Concerns have been expressed regarding the use of Sulphur Hexafluoride (SF<sub>6</sub>) within proposed station switching equipment. This gas is a commercially available non-toxic gas, used by Hydro One and most utilities world-wide as an insulating medium. It is contained in sealed equipment and enables utilities to minimize the footprint of transmission facilities. SF<sub>6</sub> is an inert, colourless, odourless gas in its pure state. It is highly stable both chemically and thermally, and is non-flammable. While SF<sub>6</sub> is considered a greenhouse gas, procedures are in place to minimize leaks. Hydro One facilities are operated on full compliance with all applicable federal and provincial legislations.

For additional information regarding the key issues raised throughout the EA process, refer to **Table 4-6** for a summary of public comments and concerns.

## 4.8 Summary of Key Issues

**Tables 4-1 to 4-6** provide a summary of the comments and issues raised from the interested parties throughout the consultation process, including Project Participation Forms, letters, emails and telephone correspondence as well as at meetings. The corresponding response provided by Hydro One to the comments and issues raised is also included in the following tables.

The Enniskillen Environmental Association's comments and issues are included in **Table 4-6** with the public as members were involved with the local community at PIC #1, the Community Information Meeting, and PIC #2.

Community	Comments and Issues	Hydro One's Response
Alderville First Nation	Wish to keep updated regarding any archaeological findings, burial sites, or any environmental impacts	Notified of archaeological findings and project updates. Refer to <b>Section</b> <b>4.2.1</b> .
Mississaugas of Scugog Island First Nation	Proposed project is on First Nation's Treaty land and interested in evaluating potential impacts to First Nation rights and interests	Notified of archaeological findings and project updates. Refer to <b>Section</b> <b>4.2.2</b> .
Chippewas of Rama First Nation	Interested in being kept on project mailing list.	Notified of archaeological findings and project updates. Refer to <b>Section</b> <b>4.2.3</b> .

### Table 4-2: Summary of Federal Government Agency Comments and Issues

Stakeholder	Comments and Issues	Hydro One's Response
TC	TC is the administrator of the Navigable Waters Protection Act and Railway Safety Act. Hydro One is required to complete an Aeronautical Obstruction Clearance Form and recommended Hydro One contact NAV Canada.	The proposed project will not affect navigable waters and railways. The new 230 kV and 500 kV line structures will not be taller than 90 m, therefore will not require lighting and marking. Hydro One has been in contact with NAV Canada and will be submitting the Land Use submission form once final design is complete. Refer to <b>Section 4.3.2</b> .
NAV Canada	Requires a Land Use submission form along with GPS locations of structures.	Hydro One will submit the Land Use submission form and provide the GPS locations of the structures once the design is finalized. Refer to <b>Section 4.3.3</b> .
GTAA	Interested in the potential effects of project alternatives on the future Pickering airport design	Hydro One will provide the final design for the lines structures when it is completed. In respect to EMF, Hydro One indicated that "results from

Stakeholder	Comments and Issues	Hydro One's Response
	and operations. Concerns include effects on potential energy supply; future air navigation, communication and surveillance equipment and signals; compatibility with airport zoning requirements, flight operations, and takeoff and approach surfaces; and EMF.	preliminary EMF modeling indicated that at 100 metres above ground level, the electric and magnetic fields have already mostly dissipated. At 200 metres above ground level, they would be practically undetectable." Refer to <b>Section 4.3.4</b> .

### Table 4-3: Summary of Provincial Government Agency Comments and Issues

Stakeholder	Comments and Issues	Hydro One's Response
MOE	MOE indicated the following topics were an area of interest: ecosystem protection and restoration, surface water, groundwater, air quality, dust and noise, servicing and facilities, contaminated soils, mitigation and monitoring, planning and policy, Class EA process, and Aboriginal consultation.	Hydro One has integrated all of their areas of concern into this ESR. Refer to <b>Section 4.4.2</b> .
MNR	MNR requires an IGF for activities that may affect species or habitat protected under the <i>ESA</i> and any associated restoration. MNR is interested in Butternut Health Assessment and identifying trees on site. The MNR requested to be provided with information on Hydro One's consultation with the municipalities, CLOCA and the public result in agreement with the assessment of line reconfiguration alternative 1. An area of approximately 3 hectares is required for a remedial planting area.	Hydro One submitted an initial IGF to the MNR on June 13, 2012. As Hydro One gathered additional information the IGF was updated with the final version submitted October 18, 2012. MNR and Hydro One met onsite twice during the proposed project to review the Butternut Health Assessment and during DNA sampling. Hydro One will keep MNR informed of the public and regulatory agency feedback regarding the line reconfiguration. Hydro One has agreed to MNR's restorative requirements. Refer to <b>Section</b> <b>4.4.3</b> .

Stakeholder	Comments and Issues	Hydro One's Response
OMAFRA	OMAFRA recommended that Hydro One ensure that agricultural criteria area and it is applied equitably, consider avoiding prime agricultural areas and operations, and if agricultural cannot be avoided to ensure that effects are minimized.	Hydro One has taken into consideration the active agricultural fields and the potential effects on the project area. Refer to <b>Section 4.4.4</b> .
МТО	MTO indicated that they are interested in the project as it may trigger a Building and Land Use permit due to the proximity of the future Highway 407.	Hydro One is more than 400 metres from the centerline of the future Highway 407. Refer to <b>Section 4.4.5</b> .
MTCS	MTCS indicated at a Heritage Impact Assessment is recommended and should be completed prior to the completion of the EA.	A follow-up meeting has been arranged to discuss the project and next steps for the proposed project. Refer to <b>Section 4.4.6</b> .
МАН	Hydro One is required to conform to Section 41 of the ORMCP which contains detailed approval policies and standards for infrastructure and utilities.	The proposed project does not apply with Section 30 of the ORMCP, but is required to conform to Section 41. Refer to <b>Section 4.4.7</b> .

