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August 15, 2014  
File: 160900764

**Attention: Paul Dalmazzi**

HydroOne  
483 Bay Street  
South Tower, 6th Floor  
Toronto Ontario  
M5G 2P5  
Canada

Dear Paul Dalmazzi,

**Reference: Hydro One - Clarington Transformer Station  
Well Interference Response Plan**

Stantec Consulting Ltd. (Stantec) is pleased to provide Hydro One Networks Inc. (Hydro One) with the following Clarington Transformer Station - Well Interference Response Plan (Response Plan). Hydro One requested that Stantec develop a plan for responding to well interference complaints as well as the criteria for assessing and mitigating well-related complaints associated with the construction and operation of the Clarington Transformer Station. The following letter provides an outline for the Response Plan.

**BACKGROUND**

Hydro One understands and respects the reliance on a clean, safe, and secure groundwater supply by all of its neighbours. In their Class EA Project Environmental Study Report (Project ESR), Hydro One committed to and has initiated its Groundwater and Surface Water Monitoring Program (Monitoring Program) that includes recording water levels and water quality at monitoring wells and surface water monitoring locations within its property boundaries (*Project Area*), and a Private Well Monitoring Program offered to owners of private wells within 1,200 meters of the transformer station.

Integral to the Monitoring Program is a plan which defines the criteria for a well owner to report a well interference complaint, as well as the timing and types of responses which will be initiated by Hydro One upon receipt of a well-related complaint.



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Well Interference Response Plan**

**OBJECTIVES**

The Response Plan has three primary objectives: to fulfill Hydro One's commitment to well owners within 1,200 metres of the Clarington Transformer Station to respond to and assess the nature of well-related complaints; to define the criteria for recording a well interference complaint; and to provide an outline for the types of responses and mitigation measures that may be anticipated by local well owners, depending on the nature of the complaint.

**CRITERIA FOR INITIATING THE WELL INTERFERENCE RESPONSE PLAN**

The Well Interference Response Plan will be initiated if a well owner within 1,200 metres of the Clarington Transformer Station submits a written well interference complaint to Hydro One, or its Private Well Monitoring Program consultant, Stantec. Any well owner contacting Hydro One regarding a well interference complaint will be immediately referred to Hydro One's environmental consultant, Stantec, for an *Initial Well Assessment*.

*Well interference* is defined as a decrease in private well performance or water quality due to construction or operation of the Clarington Transformer Station that causes a decrease in well capacity; such that the normal supply of water and/or water quality is temporarily or permanently interrupted.

**WELL INTERFERENCE RESPONSE PROCEDURES**

The procedures for responding to a well interference complaint will be divided into two categories, as follows:

- Initial Well Assessment; and
- Secondary Well Assessment.

The *Initial Well Assessment* will be completed by the Stantec staff each time a private well interference complaint is received in writing from a well owner with a private well located within 1,200 metres of the Clarington Transformer Station. Depending on the results of the Initial Well Assessment, it may be necessary to complete one or more of the following action items, including water level monitoring and/or water quality testing; and/or well testing / rehabilitation. The procedures for both assessments are detailed below,

**INITIAL WELL ASSESSMENT**

Stantec staff will contact the well owner to undertake an *Initial Well Assessment* within 24 hours of receiving the well interference complaint. Following initial discussion with the well owner and assessment, Stantec may conclude that no further action is required on the part of Hydro One.



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In the event that Stantec concludes that *well interference may have occurred*, the following actions will be taken:

1. Hydro One will immediately offer or provide the well owner with a reasonable amount of potable water, based on typical well water use;
2. Complete a water supply investigation consisting of water level monitoring and/or water quality sampling in order to determine the cause of the complaint; and
3. Schedule well testing and/or rehabilitation by a licensed well contractor to further characterize the cause of the complaint, or to rehabilitate the well in order to restore water supply.

All costs associated with the above *Initial Well Assessment* to determine the cause of the well interference complaint will be borne entirely by Hydro One.

