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.

Posted July 30, 2020

The following interpretation regarding Clause 12.2.5.2.3 of CSA Standard N285.4:19, Periodic inspection of CANDU nuclear power plant components, has been approved by the Members of the CSA Standards Technical Committee on Periodic Inspection of Nuclear Power Plant Components (N285B).

Rationale: The goal of the acceptance criteria is to satisfy the requirement to have no PT-CT contact at normal operating conditions from the time of inspection up to the end of the next periodic inspection interval. Any corrective action required to remove/prevent PT-CT contact prior to end of the next periodic inspection interval should be supported by a request for disposition.

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Question: To demonstrate compliance with Clause 12.2.5.2.3(b) is it necessary to demonstrate that there is no pressure-tube-to-calandria-tube contact in an operational state at the inspection time and up to the end of the next periodic inspection interval?

Answer: Yes

Question: Is an owner/operator expected to consider the effects of change in the in-service loads (i.e., elastic response due to defueling the channel for inspection or to fueling the channel for operation) when evaluating inspection findings against the acceptance standards in Clause 12.2.5.2.3(b)?

Answer: Yes

Posted July 30, 2020

The following interpretation regarding Clauses 1.5, 2.2, 4.3.7.2 to 4.3.7.4, 10.3.7, 10.3.8, 10.7.1, 16.8.7 and Table 4.2 of CSA Standard Z662-19, Oil and gas pipeline systems, has been approved by the CSA Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials.

Question 1a: A pipeline is constructed to an earlier edition of CSA Z662 (e.g. 2015) and requires some instances of change as shown below (change in service, increase in MOP, resumption). The
class location designation as assessed per Clause 10.7.1 has not changed since the 2019 edition has been released. The pipeline has also not had a new crossing per 10.8.1.

If the pipeline requires a change in service fluid (Clause 10.3.7) which modifies the application of the pipeline from one row in table 4.2 to another e.g. “Gas (non-sour service)” to “Sour service fluid”, or from “LVP liquid hydrocarbon (with low flammability)” to “LVP liquid hydrocarbon (with high flammability)” does the design thickness calculation have to use location factors and/or designations as determined by the 2019 edition?

**Answer 1a:** Yes

**Question 1b:** If the pipeline requires a change in service condition per clause 16.8.7, which does not change the application of the pipeline from one row in table 4.2 to another e.g. remains “sour service fluid” does the design thickness calculation have to use location factors and/or designations as determined by the 2019 edition.

**Answer 1b:** No

**Question 2a:** Is it the intent of the standard that, if the pipeline from the scenario in question 1a) requires a change in service fluid (Clause 10.3.7) from one type of LVP (other than fresh water), to another type of LVP (other than fresh water) e.g. from LVP multiphase to LVP liquid hydrocarbon (with high flammability) do the DGA requirements as specified in clauses 4.3.7.2 through 4.3.7.4 apply?

**Answer 2a:** No

**Question 2b:** Is it the intent of the standard that, if the pipeline requires a change in service fluid (Clause 10.3.7) from something other than LVP (e.g. Gas) to a type of LVP (other than fresh water), do the DGA requirements as specified in clauses 4.3.7.2 through 4.3.7.4 apply?

**Answer 2b:** Yes

**Question 3:** If the pipeline from the scenario in question 1a) requires upgrading to a higher maximum operating pressure (Clause 10.3.8) does the design thickness calculation have to use class location factors and/or designations as determined by the 2019 edition?

**Answer 3:** Yes

*Posted July 30, 2020*

The following interpretation regarding Clauses 1.5, 2.2, 4.3.7.2 to 4.3.7.4, 10.7.1, and 10.7.2 note of CSA Standard Z662-19, Oil and gas pipeline systems, has been approved by the CSA Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials.

**Question 1a:** An LVP pipeline (other than freshwater) is constructed to an earlier edition of CSA Z662 (2015) and has been subject to a class location change as determined by Clause 10.7.1 and 10.7.2 because of an increase in housing. This change in class location happens to have occurred by a river.
Does the company have to determine whether the river would be considered a DGA for this existing line per Clause 4.3.7.2?

**Answer 1a:** No

**Question 1b:** Does the company have to determine if a release from the pipeline can affect this river or other DGA’s in the area that the company has previously designated as required by Clause 4.3.7.3?

**Answer 1b:** No

**Question 1c:** Would Clause 4.3.7.4 apply to the scenario in Question 1a?

**Answer 1c:** No

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**Posted July 30, 2020**

The following interpretation regarding Clauses 1.5, 2.2, 10.7.1, and 10.15.2 of CSA Standard Z662-19, Oil and gas pipeline systems, has been approved by the CSA Technical Committee on *Petroleum & Natural Gas Industry Pipeline Systems and Materials*.