#### Table 4-4: Summary of Municipality and Agency Comments and Issues

Stakeholder	Comments and Issues	Hydro One's Response
Durham Region	Indicated that Hydro One should contact the	Hydro One has been in contact with the Municipality of Clarington and the
Planning Department	Municipality of Clarington and City of Oshawa to directly discuss the details of the project.	City of Oshawa to discuss the proposed project. Refer to <b>Section 4.5.2</b> .

Stakeholder	Comments and Issues	Hydro One's Response
Durham Region Health Department	The Durham Region Health Department informed Hydro One of the permit requirements based on the types of washroom facilities Hydro One is considered.	Upon the final decision and design of the washroom facilities, Hydro One will initiate the permitting process. Refer to <b>Section 4.5.3</b> .
Municipality of Clarington Emergency and Fire Services	The Municipality of Clarington Emergency and Fire Services Department indicated they are not interested in providing input regarding the study but wish to be kept on the mailing list. During the pre-consultation meeting with the Municipality of Clarington, Hydro One was informed to incorporate a turning circle into the station design.	A turning circle for fire trucks is being incorporated into the final design. Refer to <b>Section 4.5.4</b> .
Municipality of Clarington Planning Department	<ul> <li>The Municipality of Clarington Planning Department has the following concerns and comments:</li> <li>Washroom facilities on site</li> <li>Supply of water to site</li> <li>Townline Road North License Agreement</li> <li>Road damage</li> <li>Transformer transportation route</li> <li>Watercourse crossings, vegetation removal and restoration</li> <li>Deference to CLOCA regarding environmental components of the project</li> <li>Building permits</li> <li>Site Plan application</li> <li>Address elements of the ORMCP</li> </ul>	Following the completion of the Class EA process, Hydro One will begin talks with the Municipality of Clarington and the City of Oshawa regarding the Townline Road North Road User Agreement. Upon the final decision of washroom facilities at the proposed project, Hydro One will work with the Municipality regarding the supply of water at the future station. Hydro One is exempt from the Site Plan Review process under the <i>Planning Act</i> . Hydro One has kept the Municipality of Clarington informed and integrated their comments on the transformer haul route. Hydro One will address the applicable elements of the ORMCP in the ESR. Hydro One will continue to work with CLOCA regarding the proposed project and associated restoration activities. Refer to <b>Section 4.5.5</b> .

Stakeholder	Comments and Issues	Hydro One's Response
City of Oshawa Planning Department	<ul> <li>The City of Oshawa Planning Department has the following concerns and comments:</li> <li>Townline Road North Lease Agreement</li> <li>Transformer transportation route</li> </ul>	Following the completion of the Class EA process, Hydro One will begin talks with the Municipality of Clarington and the City of Oshawa regarding the Townline Road North Lease Agreement. Hydro One has kept the City of Oshawa informed and has integrated their comments regarding the transformer haul route. Refer to <b>Section 4.5.6</b> .
CLOCA	<ul> <li>CLOCA has the following concerns and comments:</li> <li>One station drainage system outlet as opposed to two</li> </ul>	Hydro One has indicated that design for one outlet is non impactive and best meets our risk requirements.
	<ul> <li>Grading outside the fence in the north and northwest section of the adjacent wooded area and creek system</li> <li>Existing drainage tiles in the southern portion</li> </ul>	Grading options and profiles of the north and northwest corner of the proposed project were provided to CLOCA. Hydro One will remove the damaged agricultural tiles that are currently located in the southern portion of the project area.
	<ul> <li>of the project area</li> <li>Access road location off Townline Road North</li> <li>Permanent and creek crossings for proposed</li> </ul>	Hydro One will remove the damaged agricultural tile in the southern portion of the project area.
	<ul><li>project</li><li>Natural Features Inventory</li></ul>	The preferred permanent access road is on Townline Road North.
	Rationale regarding line reconfiguration     alternatives	Proposed project will have 2 permanent and 3 temporary creek crossings.
	<ul> <li>Plant and forb list for remediation of creek and planting on station slopes</li> <li>Restorative vegetation and screening plan</li> </ul>	Natural Features Inventory and rationale regarding line reconfiguration alternatives were provided.
	• Spill containment design and functionality	The plant and forb list and restorative vegetation and screening plan were provided to and a meeting was held to discuss the restoration.
		Hydro One sent CLOCA an animation clip of the spill containment system and how it works.

Stakeholder	Comments and Issues	Hydro One's Response
		Refer to Section 4.5.7.

#### Table 4-5: Summary of Interest Group Comments and Issues

Stakeholder	Comments and Issues	Hydro One's Response
Friends of the Farewell	Interested in integrating habitat for the Loggerhead Shrike into proposed project's mitigation plans. Proposed involvement in the Great Lakes Guardian Fund.	proposed project's mitigation plans. Both parties agreed to continue the
Save the Oak Ridges Moraine Coalition	STORM indicated that they will meet with some local residents to visit the project site and discuss the proposed project. They are also interested in reviewing the draft ESR.	Hydro One provided project information and indicated that it will provide a copy of the draft ESR when it is available. Refer to <b>Section 4.6.3</b> .
Oshawa Kicks Soccer	Interested in utilizing Hydro One's land for soccer fields.	Recommended contact the appropriate Municipality to secure a license of land for recreational use. After license is received, Hydro One would receive submission to review application. Refer to <b>Section 4.6.4</b> .

#### Table 4-6: Summary of Public Comments and Issues

Comments and Issues	Hydro One's Response
Natural Environment	
Impacts to wildlife habitat	There are no areas on the site that would be considered as Significant Wildlife Habitat based on field studies and an assessment of the features and habitat. Refer to <b>Section 7.2</b> .

