PSG 135, 192

### CERTIFICATE

STATE OF WISCONSIN : : ss. PUBLIC SERVICE COMMISSION :

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

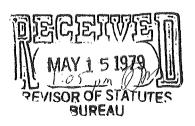
I, Lewis T. Mittness, Executive Secretary of the Public Service Commission of Wisconsin, and custodian of the official records of said Commission, do certify that the annexed rules relating to the construction, operation, and maintenance of facilities for the production, transmission, distribution and utilization of gas were duly approved and adopted by this Commission on January 9, 1979.

I further certify that this copy of the rules has been compared by me with the original on file in this Commission and that the same is a true copy thereof, and of the whole of such rules.

> IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of the Commission at the Hill Farms State Office Building in the City of Madison this  $19^{4/3}$  day of January, 1979.

1. 8-11 Mittness

Lewis T. Mittness Executive Secretary PUBLIC SERVICE COMMISSION OF WISCONSIN



DATE MAILED

### BEFORE THE

### PUBLIC SERVICE COMMISSION OF WISCONSIN

Rules and Regulations Governing the Construction, ) Operation, and Maintenance of Facilities for the ) Production, Transmission, Distribution and ) Utilization of Gas

### FINDINGS OF FACT AND ORDER

On November 7, 1978, the commission issued a Notice of Investigation and Hearing which read:

NOTICE IS HEREBY GIVEN That pursuant to ss. 196.745 and 227.021, Wis. Stats., the Public Service Commission will hold a public hearing in Room 427, Hill Farms State Office Building, 4802 Sheboygan Avenue, Madison, Wisconsin, on the 13th day of December, 1978, at 9:00 a.m., to consider certain changes and additions to the existing Wisconsin Administrative Code Adoption of Part 192 in Title 49, Code of Federal Regulations with Additions, in order to conform to changes and additions to the Minimum Safety Standards for pipeline facilities and transportation of gas established by the Federal Department of Transportation, Office of Pipeline Safety Operations, and adopted as a portion of the Wisconsin Administrative Code, s. PSC 135.09. The changes and additions to be considered relate to (1) Qualification and Design of Steel Pipe, (2) Design of Plastic Pipelines, and (3) Corrosion Control Requirements.

Hearing was held in Madison, Wisconsin on December 13, 1978 before Examiner James Wolter.

Appearances:

As Interest May Appear:

Dennis Sandberg Midwestern Gas Transmission Company Wadena, MN 56482

Joe R. Trueblood Madison Gas & Electric Company Madison, WI 53701

William Goudey Michigan Wisconsin Pipeline Company Brookfield, WI 53005

Ray LaPorte St. Croix Valley Natural Gas Company River Falls, WI 54022

Of the Commission staff:

William Sayles, Engineering Division Harold R. Wetzel, Engineering Division

### Findings of Fact

THE COMMISSION FINDS:

The changes to s. 192 of Chapter PSC 135 of the Wisconsin Administrative Code as outlined in Appendix A were promulgated during 1978 by the Office of Pipeline Safety Operations, Federal Department of Transportation, and were incorporated in Part 192, Title 49, Code of Federal Regulations.

The corrections to Chapter PSC 135 are made to eliminate inadvertent errors in the text of Chapter PSC 135.

Adoption of the aforesaid changes into Chapter PSC 135, Wis. Adm. Code, is in the public interest and consistent with the requirements of s. 196.745, Wis. Stats.

### Order

THE COMMISSION THEREFORE ORDERS:

1. That pursuant to authority vested in the Public Service Commission of Wisconsin by ss. 196.745 and 227.014, Wis. Stats., the Public Service Commission of Wisconsin hereby orders the changes as outlined in Appendix A to be incorporated into Chapter PSC 135, Wis. Adm. Code.

2. That a certified copy of such amendments be filed with the Secretary of State and Revisor of Statutes in appropriate form as required by s. 227.023, Wis. Stats.

3. That the changes in Appendix A to Chapter PSC 135 become effective as provided by s. 227.026(1), Wis. Stats.

Dated at Madison, Wisconsin, January 9, 1979 By the Commission.

