SECRETARY

Under section 14 of the reported bill, the Secretary is required to submit to the President for transmittal to the Congress an annual report covering the preceding calendar year. Such report is required to include—

(1) a compilation of accidents and casualties and causes thereof, when the National Transportation Safety Board has made a finding of cause;

(2) a list of Federal safety standards in effect during such year with identification of standards newly established during such year;

(3) a summary of the reasons for each waiver granted under section 3(e) during such year;

(4) a list of enforcement actions and compromises of alleged violations by location and company name, together with an evaluation of the degree of observance of applicable safety standards;

(5) a summary of outstanding problems in the administration of this legislation in order of priorities;

(6) an analysis of research activities and the policy implications thereof, together with an evaluation of technological progress for safety achieved;

(7) a list of completed and pending judicial actions, together with a brief statement of the issues;

(8) the extent to which technological information was disseminated to the scientific community and consumer-oriented information was made available to the public;

(9) a compilation of certifications filed by State agencies under section 5(a) which were in effect during the preceding calendar year, and a compilation of certifications which were rejected, together with a summary of the reasons for such rejections; and

(10) a compilation of agreements entered into with State agencies under section 5(b) which were in effect during the preceding calendar year, and a compilation of such agreements which were terminated by the Secretary, together with a summary of the reasons for such terminations.

The Secretary is required to include in his report such recommendations for legislation as he deems necessary to promote cooperation among the States in the improvement of pipeline safety and to strengthen the pipeline safety program.

The committee added items (9) and (10) to the reporting requirements in conformity with the changes made in section 5 concerning State certifications and agreements.

ROLE OF THE FEDERAL POWER COMMISSION

The general scheme of the act is to provide broad safety powers to the Secretary in gas pipeline transportation. The Federal Power Commission presently has exercised certain safety regulatory authority over interstate transmission lines under the Natural Gas Act.

The Commission considers and takes action on some elements of the safety of transmission proposals in acting on applications for new or extended authority and it is not intended that the passage of this act will diminish that authority and responsibility of the Commission. In order, however, that the Commission not be placed in the position of having to determine whether the construction and operation details of a proposed service conform to the Secretary's standards, an applicant may certify to this effect and the certification will be conclusive on the Commission. But if the relevant State or Federal enforcement agency has information that the applicant has violated safety standards in the past (thus possibly calling in question the applicant's compliance disposition) and notifies the Commission in writing, the certification will not be binding. The Commission then in connection with its awarding a certificate of public convenience and necessity may give such weight to the absence of a certificate as it may feel appropriate. It is not intended by the committee that this process of certification of compliance with the Secretary's standards will bar the Commission from continuing to consider safety in the same fashion it presently does in connection with awarding certificates of public convenience and necessity.

In addition to the above authority, the Federal Power Commission has authority over the routing of interstate transmission lines, and through the exercise of its conditioning authority in the granting of a certificate of convenience and necessity can delimit the route with particularity. The reported bill does not impinge upon this jurisdiction of the Commission. Indeed section 2(4) states that the Secretary is not authorized to prescribe the location or routing of any pipeline facility.

The Commission's authority in routing matters is of especial importance owing to the fact that by being certificated, the transmission line may then exercise the right of eminent domain in a district court of the United States to acquire land needed for certificate operations. This was provided by the enactment in 1947 of the Schwabe Act adding subsection (h) to section 7 of the Natural Gas Act.

Since the interrelation between safety and routing was brought up during the hearings, the committee believes it important to include herewith the response of Chairman Lee White of the Commission making clear that it is that Commission which has the jurisdiction and "provides a forum" for consideration in the routing of transmission pipelines, "where relevant, safety implications, community dislocation and the impact of the proposed construction on sites of historic importance or scenic beauty."

FEDERAL POWER COMMISSION,
Washington, D.C., February 27, 1968.

Hon. TORBERT H. MACDONALD,
Chairman, Subcommittee on Communications and Power, House Committee on Interstate and Foreign Commerce, Washington, D.C.

DEAR MR. CHAIRMAN: This replies to your letter of January 23, asking that the Commission make clear for the record its jurisdiction and responsibility over the routing of natural gas pipelines.

The selection of the route which an interstate pipeline will take is in the first instance left to the natural gas company. However, before construction or operation of the pipeline may commence, a certificate of public convenience and necessity must be obtained from this Commission. Among other things the certificate application filed by the natural gas company must include "a concise description of the proposed * * * construction" (FPC regulations under the Natural Gas Act, sec. 157.6(b)(4)) and have annexed to it a map showing generally the location of the proposed facilities. Section 157.14(a)(6). The proposal may be implemented only if the Commission finds that it is required by the present or future public convenience and necessity. If the Commission certificates a proposal, the certificate holder has the right of eminent domain to acquire land needed for the certificated operations. Natural Gas Act, section 7(h).

In determining the public convenience and necessity of a proposal, the Commission must determine its economic feasibility and the proposed route can be relevant to this determination. However, the Commission does not limit its consideration to economic matters. Rather it must consider "all factors bearing on the public interest." *Atlantic Refining Co.* v. *P.S.C. of N.Y.*, 360 U.S. 378, 391 (1959). This may include, where relevant, safety implications, community dislocation and the impact of the proposed construction on sites of historic importance or scenic beauty.

The Commission's existing procedures provide a forum for persons who wish to take issue with the routing of a proposed pipeline, although that forum has only rarely been used. Such persons may intervene and enjoy full party status with the right to present evidence, cross-examine witnesses and file briefs. Alternatively, those persons wishing to make their views known without becoming parties to the proceeding may do so by the filing of protests. In two recent pipeline certificate cases the Commission has admitted as intervenors local governmental authorities, landowner associations, and individual landowners from the area the pipeline will traverse. *Manufacturers Light and Heat Co.*, Docket No. CP66–347 (southeastern Pennsylvania), now pending Commission decision, and *Tennessee Gas Pipeline Co.*, Docket No. CP67–211 (Phase II, eastern Massachusetts), order issued November 8, 1967 (attached). The intervenors have raised such issues as the need for any construction, the safety of the proposed line and the width of the right-of-way to be acquired and have suggested alternative routes. In the *Tennessee* case the pipeline company agreed to routing changes to accommodate the position of the intervenors. There is also now pending before the Commission a proceeding initiated by the complaint of a landowner objecting to the route selected by a pipeline. *Stitt* v. *Manufacturers Light & Heat Co.*, Docket No. IN–1003. Where a certificate is granted the natural gas company may select any appropriate route within the general criteria established by the certificate. However, the Commission through the exercise of its conditioning authority, may delimit the route with particularity.

In sum, the Commission now has jurisdiction to review the proposed routing of interstate pipeline facilities and does offer a forum for public participation and the advancement of interests which may differ from those of the applicant. This area of Commission concern

and responsibility would in no way be foreclosed or diminished by enactment of S. 1166.

I do not mean to convey the impression that the Commission's procedures cannot be improved upon. They can and will be as the Commission gains experience in dealing with these problem areas. One area of present concern relates to the problem of assuring that interested persons are timely apprised of the pendency of applications in order to be able to avail themselves of the Commission's procedures. Another is the problem posed by pipelines proceeding with condemnation after receiving a temporary certificate which may, under the act, be granted ex parte "in cases of emergency, to assure maintenance of adequate service or to service particular customers," but before being issued a permanent certificate of public convenience and necessity. Where a temporary certificate has been issued and condemnation already taken place, the permanent certificate proceeding obviously provides an inadequate forum for the landowner whose basic contention is that certain portions of his property should not be defaced. However, in our view the resolution of these problems relates to the Commission's rules of practice and procedure rather than the existence of any legislative gap. One step which the Commission has recently taken to facilitate the expression of views of interested persons involves the simplification of our rules dealing with the filing of complaints and protests (Order No. 359, issued Feb. 5, 1968). Under the revised rules persons who wish to object to a pending application or who contend that a natural gas company is violating a Commission order, rule, or regulation would be able to do so informally and with the assurance that a complaint or timely filed protest will be referred to the Commission for appropriate action.

Even if, with greater exposure to the land-use problem, the Commission should conclude that further legislation is warranted, I do not believe that it would be desirable to look for a solution by way of an amendment to pipeline safety legislation. Certainly there is no need to amend that legislation either to reserve to the Commission its existing jurisdiction over pipeline routing or to preserve the public's right to present to the Commission its objections to a proposed route.

Sincerely,

LEE C. WHITE, *Chairman.*

AUTHORIZATION OF APPROPRIATIONS AND COST OF THE LEGISLATION

In the course of the hearings before the Senate committee the Department of Transportation placed the cost of this legislation at approximately $25 million a year. The Senate bill as it passed the Senate and came to this committee contemplated that about one-half of this amount would be raised through the imposition of annual fees upon those who were engaged in the transportation of gas and the remainder of the amount come from appropriated funds. The bill accordingly authorized appropriations for the next 3 fiscal years of $10 million, $13 million, and $15 million, respectively.

The subcommittee in its interrogation of witnesses from the Department of Transportation had extreme difficulty in developing the basis for the $25 million figure. The matter was pursued with the

Department following the hearings and under date of March 18, Secretary of Transportation Boyd submitted the following table:

DEPARTMENT OF TRANSPORTATION—ESTIMATED STAFFING AND FUNDING REQUIREMENTS FOR IMPLEMENTATION OF THE NATIONAL GAS PIPELINE SAFETY ACT OF 1967 (S. 1166), FISCAL YEARS 1969–73

	1969	1970	1971	1972	1973
Direct operations:					
Man-years	20	65	112	143	161
Personal compensation and benefits	$328,000	$898,000	$1,433,500	$1,798,000	$2,009,500
Other objects	172,000	922,000	1,506,500	1,525,000	1,510,500
Total	500,000	1,820,000	2,940,000	3,323,000	3,520,000
Grants-in-aid program to States		5,000,000	9,000,000	9,600,000	9,600,000
Grand total	500,000	6,820,000	11,940,000	12,923,000	13,120,000

The funds which the committee, in section 15 of the reported bill, has authorized to be appropriated; namely, $500,000, $2 million, and $3 million for the next 3 fiscal years roughly are those which the Secretary of Transportation contemplates are adequate for the creation of standards and the part of the program of direct cost to him.

In effect, the authorization does not provide for any substantial portion of the grant-in-aid program for State administration of a Federal safety program as contemplated by the bill. It should be noted, however, that under the terms of the legislation here proposed interim standards will be in effect until such time, not over 2 years hence, as the Secretary of Transportation promulgates Federal standards. These "interim" standards are merely the prescription of the standards which the State already has in effect and, accordingly, there seems very little in the way of need for additional grants to carry out what the States already are doing. For that matter, a committee change to section 5(c) of the bill, made at the request of the Secretary of Transportation, requires that the Federal funds cannot be a substitute for State funds which must be maintained at a level which is not below the level of their expenditures for the last 2 previous fiscal years.

Further, while Federal safety standards will be prescribed before the end of 24 months after the enactment of this legislation, such standards, of course, cannot become immediately effective, nor will the adoption and enforcement of such standards all at once give rise to tremendously increased expenditures by the States.

The committee is aware of the fact that sometime during the third year there will appear a need for the consideration of the extent to which the grant-in-aid program will require the authorization of additional Federal funds and the committee accordingly intends to keep abreast of this situation so that in its consideration of the extension of the legislation appropriate attention to whatever is this need may be given.

The bill as referred authorized a $20,000 grant to the National Association of Regulatory Commissions to aid the States in their enforcement programs by coordinating State activities and rendering technical assistance. In view of the reduction of funds and the obvious timelag discussed above before State programs will be in operation, the committee feels this provision is unnecessary at the present time, and the reported bill deletes it.

The bill as referred included a revision in subsection (b) of section 15 authorizing the Secretary to require the payment of a reasonable annual fee to him by all persons engaged in the transportation of gas for the purpose of helping to defray the expenses of Federal inspection and enforcement under this act. It is the sense of the committee that when any collection of fees is authorized, they should be covered into the Treasury and the expenses of the Secretary should be met through the usual route of authorized and appropriated funds. Since this provision apparently was inserted originally to reduce the amount of appropriated funds and permit the expenses to be met otherwise, the committee has deleted the provision.

Appendix A

Department of Transportation Statement on Current State Pipeline Safety Activities

A study of State activities conducted by the National Association of Regulatory Utility Commissioners and the Department of Transportation was completed in April 1967. This study indicated a strong need for comprehensive uniform safety standards covering the natural gas industry. A copy of the analysis of the survey is attached.

A report, dated September 11, 1967, prepared by the Subcommittee on Intergovernmental Relations of the Committee on Government Operations, U.S. Senate, contains the results of a survey of the State commissions responsible for the regulation of utilities. This report reveals that 31 of the 49 States responding indicate their current budget is sufficient and they do not plan any increase. These 31 States have within their boundaries approximately 70 percent of the total pipelines (gathering, transmission, and distribution) of the United States. It appears that, even though there has been a rapid passage of legislation by the States during the past 18 months concerning pipeline safety, very few States plan to do very much more than they are doing now. Based on the NARUC survey of April 4, 1967, and the above-mentioned survey, there remains a void in the comprehensiveness and uniformity of regulations for gas pipeline safety.

Analysis of the Natural Gas Safety Questionnaire, Dated July 18, 1967, Submitted by NARUC to the States and District of Columbia on April 4, 1967

A natural gas safety questionnaire was sent to all States and the District of Columbia. A total of 44 completed questionnaires were returned with no response from seven States. Of the 44 responding, four do not have authority to establish safety standards for the gas industry. Therefore, all comments and statistical comparisons made in this analysis are based on 40 States including the District of Columbia. These represent 80 percent of the total States. Those States not included are Alaska, Georgia, Louisiana, Massachusetts, Minnesota, Montana, Nebraska, New York, Pennsylvania, South Dakota, and Wyoming. Of these 11, it is understood that three have regulations while the remaining eight do not have any codes for natural gas facilities.

This analysis indicates the strong need for comprehensive uniform safety regulations.

The following are the individual questions, replies, and a brief analysis.

1. (*a*) Does the commission have the authority to establish safety standards for privately owned natural gas utilities?

Yes 40. No. 0. N/A* 0.

*No answer or not applicable.

(*b*) If the commission has such authority, does it apply throughout the State?

Yes 40. No 0. N/A 0.

(*c*) Does the commission have safety jurisdiction over:

(1) Interstate transmission systems? Yes 26. No 10. N/A 4.

(2) Intrastate transmission systems? Yes 39. No. 1. N/A 0.

(3) Distribution systems? Yes 40. No. 0. N/A 0.

(4) Gathering systems? Yes 16. No 11. N/A 13.

All 40 States report that they have statewide authority to establish safety standards for privately owned natural gas utilities or distribution systems. In addition—

65 percent have authority over interstate transmission systems.

97.5 percent over intrastate transmission systems.

Only 50 percent have jurisdiction over gathering systems due to the fact that a large number of States have no gas production.

2. (*a*) Does the commission have the authority to establish safety standards for publicly owned natural gas utilities, such as municipal systems?

Yes 10. No 27. N/A 3.

(*b*) If the commission has no such jurisdiction, is there authority at the municipal or county level?

Yes 22. No 3. N/A 15.

(*c*) Is such authority exercised?

Yes 14. No. 4. N/A 22.

Only 25 percent of the States have authority to regulate publicly owned natural gas utilities, while 55 percent report that authority for establishing safety standards does exist at the municipal or county level. At this level only 35 percent have any type enforcement.

These figures indicate that the States have very little control over the publicly owned natural gas utilities.

3. Aside from the commission, are there any other public bodies within the State—local, county, or regional—which establish safety standards for privately owned gas utilities?

Yes 16. No 24.

The survey shows that 100 percent of the States reporting, Question 3, have safety jurisdiction over privately owned gas utilities with 40 percent showing further regulatory authority at lower levels of government.

4. In those areas in which the commission has the statutory or constitutional authority to establish safety standards for privately or publicly owned gas utilities, has it adopted rules or regulations to implement that authority?

Yes 36. No 3. N/A 1.

Ninety percent of the States have adopted rules or regulations.

5. (*a*) Has the commission adopted the USASI code for gas safety standards for new pipelines?

Yes 31. No 8. N/A 1.

(*b*) If the USASI code is the basis for your regulation, have you eliminated or modified any sections of the code?

Yes 14. No 21. N/A 5.

(*c*) Has the commission adopted safety standards for existing gas pipelines?

Yes 29. No 11.

(*d*) If so, do these standards conform to the USASI standards for new pipes?

Yes 26. No 6. N/A 8.

Seventy-eight percent have adopted the USASI code with 40 percent of these making changes, either eliminating or modifying various sections covering new lines. From these figures it is not possible to determine exactly what type protection the existing regulations are providing.

Seventy-three percent have adopted safety standards for existing gas pipelines with 90 percent of these conforming to the USASI standards for new pipes.

6. Has the commission adopted any additional or other gas safety standards or codes, including the proposed NARUC amendments?

Yes 18. No 22.

These figures show that 45 percent of the States have adopted codes or standards other than or in addition to the USASI code.

7. (*a*) Do the companies in your State periodically test and inspect existing gas pipelines?

Yes 31. No. 5. N/A 4.

(*b*) Does the commission periodically test and inspect existing gas pipelines?

Yes 9. No 30. N/A 1.

(*c*) Does the commission inspect materials and methods of construction for gas pipelines?

Yes 18. No 21. N/A 1.

(*d*) If the commission has established gas safety standards, does it enforce these standards through civil or criminal sanctions?

Yes 29. No 5. N/A 6.

Seventy-eight percent of these States reporting indicate that gas companies inspect and test existing gas lines, while 13 percent report not testing or inspecting.

Only 23 percent of these States inspect existing gas pipelines.

Forty-five percent of these States inspect construction of gas pipelines, while 53 percent do not.

Seventy-three percent indicate they enforce their safety regulations through civil or criminal sanctions. Thirteen percent do not while 15 percent made no reply.

8. (*a*) If your commission has a program of inspection, does it have a staff of its own to do this work?

Yes 21. No 14. N/A 5.

(*b*) If so, how many inspectors do you employ?

20 have inspectors (average range 1–4).

7 do not have inspectors.

13 no reply.

(*c*) How is this enforcement program financed?

(1) by legislative appropriation? Yes 16. No 3. N/A 21.

(2) by fees charged the companies? Yes 6. No 6. N/A 28.

(*d*) Does your commission employ outside contractors to perform such inspections?

Yes 3. No 32. If so, please explain briefly:

Of the States reporting, 53 percent have an inspection program and 35 percent do not. Fifty percent report they have inspectors, ranging from an average of 1 to 4 inspectors each. The other 50 percent either do not have inspectors or did not reply.

These figures indicate very clearly that with this number of inspectors a thorough program cannot be carried out. Some of these States indicated that their inspectors were part of their engineering staff and were not full-time inspectors. Only 8 percent employ outside contractors to perform such inspections.

9. (*a*) Does the commission collect statistics on gas accidents throughout the State?

Yes 26. No 13. N/A 1.

(*b*) Does your commission require gas companies to report gas line failure or accidents to you?

Yes 34. No 6.

(*c*) How often are they required to report such accidents?

32 as soon as possible.

2 monthly.

Sixty-five percent indicate they collect statistics on gas accidents.

Only 5 percent (two States) furnish a summary report of accidents. The others indicated the statistics were not in such form that could be separated or the information could not be reduced.

Most States required the reporting of accidents or failures as soon as possible after the accident occurred.

10. (*a*) Have there been any fatal or injury accidents in your State in the past 10 years resulting from gas pipeline failures?

Yes 17. No 18.

(*b*) Does the commission establish cause in gas accidents?

Yes 22. No 17. N/A 1.

(*c*) What have been the principal causes of such accidents?

Forty-three percent of these States have had accidents resulting in injury or death.

Only 55 percent attempt to determine the cause of gas accidents.

The principal causes of accidents was reported by 50 percent of the States, with a total of 18 accidents. The causes were as follows:

Construction/outside sources	11
Ground settling or movement	4
Corrosion	2
Human error	1

APPENDIX B

STATES IN WHICH STATE AGENCY ORDERS MAY BE ENFORCED BY INJUNCTION AND BY CRIMINAL FINES FOR WILLFUL VIOLATIONS, SUBMITTED BY THE AMERICAN GAS ASSOCIATION

Name of State	Authority to have Commission orders enforced by court injunction	Amount of fine which may be imposed for willful violation of Commission orders
Alaska		
Alabama	Yes	$1,000 per day.
Arizona	Yes	$5,000 per offense.
Arkansas		
California	Yes	$500 to $2,000 per day.
Colorado	Yes	At discretion of court
Connecticut	Yes	$5,000 for each offense.
Delaware	Yes	$50 per day.
Florida	Yes; Commission has authority to enforce orders and seek injunctions.	$5,000 per day.
Georgia	Yes; civil and criminal	Do.
Hawaii	Yes	$1,000 per offense.
Idaho	Yes	$2,000 per day for each offense.
Illinois	Yes	$500 to $2,000 per day per offense. $1,000 and/or 1 year imprisonment (individuals).
Indiana	Yes	$100 to $1,000 per offense.
Iowa		
Kansas		
Kentucky	Yes	$1,000 per offense.
Louisiana	Yes; Commission has authority to enforce orders.	$100 to $500 for each violation.
Maine	Yes; through Attorney General	$1,000 per day for each violation or part.
Maryland	Yes	$100 per day for failure to file reports. $2,500 per day for violations of Commission orders. $1,000 for the first offense. $5,000 for additional offense (individuals).
Massachusetts	Yes	At discretion of court.
Michigan	Yes	$100 to $20,000 per offense. $100 to $1,000 and/or 30 days to 1 year (individuals).
Minnesota	Yes; fire marshal	$100 and/or imprisonment of up to 90 days per offense (individuals).
Mississippi	Yes	$200 per day per offense.
Missouri	Yes	$1,000 to $2,000 per day. $1,000 and/or 1 year imprisonment (individuals).
Montana	Yes	$100 to $500 per day per offense.
Nebraska		
Nevada	Yes	$300 to $500 per day.
New Hampshire	Yes	$5,000 for each violation for corporation. $1,000 fine and/or 6 months in house of Correction (individuals).
New Jersey	Yes	$250 per day (with no limitation on days).
New Mexico	Yes	$100 to $1,000 per offense.
New York	Yes	$1,000 per day.
North Carolina	Yes	$1,000 per day per offense.
North Dakota		
Ohio	Yes	$100 to $1,000 per day. Statute also provides for imprisonment up to 2 years for willful violation and treble damages (individuals).
Oklahoma	Yes; Commission has authority	$500 per day per offense.
Oregon	Yes	$100 to $10,000 for each offense.
Pennsylvania	Yes	$50 per day for corporation. $500 and/or 1 month to 1 year imprisonment for first offense. $1,000 for subsequent offenses, imprisonment 3 months to 2 years (individuals).
Rhode Island	Yes; Administrator of Division of Public Utilities.	$200 to $500 per day.
South Carolina		
South Dakota	No; municipalities have jurisdiction.	
Tennessee	Yes	$50 per day.
Texas	Yes	$1,000 per day.
Utah	Yes	$500 per day per offense. $1,000 and/or 1 year imprisonment per offense (individuals).
Vermont	Yes	$5,000 for each violation.
Virginia	Yes; Commission has authority to enforce orders and seek injunctions.	$500 per day.
Washington	Yes	$1,000 per day.
West Virginia	Yes	$5,000 per day and/or imprisonment of 3 months to 1 year (individuals).
Wisconsin	Yes	$25 to $1,000 per day.
Wyoming	Yes	$5,000 per offense.

APPENDIX C

STATISTICS PERTAINING TO STATES PRODUCING NATURAL GAS IN 1966, COMPILED BY HAROLD E. SHUTT, CHAIRMAN OF THE SUBCOMMITTEE OF STAFF EXPERTS OF THE NARUC COMMITTEE ON GAS

State	Gathering and field lines [1]		Percent of domestic production [2] for interstate sales	Questions for State survey		
	Miles	Percent		No. 1 [3]	No. 2 [4]	No. 3 [5]
Alabama			([6])	No	None	Yes.
Arizona		([6])	0.01	No	do	Yes.
Arkansas	580	0.92	.75	Yes [7]	Arkansas Public Service Commission	Yes.
California	710	1.12		No	None	Yes.
Colorado	1,160	1.83	.51	No	do	Yes.
Illinois	80	.13		Yes [7]	Illinois Commerce Commission	Yes.
Indiana	320	.50	([6])	Yes	Public Service Commission of Indiana	Yes.
Iowa	70	.11		Yes [8]	Iowa State Commerce Commission	Yes.
Kansas	6,490	10.25	5.93	No	None	Yes.
Kentucky	3,450	5.45	.33	Yes	Kentucky Public Service Commission	Yes.
Louisiana	2,440	3.85	37.30	No	None	No.
Maryland	60	.10	([6])	Yes [9]	Maryland Public Service Commission	Yes.
Michigan	620	.98		Yes	Michigan Public Service Commission	Yes.
Mississippi	140	.22	1.42	No	None	Yes.
Montana	1,140	1.80	([6])	Yes	Montana Board of Railroad Commissioners	Yes.
Nebraska	40	.06	.06	No	None	Yes.
New Mexico	7,030	11.10	5.94	No	do	No.
New York	820	1.29	.01	Yes	New York Public Service Commission	Yes.
North Dakota	20	.03	.19	No	None	
Ohio	4,330	6.84	.17	Yes [7]	Ohio Public Utilities Commission	Yes.
Oklahoma	6,450	10.19	8.58	No	None	No.
Pennsylvania	6,830	10.78	.22	No	do	Yes.
Texas	10,280	16.23	35.48	No	do	No.
Utah	470	.74	.38	No	do	
Virginia	10	.02	.02	Yes [8]	Virginia State Corporation Commission	Yes.
West Virginia	9,020	14.24	.96	No	None	Yes.
Wyoming	770	1.22	1.71	Yes	Wyoming Public Service Commission	Yes.
Total	63,330	100.00	100.00			

[1] Data obtained from "Gas Facts" prepared by the American Gas Association, 1967.
[2] Data obtained from "Sales by Producers of Natural Gas to Interstate Pipeline Companies, 1966," prepared by the Federal Power Commission.
[3] Is there any State agency within your State that has regulatory jurisdiction of safety of gas-gathering lines?
[4] If yes, what is the agency's name?
[5] If a public utility owned and operated gas-gathering lines in your State, would your commission have regulatory jurisdiction of safety of these lines?
[6] Less than 0.01 percent.
[7] If the lines are operatec by a public utility.
[8] Yes, if State had any gathering lines.
[9] Not exercised.

