

Decision No. 82467

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of
CALIFORNIA-PACIFIC UTILITIES COMPANY,
PACIFIC GAS AND ELECTRIC COMPANY,
SAN DIEGO GAS & ELECTRIC COMPANY,
SOUTHERN CALIFORNIA GAS COMPANY, and
SOUTHWEST GAS CORPORATION, public
utility gas corporation, for an Order
modifying General Order No. 112-C
adopted April 2, 1971, in Decision
No. 78513 by adding Sections 192.12
and 192.379; and amending Sections
192.3, 192.55, 192.65, 192.201(a),
192.717(b), and 192.727, and Sections
of Appendix A and Appendix B; to
conform with the changes to the
Minimum Federal Safety Standards issued
by the Office of Pipeline Safety as
more particularly set forth in the
Application herein.

Application No. 54435
(Filed November 7, 1973)

O P I N I O N

Applicants' Request

This application was filed pursuant to the authority
granted in Section 142.1 of the Commission's General Order
No. 112-C.^{1/}

1/ Section 142.1 of General Order No. 112-C provides:

"142.1. For the purpose of keeping the provisions, rules,
standards, and specifications of this General Order up to date,
the gas utilities subject to these rules, either individually
or collectively, shall file an application setting forth such
recommended changes in rules, standards, or specifications as
they deem necessary to keep this General Order up to date in
keeping with the purpose, scope and intent thereof. However,
nothing herein shall preclude other interested parties from
initiating appropriate formal proceedings to have the Commission
consider any changes they deem appropriate, or the Commission
from acting upon its own motion."

In Application No. 54435 applicants are requesting an Order from the Commission incorporating the addition of Sections 192.12 and 192.379, and amending Sections 192.3, 192.55, 192.65, 192.201(a), 192.717(b), and 192.727, and portions of Appendix A and Appendix B to conform with the changes to the Minimum Federal Safety Standard issued by the Office of Pipeline Safety.

Section 192.12 was created to establish safety standards for facilities used in the storage, treatment or transfer of LNG. Section 192.12 adopts Standard 59A, approved by the National Fire Protection Association on May 19, 1971. As a result of continuing development of LNG facilities in California, it is in the public's interest to adopt these standards.

Sections 192.379 and 192.727 require that the utility companies take certain steps to prevent the unauthorized introduction of gas into inactive pipeline facilities. These sections require that valving with locking devices, mechanical devices to stop the flow of gas, or physically disconnecting the customer's piping be used in inactive pipeline facilities. The sections pertain to both new and existing services.

Sections 192.55 and 192.65 provide a means of qualifying new or used pipe manufactured prior to November 12, 1970 which was not manufactured in accordance with a listed specification and/or pipe transported by railroad prior to November 12, 1970 using a procedure not in accordance with API RP5L 1. These revisions will result in an appreciable savings to the applicants without a significant reduction in safety to the public.

Section 192.201(a) as modified will provide the utilities with a more practical method of providing overpressure protection for systems limited to 60 psig or less without jeopardizing public safety. An overpressure limitation of 6 psig is considered a practical increment, sufficient for proper functioning of regulating equipment used in pipelines with a MAOP between 12 and 60 psig. A tolerance of 50 percent above MAOP will be adequate for pressure control between 1 and 12 psig.

Section 192.717(b) will permit the permanent field repair of pipeline leaks by means other than welded repair sleeves when the transmission line involved operates at less than 40 percent of SMYS and is joined by mechanical couplings. Permitting the use of mechanical clamps on mechanically joined lines operating below 40 percent SMYS will result in substantial savings to the utilities with no significant loss in safety.

Section 192.3 redefines the term service line so that "service lines" are to extend only so far as the operator's ownership extends, whether that be to the meter or to the customer's piping. Revision of this section of the General Order is for clarification of the General Order only and does not affect the safety of the public for which this Commission has jurisdiction.

As a result of the above revisions and additions applicable parts of Appendix A and Appendix B are modified as needed.

