

# **Welcome to our Public Information Centre**

**Public Information Centre**



# Purpose of the Public Information Centre

- Provide you with information about Hydro One's proposed project
- Give you an opportunity to review display panels and maps and speak directly with members of our project team
- Outline the next steps in project planning, approvals and implementation

# The Need for Transmission Reinforcement

The Ontario Power Authority, in consultation with local distribution companies and Hydro One, has confirmed the need to reinforce the electricity transmission system in the Windsor – Essex area to:

- Ensure an adequate supply of electricity to meet future needs in the Towns of Lakeshore, Kingsville and Leamington, part of the Town of Essex, and the Township of Pelee
- Improve overall security and reliability of power supply for Windsor and Essex County
- Reduce transmission congestion in transferring power from generating plants in Windsor to Ontario's transmission grid\*

*\* Hydro One will address this particular need as part of a separate project in the future*

# The Ontario Power Authority (OPA)

- Established in 2004, the OPA is responsible for ensuring a long-term supply of electricity for the province of Ontario. The OPA's mandate includes:
  - leading and coordinating electricity conservation initiatives
  - ensuring required investments are made in new electricity supply resourcespreparing a comprehensive and integrated long-term power system plan
  - preparing a comprehensive and integrated long-term power system plan facilitating a commercial structure for Ontario's electricity industry



# Hydro One Networks Inc. (Hydro One)

- Hydro One, a successor company to the former Ontario Hydro, is an electricity transmission and distribution company. It owns, operates and maintains Ontario's high-voltage transmission system and is responsible for:
  - implementing transmission solutions identified by the Ontario Power Authority
  - conducting public consultation and seeking environmental and regulatory approvals for specific projects
  - coordinating the engineering, design and construction of new or upgraded transmission facilities.



Partners in Powerful Communities

## Supply to Essex County: Project Alternatives

- As part of this Class Environmental Assessment (EA) project, Hydro One is gathering data and seeking public input on two transmission alternatives
- Both alternatives are technically feasible and satisfy identified electricity system needs in the eastern part of Essex County; no preference is being given to either alternative at this time.
- Following analysis of technical, environmental, and socio-economic information and input from the public and community stakeholders, Hydro One will identify its preferred alternative and present its recommendation at a second series of Public Information Centres

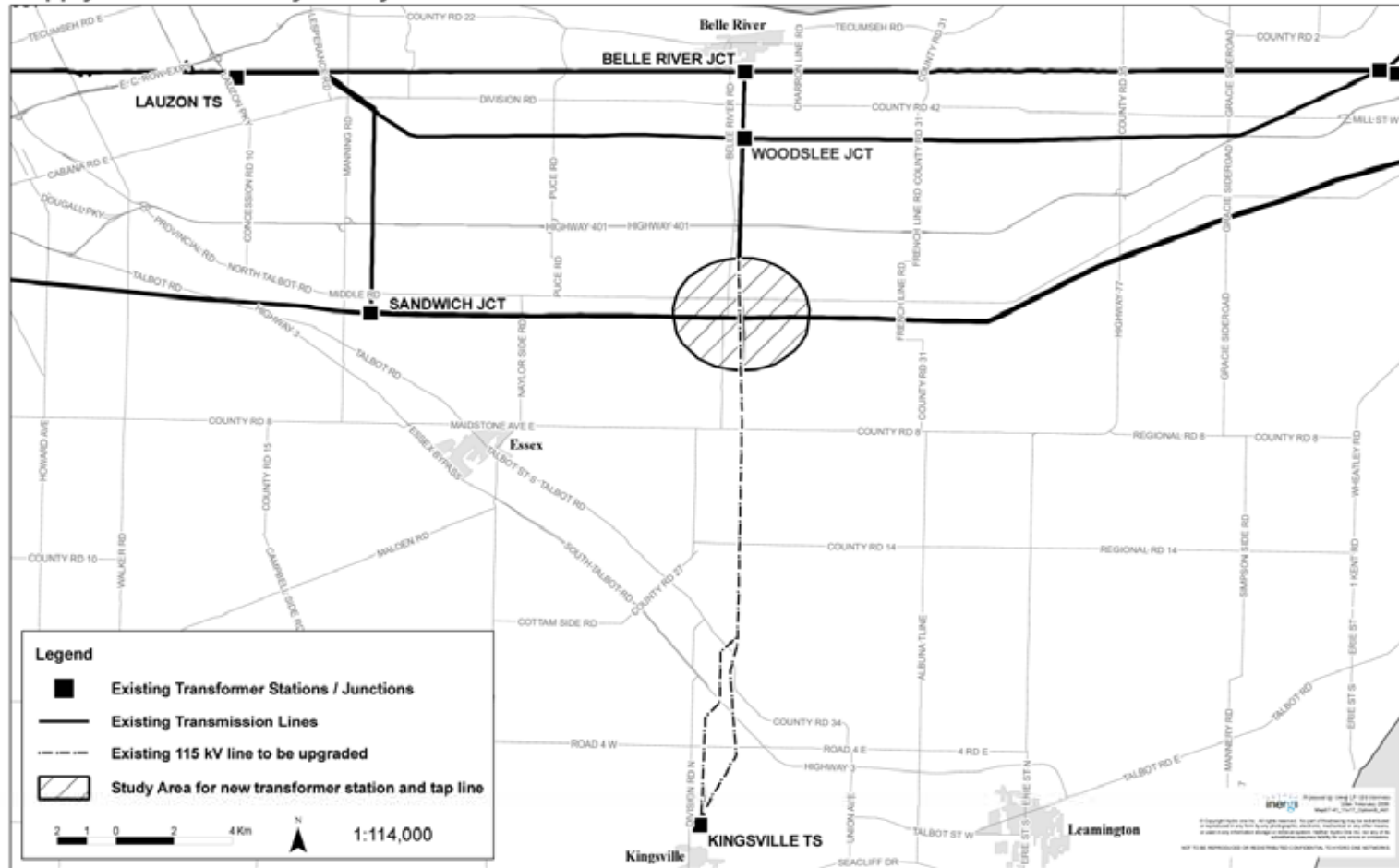
# Project Description -- Alternative One