AGENCY REPORTS

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington, D.C., February 28, 1968.

Hon. HARLEY O. STAGGERS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: This is in reply to your request for the views of the Bureau of the Budget on H.R. 6551, H.R. 13936, and S. 1166, bills relating to the safety regulations of natural gas pipelines, and to your letter of February 21, 1968.

In his message of February 16, 1967, on protection of the American consumer, President Johnson called for legislation to provide Federal safety regulation of gas pipelines. To this end, S. 1166 was introduced in the Senate on March 3, 1967. In testimony before your committee on December 6, 1967, the Secretary of Transportation endorsed S. 1166 as passed by the Senate, but recommended amendments to (1) delete the requirement for the Secretary to publish his reasons for rejecting recommendations of the Technical Advisory Committee; (2) add a maintenance-of-effort requirement to the provision for grants to the States; (3) add criminal penalties for wilful and knowing violations; and (4) delete the partial exemption from retroactive application of standards.

We concur in the views expressed by Secretary Boyd and strongly recommend that S. 1166 be amended as he suggested. Enactment of this legislation would be in accord with the program of the President.

You also inquired about the costs of this legislation and whether provision has been made for them in the 1969 budget. The timing of enactment and the final form of the bill will, of course, affect the costs which can be anticipated for fiscal year 1969. This legislation was taken into account in developing the allowance for contingencies in the 1969 budget, which provides for the possible costs of new programs for which definite estimates cannot be made at the time.

Sincerely yours,

WILFRED H. ROMMEL,
Assistant Director for Legislative Reference.

U.S. DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D.C., December 6, 1967.

Hon. HARLEY O. STAGGERS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR MR. STAGGERS: Your committee has requested a report on S. 1166, a bill to authorize the Secretary of Transportation to prescribe safety standards for the transportation of natural and other gas by pipeline, and for other purposes.

S. 1166 would authorize the Secretary of Transportation to establish minimum Federal safety standards applicable to the design, installation, inspection, testing, construction, extension, operation, replacement, and maintenance of pipeline facilities used in the transportation of gas.

Under the terms of the bill, "gas" is defined as "natural gas, flammable gas, or nonflammable hazardous gas," and "transportation of gas" is declared to mean "the gathering, transmission, or distribution of gas by pipeline or its storage in or affecting interstate or foreign commerce." The term "pipeline facilities" is also comprehensively defined within the bill to include new and existing pipe, rights-of-way, buildings, and general equipment and facilities.

The bill provides that within 3 months following its enactment the Secretary of Transportation shall, by order, adopt interim minimum Federal safety standards for pipeline facilities and the transportation of gas in each State. In those States currently enforcing regulatory standards governing such activities, the State standards are to be adopted as the interim Federal safety requirements. Where no State standards are currently in effect, the Secretary is directed to establish such interim Federal safety standards as are common to a majority of the States presently enforcing specific safety standards within their borders. The Secretary is directed to establish permanent minimum Federal safety standards not later than 24 months after the enactment of the act, which standards "shall be practicable and designed to meet the need for pipeline safety." Any permanent minimum Federal safety standards are to become effective 30 days after their date of issuance unless the Secretary, for good cause shown, determines that an earlier or later effective date is reasonably necessary to insure compliance.

Minimum Federal safety standards prescribed by the Secretary of Transportation relating to design, installation, construction, initial inspection, and initial testing would not be applicable to pipeline facilities in existence on the date such standards were adopted unless a potentially hazardous situation existed. The Secretary would be authorized by written agreement with an appropriate State agency to exempt from Federal safety standards those pipeline facilities and the transportation of gas not otherwise subject to the jurisdiction of the Federal Power Commission under the Natural Gas Act. Under such agreements, the State agencies would be required to adopt the Federal standards, undertake programs designed to achieve adequate compliance with such standards, and cooperate in a system of Federal monitoring of the compliance program and reporting requirements. The bill authorizes the Secretary to pay up to 50 percent of the annual costs for carrying out such agreements by a State agency.

Prior to promulgation of permanent Federal safety standards, the Secretary of Transportation is directed to establish a Technical Pipeline Safety Standards Committee composed of 15 members, five to be selected from governmental agencies, five from the natural gas industry, and five from the general public. All of the proposed Federal safety standards and amendments would be submitted to the technical committee, which in turn would report on the technical feasibility, reasonableness and practicability of each proposal. The committee would also be authorized to propose safety standards to the Secretary for his consideration. The Secretary, however, would not be bound by the technical committee's reports or conclusions.

The bill provides for judicial review before the various U.S. courts of appeals of any order or other administrative determination of the Secretary of Transportation arrived at under the Natural Gas Pipeline Safety Act of 1967. Enforcement features of the bill include provision for civil penalties not exceeding $1,000 per day for each violation, except that the maximum civil penalty may not exceed $400,000 for any related series of violations. The Secretary is authorized to compromise monetary penalties in accordance with the equities of the particular case, or to recover penalties, wherever necessary, through civil actions in the U.S. district courts. Injunctive relief to restrain violations of the act is also provided for through the offices of the appropriate U.S. attorneys or the Attorney General. The Secretary of Transportation is authorized to advise, assist, and cooperate with other Federal and State departments and agencies, as well as other interested public and private agencies and persons, in the planning and development of Federal safety standards and general enforcement procedures.

We recommend enactment of S. 1166. Although this Department is assigned no functional role in the administration and enforcement of the Natural Gas Pipeline Safety Act of 1967, we are in full accord with the determination that need exists for early enactment of safety legislation in this vital consumer area. President Johnson, in his consumer message to the Congress on February 16, 1967, stated the following:

"Nearly 800,000 miles of pipeline reach out across a continent, linking the Nation's natural gas producing fields to the consumer. This gas brings heat and convenience to millions of American homes. It is used increasingly in industrial processes.

"The safe transmission and distribution of natural gas is essential to all of us.

"The natural gas industry is among the most safety conscious in the nation. But natural gas is inherently dangerous when it is being transmitted. It travels through pipelines at enormous pressures. It is highly inflammable. When it burns, it can reach temperatures as high as 2500° Fahrenheit. In March 1965, a tragic pipeline failure near Natchitoches, Louisiana, killed 17 persons. The recent blaze in Jamaica, New York, dramatically underscored how serious a gas pipeline failure can be.

"As pipelines age and as more and more of the system lies under areas of high population density, the hazards of pipeline failures—and explosions—increase. Yet:

—22 States have no safety regulations.

—Many of the remaining 28 States have weak or outmoded provisions.

—Although the gas industry has developed safety standards, they are not binding and in some instances not adequate.

—There is no Federal jurisdiction whatsoever over 80 percent of the Nation's gas pipeline mileage and no clear authority to set minimum safety standards for the remaining 20 percent.

"With the creation of the Department of Transportation, one agency now has responsibility for Federal safety regulation of air, water and land transportation, and oil pipelines. It is time to complete this comprehensive system of safety by giving the Secretary of Transportation authority to prescribe minimum safety standards for the movement of natural gas by pipeline.

"I recommend the Natural Gas Pipeline Safety Act of 1967."

Inasmuch as the Secretary of Transportation is authorized to advise and cooperate with other Federal departments and agencies in the planning and development of Federal safety standards and methods relating to inspection and testing for purposes of assuring compliance with the act, this Department anticipates future opportunity to participate actively in the formulative process.

There is a typographical error in section 8(a) (2) and (3) of the bill. Section 8(a)(2) should refer to "section 11" instead of "section 12" and section 8(a)(3) should read "section 12" instead of "section 13".

The Bureau of the Budget has advised that there is no objection to the presentation of this report from the standpoint of the administration's program.

Sincerely yours,

J. CORDELL MOORE,
Assistant Secretary of the Interior.

FEDERAL POWER COMMISSION REPORT ON H.R. 6551, S. 1166, H.R. 13936, H.R. 13950 AND H.R. 13953, 90TH CONGRESS, GAS PIPELINE SAFETY BILLS

S. 1166, H.R. 13936 (identical to H.R. 13950), and H.R. 13953 would assign to the Secretary of Transportation the responsibility for prescribing safety regulations for the transportation of natural and other gases by pipeline. Such regulations would cover the gathering, transmission, and distribution of gas by pipeline and its storage in or affecting interstate commerce.

The bills, except for H.R. 6551, are all similar in scope, language, and structure with one major substantive difference: S. 1166 and H.R. 13953 do not provide for criminal penalties; H.R. 13936 does. The attachment contains a brief analysis of S. 1166 with a table showing the differences between the various bills.

H.R. 6551 would assign such a responsibility for interstate lines to the Federal Power Commission. While the Commission has supported such legislation in the past, it now supports the broader concept embodied in S. 1166.

NEED FOR LEGISLATION

The principal need for a Federal effort in the field of gas pipeline safety is the inadequacy of the code now used as a safety guide by companies and State agencies, and the improbability that an adequate code can or will be established under existing law or under existing private procedures.

The current basis for safety standards for transmission and distribution pipelines is the USAS B31.8 Code for Pressure Piping. This code has in turn been adopted by a preponderance of State utility commissions, on occasion with some strengthening amendments, as the basis for their legal requirements.

The flaw in this picture of almost unanimous adoption of a safety code by almost all the States is not in the will of States in adopting available safety standards, but in the inadequacy of the available safety standards themselves. The B31.8 Code, while it establishes some

safety standards in some areas, sets standards so low that it is seriously deficient to ensure safe practices. In fact, the standards the code sets are so low that most companies exceed code requirements or use practices more stringent than those required by the code. To illustrate, companies, as a matter of practice, bury their pipe, which is not required by the code, except at crossings. To protect against corrosion, most companies put a protective coating on pipe, also not required by the code; further, companies cathodically protect their pipelines, also not required by the code. In addition, most companies require a coating of a specific electric resistance, also not required by the code. Most companies have a comprehensive program for maintenance and corrosion prevention, while the code merely provides a checklist of danger areas. Most companies radiographically inspect welds on their pipe, while the code makes no such requirement.

Comparison with previous gas pipeline safety bills

S. 1166 establishes a complete scheme of standard setting, inspection, enforcement, sanctions, agreements with States, reporting and monitoring, whereas previous bills assigning such responsibility to the FPC would have utilized the existing enforcement, reporting, and compliance sections of the Natural Gas Act. S. 1166, as introduced, amended title 18 of the United States Code which would have added gas pipelines to the Transportation of Explosives Act.

S. 1166 would cover gas gathering, transmission, and distribution pipelines and storage facilities, whereas previous bills assigning such responsibility to the FPC would have covered only interstate transmission lines under FPC jurisdiction. In addition, S. 1166 would apply to all pipelines regardless of ownership, whereas previous bills would have applied only to privately owned companies.

Effect on FPC

The bill contains provisions to reduce any possible administrative problems which may arise because of the dual responsibilities over the transportation of natural gas between the Department of Transportation and the FPC. For example, section 7 of the Safety Act provides that whenever the establishment of a standard or action upon an application for a waiver would affect continuity of FPC certificated gas service, the Secretary must first consult with the FPC and defer the effective date until the FPC has had reasonable opportunity to grant the authorizations it deems necessary. Such language gives the final say on safety to the Secretary of Transportation but coordinates the actions of the FPC and the DOT so that compliance with a DOT standard would not entail violation of a FPC certificate of public convenience and necessity.

In addition, section 7 of the Safety Act provides that applicants under the Natural Gas Act for a certificate to construct a pipeline must certify that the proposed pipeline will meet Federal standards. This certification is binding on the FPC unless the DOT has timely advised the FPC that the applicant has violated DOT safety standards. The Senate Commerce Committee report on S. 1166 (Rept. 718, 90th Cong.) interprets this:

> The FPC is required to consider and take action on some elements of the safety of transmission proposals in acting on applications for new or extended authority and it is not intended that this act will diminish that authority and re-

> sponsibility of the FPC. * * * It is not intended by the committee that this process of certification of compliance with the Secretary's standards will bar FPC from continuing to consider safety in the same fashion it presently does in connection with awarding certificates of public convenience and necessity.

The FPC agrees with this interpretation.

Section 13(b) provides that, upon request, the Secretary shall furnish the FPC any information he has regarding the safety of materials, operations, devices or processes relating to the transportation of gas or the operation of pipeline facilities. This will allow the FPC to obtain the most up-to-date safety data to help in its consideration of the safety of proposed facilities for those aspects of the transportation of gas not covered by DOT standards.

Section 13(c) also authorizes the Secretary to cooperate with, among others, the FPC in planning and developing Federal standards and methods to insure compliance with those standards.

SUGGESTED AMENDMENTS

While the Commission strongly supports the basic concept of the bill, the Commission feels that the bill could be improved to give the States and the Secretary more discretion in promulgating standards. These amendments would restore S. 1166 more closely to its form as introduced and endorsed by the President and heretofore supported by the Commission.

MORE DISCRETION IN PROMULGATING STANDARDS

S. 1166 now prevents States from establishing additional nonconflicting standards for interstate transmission lines and also prevents the Secretary from adopting any standards but the State standards then existing in each State as Federal interim standards. In any State where no such standards are in effect, the Secretary must promulgate those standards common to a majority of States.[1]

Under these provisions the anomalous situation is created whereby States may raise their own standards for those transmission lines under State jurisdiction (50,000 miles) but may not apply similar standards for such lines in that State under FPC jurisdiction (160,000 miles). Functionally and operationally, these lines under State or FPC jurisdiction are identical and may even be part of the same network or even owned by subsidiaries of the same holding company. Some States have made valuable and worthwhile additions to the B31.8 Code and others may wish to do so. The FPC has supported the concept of minimum standards in its testimony on S. 1553 in the 89th Congress and S. 1166 in the 90th Congress before the Senate Committee on Commerce because it believes the creative efforts of States have proved to be and should continue to be fruitful sources of safety concern. We believe the States should be free to improve their own standards for interstate lines and continue their current jurisdiction. Similarly, the Secretary should be free to supplement

[1] This section would authorize the Secretary to prescribe standards for those pipelines in States where the State has adopted some safety regulations but which did not apply to particular classes of pipe, such as distribution lines or interstate lines.

the interim standards with such additional requirements as accident reporting or other rules as would be necessary to administer an interim safety program rather than be required to adopt the various existing State standards as then in effect. In sum, we suggest the Secretary be allowed to so supplement existing State standards for interim standards and that the Federal standards not preempt additional consistent State regulation of the interstate transmission lines.

The FPC believes that there is a vital public need for a national agency responsible to the public to set adequate safety standards for gas pipelines. S. 1166, with the amendments we suggest, effectively provides for a national responsibility and the FPC therefore favors enactment of such a bill.

MINORITY VIEWS ON S. 1166, NATURAL GAS PIPELINE SAFETY BILL

SECTION 5

AMENDMENT TO RESTORE FEDERAL SAFETY REGULATION

The original bill provided that the Secretary of Transportation would have jurisdiction over all pipeline facilities and the transportation of all natural gas.

Under section 5 of S. 1166 when it was referred to the House, the Secretary of Transportation was authorized by written agreement with appropriate state agencies to exempt from Federal safety standards pipeline facilities and the transportation of gas not subject to the jurisdiction of the Federal Power Commission. No such agreement could have been concluded unless the State agency in effect had authority to impose the same kind of sanctions, recordkeeping, and inspection responsibilities that were given to the Secretary. In the event a State agency could not enter into such an agreement, the Secretary was authorized to negotiate with such agencies to carry out certain administration of the act on behalf of the Secretary.

Section 5 was changed by the House Committee to provide that any State which could meet certain requirements would have the right to certify its ability to carry out the regulation required by the act and thereafter the State would control regulation (sec. 5), have the right to waive compliance with safety standards (sec. 2(e)), receive the plans for inspection and maintenance (sec. 11), and generally carry out the entire examination and inspection of gas pipelines not regulated by the Federal Power Commission (sec. 5).

Once the State had certified its program, then under this bill the Federal Government would be required to pay up to 50 percent of the cost of the activities of the State agencies above the present amounts they are spending (sec. 5(c)); a subsidy which would absorb nearly all of the funds granted to the Secretary under the act (sec. 15).

The net effect of the House committee amendment thrusts a burden on the Secretary which he cannot possibly carry. In order to insure protection for the public, under this unique Federal-State relationship, the Secretary would have to have a massive staff to monitor State enforcement activities, since the burden would be on him to prove that a State was, despite its certification, not in compliance.

This is in contrast to the original bill which would provide that, by written agreement, a State must spell out in detail the standards it has adopted and prove that it has the capacity to enforce those standards. Under such a system only a modest force would be necessary to monitor compliance. Also, of vital importance, the burden of proof would be on the States to show compliance and enforcement instead of on the Secretary to show noncompliance and inadequate enforcement.

There is also a substantial question whether, the State having certified itself out from Federal supervision, the Secretary could make any serious effort to look behind that certification.

This proposed amendment will be presented by Congressman Macdonald.

SAMUEL N. FRIEDEL.
JOHN E. MOSS.
JOHN D. DINGELL.
DANIEL J. RONAN.
BROCK ADAMS.
RICHARD L. OTTINGER.
PETER N. KYROS.

MINORITY VIEWS ON AMENDMENTS TO RESTORE SECTIONS 2, 3, 4, 9, AND 15

GENERAL

In addition to the basic change in the bill created by section 5, there were a series of weakening amendments adopted by the committee which will prevent the bill from being effective even if section 5 were to be corrected. With section 5 in its present form, these amendments make the bill a nullity.

SECTION 2

AMENDMENT TO RESTORE REGULATION OF GATHERING LINES

The original will provided that "transportation of gas" included all means of distribution of gas by pipeline or its storage.

The committee amended that section to exclude pipelines used for the gathering of gas in rural locations unless the Secretary defined that an area had become "nonrural."

It will be impossible for the Secretary to examine each of some 65,000 miles of gathering lines to determine where there is a populated as opposed to nonpopulated area, and therefore the risk caused by gathering lines will continue in its present status since the Secretary can only issue general regulations and cannot examine each line to determine whether it is rural or nonrural.

SECTION 3

AMENDMENT TO RESTORE REGULATION OF EXISTING PIPELINES

Existing pipe under our major metropolitan centers is the chief hazard against which legislative action is needed, yet this pipe is effectively "grandfathered" out from effective coverage by section 3 of the bill.

The Senate language in section 3 should be restored. This would permit the Secretary to eliminate potentially hazardous situations by requiring compliance with safety standards already established. It would allow the Secretary to promulgate a series of orders in general form that would correct some of the more dangerous situations in the existing lines throughout the Nation. For example, he could find that certain types of pipe which had been in existence for a certain number

of years were hazardous and should be replaced. Pipe of deficient material, or which was improperly welded, would be subject to replacement. The burden would then be on the companies to bring their facilities up to such standards.

The committee changed this section to provide that the Secreatry could not issue general orders but instead was required to find that a "particular" facility was actually (not potentially) hazardous to life or property and then he had to order the person operating such facility to take the steps necessary to remove the potential hazard. This would mean that every mile of the country's pipeline would have to be inspected and tested and the faults revealed before he could order compliance. This is an impossible burden for the Secretary and is contrary to the general regulatory system which requires the industry itself to bring its facilities up to a standard, with the risk of meaningful penalties for noncompliance.

There are today some 800,000 miles of gas pipeline already in the ground. Some of that pipe has been in use for over a century, and most for at least a decade. Some pieces of pipe taken recently from under city streets and buildings and shown at the hearings were so corroded that they could crumble at the slightest touch. Explosions that have leveled hundreds of houses and office buildings, that have killed hundreds and have maimed thousands have taken place in cities all around the country. Some recent examples are a rupture and explosion in Natchitoches, La., in March 1965, gutting an 18-acre area, killing 17, burning down five houses and melting cars and rocks in the vicinity; a January 1967 explosion engulfing an entire block in Queens, N.Y., in which seven people were injured and 19 families left homeless; the injury of 14 people in a recreation hall explosion in South Milwaukee, Wis., in February 1967, where 20 minutes earlier 250 people had been gathered; a February 1967 explosion in Hastings-on-Hudson, N.Y., which killed one, injured 15 and left 35 families homeless; a March 1967 explosion in Logansport, Ind., injured eight; destruction of an office building in downtown St. Louis, Mo., in November 1967—no one was hurt because luckily the explosion took place at night; explosion injuring nine in Riverdale, N.Y., last December; and so on.

SECTION 4

AMENDMENT TO BROADEN THE MEMBERSHIP OF THE TECHNICAL PIPELINE SAFETY STANDARDS COMMITTEE

This committee is to assist the Secretary in establishing safety standards, but the bill goes far beyond that and requires that the Secretary shall use this committee's recommendations unless he specifically rejects them and publishes his reason for rejection thereof.

The present standard provides that each of the 15 members must be experienced in the safety regulation of the transportation of gas and of pipeline facilities or technically qualified by training and experience in one or more fields of engineering applied in the transportation of gas or the operation of pipeline facilities. This in effect limits the membership of this committee to individuals who are in, or have in the past been members of, the gas pipeline industry. This would exclude members of regulatory agencies who had not worked for the industry or academic personnel who had not worked specifically in engineering applied in the transportation of gas or the operation of pipeline facilities.

SECTION 5

See the first minority views.

SECTION 9

AMENDMENT TO RESTORE THE CIVIL PENALTIES SECTION

The House committee reduced the civil penalties in the Senate bill from $1,000 to $500 per day with a maximum of $100,000 instead of $400,000. For big utilities, these maximums are inadequate.

Even more importantly, the committee amendment reduced the penalty sanctions to absurdity by insisting that they could be assessed only upon prior notice of noncompliance by the Secretary, followed by inaction by the pipeline company. This situation is precisely analogous to the old "mad dog" statutes, which permitted any dog one bite before he could be muzzled. We are not prepared to permit a pipeline company one explosion before minimum safety standards can be imposed.

Nowhere in any Federal regulation (or State so far as the undersigned know) is such a system of civil penalties used.

SECTION 15

AMENDMENT TO RESTORE APPROPRIATIONS

The amounts authorized to the Secretary to carry out his responsibilities under the act are wholly inadequate to permit him to do the job. Next year's authorization is cut from $13 million to $2 million, and the 1971 authorization from $15 million to $3 million.

We are conscious of the need to keep Federal spending down to the essential minimum level consistent with the national welfare. In our view, however, the amounts authorized in this legislation are inadequate to permit even a show of compliance with the duties which the legislation imposes or attempts to impose upon the Secretary. The amounts provided won't provide for any meaningful Federal inspection, to say nothing of the 50 percent grants to the States required under section 5(c).

The Natural Gas Pipeline Safety Act should be restored to the form in which it passed in the Senate, and the Secretary of Transportation should be given the funds necessary to do the job required.

As one witness testified before the committee about the leaking pipelines under our cities: "There is dynamite under our streets." It is left to us to remove it.

JOHN E. MOSS.
JOHN D. DINGELL.
DANIEL J. RONAN.
BROCK ADAMS.
RICHARD L. OTTINGER.

SEPARATE VIEWS

Having heard a major portion of the testimony in public hearings and participated in subcommittee deliberations, I do not share all the misgivings of my colleagues in their minority views. However, I agree substantially that section 5(a), as amended, seriously impairs the Secretary's opportunity to attack present dangers.

The language as reported appears to admit Federal jurisdiction, but at the same time places an undue burden on the Secretary to prove that it ought to be asserted. I therefore urge a return to the language of section 5 as it was passed by the Senate, which preserves the traditional concept of Federal-State cooperation.

I would nonetheless caution against a familiar pitfall of consumer legislation, the desire of well-intentioned administrators to achieve a wider jurisdiction than is proved necessary. An example in the present debate is their effort to regulate all gathering lines.

Our subcommittee worked conscientiously to protect inhabited areas against faulty gathering lines. But from nearly 98 percent of gathering lines, testimony indicated, there is no need for protection. These lie across open terrain, most of it prairie, and the usual gas pressures are only 3 or 4 pounds per inch. No accidents involving gathering lines have occurred over the past decade.

