

# Welcome to our Information Centre

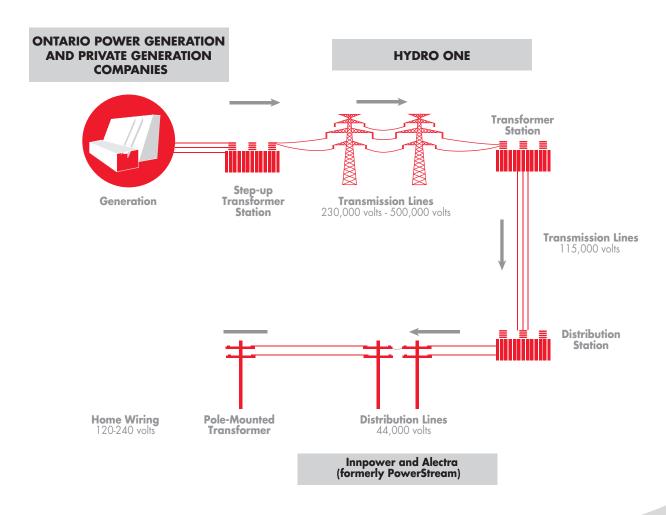
The purpose of this Information Centre is to meet our team and learn more about:

- The proposed project in your community
- The planning and approvals process
- Next steps and opportunities for your participation

We're here to listen to your comments, obtain your feedback and answer your questions.



# What is Hydro One's Role in Delivering Electricity





## **Key Organizations**



#### **Hydro One Networks Inc.**

Builds, owns, operates and maintains electricity transmission and distribution facilities across Ontario.



#### **Ministry of Environment and Climate Change**

The provincial Ministry that protects the environment and leads Ontario's actions on climate change.



#### **Independent Electricity System Operator**

Develops plans to ensure electricity needs are met for the benefit of Ontario, both now and in the future.



#### **Ontario Energy Board**

Oversees the energy sector in Ontario. Approves electricity rates and the construction of new transmission lines more than 2 km long.



#### **Local Distribution Companies**

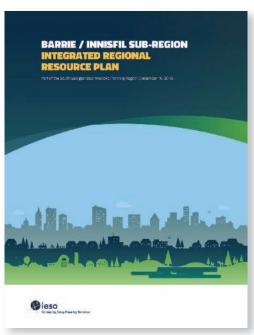
Distribute electricity supplied by Hydro One's transmission system to local homes and businesses.





## **Project Need**

- 1. This infrastructure is approximately 50 60 years old and is nearing its end-of-life.
- 2. The current equipment is reaching capacity and requires upgrading to meet growing demand in the Barrie and Innisfil area.
- 3. The IESO has recommended Hydro One proceeds with the project as outlined in the Barrie / Innisfil Sub-Region Integrated Regional Resource Plan.





## **Project Description**

To improve the overall transmission network, Hydro One has initiated planning to replace and upgrade aging infrastructure.

The project will involve:

- 1. Upgrading and expanding Barrie Transformer Station (TS).
- 2. Upgrading the existing transmission lines and structures between Barrie TS and Essa TS from 115 kilovolt (kV) to 230 kV.
  - Two existing side-by-side wooden structures will be replaced with a single line of taller steel structures.
- 3. Reconfiguring sections of Essa TS within the existing station footprint.



# Why is Local Electricity Demand Forecasted to Grow?

Hydro One's Barrie TS serves a large portion of the City of Barrie and Town of Innisfil. The station is forecasted to experience high growth in demand over the next 20 years that will require capacity to increase.