Comments and Issues	Hydro One's Response
Species at Risk	A search of the NHIC (2010a) database indicated that no SAR have been recorded recently (post-1989) within the project area. The MNR indicated that butternut, bobolink and eastern meadowlark may be found in the project area given that this is within their natural range.
	The presence of butternut trees was confirmed during field surveys. Four retainable butternut trees will be removed during construction to accommodate the transmission line configuration required to access and egress the station. To mitigate any loss of butternut trees, Hydro One will consult with the MNR to acquire the necessary approval and fulfill the required replacement planting, as well as fulfill any additional requirements of a permit issued under Section 17C of the ESA for removal of butternut. The intent of replanting is to result in a net increase in seed production when the new trees are mature. Refer to <b>Section 7.2</b> .
Impacts to creek systems	Hydro One has currently identified one potential temporary crossing and two permanent crossings of intermittent watercourses within CLOCA's jurisdiction. These watercourse crossings are anticipated to result in no significant effects to their flow rates. Refer to <b>Section 7.2</b> .
Erosion management	An erosion and sediment control plan will be included with the stormwater management plan submitted as part of the application for an ECA. Refer to <b>Section 7.2</b> .

Comments and Issues	Hydro One's Response
Impacts to groundwater and wells	Station drainage will be subject to an Industrial Sewage ECA under the EPA. The drainage design of the station will ensure that the pre and post construction area drainage is not significantly altered. The station will be situated on land with a deep overburden of glacial till which has very low permeability. Monitoring well installed at the site will be maintained and monitored regularly for groundwater depth and quality.
	Hydro One does not believe that the proposed project will have any effect on the wells in the community or to those in North Oshawa. We have construction transmission facilities throughout the Province and have yet to find a case where our facilities have negatively affected well water quality or quantity. Hydro One has extended an offer to land owners adjacent to the property to have their well water tested for level and quality before, during and after construction for a period of two years. Refer to <b>Section 7.2</b> .
Concern about the spill containment system and leaks	Hydro One has an oil spill containment system that is automatic, reliable and secure. The system is designed that in the event of a spill, oil will be captured and stored in precast concrete holding tanks. Our spill containment system requires an ECA which will be submitted to the MOE for review. Refer to <b>Section 7.2</b> .
Impacts to fish	There are no fish or amphibian SAR species identified in the Harmony Creek and Farewell Creek tributaries associated with the Clarington TS project area; however, these tributaries likely contribute to seasonally direct fish habitat. The potential changes to tributaries in the project area (i.e., installation of watercourse crossings) is not anticipated to affect fish communities downstream as flow through the culverts will be maintained in a similar pattern to the existing channel. Refer to <b>Section 7.2</b> .
Community would like to know about any fluids and/or chemicals that will be used for the construction and subsequent operation of the proposed Clarington TS.	Provided with the MSDS for mineral oil used in the transformers. Project is still in design phase and will know more about the fluids and chemicals once design is completed. More information on sulphur hexafluoride can be found in <b>Section 4.7</b> .

Comments and Issues	Hydro One's Response	
Socio-economic Environment		
Why is Hydro One allowed to construct on the Oak Ridges Moraine	The land use of the site is designated utility and transmission facilities are of permitted use under the Municipality of Clarington Official Plan (2012), the Region of Durham Official Plan (2008), the Oak Ridges Moraine Conservation Plan (2002), and the Greenbelt Plan (2005). Where the proposed project is situated on the ORM, Hydro One is required to conform to the ORMCP under section 41.	
Interested in Hydro One buying property out	Comment noted.	
Compensation for loss of resale value of property	Hydro One's practice is to pay compensation only where new or additional land rights are required to build its transmission station projects. No additional property rights are required for Clarington TS with the exception of access rights into the site. This is consistent with the practice used by similar industries such as natural gas pipelines and major transportation routes (e.g., highways)	
Property value	Historically, Hydro One has found that although property values may decline during the construction phase of a new TS, they typically return to market values consistent with other similar properties in the local area over time. Residential property value is dependent on many factors including the type of residential property, location/ neighborhood factors as well as broader social and economic conditions associated with the overall marketplace.	
The station access road via Langmaid Road will cause large amounts of disruption to local property owners. Can you select another station access road for this project?	Hydro One has agreed to consider another access road via the unopened Townline Road North allowance, see <b>Section 4.7.5</b> for more details on station access road.	

Comments and Issues	Hydro One's Response
EMF	Electric and magnetic fields are found everywhere electricity is used and come from home appliances, computers, office equipment, wiring in our homes and workplaces, and transmission & distribution lines. Transformer stations do not generally increase EMF levels, and Clarington TS will not increase the measurement of EMF that currently exists as a result of the existing transmission and distribution lines located on and adjacent to Hydro One's property. See <b>Section 4.7.8</b> .
Stray voltage	Hydro One does not anticipate any problems with stray voltage as a result of the TS. Stray voltage is an issue specific to livestock operations. Stray voltage depends largely on two factors: 1) on-farm electrical problem such as improper grounding of troughs and other equipment, improper wiring, etc; and 2) the low voltage electricity service of the farm (e.g., distance from the DS, types of customer connected to the same feeder, etc. The construction of a TS does not normally affect the existing low voltage distribution system, therefore no stray voltage problems are anticipated as a result of the construction of Clarington TS. See <b>Section 4.7.8</b> .
Construction disruption including noise, filth and activities	Hydro One will hold an open house once the Environmental Assessment is complete to provide residents with information about what to expect during construction, and Hydro One's construction mitigation plan. Refer to <b>Section 7.1.1</b> .
Construction noise effects	Sound emission standards for construction equipment are set according to the date of manufacture of the equipment as defined by the MOE in the NPC-115 publication, listed in the MOE (1978) Model Municipal Noise Control By- Law. This document stipulates specific sound emission standards for various pieces of construction equipment. Hydro One's contractor will also comply with the applicable Municipal Noise By-law. Refer to <b>Section 7.1.1</b> .
Public safety	Perimeter fencing will enclose the station and will be maintained to prevent public access Refer to <b>Section 7.3.1</b> .