Similarly, I find little logic in arguments of the minority that the prospect of penalties up to $500 a day per violation and a total of $100,000 would fail to stir action by officials of a company who have been warned their property is unsafe. And I am baffled by colleagues who find it "amazing" that a violator should be warned before he is penalized. Let us hope the day of the friendly cop has not ended altogether.

LIONEL VAN DEERLIN.

I&E
Attachment C

March 16, 1971

Mr. J. H. Lambdin
Professional Engineer
349 Glenway
Jackson, Mississippi 39216

Dear Mr. Lambdin:

This is in reply to your letter of February 16, 1971, concerning the applicability of the Natural Gas Pipeline Safety Act of 1968 to a line approximately 10 miles long operating at a pressure of 125 to 150 pounds, crossing various public and private rights-of-way and supplying only one customer, a public utility owned generating station.

The Natural Gas Pipeline Safety Act of 1968 (hereinafter called the Act), and the regulations contained in 49 CFR, Parts 191 and 192 would appear to be applicable to this facility. Section 2(3) of the Act defines "Transportation as gas" as "the gathering, transmission or distribution of gas by pipeline or its storage in or affecting interstate or foreign commerce...." (underscoring added). "Pipeline facility" as defined in Section 2(4) of the Act includes "any equipment, facility, or building used in the transportation of gas or the treatment of gas during the course of transportation."

It is our view, based on the legislative history of the Act, that even though the operation may be entirely within one State there is no question but that every element of a gas gathering, transmission and distribution line is moving gas, which is either in or affects interstate commerce.

We hope this answers your question, and if we can be of any further assistance, please let us know.

Sincerely,

Joseph C. Caldwell
Director, Acting
Office of Pipeline Safety

dal\192.1-a\13\71-03-16

I&E
Attachment D

Interpretation 191.3 (Master Meter) 13

PI-11-0014*

August 27, 2012

*{ViaData note: this PI number is also used for this related interpretation.}

Ms. Nikki Gray Shoultz, Esq.

Attorney

Bose McKinney & Evans LLP

111 Monument Circle, Suite 2700

Indianapolis, IN 46204

Dear Ms. Shoultz:

On April 24, 2012, after you became aware of an interpretation of 49 CFR § 191.3 issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA) to the Indian Utility Regulatory Commission's Pipeline Safety Division (IPSD), you informed me by email that you sent a letter to PHMSA dated September 27, 2011, requesting an interpretation of this regulation as it relates to "master meter" systems. In your request, you informed PHMSA that you represent the Indiana Apartment Association (IAA) and that the IPSD has indicated its intent to regulate one of IAA's members, Grand Oak Community, an apartment complex located in Evansville, Indiana. We confirm that we did not receive your initial interpretation request letter and thank you for resending your request.

In your request, you state that you do not believe that the piping configuration at Grand Oak constitutes a master meter system. You believe that under the definition of a "master meter" in 49 CFR 191.3, the piping at Grand Oak downstream from the local distribution company (LDC) meter should not be regulated by the IPSD because the term master meter system does not apply to piping that runs within a single building. In your request, you stated the following:

...The utility supplies gas to each building within Grand Oak's complex and each building has its own gas meter. Grand Oak owns the underground piping that runs between the building's meter to each unit inside the building. The tenants' consumption is not individually metered, and their natural gas usage is included in rent.

After carefully reviewing your request letter, both your and the IPSD requests lead us to the same conclusion regarding the applicability of the gas pipeline safety regulations to the Grand Oak complex. Based on the maps and descriptions of the Grand Oak complex that were provided to PHMSA, the pipelines downstream of the LDC's meter travel underground around the buildings before they come above ground to enter into each building.

In this case, the LDC's responsibility ends at the LDC's meter, but the complex owner/operator becomes responsible for the underground pipelines it owns that transport gas between the LDC meter and the various buildings. The pipeline downstream from the LDC meter is a gas distribution system that is subject to the gas

pipeline safety regulations in 49 CFR Parts 191 and 192 as adopted by the State of Indiana and enforced by the IPSD for a master meter operator.

I hope that this information is helpful to you. If I can be of further assistance, please contact me at 202-366-4046.

Sincerely,

John A. Gale

Director, Office of Standards and Rulemaking

cc: Mr. Robert Veneck, Executive Director

Indiana Utility Regulatory Commission

Interpretation 191.3 (Master Meter) 12

PI-11-0014*

March 27, 2012

*{ViaData note: this PI number is also used for this related interpretation.}

Mr. Robert Veneck

Executive Director

Indiana Utility Regulatory Commission

101 West Washington Street

Suite 1500 East

Indianapolis, IN 46204-3407

Dear Mr. Veneck:

In a letter to the Pipeline and Hazardous Materials Safety Administration (PHMSA) dated August 30, 2011, you asked for an interpretation of a master meter under 49 CFR Part 191, Based on the definition of a "master meter" as defined in 49 CFR § 191,3, you believe that the pipeline downstream from the local distribution company (LDC) should be regulated by the Federal pipeline safety regulations because the apartment complex owners are operating natural gas distribution systems.

You stated that the property in question includes approximately twenty buildings. each having five to seven residential units that are served by natural gas from the local distribution company (LDC). There is a meter, owned by the LDC, at the end of each of these bui!dings: the apartment owner's piping downstream from the meter goes back underground and around the back of the building to each unit. The piping for each tenant's individual unit proceeds to a riser where it enters the building for each individual ultimate customer, the tenant. There is a minimum of 12,293 feet of underground natural gas piping owned by the apartment complex owners that is located adjacent to and around the length of the twenty serviced buildings.

Also, you stated that the apartment complex owners, and the Indiana Apartment Association, dispute your determination because there are not multiple buildings being served by a single meter. By the fact that there is a single meter per building. they insist that they are not, by definition, master meter operators. Therefore, you request a detem1ination by PHMSA regarding the status of the owners of this apartment complex whether they are considered natural gas operators and are subject to Federal and state pipeline safety regulations.

Under 49 CFR § 191.3, a master meter system is defined as follows:

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;

Also, under 49 CFR § 192.3, an operator is defined as follows:

Operator means a person who engages in the transportation of gas.

In this case, the apartment complex owners are operating the pipeline which provides gas to their tenants and, therefore, are engaged in the transportation of gas. The pipelines downstream of the master meter used to distribute the gas to the tenants are considered mains and service lines subject to the Federal pipeline safety regulations. We consider the mains and service lines downstream from the LDC master meter (whether or not there are multiple buildings being served by a single meter) to be a distribution system that is subject to the Federal pipeline safety regulations in 49 CFR Parts 191 and 192.

I hope that this information is helpful to you. If I can be of further assistance, please contact me at 202-366-4046.

Sincerely,

John A Gale

Director, Office of Standards and Rulemaking

August 30, 2011

INDIANA UTILITY REGULATORY COMMISSION

101 WEST WASHINGTON STREET, SUITE 1500 EAST

INDIANAPOLIS, INDIANA 46204-3407

Mr. Jeffrey D. Wiese, Associate Administrator

Pipeline & Hazardous Materials Safety Administration

US Department of Transportation

1200 New Jersey Ave, SE

East Building, 2nd Floor

Washington, DC 20590

Dear Mr. Wiese:

The Pipeline Safety Division of the Indiana Utility Regulatory Commission requests an interpretation of 49 CFR 191.3 regarding master meter natural gas systems.

You can also expect to receive a similar request on behalf of the Indiana Apartment Association. There is an apartment complex in our state whose owners dispute our determination that they are operating natural gas distribution systems and therefore should fall under our jurisdiction and the requirements found in 49 CFR 191 and 192, and 40 and 199, and 170 IAC 5-3.

The property in question includes approximately twenty buildings, each having five to seven residential units that are served by natural gas from the local distribution company (LDC). There is a meter, owned by the LDC, at the end of each of these buildings; the apartment owner's piping downstream from the meter goes back underground and around the back of the building to each unit. The piping for each tenant's individual unit proceeds to a riser where it enters the building for each individual ultimate customer, the tenant. There is a minimum of 12,293 feet of underground natural gas piping owned by the landlord which is located adjacent to and around the length of the twenty gas serviced buildings.

The property owners, and the Indiana Apartment Association, dispute our determination because there are not multiple buildings being served by a single meter. By the fact that there is a single meter per building, they insist that they are not, by definition, master meter operators.

The Pipeline Safety Division maintains that the apartment complex owners fall under the definition of 49 CFR 191.3, and, because they are providing natural gas to their residents and recovering their cost through rents, they are operating natural gas distribution systems. Further, there is the fact that the property owner' s piping is all underground, which, in our opinion, increases risk for the residents.

As I requested in the beginning of this letter, we request a determination from PHMSA regarding the status of the owners of this apartment complex as natural gas operators and subject to federal and state pipeline safety laws. You should know that there are other apartment complexes in Indiana and likely nation-wide, with similar piping configurations. It would no doubt be helpful for all if you could clarify this situation for all similar apartment complexes.

Thank you for your consideration of this matter.

Respectfully,

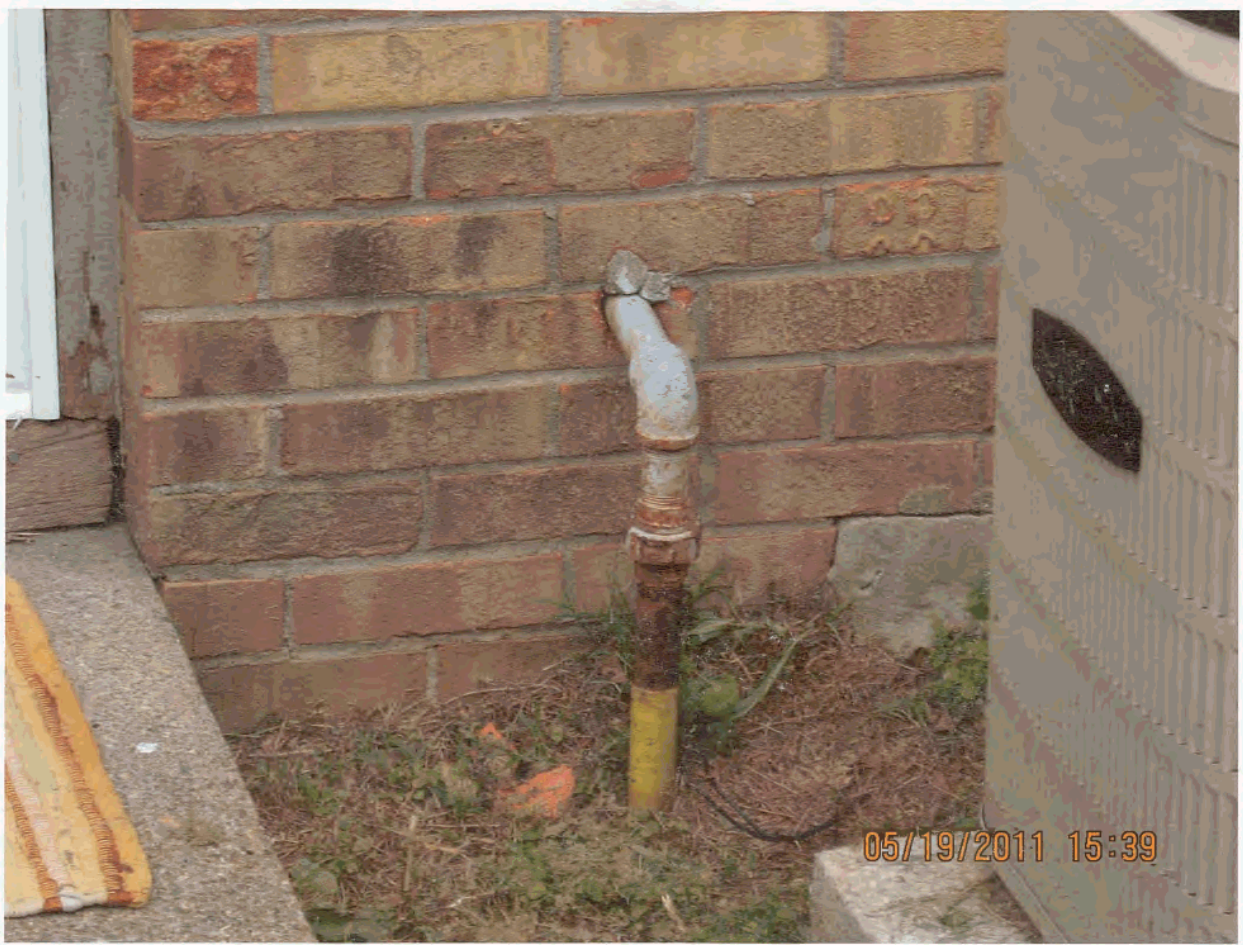
Robert Veneck, Executive Director Indiana Utility Regulatory Commission

RV/bh Enclosures

RV/bh Enclosures


05/19/2011 15:40


05/19/2011 15:43


05/19/2011 15:39

I&E
Attachment E

ASSESSMENT OF THE NEED
FOR AN IMPROVED INSPECTION PROGRAM
FOR
MASTER METER SYSTEMS

January 2002

A Report of the
Secretary of Transportation to the Congress,
prepared pursuant to Section 108 of
Public Law 100-561

FOREWORD

This report was prepared by the Volpe National Transportation Systems Center (Volpe Center), Research and Special Programs Administration (RSPA), U.S. Department of Transportation (U.S. DOT), Cambridge, Massachusetts, for the Office of Pipeline Safety (OPS), RSPA/U.S. DOT, Washington, D.C. Paul Zebe of the Volpe Center and Ralph Kubitz of OPS compiled the material for the report. Contributions to the report were also made by Lloyd Ulrich of OPS.

TABLE OF CONTENTS

TABLE OF CONTENTS

Section Page

LIST OF EXHIBITS

Exhibit **Page**

LIST OF ACRONYMS & ABBREVIATIONS

CL&P . . . . . Connecticut Light and Power

LPG . . . . . Liquefied Petroleum Gas

MAOP . . . . . Maximum allowable operating pressure

MN OPS . . . . . Minnesota Office of Pipeline Safety

NAPSR . . . . . National Association of Pipeline Safety Representatives

NARUC . . . . . National Association of Regulatory Utility Commissioners

O&M . . . . . Operations and Maintenance

OH PUC . . . . . Ohio Public Utilities Commission

OPS . . . . . Office of Pipeline Safety, RSPA, U.S. DOT

OQ . . . . . Operator Qualification

psig . . . . . Pounds per square inch gauge

RSPA . . . . . Research and Special Programs Administration, U.S. DOT

SASC . . . . . Systems & Applied Sciences Corporation

TSI . . . . . Transportation Safety Institute, RSPA, U.S. DOT

U.S. DOT . . . . . U.S. Department of Transportation

U.S. HUD . . . . . U.S. Department of Housing and Urban Development

Volpe Center . . . . . John A. Volpe National Transportation Systems Center, RSPA, U.S. DOT

1. INTRODUCTION

1.1. BACKGROUND

Gas master meter systems are small intrastate gas distribution systems providing natural gas purchased from local gas utilities (or, rarely, gas transmission systems) to consumers in connection with the rental, leasing, or management of real property.[1] Gas master meter systems, of which there are thousands, operate in almost every state and supply natural gas for heating, cooking, and other uses to tens of thousands of homes and businesses. The systems can be found at a wide variety of locations, including trailer parks, public housing projects, shopping centers, and apartment complexes.

To ensure their safe operation, master meter systems, like other gas distribution systems, are regulated by the U.S. Department of Transportation's (U.S. DOT's) Office of Pipeline Safety (OPS) under the authority of Federal pipeline safety law.[2] Federal pipeline safety law allows states to assume responsibility for inspecting master meter systems and for enforcing the Federal regulations that apply to them by entering into cooperative agreements with the OPS. The OPS actively encourages states to do this by providing funds to states as an incentive under a Federal grant-in-aid program authorized by Federal pipeline safety law. As of the end of 1999, 42 states and the District of Columbia had assumed partial or full responsibility for their master meter systems. Inspection of the master meter systems in these states is the responsibility of the state pipeline safety authorities. Federal inspection, under OPS policy, is limited to systems not covered by state regulation and is conducted only when (1) an accident occurs, or (2) the OPS becomes aware of a safety concern.

The OPS and its state partners, as well as many others in government and the general public, have an abiding interest in ensuring the safety of the Nation's gas pipeline systems. A focus of that interest has been on the adequate inspection of gas pipeline system systems. Inspection is crucial to the efforts of safety regulators working to ensure that gas pipeline systems are being operated in a safe manner. Inspection gives safety regulators an opportunity to work with gas pipeline system operators to identify and correct problems before they can cause accidents, and this can be especially important for master meter systems.

There are a number of factors complicating the inspection of master meter systems. Arguably the most important is the large numbers of such systems. Currently, over eight thousand master meter systems are believed to be operating in the U.S. In contrast, probably less than 1,400 local natural gas

[1]In addition to natural gas master meter systems, it might be noted that there are also water, electricity, and Liquefied Petroleum Gas (LPG) master meter systems. For the purposes of this study, the term "master meter system" will refer to a natural gas master meter system, unless otherwise indicated.

[2]49 U.S.C. 60101 et seq.

distribution companies are currently operating in the U.S.[3] It is difficult for state and Federal inspectors to visit such a large number of operating entities on a regular basis.

A second factor, closely rivaling the first in importance, is that there is no easy way of identifying master meter systems. Safety regulators frequently must rely on local gas utilities to identify master meter systems. In many cases, local gas utilities do not have or keep that type of information. Furthermore, master meter operators often do not realize that they are subject to gas safety regulations, so they cannot be relied upon to identify themselves.

A third factor complicating inspection is that master meter systems, unlike local gas utilities, are frequently operated and maintained by people who are not gas pipeline professionals and who have, at best, only a sketchy and vague understanding of the Federal safety standards for the distribution of natural gas by pipeline as set forth in Part 192 of Title 49 of the *Code of Federal Regulations*. Some master meter operators reportedly do not realize that the local gas utilities supplying them with gas are not responsible for the safety and maintenance of their systems. As a consequence, inspectors must often spend a disproportionate amount of time with master meter systems to ensure their safety.

1.2. PURPOSE OF THIS STUDY

The purpose of this study is to assess the need for an improved inspection program for master meter systems. This is the obvious first step in any effort to ensure the safe operation of master meter systems, since inspection is the primary means used to identify problems.

This study was mandated by Congress in Section 108(c) of the Pipeline Safety Reauthorization Act of 1988,[4] which directs the Secretary of Transportation to "...undertake a study to assess the need for an improved inspection program for master meter systems."[5] The Act also directs that a report detailing the findings of that study be submitted to Congress, along with any recommendations for appropriate legislation that the Secretary of Transportation may wish to make.[6]

Additionally, Section 108(a) of the Pipeline Safety Reauthorization Act of 1988, in part, mandates that the master meter systems for which the states have not assumed regulatory responsibility (i.e., the systems for which the OPS retains regulatory responsibility) be inspected at least once every two years, but gives the Secretary of Transportation the option of reducing the frequency of inspection. This study provides information that can be used to ascertain whether the frequency of inspection can be reduced without compromising the safety of master meter systems.

---

[3]While master meter systems are local and distribute gas, they are not generally referred to or classed as "local distribution companies" or "local gas utilities."

[4]Public Law 100-561.

[5]See Section 108(c)(1).

[6]See Section 108(c)(2).

The focus of this study is on natural gas master meter systems. Liquefied petroleum gas (LPG) distribution systems are not considered. The OPS regards LPG systems, including LPG master meter systems, as a separate category of intrastate pipeline systems with somewhat different problems and concerns than natural gas master meter systems.

1.3. STRUCTURE OF THE REMAINDER OF THE REPORT

The remainder of this report is organized in the following manner. In Chapter 2, an overview of master meter systems is presented. Included in this chapter is a description of master meter systems, the definition of a master meter system contained in the Federal pipeline reporting requirements (49 CFR 191), an estimate of the number of systems currently in operation in the U.S., and an overview of the safety record of the systems. In Chapter 3, Federal and state regulation of the safety of master meter systems is surveyed. In Chapter 4, inspection and other activities undertaken by state and Federal pipeline safety regulators to ensure the safety of the systems are detailed. In Chapter 5, the need for improved inspection of master meter systems is examined. In Chapter 6, an alternative to an improved inspection program is reviewed and evaluated. Chapter 7 outlines the key findings of the report. Chapter 8 presents the report's recommendations. A selected bibliography listing the papers and publications used in preparing the report, a list of those contributing to the study, and three appendices conclude the report.

2. OVERVIEW OF MASTER METER SYSTEMS

2.1. INTRODUCTION

This chapter provides an overview of natural gas master meter systems. The purpose of the overview is to provide background information that will allow a better understanding of master meter systems and the associated safety concerns. In this chapter, master meter systems as a general concept and as defined in the Federal pipeline reporting requirements by the Office of Pipeline Safety (OPS) are described, salient information about master meter systems and their operation is presented, the number of master meter systems currently in operation is discussed, and the recent safety record of master meter systems is reviewed.

2.2. WHAT IS A MASTER METER SYSTEM?

A master meter system is a distribution system providing gas to consumers in conjunction with the rental, leasing, or management of real property.[7] Master meter systems usually purchase product from the local gas utility, although occasionally a master meter system's supplier may be a transmission system.[8] Master meter systems take their name from the "master meter" at the connection point between a master meter system and its supplier, which measures the amount of gas taken from the supplier by the system.[9]

A master meter system operator will either (1) sell the gas it purchases from its supplier directly to the consumer or (2) include the cost of the gas in the fee or charge assessed for the use of the real property by the consumer (for example, in rent or condominium fee). A master meter system may have sub-meters (i.e., meters for each consumer or for groups of consumers)[10] for measuring consumption and allocating costs. Sub-meters are banned in some states.[11]

Frequently, a master meter system obtains the gas that it distributes at a bulk rate discount. This discount will vary from utility to utility and from state to state, as well as over time, but it can be fairly substantial. In California in the early 1980s, for instance, Pacific Gas & Electric Co. was giving a 15

[7]Some condominium associations, cooperatives, and similar entities operate master meter systems as one of the management services provided to their members.

[8]A gas transmission system is a gas pipeline system used to transport natural gas from oil/gas fields or gas processing plants (which are generally located near oil/gas fields) to local gas distribution utilities.

[9]Master meters system that are not sub-metered are sometimes referred to as "centrally metered installations."

[10]Sub-meters at public housing projects are sometimes referred to as "check meters".

[11]According to Seisler, p. 147, as of July 1978, 27 states had banned sub-meters. It is uncertain how this has changed since then.

percent discount to at least some master meter systems.[12] Some of the savings realized by a master meter system due to its purchase of gas at a bulk rate discount may be passed on to the system's customers. In some states, master meter systems are not allowed to charge final consumers more than was originally paid for the gas, and in those states the entire discount will be passed on.[13] This, of course, will tend to discourage potential master meter operators from entering the business, which may have a safety impact, as well as an economic impact. Furthermore, it can induce existing operators to leave the business, which may also have both safety and economic impacts.

Master meter systems provide gas at a variety of different types of facilities. These include public housing projects, trailer parks, colleges and universities, campgrounds, apartment buildings and complexes, shopping malls, industrial parks, motels, golf courses, medical facilities, and churches. The category with the most gas master meter systems is apartment buildings and complexes, followed by trailer parks and public housing projects.

2.3. A MASTER METER SYSTEM AS DEFINED BY THE OPS

The safety of natural gas master meter systems is regulated under the statutory authority given to the Secretary of Transportation by Federal pipeline safety law and delegated by the Secretary to the Office of Pipeline Safety (OPS). For purposes of its safety regulations, the OPS in 49 CFR §191.3 defines a gas master meter system as follows:

> *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.[14]

OPS policy is that the term "master meter system" applies only to gas distribution systems serving multiple buildings. It does not apply to gas distribution systems consisting entirely or primarily of interior piping located within a single building.[15] Such systems, however, may be referred to as master meter

---

[12]U.S. DOT, "Exercise of Jurisdiction Over Master Meter Gas Operators," p. 24. The original source is cited as a letter from PG&E to Operators of Privately Owned Gas Distribution Systems in Mobile Home Parks, dated January 4, 1982.

[13]According to a telephone conversation on January 3, 2001, between Steve Pott, Colorado Public Utility Commission, and Paul Zebe, Volpe Center, this is the case currently in Colorado. In that state, the price that the master meter operator pays for gas is the maximum price that system customers can be charged. According to an e-mail on November 17, 2000, from Gary Hall, Kansas Corporation Commission, to Paul Zebe, Volpe Center, master meter operators in Kansas may not make a profit on the sale of natural gas.

[14]49 CFR §191.3.

[15]See U.S. DOT, "RSPA Responses to NAPSR Resolutions," pp. 115-116 (Note: NAPSR is the National Association of Pipeline Safety Representatives), which states, in part, that

systems by local utilities and utility regulators for rate purposes, as well as by some state gas pipeline safety regulators for safety regulation purposes.

Master meter systems consisting entirely or primarily of interior piping located within a single building are excluded by the OPS from its definition because

> ...such systems do not resemble the kinds of distribution systems to which Congress intended the Natural Gas Pipeline Safety Act to apply because of the absence of any significant amount of underground or external piping serving more than one building.[16]

In essence, the OPS regards such systems in the same way it regards the piping at a large commercial building or industrial plant.

