



## Formal Interpretations/ Interprétation formelle

This section lists questions that individuals have submitted about a particular standard. Each question has been reviewed and answered by the appropriate committee. If you would like to submit a question about a particular standard, please see the end notes in the preface of that standard.

*November 04, 2015*

The following interpretation regarding CSA Standard N286-05, *Management System Requirements for Nuclear Power Plants*, Clause F.3.2 item (c), has been approved by the Z955 TC Management Systems for Nuclear Facilities (N286 Series):

**Question:** \_ Was the intention of the wording of the verification technique in F.3.2(c) to limit verification of design calculations to alternative analysis only?

**Answer:** No

*November 04, 2015*

The following interpretation regarding CSA Standard Z276-11, *Liquefied natural gas (LNG) - Production, storage, and handling*, “the requirements for setbacks for LNG portable equipment”, has been approved by the Technical Committee on Liquefied Natural Gas (LNG) Production, Storage and Handling:

**Question:** Can we locate portable storage/vaporization unit (MC 338 compliant), in short-term applications, 4.5 m (15 ft) from a diesel-electric generator?

**Answer:** Yes, providing that it meets all the requirements in Clause 5.3.4.

*November 04, 2015*

The following interpretation regarding CSA Standard Z276-15, *Liquefied natural gas (LNG) - Production, storage, and handling*, “Clause 5.2.1.2 ”, has been approved by the Technical Committee on Liquefied Natural Gas (LNG) Production, Storage and Handling:

**Question:** Can we consider that the use of Vacuum Insulated Pipe, with inner and outer pipe made of stainless steel materials design to hold LNG, be considered as double containment and that no further means of collecting LNG leaks (such as trench) is required along the 1.5 km between the processing plant and the Jetty?

**Answer:** No.

*November 04, 2015*

The following interpretation regarding CSA Standard Z276-15, *Liquefied natural gas (LNG) - Production, storage, and handling*, “Vacuum Insulated Pipe considered as double containment”



has been approved by the Technical Committee on Liquefied Natural Gas (LNG) Production, Storage and Handling:

**Question 1:** Is the top of tank piping to be considered as a process area?

**Answer 1:** No.

**Question 2:** Is the top of tank piping to be provided with spill collection/downcomer?

**Answer 1:** Yes.

*January 19, 2015*

The following interpretation regarding CSA Standard Z276-11, *Liquefied natural gas (LNG) - Production, storage, and handling*, Clause 13.3.11.3, has been approved by the Technical Committee on Liquefied Natural Gas (LNG) Production, Storage and Handling:

**Question 1:** Would there be a requirement for the bays to be a minimum of 7.6 m (25 ft.) apart to allow for simultaneous operation?

**Answer:** No.

**Question 2:** Would it be acceptable to allow a truck trailer to pull up to a bay while another adjacent trailer is being loaded, if the separation is less than 7.6 m (25 ft.)?

**Answer:** Not applicable.

*January 19, 2015*

The following interpretation regarding CSA Standard Z276-11, *Liquefied natural gas (LNG) - Production, storage, and handling*, Clause 5.2.4.2.2, has been approved by the Technical Committee on Liquefied Natural Gas (LNG) Production, Storage and Handling:

**Question:** A single remote impoundment sized as per CSA Z276 serves four single containment tanks, each less than 265 m<sup>3</sup> water capacity. Does the limiting temperature rise stipulated for full and double containment tanks exposed to an impoundment pool fire (as per CSA Z276-11 Clause 5.2.4.2.2) apply to single containment tanks?

**Answer:** No. The requirements in Clauses 5.2.1.1 and 5.2.2.1 must be followed

*Posted January 8, 2015*

The following interpretation regarding CSA Standard CAN/CSA-Z662-11, *Oil and gas pipeline systems*, Clause 14.3, has been approved by Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials (Z662):



**Question 1:** Per Clause 14.3.4.3, is it the intent that only fittings manufactured to ASME B16.9 and ASME B16.11 are permitted as the clause does not list an option for fittings manufactured to other component standards?

