

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: Proposed Revision of Chapter) DOCKET NO. 910451-GU
 25-12, F.A.C., Safety of Gas)
 Transportation by Pipeline.) ORDER NO. 24904
)
) ISSUED: 8/9/91

NOTICE OF RULEMAKING

NOTICE is hereby given that the Commission, pursuant to section 120.54, Florida Statutes, has initiated rulemaking to adopt Rules 25-12.027, 12.028, 12.029, 12.30, 12.055, F.A.C., and amendment of Rules 25-12.004, 12.005, 12.007, 12.020, 12.021, 12.040, 12.045, 12.050, 12.052, F.A.C., relating to Safety of Gas Transportation by Pipelines.

The attached Notice of Rulemaking will appear in the August 16, 1991 edition of the Florida Administrative Weekly. If requested, a hearing will be held at the following time and place:

9:30 a.m., Thursday, September 26, 1991
 Room 122, Fletcher Building
 101 East Gaines Street
 Tallahassee, Florida

Written requests for hearing and written comments or suggestions on the rules must be received by the Director, Division of Records and Reporting, Florida Public Service Commission, 101 East Gaines Street, Tallahassee, FL 32399, no later than September 6, 1991.

By Direction of the Florida Public Service Commission, this
9th day of AUGUST, 1991.


 STEVE TRIBBLE Director
 Division of Records & Reporting

(S E A L)

MER

amd2512.cjp

DOCUMENT NUMBER-DATE
 08067 AUG -9 1991
 FPSC-RECORDS/REPORTING

ORDER NO. 24904
 DOCKET NO. 910451-GU
 PAGE 2

FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 910451-GU

RULE TITLE:	RULE NO.:
Definitions	25-12.004
Codes and Standards Adopted	25-12.005
Commission Compliance Evaluations	25-12.007
Construction Specifications and Inspections	25-12.020
Use of Plastic Pipe	25-12.021
Welder Qualification	25-12.027
Marking of Materials	25-12.028
Limiting Use of Pipeline Casings	25-12.029
Testing and Inspection of Production	
Welds and Inspection of Fusions	25-12.030
Leak Surveys, Procedures and Classification	25-12.040
Inactive Services (formerly Discontinuance of	
Services Due to Inactivity)	25-12.045
Facility Identification	25-12.050
Criteria for Cathodic Protection of	
Buried or Submerged Steel, Cast Iron,	
and Ductile Iron Pipeline	25-12.052
Cathodic Protection - Electrical Survey	25-12.053
Odorization of Gas	25-12.055
PURPOSE AND EFFECT: To define technical terms to implement rules	
relating to safety of gas transportation by pipeline rules, to	

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 3

clarify the intent of existing rules, and to promulgate new rules to insure customer and public safety.

SUMMARY: Definitions are added for the new terms, the section of the rule which adopts federal regulations is updated, drug testing standards prescribed by the U.S. Department of Transportation are adopted. New language is added which codifies the Commission's statutory authority to require tests to insure compliance with Commission rules, adopted regulations, standards or codes. A provision for waiver of testing requirements is included.

Language is added to an existing section to clarify qualifications for inspectors and to specify that they shall be given authorization resolve non-complying pipeline construction standards. Additionally, pipeline constructed by contractors must be inspected by the utility. Standards are clarified for the use of both mechanical fittings and the types of plastic resins used in forming joints. Testing procedure language is clarified. Additional language specifies personnel qualifications. Destructive testing of fusion joints made with different resins is required.

New rules require welders to requalify periodically, specify that valves, fittings, and piping must be marked in order to identify them as qualified materials, discourage use of casings on metallic pipelines, and require inspection of joining and installation of gas pipelines.

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 4

Revised language requires that gas leak surveys be done by a gas detector instrument. Master meter systems are added to the list of areas which must be surveyed for leaks. Periodic leak surveys are required for different types of pipelines.

The rule regarding inactive services is substantially revised, with standards specified for retirement and abandonment of lines.

