

September 12 2005
Mr. George Juhn
Manager–Lines & ROW Programs
Hydro One Networks Inc.
483 Bay Street, 15th Floor – North Tower
Toronto, ON.,
M5G 2P5

Dear Mr. Juhn:

Refurbish Circuits Q2AH and Q5G between Louth Junction and Beamsville T.S.
Notification of Approval of Connection Proposal
CAA ID Number: 2005-EX244

Thank you for the detailed information regarding the conductor replacement of circuits Q2AH and Q5G between Louth Junction and Beamsville T.S. The proposed work represents a like for like replacement of the aging conductor, two in-line disconnect switches (4500 Q2AH-69 and 4500 Q2AH-18), and the steel shieldwire.

From the information provided, our review concludes that the proposed changes will not result in a material adverse effect on the reliability of the IESO-controlled grid. The IESO is therefore pleased to grant **conditional approval** for the proposed modifications, subject to the implementation of the requirements detailed in the attached assessment report. Any material changes to your proposal may require re-assessment by the IESO in accordance with Market Manual 2.10, and may nullify your conditional approval.

Final approval will be granted upon successful completion of the IESO Facility Registration process. During facility registration you will be expected to demonstrate that you have fulfilled the requirements and the modification is in line with the proposal assessed by the IESO. Please contact facility.registration@ieso.ca if you have not received a Facility Registration Summary package within the next 10 days.

For further information, please contact the undersigned.

Yours truly,

Michael Falvo
Manager - Transmission Assessments & Performance
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cc: IESO Records

ASSESSMENT SUMMARY

Hydro One Networks Inc.

Refurbish Circuits Q2AH and Q5G between Louth Junction and Beamsville T.S. CAA ID Number: 2005-EX244

1.0 GENERAL DESCRIPTION

Certain sections of conductor on circuits Q2AH and Q5G (25 HZ) require replacement due to their age and condition. The circuits share the same physical path and replacement conductors of a higher rating will be installed between Louth Junction and Beamsville T.S (approximately 17.4 km) on both circuits. Along with the conductor replacement, a section of steel shieldwire which is also in poor condition will be replaced. Two in-line disconnect switches on the Q2AH circuit, 4500 Q2AH-69 and 4500 Q2AH-18 are at risk of being damaged as a result of this work and will also be replaced with new disconnect switches.

2.0 PROPOSED MODIFICATION

The scope of work is divided into the following components. Please refer to the diagrams below for further details:

2.1 Replacement of conductor for circuits Q2AH and Q5G:

Tests conducted on the existing conductors for these circuits indicate that they have reached the end of their life. A 17.4 km section of these two circuits running between Louth Junction and Beamsville T.S. will be replaced with new conductor of a higher ampacity

2.2 Replacement of steel shieldwire:

The existing shield wire spanning approximately 12 km is also in poor condition and will be replaced.

2.3 Replacement of in-line disconnect switches:

During the re-conductoring work, it is anticipated that existing in-line manual disconnect switches will become damaged (due to their age and condition). Two switches on the Q2AH circuit at Cherry Junction on each side of the tap line feeding Vineland D.S. (4500 Q2AH-69 and 4500 Q2AH-18) will be replaced with new disconnect switches.

3.0 ASSESSMENT

Conductor and Shieldwire specifications are as follows:

	EXITING	REPLACEMENT
CONDUCTOR SIZE	605 kcmil	997 kcmil compact
SUMMER CONTINUOUS RATING	710 A	960 A
SUMMER EMERGENCY RATING	913 A	1240 A
WINTER CONTINUOUS RATING	880 A	1190 A
WINTER EMERGENCY RATING	1038 A	1409 A
SHIELDWIRE SPECIFICATION	5/16 inch steel	7#8 Alumoweld

The new conductor has been selected based on current conductor standards and compatibility with existing structures. Selection was based on phase spacing, the ability of structures to support the conductor with minimal modifications, and future load growth.

In-Line Disconnect Switch specifications:

The new disconnect switches (4500 Q2AH-69 and 4500 Q2AH-18) have a rating of 1200 amps continuous which is equivalent or better than the existing switches. They exceed the current circuit loading requirements.