It might be noted that it is OPS policy to exclude some piping in jurisdictional master meter systems (i.e., in master meter systems as defined by the OPS) from regulation.[17] Specifically, interior piping in buildings that is "downstream" from the customers' meters, or the start of customer piping if there is no sub-metering, is not regulated by the OPS.[18] Interior piping that is "upstream" from the customers' meters is subject to OPS regulation.[19]

2.4. SELECTED CHARACTERISTICS OF GAS MASTER METER SYSTEMS

A number of characteristics of master meter systems may impact the safety of the systems or the severity of consequences that would result if an accident occurred. Significant among these are the number of customers that a system serves, the length of underground or exterior piping, and system distribution pressure.

> Even though the present definition of 'master meter system' does not refer specifically to the existence of exterior piping serving multiple buildings, the reference to a 'pipeline system for distributing gas within...a mobile home park, housing project, or apartment complex' must involve the distribution of gas through exterior or underground pipelines to more than one building. The phrase regarding exterior piping serving multiple buildings was not considered essential since the use of exterior or underground pipelines to distribute gas to more than one building is implicit in the language of the definition.

This is a continuation of the policy adopted by the OPS prior to the publication of the regulatory definition of a master meter system. [See OPS Advisory Bulletin 73-10, October 1973, or the May 1973 letter from Joseph Caldwell, then Director of OPS, to Wayne Carlson, Public Service Commission of Utah.]

[16]U.S. DOT, "RSPA Responses to NAPSR Resolutions," p. 116.

[17]This policy is followed by regulators in some of the states that cooperate with the OPS in the regulation of master meter systems. Regulators in other states, such as Connecticut, report that they cannot follow the policy. State law in these states does not allow them to deviate from the Federal pipeline safety regulations.

[18]Telephone conversation between Jim Thomas, Regional Director, Southwest Region, Office of Pipeline Safety, U.S. DOT/RSPA, and Paul Zebe, Volpe Center, January 1990.

[19]U.S. DOT, "RSPA Responses to NAPSR Resolutions," p. 116.

2.4.1. The Number of Customers

A master meter system generally does not serve many customers.[20] For instance, in Maryland, a typical master meter system is reported to currently serve about 284 units (customers).[21] In Nevada, seven of the eight master meter systems in operation in that state are reported to have between approximately 100 and 275 customers.[22]

2.4.2. The Length of Underground Piping

The length of master meter system underground piping varies considerably. It is generally not very long, however. The average length of the underground or exterior piping for master meter systems currently operating in Maryland, for example, is 2,764 feet.[23] This is short when compared to the average length of the underground distribution main piping operated by local gas utilities. In the U.S. in 1995 there were, according to the National Association of Regulatory Utility Commissioners (NARUC), approximately 1,350 gas utility operations[24] and, according to the American Gas Association (AGA), 935,082 miles of gas utility distribution mains.[25] Based on these figures, a gas utility in the U.S. has, on average, about 693 miles of distribution mains.

2.4.3. The Distribution Pressure

In general, the distribution pressure of master meter systems is very low. In Colorado, for example, state pipeline safety regulators report that the pressure is generally two pounds or less in most systems.[26] In contrast, local gas utilities generally operate at much higher distribution pressures.

---

[20]U.S. DOT, "Exercise of Jurisdiction Over Master Meter Gas Operators," p. 3.

[21]E-mail from John Clementson, Pipeline Safety Engineer, Maryland Public Service Commission, to Paul Zebe, Volpe Center, November 27, 2000.

[22]E-mail from Craig Steele, Nevada Public Service Commission, to Paul Zebe, Volpe Center, April 10, 2001.

[23]E-mail from John Clementson, Pipeline Safety Engineer, Maryland Public Service Commission, to Paul Zebe, Volpe Center, November 27, 2000.

[24]National Association of Regulatory Utility Commissioners (NARUC), *Utility Regulatory Policy in the United States and Canada, Compilation 1995-1996*, Washington, DC, 1996, Table 171, number of utilities by state. Some of the utilities operate in more than one state and therefore may have been counted more than once. Also, counts for some types of gas utilities in two states (Illinois and Nebraska) were unavailable, and counts of utilities in another two states (Alabama and New Jersey) were for prior years.

[25]AGA, *Gas Facts*, 1996 edition (1995 data), p. 27.

[26]Letter from Ernest Tronco, P.E., Gas Pipeline Safety Engineer, Colorado Public Utilities Commission, to Paul Zebe, Volpe Center, November 22, 1989.

Typically, the distribution pressure for a gas utility is 20 to 40 psig (pounds per square inch gauge).[27] The distribution pressure of master meter systems is also lower than the service line pressures found on

[27]Telephone conversation between Lloyd Ulrich, OPS, and Paul Zebe, Volpe Center, September 11, 1990.

many local gas utility systems. The typical pressure in a local gas utility high pressure service line is between 2 and 10 psig, although it can be considerably higher.[28]

2.5. THE NUMBER OF MASTER METER SYSTEMS CURRENTLY IN OPERATION

The exact number of jurisdictional master meter systems currently in operation in the U.S. is unknown. Exhibit 1 presents the best available information on the number of master meter systems in operation in the U.S. in 1999 by state. The information in the exhibit was obtained primarily from the annual submissions of state and other pipeline safety regulators to the OPS. Based on those submissions, there are at least seven thousand jurisdictional master meter systems currently operating in the U.S.[29] In total, there are approximately 8.4 thousand jurisdictional master meter systems presently in operation. This estimate was derived from the information contained in Exhibit 1.[30]

For some states, the number of systems given in Exhibit 1 is the number of systems with "appreciable" underground or exterior piping downstream of the master meter, while for other states additional master meter systems are included. Those with appreciable underground or exterior piping downstream of the master meter are, of course, those meeting the OPS's definition of a master meter system and, as a consequence, are covered by the Federal gas pipeline safety regulations. State pipeline safety regulations in some cases cover additional master meter systems not covered by the Federal regulations. The state of Washington is one example of a state that uses a broader definition of master meter systems than used by the OPS.[31] Utah is another example.[32]

For some states, the number of systems given in Exhibit 1 excludes some jurisdictional master meter systems because the jurisdiction of some state pipeline regulators is limited. For example, California pipeline safety regulators only have jurisdiction over master meter systems at mobile home parks,[33] while Missouri pipeline safety regulators do

---

[28]E-mail from Lloyd Ulrich, OPS, to Paul Zebe, Volpe Center, March 20, 2001.

[29]This estimate was derived by summing the figures given in Exhibit 1 and rounding the result, 7,352, to the nearest thousand.

[30]Values are presented in Exhibit 1 for master meter systems in 44 (88 percent) of the states. Assuming that the states for which there are no values are not significantly different from those for which there are, then a total estimate can be calculated by dividing 7,352, the sum of the figures given in Exhibit 1, by 0.88. This simplistic estimation approach ignores Puerto Rico and DC, as well as any under- or overreporting by the states. Because underreporting is considered more likely than overreporting, the estimate probably understates the actual number of systems.

[31]Letter from Douglas Kilpatrick, P.E., Pipeline Safety Director, Washington Utilities and Transportation Commission, to Paul Zebe, Volpe Center, December 1, 2000.

[32]E-mail from Chris Hoidal, Regional Director, Western Region, Office of Pipeline Safety, U.S. DOT/RSPA, to Paul Zebe, Volpe Center, June 18, 2001.

[33]Telephone conversation between Mahendra Jhala, Chief, Utilities Safety Branch, California Public Service Commission, and Paul Zebe, Volpe Center, December 19, 2000.

EXHIBIT 1. NUMBER OF MASTER METER SYSTEMS IN OPERATION AS OF DECEMBER 31, 1999

State	Number	State/Other	Number
Alabama	93	Nebraska	2
Alaska	Unknown	Nevada	8
Arizona	1185	New Hampshire	3
Arkansas	200	New Jersey	57
California	2,704[a]	New Mexico	219
Colorado	45	New York	Unknown[d]
Connecticut	0	North Carolina	21
Delaware	8	North Dakota	11
Florida	13[b]	Ohio	49
Georgia	127	Oklahoma	168
Hawaii	Unknown	Oregon	3
Idaho	Unknown	Pennsylvania	Unknown
Illinois	22	Rhode Island	7
Indiana	52	South Carolina	8
Iowa	0	South Dakota	2
Kansas	28	Tennessee	59
Kentucky	106	Texas	776
Louisiana	147	Utah	472
Maine	0	Vermont	0
Maryland	62	Virginia	99[e]
Massachusetts	Unknown	Washington	258
Michigan	0	West Virginia	198
Minnesota	4	Wisconsin	circa 30
Mississippi	74	Wyoming	0[f]
Missouri	8[c]	D.C.	0
Montana	24	Puerto Rico	Unknown

Notes:

a. Only includes master meter systems at mobile home parks.
b. Jurisdiction extends only to the furthest meter downstream. For master meter systems without submetering, this will be the master meter.
c. Does not include master meter systems at public housing projects.
d. Local distribution companies are responsible for all underground gas facilities up to building wall.
e. Does not include master meter systems on Indian Reservations.

Sources of Information: Annual state/other agency filings with the Office of Pipeline Safety, U.S. Department of Transportation, and other information from state pipeline safety agencies.

not have jurisdiction over master meter systems operated by state housing authorities.[34] Additionally, some state pipeline safety regulators, such as those in Virginia, do not have jurisdiction over publicly owned utilities and by extension the master meter systems that they serve.[35]

Master meter systems on Indian Reservations fall outside the jurisdiction of state and Federal pipeline safety regulators,[36] except when those systems are operated by outside contractors, rather than by residents of the reservations.[37] The same applies to master meter systems on military bases and other military facilities.[38]

In 1979, there were an estimated 81 thousand natural gas master meter systems in operation in the U.S. This estimate was derived for the OPS by the Systems & Applied Sciences Corporation (SASC), based upon information obtained from gas utilities throughout the U.S.[39] SASC's estimates of the number of master meter systems by state are presented in Appendix A of this report.

With between 8 and 9 thousand master meter systems currently in operation, it appears that nearly 90 percent of all master meter systems in operation in 1979 have gone out of business.[40] The decline in the number of master meter systems since 1979 would appear, for the most part, to be the result of two factors. The first has been the desire of master meter system operators to make their gas customers accountable for the cost of the gas they consume. Master meter systems are often not sub-metered (as mentioned before, in many states this is illegal). When this is the case, consumers are not directly accountable for the cost of the gas they consume, but instead are only indirectly accountable through the rent paid to the landlord. Sometimes this can result in the landlord getting hurt financially, particularly when the price of gas is fairly volatile. Metering is needed to make the consumers accountable for the cost of the gas that they consume. The installation of sub-meters also costs money, however. To avoid this cost and to make the customers accountable, it appears some master meter system operators turned their systems over to their gas suppliers and went out of the gas

---

[34]Telephone conversation between Michael Loethen, Missouri Public Service Commission, and Paul Zebe, Volpe Center, February 7, 2001.

[35]Annual submission of Virginia for 1999 to the Office of Pipeline Safety.

[36]E-mail from Jon Jacquot, Public Service Commission of Wyoming, to Paul Zebe, Volpe Center, March 21, 2001.

[37]E-mail from Warren Miller, Central District, Office of Pipeline Safety, RSPA/U.S. DOT, to Paul Zebe, Volpe Center, June 22, 2001.

[38]E-mail from Warren Miller, Central District, Office of Pipeline Safety, RSPA/U.S. DOT, to Paul Zebe, Volpe Center, June 22, 2001.

[39]SASC, *An Analysis of Natural Gas Master Meter Systems (Definition & Program) From A Federal Perspective.* The SASC estimate of 81 thousand does not include the number of master meter systems in Hawaii or New Jersey. SASC was unable to derive estimates for Hawaii and New Jersey because it received no usable data on the number of master meter systems when it surveyed the utilities in those states.

[40]It should be recognized that it is entirely possible the 81 thousand systems in existence in 1979 have all gone out of business, and the systems currently in operation are new systems that have started up since 1979.

distribution business.

The second factor contributing to the decline of master meter systems has been pressure applied on master meter operators and their gas suppliers by some state pipeline regulators, as well as by OPS regional personnel, to get (1) the operators to agree to turn their systems over to their suppliers and (2) the suppliers to agree to take over the systems from the operators. This has been an actively pursued goal of regulators in many states for years, and has reportedly been successful in many cases. The goal has been pursued primarily to help ensure the safety of those who obtain their gas from the master meter systems. This will be discussed in greater detail later in this report. Some of the pressure, it should be noted, has probably resulted from a concern by price regulators that master meter systems were charging their customers (or could potentially charge their customers) too much for natural gas.

2.6. THE SAFETY RECORD OF MASTER METER SYSTEMS

The safety record of master meter systems -- the violations of the Minimum Federal Safety Standards (i.e., 49 CFR Part 192) that are found during inspections and the historical incident record for the systems -- provides an indication of the types and magnitude of problems that master meter systems face.

2.6.1. Violations

Inspections of master meter systems by Federal and state inspectors often turn up violations of the Minimum Federal Safety Standards. Exhibit 2 identifies the most common violations and problems found by inspectors at master meter systems. As shown in the exhibit, there is considerable variation among the states with respect to the most common violations and problems found by pipeline safety inspectors. Problems relating to corrosion control, cathodic protection, leak surveys, emergency plans, and records preparation and maintenance are some of the more frequently cited violations.

Information on the numbers of violations and on the relative frequency of the types of violations found by inspectors is not readily available for the entire country. This information is available, however, for a few states.

With respect to numbers of violations, the situation in Arkansas may not be atypical. State pipeline regulators in Arkansas report an average of two violations per inspection.[41] This appears fairly consistent with the situation in other states. Kansas, for instance, has inspected an average of 33 master meter operators per year and has found an average of 79 violations per

[41]Letter from Don Martin, Chief of Pipeline Safety, Arkansas Public Service Commission, Utilities Division, to Paul Zebe, Volpe Center, Nov. 28, 2000.

EXHIBIT 2. THE MOST COMMON VIOLATIONS/PROBLEMS FOUND DURING INSPECTIONS OF MASTER METER SYSTEMS

State	Violations/Problems
Alabama	Low cathodic protection measurements
Alaska	No information
Arizona	Leak surveys, valve maintenance, mapping, training, odor checks, cathodic protection, atmospheric corrosion
Arkansas	§192.355--customer meters and regulators: protection from damage §192.463--External corrosion control: cathodic protection §192.615--Emergency plans §192.723--Distribution systems: leakage surveys §192.727--Abandonment or deactivation of facilities
California	No information
Colorado	No information
Connecticut	No master meter systems
Delaware	Mostly record maintenance related
Florida	Corrosion control and failure to lock meters where gas service has been interrupted or discontinued
Georgia	§192.465--External corrosion control: monitoring §192.723--Distribution systems: leakage surveys
Hawaii	No information
Idaho	No information
Illinois	No typical probable violation, but most problems are related to record keeping and the operator's knowledge of procedures
Indiana	Insufficient records to show compliance
Iowa	No master meter systems
Kansas	§192.465--External corrosion controls, monitoring §192.603--General provisions §192.615--Emergency plans §192.625--Odorization of gas §192.739--Pressure limiting and regulating stations: inspection and testing Kansas rules relating to leak surveys and valve maintenance
Kentucky	§192.721--Distribution system patrolling §192.727--Distribution valve maintenance §192.465--External corrosion controls, monitoring
Louisiana	Maximum allowable operating pressure, cathodic protection, and leak surveys
Maine	No master meter systems
Maryland	Key valves testing, hazards of gas notices, and emergency plan training

Massachusetts	No information

EXHIBIT 2. (CONT.)

State	Violations/Problems
Michigan	No master meter systems
Minnesota	Meter set support, Maxitrol regulators, emergency response liaison, emergency plan, operation and maintenance plan, external corrosion control, atmospheric corrosion control, public education, line marker and warning signs, and depth of cover
Mississippi	Leak repairs
Missouri	No information
Montana	Inspection program just getting established
Nebraska	Inadequate operations and maintenance manuals
Nevada	Inadequate operations and maintenance manuals, liaison with public officials, public education, cathodic protection
New Hampshire	Leak surveys, corrosion control, and education are problem areas
New Jersey	Cathodic protection O&M training
New Mexico	Updating O&M plans
New York	Inactive services
North Carolina	No major problems with master meter systems
North Dakota	No information
Ohio	O&M plan, emergency plan, leakage surveys, critical valve inspection, and mapping
Oklahoma	Lost O&M and records
Oregon	Cathodic protection, atmospheric corrosion, and various problems relating to O&M and emergency plans
Pennsylvania	Lack of operating and maintenance manuals, including record keeping as required under 49 CFR Part 192
Rhode Island	O&M plans, emergency plans, cathodic protection, leak surveys, atmospheric protection of aboveground piping, key valve maintenance
South Carolina	Only minor problems
South Dakota	Lack of written procedures and adequate record keeping
Tennessee	Leakage survey, cathodic protection, valve maintenance, record keeping
Texas	Repair and construction; design, installation, maintenance and inspection of pressure control equipment and corrosion facilities; testing; adequate operation, maintenance and emergency plans; establishing MAOP (maximum allowable operating pressure); maintenance and inspection tasks, such as patrolling, leak surveys, and inspection of valves
Utah	Inspection program just getting established
Vermont	No information

Virginia	Corrosion control procedures, monitoring, and records; O&M and emergency plans; MAOP; odorization; and leakage surveys

EXHIBIT 2. (CONT.)

State	Violations/Problems
Washington	O&M plans, emergency plans, mapping and records, leak surveys, aboveground pipe maintenance, cathodic protection, records, overpressure protection, odorization, valve maintenance, non-participation in a locator service
West Virginia	Written documentation and records, and maintenance
Wisconsin	Because most systems are only being inspected for the first time, few safety requirements are being fully met by operators
Wyoming	No master meter systems
D.C.	No master meter systems
Puerto Rico	No information

Sources of information: Various state regulatory agencies; OPS Eastern Regional Office; annual agency filings with the Office of Pipeline Safety, U.S. DOT.

year, or little over 2 violations per inspected operator.[42] Texas, which has performed 1,975 master meter system evaluations since January 1, 1995, has found a total of 5,627 violations, or an average of nearly 3 violations per evaluation.[43] Kentucky inspected 54 master meter operators in 1999[44] and found 59 violations,[45] an average of a little over 1 violation per inspected operator.

With respect to the relative frequency of the types of violations found during inspections, information is readily available for Arkansas and Maryland. The situations in Arkansas and Maryland, while in many ways similar, are by no means identical. This may be the result of a number of factors including the mix of types of master meter operators in the two states. For instance, master meter systems at trailer parks may be much more common in one state than the other, and master meter systems at trailer parks may typically experience a different set of problems than those found elsewhere. Another possibility is that the proportion of newly discovered master meter systems to previously identified systems may be different in the two states. Newly discovered systems would appear to be more likely to have problems than previously identified systems, all other things equal, because their operators are typically unacquainted with the requirements of the Minimum Federal Safety Standards.

In Arkansas from 1995 through 1999, state pipeline safety inspectors found 1,148 violations. Of those, 16 percent were related to leakage surveys, 13 percent were related emergency plans, 13 percent were related to cathodic protection for external corrosion, 12 percent were related to protection of meters from damage, 12 percent were related to abandonment or deactivation of facilities, 8 percent were related to general corrosion control, 8 percent were related to general atmospheric corrosion control, and the remaining 18 percent were related to a variety of other conditions.[46]

In Maryland from 1995 through 1999, 92 violations were found by state pipeline safety inspectors. Of those, 23 percent were related to testing key valves, 21 percent were related to hazards of gas notice, 17 percent were related to emergency plan training, 13 percent were related to checking corrosion protection readings, 11 percent were related to leak surveys, 5 percent were related to checking rectifiers, 3 percent were related to remedial action, 2 percent were related to lack of procedural manuals, 2 percent were related to service vents, 1 percent were related to retention of records, and 1 percent were related to condition of exposed pipe.

---

[42]E-mail from Gary Hall, Kansas Commerce Commission, to Paul Zebe, Volpe Center, Nov. 17, 2000.

[43]E-mail from Mary McDaniel, Texas Railroad Commission, to Paul Zebe, Volpe Center, Jan. 19, 2001.

[44]Annual filing with the OPS for 1999 by the Kentucky Public Service Commission.

[45]Letter from Eddie B. Smith, Gas Branch, Division of Engineering, Kentucky Public Service Commission, to Paul Zebe, Volpe Center, Nov. 14, 2000.

[46]Letter from Don Martin, Chief of Pipeline Safety, Arkansas Public Service Commission, Utilities Division, to Paul Zebe, Volpe Center, Nov. 28, 2000.

2.6.2. The Incident Record

Information on the number of master meter system incidents is incomplete. This is mainly because master meter incidents are not always identified as such in incident reports and incident databases. As a consequence, incident information is available for the master meter systems in some, but not all, states. Exhibit 3 presents readily available information on master meter incidents from 1995 through 1999 that resulted in a death, a serious injury (i.e., one requiring a hospital stay), or property damage of $50,000 or more.

As shown in Exhibit 3, complete incident information is available for the five-year period for master meter systems in 37 states. In these 37 states during the five-year period, there were 2 master meter system incidents, which resulted in 2 injuries and over $200,000 of property damage. Of the 2 master meter incidents in the 37 states, 1 resulted from corrosion and 1 resulted from construction/operating error.

In comparison, the same 37 states during the same five-year period experienced 290 gas distribution system incidents, which resulted in a death, injury, or $50,000 or more in property damage. In total, those incidents resulted in 45 deaths, 218 injuries, and $53,165,561 in property damage. Of the 290 gas utility system incidents in the 37 states, 12 (or 4 percent) were the result of corrosion and 11 (or 4 percent) were construction/operating error. The remaining 267 (92 percent) were the result of damage by outside forces, accidentally caused by the operator, or the result of some other cause.[47]

[47]U.S. DOT, Office of Pipeline Safety, natural gas distribution incident data, Office of Pipeline Safety web site (ops.dot.gov), March 2001.

EXHIBIT 3. THE INCIDENT RECORD OF MASTER METER SYSTEMS, 1995-1999[a]

State	Incidents	Deaths	Injuries	Property Damage
Alabama	0	0	0	$0
Alaska	unk	unk	unk	unk
Arizona	0	0	0	$0
Arkansas	1[b]	0	0	>$100,000
California	unk	unk	unk	unk
Colorado	0	0	0	$0
Connecticut	na	na	na	na
Delaware	0	0	0	$0
Florida	0	0	0	$0
Georgia	0	0	0	$0
Hawaii	unk	unk	unk	unk
Idaho	unk	unk	unk	unk
Illinois	0	0	0	$0
Indiana	0	0	0	$0
Iowa	na	na	na	na
Kansas	0	0	0	$0
Kentucky	0	0	0	$0
Louisiana	0	0	0	$0
Maine[d]	na	na	na	na
Maryland	0	0	0	$0
Massachusetts	unk	unk	unk	unk
Michigan	na	na	na	na
Minnesota	0	0	0	$0
Mississippi	1[b]	0	1	>$100,000
Missouri	0	0	0	$0
Montana	0	0	0	$0
Nebraska	0	0	0	$0
Nevada	0	0	0	$0
New Hampshire	0	0	0	$0
New Jersey	0	0	0	$0
New Mexico	0	0	0	$0
New York	0	0	0	$0
North Carolina	0	0	0	$0

North Dakota	0	0	0	$0

EXHIBIT 3. (CONT.)

State	Incidents	Deaths	Injuries	Property Damage
Ohio	0	0	0	$0
Oklahoma	0	0	0	$0
Oregon	0	0	0	$0
Pennsylvania	unk	unk	unk	unk
Rhode Island	0	0	0	$0
South Carolina	0	0	0	$0
South Dakota	0	0	0	$0
Tennessee	0	0	0	$0
Texas	<10[b]	unk	unk	unk
Utah	0	0	0	$0
Vermont	0	0	0	$0
Virginia	0	0	0	$0
Washington	0[c]	0	0	$0
West Virginia	0	0	0	$0
Wisconsin[d]	na	na	na	na
Wyoming	na	na	na	na
D.C.	na	na	na	na
Puerto Rico	unk	unk	unk	unk

Key:

a Incident Definition: A release of gas from a pipeline and at least one of the following: (1) death, (2) injury requiring in-patient hospitalization, or (3) property damage valued at $50,000 or more.

b Incident causes: Arkansas--construction/operating error
Mississippi--external corrosion
Texas--various

c Known incidents; it is possible that incidents did occur during the time period. This may apply to incident information from other states, as well.

d Safety jurisdiction assumed between 1995 and 1999.

unk Unknown

na Not applicable--no gas master meter systems in operation during period

> Greater than

< Less than

Sources of information: State pipeline regulators; State filings with the U.S. Department of Transportation.

3. REGULATORY AUTHORITY OVER THE SAFETY OF MASTER METER SYSTEMS

3.1. INTRODUCTION

Regulatory authority over master meter systems is vested by the Federal pipeline safety law[48] with the U.S. Department of Transportation (U.S. DOT) and, by delegation, with the OPS. The law permits the states to assume jurisdiction and take responsibility for inspection and enforcement of intrastate pipeline systems, including master meter systems. The OPS actively encourages the states to assume jurisdiction over master meter systems because the OPS considers states "better equipped to inspect and otherwise deal with these localized gas distribution systems,"[49] and because it was never the intention of Congress or "the Federal approach to budgeting and resources" that the Federal government take permanent responsibility for intrastate distribution systems, including master meter systems.[50] The OPS exercises jurisdiction only over those master meter systems for which states have not assumed responsibility.