A new subsection is added which requires ownership identification on customer meters, gas regulating stations and aboveground gas transporting facilities. Language is clarified which requires submission of proposed procedures for determining the degree of cathodic protection (corrosion control) under a particular criterion specified in the rule. A new subsection requires testing of cathodic protection of certain pipelines. Remedial action is specified for gas leakage caused by corrosion.

A new subsection requires utilities to have a comprehensive written procedure to evaluate electrical survey data and to identify areas of active corrosion where cathodic protection must be installed. A subsection is deleted which required technically obsolete testing.

A new rule requires utilities to odorize and sample gas.

RULEMAKING AUTHORITY: 368.05(2), 350.127(2), F.S.

LAW IMPLEMENTED: 368.03, F.S.

SUMMARY OF THE ESTIMATE OF ECONOMIC IMPACT OF THESE RULES: On a per-utility basis, estimates of costs to implement the rule

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 5

revisions and additions range from zero to \$279,000 in nonrecurring costs and zero to \$1,120,000 in recurring costs. The wide variation in estimated costs may be attributable to rule requirement interpretation and the specific measures each company must take to comply with the rules. Some cost estimates include costs associated with current federal and state rule requirements. The greatest costs will be incurred in compliance with Rule 25-12.030, Testing and Inspection of Production Welds and Inspection of Fusions. Any additional recurring operating and maintenance expenses incurred due to implementation of these rule revisions would ultimately be passed through to ratepayers.

The rule revisions should not require additional agency resources. No additional forms are used and no additional duties are required of agency personnel. The proposed revisions are not expected to generate activities by regulated utilities which would contribute to an increased workload for Commission staff. Staff's surveillance workload could decrease due to additional tracking procedures in the rule revisions.

Impact on small businesses caused by the rule revisions is unlikely. None of the utilities responding to data requests identified themselves as small businesses under the Florida Small and Minority Business Act of 1985.

WRITTEN COMMENTS OR SUGGESTIONS ON THE PROPOSED RULES MAY BE SUBMITTED TO THE FPSC, DIVISION OF RECORDS AND REPORTING, WITHIN 21

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 6

DAYS OF THE DATE OF THIS NOTICE FOR INCLUSION IN THE RECORD OF THE PROCEEDING. IF REQUESTED WITHIN 21 DAYS OF THE DATE OF THIS NOTICE, A HEARING WILL BE HELD AT THE DATE AND PLACE SHOWN BELOW:
TIME AND DATE: 9:30 A.M., September 16, 1991

PLACE: Room 106, 101 East Gaines Street, Tallahassee, Florida.

THE PERSON TO BE CONTACTED REGARDING THESE RULES AND THE ECONOMIC IMPACT STATEMENT IS: Director of Appeals, Florida Public Service Commission, 101 East Gaines Street, Tallahassee, Florida 32399

THE FULL TEXT OF THE THESE RULES ARE:

25-12.027 Welder Qualification.

(1) No welder shall make any weld unless the welder has regualified in accordance with Section 3 of American Petroleum Institute Standard 1104, Section IX of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code or Sections 1, 2 & 3 of Appendix C of the Code of Federal Regulations Part 192, within the preceding 15 months, but at least once each calendar year.

(2) No welder shall weld with a particular welding process unless the welder has engaged in welding with that process within the preceding six calendar months. A welder who has not engaged in welding with that process within the preceeding calendar six months must requalify for that process as set forth in subsection (1) herein.

Specific Authority: 368.05(2), F.S.

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 7

Law Implemented: 368.03, F.S.

History: New.

25-12.028 Marking of Materials.

(1) Each valve, fitting, length of pipe, or other component must be clearly marked as prescribed in the specification or standard to which it was manufactured.

(2) Any marking alterations or remarking after acceptance of delivery by the operator shall be subject to prior approval of the Commission's Bureau of Gas Regulation.

Specific Authority: 368.05(2), F.S.

Law Implemented: 368.03, F.S.

History: New.

25-12.029 Limiting Use of Pipeline Casings.

The installation of casings on metallic pipelines is prohibited unless necessary for the installation process of the pipeline or justifiably required by an appropriate governmental authority.

