# Welcome to our Pre-Construction Public Information Centre

## Overbrook to Riverview Transmission Line Upgrade

## July 2017

Partners in Powerful Communities

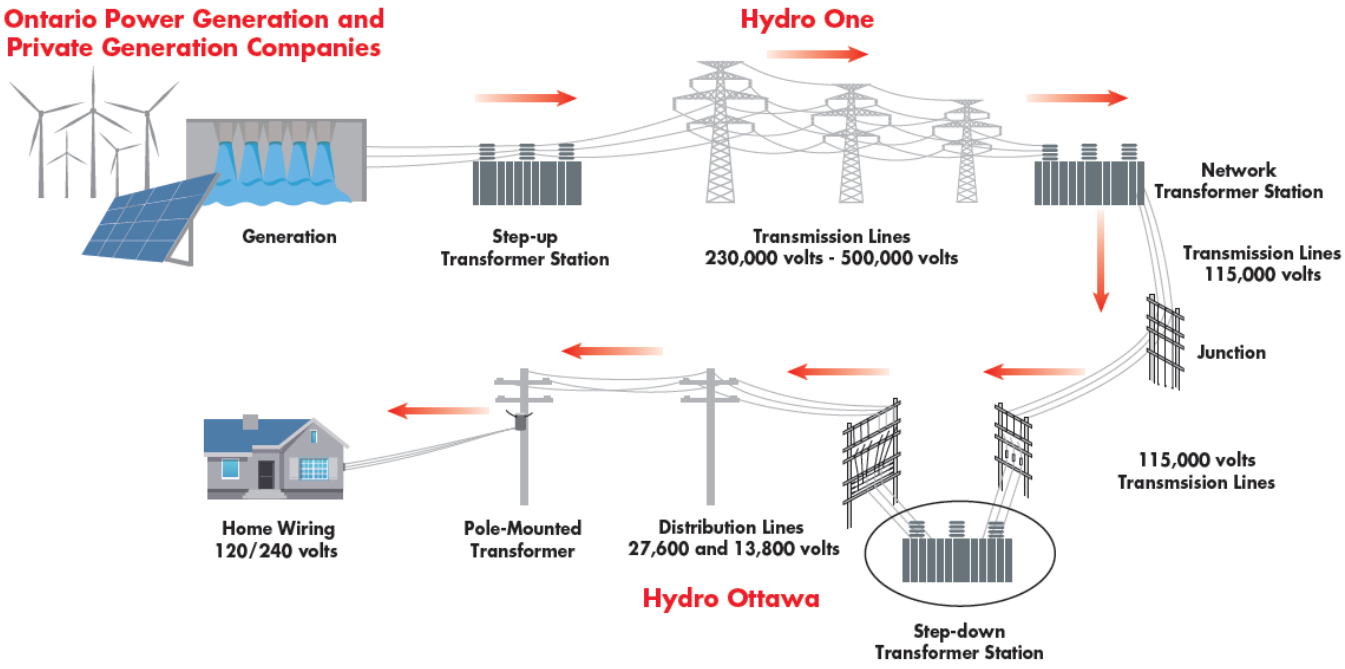
# We're here to share information and answer your questions

**Please**

- Take a moment to review the display panels and table maps, and chat with members of our team.
- Provide us with your email address if you would like to receive email updates during the construction of this project.
- Contact us anytime at 1-877-345-6799, or via Community.Relations@HydroOne.com

**Thank you** for your interest in the project and for attending our event.

# Hydro One's Role in Delivering Electricity to Your Community

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# Key Organizations

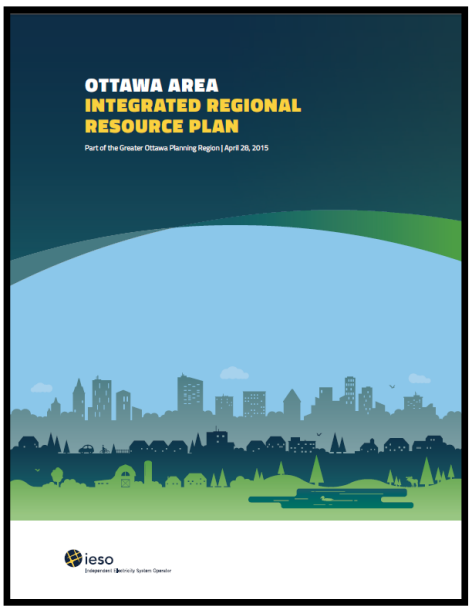
**Hydro One Networks Inc.**
Builds, owns, operates and maintains electricity transmission and distribution facilities across Ontario

**Hydro Ottawa**
Distributes electricity supplied by Hydro One's transmission system to residential, commercial and industrial customers in parts of Ottawa.