> Lewis T. Mittness Executive Secretary

### Appendix A

### CHANGES TO CHAPTER PSC 135 OF THE WISCONSIN ADMINISTRATIVE CODE TO INCORPORATE CHANGES AND ADDITIONS TO PART 192 OF TITLE 49 IN THE CODE OF FEDERAL REGULATIONS

#### Revise section 192.121 to read as follows: 1.

192.121 Design of plastic pipe.

The design pressure for plastic pipe is determined in accordance with the following formula, subject to the limitations of s. 192.123:

$$P = 2S \frac{t}{(D-t)} \times 0.32$$

- P = Design pressure, gage, RPa (psi).
- S = For thermoplastic pipe the long-term hydrostatic strength determined in accordance with the listed specification at a temperature equal to  $23^{\circ}$  C (73° F), 38° C (100° F), 49° C (120° F), or 60° C (140° F); for reinforced thermosetting plastic pipe, 75,800 kPa (11,000 psi).
- t = Specified wall thickness, mm (in.).

D = Specified outside diameter, mm (in.).

#### 2. Revise section 192.123(a) introductory text, (b)(1) and (2), (c), and (d) to read as follows:

192.123 Design limitations for plastic pipe.

The design pressure may not exceed a gage (a) pressure of 689 kPa (100 psig) for plastic pipe used in--

(b) \* \* \*

(1) Below minus  $29^{\circ}$  C (- $20^{\circ}$  F); or

(2) In the case of thermoplastic pipe, above the temperature at which the long-term hydrostatic strength used in the design formula under s. 192.121 is determined, except that pipe manufactured before May 18, 1978, may be used at temperatures up to  $30^{\circ}$  C ( $100^{\circ}$  F); or in the case of reinforced thermosetting plastic pipe, above  $66^{\circ}$  C ( $150^{\circ}$  F). (c) The wall thickness for thermoplastic pipe may

not be less than 1.57 millimeters (0.062 in.).

The wall thickness for reinforced thermosetting (d) plastic pipe may not be less than that listed in the following table:

Nomi	ina	11	s	ize	9 1	in	inches:					Minimum wall thickness in millimeters (inches)			
- 3		•	•	•	.• •	•	•	•	•	•	•	•	•	$\begin{array}{c} 1.52 \\ 1.78 \end{array}$	(0.060) (0.060) (0.070) (0.100)

3. Change paragraph 192.14(a)(4) to 192.14(b).

4. Section 195.212(b)(3)(1i) is corrected to read as follows:

(3) \* \* \*
 (ii) The pipe is 12 inches or less in outside
diameter or has a diameter to wall thickness ratio less
than 70.

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### 5. Section 192.313(a)(4)(ii) is corrected to read as follows:

(a) \* \* \* (4) \* \* \*

(b)

(ii) The pipe is 12 inches or less in outside diameter or has a diameter to wall thickness ratio less than 70.

### 6. Amend section 192.451 as follows:

In s. 192.451, paragraph (b) is deleted.

### 7. Amend section 192.457 as follows:

In s. 192.457, the following phrases and punctuation marks are deleted:

In the first sentence of paragraph (a), delete ",not later than August 1, 1974,", and in the first sentence of paragraph (b), delete ", not later than August 1, 1976,".

### 8. Amend section 192.465(b) and (c) as follows:

192.465 External corrosion control: monitoring

(b) Each cathodic protection rectifier or other impressed current power source must be inspected six times each calendar year, but with intervals not exceeding  $2\frac{1}{2}$ months, to insure that it is operating.

(c) Each reverse current switch, each diode, and each interference bond whose failure would jeopardize structure protection must be electrically checked for proper performance six times each calendar year, but with intervals not exceeding  $2\frac{1}{2}$  months. Each other interference bond must be checked at least once each calendar year, but with intervals not exceeding 15 months.

# 9. Amend section 192.467(b) to read as follows:

192.467 External corrosion control: electrical isolation

(b) One or more insulating devices must be installed where electrical isolation of a portion of a pipeline is necessary to facilitate the application of corrosion control.

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## 10. Amend section 192.473 as follows:

In s. 192.473(a), the following phrase is deleted: "After July 31, 1973,".

### 11. Amend section 192.475 as follows:

In s. 192.475(a), the following phrase is deleted: "After July 31, 1972,".