Findings

Upon consideration of the evidence, the Commission finds that:

1. It is in the interest of the consuming public and the public utility corporations that General Order No. 112-C be revised to incorporate the additions of Sections 192.12 and 192.379 and the amendment to Sections 192.3, 192.55, 192.65, 192.201(a), 192.717(b), 192.727 and portions of Appendix A and Appendix B to conform with the changes to the Minimum Federal Safety Standard issued by the Office of Pipeline Safety. The above additions and revisions are shown as utility exhibits A, B, C, D, E, F, G, H, I, and J.

2. A public hearing is not considered necessary. The Commission having found as hereinabove set forth concludes that it should issue its order as follows:

O R D E R

IT IS ORDERED that:

1. General Order No. 112-C be revised to incorporate the additions of Sections 192.12 and 192.379 and the amendments to Sections 192.3, 192.55, 192.65, 192.201(a), 192.717(b), 192.727 and portions of Appendix A and Appendix B to conform with the changes to the Minimum Federal Safety Standards issued by the Office of Pipeline Safety and as shown in the Appendix.

2. A copy of this decision shall be mailed to each gas corporation under the jurisdiction of this Commission.

Dated at San Francisco, California, this 13th
day of FEBRUARY, 1974.

James L. Stinson
President
William J. ...
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...
...
Commissioners

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AMENDMENTS AND ADDITIONS TO G.O. 112-C

1. Section 192.12 is added to Subpart A following Section 192.11. The new Section 192.12 is to read as follows:

Sec. 192.12 Liquefied natural gas facilities.

(a) Except for a pipeline facility in operation or under construction before January 1, 1973, no operator may store, treat, or transfer liquefied natural gas in a pipeline facility unless that pipeline facility meets the applicable requirements of this part and of NFPA Standard No. 59A.

(b) No operator may store, treat, or transfer liquefied natural gas in a pipeline facility in operation or under construction before January 1, 1973, unless --

(1) The facility is operated in accordance with the applicable operating requirements of this part and of NFPA Standard 59A; and

(2) Each modification or repair made to the facility after December 31, 1972, conforms to the applicable requirements of this part and NFPA Standard 59A, insofar as is practicable.

2. Section I of Appendix A is amended by revising Paragraph B to read as follows:

B. American Petroleum Institute (API). 1801 K Street NW, Washington, DC 20006 or 300 Corrigan Tower Building, Dallas, Tex. 75201.

3. Section II of Appendix A is amended by revising Subparagraphs A.1, 2, 3 and 5 to read as follows:

II. Documents incorporated by reference.

A. American Petroleum Institute:

1. API Standard 5L "API Specification for Line Pipe" (1967, 1970, 1971 editions, 1971 edition plus Supplement 1).

2. API Standard 5LS "API Specification for Spiral-Weld Line Pipe" (1967, 1970, 1971 editions, 1971 edition plus Supplement 1).

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3. API Standard 5LX "API Specification for High-Test Line Pipe" (1967, 1970, 1971 editions, 1971 edition plus Supplement 1).

5. API Standard 5A "API Specification for Casing, Tubing, and Drill Pipe" (1968, 1971 editions).

4. Section II.F of Appendix A is amended by adding the following new item at the end thereof:

4. NFPA Standard 59A "Standard for the Production, Storage and Handling of Liquefied Natural Gas (LNG)" (1971 edition).

5. Section I of Appendix B is amended by revising the first three items to read as follows:

I. Listed pipe specifications. Numbers in parentheses indicate applicable editions.

API 5L--Steel and iron pipe (1967, 1970, 1971, 1971 plus Supplement 1).

API 5LS--Steel pipe (1967, 1970, 1971, 1971 plus Supplement 1).

API 5LX--Steel pipe (1967, 1970, 1971, 1971 plus Supplement 1).

6. Section 192.379 is added to Subpart H after Section 192.377 to read as follows:

Sec. 192.379 New service lines not in use.

Each service line that is not placed in service upon completion of installation must comply with one of the following until the customer is supplied with gas:

(a) The valve that is closed to prevent the flow of gas to the customer must be provided with a locking device or other means designed to prevent the opening of the valve by persons other than those authorized by the operator.