Specific Authority: 368.05(2), F.S.

Law Implemented: 368.03, F.S.

History: New.

25-12.030 Testing and Inspection of Production Welds and Inspection of Fusions.

(1) A qualified construction inspector must inspect welds and fusions prior to installation of all gas pipelines.

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 8

(a) The qualified construction inspector must be an individual employed or designated by the gas utility to perform construction inspection during construction activities, but may not be employed by the contractor installing the pipeline.

(2) Randomly selected welds must be subjected to destructive testing during construction of any pipeline that is at least two inches in diameter and over five thousand feet in length.

(a) At least two welds must be tested from each five thousand feet of the pipeline under construction. X-ray testing is an acceptable alternative to destructive testing. The result of the test must be evaluated by a procedure that has been established in writing, tested and found to produce joints of a strength that meet or exceed, as a minimum, one of the strength standards listed in the Code of Federal Regulations, Part 192, Appendix B - Qualification of Pipe or other Commission adopted standard.

(3) Each operator shall establish and maintain for the life of the system a record of each test and inspection required in parts (1) and (2) above, and each main tie-in weld when any one pipeline in the joint is greater than two inches in diameter. The record shall include as a minimum:

(a) The name of the person or persons performing the joining;

(b) The name of the person or persons performing the testing or inspection;

(c) The size of pipe;

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 9

- (d) The type of material;
- (e) The location of construction;
- (f) The date of test or inspection; and
- (g) The defects, if any.

Specific Authority: 368.05(2), F.S.

Law Implemented: 368.03, F.S.

History: New.

25-12.055 Odorization of Gas.

(1) Any operator who receives gas directly from a transmission supplier and distributes gas in any system that serves more than 25 customers must odorize all gas transported. As a minimum, the odorant when tested must be at a concentration readily detectable at a gas and air mixture of one-fifth of the lower explosive limit.

(2) At least twelve times per calendar year, at intervals not exceeding forty-five days, each operator shall sample gas distributed at places downstream of all injection points to assure the presence of odorant in a concentration that is in accordance with this rule. This testing of samples must be conducted using equipment manufactured specifically for odorant testing.

Specific Authority: 368.05(2), F.S.

Law Implemented: 368.03, F.S.

History: New.

25-12.004 Definitions.

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 10

Definitions contained in codes or standards adopted by these rules are applicable to the rules and the adopted codes or standards with the following exceptions:

(1) "Commission". Unless a different intent clearly appears from the context, the word "Commission" shall mean the Florida Public Service Commission, 101 East Gaines Street, Tallahassee, Florida ~~32399-0868 32301~~, area code (904) 488-8501.

(2) "Utility" or "Operator". Except where a different meaning clearly appears from the context, the word "Utility" or "Operator" shall be every person, corporation, partnership, association, public agency, municipality, cooperative gas district or other legal entity and their lessees, trustees, or receivers, now or hereafter owning, operating, managing or controlling any gas transmission or distribution facility transporting gas as defined herein and not specifically exempt ~~exempted~~ from state jurisdiction by the Natural Gas Pipeline Safety Act of 1968, Public Law 90-481.

(3) "Gas". Gas as used herein shall mean natural, manufactured, liquefied petroleum gas with air admixture, or any similar gaseous substances, but shall not include liquefied petroleum gas in either the liquid or gaseous form except when stored or used for peak shaving or standby fuels in conjunction with an operator's system.

(4) "Inspector". The term "Inspector" shall apply to a person designated by the utility vested with the authority to

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 11

initiate action to assure compliance with the adopted codes.

(5) "Distribution system". As as used in these rules shall mean any group of interconnected pipe and facilities operating at a hoop stress of less than 20% specified minimum yield strength which transports gas from a common source of supply or storage facility to a customer.

(6) "Low Pressure Distribution System" is a gas distribution piping system or portion thereof which supplies gas to more than 10 customers through a common pressure reducing device(s) at a pressure substantially the same as the pressure provided to the customer.

(7) "Fusion" means the union of two plastic surfaces that have been heated, or have had solvents applied, sufficiently to melt and fuse them together.