The reporting and safety requirements applicable to master meter systems are contained in Parts 191 and 192 of Title 49 of the *Code of Federal Regulations* (CFR). Part 191 details the incident reports required, while Part 192, the Minimum Federal Safety Standards, details the mandated minimum safety requirements that must be complied with by the systems. States that assume jurisdiction over master meter systems may impose safety standards that are more stringent than the Federal safety standards, but those standards must not be inconsistent with the Federal standards.[51] The safety and reporting requirements for master meter systems are similar, but not identical, to those for local gas distribution systems (i.e., local gas utilities).

Master meter systems, like local gas utilities, are required to do such things as provide training and written instruction for their staff, prepare written procedures to ensure the safe operation of the system and to "minimize the hazards resulting from natural gas pipeline emergencies," and keep records of inspection and testing.[52]

In addition, master meter operators, like gas distribution system operators, are required to develop written Operation and Maintenance (O&M) Plans. The provisions that these O&M plans must address are slightly different for master meter systems than for local gas utilities. Specifically, the odorization provision is different, and there are several other provisions that master meter operators

---

[48]49 U.S.C. 60101 et seq.

[49]U.S. DOT, "Exercise of Jurisdiction Over Master Meter Gas Operators," p. 3.

[50]U.S. DOT, "Exercise of Jurisdiction Over Master Meter Gas Operators," p. 18.

[51]U.S. DOT, "Exercise of Jurisdiction Over Master Meter Gas Operators," p. 3.

[52]U.S. DOT, *Guidance Manual for Operators of Small Gas Systems*, p. I-1.

will probably not need to include in their plans because they address situations or conditions not generally found on master meter systems.[53]

In addition to an O&M Plan, master meter systems, like local gas distribution systems, must have written Emergency Plans that address emergency response procedures. The Emergency Plan may be included as part of the O&M Plan; however, this need not be the case. The provisions in the O&M and Emergency Plans must be consistent with Federal (and, where applicable, state) standards and requirements and with the actual procedures and practices of the system.[54]

Master meter operators are required to provide telephonic notification whenever there is a release of natural gas that results in a death, serious injury, or property damage of $50,000 or more, or that is considered significant by the operator. Unlike local gas distribution systems, they are not required to file annual reports or written incident reports with the OPS.[55] (State rules, however, may require that both be filed with the state.) They are also not required to develop written damage prevention programs.[56] (Again, state rules may require this.) In addition, employees of master meter systems are not subject to the drug testing requirements of 49 CFR Part 199.[57]

3.2. STATE EXERCISE OF JURISDICTION

States may assume jurisdiction over the master meter systems operating within their boundaries. To assume jurisdiction, a state agency must either (1) be annually certified by the U.S. DOT in accordance with Section 60105 of Title 49 of the U.S. Code[58] or (2) enter into an agreement with the U.S. DOT in accordance with Section 60106 of Title 49 of the U.S. Code.[59] The text of both of these sections can be found in Appendix B. States certified under Section 60105 take responsibility for both inspection and enforcement, while states under a Section 60106 agreement take responsibility for inspection and leave the responsibility for enforcement with the OPS.

States are encouraged by the OPS to assume jurisdiction over their master meter systems. The OPS provides the states with financial incentives to take responsibility for their pipeline systems through the

---

[53]U.S. DOT, *Guidance Manual for Operators of Small Gas Systems*, pp. VIII-1 to VIII-21.

[54]U.S. DOT, *Guidance Manual for Operators of Small Gas Systems*, pp. VIII-1 to VIII-33.

[55]U.S. DOT, *Guidance Manual for Operators of Small Gas Systems*, pp. VIII-34, VIII-37.

[56]49 CFR 192.614(e)(1).

[57]U.S. DOT, *Guidance Manual for Operators of Small Gas Systems*, p. I-1.

[58]U.S. Code, Title 49, Section 60105, as amended.

[59]U.S. Code, Title 49, Section 60106, as amended.

State Pipeline Safety Grants program.[60]

At present, 43 states and the District of Columbia participate with the OPS in the regulation of the safety of master meter systems. Most states have assumed regulatory jurisdiction over master meter systems under Section 60105 certifications. Over the years, a few states have chosen to enter into 60106 agreements with the U.S. DOT. Currently, Delaware is the only state whose master meter system responsibility is covered by a 60106 agreement with the OPS. States can surrender jurisdictional authority if they so choose.

Exhibit 4 identifies those states that had regulatory jurisdiction as of December 31, 1999, along with the responsible state agencies. Exhibit 5 presents a map showing the states with and without jurisdiction. In addition, the map identifies those states in which there are no master meter systems.

To ensure that state inspection of pipeline facilities, including master meter systems, and state enforcement actions are both appropriate and adequate, the OPS, through its Regional Offices, regularly monitors the state pipeline safety programs. As part of this effort, the OPS annually reviews state inspection documentation (i.e., completed inspection forms and supporting documents) and enforcement actions. It also periodically observes state inspectors in the field. Any inspection or enforcement problems observed by the OPS are called to the attention of the inspectors or, where appropriate, the state regulatory agency.

To help ensure the quality of the state pipeline inspection program, the OPS requires that all state pipeline inspectors complete a nine to ten course training program over a three-year period at the U.S. Department of Transportation's Transportation Safety Institute (TSI) in Oklahoma City. The OPS also encourages the states to send their inspectors to TSI periodically for refresher courses to help them keep up with changes in pipeline regulations.

3.3. FEDERAL EXERCISE OF JURISDICTION

The OPS exercises jurisdiction over master meter systems only in cases where no state agency has assumed jurisdiction. Where it has jurisdiction, it is OPS policy to inspect master meter systems only when there has been an accident or when the OPS becomes aware of a safety concern.[61] The OPS can become aware of a safety concern through a variety of means, including complaints from members of the general public, reports of problems by state pipeline regulators, or observations made during previous inspections.

Currently, the OPS exercises full jurisdiction over master meter systems, if any, in Alaska, Hawaii, Idaho, Michigan, Vermont, Massachusetts, Pennsylvania, and Puerto Rico. It also is responsible for

[60]See U.S. Code, Title 49, Section 60107, as amended.

[61]U.S. DOT, "Exercise of Jurisdiction Over Master Meter Gas Operators," p. 13; telephone conversation between Jeff Stahoviak, Western Regional Office, Office of Pipeline Safety, U.S. DOT/RSPA, and Paul Zebe, October 25, 2000.

enforcement activities in Delaware. In addition, the OPS is responsible in states

EXHIBIT 4. REGULATORY JURISDICTION OVER THE SAFETY OF MASTER METER SYSTEMS BY STATE AS OF DECEMBER 31, 1999

State	Jurisdiction?	Agency	State	Jurisdiction?	Agency
Alabama	Yes	PSC	Nebraska	Yes	SFM
Alaska	No	--	Nevada	Yes	PUC
Arizona	Yes	CC	New Hampshire	Yes	PUC
Arkansas	Yes	PSC	New Jersey	Yes	BPU
California	Yes	PUC	New Mexico	Yes	SCC
Colorado	Yes	PUC	New York	Yes	PSC
Connecticut	Yes	DPUC	North Carolina	Yes	UC
Delaware	Yes	PSC	North Dakota	Yes	PSC
Florida	Yes	PSC	Ohio	Yes	PUC
Georgia	Yes	PSC	Oklahoma	Yes	CC
Hawaii	No	--	Oregon	Yes	PUC
Idaho	No	--	Pennsylvania	No	--
Illinois	Yes	CC	Rhode Island	Yes	DPUC
Indiana	Yes	URC	South Carolina	Yes	PSC
Iowa	Yes	UB	South Dakota	Yes	PUC
Kansas	Yes	CC	Tennessee	Yes	RA
Kentucky	Yes	PSC	Texas	Yes	RRC
Louisiana	Yes	DNR	Utah	Yes	DC
Maine	Yes	PUC	Vermont	No	--
Maryland	Yes	PSC	Virginia	Yes	SCC
Massachusetts	No	--	Washington	Yes	UTC
Michigan	No	--	West Virginia	Yes	PSC
Minnesota	Yes	DPS	Wisconsin	Yes	PSC
Mississippi	Yes	PSC	Wyoming	Yes	PSC
Missouri	Yes	PSC	D.C.	Yes	PSC
Montana	Yes	PSC	Puerto Rico	No	--

Key:

BPU	=Board of Public Utilities	PSC	= Public Service (or Safety) Commission
BRC	=Board of Regulatory Commissioners	PUC	= Public Utility(ies) Commission
CC	=Corporation (or Commerce) Commission	RA	= Regulatory Authority
DC	=Department of Commerce	RRC	= Railroad Commission
DNR	=Department of Natural Resources	SCC	= State Corporation Commission
DPS	=Department of Public Service (or Safety)	SFM	= State Fire Marshal
DPU	=Department (or Division) of Public Utilities	UB	= Utilities Board
DPUC	=Department of Public Utility Control or Division of Public Utilities and Carriers	UC	= Utilities Commission
		URC	= Utility Regulatory Commission

UTC = Utilities and Transportation Commission

Sources of information: Various state agencies; state filings with OPS

with Section 60105 certifications or Section 60106 agreements for master meter systems that those states do not oversee. For example, California state pipeline safety regulators only have responsibility for master meter systems at trailer parks, so the OPS is responsible for all other natural gas master meter systems in that state.[62]

Federal inspection and enforcement is undertaken primarily by the OPS's five Regional Offices. These offices, the Eastern, Southern, Central, Southwestern, and Western, are located in Washington, D.C.; Atlanta, Georgia; Kansas City, Missouri; Houston, Texas; and Lakewood, Colorado, respectively. Exhibit 6 lists the states served by each of the Regional Offices and Exhibit 7 presents a map of the OPS regions.

[62]E-mail from Lloyd Ulrich, Office of Pipeline Safety, RSPA/U.S. DOT, to Paul Zebe, Volpe Center, August 16, 2001.

EXHIBIT 6. STATES SERVED BY THE OPS REGIONAL OFFICES

Regional Office	States (and Others) Served
Eastern.....	Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia
Southern.....	Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, Puerto Rico, South Carolina, and Tennessee
Central.....	Iowa, Illinois, Indiana, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin
Southwestern.....	Arizona, Louisiana, New Mexico, Oklahoma, and Texas
Western.....	Alaska, California, Colorado, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming.

4. ONGOING EFFORTS TO IMPROVE/ENSURE THE SAFETY OF MASTER METER SYSTEMS

4.1. INTRODUCTION

The states and the Federal government are currently engaged in a number of activities aimed at improving or ensuring the safety of master meter systems in the U.S. The primary activity undertaken to improve or ensure the safety of the systems is inspection. Other activities undertaken by regulators include identifying master meter systems, providing operators of master meter systems with training, encouraging master meter system operators to transfer their systems to gas suppliers, and encouraging gas suppliers to accept operational responsibility or ownership of master meter systems.

4.2. INSPECTION

Inspection is one method used by both Federal and state safety regulators to ensure and improve the safety of the master meter systems. Exhibit 8 provides information on the frequency of inspection of master meter systems by both Federal and state inspectors. Exhibit 9 is a map showing the frequency of master meter system inspection by state. The states are categorized according to the length of time between each inspection.

As shown in the two exhibits, in 19 states the frequency of inspection of master meter systems is at least once a year. Inspection occurs most frequently in Delaware, where state regulators report that they inspect several times a year. In seven states, the frequency of inspection is at least once every two years. Eight states inspect at least once every three years. Two states, Virginia and California, perform their inspections at intervals greater than three years. Six states and D.C. have no master meter systems. In two states, Montana and Utah, the responsibility for master meter systems has recently been assumed by state pipeline regulators, and regular inspection programs have not commenced. Georgia inspects systems consisting of steel pipe on an annual basis and inspects those consisting of plastic pipe less frequently. In all other states and in Puerto Rico, inspection is the responsibility of the OPS and is irregular.

It would seem that in those states with a greater frequency of inspection, safety would be enhanced and the number of incidents would be less. Unfortunately, it is not possible to test this hypothesis, because information on master meter system incidents is not adequate for that purpose.

The number of state inspections performed at master meter systems in 1999 is presented in Exhibit 10. Master meter systems are sometimes composed of multiple parts, or “inspection units.” This can occur when the system is large, or when the system has several discrete pieces that are not collocated. As shown in Exhibit 10, in 1999 a total of 3,092 master meter systems were inspected by the states. This appears to include multiple inspections of some

EXHIBIT 8. FREQUENCY OF INSPECTION OF MASTER METER SYSTEMS

State	Responsibility for Inspection	Frequency of Inspection
Alabama	State	Annually (at least)
Alaska	Federal	Irregular. No state inspection. Federal inspection in case of an incident, complaint, or OPS learns of a safety concern.
Arizona	State	Annual--Schools, child day care centers, retirement care centers, hospitals, churches, health care facilities, rehabilitation centers Biennial--Prisons, apartments, mobile home parks, RV centers, condos, businesses, campgrounds, industrial site, motels, hotels.
Arkansas	State	All master meter systems inspected at 12 to 24 month intervals
California	State	Less than once every three years, on average
Colorado	State	Annually
Connecticut	State	No master meter systems
Delaware	State	One to three times per year
Florida	State	Systems under PSC jurisdiction are evaluated annually. Systems not under direct PSC jurisdiction are required to be leak surveyed annually by the utilities supplying those systems with their natural gas.
Georgia	State	Systems with steel pipe may be inspected annually; systems that have all plastic pipe are inspected less frequently; based on annual reports to OPS,
Hawaii	Federal	Irregular. No state inspection. Federal inspection in case of an incident, complaint, or OPS learns of a safety concern.
Idaho	Federal	Irregular. No state inspection. Federal inspection in case of an incident, complaint, or OPS learns of a safety concern.
Illinois	State	Annually, on average
Indiana	State	Inspected annually
Iowa	State	No master meter systems
Kansas	State	Inspected annually
Kentucky	State	Inspections occur on a three-year cycle
Louisiana	State	At least once per year
Maine	State	No master meter systems
Maryland	State	Once every 15 months
Massachusetts	Federal	Irregular. No state inspection. Federal inspection in case of an incident, complaint, or OPS learns of a safety concern.
Michigan	Federal	No master meter systems
Minnesota	State	At least once each calendar year
Mississippi	State	Once per year

Missouri	State	Currently inspected annually

EXHIBIT 8. (CONT.)

State	Responsibility for Inspection	Frequency of Inspection
Montana	State	Not yet established
Nebraska	State	Once every two to three years
Nevada	State	Once every two years
New Hampshire	State	Once per year is goal
New Jersey	State	Once per year
New Mexico	State	At least once comprehensively every 36 months
New York	State	Annually or at least every other year
North Carolina	State	Inspected annually
North Dakota	State	Inspected annually
Ohio	State	Biennially
Oklahoma	State	Inspections occur on a one to three year cycle
Oregon	State	Try to inspect annually; maximum time allowed between inspections is three years; longest actual time between inspections is two years
Pennsylvania	Federal	Irregular. No state inspection. Federal inspection in case of an incident, complaint, or OPS learns of a safety concern.
Rhode Island	State	Once a year
South Carolina	State	Varies, but all sites are inspected at least once per year
South Dakota	State	Once each calendar year
Tennessee	State	Annually
Texas	State	Systems are scheduled for evaluation every three years
Utah	State	Not yet established
Vermont	Federal	No master meter systems
Virginia	State	Inspections are on a five year cycle
Washington	State	An average of 168 master meter system inspections per year have occurred in the past five years
West Virginia	State	Once every 2½ years or sooner if deemed necessary Newly recognized master meter systems inspected as soon as practicable after identification
Wisconsin	State	Once every three years
Wyoming	State	No master meter systems
D.C.	Local	No master meter systems
Puerto Rico	Federal	Irregular. No local inspection. Federal inspection in case of an incident, complaint, or OPS learns of a safety concern.

Sources of information: Various state agencies; annual agency filings with the Office of Pipeline Safety, U.S. DOT.

xxx

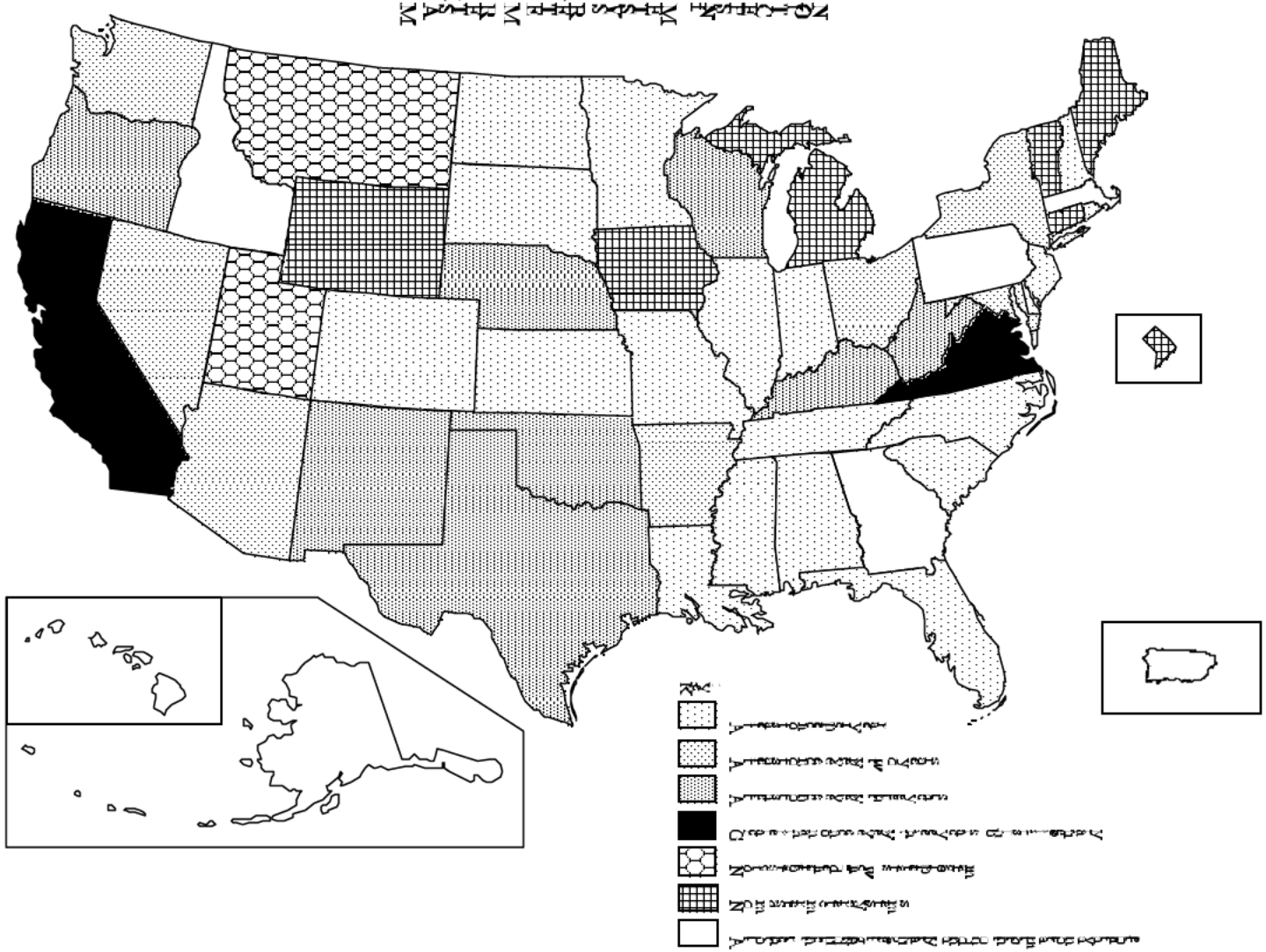


EXHIBIT 10. INSPECTIONS OF MASTER METER SYSTEMS IN 1999

State/Other	Number Inspected		State/Other	Number Inspected	
	Operators (% of Total)	Inspection Units (% of Total)*		Operators (% of Total)	Inspection Units (% of Total)*
Alabama	93 (100%)	111 (100%)	Nebraska	1 (50%)	1 (50%)
Alaska	0	0	Nevada	2 (25%)	2 (25%)
Arizona	816 (69%)	816 (69%)	New Hampshire	0 (0%)	0 (0%)
Arkansas	128 (64%)	230 (66%)	New Jersey	20 (35%)	31 (34%)
California	622 (23%)	622 (23%)	New Mexico	143 (65%)	181 (63%)
Colorado	40 (89%)	40 (89%)	New York	unk	unk
Connecticut	na	na	North Carolina	22 (104%)	22 (104%)
Delaware	8 (100%)	12 (100%)	North Dakota	11 (100%)	11 (100%)
Florida	13 (100%)	13 (100%)	Ohio	34 (69%)	54 (71%)
Georgia	50 (39%)	50 (39%)	Oklahoma	75 (44%)	75 (44%)
Hawaii	0	0	Oregon	0 (0%)	0 (0%)
Idaho	0	0	Pennsylvania	unk	unk
Illinois	17 (77%)	17 (77%)	Rhode Island	7 (100%)	7 (100%)
Indiana	52 (100%)	52 (100%)	South Carolina	8 (100%)	8 (100%)
Iowa	na	na	South Dakota	1 (50%)	1 (50%)
Kansas	27 (96%)	27 (96%)	Tennessee	59 (100%)	59 (100%)
Kentucky	54 (51%)	54 (51%)	Texas	286 (37%)	297 (35%)
Louisiana	145 (99%)	145 (99%)	Utah	23 (5%)	23 (5%)
Maine	na	na	Vermont	na	na
Maryland	53 (85%)	54 (86%)	Virginia	34 (34%)	69 (32%)
Massachusetts	0	0	Washington	60 (23%)	60 (23%)
Michigan	na	na	West Virginia	95 (48%)	147 (56%)
Minnesota	4 (100%)	4 (100%)	Wisconsin	circa 1 (3%)	circa 1 (3%)
Mississippi	67 (91%)	74 (93%)	Wyoming	na	na
Missouri	8 (100%)	8 (100%)	D.C.	na	na
Montana	13 (54%)	13 (54%)	Puerto Rico	0	0

Key:

unk = Unknown
na = Not applicable (no master meter systems)

Notes:

*Master meter systems, especially large ones, may be composed of more than one inspection unit.

Source: Annual state/other agency filings with the Office of Pipeline Safety, U.S. DOT.

master meter systems (see, for example, North Carolina in Exhibit 10). A total of 3,391 master meter inspection units were inspected in 1999. This figure appears to include multiple inspections of some inspection units.

4.3. OTHER ACTIVITIES

In addition to inspection, the Federal government and the states have undertaken a number of activities to help improve or ensure the safety of master meter systems. Exhibit 11 lists the major activities other than inspection undertaken by the various agencies of the Federal government and the states.

4.3.1. Other Activities Undertaken by the States

As shown in Exhibit 11, a number of states report that they train master meter operators, either formally or informally. This is probably the most common activity beyond inspection undertaken by the states to help improve or ensure the safety of master meter systems.

A number of states have formal training programs. Arizona, for example, annually provides master meter operators with a day of classroom training and a day of hands-on field training with various equipment. In addition, it has a program for master meter operators that will lend them equipment for use in leak surveys, corrosion control surveys, and pipe locating.[63] Illinois, unlike most other states, mandates formal training for everyone involved in the operation of gas systems, including master meter systems. Illinois state regulations stipulate, in some detail, the minimum requirements for the procedures used in the training of the operations personnel. The regulations allow master meter operators, as well as operators of other small gas systems, to use training programs conducted by local gas utilities, colleges and universities, consultants and others to obtain the required training. The section of the Illinois state regulations on training procedures is provided in Appendix C of this report.

In addition to formal training, information obtained from state pipeline regulators indicates that almost every state that inspects master meter systems provides some level of informal training during inspection. This is needed to ensure that system operators have some understanding of what is required of them and why. When North Carolina began regulating the safety of master meter systems, it found that the formal training it provided to operators had little effect on their performance. It found that the only way to get the operators to operate their systems in accordance with the Minimum Federal Safety Standards was to work with the operators during inspection.[64]

---

[63]Attachment B with letter from Terry Fronterhouse, Chief of Pipeline Safety, Pipeline Safety Section, Arizona Corporation Commission, to Paul Zebe, Volpe Center, November 21, 2000.

[64]For more on the experience of North Carolina, see Dixon, "How North Carolina Solved Its Master Meter Problem."

