



File OF-Surv-Inc-2014-33 01
25 January 2016

Mr. Alex Poubaix
Chief Operating Officer
TransCanada PipeLines Limited
450 1st Street SW
Calgary, AB T2P 5H1
Facsimile 403-920-2410

Dear Mr. Poubaix:

**Nova Gas Transmission Ltd. (NGTL)
Amended Order AO-009-SG-N081-001-2014
TransCanada's 20 and 21 August 2015 Filings
Requests to Remove Pressure Restrictions**

On 5 March 2014, the National Energy Board (NEB or Board) issued Safety Order SG-N081-001-2014 in response to a recent trend of pipeline releases on the NGTL system. Among other things, the Order required TransCanada to proactively reduce the maximum operating pressure on the unpiggable pipelines previously identified by the company to have the highest societal risk.

In accordance with Condition 5(c) of Amended Order AO-008-SG-N081-001-2014, on 20 and 21 August 2015, TransCanada filed requests to remove the pressure restrictions on the following NGTL pipelines based upon the accompanying engineering assessments:

- Wildcat Lateral;
- Sylvan Lake Lateral;
- Donalda Lateral, and
- Crossfield Lateral.

The Board has considered NGTL's request and approves the removal of the pressure restrictions imposed on the aforementioned pipelines under the Amended Order AO-008-SG-N081-001-2014. The Board has issued the attached Amended Order AO-009-SG-N081-001-2014 reflecting these approved changes.

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In its approval to remove the pressure restriction, the Board understands that as a result of excavations conducted to validate reported in-line inspection anomalies on both the Wildcat and Crossfield Laterals, opportunistic inspections of the longitudinal Electric Resistance Welded (ERW) seams detected flaws that were subsequently repaired. One seam weld flaw on the Wildcat Lateral had an actual maximum depth approaching fifty (50) percent. Whereas the Board accepts TransCanada's argument that seam weld flaws are generally considered to be stable hazards (not varying over time), the Board has investigated incidents where such flaws have eventually grown to failure in gas service. A number of factors can influence the respective outcomes. For instance, steady state operations may result in a stable condition, but would have no effect on mechanisms such as selective seam weld corrosion. Therefore, in addition to any opportunistic inspections that may present themselves, TransCanada should enhance its integrity management program to more fully assess the hazard posed by seam weld flaws. In that regard, TransCanada may perform in-line inspections that target seam weld flaws including mechanisms such as selective corrosion. Moreover, pressure profiles may be periodically analyzed to ensure cycling is not promoting seam weld flaw growth through mechanisms such as corrosion fatigue. In brief, TransCanada should consider implementing all effective means of mitigating the hazard posed by seam weld failures, particularly in vintage ERW pipe.

Yours truly,



for
Sheri Young
Secretary of the Board

Attachment



ORDER AO-009-SG-N081-001-2014

IN THE MATTER OF the *National Energy Board Act*
(the Act) and the regulations made thereunder; and

IN THE MATTER OF promoting the safety and security of
operation of the TransCanada Alberta system by TransCanada
PipeLines Limited (TransCanada), National Energy Board
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BEFORE the Board on 25 January 2016.

WHEREAS the Board issued Safety Order SG-N081-001-2014 (the Order) on 5 March 2014
requiring specific safety and security measures of TransCanada;

AND WHEREAS the Board issued Order AO-001-SG-N081-001-2014 on 28 March 2014
extending the deadlines for compliance to Conditions 1 and 2 of the Order;

AND WHEREAS the Board issued Order AO-002-SG-N081-001-2014 on 14 April 2014 to
vary the pressure restrictions specified by the Board due to impacts to shippers and end users;

AND WHEREAS the Board issued Order AO-003-SG-N081-001-2014 on 15 August 2014 to
vary the Schedule A by transferring the Donalda Lateral from Schedule A to Schedule B and
permitting TransCanada to directly examine the Unity Lateral;

AND WHEREAS the Board issued Order AO-004-SG-N081-001-2014 on 4 June 2015 to vary
the Schedule A by removing the Suffield South Lateral;

AND WHEREAS the Board issued Order AO-005-SG-N081-001-2014 on 16 July 2015 to vary
Schedule B by removing the Bassano South Lateral;

AND WHEREAS the Board issued Order AO-006-SG-N081-001-2014 on 28 August 2015 to
vary Schedule B by removing the Minnehik Buck Lake Lateral Loop;

AND WHEREAS the Board issued AO-007-SG-N081-001-2014 on 30 October 2015 to vary
Schedule A by removing the Unity Lateral, and Schedule B by removing the Robb Lateral,
Cutbank River Lateral and Quirk Creek Lateral;

AND WHEREAS the Board issued AO-008-SG-N081-001-2014 on 9 December 2015 to vary
Schedule C by removing the Ferrier North Lateral;

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NOW THEREFORE, pursuant to sections 12 and 48 of the Act, the Board hereby orders the following:

The Wildcat Lateral is removed from Schedule B.

