November 17, 2009

Mr. John Sabiston
Manager, Transmission Plans - West
Hydro One Networks
483 Bay Street
Toronto, Ontario
M5G 2P5

Dear Mr. Sabiston:

Install Current Limiting Reactors at Jarvis TS
Notification of Conditional Approval of Connection Proposal
CAA ID Number: 2009-EX447

Thank you for the information regarding the proposed installation of series reactors at Jarvis TS.

We have concluded that the proposed changes at Jarvis TS will not result in a material adverse impact on the reliability of the integrated power system.

The IESO is therefore pleased to grant **conditional approval** for the modification 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 to connect the facility to the IESO-controlled grid will be granted upon successful completion of the IESO Market Entry process including, without limitation, satisfactory completion of the requirements set out in the System Impact Assessment report. During this process you will be expected to demonstrate that you have fulfilled the requirements and that the facility you have installed is materially unchanged from the proposal assessed by the IESO. Please refer to the 'External Guidelines for Connection to the IESO' attachment in your approval email for key steps in the Market Entry process. In order to initiate this process, please contact Market Entry at market.entry@ieso.ca at least eight months prior to your energization date.

For further information, please contact the undersigned.

Yours truly,

Barbara Constantinescu
Manager – Market Facilitation
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cc: IESO Records

Expedited System Impact Assessment
Hydro One Networks

1.0 GENERAL DESCRIPTION & PROPOSED MODIFICATIONS

Hydro One Networks is planning to install new series reactors and load break switches on T3 and T4 transformers as shown in figure 1. The expected in-service date is September 2010.

The three-phase symmetrical short circuit currents on the Jarvis TS 27.6 kV buses are approaching the 17 kA limit specified in the Transmission System Code (TSC). The load break switches will be operated normally open to contain the three-phase symmetrical short circuit currents below this limit when both transformers are in service. When either of the transformers is out of service the respective reactor will be bypassed by closing the applicable load break switch.

Jarvis TS is connected to Nanticoke GS via the 230 kV circuits N21J and N22J.

2.0 TECHNICAL SPECIFICATIONS

The technical specifications for the new reactors are given below.

Jarvis TS	
Reactor	**R4 (on T1) and R5 (on T2)**
Configuration	Single phase X 3
Rated Voltage	27.6 kV (phase to phase)
Maximum Voltage Rating	29.2 kV
Reactance	1.5 ohm / phase
Continuous Current Capability	2500 A

The technical specifications of the 27.6 kV motorized load break switches that will be used to bypass the reactors are not part of this assessment.

3.0 REQUIREMENTS

The proponent must notify the IESO as soon as it becomes aware of any changes to the assumptions made in the connection assessment. The IESO will determine whether these changes require a re-assessment.

IESO Monitoring Requirements

In accordance with the telemetry requirements for transmitters (see Appendices 4.16, 4.20 and 4.21 of the Market Rules) the connection applicant must install equipment at this project with specific performance standards to provide telemetry data to the IESO. The data is to consist of certain equipment status and operating quantities which will be identified during the IESO Market Entry Process.

As part of the IESO Facility Registration/Market Entry process, the connection applicant must also complete end to end testing of all necessary telemetry points with the IESO to ensure that standards are met and that sign conventions are understood. All found anomalies must be corrected before IESO final approval to connect any phase of the project is granted.

Protection Requirements

New protection systems must be coordinated with existing protection systems and must be designed to satisfy the requirements of the Transmission System Code (TSC). Facilities designated as essential to power system reliability must be protected by two redundant protection systems according to section 8.2.1a of the TSC. These redundant protections systems must satisfy all requirements of the TSC but in particular they may not use common components, common battery banks or common secondary CT or PT windings.

As currently assessed, this facility is not designated as essential to power system reliability and therefore the above requirements do not apply. In the future, as the electrical system evolves, this facility may be designated as such and at that time the above requirements will apply.

The proponent is required to submit documentation describing protection functionality and settings associated with new facilities prior to going into service.

Please send documentation for protection changes triggered by new or modified primary equipment (i.e. new or replacement relays) to connection.assessments@ieso.ca. For protection changes that are not associated with new or modified equipment (i.e. protection setting changes) please send documentation to protection.settings@ieso.ca.

Provided that the TSC requirements are satisfied, the IESO does not have additional requirements.