These replacements represent like-for-like exchanges and will not have any material adverse effect on the IESO-controlled grid.

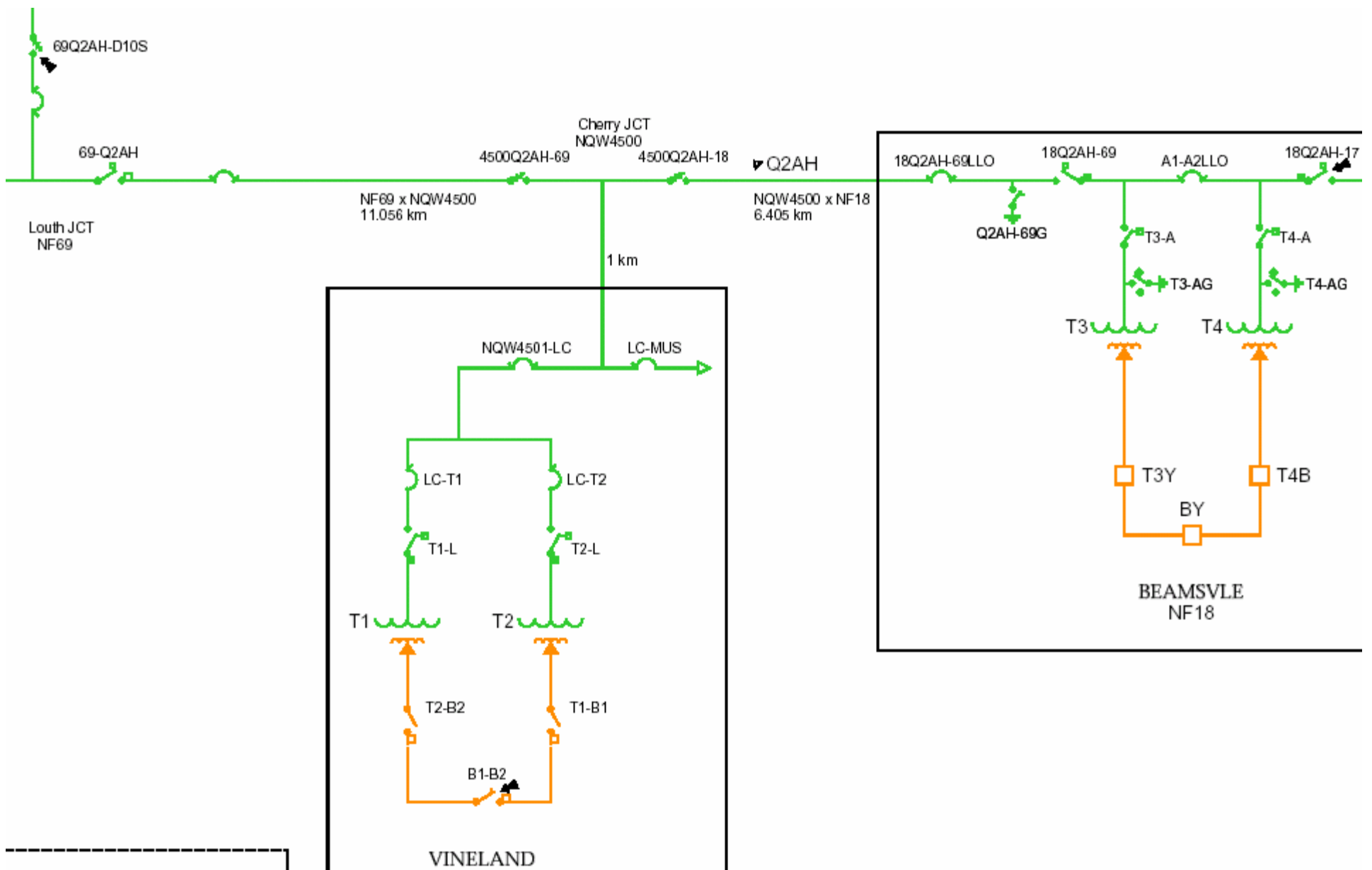
4.0 IESO REQUIREMENTS

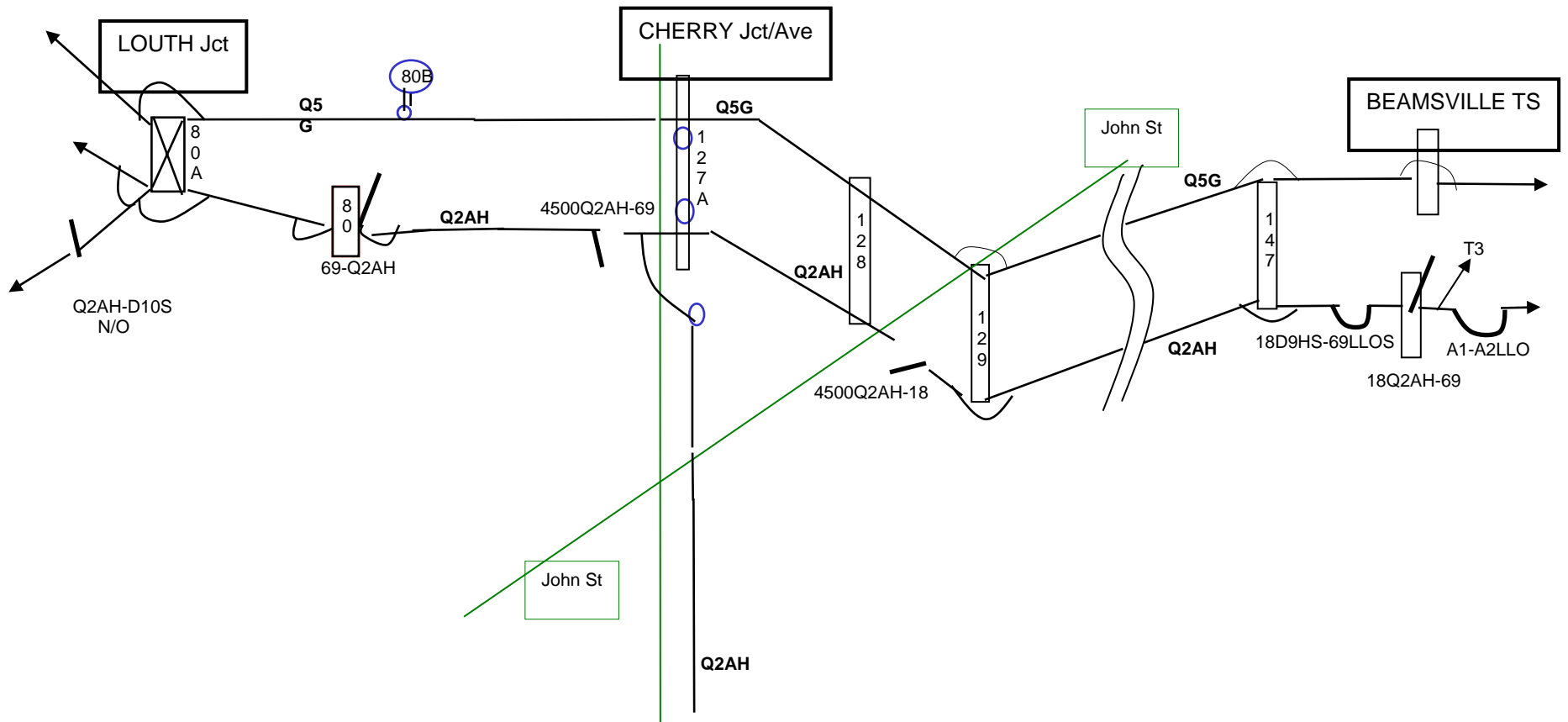
The Market Rules (Chapter 4 section 7.4) require that each transmitter shall provide the IESO on a continual basis with on-line monitored quantities as specified in Appendix 4.16. For this proposed project, the IESO will continue to require the status and operating quantities associated with the disconnect switches. Hydro One will be required to meet the IESO's on-line monitoring requirements.

Hydro One will be required to meet Transmission System Code requirements with respect to protection systems.

5.0 NOTIFICATION OF APPROVAL

It is therefore recommended that a Notification of Approval of the Connection Proposal be issued.





EXISTING LINE SECTIONS & ROADS

Current line section Louth Jct x Cherry Jct x Beamsville TS