### 12. Amend section 192.477 to read as follows:

192.477 Internal corrosion control: monitoring.

If corrosive gas is being transported, coupons or other suitable means must be used to determine the effectiveness of the steps taken to minimize internal corrosion. Each coupon or other means of monitoring internal corrosion must be checked two times each calendar year, but with intervals not exceeding 7½ months.

#### 13. Amend section 192.479 as follows:

In s. 192.479(b), the following phrase is deleted: "Not later than August 1, 1974,".

#### 14. Amend section 192.481 to read as follows:

192.481 Atmospheric corrosion control: monitoring.

After meeting the requirements of s. 192.479(a) and (b), each operator shall, at intervals not exceeding 3 years for onshore pipelines and at least once each calendar year, but with intervals not exceeding 15 months, for offshore pipelines, reevaluate each pipeline that is exposed to the atmosphere and take remedial action whenever necessary to maintain protection against atmospheric corrosion.

### 15. Amend section 192.485(a) to read as follows:

192.485 Remedial measures: Transmission lines.

(a) General corrosion. Each segment of transmission line with general corrosion and with a remaining wall thickness less than that required for the maximum allowable operating pressure of the pipeline must be replaced or the operating pressure reduced commensurate with the strength of the pipe based on the actual remaining wall thickness. However, if the area of general corrosion is small, the corroded pipe may be repaired. Corrosion pitting so closely grouped as to affect the overall strength of the pipe is considered general corrosion for the purpose of this paragraph.

## 16. Amend section 192.491 as follows:

In s. 192.491(a), the following phrase is deleted: "After July 31, 1972,".

### 17. Amend section 192.55 as follows:

In s. 192.55, (a)(3) through (c) should be deleted on page 264 because they appear on page 265.

### 18. Amend section 192.713 as follows:

In s. 192.713(d) should be renumbered to 192.713(a)(4).

### 19. Revise section 192.63 as follows:

In s. 192.63, paragraphs (b), (c), and (d) are redesignated paragraphs (c), (d), and (e) respectively; reference to paragraph (d) in the introductory text of paragraph (a) is changed to read "paragraph (e)." A new paragraph (b) is added to read as follows:

192.63 Marking of materials.

(b) In addition to the requirements in paragraph (a), thermoplastic pipe manufactured in accordance with the 1974a or earlier listed edition of ASTM D2513 must be marked as required by section 9.2 of ASTM D2513 (1975b edition) unless the pipe was manufactured before May 18, 1978, and is installed where operating temperatures are not above  $38^{\circ}$  C (100° F).

### 20. Amend Section II of Appendix A to Part 192 to read as follows:

Appendix A -- Incorporated by Reference

II. Documents incorporated by reference. Numbers in parentheses indicate applicable editions. Only the latest listed edition applies except that an earlier listed edition may be followed with respect to pipe or components which are manufactured, designed, or installed in accordance with the earlier edition before the latest edition is adopted, unless otherwise provided in this part.

A. \* \* \*

(5) API Standard 5LS "API Specification for Spiral-Weld Line Pipe" (1967, 1970, 1971 plus Supp. 1, 1973 plus
Supp. 1, 1975 plus Supp. 1, and 1977).
(6) API Standard 5LX "API Specification for High-

(6) API Standard 5LX "API Specification for High-Test Line Pipe" (1967, 1970, 1971 plus Supp. 1, 1973 plus Supp. 1, 1975 plus Supp. 1, and 1977.)

## 21. Amend Section I of Appendix B to Part 192 to read as follows:

Appendix B -- Qualification of Pipe

I. Listed Pipe Specifications. Numbers in parentheses indicate applicable editions. Only the latest listed edition applies except that an earlier listed edition may be followed with respect to pipe or components which are manufactured, designed, or installed in accordance with the earlier edition before the latest edition is adopted, unless otherwise provided in this part. 21. (continued)

API 5LS, Steel pipe (1967, 1970, 1971 plus Supp. 1, 1973 plus Supp. 1, 1975 plus Supp. 1, and 1977).

API 5LX, Steel pipe (1967, 1970, 1971 plus Supp. 1, 1973 plus Supp. 1, 1975 plus Supp. 1 and 1977).