



120 Adelaide Street West
Suite 1600
Toronto, Ontario M5H 1T1
T 416-967-7474
F 416-967-1947
www.powerauthority.on.ca

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Mr. Bing Young
Director, Transmission System Development
Hydro One Networks, Inc.
483 Bay Street
Toronto, Ontario M5G 2P5

Initiating Near-Term Transmission Components of the York Region Integrated Regional Resource Plan

Dear Bing:

The purpose of this letter is to:

- Hand off from the Ontario Power Authority (OPA) the lead responsibility for the planning process associated with the near-term transmission component of the York Region Integrated Regional Resource Planning (IRRP) process to Hydro One.
- Request that Hydro One develop wires solutions and implement the near-term transmission component of the integrated plan to meet the near- and medium-term reliability needs of York Region.

This is consistent with the regional planning process endorsed by the Ontario Energy Board (OEB) as part of its Renewed Regulatory Framework for Electricity.

The York Region Working Group (Working Group), consisting of staff from the OPA, the Independent Electricity System Operator (IESO), Hydro One and the York Region local distribution companies, has been conducting an IRRP process for York Region. In combination with conservation and local generation options, the Working Group has identified two transmission projects for meeting the reliability needs of the area for the near and medium term. These projects are located at Holland TS, and along the Parkway Belt transmission corridor.

The Working Group has identified these projects for near-term implementation and has discussed preliminary options. However, more detailed study and development work is required before these projects can be implemented. Continued development of both projects is best accomplished by the lead transmitter, Hydro One, leading these efforts as part of the Working Group, guided by the information and requirements provided below from the IRRP process.

The objectives and scope of these two projects are provided in Attachment 1.

To facilitate the development of these wires solutions, the OPA will provide Hydro One with the following information:

- Relevant system base cases
- Demand forecasts
- Conservation and distributed generation forecasts
- Any other relevant information

We look forward to information, results and deliverables from the York Region near-term transmission projects, as part of the York Region Working Group activities, and to continuing to work with and support Hydro One on the implementation of these projects.

Best Regards,



Bob Chow
Director, Transmission Integration
Power System Planning Division
Ontario Power Authority

CC York Region Working Group members:

PowerStream

Irv Klajman
Richard Wang
Riaz Shaikh

Newmarket-Tay Power

Larry Herod

Hydro One Distribution

Charlie Lee

Hydro One Networks

Farooq Qureshy
Paul Cook
E. Warren King

IESO

Peter Drury

OPA

Nicole Hopper
Bernice Chan
Alexandra Barrett
Kun Xiong
Joe Toneguzzo

Attachment 1 – Project Objectives and Scope

Holland TS Project Objectives:

The objectives of the Holland TS project are as follows:

- To increase the load-meeting capability of the Claireville-to-Brown Hill transmission line (B82V/B83V) to accommodate forecast load growth in northwest Vaughan and northern York Region in the near and medium term, and the connection of Vaughan #4 MTS, a new load supply station planned to be in service in spring 2017.
- To improve the capability to restore customer loads in northern York Region following a major outage affecting the main B82V/B83V transmission line, in accordance with the IESO's Ontario Resource and Transmission Assessment Criteria (ORTAC).

Holland TS Project Scope:

The Working Group has discussed options for meeting the above objectives and recommends proceeding with the following measures:

- Installation of two in-line breakers and associated motorized disconnect switches on the B82V/B83V circuits at, or near, the Holland TS property.
- Design and implementation of a Load Rejection (L/R) scheme for the stations connected to the B82V/B83V transmission line, or have available operational measures adequate for providing similar relief, as permitted by ORTAC.

Based on technical studies by the Working Group, with the addition of the in-line breakers and implementation of the L/R scheme described above, a load-meeting capability of 750 MW can be achieved for the system consisting of the B82V/B83V circuits and local generation (York Energy Centre). The switching facilities will also enable fast isolation of faulted line sections and allow restoration of customer loads, with York Energy Centre as a local supply source, following a major outage on the main transmission line, in accordance with ORTAC.

Hydro One will confirm the scope and cost of the above facilities to meet the identified reliability needs and to optimize their specifications and configuration.

Initiating these measures through the RIP process will allow restoration criteria to be met and provide sufficient capacity to supply forecast net load growth in Vaughan and northern York Region for the near and medium term. In the longer term (2020-2025 based on current load forecasts), the Working Group recognizes that a solution will be needed to support continued load growth in York Region and is planning engagement with affected communities, Aboriginal communities, and stakeholders on a long-term York Region Integrated Regional Resource Plan (IRRP).

The Holland TS project is needed in northern York Region to meet ORTAC restoration criteria today. In addition, it will be necessary to coordinate the development of this project with the connection of Vaughan #4 MTS to ensure there is sufficient capacity to supply this station when it connects in spring 2017. Therefore, the Holland TS project should be targeted to be in service by spring 2017.

Parkway Belt Project Objectives:

The objective of the Parkway Belt project is to improve the reliability of supply to customers supplied from the 230 kV “Parkway Belt” circuits (V71P/V75P), specifically in the following areas:

- To enable the Parkway Belt to meet ORTAC’s 600 MW load security limit. Currently, the amount of load that could be lost by configuration in a double-circuit contingency exceeds 700 MW during peak demand conditions.
- To enable customer loads supplied from the Parkway Belt circuits to be restored following a major outage affecting the V71P/V75P circuits in accordance with ORTAC.

Parkway Belt Project Scope:

There are a number of options for meeting the above objectives, including a new switching station or line option, and the optimal solution has not been determined at this time. Development work is required to assess the feasibility, cost and development timelines of the various options before the project can be fully scoped. There may be potential for a coordinated transmission and distribution solution.

This project is needed to meet ORTAC load security and restoration criteria today. As the project scope has yet to be defined, the in-service date will be established in accordance with the development timeline for the selected option.