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File Ad-GA-RG-CSA 0101
28 June 2023

To: All Holders of Authorizations to Build and Operate Pipelines under the
Canada Energy Regulator's Jurisdiction

Canadian Standards Association Z662 Safety Class Method

A new edition of the Canadian Standards Association (**CSA**) *Z662 Oil & Gas Pipeline Systems Standard (Z662)*, which is incorporated by reference in the *Canadian Energy Regulator Onshore Pipeline Regulations (OPR)*, will be published in June of 2023. The Commission of the Canada Energy Regulator (**CER**) is of the view that this edition of the standard, in its introduction of the optional Safety Class approach, contains changes that have not yet been demonstrated to consistently provide suitable levels of safety for certain activities that might be encountered in the operation of the pipeline. One example of such a situation would be the evaluation of anomalies when applying the Safety Class approach.

Until the Safety Class approach has been demonstrated to consistently provide suitable levels of safety, the Commission will need to oversee its use and requires certain information to assess whether a particular intended use of the Safety Class approach will provide a suitable level of safety or whether additional measures may be required for such use.

Based on the above, the Commission considers that imposing a requirement to provide such information to the CER is required immediately for the safety or security of persons, regulated facilities or for the protection of property and the environment. To impose this requirement, the Commission has issued Order MO-015-2023 (attached), requiring all holders of authorizations to build and operate pipelines under the CER's jurisdiction, intending to utilize the optional Annex C of CSA Z662:23, Clause C.5 Pressure Design (Safety Class approach) as permitted by Clause 4 of CSA Z662:23, to submit a notification to the CER through the Online Event Reporting System a minimum of 60 days before constructing or operating a pipeline using the Safety Class approach. The notification shall include:

1. The Class Location Designation for the segments being reported as given in Table 4.1 of CSA Z662:23;
2. A description of the use case including:
 - a. Any application of the Safety Class methodology used in the assessment of imperfections;
 - b. a list of the segments to which the Safety Class methodology is being applied;
 - c. details of any crossings;
 - d. Intended range of operating conditions.

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3. All factors used in the calculation of the design pressure and allowable Maximum Operating Pressure, including:
 - a. Service fluid and all associated parameters (Tables C.2 and C.3 of CSA Z662:23);
 - b. Population densities used and details of how they were derived;
 - c. Class factors including the components used to determine it:
 - i. Basic class factor per Clause C.5.3.3 of CSA Z662:23;
 - ii. Hit rate factor per Clause C.5.3.4 of CSA Z662:23;
 - iii. Fracture toughness factor per Clause C.5.3.5 of CSA Z662:23.
 - d. Hoop stress factor per Clause C.5.2 of CSA Z662:23;
 - e. Elevation change used to define the hoop stress factor.

If you have any questions regarding Order MO-015-2023, please contact the Director of Research and Innovation at ResearchandInnovation@cer-rec.gc.ca or through our toll-free number at 1-800-899-1265.

Yours sincerely,

Signed by

Ramona Sladic
Secretary of the Commission

Attachment