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File 3427016
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Dorothy Golosinski
Vice President, Regulatory
Trans Mountain Canada Inc.
Trans Mountain Pipeline ULC
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Dear Dorothy Golosinski:

**Trans Mountain Pipeline ULC
Trans Mountain Expansion Project
Certificate of Public Convenience and Necessity OC-2, as amended
Order XO-T260-009-2016, as amended
Mainline piping within the boundaries of three North British Columbia Pump
Stations (Blue River, McMurphy, and Blackpool Pump Stations)
Leave to Open Decision No. 22**

**Before: K. Penney, Presiding Commissioner; W. Jacknife, Commissioner;
S. Sajnovics, Commissioner**

On 23 February 2023, Trans Mountain Pipeline ULC (**Trans Mountain**) submitted a Leave to Open (**LTO**) application for the mainline piping for Line 1 and Line 2 within the boundaries of the Blue River, McMurphy, and Blackpool Pump Stations ([C23371](#)). Trans Mountain indicated that the mainline piping within the Blue River, McMurphy, and Blackpool Pump Stations was excluded from Trans Mountain's LTO application for the North British Columbia (**BC**) Pump Stations – Blue River, McMurphy, and Blackpool Pump Stations (**North BC Pump Stations LTO application**) which was filed on 16 September 2022 ([C20968](#)). On 9 December 2022, the Commission of the Canada Energy Regulator issued LTO Decision No. 4 together with Order OPSO-004-2022 approving LTO for the North BC Pump Stations LTO application ([C22481](#)).

On 23 February 2024, Trans Mountain filed an addendum to the LTO application (**Addendum**) ([C28482](#)).

Background

On 6 June 2016, the National Energy Board (**NEB**), predecessor to the Canada Energy Regulator (**CER**), issued Order XO-T260-009-2016, the effect of which was to approve the new Line 2 pump stations ([A77401](#)) of the Trans Mountain Expansion Project (**Project**). On 21 June 2019, the NEB issued Certificate of Public Convenience and Necessity OC-2 and OC-065 ([C00061](#)) to Trans Mountain authorizing the construction and operation of the Project.

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Paragraph 180(1)(b) and subsection 213(1) of the *Canadian Energy Regulatory Act (CER Act)*, reproduced below, require companies to seek and obtain LTO for pipelines, which includes mainline piping within pump stations.

180 (1) A company must not operate a pipeline unless

...

(b) the company has been granted leave under this Part to open the pipeline.

213 (1) A pipeline or section of a pipeline must not be opened for the transmission of hydrocarbons or any other commodity by a company unless an order granting it leave to do so has been made by the Commission.

(2) Leave may be granted by the Commission under this section only if it is satisfied that the pipeline may safely be opened for transmission.

On 28 October 2021, Trans Mountain requested an exemption from the requirements of paragraph 180(1)(b) and subsection 213(1) of the CER Act to obtain LTO for low-pressure small diameter (NPS¹ 4 and under) piping including the small diameter drain system piping that is being installed at each of the new pump stations (**Small Diameter Piping**). On 24 February 2022, the Commission issued Letter Decision No. 113 and Order MO-008-2022 granting the request for the Small Diameter Piping for all new pump stations, including the Blue River, McMurphy, and Blackpool Pump Stations ([C17846](#)).

On 10 June 2022, the Commission issued Letter No. 143 ([C19512](#)) regarding the timing of dry commissioning and LTO applications. The Commission stated that it needed confirmation of completion of dry commissioning activities for the applicable facility in order to make a decision regarding an application for LTO. The Commission further stated that Trans Mountain may apply for LTO approval separately from providing information confirming completion of dry commissioning activities for the applicable facility.

On 9 December 2022, the Commission issued LTO Decision No. 4 for the North BC Pump Stations, including Order OPSO-004-2022 ([C22481](#)), granting LTO for those facilities at a maximum operating pressure (**MOP**) of 9 930 kPa.

In its 23 February 2023 LTO application (**Application**), Trans Mountain applied for LTO for the mainline piping within the boundaries of Blue River, McMurphy, and Blackpool Pump Stations ([C23371](#)), as well as confirming completion of dry commissioning activities for the mainline piping. In its submission, Trans Mountain indicated the following:

- The requested MOP is:
 - 6 465 kPa for the mainline piping within Blue River corresponding to Line 1 (Test Package 9 BR-TP-015 – Appendix U [C23371-8](#), and Test Package 10 BR-TP-016 – Appendix V [C23371-9](#)).
 - 9 930 kPa for the mainline piping within Blue River, McMurphy, and Blackpool Pump Stations corresponding to Line 2 (Test Package 7 BR-TP-013 – Appendix S [C23371-6](#), Test Package 8 BR-TP-014 – Appendix T [C23371-7](#), Test Package 4 MM-TP-007 – Appendix W [C23371-10](#), and Test Package 3 BP-TP-003 – Appendix X [C23371-11](#)).

¹ NPS stands for Nominal Pipeline Size.

- Appendix D ([C23371-2](#)), Appendix K ([C23371-3](#)), and Appendix P ([C23371-4](#)) are revised versions of the same Piping and Instrumentation Drawings (**P&IDs**) that were filed with the North BC Pump Stations LTO application. The revised Appendices D, K, and P include the mainline piping at Blue River, McMurphy, and Blackpool Pump Stations respectively.
- Appendix R ([C23371-5](#)) includes the revised Component Testing Summary that was filed with the North BC Pump Stations LTO application. The identified components were all successfully shop tested at the manufacturer's facility.

In addition, Trans Mountain requested pursuant to section 69 of the CER Act that the Commission vary Order OPSO-004-2022 to add to that Order the mainline piping within the boundaries of the North BC Pump Stations.