Comments and Issues	Hydro One's Response
Loss of agricultural land	The total area of cultivated land affected by the proposed TS project including the permanent access road will be about 16.4 ha. Agricultural land that is cleared or damaged during construction, including temporary warehousing areas, will be restored after construction is complete. Refer to <b>Section 7.3.2</b> .
Loss of views	Hydro One is working to develop a vegetative restoration and screening plan. Although vegetation will not screen the station entirely, our intent is to mitigate as much as possible. Refer to <b>Section 7.3.3</b> .
If the well on my property is damaged as a result of the station, will you fix it?	Hydro One has offered testing before, during and after construction to private well owners adjacent to the Hydro One property. Hydro One will address any damage caused. It is not anticipated that the construction of the station will affect private wells.
Technical and Cost	·
Why is this station needed?	The proposed project is not intended to supply more energy – it is to maintain status quo. When Pickering NGS retires, current electricity needs cannot be met and the local supply of energy will no longer exist. To provide the community with electricity, Hydro One must transport electricity from other generating sources. See <b>Section 1.1</b> for the Need of the Undertaking.
Requested estimate of the proposed project.	The estimate for the project is currently \$270M, as per Hydro One's most recent Transmission Rate Application to the OEB.
How will the project be funded?	Once Clarington TS is placed in service, the costs for this station will be included in Hydro One's transmission revenue requirement, which is recovered through the electricity bill by all ratepayers of all utilities in Ontario.
Are the ratepayers of Ontario aware of the proposed station and the costs associated?	All of Hydro One's work is subject to public review and approval by the OEB.

Comments and Issues	Hydro One's Response
Request for cost comparison for a new station at the Clarington site versus upgrade the existing Cherrywood TS	The Cherrywood TS upgrade is not a technically viable option. As a result, a cost comparison is not meaningful. Refer to <b>Section 1.3</b> for the Alternatives to the Undertaking.
How is this station different from Pickering Nuclear Generating Station?	Pickering NGS produces electricity. A TS does not produce electricity it helps carry electricity through the wires. It helps move electricity by connecting the larger transmission lines with the smaller distribution lines that supply electricity directly to the consumer.
Can Pickering NGS be refurbished?	OPA indicated that two of the nuclear units at Pickering A have already been refurbished. However, current information from OPG indicates that rather than refurbishing units at Pickering B they have decided to pursue the continued operation work, which may result in life extension to 2020.
Will the proposed project increase the amount of power generation within the province?	No.
Class EA-related	•
Why did we waste time attending meetings for Enfield TS when the station is not needed?	The need for Enfield TS was to serve forecasted electricity distribution demand (load growth) in the area. Reduction in electricity demand caused by 2008 economic downturn and other local factors deferred the need for Enfield TS to a future date. Refer to <b>Section 1.1</b> for the Need of the Undertaking.
Why this site?	See <b>Section 1.3</b> for the Alternatives to the Undertaking and <b>Section 5.1</b> for the rationale for selection of the station location.

Comments and Issues	Hydro One's Response
Explanation of why the proposed station is to be placed on the moraine within the Greenbelt.	Hydro One's property west of Langmaid Road was acquired via expropriation in 1978 for purpose of building a transformer facility. This site is ideal as Clarington TS requires a connection to both 500 kV and 230 kV lines, both of which are already located on the property. The site meets the necessary size requirements and is consistent with the PPS of using existing facilities and property where possible to avoid developing Greenfield sites. See <b>Section 1.3</b> and <b>Section 5.1</b> .
	Hydro One as a utility is a permitted use within the Greenbelt and the ORMCP. Hydro One to be located at the site is required to meet a number of environmental criteria (see <b>Section 3.2.1</b> ).
Did you consider other sites?	During the course of the Class EA process, no alternative was considered reasonable from a technical and economic viewpoint. The <i>EA Act</i> requires consideration of reasonable alternatives and based on knowledge of the project area and the above factors, Hydro One has concluded that there are no other reasonable locations for a TS that will address the retirement of Pickering NGS. Refer to <b>Section 1.3</b> for the Alternatives to the Undertaking.
	Other sites were proposed by the Enniskillen Environmental Association (i.e., Pickering NGS, Darlington NGS, Whitby TS surrounding lands, Wesleyville GS and "Seaton" lands and lands surrounding Cherrywood TS). Refer to <b>Section 4.6.2</b> for the reasoning of why Hydro One did not further consider these sites.
When did Hydro One enter into discussions with the Municipality of Clarington?	Hydro One and the Municipality of Clarington entered into discussions regarding Clarington TS in April 2012. Refer to <b>Section 4.5.5</b> for consultation with the Municipality of Clarington Planning Department.
Pickering NGS has the potential to operate until 2020, why does construction need to begin in 2013?	The closure of Pickering NGS may occur as early as 2015, therefore Hydro One is required to commence construction in the Spring of 2013. See <b>Section 1.1</b> for the Need of the Undertaking.

Comments and Issues	Hydro One's Response
Rushed EA process	The proposed project is to be placed in service for the eventual closure of Pickering NGS, sometime between 2015 and 2020. Construction is required to start in march 2013 in order to meet the Spring 2015 in-service date. See <b>Section 1.1</b> for the Need of the Undertaking.
Is there a connection with the previous EA that was completed for the Enfield site that suggested the site be located west of Townline?	As part of the Enfield EA, a study area was defined where potential sites would be identified and considered. The study area for the Enfield EA extended west of Townline Road North.
Why were we not informed during the Enfield EA process that plans for a larger station was also being developed	When Hydro One began the Class EA process for Enfield TS project, the need was to increase capacity to homes and businesses in the local area. After the economic downturn, this need was no longer a priority. At the time of the Enfield TS EA process, details surrounding the closure Pickering NGS were not known and Hydro One had not received direction from the OPA to build a TS.
This is a major project. Does this project not require an individual EA?	The proposed project, a 500/230 kV TS, falls within the criteria defined in the Class Environmental Assessment for Minor Transmission Facilities (1992, Ontario Hydro), which was approved by the MOE under the <i>EA Act</i> . See <b>Section 1.5.1</b>

Comments and Issues	Hydro One's Response
How long this project has been underway?	This property was acquired by Ontario Hydro in 1978 via expropriation. An environmental study was conducted for the 500 kV Oshawa-Lennox transmission corridor where a TS on the Clarington site was identified as "Oshawa Area TS" at the time. This study was released in 1974.
	The need for a TS at this location was included in OPA's first Integrated Power System Plan (IPSP) in 2007, which was referred to as Oshawa Area TS.
	The work by Hydro One has been underway since October of 2011 following the recommendation from the OPA.
	See Section 1.1 for the Need of the Undertaking.
Why is Hydro One using Stantec on this project?	Stantec is one of the consultants selected under the Hydro One procurement process. Hydro One is using Stantec because they have a great deal of expertise related to the field work that is required for this project. They have been used in this capacity in other projects and found to be well qualified, respected and thorough. Hydro One will oversee and approve all work submitted by Stantec and Hydro One is ultimately accountable for the EA and the quality of the ESR.