Facility Registration/Market Entry Requirements

The connection applicant must complete the IESO Facility Registration/Market Entry process in a timely manner before IESO final approval for connection is granted. Models and data, including any controls that would be operational, must be provided to the IESO. This information should be submitted at least seven months before energization to the IESO-controlled grid, to allow the IESO to incorporate this project into IESO work systems and to perform any additional reliability studies.

As part of the IESO Facility Registration/Market Entry process, the connection applicant must provide evidence to the IESO confirming that the equipment installed meets the Market Rules requirements and matches or exceeds the performance predicted in this assessment. This evidence shall be either type tests done in a controlled environment or commissioning tests done on-site. In either case, the testing must be done not only in accordance with widely recognized standards, but also to the satisfaction of the IESO. Until this evidence is provided and found acceptable to the IESO, the Facility Registration/Market Entry process will not be considered complete and the connection applicant must accept any restrictions the IESO may impose upon this project's participation in the IESO administered market or connection to the IESO-controlled grid.

The evidence must be supplied to the IESO within 30 days after completion of commissioning tests. Failure to provide evidence may result in disconnection from the IESO-controlled grid.

If the submitted models and data differ materially from the ones used in this assessment, then further analysis of the project will need to be done by the IESO.

4.0 ASSESSMENT & CONCLUSIONS

Switching studies performed by Hydro One estimate that the voltage change will be 1.42% when switching one reactor and 2.84% when switching two reactors. This is less than the steady state rms voltage change limit of 4% specified in the Market Rules.

This expedited System Impact Assessment concludes that the installation of the new reactors is not expected to have a material adverse impact on the IESO-controlled grid.

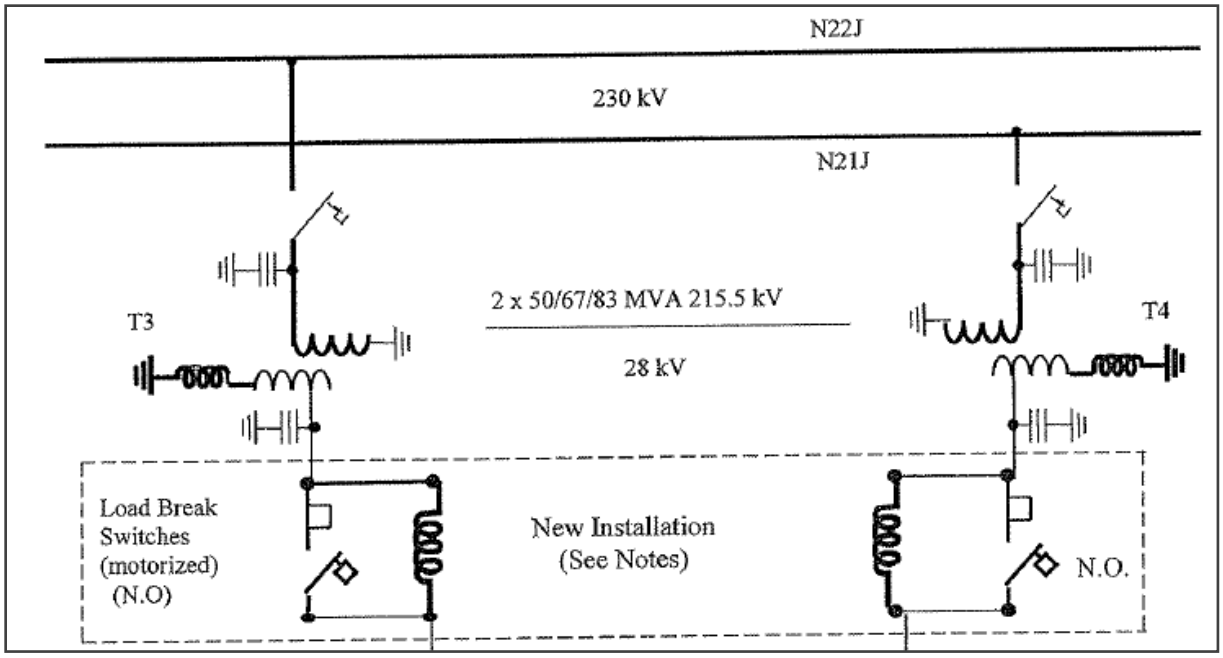

Figure 1 – Single Line Diagram for T3 and T4 reactors at Jarvis TS