(8) "Gas Meter" means an instrument manufactured primarily for use in measuring, and indicating or recording the measurement of, the volume of gas that has moved through the instrument.

(9) "Master Meter System" means a pipe system that receives gas through a gas meter and transports that gas to or for the public, with the gas being delivered through another gas meter prior to consumption.

(10) "Pipeline" means all parts of those physical facilities through which gas moves in transportation, including pipe, valves, and other appurtenances attached to pipe, compressor units,

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 12

metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. "Pipeline," for the purposes of these rules, unless stated otherwise, includes mains and service lines.

(11) "Main" means a pipeline that serves as a common source of supply for more than one service line.

(12) "Service line" means a pipeline that transports gas from a common source of supply to a gas meter prior to consumption.

(13) "Weld" means the union of two metal surfaces that have been heated sufficiently to melt and fuse them together.

Specific Authority: 368.05(2), F.S.

Law Implemented: 368.03, F.S.

History: New 6/24/67, Amended 3/7/70, 11/14/70, 9/21/74, 10/7/75, 10/2/84, _____, formerly 25-12.04.

25-12.005 Codes and Standards Adopted.

The Minimum Federal Safety Standards and reporting requirements for pipeline facilities and transportation of gas prescribed by the United States Department of Transportation in Parts 191 and 192 of Title 49, Code of Federal Regulations (CFR) as amended through January 31, 1991 ~~April 4, 1989~~, are adopted as part of these rules. Part 199, "Drug Testing" is adopted to control drug use, by setting standards and requirements to apply to the testing and use of employees directly or indirectly employed by gas utilities in the operation, maintenance and on-site construction of natural gas transporting pipeline facilities, including emergency

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 13

response personnel under the direct authority or control of a gas utility. Part 199 also is adopted to prescribe standards for use of employees who do not meet the requirements of the regulations.

Specific Authority: 368.05(2), 350.127(2), F.S.

Law Implemented: 368.03, F.S.

History: New 11/14/70, Amended 9/24/71, Revised 9/21/74, Amended 10/7/75, 11/30/82, 10/2/84, 8/8/89, _____, formerly 25-12.05.

25-12.007 Commission Compliance Evaluations.

(1) The Commission or its authorized representatives shall be granted access to all installations or construction projects at any and all reasonable times and shall be given access to any records or information related to or arising from compliance with these rules or the adopted regulations, standards, or codes.

(2) The Commission's Bureau of Gas Regulation or its authorized representative has the authority to require prudent and reasonable tests to be made by the operator to insure public safety and compliance with the Commission's rules or adopted regulations, standards, or codes.

(3) When the Commission's compliance evaluations or required tests create an unusual hardship, or the operator believes them to be imprudent and unreasonable, the utility may petition the Commission for a waiver of those requirements for good cause shown.

Specific Authority: 368.05(2), F.S.

Law Implemented: 368.05(2), F.S.

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 14

History: New 6/24/67, Amended 11/14/70, Repromulgated 10/7/75,
Amended 10/2/84, _____, formerly 25-12.07.

25-12.020 Construction Specifications and Inspections.

(1) Each operator shall formulate comprehensive written construction specifications for all phases of design, installation, testing, repair and inspection in sufficient detail to assure compliance with these rules. All work performed must be in accordance with these specifications.

(2) Field inspections by the operator shall be sufficient to assure the materials used and work performed comply with these rules and the operator's construction specifications.

(3) Inspectors shall be qualified by appropriate training and experience to recognize departures from specifications and shall be given authorization by the operator to initiate action ~~so~~ as to cause the repair or removal of any component ~~found~~ that fails to meet these rules or the operator's construction specifications.

Specific Authority: 368.05(2), F.S.

Law Implemented: 368.05(2), F.S.

History: New 9/21/74, Repromulgated 10/7/75, Amended 10/2/84,
_____, formerly 25-12.20.

25-12.021 Use of Plastic Pipe.

(1) Before using a specific types ~~type~~ of plastic pipe and fittings, the operator shall:

(a) Establish a joining procedure specification for each kind

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 15

and type of plastic resin used in forming joints with mechanical fitting and solvent cement or heat fusion joint.