EXHIBIT 11. ACTIVITIES BEYOND INSPECTION UNDERTAKEN TO IMPROVE THE SAFETY OF MASTER METER SYSTEMS

Agency	Activities
State/Local Agencies	
Alabama PSC	Conducts seminars Conducts workshops Encourages Alabama Line Location Center membership
Alaska	State has not assumed jurisdiction
Arizona CC	Conducts annual master meter seminars Has a program for master meter operators under which they can borrow equipment to use for leak surveys, corrosion control surveys, and pipe locating Arizona Administrative Code prohibits construction of new or expansion of existing permanent residential mobile home parks Encourages master meter operators to allow local distribution companies to install individual meters and take over their systems
Arkansas PSC	Provides training to new managers/owners of master meter systems (i.e., those with less than two years of experience) on the minimum safety standards Copies of all leak surveys and cathodic protection monitoring surveys must be submitted by master meter operators to the state for review. If reports indicate problems, proof of actions to rectify deficiencies must be submitted by master meter operators for review Local distribution utilities are forbidden by state regulations to supply service to "newly constructed"facilities through master meter systems, barring specific exemptions
California PSC	Local distribution companies have been encouraged to take over master meter systems
Colorado PUC	Emphasizes training Tries to encourage local distribution companies to absorb master meter systems
Connecticut PUC	Pressed local distribution companies to avoid creating new master meter situations
Delaware PSC	Regular pipeline safety educational seminars are offered locally or in conjunction with neighboring states Provides free updates of pipeline safety regulation booklets When practicable, owners of new master meter systems are informed in advance of the pipeline safety rules and regulations Encourages master meter operators to let the local distribution companies maintain their systems for compliance with safety regulations

EXHIBIT 11. (CONT.)

Agency	Activities
State/Local Agencies (Cont.)	
Florida PSC	Ensures that all master meter systems are members of the local one-call notification system New master meter systems are banned for investor-owned utilities New master meter systems are strongly discouraged for public gas systems For regulated utilities, new requirements have been added, including leak surveys for non-owned systems
Georgia PSC	Offers training for master meter operators to help with compliance with state and Federal regulations Assists with qualifications for plastic fusion welding Encourages local distribution companies to absorb master meter systems Encourages master meter systems to enter into maintenance contracts
Hawaii	State has not assumed jurisdiction
Idaho	State has not assumed jurisdiction
Illinois CC	Strongly encourages master meter operators to participate in educational and training programs sponsored by state agencies and industry associations/organizations Has encouraged local gas distribution companies to absorb the master meter systems that they serve
Indiana URC	Hosts bi-annual TSI seminar, which master meter operators are encouraged to attend Encourages master meter operators to attend the annual Purdue University Corrosion Short Course Inspectors work with and provide information to master meter operators, upon request. Recent activities in this area relate to educating master meter operators about the Operator Qualification rule and providing information to assist in compliance with the rule
Iowa	State does not allow master metering
Kansas CC	Engages in random drop-in visits throughout the year Currently has proposed regulation that master meter operators cannot make a profit on gas sales Currently has proposed regulation that new master meters will not be allowed

EXHIBIT 11. (CONT.)

Agency	Activities
State/Local Agencies (Cont.)	
Kentucky PSC	Works closely with the Kentucky Gas Association to encourage master meter operators to take advantage of the training opportunities offered through that organization Training sessions specifically for master meter systems Training sessions for all utilities, including master meter systems Encourages local distribution companies to absorb master meter systems
Louisiana DNR	Conducts two small operator/master meter operator seminars annually Performs operator training upon request
Maine	No master meter operators
Maryland PSC	Provides O&M manuals and emergency plans Provides emergency plan training Provides small operators' course triennially
Massachusetts	State has not assumed jurisdiction
Michigan	No master meter systems
Minnesota DPS	Master meter operators are invited to attend the annual Minnesota Office of Pipeline Safety Educational Conference Encourages local distribution companies to offer safety training to their master meter operators Newly identified master meter operators are encouraged to work with their local distribution companies for replacement and/or take-over by the local distribution companies Underground master meter facilities are listed in the Gopher State Once Call database for location and marking prior to planned excavation activities Existing master meter operators have arrangements with their local distribution company gas providers to perform most required safety functions
Mississippi PSC	Holds training seminars

Missouri PSC	Working with investor-owned utilities to systematically replace facilities of master meter systems using rates and tariffs of the utilities as the funding mechanism Local investor-owned distribution companies have been tasked with performing leak surveys for the master meter systems that they service. Some leaks that are found during those surveys are repaired by the local distribution company, which bills the master meter operator for the cost. Other leaks are left to the master meter operator to repair. In those cases, the operator has six months to complete the repairs.

EXHIBIT 11. (CONT.)

Agency	Activities
State/Local Agencies (Cont.)	
Montana PSC	Provides training in the requirements, such as operation and maintenance plans and emergency plans Encourages master meter operators to let their local distribution company take over their facilities
Nebraska SFM	Treats master meter operators exactly the same as any other gas system operator Will do occasional on-site training, if needed
Nevada PUC	Hosts a pipeline safety seminar every three years with a portion dedicated to small operators Maintains a list of qualified contractors for distribution to small operators if requested Inspectors often act as consultants to small operators Will encourage local distribution companies to absorb master meter systems that are unsafe or do not make any effort to comply with the safety codes
New Hampshire PUC	Encourages local distribution companies to perform operations and maintenance on system Strongly urges not installing a master meter system unless the local distribution company will be performing the operations and maintenance for the system
New Jersey BPU	Routinely corresponds with master meter operators to advise them of the requirement to file annual master meter compliance certifications Meets occasionally with local distribution companies to discuss ways of ensuring that the master meter operators they serve continue to perform master meter safety inspections State pipeline safety regulations ban new master meter systems When master meter operators have difficulty meeting their safety obligations, they are encouraged to meet with their local gas supplier to discuss available options, including turning the system over to the supplier
New Mexico SCC	Teach operators while inspecting, and advise operators when appropriate

New York PSC	The local gas distribution company is required to take total responsibility for all underground piping from gas mains to building walls regardless of where meters are located
North Carolina	Provides training for master meter operators Holds operator meetings to which master meter system operators are invited

EXHIBIT 11. (CONT.)

Agency	Activities
State/Local Agencies (Cont.)	
North Dakota PSC	All master meter operators are invited to an annual Federal/State gas pipeline safety seminar Provides assistance to any master meter operator needing help in writing or updating plans All O&M/Emergency Response Plans of master meter operators undergo a full review at least once every three years Efforts being made to encourage local distribution companies to absorb master meter systems Efforts are being made to limit new master meter systems
Ohio PUC	Hosts safety seminars throughout Ohio to educate master meter operators Has distributed copies of the *Guidance Manual for Operators of Small Natural Gas Systems* and of Parts 191 and 192 to master meter operators Has invited all master meter operators to their TSI seminars Encourages local distribution companies to take over master meter systems
Oklahoma CC	Holds two to three master meter seminars per year, which cover how to attain compliance with state and Federal regulations Works closely with local distribution companies to take over master meter systems

Oregon PUC	When staff is in the area, they try to take cathodic protection readings for master meter systems Encourages master meter operators to coordinate and communicate with the local distribution company Provides additional training, encourages operators to contact them with any questions they may have, and encourages operators to read the *Guidance Manual for Operators of Small Natural Gas Systems* Has made efforts to get local distribution companies to take over master meter systems Gets immediate notification from local distribution companies of any requests to become master meter operators, and meets with the requestors to explain the requirements of the pipeline safety regulations
Pennsylvania	State has not assumed jurisdiction

EXHIBIT 11. (CONT.)

Agency	Activities
State/Local Agencies (Cont.)	
Rhode Island DPUC	Provides Microsoft Powerpoint presentation on gas safety, compliance with the codes, and basic maintenance issues associated with gas master meter systems to the owners, management, and maintenance workers at each master meter facility Trying to get the one local distribution company with master meter customers to absorb all of them and have offered to have the expenses absorbed by the ratepayers in the interest of public safety
South Carolina PSC	Makes the same resources available to master meter operators as are available to other operators, including training, video tapes, publications, and visitations between inspections Has made efforts to get local distribution companies to absorb master meter systems
South Dakota PUC	Has adopted rules that generally prohibit the construction of new master meter systems. A variance is needed from the Commission before a new master meter system may begin operation

Tennessee RA	Sponsors gas pipeline safety seminars for master meter systems and small distribution system operators Encourages membership and participation in Tennessee Gas Association to promote education and training in natural gas operations Has recently conducted training on the Federal Operator Qualification (OQ) rule and on the guidelines for developing OQ plans Inspectors have informally encouraged master meter operators to consider transferring ownership to local distribution companies if the operators are unable to comply with all of the Minimum Federal Safety Standards
Texas RRC	Annually conducts seminars for pipeline operators, including master meter system operators Conducts special investigations to assist master meter operators in understanding applicable safety rules Has mandated that local distribution companies install and maintain over pressure equipment at master meter locations where ten or more consumers are served low pressure gas
Utah DPU	Hosts an annual seminar to which master meter operators are invited in order to refresh their knowledge of what is important concerning the safety of their systems Has an agreement with a local distribution company to limit new master meters to situations where individual meters would be impractical
Vermont	No master meter systems

EXHIBIT 11. (CONT.)

Agency	Activities
State/Local Agencies (Cont.)	
Virginia CC	Holds biennial pipeline safety seminars to which master meter operators are invited Is working with gas utilities in the state to develop training materials specifically designed for master meter operators. After these materials have been developed, it is planned that local seminars will be held at various locations around the state to train master meter operators. Encourages local distribution companies to work with the master meter systems they serve in order to help ensure the safe delivery of gas

Washington UTC	Uses a more stringent definition of master meter operators than the U.S. DOT's Office of Pipeline Safety Educates during inspection, walking the master meter operators through the process and assisting the operators in meeting compliance requirements Invites master meter operators to DOT-sponsored seminars Requires annual reporting of pipe inventory and cause of leaks Provides master meter operators with samples of plans, procedures, and forms Encourages master meter operators to replace their systems with an individually metered utility system
West Virginia PSC	Copies of *Guidance Manual for Operators of Small Natural Gas Systems* are provided during initial inspection of master meter systems (and sometimes during follow-ups), along with sample O&M plans and emergency plans Encourages master meter operators to contact Miss Utility of West Virginia, Inc., the local one-call notification system, about membership Has worked closely with some local distribution companies to encourage them to acquire master meter systems
Wisconsin PSC	Copies of *Guidance Manual for Operators of Small Natural Gas Systems* are provided to operators Copies of pipeline safety regulations are provided to operators Staff is currently in the process of creating a model O&M plan for master meter operators that will be made available for their use Encourages local distribution companies to acquire master meter systems Encourages master meter systems to allow their facilities to be taken over by local distribution companies
Wyoming	No jurisdictional master meter systems
D.C.	No master meter systems

EXHIBIT 11. (CONT.)

Agency	Activities
State/Local Agencies (Cont.)	
Puerto Rico	Commonwealth has not assumed jurisdiction
Federal Agencies	

U.S. Department of Transportation	Prepares, updates, and distributes the *Guidance Manual for Operators of Small Natural Gas Systems*. To facilitate and extend distribution, an electronic version of this manual has been made available on the Internet Holds, co-sponsors, and/or participates in training seminars for pipeline operators, including master meter operators, throughout the U.S. Some of these seminars are specifically designed to help small operators, such as master meter operators. Provides telephone help and assistance to pipeline operators, including small operators Works and participates with associations that support small operators Has developed a PowerPoint training presentation for in-house use by staff of small operators. This presentation can be downloaded from the Internet Offers participation to small operators, including master meter operators, in PEPG (Pipeline Employee Performance Group) training development meetings Prepares, updates, and distributes *Pipeline Safety Regulations.* Also makes regulations available on the Internet Encourages states that do not regulate master meter systems to seek authority to do so
U.S. Department of Housing and Urban Development	Various activities directed at helping to ensure the safety of master meter systems associated with public housing

Key:

BRC = Board of Regulatory Commissioners
CC = Corporation (or Commerce) Commission
DC = Department of Commerce
DNR = Department of Natural Resources
DPS = Department of Public Service
DPU = Department (or Division) of Public Utilities
DPUC = Department of Public Utility Control
UC = Utilities Commission
OPS = Office of Pipeline Safety
PSC = Public Service Commission
PUC = Public Utility(ies) Commission
PC = Railroad Commission
SCC = State Corporation Commission
SFM = State Fire Marshall
TSI = U.S. DOT/RSPA/Transportation Safety Institute
URC = Utility Regulatory Commission
UTC = Utilities and Transportation Commission

Sources of information: Various state agencies; OPS Regional Offices; TSI; state filings with OPS

A number of states attempt to (1) get master meter system operators to let their facilities be taken over by the local gas utilities supplying them, (2) get operators to have the maintenance or operation and maintenance of their systems be taken over by their gas suppliers, or (3) ban master meter systems.

Regulators in various states report that their agencies have made efforts to get the facilities of master meter systems taken over by the utilities supplying the systems with gas. These efforts have frequently met with success. In Connecticut, for example, due to the efforts of regulators, all existing master meter systems were phased out.[65] In Arizona, local gas distribution companies and state pipeline regulators have encouraged master meter operators to allow their gas suppliers to install individual meters. As a result of these efforts, approximately 350 master meter operators were eliminated in Arizona between 1995 and 2000.[66] In Missouri in 1984, state regulators worked with KPL Gas Service and got KPL to take over the facilities from a majority of the master meter systems at trailer parks in the KPL service area.[67] In the District of Columbia as a result of regulator activities, all master meter systems, as defined by the OPS, have been taken over by the local gas distribution company.[68] In Florida, new master meter systems have been banned for investor-owned utilities. New systems are strongly discouraged for public utilities. As a result, it is reported that no new master meter systems have been built in years.[69] In Michigan, as a result of Michigan Public Service Commission Cases U-4211 (April 29, 1974) and U-4985 (August 29, 1977), and a plan developed in 1992 in cooperation with utility representatives, "...the installation of centrally metered facilities has essentially been banned...."[70] In New Jersey, state pipeline safety regulations do not permit new master meter systems.[71]

Only one state, Iowa, has effectively banned master meter systems completely. Iowa state regulations do not permit master meters.[72] The regulations of the state require that

---

[65]Letter from Philip Sher, Associate Engineer, Connecticut Department of Public Utility Control, to Paul Zebe, Volpe Center, December 18, 1989.

[66]Letter from Terry Fronterhouse, Chief of Pipeline Safety, Pipeline Safety Section, Arizona Corporation Commission, to Paul Zebe, Volpe Center, November 21, 2000.

[67]Letter from W.R. Ellis, Pipeline Safety Program Manager, Missouri Public Service Commission, to Paul Zebe, Volpe Center, December 4, 1989.

[68]Information from Richard C. Huriaux, P.E., Director, Office of Engineering, Public Service Commission of the District of Columbia, to Paul Zebe, Volpe Center, November 15, 1989, and subsequent information.

[69]E-mail from Edward Mills, Florida Public Service Commission, to Paul Zebe, Volpe Center, November 3, 2000.

[70]Letters from Ram Veerapaneni, Supervisor, Gas Operations, Michigan Public Service Commission, of December 1, 1989 and February 11, 1993 to U.S. DOT.

[71]E-mail from David McMillan, New Jersey Board of Public Utilities, to Paul Zebe, Volpe Center, December 4, 2000.

[72]Letter from Donald J. Stursma, P.E., Principal Gas & Water Engineer, Bureau of Rate & Safety Evaluation, Iowa State Utilities Board, to Paul Zebe, Volpe Center, November 15, 1989.

> All gas delivered to multi-occupancy premises where units are separately rented or owned shall be sold by a utility on the basis of individual meter measurement for each unit except for that gas used in centralized heating, cooling or water-heating systems, where individual metering is impractical, where a facility is designated for elderly or handicapped persons and utility costs constitute part of the operating cost and are not apportioned to individual tenants, or where submetering or resale of service was permitted prior to 1966.[73]

New York State, which permits master meter systems, requires that local gas utilities take responsibility for all underground piping from gas mains to building walls.[74] This effectively eliminates much of the risk associated with master meter systems.

4.3.2. Other Activities Undertaken by the Federal Government

The U.S. DOT has undertaken a number of activities to improve or ensure the safety of master meter systems, as can be seen in Exhibit 11. It periodically updates and distributes its *Guidance Manual for Operators of Small Gas Systems.* This manual was developed to provide a broad, general overview of the requirements of the Federal pipeline safety regulations for a non-technical audience. It covers reports and plans required by the OPS, the materials qualified for use in gas systems, construction and repair of systems, and the proper location and design of customer meters and service regulators.[75] It also provides the reader with a list of sources of additional information. The manual, last revised in 1997, has been widely distributed to master meter systems. A new update of the manual is currently being prepared. The 1997 version is currently available not only in hard copy, but also an electronic version of the manual is available on the Internet at www.tsi.dot.gov/divisions/pipeline/pipe_docs/som.htm.

The OPS Regional Offices provide some informal training to the master meter system operators with whom they come into contact in the course of inspecting master meter systems. The OPS Regional Offices are also active in sponsoring, participating in, and encouraging formal training seminars for master meter systems. They also encourage states that have not assumed master meter jurisdiction to do so.

The U.S. DOT's Transportation Safety Institute (TSI), which, like the OPS, is part of the Research and Special Programs Administration, is a key player in the formal training of master meter and other gas pipeline system operators. Each year it conducts training seminars and meetings in Oklahoma City, where it is located, and at many other sites throughout the country. Many states, as well as the OPS regional offices, sponsor TSI training seminars for gas pipeline system operators, including

---

[73]Iowa Rules, 199-19.3(1)b.

[74]E-mail from Jeffrey Kline, Senior Valuation Engineer, Safety Section, Office of Gas & Water, New York State Department of Public Service to Paul Zebe, Volpe Center, November 6, 2000.

[75]A service regulator is "a device designed to reduce and limit the gas pressure to a consumer" [*Guidance Manual for Operators of Small Gas Systems*, p. A-4.].

master meter system operators.

Like the U.S. DOT, the U.S. Department of Housing and Urban Development (U.S. HUD), which is responsible at the Federal level for public housing in the U.S., also has an interest in the safety of master meter systems because many public housing projects in the U.S. are served by gas master meter systems. In the mid-1970s, U.S. HUD had Arthur D. Little, Inc., do a study "...to assess natural gas pipeline safety in residential areas served by master meters."[76] This study was used as the basis for a HUD master meter system safety guide entitled, *Handbook on Natural Gas Pipeline Safety in Residential Areas Served by Master Meters*, which was published in 1975.[77] The underlying purpose of this guide was

> ...to make housing project managers, maintenance engineering staff, and designers and architects of HUD-assisted and HUD-insured housing projects and mobile home parks aware of their responsibilities under the Natural Gas Pipeline Safety Act.[78]

The U.S. HUD guide was superseded by DOT's *Guidance Manual for Operators of Small Gas Systems*, which U.S. HUD has distributed in the past to public housing authorities around the country.[79]

U.S. HUD has operated a variety of programs over the years that could be used by public housing authorities to obtain funding to bring their master meter systems into compliance with the minimum Federal Safety Standards. Master meter operators in a number of states, including South Carolina, are reported to have availed themselves of U.S. HUD funding in order to finance system safety improvements.[80]

---

[76]Arthur D. Little, Inc., *Natural Gas Pipeline Safety in Master-Metered Residential Areas*, p. iii.

[77]S. Atallah, P. Athens, D. Jeffreys, R. Linstrom, and J. O'Brien, *Handbook on Natural Gas Pipeline Safety in Residential Areas Served by Master Meters*.

[78]Atallah, S., Athens, P., Jeffreys, D., Linstrom, R., and O'Brien, J., *Handbook on Natural Gas Pipeline Safety in Residential Areas Served by Master Meters*, p. I.

[79]Telephone conversation between Charles Ashmore, HUD, and Paul Zebe, Volpe Center, January 11, 1990.

[80]Letter from James S. Stites, Chief, Gas Department, Utilities Division, South Carolina Public Service Commission, Paul Zebe, Volpe Center, November 14, 1989.

5. IMPROVING THE MASTER METER SYSTEM INSPECTION PROGRAM

5.1. INTRODUCTION

Inspection is one of the important activities undertaken by the states and the Office of Pipeline Safety (OPS) to ensure and improve the safety of master meter systems in the U.S. While other activities may have a potential for improving the safety of the systems (these will be discussed in the next chapter), none is currently as widely used as inspection.

When the states or the OPS send an inspector to a master meter system, the inspector almost always provides informal training in one form or another. The inspector may explain how to operate a pipe locator, or why it is important to periodically do leak surveys, or how to do a leak survey. In some cases, the inspector will sit down with the operator and review the regulations, explaining what the operator needs to do and how it is to be done. The training provided by inspectors is essential to the safe operation of master meter systems. In fact, in many cases it is the only gas pipeline safety training an operator receives.

Inspectors also help identify problems before those problems get worse. This is an important function of inspectors at any pipeline operation. It is an essential function at master meter systems, because the operators often may not recognize a problem and, if they do, often may not know how to correct it. When the OPS inspects and finds violations, it undertakes enforcement actions requiring the master meter system operator to take remedial action to bring the system into compliance with the Federal pipeline safety code. The states with Section 60105 certifications take similar actions when violations are found, while those with Section 60106 agreements refer enforcement actions to the OPS.

Master meter system operators, unlike the operators of most other types of gas pipeline systems, are not usually gas pipeline professionals. They are property owners, property managers, property maintenance people, and sometimes even janitors. They generally have little or no understanding of natural gas or how to handle it safely. It is reported, for instance, that one master meter operator was surprised to find that natural gas did not flow through the pipes as a liquid.[81]

It is evident from the foregoing that inspection is quite important to the safety of master meter systems. Given its importance, the question arises as to whether the current Federal/state cooperative program of inspection is sufficient, and, if not, how it might be improved.

5.2. IS THERE A NEED FOR AN IMPROVED INSPECTION PROGRAM?

The need for an improved inspection program would logically appear to hinge on the historical safety performance of master meter systems. If the performance has been good and there is no reason to assume that it will change in the future, then there is no need for an improved inspection program. If

[81]Dixon, "How North Carolina Solved Its Master Meter Problem," p. 26.

the performance is poor or there is some compelling reason to believe that today's good performance will deteriorate in the future, then an improved inspection program might be in order. Unfortunately, the data available on master meter incidents (see Exhibit 3) is too sparse to support an analysis to make such a determination. Furthermore, the data that exists is mostly from states with active master meter inspection programs, limiting its usefulness in any determination of the impact of an improved inspection program on the safety of master meter systems in states without such programs.[82] Little data exists for those states without active master meter inspection programs.

Because OPS policy in the states where it exercises jurisdiction is to inspect only when there is an accident or a safety concern, it might be assumed that OPS inspections conducted following incidents could be counted and used to bolster the available state incident data. Unfortunately, it is not clear that the OPS is notified of all master meter incidents where it exercises jurisdiction. Many master meter operators may not know that they are supposed to report accidents. Others may know that they are supposed to report, but not how or to whom, and still others may simply ignore the requirement for various reasons (this may also be true in some of the states where state agencies have assumed jurisdiction). In the 1970s and early 1980s when the OPS required annual reporting by all master meter operators, only an estimated 1.5 to 2.3 percent ever filed a report.[83] Although this experience may not necessarily be reflective of the experience of the OPS with the reporting of master meter system incidents, it is indicative of the possibility of under-reporting.

Although there is a paucity of master meter accident data, there are some indications of the relative performance of master meter systems. Many regulators have found from their experience that master meter system operators, unlike the operators of other gas distribution systems, are generally inadequately trained to safely operate and maintain their systems. Consequently, the potential for problems is considered greater on master meter systems than on other distribution systems. It should be noted that the opinion that master meter systems are not as safe as other systems is not universal. Pipeline regulators in several states have reported that the safety of master meter systems in their states is no worse than that of any other distribution system.[84]

One way to assess the adequacy of the current regime of master meter system inspection (and thereby assess the need for an improved inspection program) without accident data would be to compare the frequency of master meter system inspection with the frequency of inspection of similar types of pipeline systems, such as other gas distribution systems. The frequency of inspection that is needed for a particular type of system will depend, to a greater or lesser extent, on the risk of an accident (i.e., the probability of an accident times its expected consequences). Consequently, comparing the relative risk of accidents on master meter systems with that of accidents on other gas distribution systems

---

[82]Of the 37 states with master meter systems for which incident data is provided in Exhibit 3, 20 inspect master meter systems at least once a year, 8 inspect them at least once every two years, and 7 inspect less frequently than biennially. Two of the states have not yet established an inspection schedule.

[83]U.S. DOT, "Exercise of Jurisdiction Over Master Meter Gas Operators," p. 9.

[84]Letter from Myron Thompson, Chief, Pipeline Safety, Arkansas Public Service Commission, to Paul Zebe, Volpe Center, December 1, 1989; letter from R. Lynnard Tessner, Georgia Public Service Commission, to Paul Zebe, Volpe Center, December 5, 1989.

would provide some indication of the frequency of inspection needed for master meter systems. To perform this comparison, it is necessary to look at the relative probabilities of accidents on the two types of systems and the relative consequences of accidents.

If master meter systems are less safe than other gas distribution systems, the probability of a master meter accident will be greater than that of an accident on other gas distribution systems. If master meter systems are no less safe than other gas distribution systems, the probability of a master meter accident will be about the same as that of an accident on other gas distribution systems. In the absence of good data, the probability of an accident on a master meter system can be expected to be greater than or equal to the probability of an accident on other gas distribution systems.