# 4.9 Final Notification and Draft ESR Review Period

Hydro One provided a 30-day Review Period to allow First Nations and Métis communities, government agencies and officials, affected property owners and interested public to review the draft ESR. The draft ESR was made available for review and comment from Thursday November 15, 2012 to Monday December 17, 2012.

The Notice of Completion of the draft ESR review period (final project notification) was provided to the following groups (**Appendix B2**).

- Email notification and letters to First Nations and Métis communities on November 13, 2012
- Email notification to government agencies and interest groups on November 13, 2012
- Email notification to provincial and municipal officials on November 14, 2012
- Email notification to interested public on November 14, 2012
- Letters to area residents within approximately a 2 km radius of Project site via hand delivery and courier on November 15, 2012

A public notice regarding the Notice of Completion of the draft ESR (Final Notification) was placed in local newspapers (see Section 4.7.2).

Copies of the draft ESR were made available for review on the Hydro One project website and in hardcopy format at the following locations:

Municipality of Clarington	City of Oshawa
40 Temperance Street	50 Centre Street South
Bowmanville, ON	Oshawa, ON
Phone: 905-623-3379	Phone: 905-436-3311
Clarington Public Library	Oshawa Public Library
Clarington Public Library Courtice Branch	Oshawa Public Library Northview Branch
0	2
Courtice Branch	Northview Branch

**Clarington Public Library Bowmanville Branch** 163 Church Street Bowmanville, ON Phone: 905-623-7322

Comments regarding the draft ESR were requested in writing to Hydro One by 4:30 pm on December 17, 2012 and were to be sent to:

Yu San Ong, Environmental Planner 483 Bay Street, South Tower, 6th Floor Toronto, ON M5G 2P5 Email: Community Relations@HydroOne.com Tel: 1-877-345-6799 Fax: 416-345-6919

Hydro One has responded to and made best efforts to resolve any issues raised by concerned parties during the 30-day Review Period (see **Section 4.10**). Hydro One indicated that if no concerns were expressed, Hydro One would finalize the ESR and file it with the

MOE. The Project would then be considered acceptable and will proceed as outlined in the ESR.

If an individual is dissatisfied with the Class EA process, or with Hydro One's recommendations, he or she can make a written request during the 30-day Review Period to the Minister of the Environment to ask for a higher level of assessment. This request for a higher level of assessment is referred to as a Part II Order request. Instructions on how to fully participate in the Class EA process were provided in the Final Notification public notice published in the local newspapers (see **Appendix B6**).

# 4.10 Draft ESR 30-day Review Period Comments

Hydro One made the draft Environmental Study Report (ESR) available for a 30-day Review Period from November 15 to December 17, 2012. During the Review Period Hydro One received review letters from the following:

- Chippewas of Rama First Nation
- Ministry of the Environment (MOE)
- Ministry of Tourism, Culture and Sport (MTCS)
- Durham Region Planning Department
- Municipality of Clarington
- Central Lake Ontario Conservation Authority (CLOCA)

The Chippewas of Rama First Nation acknowledged the receipt of the Notice of Completion letter and included no comments.

The remaining letters provided both general and editorial-type comments. These letters and Hydro One's responses are provided in **Appendix B8**. **Table 4-7** provides a summary of the general comments.

During the 30-day Review Period, email correspondence was received from the Enniskillen Environmental Association (EEA). The comments and issues presented in these emails were reflected in their two (2) Part II Order Requests and are discussed in **Section 4.11**.

Hydro One also received a total of fifty-six (56) Part II Order Requests to elevate the status of the Project to an Individual Environmental Assessment (see **Section 4.11** for further details). The Part II Order Requests, Hydro One's response letters, and the Minister of the Environment's decision are included in **Appendix B9 and B10** respectively.

Stakeholder	Comments and Issues	Hydro One's Response
Durham Region - December 19 lette <b>r</b>	The draft ESR does not include any conclusions about how the proposed new uses meet the approval policies and standards requirements of Section 41 of the Oak Ridges Moraine Plan.	Hydro One agrees that it must satisfy Section 41 of the ORMCP. A letter was sent to Durham on April 15, 2013 stating how the Project conforms to the ORMCP Section 41. This will be clarified in the final ESR.
	Regional Works, Durham Regional Police Services and the Durham Emergency Measures Office should be consulted on any related:	Hydro One will be consulting with the noted departments regarding the listed items.
	<ul> <li>equipment transportation routing</li> </ul>	
	• traffic	
	• access	
	<ul> <li>emergency service and response</li> </ul>	
	• security	
	<ul> <li>other site planning activities</li> </ul>	
	Contact the Planning and Economic Development Department regarding the proposed tree cutting activities.	Hydro One will obtain the tree cutting permit.
	The Health Department understands that Hydro One will be conducting well water tests for interested residents before, during and after construction to ensure well water quality has not been adversely affected by construction activities.	Hydro One has offered in the ESR in Section 7.2 to monitor the private water wells on adjacent properties, before, during and after construction for a period of two years.
	Clarify the statement in Section 3.2.1 regarding land use designations on page 51	This will be corrected in the final ESR.