1. (b) Qualify procedures by ascertaining that tests of assemblies made in accordance with the procedures have been tested made. These tests shall be sufficient to prove demonstrate that the joint is as strong as the pipe, that it is gas tight, and that it can sustain anticipated longitudinal pullout ~~or thrust forces.~~

2. (e) Qualify Test personnel in accordance with the procedures to prove demonstrate their ability to make satisfactory joints and or repairs. This personnel qualification shall be accomplished by appropriate training and by experience in the use of the procedures and shall be verified by destructive testing of joints made by the personnel.

(b) Establish a joining procedure specification for each kind and type of mechanical fitting.

1. Qualify procedures by ascertaining that assemblies made in accordance with the procedure have been tested. These tests shall be sufficient to prove that the joint is as strong as the pipe, that it is gas tight, and that it can sustain anticipated

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 16

longitudinal pull or thrust forces.

2. Qualify personnel in accordance with the procedures to prove their ability to make satisfactory joints and repairs. This personnel qualification shall be accomplished by appropriate training and by experience in the use of the procedures.

(2) Thermosetting plastic pipe may not be used for direct burial without first submitting a proposal for providing protection from external damage to the Commission for review and approval.

(3) All underground plastic pipelines must have an electrically conductive wire or other suitable means ~~action~~ taken to provide positive location. When a wire is used and it is subject to corrosion, ~~then~~ it must have an insulating ~~type~~ coating.

Specific Authority: 368.05(2), F.S.

Law Implemented: 368.05(2), F.S.

History: New 9/21/74, Repromulgated 10/7/75, Amended 10/2/84, _____, formerly 25-12.21.

25-12.040 Leak Surveys, Procedures and Classification.

(1) Each operator shall perform periodic leakage surveys in accordance with the following schedule as a minimum:

(a) A gas detector instrument survey shall ~~must~~ be conducted at intervals not exceeding 15 months but at least once each calendar year in those portions of an operator's service area, including:

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 17

1. Principal business districts, master meter systems, and other places where the ~~general~~ public is known to regularly congregate frequently.
2. Where pipeline facilities, including service lines, are located under surfaces of such construction that little opportunity is afforded for a leak to safely vent safely.

(b) A gas detector instrument ~~Effective~~ survey surveys to locate leaks throughout areas not included in (a) above shall ~~must~~ be conducted ~~made as frequently as experience indicates~~, but at intervals not exceeding three (3) years on bare metallic, galvanized steel, coated tubing pipelines, and five (5) years on the remaining pipeline system, or more frequently if experience indicates.

(2) The following leak classification system shall be used on all leak records and reports:

(a) "Grade 1 Leak" - a leak of gas that represents an existing or probable hazard to persons or buildings. Prompt action to protect life and property and continuous action until conditions are no longer hazardous is required.

(b) "Grade 2 Leak" - a leak that is not a threat to persons or property at the time of detection, but justifies scheduled repair based on potential future hazard. These leaks shall be repaired ~~scheduled for repair and repairs consummated~~ within a

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 18

~~period not to exceed~~ 90 days from the date the leak was originally located, unless due to resurvey the leak was determined to be Grade 3 as defined in subsection (c) below. In determining the time period for repair, the following criteria should be taken into consideration:

1. amount and migration of gas;
2. proximity of gas to buildings and subsurface structures;
3. extent of pavement;
4. soil type and conditions, such as moisture and natural venting.

(c) "Grade 3 Leak" - a leak that is not a threat to persons and property and ~~is not~~ can be expected to become remain so. Above ground grade 3 ~~These leaks that are aboveground~~ shall be repaired ~~scheduled for repair and repairs consummated~~ within a ~~period not to exceed~~ 90 days from the date the leak was originally located unless the leak is upgraded or does not produce a positive leak indication when a soap and water solution, or its equivalent, is applied on suspected locations at operating pressure. Grade 3 leaks that are underground shall be reevaluated ~~re-evaluated~~ at least once every 6 months until cleared. The frequency of reevaluation ~~re-evaluation~~ shall be determined by the location and magnitude of the leak ~~leakage condition~~.

