

Decision No. 85280

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 corporations, for an Order modifying General Order No. 112-C adopted April 2, 1971, in Decision No. 78513 by amending, adding to and/or deleting Sections 192.59(a), (b) and (c); 192.65; 192.225 (a); 192.227(a)(2); 192.229(c); 192.241(c); 192.705(a), (b) and (c); 192.706; 192.707; and Sections of Appendix A and Appendix B; to conform with the changes to the Minimum Federal Safety Standards issued by the Department of Transportation, Office of Pipeline Safety, as more particularly set forth in the Application herein.

Application No. 56063
(Filed November 13,
1975)

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. 56063 applicants request an Order from the Commission modifying General Order No. 112-C to:

1. Add Subsection 192.59(c),
2. Amend Subsections 192.59(a)(1) and 192.59(b)(1),
3. Amend Section 192.65,
4. Amend Subsection 192.225(a),
5. Amend Subsection 192.227(a)(2),
6. Amend Subsection 192.229(c),
7. Amend Subsection 192.241(c),
8. Amend Subsections 192.705(a) and 192.705(b),
9. Add Section 192.706,
10. Amend Section 192.707,
11. Delete Subsection 192.705(c), and to
12. Amend portions of Appendix A and Appendix B,

in order to make the General Order conform to changes in the Minimum Federal Safety Standards issued by the Office of Pipeline Safety Operations, Department of Transportation (Title 49, CFR, Part 192).

The addition of Subsection 192.59(c) would allow the use of plastic pipe of a diameter intermediate to those included in a listed specification, if the use of a listed diameter is impractical, and provided it meets the strength, design, and materials criteria of that listed specification.

The amendment of Subsections 192.59(a)(1) and 192.59(b)(1) refers to new and used plastic pipe, respectively, and would allow the use of plastic pipe manufactured after March 21, 1975 only if it was manufactured in accordance with the latest listed edition of a listed specification. Plastic pipe manufactured before that date would be allowed if it meets the requirements of any of the listed specifications.

The amendment of Section 192.65 would, in effect, allow the use of "double-jointed" pipe (80-foot lengths consisting of two 40-foot lengths welded together) which has been transported on standard 52-foot flatcars. Currently, Section 192.65, together with the referenced documents in Section II.A of Appendix A, specifies that any railroad transportation of pipe must be performed in accordance with the 1967 edition of the American Petroleum Institute (API) Standard No. RP5L1; the requirements of this Standard preclude the use of such double-jointed pipe. However, the 1972 edition of API No. RP5L1 incorporates procedures developed for transporting double-jointed pipe.

The purpose of the amendments of Subsections 192.225(a), 192.227(a)(2), 192.229(c), and 192.241(c) would be to improve the quality of welding performed on gas pipeline facilities. These amendments would subject to the 1973 edition of API Standard 1104, "Standard for Welding Pipelines and Related Facilities," respectively, the qualification of welding procedures, the qualification of welders, the limitations on welders, and the inspection and testing of welds.

The amendments of Subsections 192.705(a) and 192.705(b) would specify the frequency of patrolling transmission lines and would provide for more frequent patrols in Class 3 and 4 locations and at highway and railroad crossings.

The addition of Section 192.706 would require periodic leakage surveys along transmission lines. This section of the Federal regulations specifies a survey interval of one year or less, except for lines carrying unodorized gas in certain locations, for which shorter intervals are required. Since General Order No. 112-C requires gas in all transmission lines to be odorized, the proposed addition deletes this exception and omits any reference to unodorized gas.

The amendment of Section 192.707 would provide for more stringent requirements in the marking of the location of transmission lines. It would also establish marking requirements for distribution mains, which are not currently required to be marked. These additional markers should help to reduce the incidence of damage to mains and transmission lines caused by excavators, which represents a major cause of pipeline accidents.

The deletion of Subsection 192.705(c) would remove from the General Order the current reference to more frequent patrolling of transmission lines at highway and railroad crossings, since the frequency of patrolling in these areas would be specified by the amendment of Subsection 192.705(b), as set forth above.

The amendment of Appendix A and Appendix B would add to the lists of documents incorporated by reference those recent editions of certain technical specifications to which reference is made in the various sections and subsections of the General Order.

Findings

1. It is in the interest of the consuming public and of the public utility companies that General Order No. 112-C be revised to incorporate the changes requested by applicants and shown as applicants' Exhibits A through M, inclusive.