**Question 1a:** A pipeline is constructed to an earlier edition of CSA Z662 (e.g. 2015) and requires reactivation, per Clause 10.15.2, after a period of deactivation. Since the 2019 edition:

- The class location designation, as assessed per Clause 10.7.1, has not changed.
- The service fluid has not changed, as described in Clause 10.3.7
- There have been no new crossings per Clause 10.8.1.

Do the location factors and/or designations as determined by the 2019 edition now apply to the pipeline?

**Answer 1a:** No

**Question 1b:** Do the DGA requirements as specified in Clauses 4.3.7.2 through 4.3.7.4 of the 2019 edition now apply to the pipeline described in question 1a?

**Answer 1b:** No

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**Posted July 30, 2020**

The following interpretation regarding Clauses 1.5, 2.2, 4.3.7.2 to 4.3.7.4, 10.10.2.5.1, 10.10.2.5.2, 10.11.2.3.1, and 10.11.2.3.2 of CSA Standard Z662-19, Oil and gas pipeline systems, has been approved by the CSA Technical Committee on *Petroleum & Natural Gas Industry Pipeline Systems and Materials*. 
**Question 1a:** An LVP pipeline (other than fresh water) is constructed to an earlier edition of CSA Z662 (e.g. 2015) and requires assessment of corroded areas per Clause 10.10.2.5.1 and assessment of grinding per Clause 10.11.2.3.1.

If the anomaly was in a location that could affect a DGA, do the limitations on location factor (Clause 4.3.7.4) apply to the equation in 10.10.2.5.1 or 10.11.2.3.1?

**Answer 1a:** No

**Question 1b:** If the pipeline was built to the 2019 edition and the anomaly was in a location that could affect a DGA, do the limitations on location factor (Clause 4.3.7.4) apply to the equation in 10.10.2.5.1 or 10.11.2.3.1?

**Answer 1b:** Yes

*Posted July 30, 2020*

The following interpretation regarding Clause 7.7.8.3 of CSA Standard Z662-19, Oil and gas pipeline systems, has been approved by the CSA Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials.

**Question:** Is it the intent that acceptable “depth” measurement of a slag inclusion not exceed 1mm in any direction?

**Answer:** Yes

*Posted July 30, 2020*

The following interpretation regarding Clause 6.5 of CSA Standard Z245.11-17, Steel fittings, has been approved by the CSA Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials.

**Question 1:** Does Clause 6.5.2 require that scraper bars be attached with full penetration welds per Clause 6.3.2?

**Answer 1:** No

**Question 2:** Does Clause 6.5.1 allow weld joint designs other than “full penetration” to be specified for the attachment of scraper bars in a tee?

**Answer 2:** Yes

*Posted July 30, 2020*
The following interpretation regarding Clause 12.7.5.2 & 4.7.1 of CSA Standard Z662-19, Oil and gas pipeline systems, has been approved by the CSA Technical Committee on Petroleum & Natural Gas Industry Pipeline Systems and Materials.

**Question:** Does Clause 12.7.5.2 include all welds that cannot be pressure tested?

**Answer:** Yes

**Question:** May soil restraint, such as that provided by specified depth of cover or soil density, be considered as a “special design measure” per Clause 4.7.1?

**Answer:** Yes

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Posted June 25, 2020

The following interpretation regarding Clause 4.4.2 of CSA Standard A440.4-19, Window, door, and skylight installation, has been approved by the Members of the CSA Standards Technical Committee on Performance Standard for Windows.

**Question 1:** Does Clause 4.4.2 of CSA A440.4-19 consider that manufacturers complying with this clause should provide written installation instructions, that are to be used on-site, which would include anchor details as required by NAFS-17?

**Answer:** Yes

**Question 2:** Does Clause 6.1.3 of CSA A440.4-19 consider that, given the requirements of Clauses 10.1.1 and 10.2.4.1, continuity between the fenestration product and the water-resistant barrier should be provided in a way to prevent impacts on the fenestration product drainage system and the installation cavity drainage systems?

**Answer:** Yes

**Question 3:** Clause 6.5.4.1 of CSA A440.4-19 does not specify a minimum thickness when plywood is used as the required wood sub-frame. Does 19 mm thick plywood, that is sufficient to resist the loads imposed on it, meet the requirement of Clause 6.5.4.1 of CSA A440.4-19?

**Answer:** Yes

**Question 4:** Do the requirements of Clause 8.6.3 with respect to the insertion of the drywall into the J-mould only apply when the drywall is intended to serve as the airtight component of the air barrier system?