(b) A mechanical device or fitting that will prevent the flow of gas must be installed in the service line or in the meter assembly.

(c) The customer's piping must be physically disconnected from the gas supply and the open pipe ends sealed.

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7. Section 192.727 is amended by revising certain paragraphs and adding others to read as follows:

Sec. 192.727 Abandonment or inactivation of facilities.

Whenever any structure being served with gas is destroyed, removed or demolished, the gas utility serving said structure shall, within one hundred twenty (120) days after notice thereof, cut and cap the gas service line at or outside the property line: provided, however, that if the erection of a new structure is commenced upon the same premises within the one hundred twenty day period, said gas service line may be permitted to remain uncut if it is to be used as a gas supply line to serve the new structure immediately upon the completion thereof. In addition:

(a) Each operator shall provide in its operating and maintenance plan for abandonment or deactivation of pipelines, including provisions for meeting each of the requirements of this section.

(b) Each pipeline abandoned in place must be disconnected from all sources and supplies of gas, purged of gas, and the ends sealed. However, the pipeline need not be purged when the volume of gas is so small that there is no potential hazard.

(c) Except for service lines, each inactive pipeline that is not being maintained under this part must be disconnected from all sources and supplies of gas, purged gas, and the ends sealed. However, the pipeline need not be purged when the volume of gas is so small that there is no potential hazard.

(d) Whenever service to a customer is discontinued, one of the following must be complied with:

(1) The valve that is closed to prevent the flow of gas to the customer must be provided with a locking device or other means designed to prevent the opening of the valve by persons other than those authorized by the operator.

(2) A mechanical device or fitting that will prevent the flow of gas must be installed in the service line or in the meter assembly.

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(3) The customer's piping must be physically disconnected from the gas supply and the open pipe ends sealed.

(e) If air is used for purging, the operator shall insure that a combustible mixture is not present after purging.

(f) Each abandoned vault must be filled with a suitable compacted material.

8. Section 192.55 is amended by revising Paragraphs (a)(2) and (b)(2) so that it will read as follows:

Sec. 192.55 Steel pipe.

(a) New steel pipe is qualified for use under this part if--

(1) It was manufactured in accordance with a listed specification;

(2) It meets the requirements of--

Revised
Section

(1) Section II of Appendix B to this part; or

(ii) If it was manufactured before November 12, 1970, either section II or III of Appendix B to this part; or

(3) It is used in accordance with paragraph (c) or (d) of this section.

(b) Used steel pipe is qualified for use under this part if--

(1) It was manufactured in accordance with a listed specification and it meets the requirements of paragraph II-C of Appendix B to this part;

(2) It meets the requirements of--

Revised
Section

(1) Section II of Appendix B to this part; or

(ii) If it was manufactured before November 12, 1970, either section II or III of Appendix B to this part;

(3) It has been used in an existing line of the same or higher pressure and meets the requirements of paragraph II-C of Appendix B to this part; or

(4) It is used in accordance with paragraph (c) of this section.

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(c) New or used steel pipe may be used at a pressure resulting in a hoop stress of less than 6,000 psi where no close coiling or close bending is to be done, if visual examination indicates that the pipe is in good condition and that it is free of split seams and other defects that would cause leakage. If it is to be welded, steel pipe that has not been manufactured to a listed specification must also pass the weldability tests prescribed in Paragraph II-B of Appendix B to this part.

(d) Steel pipe that has not been previously used may be used as replacement pipe in a segment of pipeline if it has been manufactured prior to November 12, 1970, in accordance with the same specification as the pipe used in constructing that segment of pipeline.

(e) New steel pipe that has been cold expanded must comply with the mandatory provisions of API Standard 5LX.

9. Section 192.65 is amended to read as follows:

Sec. 192.65 Transportation of pipe.