(3) The adequacy of all the repairs of leaks repaired shall

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 19

must be checked by appropriate acceptable methods immediately after the repairs are completed. Where there is residual gas in the ground, a follow-up inspection using a gas detector instrument must be made as soon as the gas has had an opportunity to dissipate, but no later than one month for Grade 1 leaks and 6 months for Grade 2 leaks. The date and status of recheck shall be recorded on the leak repair records.

Specific Authority: 368.05(2), F.S.

Law Implemented: 368.05(2), F.S.

History: New 9/21/74, Repromulgated 10/7/75, Amended 10/2/84,
_____, formerly 25-12.40.

25-12.045 Inactive Services ~~Discontinuance of Services Due to Inactivity.~~

(1) The following actions shall be taken for inactive gas services that have been used, but have become inactive without reuse:

(a) If there is no prospect for reuse, the service line shall be retired and physically abandoned within three months.

(b) After a gas line has been inactive for a period of two years, if there is a prospect for reuse of the line, one of the following actions shall be taken within six months:

~~After gas service has remained inactive for a period of two (2) years, one of the following actions shall be taken within six months:~~

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 20

1. (1) Disconnect the service line from all sources of gas and abandon or remove ~~it~~.
2. (2) A valve on the service line shall be locked in the closed position and the service line plugged to prevent the flow of gas ~~it~~.
3. (3) Remove the meter and plug the end of the service line to prevent the flow of gas.

(c) After five years of inactivity, gas service lines shall be retired and physically abandoned within six months.

(2) To physically abandon a service line, the operator must disconnect the service line from all sources of gas at the nearest point to the gas main. Where the appropriate governmental authority prohibits cutting pavement, the service line shall be disconnected at the nearest point not under a paved surface. The stub of the service, the short section of the remaining service line to the main, shall be disconnected closer to the main or at the main, if at some later date it becomes accessible during normal operations.

(3) Records must be kept of the size, material, and location of all remaining service line stubs. These records must be readily available to personnel assigned to pipeline locating activities.

Specific Authority: 368.05(2), F. S.

Law Implemented: 368.05(2), F.S.

History: New 9/21/74, Repromulgated 10/7/75, Amended 10/2/84,

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 21

_____, formerly 25-12.45.

25-12.050 Facility Multi-Meter Identification.

(1) Gas service line valves at multi-service installations shall be plainly marked by a metal tag or other permanent means designating the building or part of the building being served. However, if marking of the meter will readily identify its service line valve, the meter may be marked in lieu of the service line valve.

(2) Each customer meter, gas regulating station, or any aboveground gas transporting facility shall be permanently marked to identify ownership. This identification shall include the operator's name and phone number. Marking of facilities shall be accomplished by metal signs, line markers, plastic decals, or other appropriate means.

Specific Authority: 368.05(2), F.S.

Law Implemented: 368.05(2), F.S.

History: New 9/21/74, Amended 10/7/75, _____, formerly 25-12.50.

25-12.052 Criteria for Cathodic Protection of Buried or Submerged Steel, Cast Iron, and Ductile Iron Pipeline.

(1) The only acceptable criteria for the determination of cathodic protection shall be I-A(1), I-A(2), I-A(3), and I-A(5) of Appendix D, Part 192 of Title 49, CFR.

(2) I-A(1) shall be the only criteria acceptable for

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 22

determination of the degree of cathodic protection of externally coated buried or coated submerged pipelines installed after June 1, 1975. When requirements cannot be met due to ineffective insulating capabilities of the external coating, that portion of the pipeline may be isolated and protected using other criteria listed in (1) above.

(3) Application of Criterion I-A(2) shall be dependent upon the establishment of initial or unprotected pipe/soil potentials.

(4) Application of Criterion I-A(5) is restricted to bare and essentially bare ineffectively coated metallic gas pipelines installed prior to July 31, 1971.