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

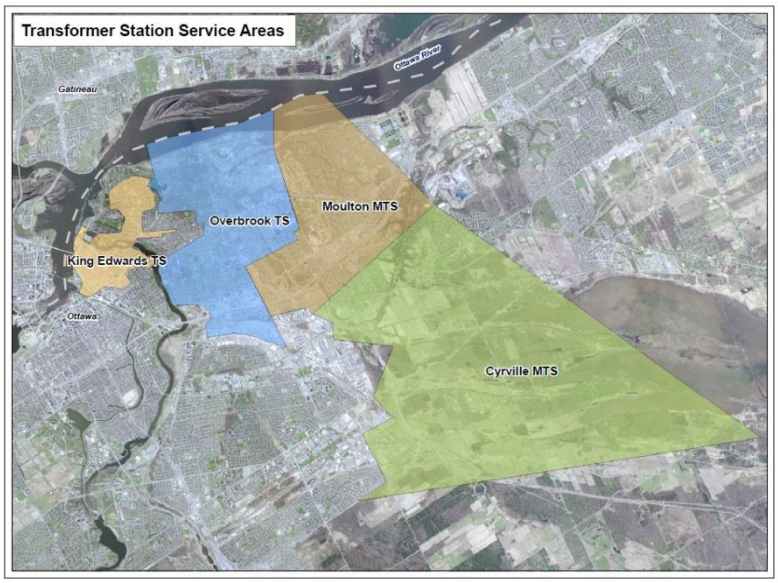
# Project Background

- This project is identified in the Ottawa Area *Integrated Regional Resource Plan,* developed by the IESO, Hydro Ottawa and Hydro One to address the growing electricity needs of central Ottawa.
- Power to this area is supplied by Hydro Ottawa and this project will ensure that Hydro One's transmission system can deliver an adequate and reliable supply of electricity to meet Hydro Ottawa's forecasted electricity needs.
- The project was initiated at the request of Hydro Ottawa to increase the capacity of the transmission system in central Ottawa to power homes and businesses.



# Area Electricity Demand

The proposed project will maintain a reliable supply of power to the following Transformer Stations (TS), areas and end-users.




**Overbrook TS**
- Vanier Community
- Montfort Hospital
- St. Laurent Mall

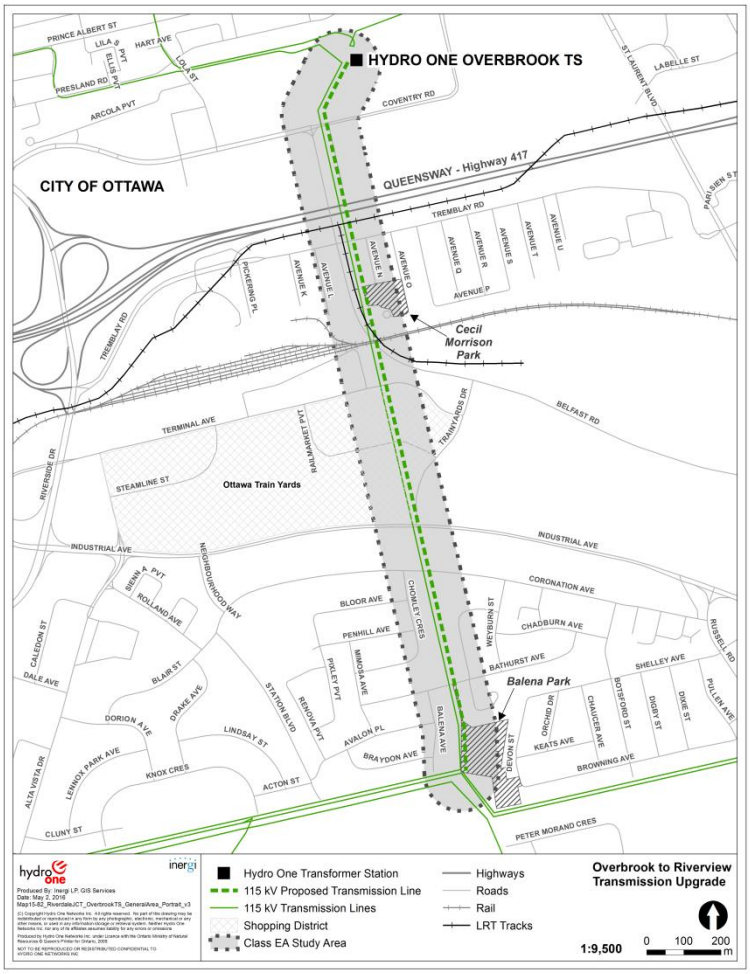
**King Edward TS**
- Sandy Hill Community
- The Market
- University of Ottawa
- Rockcliffe Park