**Answer:** No

**Question 2:** Per Clause 14.3.4, are fittings manufactured to another standard such as CSA Z245.11, MSS SP-75, or MSS SP-97 permitted provided these are either listed component standards in ASME B31.3 and/or CSA Z662 with listed material properties in ASME B31.3 at the design temperature, or qualified in accordance with Clause 14.3.2.1.

**Answer:** Yes

**Question 3a:** In Clause 14.3.4.2, is it intended that only “fittings other than bends” require registration as specified in CSA B51

**Answer:** Yes

**Question 3b:** Is it intended that “Flanges”, “Valves”, “Transition Pieces”, and “Bends” do not require such registration since the registration requirement only appears in Clause 14.3.4 and not in any of these other parallel clauses (or as a more general requirement in Clause 14.3.1)?

**Answer:** Yes

*Posted January 8, 2015*

The following interpretation regarding CSA Standard CAN/CSA-Z662-11, *Oil and gas pipeline systems*, Table 3, has been approved Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials (Z662):

**Question 1:** Is Table 7.3 applicable to in-service welding procedures when the essential changes are not addressed in the applicable part of Table 7.10?

**Answer:** No.

**Question 2:** Does Table 7.3 have any applicability to in-service welding procedures?

**Answer:** No.

The following interpretation regarding CSA Standard CAN/CSA-Z662-11, *Oil and gas pipeline systems*, Clause 16.6.4, has been approved Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials (Z662):

**Question 1a:** Is 100% hardness testing required?

**Answer:** No.

**Question 1b:** Is the frequency of testing, along with the locations and test patterns, up to the company?

**Answer:** Yes.

The following interpretation regarding CSA Standard CAN/CSA-Z662-11, *Oil and gas pipeline systems*, Interpretation of “Pressure-control system”, has been approved K110 Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials (Z662):

**Question:** In a case where you have piping at higher MOP to a lower MOP, does having continuous monitoring of pressure (i.e., pressure transmitter) through SCADA with in situ intervention by the Operator upon alarm comply with the intent of “manual intervention” as referenced in the definition for “pressure control system”?

**Answer:** Yes. However, see definition of “overpressure protection” and the overpressure protection requirements in Clause 4.18.1.

The following interpretation regarding CSA Standard CAN/CSA-Z662-11, *Oil and gas pipeline systems*, Pressure Testing – Clauses 8.12, 8.1.3, & 8.1.7, has been approved Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials (Z662):

**Question 1:** (Note: The following question assumes Clause 8.4 is not applicable)

(a) Often during initial testing of piping not in place, when moving the piping to its final location it is “broken up” into smaller spools at flanged connections. Also, during maintenance activities flanged pretested spool pieces are often installed. It is the practice at some companies to replace the gaskets. Do the new gaskets associated with these spool pieces require a pressure test?

**Answer:** No. See Clause 8.12.2.

(b) Regarding Clause 8.1.7, if the applicable manufacturing and design standard or specification contains requirements for pressure testing that are less onerous than clause 8 with respect to test pressure or duration, is the manufacturing pressure test acceptable?

**Answer:** Yes.

(c) Regarding Clause 8.1.7, if the applicable manufacturing and design standard or specification does not contain requirements for pressure testing, is a pressure test required?

**Answer:** Yes.

(d) If there is no applicable manufacturing and design standard or specification for the component to be installed, does the fabricated item require pressure testing?

**Answer:** Yes.

(e) Would the following items (i through vii) be considered fabricated items for the purposes of clause 8.1.7?

i. Regulators

**Answer:** No.

ii. Control valves

**Answer:** No.

iii. Relief valves

**Answer:** No.

iv. Filters

**Answer:** No response. The answer is dependent on filter type.

v. Scrubbers

**Answer:** Yes.

vi. Spacer plates

**Answer:** No.

vii. Gaskets

**Answer:** No.

viii. Compressors/pumps

**Answer:** No.

The following interpretation regarding CSA Standard CAN/CSA-Z662-11, *Oil and gas pipeline systems*, Clause 8.8.5 and 12.8.1, has been approved Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials (Z662):

**Question 1:** Would it be acceptable to use pressure gauge plots as an “appropriate leak detection” method, for very small test volumes?