**SECONDARY WELL ASSESSMENT**

Depending on the nature of any well testing and/or monitoring completed as part of the *Initial Well Assessment*, a *Secondary Well Assessment* will include analyses of well data and comparison to background data, where available, as well as on-site activities, in an effort to determine the cause of the well complaint. The *Secondary Well Assessment* protocol is divided into the following two categories:

1. In the event that, through completing an *Secondary Well Assessment*, Stantec concludes that *well interference did not occur* as a result of construction or operation of the Clarington transformer Station,
  - a. The well owner may be required to pay for the temporary water supply provided during the Preliminary Assessment; and
  - b. The well owner will be responsible to arrange for all further corrective action and bear all associated costs.
2. In the event that Stantec concludes that *well interference is likely to have occurred* as a result of construction or operation of the Clarington Transformer Station, Hydro One will complete one of the following actions;
  - a. With agreement from the well owner, continue to provide a reasonable amount of water to the resident, based on typical well water use; or
  - b. Institute well mitigation measures, such as but not limited to: lowering the well pump, purging the well and collecting water quality samples for laboratory



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analyses, repairing/replacing the well in order to accommodate the observed interference; or

- c. Reduce the rate and amount of water taking so as to alleviate the observed interference. This action may not immediately restore the well water supply to the private well, and it may be necessary to continue providing water to the well owner, as per action 'a', above in the interim.

**DOCUMENTATION**

The interference complaint should be summarized on a *Well Interference Report* that, as a minimum, documents the following:

1. The location of the complaint (name, address, telephone number, other contact info);
2. Well Assessment procedures completed and results; and
3. Any actions taken so as to restore water supply.

**NOTIFICATION**

The Ministry of the Environment (MOE), Central Region must be notified of any confirmed well interference issue, as follows:

1. Hydro One's private well monitoring contractor, Stantec, will notify the MOE, Central Region by phone and e-mail immediately after confirming that a well interference may have occurred.
2. The *Well Interference Report* documenting the well interference will be submitted to the MOE, Central Region no more than one week after the well interference was confirmed.

**UPDATING THE WELL INTERFERENCE RESPONSE PLAN**

The *Well Interference Response Plan* will be a living document that is updated whenever there are changes to the contact information provided by Hydro One, its private well monitoring consultant Stantec, or the well owners. At a minimum, the Response Plan should be reviewed annually to ensure that the information is up to date.

Contact information is provided on the following Well Interference Contact Information Sheet



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**CLOSURE**

We trust this proposed Well Interference Response Plan meets your requirements at this time. Should you have any questions or comments, please feel free to contact me in our Markham office.

Regards,

**STANTEC CONSULTING LTD.**

A handwritten signature in blue ink, appearing to read 'J. Brant Gill'.

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Senior Hydrogeologist, Environmental Management  
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Attachment: Contact Information Sheet

c. Dan Eusebi

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Reference: Hydro One - Clarington Transformer Station  
Well Interference Response Plan

## Well Interference Response Plan Contact Information Sheet

<b>Hydro One Networks Inc.</b>	483 Bay Street, South Tower Toronto, ON M5G 2P5
Primary Contacts	<b>Paul Dalmazzi (Environmental Engineering)</b> Office: (416) 345-6145 Fax: email: <a href="mailto:Paul.Dalmazzi@HydroOne.com">Paul.Dalmazzi@HydroOne.com</a>
	<b>Jeff Cridland (Manager)</b> Office: (416) 345-1315 Fax; email: <a href="mailto:Jeff.Cridland@HydroOne.com">Jeff.Cridland@HydroOne.com</a>
	<b>Denise Jamal (Community Relations)</b> Office: (416) 345-4255 Fax: email: <a href="mailto:Denise.Jamal@HydroOne.com">Denise.Jamal@HydroOne.com</a>
<b>Well Monitoring Consultant</b>	
<b>Stantec Consulting Ltd.</b>	300 – 675 Cochrane Drive, West Tower Markham, ON L3R 0B8
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Secondary Contact	Dan Eusebi Senior Environmental Planner Office: (519)836-6966 x 234 Fax: (519) 836-2493 Email: <a href="mailto:dan.eusebi@stantec.com">dan.eusebi@stantec.com</a>