2. A public hearing is not necessary.

The Commission concludes that it should issue its order as follows:

O R D E R

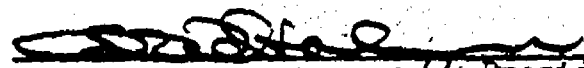
IT IS ORDERED that:



1. General Order No. 112-C is revised to incorporate the addition of Subsection 192.59(c) and Section 192.706; the amendment of Subsections 192.59(a)(1), 192.59(b)(1), 192.225(a), 192.227(a)(2), 192.229(c), 192.241(c), 192.705(a) and 192.705(b), Sections 192.65 and 192.707 and portions of Appendix A and Appendix B; and the deletion of Subsection 192.705(c); all as set forth in the Appendix of this decision.


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

The effective date of this order is the date hereof.

30th Dated at San Francisco, California, this
day of DECEMBER, 1975.



President





Commissioners

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1. In § 192.59, paragraphs (a)(1) and (b)(1) are amended and a new paragraph (c) is added to read as follows:

§ 192.59 Plastic pipe.

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

(1) When the pipe is manufactured, it is manufactured in accordance with the latest listed edition of a listed specification, except that before March 21, 1975, it may be manufactured in accordance with any listed edition of a listed specification; and

* * *

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

(1) When the pipe was manufactured, it was manufactured in accordance with the latest listed edition of a listed specification, except that pipe manufactured before March 21, 1975, need only have met the requirements of any listed edition of a listed specification;

* * *

(c) For the purpose of paragraphs (a)(1) and (b)(1) of this section, where pipe of a diameter included in a listed specification is impractical to use, pipe of a diameter between the sizes included in a listed specification may be used if it--

(1) Meets the strength and design criteria required of pipe included in that listed specification; and

(2) Is manufactured from plastic compounds which meet the criteria for material required of pipe included in that listed specification.

2. Section 192.65(a) is amended to read as follows:

§ 192.65 Transportation of pipe.

In a pipeline to be operated at a hoop stress of 20 percent or more of SMYS, an operator may not 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 is performed in accordance with the 1972 edition of API RP5LL, except that before February 25, 1975, the transportation may be performed in accordance with the 1967 edition of API RP5LL; or

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3. Section 192.225(a) is amended to read as follows:

§ 192.225 Qualification of welding procedures.

(a) Each welding procedure must be qualified under section IX of the ASME Boiler and Pressure Vessel Code or section 2 of the 1973 edition of API Standard 1104, whichever is appropriate to the function of the weld, except that a welding procedure qualified under section 2 of the 1968 edition of API Standard 1104 before March 20, 1975, may continue to be used but may not be requalified under that edition.

4. Section 192.227(a)(2) is amended to read as follows:

192.227 Qualification of welders.

(a)

* * *

(2) The following editions of Section 3 of API Standard 1104:

(1) The 1973 edition, except that a welder may be qualified by radiography under subsection 3.51 without regard for the standards in subsection 6.9 for depth of undercutting adjacent to the root bead unless that depth is visually determined by use of a depth measuring device on all undercutting along the entire circumference of the weld; or

(11) If a welder is qualified before March 20, 1975, the 1968 edition, except that a welder may not requalify under the 1968 edition.

* * *

5. Section 192.229(c) is amended to read as follows:

§ 192.229 Limitations on welders.

* * *

(c) A welder qualified under § 192.227(a) may not weld unless within the preceding 6 calendar months the welder has had one weld tested and found acceptable under--

(1) Section 3 or 6 of the 1973 edition of API Standard 1104, except for the standards in subsection 6.9 for depth of undercutting adjacent to the root bead unless that depth is visually determined by use of a depth measuring device on all undercutting along the entire circumference of the weld; or

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6. Section 192.241(c) is amended to read as follows:

§ 192.241 Inspection and test of welds.

* * *

- (c) The acceptability of a weld that is nondestructively tested or visually inspected is determined according to the standards in Section 6 of the 1973 edition of API Standard 1104. However, the standards in subsection 6.9 for depth of undercutting adjacent to the root bead apply only if--
- (1) That depth is visually determined by use of a depth measuring device on all undercutting along the entire circumference of the weld; and
 - (2) Visual determination of internal undercutting is made in all pipe of the same diameter in a pipeline, except where impractical at tie-in welds.

7. Subsections 192.705(a) and 192.705(b) are amended, and Subsection 192.705(c) is deleted, so that Section 192.705 reads as follows:

§ 192.705 Transmission lines: Patrolling.