- Build a new 230 kilovolt (kV) to 115 kV autotransformer station in the Woodslee area in the Town of Lakeshore
- This new transformer station (TS) would be connected by a “tap” line to the existing 115 kV transmission line that delivers power to Kingsville TS, and to the existing 230 kV transmission line running east to Sandwich Junction
- Rebuild the existing 115kV line between the proposed station and Kingsville TS, by replacing the existing conductor (wires) with higher capacity conductor and replacing the wood pole structures on the existing transmission right-of-way

Note: Depending on growth in electricity demand, an additional transformer station could be required within the next 10 years on the east side of the 115 kV line between Woodslee and Kingsville

# Alternative One

Supply to Essex County: Study Area for Alternative 1



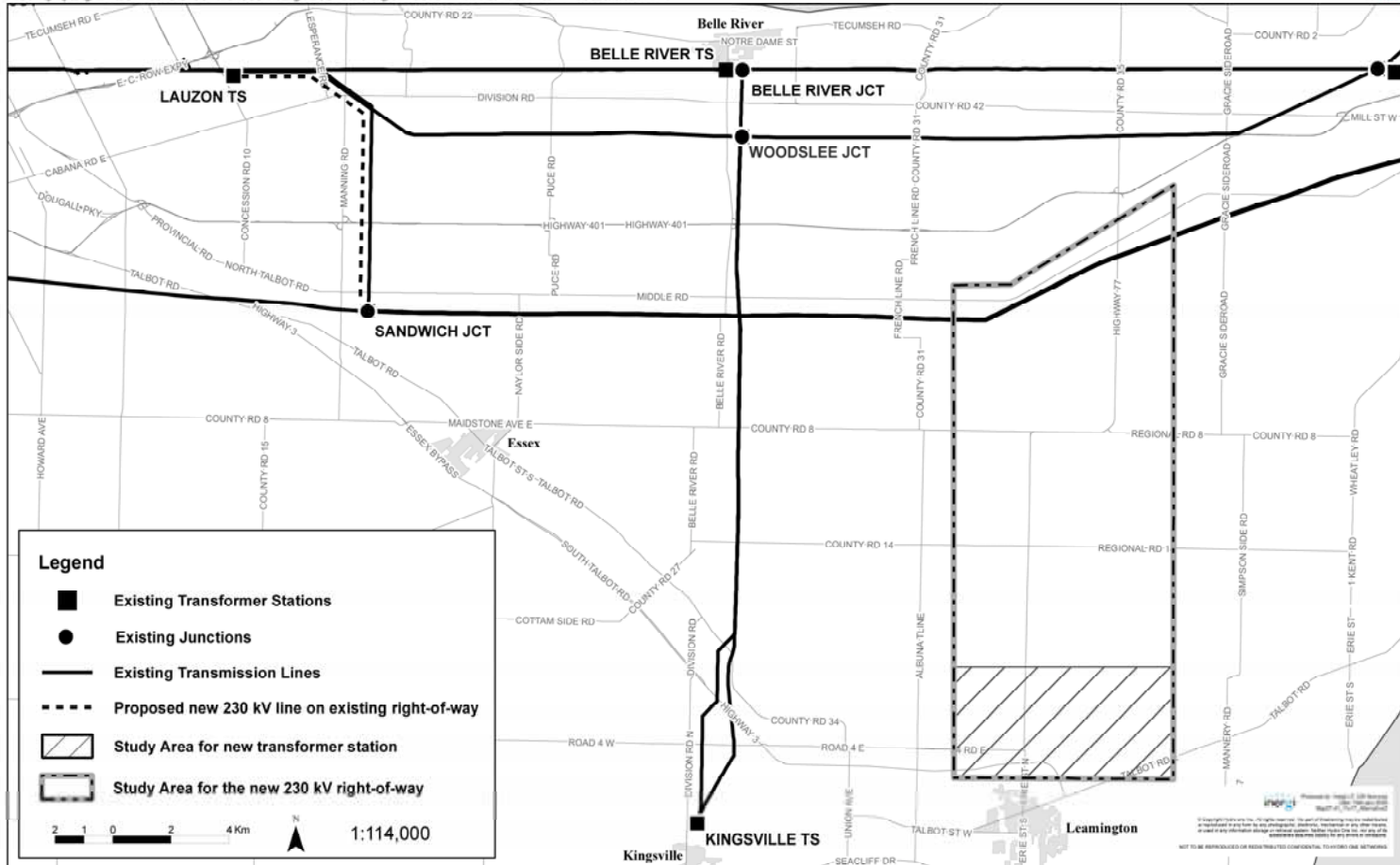


# Project Description -- Alternative Two

- Build a new 230 kilovolt (kV) to 27.6 kV step-down transformer station in the Leamington area
- Build a new 230 kV transmission line on a new right-of-way to connect the proposed transformer station to the existing 230 kV line running east-west, south of Hwy 401
- This alternative would also require the construction of a new 230 kV transmission line on the existing Hydro One-owned right-of-way between Lauzon Transformer Station and Sandwich Junction

# Alternative Two

Supply to Essex County: Study Area for Alternative 2



# Typical Layout of Transformer Stations



Transformer station similar to the one being proposed in the Woodslee area



Transformer station similar to the one being proposed in the Leamington area

# Environmental Planning Process

The potential effects of the project will be identified during project planning and design, as part of the Class Environmental

- Assessment (EA) process, including potential effects related to:
- Business and residential property owners
- Planned land uses and existing infrastructure
- Biodiversity and habitat (terrestrial and aquatic)
- Agricultural lands and productivity
- Archaeological (heritage) resources
- Forestry and mineral resources
- Recreational resources and landscape appearance
- Storm-water management

# Environmental Mitigation Measures

Measures to prevent or mitigate potentially adverse environmental effects during design, construction and operation include:

- Spill containment and storm-water management
- Minimization of erosion and soil compaction
- Protecting electrical equipment from fire hazards
- Environmental management during construction and operation
- Minimizing effects on prime agricultural lands and vegetation
- Controlling mud, dust, and traffic disturbances during construction
- Controlling noise and appearance of the site after construction
- Protecting archaeological resources
- Minimizing effects on land owners and existing and planned land uses