**Answer:** Yes, pressure gauge plots are acceptable if it is determined that the Company’s testing procedure is effective in determining a leak in the defined time and documented as stated in Clause 8.8.7.

**Question 2:** If the above response to Question #1 is no, then:

(a) Is it CSA’s point of view that all gas utility service lines (above and below 700 kPa), which are typically ½ – ¾”, shall be pressure tested using water?

**Answer:** Not applicable. See response to Question #1.

(b) And where water is impractical to remove or may cause issues with corrosion, shall they be pneumatically pressure tested for 24 hours?

**Answer:** Not applicable. See response to Question 1.

**Question 3:** Is the designer expected to refer back to Section 8.8 for gas distribution piping operating below 700 kPa?

**Answer:** Yes.



The following interpretation regarding CSA Standard CAN/CSA-Z662-11, *Oil and gas pipeline systems*, Clause 14.3.5, has been approved Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials (Z662):

**Question 1:** Is it the intent of this clause to prohibit the use of CSA Z245.12 flanges in Clause 14 pipelines since the corresponding CSA materials are not listed in ASME B16.5 and do not fall within any of the defined materials groups in ASME B16.5?

**Answer:** Yes.

**Question 2:** Is it permissible to use a CSA Z245.12 flange in Clause 14 pipeline system at a temperature in excess of 120 C?

**Answer:** No.

**Question 3:** Is it permissible to use ASME B16.5 Appendix A “*A Method used for Establishing Pressure Temperature Ratings*” to determine the ASME B16.5 pressure temperature ratings for flange materials not currently listed in any materials group in ASME B16.5?

**Answer:** CSA’s policy does not allow for the interpretation of non-CSA standards.

**Question 4:** Is it permissible to use the established pressure temperature ratings for a given materials group in ASME B16.5 for a CSA Z245.12 flange when it can be established that the Selected Stress “S1” (as specified in Appendix A of ASME B16.5) for that CSA flange material exceeds the Selected Stress upon which other listed materials (e.g., ASTM A105) have been added to the materials group proposed for use?

**Answer:** CSA’s policy does not allow for the interpretation of non-CSA standards.

**Question 5:** MSS SP-44 is an established flange manufacturing standard listed in Table 326.1 of ASME B31.3. This standard includes published pressure ratings to a maximum temperature of 232 C, which are accepted under ASME B31.3. Is it permissible to use an MSS SP-44 flange, manufactured using ASTM material listed in Table 5.3 of CSA Z662, in a CSA Z662 Clause 14 pipeline in accordance with the materials requirements, and pressure temperature ratings, of MSS SP-44 and the applicable ASTM standard?

**Answer:** No.

The following interpretation regarding CSA Standard CAN/CSA-Z662-11, *Oil and gas pipeline systems*, Clause 4.21.1, has been approved Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials (Z662):

**Question 1:** Does the process of natural gas liquefaction constitute “further processing” under Clause 4.21.1 of the CSA Z662?

**Answer:** Yes

*Posted March 17, 2015*

The following interpretation regarding CSA Standard CAN/CSA-Z662-11, *Oil and gas pipeline systems*, Clauses 10.5.3.1 and 10.5.3.7, has been approved Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials (Z662):

**Question 1:** Is it the intent of these clauses that Industry may risk-manage the need for signage, such that it may not be required at all water crossings based on the potential hazard of public activity?