**Moulton Municipal TS**
- Community of Rothwell Heights
- Gloucester Centre
- Industrial and commercial area along Ogilvie Road

**Cyrville Municipal TS**
- Cyrville Community
- Ottawa-Carleton Detention Centre
- Industrial and commercial area along Innes Road

# Project Details

- Add a second 115 kilovolt (kV) transmission circuit between Hydro One's Overbrook Transformer Station and Balena Park.
- Replace seven of the nine existing steel lattice and wood H-frame transmission towers with steel poles
- Replace the 2-pole structure adjacent to Overbrook TS with three sets of tapping structures.

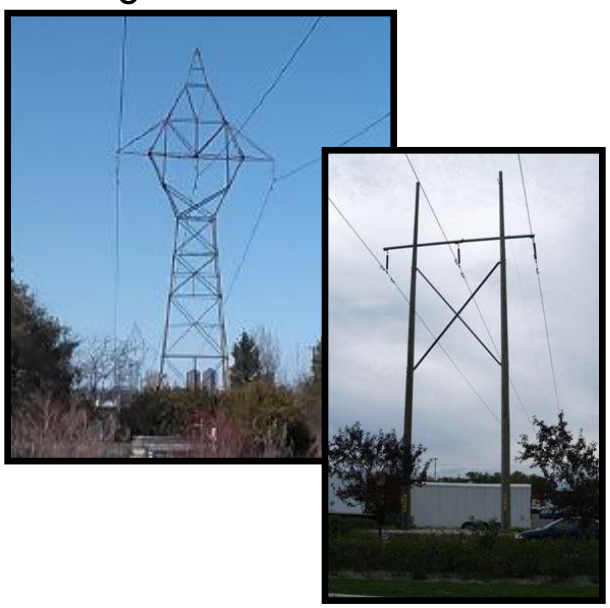


# Project Evolution

| ACTIVITY | TARGET TIMELINE |
|---|---|
| The IESO released its *Integrated Regional Resource Plan* (IRRP) for the Ottawa Area. | April 28, 2015 |
| Hydro One conducted a Class Environmental Assessment (EA) for the project | June 2016 – April 2017 |
| Hydro One planning for construction (i.e. negotiating easement rights, undertaking detailed engineering, obtaining permits, and contracting for services and materials) | Spring 2017 |
| Hydro One hosts pre-construction PICs | July 17 and 18, 2017 |
| Hydro One hosts a corridor tour | July 18, 2017 |
| Construction start date | Summer 2017 |
| Construction completion and corridor restoration | Spring 2018 |
| Planned in-service date | Spring 2019 |

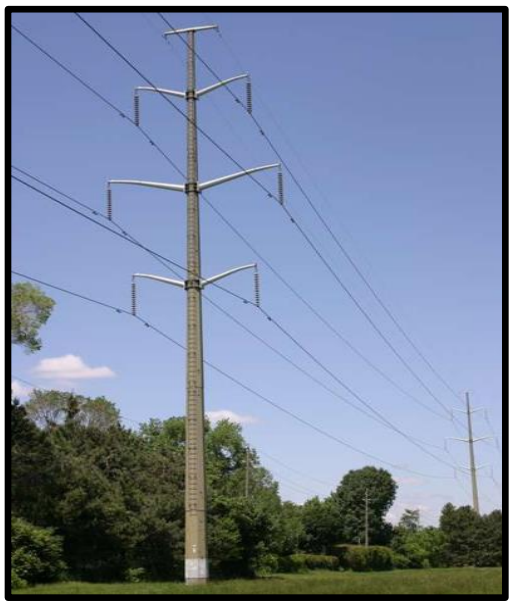
# What the new structures will look like

Existing Towers



Existing towers are between 80ft and 130ft tall

New Steel Poles



New pole heights will range between 132ft and 162ft tall

# What the new tapping structures will look like adjacent to Overbrook TS

Existing 2-pole structure

New Tapping Structures

# Construction Process

**Step 1:** Remove vegetation and install temporary access roads and work pads in the construction zone and establish laydown areas