This increase in demand is due to:

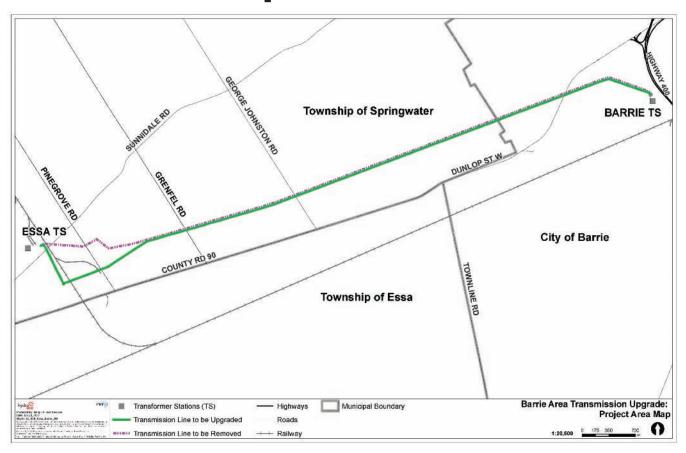
- The City of Barrie being identified as an urban growth area.
- The increased demand from the development of data centres in the City of Barrie.
- The forecasted growth for the Town of Innisfil, including the proposed Innisfil Heights commercial development.

The proposed electrification of the Barrie Line by Metrolinx is also planned to connect to the upgraded Barrie TS.

Source: IESO "Barrie / Innisfil Sub-region Integrated Regional Resource Plan"



## **Project Location**



Project map of the existing and proposed transmission corridor from Barrie TS to Essa TS



## **Barrie TS**

- Aging equipment will be replaced and upgraded from 115 kV to 230 kV.
- The station will be expanded by approximately 25 metres on the west side.
- Tree clearing within Hydro One owned property will be required to facilitate the expansion and construction activity.



The existing Barrie TS is planned to expand as part of the upgrade project



## **Transmission Lines and Structures**

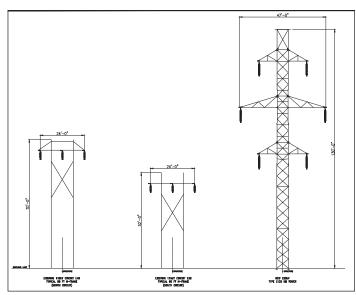
In order to carry more electricity, the lines from Barrie TS to Essa TS will be upgraded from 115 kV to 230 kV.

This requires replacing the two existing side-by-side wooden structures with a single line of steel towers.

The proposed configuration will result in less towers along the corridor.

New structures are required because:

- The upgraded lines will be larger and heavier to allow for the increased capacity.
- The new lines will need to be higher from the ground; taller structures will ensure a safe clearance.



The side-by-side existing structures (left) will be replaced with a single line of new towers (right)



# Existing and Proposed Tower Structures



The existing structures are between 50-80 ft high



The planned new structures are between 130-150 ft high



### **Essa TS**

- All 115 kV transformers at Essa TS will be decommissioned and removed.
- The station will be reconfigured to support the new 230 kV line to Barrie TS.
- All work will take place within the existing station footprint with no expansion required.



Current view inside Essa TS



### **Environmental Assessment Process**

- The Barrie Area Transmission Upgrade project is subject to the provincial Environmental Assessment Act, and is being planned in accordance with the Class Environmental Assessment for Minor Transmission Facilities, 1992 (Class EA) process.
- This Class EA process ensures that transmission projects that have a predictable range of effects are planned and carried out in an environmentally acceptable manner.
- As part of the Class EA consultation process, a draft Environmental Study Report (ESR) is planned to be available for public review and comment in the fall of 2017.
- Hydro One will make best efforts to resolve any concerns raised during the public review and comment period before filing the final ESR with the Ontario Ministry of the Environment and Climate Change (MOECC).
- If you feel that concerns were not addressed during the public review period, you can submit a written request (called a "Part II Order") to the MOECC asking for a higher level of assessment, known as an Individual Environmental Assessment.