### Table 4-7: Summary of Draft ESR 30-Day Review Period Comments and Issues

Stakeholder	Comments and Issues	Hydro One's Response
Municipality of Clarington Dec 12, 2012	Include a commitment in the ESR, with regard to berming and planting.	Section 7.3.3 and Table 7.1 Visual aesthetics under the Socio- economic section indicate that screening will be undertaken on Hydro One property for this purpose.
letter	The ESR tries to demonstrate that the need defines the location as the only alternative. Alternatives are discussed by the OPA in Appendix A - this should be discussed more fully in the main document	This will be clarified in the final ESR.
	Hydro One's Emergency Response Plan should be prepared so that it meets DEMO's and Clarington's approval.	Hydro One prepares an Emergency Response Plan (ERP) for all of its stations. This is a condition of approval for the Environmental Compliance Approval (obtained post-EA). The ERP was noted on Section 1.4.2 on page 7 and Section 7.1.2 on page 154 of the draft ESR.
	Identify the number of acres lost to agricultural production.	Section 7.3.2 specifies that 16.4 ha of agricultural land will be lost through the construction of the station and access road. Approximately another 4 ha will be used for vegetative restoration.
	Townline Road as an alternative access should be considered as a mitigation measure.	Section 4.7.5 describes the selection of Townline Road in response to concerns raised by local residents and ensuing meetings with the Municipality of Clarington and the City of Oshawa to confirm the use of this road. The selection of Townline Road is not considered mitigation but rather the resolution of an issue. Consequently, it is not included in Section 7. Section 4.7.5 also states that a "license agreement" would need to be obtained from the municipalities. This will be modified to read "road user agreement" as per your comment.
	Include a commitment in the ESR to undertake well monitoring, to ensure that the project has no impact on residential wells.	Section 7.2 Hydrology addresses monitoring well testing on the site and Table 7.1 Hydrology under the socio-economic section also notes the same. Table 4.6 provides an offer by Hydro One to adjacent landowners for the testing of their well(s) pre-, during and post-construction.

Stakeholder	Comments and Issues	Hydro One's Response
	Hydro One carried out a less rigorous process and provided an "ESR Lite".	The proposed Clarington TS falls within the definition of the Class Environmental Assessment (EA) for Minor Transmission Facilities (Ontario Hydro, 1992), which was approved by the Ministry of the Environment under the Environmental Assessment Act.
		Hydro One has extensive EA experience and does not agree with the "ESR Lite" observation. Hydro One has fully complied with the approved Class EA process and provided significant opportunities for public and regulatory consultation.
		In Hydro One's opinion and experience, the process carried out for the Clarington TS project is consistent with 100s of past projects and has been no less rigorous. The issues identified are also consistent with past projects.
	Reports and background information were not included in the documentation available to the public.	The position that all technical studies be part of the ESR is not consistent with current EA practice and not a requirement of the approved Class EA. Technical reports are made available during the Class EA process on a selective basis but do not form part of the ESR documentation (i.e., they are intended for technical audiences only). To date, we have provided the technical reports to the residents when requested, however this is beyond our standard practice.
		The purpose of the draft ESR is to summarize the Class EA process. Typical ESR contents are described in Section 3.6 of the Class EA parent document. Section 3 of the draft ESR is fully consistent with the parent document as well as with past practice. It describes the environmental features, including a summary of the relevant environmental data collected throughout the Class EA process.

Stakeholder	Comments and Issues	Hydro One's Response
		Throughout the Class EA process, appropriate review agencies and the municipalities were consulted on the potential environmental effects identified through the research and surveys.
	It is unclear in the draft ESR how the mitigation for heritage features will be addressed.	Hydro One has provided numerous opportunities to discuss project effects and mitigation plans. The assessment is complete and there is no missing background information. As noted, it is not our practice to include detailed technical reports in EA submissions. The draft ESR is consistent with the approved Class EA process and current EA practice.
		In terms of addressing mitigation for heritage features, Hydro One has consulted and will continue to work with the Ministry of Tourism, Culture and Sport (MTCS) throughout the project.
	A more meaningful and long term communications strategy working with the community needs to be part of the mitigation measures on Pages 171 to 178 of the draft ESR, as well as including a Communications Plan for the construction phase.	"Commitments are located elsewhere in the document. Table 7-1 (pages 171 to 178) covers potential short-term and long-term environmental effects and their corresponding mitigation, it does not include information or commitments on ongoing public consultation and communications per se. The Class EA parent document also describes communications subsequent to the completion of the EA process, refer to Appendix I of Class EA parent document.
		As a standard practice, Hydro One uses public information centres, websites and newsletters to communicate information during the construction phase. Email and other social media facilitate continuing two-way communications on the project. "
	The mitigation section of the report (Section 7) contains very generalized statements.	The level of detail provided in the ESR is representative of all Hydro One ESRs. The ESR is consistent with the examples of mitigation described in Table J-1 of Appendix J of the Class EA parent document. Further details are provided in the Class EA

Stakeholder	Comments and Issues	Hydro One's Response
		companion document 'Environmental Guidelines for Construction and Maintenance of Transmission Facilities'. The ESR elaborates on specific commitments rather than restating standard practice. Examples include commitments regarding vegetative restoration ratios, screening and meeting with stakeholder agencies.
	Heritage resources are not addressed.	Hydro One is working with the MTCS to address its comments regarding cultural heritage resources.
	Copies of Archaeological studies have not been submitted to the Municipality and are not referenced.	The appropriate archaeological assessments have been undertaken and are referenced in Section 3.2.5 (pages 61-62) as well as in Section 10. The reports have been submitted to MTCS. There is no requirement in the Class EA to submit archaeology reports to the municipalities. As a matter of standard practice, this is not done because reports may contain sensitive information.
	Was an acoustical study prepared by an acoustical engineer?	As indicated in Section 7.1 (p.151), "since one or more of the receptors are less than 500 metres away from the proposed site, a detailed acoustic assessment will be performed to predict potential sound levels at the receptors and included in the ECA application".
		The acoustic assessment will be undertaken by an Acoustic Engineer following completion and filing of the final ESR.
	Alternatives 1,2 and 3 - all on the same site, not sure this meets the definition of alternatives under the EA Act	The EA Act does not provide property-related criteria defining what constitutes an alternative. Only one of the three alternatives is within the Hydro One property. The other alternatives require land acquisition.
	Potential environmental effects, and recommended mitigation, restoration and compensation are lacking items such as creek crossings, buffer zones, sediment and erosion controls, breeding bird survey, rehabilitation plans	As described in Table 7-1, Hydro One has proposed mitigation regarding sediment and erosion, watercourse crossings, restoration, and terrestrial features.
	etc. are to be part of this document.	As noted in Section 8, an Environmental Specification will be