**Answer:** Yes

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Posted June 5, 2020

The following interpretation regarding Clauses 7.11.2 (Basis), 7.11.5 Filtration Effect (Filtration Effect) of CSA Standards N288.2-14 and N288.2-19, Guidelines for calculating the radiological
consequences to the public of a release of airborne radioactive material for nuclear reactor accidents, has been approved by the Members of the CSA Standards Technical Committee on *Environmental Management for Nuclear Facilities (N288).*

**Rationale:** The term “filtration” normally applies to the reduction in indoor particulate concentrations compared to out of doors particulate concentrations arising from a filtration effect of a home with closed doors and windows.

The inhalation pathway protection factor for indoor occupancy assumes a filtration effect when outside air mixes with air inside the house. In the case of tritium (HTO) the filtration effect is negligible, so it is not appropriate to apply the protection factor in Clause 7.11.5, since it was derived for particulates.

**Question:** Does CSA N288.2 apply a protection factor less than 1 to the dose from a short term tritium release to an individual at the site boundary?  

**Answer:** No

 Posted May 28, 2020

The following interpretation regarding Clause 4.8.5 of CSA Standard ANSI Z83.25/CSA 3.19, Direct gas-fired process air heaters, has been approved by the Members of the CSA Joint Technical Committee on *Gas Standards.*

**Question:** Last sentence of paragraph: “For intermittent or continuous pilot ignition systems, the supervision shall be at a point furthermore from the source of ignition.” Is the intent of this paragraph is to verify flame propagation?  

**Answer:** Yes

**Question:** Was this paragraph written to apply to flame rods or other localized flame detection methods?  

**Answer:** Yes

**Question:** Were the operating characteristics of UV sensors considered when paragraph was authored?  

**Answer:** Yes

 Posted May 28, 2020

The following interpretation regarding Clause 4.8.4 of CSA Standard ANSI Z83.25/CSA 3.19, Direct gas-fired process air heaters, has been approved by the Members of the CSA Joint Technical Committee on *Gas Standards.*

**Question 1:** Section 4.8.4 states that “The automatic gas ignition system shall operate in accordance with the following, as applicable: (f) The primary safety control shall de-energize all main gas safety shutoff valves within the time specified in Table 1 after flame failure. A single
trial for re-ignition may occur but, if it is not successful or is not provided, the primary safety control shall assume a lockout position and shall require a manual restart.” The definition of primary safety control is “a control responsive directly to flame properties, sensing the presence of flame and causing fuel to be shut off in the event of ignition or flame failure requiring manual reset.” Was it the intention of section 4.8.4, along with the definition of primary safety control, to require that a flame safeguard device has its own built in integral manual reset?

**Answer:** No

**Question 2:** If the answer to Question 1 is no, can the manual reset/restart functionality be part of an overall control system which prevents the burner from automatically relighting, but in which the flame safeguard does not have its own internal manual reset?

**Answer:** Yes

If the answer is yes, restarting of the burner would require manual intervention with the control system, but not specifically manually resetting the flame safeguard.

Agreed.

*Posted March 18, 2020*

The following interpretation regarding Clauses 8.3.4 and 10.1.4 of CSA Standard N293-12, Fire protection for nuclear power plants, has been approved by the Members of the CSA Standards Technical Committee on *Fire Protection for Nuclear Power Plants (N293).*

**Background:** There is a concern that an inherent conflict-of-interest (perceived or real) could exist if the vendor tasked with determining the personnel and equipment needs [via c.10.1.4] is also tasked with assessing the sufficiency of personnel and equipment [via c.10.2.3]. The lineage that the Fire Protection Program Audit [c.8.3.4] is to include an assessment of sufficient industrial fire brigade personnel and equipment [c.10.2.3]. It relies on the position that the “performance levels” to be assessed via an emergency response team drill [c.8.3.4(h)] are those specified in c.10.8, Industrial Fire Brigade Performance Criteria, as “performance requirements”.

**Question:** Can the 3rd party vendor performing Fire Analysis as per 10.1.4 also perform Fire Protection Program Audit as per 8.3.4?

**Answer:** Yes

*Posted February 20, 2020*

The following interpretation regarding Clause 6.2.7.3 of CSA Standard C22.3 No. 7-15, Underground Systems, has been approved by Members of the CSA Standards Technical Committee on *Underground Systems.*

**Background:** Quebec department of transportation (Transport Québec) owns subsurface chambers in which supply conductors for surveillance cameras (600 V) and fiber optic cables are installed. Clause 6.2.7.3 of the C22.3 No.7-15 states that supply cables and communication
cables may occupy the same subsurface chamber if “(...) c) communication cables or equipment with exposed non-current-carrying parts is bonded to the supply neutral and the supply cable metallic shield/sheath and the whole effectively grounded;(...)”

**Question:** Does it mean that the dielectric jacket of a fiber optic cable shall be connected to the supply neutral conductor?

**Answer:** No.