The Sylvan Lake Lateral is removed from Schedule B.

The Donalda Lateral is removed from Schedule B.

The Crossfield Lateral is removed from Schedule B.

As hereby amended, the consolidated conditions and Schedules of the Order now read as follows:

1. Subject to the conditions of the Order, the maximum operating pressure of the thirteen (13) remaining unpiggable NGTL pipelines that TransCanada has calculated to have the highest societal risk shall be maintained at or below the pressures listed in Schedules B, C and D.
2. [Complied – AO-002-SG-N081-001-2014]
3. NGTL shall advise the Board of pipelines, if any, for which natural gas supply diminishment resulting from the pressure reductions, as listed in the Schedules, are anticipated to result in a significant impact to public safety.
4. For each pipeline listed in Schedule A:
 - a. [Complied – AO-007-SG-N081-001-2014]
 - b. [Complied – AO-007-SG-N081-001-2014]
 - c. [Complied – AO-007-SG-N081-001-2014]
 - d. [Complied – AO-002-SG-N081-001-2014]
 - e. [Complied – AO-002-SG-N081-001-2014]
 - f. [Complied – AO-007-SG-N081-001-2014]
5. For each pipeline listed in Schedule B:
 - a. TransCanada shall conduct the appropriate in-line inspection (ILI) for the susceptible hazard(s), subsequent correlation excavations to validate the ILI and as a result of the ILI results any applicable mitigation of the hazard(s) before 1 September 2015.

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- b. If TransCanada is unable to complete the requirements outlined in Condition 5a above, then TransCanada shall conduct a hydrotest as per CSA Z662-11 Clause 8 and Table 8.1 before 1 September 2015.
 - c. TransCanada shall provide the Board an Engineering Assessment which is in compliance with CSA Z662 requirements, that demonstrates the line is fit for continued service by 1 September 2015. The Engineering Assessment shall be signed by TransCanada's Accountable Officer.
 - d. In the interim, to provide assurance of the safety of the pipeline, TransCanada shall, only for the portions of the pipeline with the high societal risk, conduct Direct Assessments for the applicable hazard(s) in compliance with the appropriate NACE DA SP for the relevant hazard(s) before 31 December 2014. This condition includes conducting the above ground assessments and correlation excavations outlined in the relevant NACE DA SP.
 - e. TransCanada shall provide the Board a letter, signed by TransCanada's Accountable Officer, by 31 December 2014 confirming that the DA has been completed in compliance with the NACE DA SP for the relevant hazard(s) and that an Engineering Assessment has been completed demonstrating that the pipeline is fit for purpose up to the 1 September 2015 deadline.
 - f. Until Condition 5c is satisfied, TransCanada shall conduct appropriate leak detection on the entire pipeline monthly to verify that there are no leaks.
6. The pressure restrictions shall remain in place until a plan and program to assess the integrity of the subject lines is approved by the Board and implemented by TransCanada.
7. TransCanada shall comply with all of the conditions of this Order unless the Board otherwise directs.

NATIONAL ENERGY BOARD

Original signed by L. George for

Sheri Young
Secretary of the Board

Schedule A

[Complied – AO-007-SG-N081-001-2014]

Schedule B – Pressure Reduction of 5% or 10% below 90 Day High Pressure (as Specified)

Line Number	Facility	Licensed MAOP	90 Day High Pressure ending March 4 2014	Reduced MAOP
1	Nevis Lateral	7068	6155	5847
2	Crossfield Lateral Loop	6517	5478	5204

Schedule C – Pressure Reduction of 20% below 90 Day High Pressure

Line Number	Facility	Licensed MAOP	90 Day High Pressure ending March 4 2014	Reduced MAOP
1	Eastern Alberta System Mainline Empress to Princess Loop 3	5695	4634	3707
2	Waterton Lateral	6516	6266	5013
3	Waterton Interchange Lateral	7446	5323	4258
4	Ricinus Lateral	7448	6000	4800
5	East Lateral Loop	6280	4806	3845
6	Alderson Lateral	6737	6220	4976
7	Atmore Lateral	8462	7326	5861
8	September Lake Lateral	8455	7548	6038
9	North Lateral Extension Stage 1 Brooks	8450	5690	4552

Schedule D – No additional Pressure Restriction Required

Line Number	Facility	Licensed MAOP	90 Day High Pressure ending March 4 2014	Reduced MAOP
1	Kaybob South Lateral	6248	nil	Not applicable; line is currently out of service pending repair and submission of EA per Order
2	Carstairs Lateral Sales	6206	690	Not applicable; line is operated at low pressure