Stakeholder	Comments and Issues	Hydro One's Response
		prepared to guide construction activities for both lines and stations work. The Environmental Specification will contain all of the committed mitigation identified within the ESR.
CLOCA - December 17 letter	CLOCA will review all aspects of stormwater management for the project, please refer to CLOCA's Stormwater Management Guidelines.	Agreed.
	Staff suggests that the report should include a map to show the overlay of the ORM planning boundary and the physiographic region/surficial geology for clarity.	This map will be added in the final ESR.
	The ESR (Section 3.1.3, pg. 43) makes reference to the installation of three monitoring wells; however there is no comprehensive background report on Hydrogeology for the proposed transformer site or for the proposed transmission line re-configuration as outlined in Section 5.0.	Hydro One attempts to fully address the requirements of agencies. Opportunities are provided to review and discuss technical information. The level of detail in ESR documentation need not break from conventional practice based on agencies preferences.
		Hydro One will provide a comprehensive background report to CLOCA.
	CLOCA would like to ensure that a minimum 30 m setback from the Harmony Creek tributaries is maintained as much as possible	Hydro One agrees to the 30 m setback where possible and will erect protective fencing to control and protect this setback.
	CLOCA will require detailed plans on all aspects of work in this area including restoration plans at the suggested 2:1 planting ratio to ensure that the vegetation replacement area meets or exceeds a 3.0 ha area.	Hydro One agrees to provide a detailed plan of the work activities and as noted above restoration at a 2:1 ratio and conference with CLOCA (and others) to optimize restorative values.
	The northwest corner of the station is shown to encroach within approximately 22 m of the top of the slope for the grade change to the station elevation. CLOCA will require buffer strip plantings (native species) within any areas where the station encroaches the existing valleylands associated with the tributaries of Harmony Creek.	Hydro One agrees to this condition and has stated in the draft ESR that we will work in conjunction with CLOCA regarding all vegetative restoration.

Stakeholder	Comments and Issues	Hydro One's Response
	CLOCA does not support access to the site via Langmaid Road as it would require considerably more disturbances as this route to the station is much longer and requires a watercourse crossing. Access from Townline Road would be much shorter and does not require a watercourse crossing.	Hydro One also supports the Townline Road access for many of the same reasons.
	CLOCA would like Hydro One to follow the Draft "Clean Equipment Protocol for Industry".	We will obtain a copy of this draft document and include it into our Environmental Specifications for construction and operations to reduce impact associated with the introduction of non-native invasive species.
	CLOCA can support the proposed preferred Alternative 1 provided that restoration plantings are completed in a 2:1 ratio for the remedial planting area and all provisions for butternut restoration are completed in accordance with SAR requirements set forth by the MNR.	Hydro One has committed to the 2:1 ratio for remedial planting and the approval from MNR for the removal and planting of butternut. Further Hydro One will meet with CLOCA to optimize the restorative planting values and include any other possible stakeholder values.
	CLOCA will review construction and grading plans at the detailed stage and will require strict adherence to erosion and sediment control plans required for all areas adjacent to the Harmony Creek valleylands.	Hydro One will provide the plans and honour commitments in those plans as requested. Where setbacks from sensitive features can be greater than 30 m and still allow for construction, this will be implemented.
	CLOCA would like to see the establishment of a larger natural buffer between the pocket wetland areas and adjacent agricultural fields.	This can be included as a component of the restoration planting plan done in conjunction with CLOCA.
	The ESR should reflect the comments regarding CLOCA's natural heritage system and potential restoration opportunities sent to Hydro One on November 13, 2012.	Hydro One has committed to a 2:1 compensation. This is provided in the draft ESR and previous responses. What will be clarified is our commitment to the determination of loss and subsequent restoration based upon the use of CLOCA's Natural Heritage System as agreed upon in these meetings.
	Monitoring of lease agreements should also be explored to ensure the maintenance and preservation of any restoration work done as part of Hydro One's restoration compensation commitments.	Hydro One has a strong interest in ensuring the preservation and protection of restored areas. Lease agreements will respect this requirement.

Stakeholder	Comments and Issues	Hydro One's Response
	It is suggested that Hydro One conducts pre-construction water level and water quality sampling for on-site monitoring wells as well as sampling for area residents and provide this data as baseline conditions. Monitoring of all wells is also recommended during and after construction of the transformer station and transmission line re-configuration work.	"Section 7.2 Hydrology addresses monitoring well testing on the site and Table 7-1 Hydrology under the Socio-economic section also notes the same.
		It is our intent to retain a minimum of three (3) wells on site in appropriate locations to be used for this monitoring.
		Table 4-6 provides an offer by Hydro One to adjacent landowners for the testing of their well pre, during and post construction. "
	The post-construction monitoring program should be carried for a minimum two year period. This work should include water level and water quality monitoring for down-gradient site and boundary monitoring wells.	It was conveyed verbally. This timeline will be specified in the final ESR.
	None of the background information provided to CLOCA prior to the release of the draft ESR is provided in the appendices of the draft ESR and there is little reference made to the noted reports/ information provided to CLOCA.	As a matter of standard practice. Hydro One includes summaries of technical reports in ESR documentation (i.e., to avoid unduly large submissions which are potentially confusing to non-technical readers). Opportunities are provided to discuss technical information and selectively release documents to agencies.
MOE - December 14 letter	In Section 1.5 on page 13, the last paragraph states that "it should be noted that a project status elevation from a Class EA to an Individual EA is unlikely to require a new assessment." This statement is contestable and should be deleted from the ESR, since such decisions ultimately lie with the Minister of Environment and not the proponent.	We will delete the statement to avoid any possible confusion.
	The statement: "An Individual EA process would delay the project", while factual, may be misleading to the public and needs to be deleted from the ESR.	We will delete this statement.
	In Section 1.5.2 on Page 14, a Permit to Take Water from the Ministry of Environment should also be included in the list of permits and approvals.	Although we are not expecting a permit to be required, we will add this permit to the list in the final ESR.

