

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
483 Bay Street
Toronto, Ontario M5G 2P5

Brant Area Regional Planning - Initiating the Implementation of the Near-Term Wire(s) Solution

Dear Bing:

The purpose of this letter is to request Hydro One Networks to initiate the implementation of a wire(s) solution - providing additional reactive support - to address the near-term supply need in the Brant Area.

The Brant Regional Planning Working Group (Working Group), consisting of staff from the OPA, the Independent Electricity System Operator (IESO), Hydro One Transmission and Distribution, Brantford Power and Brant County Power has been conducting an Integrated Regional Resource Planning (IRRP) process for the Brant sub-region within the Burlington to Nanticoke Region. The IRRP process develops and analyzes forecast for demand growth for a 20-year time frame, determines supply adequacy in accordance with the Ontario Resource and Transmission Assessment Criteria (ORTAC) and develops integrated solutions to address any needs that are identified.

While the IRRP for the Brant study area is not yet complete, the study has identified an urgent need to increase the load meeting capability (LMC) of the B12/13 circuits supplying Brant TS and Powerline MTS. The LMC for this supply was determined to be 104 MW based on voltage criteria. The peak loading on these circuits was approximately 118 MW in summer 2013 and is forecasted to reach 126 MW by 2016. Studies show that the installation of capacitor bank(s) at Powerline MTS will provide adequate relief to allow the circuits to be operated to their thermal capability, which will be approximately 125 MW. The load transfer among the Brant area stations will also allow effective use of the existing installed capacity. The Working Group believes that, along with the level of conservation expected to be achieved in this area, additional

reactive support provides the most economic and effective solution for addressing this near-term need in this area.

Under the Ontario Energy Board's (OEB) recently endorsed regional planning process, in cases where an IRRP is still in progress but it has determined that a transmission and/or distribution wires solution is necessary to best address a near-term need, a "hand off" letter would be provided from the OPA to the lead transmitter, in this case Hydro One Networks, to initiate the implementation of a wire(s) solution. This is the case for the Brant Regional Planning Study.

The details associated with the near-term wire(s) solution will be determined by Hydro One Networks and relevant LDCs in the sub-region. The following information from the studies done and discussions had by the Working Group may be helpful to Hydro One Networks in the development of this project.

- The required date of this transmission reinforcement project is as soon as practical.
- The OPA studies considered a maximum of 30 MVar reactive compensation at Powerline MTS.
- The IESO has concern with excessive voltage change on switching a single 30 MVar capacitor bank at Powerline MTS.
- Hydro One and LDC(s) will develop optimum configuration of bank sizes and location, along with distribution transfer options.

We look forward to information, results and deliverables from this project as part of the Brant Working Group activities. We will continue to work with and support Hydro One and LDCs on the implementation of this work.

Regards,

Bob Chow

Director, Transmission Integration Power System Planning Division

Ontario Power Authority

R.F. Char

CC:

Brant Working Group members

Brantford Power Inc.

Mark Simpson

Steve Faulkner

Hydro One Distribution

Charlie Lee Isabel Victal

Peter Drury

IESO

Brant County Power

Michael Desroches

Glen Fuller

Hydro One Networks

Farooq Qureshy Devinder Bahra Dhyani Shah

Ajay Garg

OPA

Kun Xiong Wajiha Shoaib

Robert D'Ippolito

Luisa Da Rocha (OPA)

Charlene de Boer (OPA)

Richard Bassindale (Horizon Utilities Corporation)

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