- (a) Each operator shall have a patrol program to observe surface conditions on and adjacent to the transmission line right-of-way for indications of leaks, construction activity, and other factors affecting safety and operation.
- (b) The frequency of patrols is determined by the size of the line, the operating pressures, the class location, terrain, weather, and other relevant factors, but intervals between patrols may not be longer than prescribed in the following table:

<u>Class location of line</u>	<u>Maximum interval between patrols</u>	
	<u>At highway and railroad crossings</u>	<u>At all other places</u>
1, 2	6 months	1 year
3	3 months	6 months
4	3 months	3 months

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8. A new Section 192.706 is added, to read as follows:

§ 192.706 Transmission lines: Leakage surveys.

- (a) Each operator of a transmission line shall provide for periodic leakage surveys of the line in its operating and maintenance plan.
- (b) Leakage surveys of a transmission line must be conducted at intervals not exceeding 1 year.

9. Section 192.707 is revised to read as follows:

§ 192.707 Line markers for mains and transmission lines.

- (a) Buried pipelines. Except as provided in paragraph (b) of this section, a line marker must be placed and maintained as close as practical over each buried main and transmission line--
 - (1) At each crossing of a public road, railroad, and navigable waterway; and
 - (2) Wherever necessary to identify the location of the transmission line or main to reduce the possibility of damage or interference.

However, until January 1, 1978, paragraphs (a)(1) and (a)(2) of this section do not apply to mains installed before April 21, 1975, and until January 1, 1978, paragraph (a)(1) of this section does not apply to transmission lines installed before April 21, 1975.

- (b) Exceptions for buried pipelines. Line markers are not required for buried mains and transmission lines--

- (1) In Class 3 or Class 4 locations--
 - (i) Where placement of a marker is impractical; or
 - (ii) Where a program for preventing interference with underground pipelines is established by law; or
- (2) In the case of navigable waterway crossings, within 100 feet of a line marker placed and maintained at that waterway in accordance with this section.

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- (c) Pipelines aboveground. Line markers must be placed and maintained along each section of a main and transmission line that is located aboveground in an area accessible to the public.

- (d) Markers other than at navigable waterways.

The following must be written legibly on a background of sharply contrasting color on each line marker not placed at a navigable waterway:

- (1) The word "Warning," "Caution," or "Danger" followed by the words "Gas Pipeline" all of which, except for markers in heavily developed urban areas, must be in letters at least one inch high with one-quarter inch stroke.
 - (2) The name of the operator and the telephone number (including area code) where the operator can be reached at all times.
- (e) Markers at navigable waterways. Each line marker at a navigable waterway must have the following characteristics:

- (1) A sign, rectangular in shape, with a narrow strip along each edge colored international orange and the area between lettering on the sign and boundary strips colored white.
 - (2) Written on the sign in block style, black letters--
 - (i) The word "Warning," "Caution," or "Danger," followed by the words "Do Not Anchor or Dredge" and the words "Gas Pipeline Crossing;" and
 - (ii) The name of the operator and the telephone number (including area code) where the operator can be reached at all times.
 - (3) In overcast daylight, the sign is visible, and the writing required by paragraph (e)(2)(i) of this section is legible, from approaching or passing vessels that may damage or interfere with the pipeline.
- (f) Existing markers. Line markers installed before April 21, 1975, which do not comply with paragraph (d) or (e) of this section may be used until January 1, 1980.

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10. In Appendix A, Item II.A.4 is amended to read as follows:

APPENDIX A--INCORPORATED BY REFERENCE

* * *

II. Documents incorporated by reference.

A. American Petroleum Institute:

* * *

4. API Recommended Practice 5L1 entitled "API Recommended Practice for Railroad Transportation of Line Pipe" (1967 and 1972 editions).

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11. In Appendix A, Item II.A.8 is amended to read as follows:

APPENDIX A--INCORPORATED BY REFERENCE

* * *

II. Documents incorporated by reference.

A. American Petroleum Institute:

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8. API Standard 1104 "Standard for Welding Pipe Lines and Related Facilities" (1968 and 1973 editions).

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12. In Appendix A, Item II.B.18 is amended to read as follows:

APPENDIX A--INCORPORATED BY REFERENCE

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II. Documents incorporated by reference

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B. The American Society for Testing and Materials

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18. ASTM Specification D2513 "Standard Specification for Thermoplastic Gas Pressure Pipe, Tubing, and Fittings" (D2513-66T, D2513-68, D2513-70, D2513-71).

13. In Appendix B, the item in Section I beginning "ASTM D2513 . . ." is amended to read as follows:

APPENDIX B - QUALIFICATION OF PIPE

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I. Listed Pipe Specifications

* * *

ASTM D2513--Thermoplastic Pipe and Tubing (1966T, 1968, 1970, 1971).