Appendix B Section 21 Application

BC Hydro Letter



Generation and Transmission Engineering

10 November 2016

Property Assignment: 1093266

Property File:

400-1402.0(5) Pt1; BCE 858;

BCE 188

Circuit/Str.:

2L078 str 47-01 to 47-05

VIA EMAIL: Adam.Neale@hatch.com

Adam Neale Kinder Morgan Trans Mountain Expansion Project

Dear Mr. Neale:

Proposal: Kinder Morgan Gas Pipeline Colocation within BC Hydro's Transmission

Line Right of Way

Right of Way Charge No.: 150334C, 166810C, 157989C, 165518C, 155428C, 165519C,

156191C, 163476C, 151506C as shown on Plan NWP12758

Legal Description: numerous

Location: Corridor between 44705 Watson Rd and 45306 Balmoral Ave, Chilliwack

This letter is in response to Kinder Morgan's request to install the proposed new Trans Mountain pipeline inside BC Hydro transmission right-of-way through Chilliwack. The proposal is to install the new pipeline using HDD method of drilling in close proximity to BC Hydro Circuit 2L078 towers.

Previously, BC Hydro conducted an electrical safety study to determine the minimum required horizontal separation between the new pipeline and existing BC Hydro transmission towers including towers 47/01, 47/02, 47/03, 47/04 and 47/05. With the use of deep ground wells (20 -35m deep) to improve tower grounding, the proposed pipeline could be installed in this corridor close to the edge of BC Hydro's right-of-way. The permissible minimum horizontal distance was calculated to be 12m to the closest foundation of a BC Hydro transmission tower in the studied Chilliwack corridor.

The proposal to install the new pipeline closer than 12m to BC Hydro towers but at greater depths by using horizontal drilling (9.5m and 14m depth) does not meet the electrical safety criteria, and would restrict BC Hydro's ability to repair, replace and upgrade tower foundations in the future (for example the use of pile foundations). The proposed option to bury the pipeline shallow and in close proximity to structure 47/05 foundations is unacceptable for both electrical safety reasons and would restrict BC Hydro's ability to perform inspection and maintenance work on the existing foundations.

The proposed alignment would also subject BC Hydro to undue risk of collateral damage during construction, maintenance and in emergency situations with inadequate separation between pipelines and BC Hydro facilities.

Due to the above concerns, the proposal to install the new Trans Mountain pipeline closer than 12m horizontal distance to tower foundations of BC Hydro Circuit 2L078 in Chilliwack is not acceptable to BC Hydro.

Regards,

Mazana Armstrong

BC Hydro Transmission Engineering Design

Anthony Lam

BC Hydro Transmission Civil Design