Master meter systems often serve mobile home parks, public housing authorities, apartment complexes, and other locations where there are concentrations of people. Many other gas distribution systems also serve concentrations of people. The concentrations of people served by master meter systems are almost certainly no less dense than the concentrations of people served by other gas distribution systems, and they may be denser. Consequently, the consequences of an accident on a master meter system will be no less than those of an accident on some other gas distribution system. This assumes that (1) accidents on other gas distribution systems are no more damaging than accidents on master meter systems and (2) property in the vicinity of accidents on master meter systems is no less valuable than property in the vicinity of accidents on other gas distribution systems.

Based on the foregoing, it would appear that the risk of an accident on a master meter system will be no less than that of an accident on other gas distribution systems, and, in fact, it may be greater. Therefore, based on comparative risk, it would appear that inspections of master meter systems should be no less frequent than inspections of other gas distribution systems. It may be, of course, that inspections should be more frequent.

Under Section 108(a) of the Pipeline Safety Reauthorization Act of 1988, if necessary funds are appropriated, the OPS is required to inspect all gas distribution systems over which it exercises jurisdiction at least once every two years. The OPS is permitted to inspect master meter systems at a reduced frequency, should this be considered appropriate. If two years is taken as the maximum acceptable interval between inspections, then master meter systems in at least 15 states are not being inspected often enough (see Exhibits 8 and 9). In 5 of those states -- Alaska, Hawaii, Idaho, Massachusetts, and Pennsylvania -- inspection is solely the responsibility of the OPS. In the others -- California, Kentucky, Nebraska, New Mexico, Oklahoma, Oregon, Texas, Virginia, West Virginia, and Wisconsin -- inspection is performed by the state.

5.3. PROBLEMS TO BE OVERCOME IN IMPLEMENTING AN IMPROVED INSPECTION PROGRAM

If an improved inspection program that increases the frequency of inspection of master meter systems is implemented, it will require the participation of pipeline regulators in every state. This will be necessary because (1) the states are better equipped to deal with local distribution systems and (2) the OPS does not have resources to take responsibility for inspection of the master meter systems. Undertaking improvement of master meter system inspection at the state level, however, will require overcoming several potential problems.

5.3.1. Getting States to Assume Jurisdiction Over Their Master Meter Systems

An improved master meter inspection program will necessitate that all states assume safety jurisdiction for their master meter systems. Currently, the states of Alaska, Hawaii, Idaho, Massachusetts, and Pennsylvania, as well as the Commonwealth of Puerto Rico, do not regulate master meter systems and cannot say definitively that they have no natural gas master meter systems. Michigan also does not regulate master meter systems, but that state eliminated them prior to giving up jurisdiction. Vermont does not regulate master meter systems, but does not have any.

It is reported that the most common reason why state regulators do not regulate master meter systems is that they have not been given the statutory authority to do so, and, as a matter of policy, generally do not seek to expand their authority. Furthermore, regulating master meter systems would require additional staff and most do not have a funding mechanism. It should be noted that most of these state regulators are not against regulating master meters. If legislation were introduced giving them authority over master meter system safety, they would generally not oppose it.[85]

The situation in California may not be atypical with regard to expansion of regulatory authority. California currently only regulates master meter systems at mobile home parks. California regulators report that they would need to show the state legislature the benefits of expanded regulation before the legislature would approve an expansion. Currently, they feel that they are incapable of doing so because they lack hard data on master meter system incidents and consequences at sites in California other than mobile home parks.[86]

5.3.2. Getting States to Increase Inspection Frequency

Getting states to increase the frequency of master meter inspection may require action by state legislatures to approve funding and increased numbers of safety inspectors, and will definitely require action by state safety agencies to undertake and allocate funding to support increased numbers of

[85]E-mail from William Gute, Regional Director, Eastern Region, Office of Pipeline Safety, RSPA/U.S. DOT, to Paul Zebe, Volpe Center, June 19, 2001.

[86]Telephone conversation between Mahendra Jhala, Chief, Utilities Safety Branch, California Public Service Commission, and Paul Zebe, Volpe Center, December 19, 2000.

inspections per year. In some cases, this might require convincing state legislatures and regulators that increased inspection frequency would be beneficial. The total cost of increased inspection to the states that inspect less frequently than biennially would appear fairly low, even when including the states that do not currently regulate master meter system safety.

Assuming that all existing state pipeline inspectors are now fully employed, undertaking at least biennial master meter inspections for the master meter systems by state agencies will involve the hiring of additional inspection staff. If a state has no pipeline safety jurisdiction whatsoever, new offices may need to be created that would include not only inspectors but also managerial and clerical staff. The average annual salary, as of December 31, 1995, of the full-time gas safety inspectors employed by the states participating in the gas pipeline safety program, according to the National Association of Regulatory Utility Commissioners, ranged from $16,000 in Vermont to $62,304 in Colorado.[87] After overhead and other costs are added to the salaries, the cost of hiring an inspector can be substantial. In some states, such as California, where the number of master meter systems unregulated by the state is probably quite large, several new hires might be required.

On the basis of master meter systems being inspected at least once every two years, it is quite possible that it would be necessary to perform 1,000 to 1,500 additional master meter inspections per year.[88] Those inspections would be distributed across 14 different states, plus Puerto Rico (these are where inspection occurs less frequently than once every two years). To perform those inspections, a total of about 28 to 50 additional inspectors would be needed. This estimate of the number of additional inspectors needed assumes that (1) the state or commonwealth undertakes to perform all needed inspections, (2) all state pipeline inspectors are currently fully employed (i.e., they have no free time to do any additional inspections), and (3) an inspector can be expected perform between 30 and 36 inspections, on average, per year.[89]

---

[87]NARUC, *Utility Regulatory Policy in the United States and Canada, Compilation 1995-1996,* Washington, DC, 1996, Table 297.

[88]This was range was derived as follows. Currently, there are 7,342 known master meter systems. It is estimated that there are 8,343 master meter systems in total. This means that 1,001 systems additional systems would need to be inspected once every two years, or 501 additional systems would need to be inspected per year. Also, the frequency of inspection would need to be increased in California, Kentucky, Nebraska, New Mexico, Oklahoma, Texas, Virginia, West Virginia, and Wisconsin (see Exhibit 8). If these states were to inspect biennially, then a total of 716 more systems would need to be inspected annually (to be conservative, where a range was given in Exhibit 8, the longest time between inspections was used in the calculations that were made). Adding 501 and 716 yields 1,217 more systems to be inspected each year. Assuming the information in Exhibit 10 is representative of the relationship between systems and inspection units, then 1,325 additional inspection units would need to be inspected per year. One inspection per inspection unit was assumed. To be conservative, a general (non-statistical) range was used, rather than the point estimate of 1,325.

[89]In 1996, a recent year for which data is readily available, 294 inspectors working a total of 272 labor years inspected 8,107 natural gas inspection units (see U.S. DOT, "Report on Pipeline Safety, Calendar Years 1995-1996", p. 44). This is an average of 29.8 inspections per labor year. In 1995, 288 inspectors working a total of 234.79 labor years inspected 8,435 natural gas inspection units (see U.S. DOT, "Report on Pipeline Safety, Calendar Years 1995-1996", p. 42). This is an average of 35.9 inspections per labor year.

To put the number of additional inspectors into perspective, in 1996 there were 294 state inspectors involved with natural gas safety. An additional 28 to 50 would represent a 10 to 17 percent increase in the total number of inspectors. It would, of course, represent an even greater percentage of the number of inspectors employed by the states where the inspection frequency falls short of once every 2 years. If it is assumed that the total cost of a state pipeline inspector, including salary and benefits and direct support costs (e.g., travel, training, and equipment) is $50,000 per year, on average, then the additional inspectors will cost the states and commonwealths between $1,400,000 and $2,500,000 per year (not including any associated management, administrative, and legal costs). Spread among 14 states plus Puerto Rico, this is not an enormous amount of money. Assuming that the total cost is $100,000 per year per inspector, the total cost, which is between $2.8 million and $5 million, still does not appear excessive when spread among 14 states and Puerto Rico. Of course, this total cost will not necessarily be borne equally by all of the states, and the additional amount required could be viewed as burdensome by some state legislatures or regulatory agencies.

One impediment to states assuming jurisdiction may be industry resistance. Although the California Public Service Commission now has jurisdiction over master meter systems at mobile home parks, it is reported that the mobile home industry was instrumental in blocking some legislation that would have given the PSC that jurisdiction at an earlier date.[90] Resistance by industry, where it exists, is probably the result, in great measure, of a fear that changes in safety regulation will result in additional costs that will have to be borne by industry.

5.3.3. Identifying Master Meter Systems

Whenever jurisdiction is obtained, one of the first tasks facing state agencies is that of identifying the master meter systems operating in the state. This is not necessarily a simple process. It can prove to be both time-consuming and expensive if it requires an on-site inspection to determine whether a purchaser of gas is operating a master meter system. This is often the case, because local gas utilities, the primary source of information, will not always have sufficiently detailed records to determine if a system is a master meter system as defined by the OPS.[91]

In 1988-89, the Minnesota Office of Pipeline Safety (MN OPS) began a program to identify all of the master meter systems in the state. As a first step, the OPS asked all the utilities in Minnesota for the names of everyone who purchased gas for redistribution. Unfortunately, the information gathered was inadequate, and site visits by OPS staff were necessary.[92]

---

[90]Telephone conversation with Al Kirchem, California Public Service Commission, March 9, 1990.

[91]SASC, *An Analysis of Natural Gas Master Meter Systems (Definition & Program) From A Federal Perspective,* p. 5-10.

[92]Telephone conversation with Ronald Wiest, MN OPS, March 6, 1990; Telephone conversation with Ronald Wiest, Steven Sweeney, and Scott Olsen, MN OPS, March 7, 1990; letter from Walt Kelly, Director, MN OPS, to RSPA, February 12, 1993.

In Ohio, the original list of potential master meter operators was 550. This was reduced by the Ohio Public Utilities Commission (OH PUC) staff to 295. Then, in 1989, an additional 850 potential operators were found. By the end of 1992 the number of identified master meter systems was 149, with a list of 596 potential ones remaining for the OH PUC to investigate.

5.3.4. Obtaining Sufficient Inspectors to Perform the Inspections

To perform additional inspections, some state regulatory agencies will undoubtedly need to hire additional inspectors. This may present some problems, at least in the short-term, since the number of individuals who are both qualified and willing to be inspectors is not unlimited. The problem appears to be that salaries paid by the state pipeline safety agencies are often too low to attract many people who are qualified.

From time to time, state pipeline safety agencies report that they come under a hiring freezes and are not permitted to hire inspectors. This could prove to be a problem if, after assuming jurisdiction, the state agencies find that they have a relatively large number of master meter systems to inspect. Although it is likely that a hiring freeze would be relaxed if the additional responsibility (i.e., the need to inspect master meter systems) considerably increased the workload of an agency, this is not certain. If the hiring freeze were not relaxed, it is likely that master meter system inspection by the state, though officially authorized, would not get underway (i.e., the state would probably not cut back on its other inspection programs to accommodate master meter system inspection). The same kind of problem would result if state agencies are not under a hiring freeze but are turned down when they seek permission to hire the additional inspectors needed.

5.4. OPERATOR QUALIFICATION AND MASTER METER SYSTEMS

In 1999, the Office of Pipeline Safety issued a final rule requiring "...pipeline operators to develop and maintain a written qualification plan for individuals performing covered tasks on pipeline facilities." This new rule, which is currently being phased in, covers master meter operators, along with most other hazardous liquid and gas pipeline operators. The rule is expected to "...ensure a qualified work force and...reduce the probability and consequence of incidents caused by human error."[93]

This rule to some extent represents an alternative to an improved program master meter system inspection.[94] It is expected by both Federal and state pipeline safety regulators that the new Operator Qualification rule will improve the safety performance of master meter systems by forcing master meter operators to do one of the following: (1) hire qualified staff, (2) hire qualified contractors, or (3) turn their operations over to the local gas distribution systems and get out of the gas distribution business. In some cases, it might be noted, to meet the requirements of the Operator Qualification rule, master

[93]*Federal Register*, August 27, 1999, Vol. 64, No. 166, pp. 46853-46867.

[94]E-mail from Frederick A. Joyner, Regional Director, Southern Region, Office of Pipeline Safety, RSPA/U.S. DOT, to Paul Zebe, Volpe Center, May 24, 2001.

meter operators are likely to hire their local gas distribution companies.

In some cases, the new Operator Qualification rule may indeed obviate the need for an improved program of master meter system inspection. It will not do so, however, in all cases. There are master meter operators who do not currently understand what their responsibilities are with respect to ensuring the safety of their systems, and as a consequence do not perform those functions in an appropriate (and safe) manner. There is some question as to whether the Operator Qualification rule will have much of an impact on those operators, unless state or Federal pipeline regulators force the issue. Its impact on operators not currently subject to regular inspection is problematic, and arguably it is these very same operators who need the rule the most.

6. AN ALTERNATIVE TO AN IMPROVED INSPECTION PROGRAM

6.1. INTRODUCTION

A problem with inspection of master meter systems is that the gains in safety made by additional inspections are often temporary. As discussed earlier, persons who operate master meter systems are generally not qualified gas pipeline professionals. The training provided during inspection helps make those who operate master meter systems better able to run their systems safely. Unfortunately, there is a high turnover of people working at master meter systems (which, in large part, appears to be the result of low wages). It is reported that in Arkansas, for example, an inspector often deals with a different person every time a system is contacted.[95] When individuals who have received training from inspectors leave, they take their training and gas pipeline "experience" with them. It is lost to the master meter system. Important records may also be lost.[96]

The goal to improve the safety of master meter systems may not necessarily involve improving their inspection by Federal or state personnel. Since local gas utilities have qualified gas pipeline professionals, an alternative would be to turn responsibility for master meter systems over to the local gas utility companies. This alternative, which can be accomplished in three different ways, is discussed in the remainder of this chapter.

6.2. BAN MASTER METER SYSTEMS

One way to get local gas utility companies to assume the responsibility for master meter systems would be to ban master meter systems. This would effectively eliminate any safety problems associated with the distribution of natural gas by master meter systems. It would, of course, also eliminate the need for the inspection of master meter systems.

A ban on master meter systems would force the transfer of gas customers from master meter systems to local gas utilities (provided, of course, that the master meter systems did not circumvent the ban by switching to another fuel, such as propane). Utilities may require that landlords who formerly operated master meter systems pay a portion of the cost of hooking their tenants up to the gas distribution system (the portion may be as high as 100 percent). This charge should be no greater than what it would be for hooking up a new property of comparable size. Landlords may be able to recoup part of their costs by selling or transferring the facilities of their master meter systems to the gas utilities, though many utilities would not be interested in the underground piping of systems unless they are able to verify that it is in compliance with the Minimum Federal Safety Standards. To ensure that landlords get fair prices for the facilities they transfer to utilities, it may be necessary for state regulators to

---

[95]Letter from Myron Thompson, Chief, Pipeline Safety, Arkansas Public Service Commission, to Paul Zebe, Volpe Center, December 1, 1989.

[96]Letter from Myron Thompson, Chief, Pipeline Safety, Arkansas Public Service Commission, to Paul Zebe, Volpe Center, December 1, 1989.

establish pricing guidelines.

Only one state, Iowa, has effectively banned all gas master meter systems. Three other states, Arkansas, Michigan, and New Jersey, have banned all new master meter systems. Existing systems in these states, however, are not affected by the ban and may continue to operate (no systems operate in Michigan any longer due to the restrictions imposed on them by the Michigan Public Service Commission in its Order in Case No. U-421 and to the state's 1992 requirement that local gas utilities offer to take master meter systems over).[97] By making the local gas utility responsible for underground piping up to the building wall, New York State's regulations apparently have had the effect of discouraging the establishment of new master meter systems and the continued operation of existing systems.[98]

Some state governments, it should be noted, appear to be opposed to expanding the regulatory control that they currently exercise over master meter systems. Regulators in at least one state, Texas, feel that their state government would be opposed to any additional governmental interference in the operation of master meter systems.[99] This, of course, means that the state government would probably be opposed to banning master meter systems.

A ban on natural gas master meter systems may cause the operators of some existing systems to change the fuel used in the system. For instance, an operator might switch to propane or a propane/air mixture. This would not necessarily represent an improvement in the safety of the system, since the operator may not know any more about propane and the safe operation of an LPG distribution system (propane is a type of LPG) than about natural gas and the safe operation of a natural gas distribution system. Therefore, while natural gas safety improves, overall public safety remains more or less the same as before. In the case of a switch to LPG, it might be noted, a system would still be subject to the Minimum Federal Safety Standards, as they apply to LPG. A system would not be subject to the Minimum Federal Safety Standards, of course, if the switch were to electricity.

There appears to be a tendency for legislatures and regulators to "grandfather" existing systems by allowing systems already in operation to continue as before. If this is done, then the safety of the current systems is not effected by banning master meter systems in a state. If existing systems are "grandfathered", then only in states with a growing number of master meter systems would there be any appreciable safety impact from a ban on master meter systems. As can be seen from a comparison of Exhibit 1 with Appendix A, there appear to be few states that have experienced a growth in master meter systems.

---

[97]Order, Case No. U-4211, Michigan Public Service Commission, April 29, 1974, p. 4, and its February 11, 1993 letter to RSPA.

[98]E-mail from Jeffrey Kline, Senior Valuation Engineer, Safety Section, Office of Gas & Water, New York State Department of Public Service, to Paul Zebe, Volpe Center, November 6, 2000.

[99]Telephone conversation with Dean Scott, Texas Railroad Commission.

6.3. REQUIRE THAT LOCAL GAS UTILITIES ABSORB THE FACILITIES OF MASTER METER SYSTEMS

Another way to get local gas utilities to assume responsibility for master meter systems would be to require that they take over and absorb the facilities of those master meter systems they supply with natural gas. Under this approach, sometimes referred to as master meter system conversion, the utilities assume both ownership and operation of all of the jurisdictional facilities of the master meter systems (i.e., all of the facilities of the master meter systems that are subject to the minimum Federal Safety Standards). These facilities are incorporated and integrated into the utilities' systems, and the master meter systems, as operating units, cease to exist.

The absorption or conversion of master meter systems would eliminate most, if not all, of the safety problems associated with the systems, as well as the need for targeted system inspection.[100] The facilities would be operated by gas pipeline professionals who understand the requirements of the minimum Federal Safety Standards and whose systems are generally in compliance with those standards. Furthermore, liability considerations, among other things, will tend to ensure that the facilities are brought into compliance with 49 CFR 192.

The absorption of a master meter system by its gas supplier often necessitates some modifications to the system to bring it into compliance with the Minimum Federal Safety Standards. These can include such things as re-piping the system or making other modifications to the piping both inside and outside of the buildings. It appears that these modifications are generally expected to be paid for by the master meter operator, not the utility. It should be noted that master meter system operators who find that they must pay for modifications to their systems to bring them into compliance with the Minimum Federal Safety Standards could be liable for these same costs even if their systems are not absorbed by their gas suppliers, since they are obligated by law to bring their systems into full compliance with the Minimum Federal Safety Standards and may face civil penalties that can be as much as $10,000 for each violation if they fail to do so.[101]

The actual costs that master meter system operators will face when they have their systems converted will vary somewhat, depending on what needs to be done. In 1986, the Stamford, Connecticut, Housing Authority had Connecticut Light and Power (CL&P) convert its system on Lawn Avenue and Custer Street, which had connections to 22 buildings. CL&P installed new underground service lines and connected the new lines into the existing building piping. The charge by CL&P for this work

---

[100]The pipeline inspection unit into which the facilities of the master meter system have been incorporated will, of course, continue to be inspected. In the inspection, the records and procedures of the operator of the unit will be expected to cover the facilities obtained from the master meter operator, just as they will be expected to cover all other facilities of the unit. Furthermore, spot checks made in the field during the inspection might be made at the former master meter system facilities, just as they might be made anywhere else in the unit. In general, however, unless problems are discovered, the facilities obtained from the master meter operator will not be a focus of the inspection.

[101]Some utilities, as a standard practice, require the systems that they take over to be replaced to ensure that they meet current Federal standards.

averaged approximately $3,900 per building.[102]

In addition to the cost of the modifications required to bring a master meter system into compliance with the regulations, a master meter system operator may also be required by the utility to pay for the installation of individual meters (and system changes associated with the installation of meters), if the system is not already sub-metered. For instance, in the late 1980s, Michigan Consolidated Gas Company, requires master meter systems without sub-metering that are converting to individual meters to pay for

> ...(a) installation of meters and regulators, but not the cost of meters and regulators, (b) relocation of any service lines, (c) additional service lines, (d) additional main in excess of twice the increased annual revenue resulting from conversion, and (e) removal of existing facilities.[103]

A master meter system, it might be noted, would be credited by Michigan Consolidated Gas Company for the "salvage value of the facilities removed except meters and regulators."[104]

One inducement that can be used to encourage master meter operators who may not be in full compliance with the pipeline safety regulations (or are not sure whether they are in compliance) to let their systems be taken over by their gas suppliers is to point out the cost of bringing a system into compliance with the Minimum Federal Safety Standards. These costs can be substantial. Master meter operators can avoid some (though, as mentioned earlier, not all) of these costs by turning their systems over to their gas suppliers. For example, operators can avoid most, if not all, of the cost of an O&M plan, because it costs relatively little for a gas utility to modify its existing O&M plan to include the pipeline facilities obtained from a master meter operator.[105] Because of the cost savings that can be realized, conversion can often make economic sense in spite of the costs that may be incurred by the master meter system operator. It makes even more economic sense when the civil penalties that can be imposed for failure to bring a system into compliance are taken into consideration.

Many regulators at both the Federal and state levels appear to feel that the takeover of master meter systems by the utility is the best way to handle the safety problems of master meter systems. In a number of states (see Exhibit 9), regulators encourage master meter systems to allow their system to be taken over by the utility. In many cases, some of which were discussed earlier (see Section 4.3.1), these regulators have been successful in their efforts. It should be noted that no state currently requires that master meter systems be taken over by their gas supplier. Any takeovers are voluntary both on

---

[102]Enclosures with letter from Philip Sher, Associate Engineer, Connecticut Department of Public Utility Control, to Paul Zebe, Volpe Center, December 18, 1989.

[103]Section B5.3(D), Rules of Service, Michigan Consolidated Gas Company, March 17, 1987.

[104]Section B5.3(D), Rules of Service, Michigan Consolidated Gas Company, March 17, 1987.

[105]Telephone conversation with Richard Sanders, Chief, Pipeline Safety Division, Transportation Safety Institute, U.S. DOT, February 20, 1990.

the part of the local gas utility and on the part of the master meter system.

There may be some resistance to the takeover of master meter systems by their suppliers. This resistance may come from any one of three sources: the utilities, the master meter operators, or the master meter system customers.

Some utilities are reportedly concerned about liability.[106] This concern can probably be overcome if it is left to the master meter operator to bring the system up to specifications before it is transferred to the utility. Utilities are also concerned about getting paid for the gas they supply.[107] When a master meter system is the customer, one person, the system's operator, is responsible for paying for the gas. When a utility takes over a master meter system, each of the customers of the former master meter system becomes individually responsible for paying for the gas that they use.

The cost to the utilities will increase if they take over the master meter systems that they supply with natural gas. This may also be a cause for utilities to resist taking over master meter systems. One cost to utilities that will increase if they take over master meter systems is the cost of billing--that is, the cost of preparing and mailing bills, and the cost of processing the paid bills that are received. This will be the result of having to send bills for the gas that is sold to each household, rather than just to owners of the master meter systems. Another related cost that may also go up is the cost of collecting on unpaid bills.

Master meter operators may resist giving up their systems because they would be giving up the profits they make on the gas they provide their customers. This resistance, however, may not be too significant. It is reported that with stable gas prices, many systems are profitable, but with relatively unstable gas prices, systems are quite unprofitable.[108] Recently, systems probably have not been particularly profitable because of increases in gas prices.

Some operators may switch fuels rather than let their systems be taken over by the pipeline utility. In Missouri, after the Missouri Public Service Commission issued its order requesting that utilities take over master meter systems for one dollar after the master meter system had been brought up to specifications, some systems are reported to have switched to propane or propane/air mixtures.[109]

Customers may object to the takeover of master meter systems by a utility company if they believe

---

[106]Telephone conversation with Fred Joyner, Regional Chief, Southern Region, Office of Pipeline Safety, U.S. DOT/RSPA.

[107]Telephone conversations with Richard Sanders, Chief, Pipeline Safety Division, Transportation Safety Institute, U.S. DOT/RSPA, and Fred Joyner, Regional Chief, Southern Region, Office of Pipeline Safety, U.S. DOT/RSPA.

[108]Telephone conversation with Richard Sanders, Chief, Pipeline Safety Division, Transportation Safety Institute, U.S. DOT/RSPA.

[109]Telephone conversation with Ed Ondak, Regional Director, Central Region, Office of Pipeline Safety, U.S. DOT/RSPA.

that gas costs will increase. Many, if not most, master meter systems purchase gas at a discount from their supplier. Sometimes, all or part of this discount is passed on to the system's customers. When this is the case, the customer's cost of gas can be expected to rise once a system is taken over by the utility. It should be noted that in some instances, the cost of gas from the master meter system may be higher than the cost of gas from the local utility. When this is the case, the cost of gas to the customer will go down as a result of the takeover of the master meter system.