On 12 May 2023, in response to CER Information Request (IR) No. 13 ([C24481](#)), Trans Mountain submitted additional technical information regarding its 23 February 2023 Application, including revised P&IDs of the pressure tested facilities with the relevant hydrotest equipment indicated.

On 5 February 2024, the Commission issued Letter Decision No. 259 ([C28317](#)) granting relief from the Condition 114 requirement to delay non-destructive examination of final tie-in welds and any repairs to them for at least 48 hours following weld completion for certain final tie-ins that are required to connect the new sending and receiving traps located at the Blue River Pump Station to the existing Line 1.

On 23 February 2024, Trans Mountain filed an Addendum ([C28482](#)) to the 23 February 2023 Application and indicated the following:

- Trans Mountain determined the tie-in spool hydrotested under Test Package 10 BR-TP-016 – Appendix V ([C23371-9](#)) for the Blue River Pump Station needed to be altered to facilitate the tie-in from the Line 1 trap piping to the inbound existing NPS 24 mainline piping, currently in Line 1 service (the tie-in spool is 13.89 metres in length).
- Test Package 10 BR-TP-016 remains valid for the outbound tie-in spool (i.e., tie-in spool to connect the Line 1 trap piping to the outbound NPS24 mainline piping), and Test Package TS-BR-NPS24 in Appendix Y ([C28482-1](#)) is the hydrotest for the inbound tie-in spool.
- The requested MOP remains as 6 465 kPa.
- A revised version of Appendix D ([C28482-1](#)), which contains the highlighted P&ID, has been included to show the changes.
- Due to concerns raised in the Quality Assurance Verification Report submitted in December 2023 under Condition 105 (non-conformance report FG-JRH-NCR-0002), regarding certain slab gate valves on the Project, Trans Mountain completed a review and inspection of all valves, including the four slab gate valves, BR-1ESV-0003, BR-1ESV-0005, BR-2ESV-0003 and BR-2ESV-0005, all located in the Blue River Pump Station trap facilities, with the following comments:
 - Valves BR-1ESV-0003, BR-1ESV-0005, and BR-2ESV-0005 were replaced with new valves which were manufactured by a fabricator included on Trans Mountain's Approved Manufacturer List as per its Quality Management Program for the Project.

- Valve BR-2ESV-0003 was repaired, hydrotested, re-installed onsite and then function tested.
- To support the verification of the fitness for service of the four slab gate valves, additional testing documentation is included to provide further details regarding the inspections and tests completed.

On 15 March 2024, in response to CER IR No. 42 ([C28804](#)), Trans Mountain submitted additional technical information regarding Test Package TS-BR-NPS24, which was included in the Addendum.

Decision

For the reasons that follow, the Commission is satisfied that the mainline piping within the boundaries of the Blue River, McMurphy, and Blackpool Pump Stations may safely be opened for transmission. Accordingly, pursuant to section 213 of the CER Act, the Commission issues Order OPSO-011-2024 which grants Trans Mountain's LTO for the mainline piping within the boundaries of the Blue River, McMurphy, and Blackpool Pump Stations at the requested MOP of:

- i. 6 465 kPa for the mainline piping within the Blue River Pump Station corresponding to Line 1; and
- ii. 9 930 kPa for the mainline piping within the Blue River, McMurphy, and Blackpool Pump Stations corresponding to Line 2.

Commission analysis and findings

Trans Mountain is taking a phased approach to the construction of the Project. The Commission's decision only applies to the mainline piping within the boundaries of the Blue River, McMurphy, and Blackpool Pump Stations and does not grant LTO the Project as a whole.

Mainline piping leave to open requirements

Before granting LTO approval, the Commission must be satisfied that the pipeline or facility has been constructed in compliance with all relevant conditions and commitments and that it can be safely opened for transmission. This approach is consistent with subsection 213(2) of the CER Act which requires the Commission to be satisfied that the pipeline, which includes pump stations and terminals, may safely be opened for transmission before granting LTO.

The mainline piping within the Blue River, McMurphy, and Blackpool Pump Stations was hydrostatically tested in accordance with the applicable specifications filed under Condition 112, as consistent with the *CER Onshore Pipeline Regulations* and the Canadian Standards Association *Z662 Oil and gas pipeline systems*. The facilities were divided into a series of test packages, where the piping was subjected to a strength test at a prescribed minimum test pressure of 125% of the proposed maximum operating pressure. This strength test was followed by a leak test, with the test pressure reduced to a minimum of 110% of maximum operating pressure.

Trans Mountain has conducted non-destructive examinations of any welded connections at the mainline piping within the Blue River, McMurphy, and Blackpool Pump Stations for 100% of their circumference. Trans Mountain previously submitted a request for and was granted relief from Condition 114 on the final tie-in welds on either end of the tie-in spool to connect

the Line 1 trap piping to the inbound existing NPS 24 mainline piping at the Blue River Pump Station.

The Commission accepts Trans Mountain's confirmation of the completion of dry commissioning activities for the mainline piping within the Blue River, McMurphy, and Blackpool Pump Stations.

The Commission also accepts Trans Mountain's documentation to confirm the slab gate valves included in the scope of the Addendum are fit for service.

Request to vary Order OPSO-004-2022

The Commission notes Trans Mountain requests that the Commission vary LTO Order OPSO-004-2022 for the North BC Pump Stations so that it includes the mainline piping that is the subject of this LTO Application (including the Addendum). Rather, the Commission has decided to issue a separate LTO Order for administrative purposes. The attached LTO Order contains a whereas clause that references LTO Order OPSO-004-2022 as it relates to the North BC Pump Stations LTO application.

Yours sincerely,

Signed by

Ramona Sladic
Secretary of the Commission

Attachment

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