Stakeholder	Comments and Issues	Hydro One's Response
MTCS - Comments Table December 14	The current draft ESR has removed information that was previously provided to MTCS regarding identified cultural heritage resources	The intent of the information previously provided was to bring forward information of potential interest to MTCS and facilitate consultation with MTCS. This was done following numerous attempts to obtain feedback from the MTCS.
		The information presented in the draft ESR is what Hydro One believes to be relevant to the Class EA process for the proposed project.
	MTCS continues to have outstanding questions regarding the consideration of cultural heritage resources as part of this EA. MTCS requests that the proponent demonstrate that the Class EA process as it relates to cultural heritage resources has been followed.	Hydro One believes that the Class EA process has taken into consideration the relevant cultural heritage resources for the proposed project. The key issue is the MTCS request to conduct heritage assessments on private property which will not be directly affected by construction activities.
		Hydro One will continue to work closely with MTCS' on cultural heritage resources after the EA process has been completed. This includes the mitigation plan proposed for the cultural heritage landscapes.
	Section 3.2.5 Cultural heritage resources (p. 56-57)	The change will be added to the final ESR.
	Revise to more accurately reflect the legislative framework for cultural heritage protection. Replace with "the MTCS is responsible for the administration of the OHA and is responsible for determining policies, priorities and programs for the conservation, protection and preservation of Ontario's heritage, which includes arch resources, built heritage and cultural heritage landscapes".	
	<b>Section 3.2.5</b> Built heritage resources and cultural heritage landscapes (p.57-59)	<ul> <li>As indicated, for the proposed project, adjacent properties are privately owned and not within the care or control of Hydro One, therefore it would be inappropriate and disrespectful to private owners to include information on privately owned</li> </ul>

Stakeholder	Comments and Issues	Hydro One's Response
	• The section does not provide data regarding the existing built heritage resources and cultural heritage landscapes conditions within the study area. Please revise.	<ul> <li>properties in a public document such as the draft or final ESR.</li> <li>The studies refers to the MTCS checklist for built heritage resources and cultural heritage landscapes</li> </ul>
	<ul> <li>Clarify the "studies" referred to that inform the information in the first paragraph.</li> <li>Clarify why the first section addresses "adjacent properties" but the second section addresses only the "Clarington property"</li> <li>This information is not consistent with the information previously provided to MTCS on October 17, 2012.</li> </ul>	<ul> <li>The first two paragraphs address the outcome of Hydro One's initial consultation with the MTCS regarding adjacent properties, and the rationale for not including private information on adjacent properties in the draft ESR (p.57). The following paragraphs address the Clarington property from a built heritage resources and cultural heritage landscapes perspective (p. 57-58). Then the "Adjacent Properties" section addresses the properties that abut the Clarington property, without providing any private information on the properties.</li> <li>As indicated earlier, the intent of the information previously provided on October 17, 2012 was to initiate discussions with MTCS. The information presented in the draft ESR is what Hydro One believes to be relevant to the Class EA process.</li> </ul>
	<b>Figure 3-12</b> (p.59) Add or re-instate information for identified cultural heritage resources.	The figure presents the current property fabric of the Clarington property and surrounding areas, and is consistent with Hydro One's intention of not including private information on adjacent properties.
	Section 3.2.5 Adjacent properties (p.60-61) Please explain how this section addresses the existing cultural conditions of the study area. The area being referred to as "adjacent" in fact lies within the limits of the "study area" as defined in <b>Section 2.1</b> of ESR. Please	This section describes the adjacent properties abutting the Clarington property and concluded that, from a cultural heritage landscapes perspective, "the new TS will be visible to properties to the east, west and south. The existing transmission corridors are visible components of the area landscapes." (p.61)

Stakeholder	Comments and Issues	Hydro One's Response
	clarify.	As indicated on p.61 of the draft ESR, "Hydro One believes strongly that information about private properties and home owners does not belong in public documents. Out of respect for privacy and personal interests, it would be inappropriate to make judgments about the heritage value of non-designated private properties. It is also our conclusion that such studies would not meaningfully influence mitigation decisions."
	<b>Table 7-1</b> (p. 174-175) The statement re: built heritage and cultural heritage landscapes is inconsistent with information previously provided to us which indicates the presence of built heritage resources and cultural heritage landscapes.	The project will not affect any built heritage resources as the project site does not contain any built heritage. However, due to the location of the Clarington Transformer Station, certain existing cultural heritage landscape features will be affected are as follows: The widening of the unopened Townline Road from Concession 7 to the Project Site (outside of Hydro One's property) as the permanent access to the Station. This section of the Townline
		Road is currently used as a maintenance access for the existing transmission lines. The effect of this widening will be minimal to the current condition. The section of the Road north of the permanent access will not be affected. We will reduce the effects of the widening of Townline Road by restricting the limits of construction.
		Existing hedgerows within Hydro One's property located where construction will take place will be removed. The remaining hedgerows along the property line of Hydro One's property will be augmented to increase the screening effects and structure of the hedgerows. Additional hedgerows will be planted using existing species of trees and shrubs along the Hydro One's property line where possible to provide additional screening of the station and to reflect the heritage values of the hedgerows.

Stakeholder	Comments and Issues	Hydro One's Response
		Approximately 328 m of the Abandon Road allowance will be removed due to the location of the Station. However, approximately 353 m of the Abandon Road allowance within Hydro One's property will remain. Please note that beyond Hydro One's property, the Abandon Road allowance is either partially removed or does not existing due to the agricultural practice within the Study Area. The section of the Abandon Road allowance within Hydro One's property that will remain will be maintained during construction and future operation of the station.