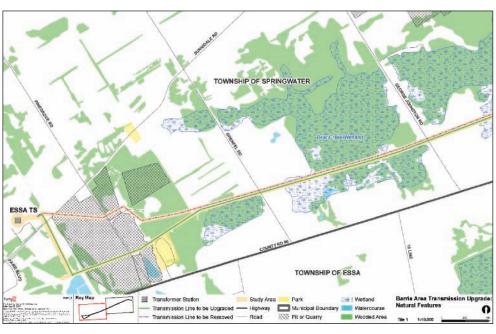
### Class EA Process Considerations

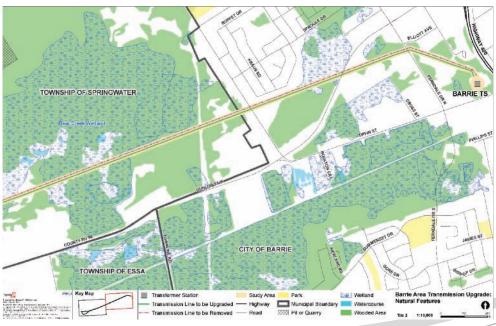
The Class EA process identifies potential project effects on:

- First Nations Communities
- Local businesses, residential property owners and community groups
- Planned land uses and existing infrastructure
- The Bear Creek Wetlands and other natural features
- Environmentally significant areas
- Archaeological and heritage resources
- Community recreational uses, including local hunting and snowmobile clubs



## **Natural Features**







## **Biodiversity Initiative**

- Some vegetation removal may be required to undertake construction activities.
- During the Class EA, we will work with interested parties to ensure that adverse effects to vegetation and other natural features are avoided or mitigated, where feasible.
- A biodiversity initiative will be implemented to compensate for effects to the natural environment.







## **Ontario Energy Board Approval**

- The Ontario Energy Board (OEB) regulates the electricity market in Ontario and approves the rates that companies can charge customers for electricity.
- In addition to the Class EA process, the OEB must also approve the Barrie Area Transmission Upgrade project under Section 92 of the Ontario Energy Board Act, 1998.
- OEB approval is required because capacity is being increased from 115 kV to 230 kV across more than 2 km of line.
- Further information from the OEB on this project will be made available in local papers and at www.ontarioenergyboard.ca.
- Join our project mailing list for important updates.



# What Can I Expect During Construction?

- The existing southern set of structures will be replaced first. Once this work is complete, the northern structures will be removed.
- Vegetation removal may be required along the right-of-way.
- Gravel access roads and working pads may be required in sections of the corridor to enable construction equipment access.
- Construction work areas will be temporarily fenced and not accessible during construction periods for safety reasons.
- Road closures are not anticipated during construction, but temporary lane restrictions may be necessary to string the new transmission lines along certain roads in the project area.
- Residents will be notified with further construction details closer to the date as planning progresses.



# What if I have a Structure or Right-of-Way on my Property?

- A Hydro One Real Estate Coordinator will work with property owners that have an existing structure or corridor on their property.
- We have developed specific Land Acquisition Compensation Principles (LACP) based on our past experience with transmission projects. These principles will be made available in the coming weeks.

### These principles aim to:

- Treat owners in a fair, transparent and consistent manner.
- Offer choices to property owners.
- Use independent property valuations.
- Reach voluntary outcomes in a timely manner.



## **Project Timeline**

Notification sent to First Nations	October 2016
Notice of Commencement issued for the Class Environmental Assessment	January 2017
Public Information Centres	January - February 2017
Anticipated draft Environmental Study Report (ESR) available for 30 day public review period	Fall 2017
Anticipated final Environmental Study Report (ESR) filed with the Ministry of the Environment and Climate Change	Fall 2017
Anticipated OEB Section 92 approval	Nov 2018
Anticipated start of construction	Feb 2019
Anticipated in-service	Nov 2020



## Your Input is Important to Us

Thank you for attending our Information Centre.
Please fill out a comment form before you leave,
or send us your comments afterward.

Join our contact list to receive important project updates

1-877-345-6799

Community.Relations@HydroOne.com www.HydroOne.com/Projects/BarrieAreaUpgrade