# Approval Requirements

## **Ontario Environmental Assessment (EA) Act**

The facilities are subject to provincial *Environmental Assessment Act* approval in accordance with the *Class Environmental Assessment for Minor Transmission Facilities*, as a precursor to any other separate approvals.

## **Ontario Energy Board (OEB) Act**

“Leave to Construct” approval is required under Section 92 of the *Ontario Energy Board Act*

## **Other**

Hydro One will meet all other legislative and permitting requirements for individual projects

# Class EA Process

- In 1978, a *Class EA for Minor Transmission Facilities* was developed and approved by the Ontario Ministry of the Environment and implemented by Ontario Hydro (now Hydro One). The Class EA was updated in 1992.
- The Class EA process is an effective way of ensuring that minor transmission projects that have a predictable range of effects are planned and carried out in an environmentally-acceptable manner
- Following the consultation process, a draft Environmental Study Report (ESR) will be available for stakeholder review and comment

## **Class EA Process** *(continued)*

- If no concerns are expressed during the review period, the project is considered acceptable. Hydro One will file the final ESR with the Ontario Ministry of the Environment, and approval is granted.
- If concerns are expressed during the review period, Hydro One will attempt to resolve them in order to complete the Class EA process
- If stakeholders are dissatisfied with the process or Hydro One's project recommendations, they can request that the Minister of the Environment bump-up the project to an individual EA



## Next Steps

Second series of Public Information Centres to present preferred transmission alternative	Spring 2008
Ontario Energy Board (OEB) Submission ("Leave to Construct" application)	Summer 2008
Public review and comment period for draft Environmental Study Report	Summer 2008
Anticipated Class EA and OEB approvals	Fall 2008
Planned start of design and construction	Spring 2009
Target in-service date	Spring 2011

# Your Input is Important to Us

- Thank you for attending our Public Information Centre
- Please fill out a comment form before you leave, or send us your comments afterward
- For project information, please contact us at:  
Website: [www.HydroOneNetworks.com/newprojects](http://www.HydroOneNetworks.com/newprojects)  
Email: [Community.Relations@HydroOne.com](mailto:Community.Relations@HydroOne.com)  
Information Line: 1-877-345-6799 or 416-345-6799  
Fax: 416-345-6984

# 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 fades 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 overall opinions from most national and international scientific bodies.
- Health Canada does not consider guidelines for EMF exposure necessary, because scientific evidence is not strong enough to conclude that typical exposures cause problems.

Source: Health Canada submission to the British Columbia Environmental Assessment Office on the Vancouver Island Transmission Reinforcement Project; 2006. [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)