(a) Prior to utilization of Criterion I-A(5), a proposed, comprehensive, written, qualified procedure for application and monitoring shall be submitted to the Commission's Bureau of Gas Regulation.

(b) The effectiveness of the procedure shall be supported qualified by test data obtained in and actual field application of the procedure. An acceptable qualification of application and monitoring procedure procedures shall must demonstrate that the procedure can attain a protective net current flow exists from the surrounding electrolyte into the pipeline surface at all current discharge (anodic) points such as: contacting and non-contacting structures, parallel, intersecting, and electrically shorted service lines, and where the electrical survey, required in

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 23

~~Commission Rule 25-12.053, has shown active corrosion may exist.~~

(c) The procedure qualification ~~test~~ shall include a surface potential survey conducted longitudinally directly above the pipeline with maximum spacing of ten (10) feet utilizing two saturated copper-copper sulfate half-cells.

(d) All procedure qualification ~~test~~ records shall be retained as long as the qualified procedure is used.

(e) If application of the qualified procedure fails to provide the required protective net current flow from the surrounding electrolyte into the pipeline surface for a segment of the pipeline, the procedure shall be modified accordingly and requalified for use in similar conditions.

~~(f) (5)~~ The placement of the electrodes for resurvey monitoring of the application of I-A(5) shall utilize the same electrode locations as the initial survey when practical.

(g) Each pipeline that is under cathodic protection utilizing Criterion I-A(5) shall be tested at least once each calendar year, but with intervals not exceeding 15 months, to determine whether the cathodic protection meets the requirements of these rules.

(5) If gas leakage results from active corrosion of a pipeline, remedial action shall include application of cathodic protection to meet one of the criteria of this rule, as described in subsection (1), unless the pipeline is replaced with non-metallic pipe. Cathodic protection for these remedial applications

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 24

must be tested at least once every calendar year, but with intervals not exceeding 15 months, to determine whether the cathodic protection meets the requirements of this rule.

~~(6) Each pipeline that is under cathodic protection must be tested at least once each calendar year, but with intervals not exceeding 15 months, to determine whether the cathodic protection meets the requirements of these rules.~~

(6) ~~(7)~~ Each operator must take prompt remedial action within three (3) months to correct or make substantial progress toward correction of any deficiencies indicated by monitoring.

Specific Authority: 368.05(2), F.S.

Law Implemented: 368.05(2), F.S.

History: New 9/21/74, Repromulgated 10/7/75, Amended 10/2/84, _____, formerly 25-12.52.

25-12.053 Cathodic Protection - Electrical Survey.

(1) Each operator shall have a comprehensive written procedure to evaluate electrical survey data and to identify areas of active corrosion where cathodic protection must be installed.

The electrical survey requirement as referred to in Subpart I, Part 192, Title 49, CFR and these rules ~~Rules are~~ is intended to utilize the following surveys:

(a) Pipe/Soil potential survey

(b) Soil resistivity survey

(2)(a) A combination of the two surveys in (1) above is

ORDER NO. 24904
DOCKET NO. 910451-GU
PAGE 25

required on the initial electrical survey.

(b) For reevaluations ~~re-evaluations~~, Pipe/Soil measurements and soil resistivity measurements are required to be taken, with soil resistivity measurements only being mandatory at Pipe/Soil potential anodic indications and areas where known changes could affect ~~effect~~ soil resistivity enough to cause active corrosion.

~~(3) When the soil resistivity measurements are relatively stable at potential anodic indications, an investigation shall be made for electrical short-circuit(s) of the pipeline.~~

(3) ~~(4)~~ When areas of active corrosion have been established and the operator does not have adequate knowledge of electric current requirements for the ~~his~~ system, then current requirement tests shall be made to determine the degree of protective current required for cathodic protection.

(4) ~~(5)~~ An electrical survey of an underground pipeline system may be considered impractical when obstructions such as concrete, asphalt, or other surface structures, lie in a position directly above the pipeline.

Specific Authority: 368.05(2), F.S.

Law Implemented: 368.05(2), F.S.

History: New 10/7/75, Amended 10/2/84, _____, formerly 25-12.53.