In a pipeline to be operated at a hoop stress of 20 percent or more of SMYS, no operator may use pipe having an outer diameter to wall thickness ratio of 70 to 1 or more, that is transported by railroad unless--

(a) The transportation was performed in accordance with API RP5L1; or

(b) In the case of pipe transported before November 12, 1970, the pipe is tested in accordance with Subpart J of this part to at least 1.25 times the maximum allowable operating pressure if it is to be installed in a class 1 location and to at least 1.5 times the maximum allowable operating pressure if it is to be installed in a class 2, 3, or 4 location. Notwithstanding any shorter time period permitted under Subpart J of this part, the test pressure must be maintained for at least 8 hours.

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10. Appendix B is amended by adding a new section III at the end thereof, to read as follows:

III. Steel pipe manufactured before November 12, 1970, to earlier editions of listed specifications. Steel pipe manufactured before November 12, 1970, in accordance with a specification of which a later edition is listed in section I of this appendix, is qualified for use under this part if the following requirements are met:

A. Inspection. The pipe must be clean enough to permit adequate inspection. It must be visually inspected to ensure that it is reasonably round and straight and that there are no defects which might impair the strength or tightness of the pipe.

B. Similarity of specification requirements. The edition of the listed specification under which the pipe was manufactured must have substantially the same requirements with respect to the following properties as a later edition of that specification listed in section I of this appendix:

(1) Physical (mechanical) properties of pipe, including yield and tensile strength, elongation, and yield to tensile ratio, and testing requirements to verify those properties.

(2) Chemical properties of pipe and testing requirements to verify those properties.

C. Inspection or test of welded pipe. On pipe with welded seams, one of the following requirements must be met:

(1) The edition of the listed specification to which the pipe was manufactured must have substantially the same requirements with respect to nondestructive inspection of welded seams and the standards for acceptance or rejection and repair as a later edition of the specification listed in section I of this appendix.

(2) The pipe must be tested in accordance with Subpart J of this part to at least 1.25 times the maximum allowable operating pressure if it is to be installed in a class 1 location and to at least 1.5 times the maximum allowable operating pressure if it is to be installed in a class 2, 3, or 4 location. Notwithstanding any shorter time period permitted under Subpart J of this part, the test pressure must be maintained for at least 8 hours.

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11. Section 192.201 is amended by revising paragraph (a) to read as follows:

Sec. 192.201 Required capacity of pressure relieving and limiting stations.

(a) Each pressure relief station or pressure limiting station or group of those stations installed to protect a pipeline must have enough capacity, and must be set to operate, to insure the following:

(1) In a low pressure distribution system, the pressure may not cause the unsafe operation of any connected and properly adjusted gas utilization equipment.

(2) In pipelines other than a low pressure distribution system--

(i) If the maximum allowable operating pressure is 60 p.s.i.g. or more, the pressure may not exceed the maximum allowable operating pressure plus 10 percent, or the pressure that produces a hoop stress of 75 percent of SMYS, whichever is lower;

(ii) If the maximum allowable operating pressure is 12 p.s.i.g. or more, but less than 60 p.s.i.g., the pressure may not exceed the maximum allowable operating pressure plus 6 p.s.i.g.; or

(iii) If the maximum allowable operating pressure is less than 12 p.s.i.g., the pressure may not exceed the maximum allowable operating pressure plus 50 percent.

Paragraphs (b) and (c) of Section 192.201 to be retained in their present form.

12. Section 192.717 is amended by revising paragraph (b) to read as follows:

Sec. 192.717 Transmission lines: permanent field repair of leaks.

(b) If it is not feasible to take the segment of transmission line out of service, repairs must be made by installing a full encirclement welded split sleeve of appropriate design, unless the transmission line--

(1) Is joined by mechanical couplings; and

(2) Operates at less than 40 percent of SMYS.

The balance of Section 192.717 will remain the same.

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13. Section 192.3 is amended by revising the definition of service line to read as follows:

Sec. 192.3 Definitions.

"Service line" means a distribution line that transports gas from a common source of supply to (1) a customer meter or the connection to a customer's piping, whichever is farther downstream, or (2) the connection to a customer's piping if there is no customer meter. A customer meter is the meter that measures the transfer of gas from an operator to a consumer.

The balance of Section 192.3 will remain the same.