

National Energy
Board



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de l'énergie

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To: All Companies under National Energy Board Jurisdiction
Canadian Energy Pipeline Association
Canadian Association of Petroleum Producers
Provincial and Territorial Regulators

**National Energy Board Information Advisory
NEB IA 2018-001
Interpretation of Board Imposed Pressure Restrictions**

Please find attached Information Advisory IA 2018-001.

The National Energy Board (Board) has issued the attached Information Advisory to provide additional clarity, regarding its interpretation and expectations of Board imposed pressure restrictions.

The Board expects that this Information Advisory be given wide circulation to all relevant personnel within your organization.

Yours truly,

Original signed by

Sheri Young
Secretary of the Board

Attachment



Board Imposed Pressure Restrictions

Basis for Issuance

The *NEB Event Reporting Guidelines* (the Guidelines) set out the Board's expectations with respect to reporting of overpressures events including those that would be characterized as an incident due to "Operation Beyond Design Limits".¹

The Board understands however that there continues to be a lack of clarity within regulated companies surrounding the interpretation of Board-imposed pressure restrictions; specifically with respect to the requirement, specified in the Guidelines, that pressure during operation shall not exceed a restricted pressure specified by the Board. The goal of this advisory is to:

- (i) Confirm that where a pipeline² is operating under a Board-imposed pressure restriction, any time the pressure during operation exceeds the Restricted Operating Pressure (ROP)³, it constitutes a reportable incident; and
- (ii) Clarify the Board's expectations for operating a pipeline with an ROP as opposed to a Maximum Operating Pressure (MOP), and the basis for these expectations.

Background

Clause 2 of CSA Z662-15 (the Standard) defines the MOP as the maximum pressure at which piping is qualified to be operated. The MOP is established in accordance with Clause 8 of the Standard, by taking the lesser of

- 1) the lowest test pressure recorded in a test section divided by a safety factor and
- 2) the design pressure

As further defined in the Standard, pressure-control systems and overpressure protection are required as follows:

"Pressure-control systems shall be installed where supply from any source makes it possible to pressurize the piping above its maximum operating pressure. Such pressure-control systems shall be set to operate at or below the maximum operating pressure."

¹ See Clause 5.1.5 of the Guidelines (effective 1 April 2018) at https://www.neb-one.gc.ca/bts/ctrg/gnnb/rprtngdlns/index-eng.html#s5_1_5

² Throughout this advisory the term 'pipeline' is used as defined in section 2 of the *National Energy Board Act*, R.S.C., 1985, c. N-7.

³ Restricted Operating Pressures (ROPs) means a Board-imposed pressure restriction including but not limited to those in Safety Orders, Miscellaneous Orders, Inspection Officer Orders, or Letters of Direction.

“Where failure of the pressure-control system, or other causes, can result in the maximum operating pressure of the piping being exceeded, overpressure protection shall be installed to ensure that the maximum operating pressure is not exceeded by more than 10% or by 35 kPa, whichever is greater.”

Whereas the MOP is determined according to the Standard as described above, an ROP is generally imposed by the Board as a temporary measure to address immediate deleterious effects of integrity-related or other operational issues. For example, the ROP could be set by restricting the operating pressure to a percentage (e.g. 80%) of the highest pressure recorded in a specified time period (typically 90 days before the event that prompted the pressure restriction). An ROP is set based on available facts and general engineering reasoning, and is intended to provide a margin of safety until additional information can be provided to the Board to demonstrate the pipeline is fit for service at the MOP (or an amended MOP).

Since all the provisions of the Standard applicable to determining the MOP are not necessarily applied in determining the ROP, the ROP cannot be considered an amended MOP⁴. Therefore the 10% overpressure protection referred to in the standard for the MOP cannot be applied to the ROP. Rather, as set out in the Guidelines, any time a pipeline is operated at a pressure greater than 100% of an ROP, it would constitute a reportable incident.

NEB Expectations

The Board expects that for pipelines with Board imposed pressure restrictions, the maximum permissible pressure during operation under any conditions (normal operating or upset) will not exceed the ROP, and overpressure protection must be set appropriately to achieve this. That is to say, overpressure protection must be set to act at or below the ROP.

For More Information

If you have any questions regarding this advisory please contact Pipeline Integrity personnel at the Board through a toll free number at 1-800-899-1265.

⁴ “Amended MOP” means a reduced, adjusted, approved or revised MOP subject to the requirement of the CSA Z662.