**Step 2:** Mobilize equipment and install foundations at the new pole locations

**Step 3:** Install temporary wood poles at road crossings as a safety barrier when relocating and stringing the new conductor (wires)

**Step 4:** Construct and erect new poles

**Step 5:** Pull new wires on poles

**Step 6:** Dismantle existing towers

**Step 7:** Remove temporary wood poles, access roads and work pads

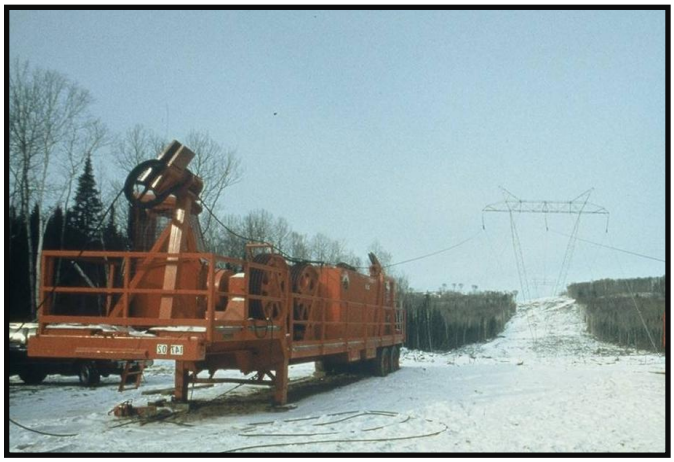
**Step 8:** Restore the right-of-way

# Examples of Construction Activities

Temporary access road

Set up laydown area

Pouring concrete for tower foundation



Pulling new conductor into position

# Typical Construction Equipment


## Bulldozers

To install temporary gravel road and working pads


## Backhoe/Excavators

To install foundations for new poles

## Cranes

To dismantle existing towers and erect new poles

# Minimizing Construction and Project Effects

- Safety for our workers and the public is our top priority. Appropriate signage and flagging will be available to ensure public safety.
- Construction work areas will be temporarily blocked off and will not be accessible to the public for safety reasons
- Construction will be intermittent and it is expected that all work can be carried out within the existing right-of-way
- Construction hours will be between 7:00 a.m. and 5:30 p.m., Monday to Friday with occasional work on weekends
- Entrances to businesses in the Ottawa Train Yards will remain accessible throughout construction
- Temporary lane restrictions will be necessary on Highway 417 to pull the new wires
- There are no power interruptions anticipated as a result of this project
- Hydro One will work with landowners and communities along the transmission right-of-way to minimize and mitigate disruption due to construction activities (noise, dust, traffic restrictions, etc.)

# Restoration Plan

- Vegetation within the construction access and work areas will be removed from the right-of-way during the site preparation stage of construction.
- Grassed areas disturbed by construction will be re-seeded after construction activities are complete.
- Forestry crews will continue to maintain the right-of-way to ensure the safe and reliable transmission of electricity.

Remove temporary access road

Remove remaining crushed stone

# Electric and Magnetic Fields (EMFs)

- EMFs are invisible forces that surround electrical equipment, power cords and power lines. You cannot see or feel EMFs.
- Every time you use electricity and electrical appliances, you are exposed to EMFs at extremely low frequencies. EMFs produced by both power lines and use of electrical appliances, belong to this category.
- EMFs are strongest when close to the source. As you move away from the source, the strength of the fields fade rapidly.

# Health Canada's Position on EMFs

- There is no compelling scientific evidence that EMF in living and school environments, regardless of locations from power transmission lines, cause ill health such as cancer. This position is consistent with the other opinions from most national and international scientific bodies.[1]
- You do not need to take action regarding daily exposures to electric and magnetic fields at extremely low frequencies. Health Canada does not consider guidelines for the Canadian public necessary because the scientific evidence is not strong enough to conclude that exposure cause health problems for the public.[2]

Sources:
1)Health Canada submission to the British Columbia Environmental Assessment Office on the Vancouver Island Transmission Reinforcement Project; 2006
2)Health Canada Fact sheet – Electronic and Magnetic Fields At Extremely Low Frequencies (January 2010)

# Thank you for coming

If you have any questions during construction please contact Hydro One Community Relations at **1-877-345-6799** or email **Community.Relations@HydroOne.com**

For additional project information please visit www.HydroOne.com/Projects/OverbrooktoRiverview

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