6.4. REQUIRE THAT MASTER METER OPERATORS TURN OVER OPERATION OF THEIR SYSTEMS TO LOCAL GAS UTILITIES

A third way to get local gas utilities to assume responsibility for master meter systems would be to require master meter operators to turn over the operation of their systems to local gas utilities. Under this approach, the local gas utilities assume operational control of the master meter systems, but the master meter operators retain ownership of their systems. Master meter system operators would be responsible for reimbursing the local gas utilities for their work.

The safety impact of this approach would be very similar to that resulting from master meter system conversion (see Section 6.3). The approach would ensure that natural gas professionals who understand the requirements of the Minimum Federal Safety Standards would operate the master meter facilities. As a consequence, the safety of those facilities should be comparable to the safety of those of local gas utilities.

The cost of this approach would also be very similar to that of master meter system conversion. It is likely, however, that 100 percent of those costs would be borne by the master meter system operators, themselves, who would be likely to pass them on to the ultimate consumers of the gas through higher rents and fees. Economies of scale available to the local gas utilities should mean that the costs to master meter operators would generally be less than if they operated their systems in a manner consistent with the Minimum Federal Safety Standards but independently of their local gas utilities.

7. FINDINGS

7.1. INTRODUCTION

This report has examined master meter systems in the U.S., their safety regulation, and the need for an improved inspection program for the systems. The principal findings of the report are summarized below.

7.2. KEY FINDINGS

The key findings of this study concern (1) change over time in the number of master meter systems, (2) the expanding assumption of the responsibility for the safety of those systems by the states, and (3) the ongoing efforts to improve and ensure the safety of those systems.

7.2.1. Number of Master Meter Systems

There were an estimated 8.3 thousand master meter systems in the U.S. in 1999. This represents a decline from 1979, when it was estimated that there were approximately 81 thousand master meter systems in operation. This decline in the number of master meter systems is due, at least in part, to (1) efforts by master meter system operators to make their customers directly accountable for the cost of the natural gas that they use; and (2) efforts by regulators to get master meter systems to merge with the utilities that supply the systems with gas.

7.2.2. Responsibility for the Safety of Master Meter Systems

Responsibility for master meter system safety has shifted over the years to the point where the state agencies are now very much in the majority (OPS favors this on the basis that jurisdiction of this kind is best handled by the states, and urges states accordingly). At the end of 1999, 43 states exercised either partial or full jurisdiction over master meter system safety. The figures for ten years earlier, 1989, were 37 with either partial or full jurisdiction. This upward trend in the number of states assuming full responsibility for the safety of their pipeline systems is expected to continue. Of the seven states not undertaking partial or full responsibility for their master meter systems, at least two have no such systems within their borders.

7.2.3. Ongoing Efforts to Improve and Ensure the Safety of Master Meter Systems

In 1999, master meter systems were inspected at least once a year in 19 states (Alabama, Colorado, Delaware, Florida, Illinois, Indiana, Kansas, Louisiana, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, North Carolina, North Dakota, Rhode Island, South Carolina, South Dakota, and Tennessee); at least once every two years in 7 states (Arizona, Arkansas, Nevada, New

York, Maryland, Ohio, and Washington);[110] and at least once every three years in 8 states (Kentucky, Nebraska, New Mexico, Oklahoma, Oregon, Texas, West Virginia, and Wisconsin). Inspection occurs at intervals greater than three years in two states (California and Virginia). Intervals were irregular in five states (Alaska, Hawaii, Idaho, Massachusetts, and Pennsylvania), as well as Puerto Rico (for further explanation of "irregularly" see Exhibit 8). Of the remaining eight states, two are in the process of doing an initial identification of master meter systems and have not yet established an inspection frequency (Montana and Utah), six states (Connecticut, Iowa, Michigan, Vermont, Maine, and Wyoming) and the District of Columbia have no master meter systems, and definitive information is unavailable for one state (Georgia).

In addition to inspection, the OPS and states engage in a number of activities to help improve and ensure the safety of master meter systems. Included among these activities are formal and informal training programs and the production and distribution of training and informational aides, such as the OPS's *Guidance Manual for Operators of Small Gas Systems.*

[110]Section 108a of the Pipeline Safety Reauthorization Act of 1988 requires the OPS, if funds are available, to inspect gas distribution systems at least once every two years.

8. RECOMMENDATION

8.1 CONCLUDING RECOMMENDATION

The concluding recommendation of this report is that OPS continue the present policy of (1) pressing for all states to have full jurisdiction over master meter system safety, (2) where a state has not taken jurisdiction, continuing with OPS inspections of those master meter systems (including enforcement action as needed) where in OPS's judgement there is a likelihood of probable violations or there are other safety concerns, and (3) investigating master meter system incidents not being covered by another qualified agency. This recommendation is based on the following:

- The declining number of master meter systems, as summarized in 7.2.1
- Increasing state involvement in improving and ensuring master meter system safety, as summarized in 7.2.2 and 7.2.3, and
- The efforts being made to ban new master meter systems, and encourage local gas distribution companies to take over the responsibility for the safety of existing ones, as discussed in Sections 4.3, 6.2, and 6.3.

A SELECTED BIBLIOGRAPHY

American Gas Association, *Gas Facts*, AGA, Arlington, VA, 1996.

Arthur D. Little, Inc., *Natural Gas Pipeline Safety in Master-Metered Residential Areas*, ADL, Cambridge, MA, April 1975.

Atallah, S., Athens, P., Jeffreys, D., Linstrom, R., and O'Brien, J., *Handbook on Natural Gas Pipeline Safety in Residential Areas Served by Master Meters*, U.S. Department of Housing and Urban Development, Washington, DC, April 1975.

Dixon, T., "How North Carolina Solved Its Master Meter Problem," *Gas Industries*, October 1981, pp.26, 28.

National Association of Regulatory Utility Commissioners, *Utility Regulatory Policy in the United States and Canada, Compilation 1995-1996*, NARUC, Washington, DC, 1996.

Seisler, J. M., "Escaping the Energy Bite: Converting Master Meters," *Journal of Property Management*, May/June 1980, pp. 146-151.

Systems & Applied Sciences Corporation (SASC), *An Analysis of Natural Gas Master Meter Systems (Definition & Program) From A Federal Perspective*, Final Report, SASC, Riverdale, MD, June 1979.

U.S. Department of Transportation, Office of Pipeline Safety, “Report on Pipeline Safety, Calendar Years 1995-1996," U.S. DOT/RSPA/OPS, Washington, DC.

U.S. Department of Transportation, Office of Pipeline Safety, "Exercise of Jurisdiction Over Master Meter Operators," U.S. DOT/RSPA/OPS, Washington, DC., March 1984.

U.S. Department of Transportation, Office of Pipeline Safety, *Guidance Manual for Operators of Small Gas Systems*, U.S. DOT/RSPA/OPS, Washington, DC, Revised August 1997.

U.S. Department of Transportation, "RSPA Response to NAPSR Resolutions," *Reauthorization of Pipeline Safety Programs*, Hearing Before the Subcommittee on Surface Transportation of the Committee on Public Works and Transportation, U.S. House of Representatives, 100th Congress, 1st Session, May 14, 1987.

INDIVIDUALS PROVIDING INFORMATION FOR THIS STUDY

Alabama

Chris J. Harvey, Alabama Public Service Comm.

Alaska

Staff, Alaska Department of Commerce and Economic Development

Arizona

Terry Fronterhouse, Arizona Corporation Commission

Dan Weaklend, Arizona Corporation Commission

Arkansas

Don Martin, Arkansas Public Service Comm.

Myron E. Thompson, Arkansas Public Service Commission

California

Russell Copeland, California Public Utilities Commission

Mahendra Jhala, California Public Service Commission

Al Kirchem, California Public Utilities Commission

Colorado

Steve Pott, Colorado Public Utilities Commission

Ernest Tronco, Colorado Public Utilities Commission

Connecticut

Philip Sher, Connecticut Department of Public Utility Control

Delaware

Malak S. Michael, Delaware Public Service Commission

Leon H. Ryan, Jr., Delaware Public Service Commission

District of Columbia

Richard D. Huriaux, DC Public Service Comm.

Florida

C. Edward Mills, Florida Public Service Commission

Georgia

Danny McGriff, Georgia Public Service Commission

R. Lynnard Tessner, Georgia Public Service Commission

Hawaii

Yukio J. Onaka, Hawaii Public Utilities Commission

Idaho

David Schunke, Idaho Public Service Commission

Illinois

Rex Evans, Illinois Commerce Commission

Steve Smock, Illinois Commerce Commission

Indiana

Larry V. Nisley, Indiana Utility Regulatory Comm.

Iowa

Donald J. Strusma, Iowa State Utilities Board

Kansas

Gary Hall, Kansas Corporation Commission

Leo Haynos, Kansas Corporation Commission

Glenn Smith, Kansas Corporation Commission

Kentucky

Eddie B. Smith, Kentucky Public Service Commission

E. Scott Smith, Kentucky Public Service Comm.

Louisiana

John E. Land, Louisiana Department of Natural Resources

James M. Mergist, Louisiana Department of Natural Resources

Maine

David Di Profio, Maine Public Utilities Commission

Gary Farmer, Maine Public Utilities Commission

Maryland

John Clementson, Maryland Public Service Commission

Alex Dankanich, Maryland Public Service Commission

Simon Hoplin, Maryland Public Service Commission

Massachusetts

David Weber, Massachusetts Department of Public Utilities

Michigan

Paul Proudfoot, Michigan Public Service Comm.

Ram Veerapaneni, Michigan Public Service Commission

Minnesota

Brad Ardner, Minnesota Office of Pipeline Safety

William Barbeau, Minnesota Office of Pipeline Safety

Walt Kelly, Minnesota Office of Pipeline Safety

Charles Kenow, Minnesota Office of Pipeline Safety

Michael J. McGrath, Minnesota Office of Pipeline Safety

Steve Sweeney, Minnesota Office of Pipeline Safety

Ronald Wiest, Minnesota Office of Pipeline Safety

Mississippi

Lyla Carnley, Mississippi Public Service Comm.

Rickey L. Cotton, Mississippi Public Service Commission

Jessie Parker, Mississippi Public Service Commission

Missouri

Ron Ellis, Missouri Public Service Commission

Michael Loethen, Missouri Public Service Commission

Montana

Dennis Crawford, Montana Public Service Commission

Joel Tierney, Montana Public Service Comm.

Nebraska

Lavern Rinehart, Nebraska State Fire Marshal's Office

Leonard Steiner, Nebraska State Fire Marshall's Office

Nevada

Jeffrey L. Maples, Nevada Public Service Commission

Craig C. Steele, Nevada Public Utilities Commission

New Hampshire

Paula M. Bergeron, New Hampshire Public Utilities Commission

Richard G. Marini, New Hampshire Public Utilities Commission

New Jersey

David McMillan, New Jersey Board of Public Utilities

Nusha Wyner, New Jersey Board of Public Utilities

New Mexico

Vince Martinez, New Mexico State Corporation Commission

Rey S. Medina, New Mexico State Corporation Commission

New York

John E. Gawronski, New York Public Service Commission

Jeffrey Kline, New York Public Service Commission

North Carolina

Tom Dixon, North Carolina Utilities Commission

North Dakota

Alan G. Moch, North Dakota Public Service Commission

Ohio

Ed Steel, Ohio Public Utilities Commission

Robert S. Stone, Ohio Public Utilities Commission

Oklahoma

Dennis Fothergill, Oklahoma Corporation Commission

Oregon

Jack P. Dent, Oregon Public Utility Commission

H. R. Garabrant, Oregon Public Utility Commission

Pennsylvania

William E. Smeigh, Jr., Pennsylvania Public Utility Commission

Rhode Island

Paul G. Grieco, Rhode Island Public Utilities Commission

Don Leverdis, Rhode Island Public Utilities Commission

South Carolina

Vernon L. Gainey, South Carolina Public Service Commission

James S. Stites, South Carolina Public Service Commission

South Dakota

Martin Bettmann, South Dakota Public Service Commission

Tennessee

Glenn Blanton, Tennessee Public Service Commission

Texas

Mary L. McDaniel, Texas Railroad Commission

Dean Scott,
Texas Railroad Comm.

Utah

S. Kent Evans, Utah Department of Commerce

John Strawn, Utah Department of Business Regulation

Vermont

Kenneth W. Wood, Vermont Department of Public Service

Virginia

Ryland Y. Bailey, Virginia State Corporation Commission

Massoud Tahamtani, Virginia State Corporation Commission

Washington

Ray C. Colby, Washington Utilities and Transportation Comm.

Douglas Kilpatrick, Washington Utilities and Transportation Commission

West Virginia

David Hippchen, West Virginia Public Service Commission

Darrell A. McKown, West Virginia Public Service Commission

Wisconsin

Harold Meyer, Wisconsin Public Utilities Comm.

Wyoming

Jon F. Jacquot, Wyoming Public Service Comm.

U.S. HUD

Charles Ashmore, U.S. Department of Housing and Urban Development

Mark A. Isaacs, U.S. Department of Housing and Urban Development

U.S. DOT

Zack Barrett, Office of Pipeline Safety, U.S. DOT/RSPA

Buzz Fant, Transportation Safety Institute, U.S. DOT/RSPA

William Gute, Office of Pipeline Safety, U.S. DOT/RSPA

Jaime A. Hernandez, Office of Pipeline Safety, U.S. DOT/RSPA

Chris Hoidal, Office of Pipeline Safety, U.S. DOT/RSPA

Fred Joyner, Office of Pipeline Safety, U.S. DOT/RSPA

Ralph Kubitz, Office of Pipeline Safety, U.S. DOT/RSPA

Warren Miller, Office of Pipeline Safety, U.S. DOT/RSPA

Ed Ondak, Office of Pipeline Safety, U.S. DOT/RSPA

Jack Overly, Office of Pipeline Safety, U.S. DOT/RSPA

Richard Sanders, Transportation Safety Institute, U.S. DOT/RSPA

Jeff Stahoviak, Office of Pipeline Safety, U.S. DOT/RSPA

Jim Thomas, Office of Pipeline Safety, U.S. DOT/RSPA

Lloyd Ulrich, Office of Pipeline Safety, U.S. DOT/RSPA

APPENDICES

APPENDIX A.
ESTIMATED NUMBER OF GAS MASTER METER SYSTEMS IN OPERATION IN 1979

	95 Percent Confidence Interval				95 Percent Confidence Interval		
State	Lower Limit	Expected	Upper Limit	State	Lower Limit	Expected	Upper Limit
Alabama	376	468	850	Nebraska	906	1,242	2,574
Alaska	na	28	na	Nevada	105	108	160
Arizona	527	975	1,423	New Hampshire	27	35	55
Arkansas	888	1,756	2,624	New Jersey	unk	unk	unk
California	11,877	12,935	24,986	New Mexico	89	421	753
Colorado	1,611	3,623	5,635	New York	238	345	715
Connecticut	na	0	na	North Carolina	369	428	772
Delaware	16	16	16	North Dakota	107	113	178
Florida	172	277	506	Ohio	89	207	585
Georgia	365	422	587	Oklahoma	836	2,309	4,761
Hawaii	unk	unk	unk	Oregon	na	4	na
Idaho	3	3	3	Pennsylvania	681	1,171	2,192
Illinois	474	1,142	2,388	Rhode Island	29	30	40
Indiana	105	115	125	South Carolina	166	252	338
Iowa	15	27	54	South Dakota	591	966	1,341
Kansas	463	1,127	1,791	Tennessee	318	430	542
Kentucky	484	1,019	1,554	Texas	23,553	39,404	55,255
Louisiana	434	2,623	4,812	Utah	196	196	196
Maine	0	0	0	Vermont	0	0	0
Maryland	207	214	303	Virginia	588	762	1,362
Massachusetts	241	386	531	Washington	29	33	37
Michigan	459	1,136	2,816	West Virginia	186	514	1,504
Minnesota	70	72	166	Wisconsin	1,051	1,317	2,176
Mississippi	139	178	270	Wyoming	459	710	961
Missouri	111	245	359	D.C.	85	85	85
Montana	1,004	1,046	1,111	*Total for U.S.*[a]	64,738	80,915	101,901

Key:

na = Not applicable
unk = No data received
a = Estimates include nothing for Hawaii or New Jersey.

Source of information: SASC, pp. 5-15 to 5-17.

APPENDIX B
U.S. CODE, TITLE 49, SECTIONS 60105 AND 60106

Sec. 60105. State pipeline safety program certifications

(a) General Requirements and Submission. - Except as provided in this section and sections 60114 and 60121 of this title, the Secretary of Transportation may not prescribe or enforce safety standards and practices for an intrastate pipeline facility or intrastate pipeline transportation to the extent that the safety standards and practices are regulated by a State authority (including a municipality if the standards and practices apply to intrastate gas pipeline transportation) that submits to the Secretary annually a certification for the facilities and transportation that complies with subsections (b) and (c) of this section.

(b) Contents. - Each certification submitted under subsection (a) of this section shall state that the State authority -

(1) has regulatory jurisdiction over the standards and practices to which the certification applies;
(2) has adopted, by the date of certification, each applicable standard prescribed under this chapter or, if a standard under this chapter was prescribed not later than 120 days before certification, is taking steps to adopt that standard;
(3) is enforcing each adopted standard through ways that include inspections conducted by State employees meeting the qualifications the Secretary prescribes under section 60107(d)(1)(C) of this title;
(4) is encouraging and promoting programs designed to prevent damage by demolition, excavation, tunneling, or construction activity to the pipeline facilities to which the certification applies;
(5) may require record maintenance, reporting, and inspection substantially the same as provided under section 60117 of this title;
(6) may require that plans for inspection and maintenance under section 60108 (a) and (b) of this title be filed for approval;
and
(7) may enforce safety standards of the authority under a law of the State by injunctive relief and civil penalties substantially the same as provided under sections 60120 and 60122(a)(1) and (b)-(f) of this title.

(c) Reports. - (1) Each certification submitted under subsection (a) of this section shall include a report that contains -

(A) the name and address of each person to whom the certification applies that is subject to the safety jurisdiction of the State authority;
(B) each accident or incident reported during the prior 12 months by that person involving a fatality, personal injury requiring hospitalization, or property damage or loss of more than an amount the Secretary establishes (even if the person sustaining the fatality, personal injury, or property damage or loss is not subject to the safety jurisdiction of the authority), any other accident the authority considers significant, and a summary of the investigation by the authority of

the cause and circumstances surrounding the accident or incident;
(C) the record maintenance, reporting, and inspection practices conducted by the authority to enforce compliance with safety standards prescribed under this chapter to which the certification applies, including the number of inspections of pipeline facilities the authority made during the prior 12 months; and
(D) any other information the Secretary requires.
(2) The report included in the first certification submitted under subsection (a) of this section is only required to state information available at the time of certification.

(d) Application. - A certification in effect under this section does not apply to safety standards prescribed under this chapter after the date of certification. This chapter applies to each applicable safety standard prescribed after the date of certification until the State authority adopts the standard and submits the appropriate certification to the Secretary under subsection (a) of this section.

(e) Monitoring. - The Secretary may monitor a safety program established under this section to ensure that the program complies with the certification. A State authority shall cooperate with the Secretary under this subsection.

(f) Rejections of Certification. - If after receiving a certification the Secretary decides the State authority is not enforcing satisfactorily compliance with applicable safety standards prescribed under this chapter, the Secretary may reject the certification, assert United States Government jurisdiction, or take other appropriate action to achieve adequate enforcement. The Secretary shall give the authority notice and an opportunity for a hearing before taking final action under this subsection. When notice is given, the burden of proof is on the authority to demonstrate that it is enforcing satisfactorily compliance with the prescribed standards.

Sec. 60106. State pipeline safety agreements

(a) General Authority. - If the Secretary of Transportation does not receive a certification under section 60105 of this title, the Secretary may make an agreement with a State authority (including a municipality if the agreement applies to intrastate gas pipeline transportation) authorizing it to take necessary action. Each agreement shall -
(1) establish an adequate program for record maintenance, reporting, and inspection designed to assist compliance with applicable safety standards prescribed under this chapter; and
(2) prescribe procedures for approval of plans of inspection and maintenance substantially the same as required under section 60108 (a) and (b) of this title.

(b) Notification. - Each agreement shall require the State authority to notify the Secretary promptly of a violation or probable violation of an applicable safety standard discovered as a result of action taken in carrying out an agreement under this section.

(c) Monitoring. - The Secretary may monitor a safety program established under this section to ensure that the program complies with the agreement. A State authority shall cooperate with the Secretary

under this subsection.

(d) Ending Agreements. - The Secretary may end an agreement made under this section when the Secretary finds that the State authority has not complied with any provision of the agreement. The Secretary shall give the authority notice and an opportunity for a hearing before ending an agreement. The finding and decision to end the agreement shall be published in the Federal Register and may not become effective for at least 15 days after the date of publication.

APPENDIX C

TITLE 83: PUBLIC UTILITIES
CHAPTER I: ILLINOIS COMMERCE COMMISSION
SUBCHAPTER d: GAS UTILITIES

PART 520
TRAINING PROGRAMS FOR NATURAL GAS SYSTEM OPERATING PERSONNEL
(GENERAL ORDER 204)

Section
520.10 Training Procedures
520.20 Definitions
520.30 "Natural Gas System"

AUTHORITY: Implementing Section 6 and authorized by Section 3 of the "Illinois Gas Pipeline Safety Act" (Ill. Rev. Stat. 1985, ch. 111 2/3, pars. 556 and 553).

SOURCE: Adopted at 4 Ill. Reg. 8, p. 134, effective February 18, 1980; codified at 8 Ill. Reg. 5147.

Section 520.10 Training Procedures

a) In order to reasonably assure the safety and well being of the populace, each natural gas system operator in Illinois shall develop training procedures which will assure that its field employees engaged in construction, operation, inspection and maintenance of the gas system are properly trained.

1) The procedures shall contain adequate descriptions of the types of training each job classification requires including those of field foremen, field crew leaders, leak inspectors, new construction inspectors, servicemen and corrosion technicians and/or equivalent classifications.

2) The procedures shall include scheduling of verbal instruction and/or on-the-job training for each job classification.

3) The procedures shall include provisions for evaluating the performance of personnel to assure their competency in performing the work assigned to them.

4) The procedures shall include subject matter relating to recognition of potential hazards, and actions to be taken toward prevention of accidents.

5) The procedures shall be updated periodically to include new materials, new methods of operation and installation, and changes in general procedures.

6) The procedures shall be made a part of the gas system's operation, inspection and maintenance plans, and shall be filed with the Commission.

7) The procedures shall be developed and ready for implementation within one year of the date of adoption of this Part.

b) Operators of small gas systems, such as municipal gas systems and master meter gas systems, may satisfy the requirements of Section 520.10(a) if the gas system personnel attend regularly scheduled instructional courses held by utility companies or participate in courses such as the Institute of Gas Technology (IGT) Gas Distribution Home Study Course, or programs developed and presented by community colleges, vocational schools, universities, consultants or other recognized gas distribution oriented agencies, which includes the procedures outlined in Section 520.10(a) which will pertain to their particular system.

Section 520.20 Definitions

As used in this Part, unless the context requires otherwise, the terms defined in Sections 520.10 through 520.30, inclusive, have the meanings ascribed therein.

Section 520.30 "Natural Gas System"

"Natural Gas System" means transmission or distribution facilities that transport natural gas as defined in Sections 1-3 of the Illinois Gas Pipeline Safety Act (Ill. Rev. Stat. 1981, ch. 111 2/3, pars. 551-553).

******** End of Document********

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of Westover Property Management Company, L.P. d/b/a Westover Companies for a Declaratory Order Regarding the Applicability of the Gas and Hazardous Liquids Pipeline Act	:	Docket No. P-2021-3030002

VERIFICATION

I, Scott Orr, Fixed Utility Valuation Engineer – 2, in the Bureau of Investigation and Enforcement's Safety Division, hereby state that the facts above set forth are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.

Date: January 3, 2022

Scott Orr
Fixed Utility Valuation Engineer – 2
Bureau of Investigation and Enforcement
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of Westover Property Management Company, L.P. d/b/a Westover Companies for a Declaratory Order Regarding the Applicability of the Gas and Hazardous Liquids Pipeline Act	:	Docket No. P-2021-3030002

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true copy of the foregoing document upon the parties, listed below, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a party).

Service by Electronic Mail:[1]

David P. Zambito, Esq.
Jonathan P. Nase, Esq.
Cozen O'Connor
17 North Second Street, Suite 1410
Harrisburg, PA 17101
dzambito@cozen.com
jnase@cozen.com
Counsel for Westover Property Management Company, L.P. d/b/a Westover Companies

Steven C. Gray, Esq.
Senior Supervising Assistant Small Business Advocate
Office of Small Business Advocate
555 Walnut Street
Forum Place, 1st Floor
Harrisburg, PA 17101
sgray@pa.gov

Patrick Cicero, Esq.
Acting Consumer Advocate
Office of Consumer Advocate
555 Walnut Street
Forum Place, 5th Floor
Harrisburg, PA 17101
pcicero@paoca.org

Stephanie M. Wimer
Senior Prosecutor
Bureau of Investigation and Enforcement
PA Attorney ID No. 207522
(717) 772-8839
stwimer@pa.gov

Dated: January 3, 2022

[1] *See Waiver of Regulations Regarding Service Requirements*, Docket No. M-2021-3028321 (Order entered September 15, 2021) (permitting electronic service by Commission staff on parties).