**Answer:** Yes. Except as required by Clause 10.5.3.7

**Question 2:** Is signage required at all water crossings regardless of potential hazard to the pipeline?

**Answer:** No

**Question 3:** Is it the intent of Clause 10.5.3.7 that Industry may risk-manage the need for signage at navigable water crossings, based on the hazard to the pipeline?

**Answer:** Yes. Except as required by Clause 10.5.3.7 a) & b)

**Question 4:** Is it the intent of Clause 10.5.3.7(a) that “periodic” apply to both “dredging” and “other construction activity”?

**Answer:** No

**Question 5:** Is signage required at wetland crossings?

**Answer:** No. Except as required by Clause 10.5.3.2

**Question 6:** Does the correct interpretation of “drainage systems” in Clause 10.5.3.1(b)(iv) include natural features such as swales, gullies, creeks and wetlands?

**Answer:** No

*Posted March 17, 2015*

The following interpretation regarding CSA Standard CAN/CSA-Z662-11, *Oil and gas pipeline systems*, Clause 7.2.5, has been approved Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials (Z662):

**Question 1**

**a):** In clause 7.2.5 (a) if radiography examination is the NDT method used to qualify welders as specified in ASME IX is the acceptance criteria Section IX QW-191?

**Answer:** Yes

**b)** Is it permissible in 7.2.5 (a) to use the acceptance standards of CSA-Z662 clause 7.11 for welder qualification using radiography on ASME qualified welds?

**Answer:** No

**c)** Is it allowable in 7.2.5 (a) to use the technical setup requirements for radiography as specified in CSA-Z662 for welder qualifications on ASME qualified welds?

**Answer:** No

**d)** Does 7.2.5 (a) make it mandatory that the requirements of ASME V Article 2 be met concerning all aspects of radio-graphic technical technique for welder qualification on ASME qualified welds?

**Answer:** Yes

**Question 2**

**a)** In clause 7.2.5 (b) does radiography have to meet the technical technique requirements of ASME V Article 2?

**Answer:** Yes

**b)** Does clause 7.2.5 (b) allow radiography to be performed to the technical techniques as outlined in CSA-Z662?

**Answer:** No

**c)** Does clause 7.2.5 (b) allow radiography to be performed to the technical techniques as outline in CSA-Z662 and still used the acceptance criteria as listed in ASME B 31.3 Table 341.3.2?

**Answer:** No

**d)** does clause 7.2.5 (b) specify that radiography must be performed to the technical requirements of ASME V Article2 and use the acceptance criteria as listed in ASME B 31.3 Table 341.3.2?

**Answer:** Yes



*Posted March 17, 2015*

The following interpretation regarding CSA Standard CAN/CSA-Z662-11, *Oil and gas pipeline systems*, Hydrostatic Tests, has been approved Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials (Z662):

**Question 1:** I would like to know if a company can use diesel to conduct a pressure test on their pipeline instead of using water.

**Answer:** Yes

*Posted March 17, 2015*

The following interpretation regarding CSA Standard Z245.30-14, *Field-applied external coatings for steel pipeline systems*, Clause 1.2 and Table 1, has been approved Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials:

**Question 1:** Is it intended that the System for liquid-applied coatings be classified by the glass transition temperature of the coating?

**Answer:** No. The System classification for liquid-applied coatings are to be determined by the maximum operating temperature of the coating and the System classification for fusion bond epoxy coatings are determined by the glass transition temperature.

*Posted March 20, 2015*

The following interpretation regarding CSA Standard CAN/CSA-Z662-11, *Oil and gas pipeline systems*, Clauses 4.18.3 and 4.14.3.2, hves been approved Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials (Z662):

**Question 1:** Clause 4.18.3 addresses pressure relieving and allows relief into air. Can HVP product be discharged to air through discharge stack?

**Answer:** No

**Question 2:** Clause 4.14.3.2 (a), is “blowdown” always intended to be a deliberate act of relieving pressure?

**Answer:** No

**Question 3:** Clause 4.14.3.2 (a), is “relieve” always intended to be the release of pressure by some safety device?

**Answer:** No