

Regional Electricity Planning – London Area

Engagement Plan

Background

This Engagement Plan outlines the background, objectives and proposed timelines to engage with communities and other interested parties in the development of an electricity plan – Integrated Regional Resource Plan (IRRP) – for the London Area.

Examples of the input the Independent Electricity System Operator (IESO) is seeking to inform the IRRP include:

- Information to inform the electricity demand forecast and needs of the area including details about projected growth, economic development, and planned energy projects and initiatives
- Local options that might address needs identified within the planning period – up to the next 20 years.
- Opportunities to align future goals within community energy plans, community-based energy solutions, and other economic development plans for consideration in the medium to long term (up to 20 years)

All interested parties are invited and encouraged to participate in this engagement initiative. Interested parties may include, but are not limited to, local municipalities, Indigenous communities, businesses, residents, stakeholders and members of the general public.

This engagement plan may be subject to review and update as the process evolves.

ABOUT REGIONAL ELECTRICITY PLANNING

Regional electricity system planning identifies and addresses local electricity needs to ensure the reliability of electricity supply in each of the 21 electricity regions across the province. Planning for each region involves the creation of a 20-year demand forecast,

considering the region's unique needs and characteristics, demand management initiatives and opportunities, local generation, transmission and distribution, and innovative approaches. Regional planning is just one component of the broader system planning process, which also includes bulk and distribution system planning. All these elements share the common objective of maintaining a reliable and cost-effective electricity supply.

Each of the 21 regions undergoes a formal planning process at least once every five years, though at different times. The process unfolds differently each time depending on the region's unique needs and concerns.

More information about the regional electricity planning process can be found in the Appendix.

REGIONAL ELECTRICITY PLANNING IN THE LONDON AREA

The London Area, shown in Figure 1, roughly comprises the municipalities of Oxford County, Middlesex County, Elgin County, City of London, City of St. Thomas, and part of Norfolk County.

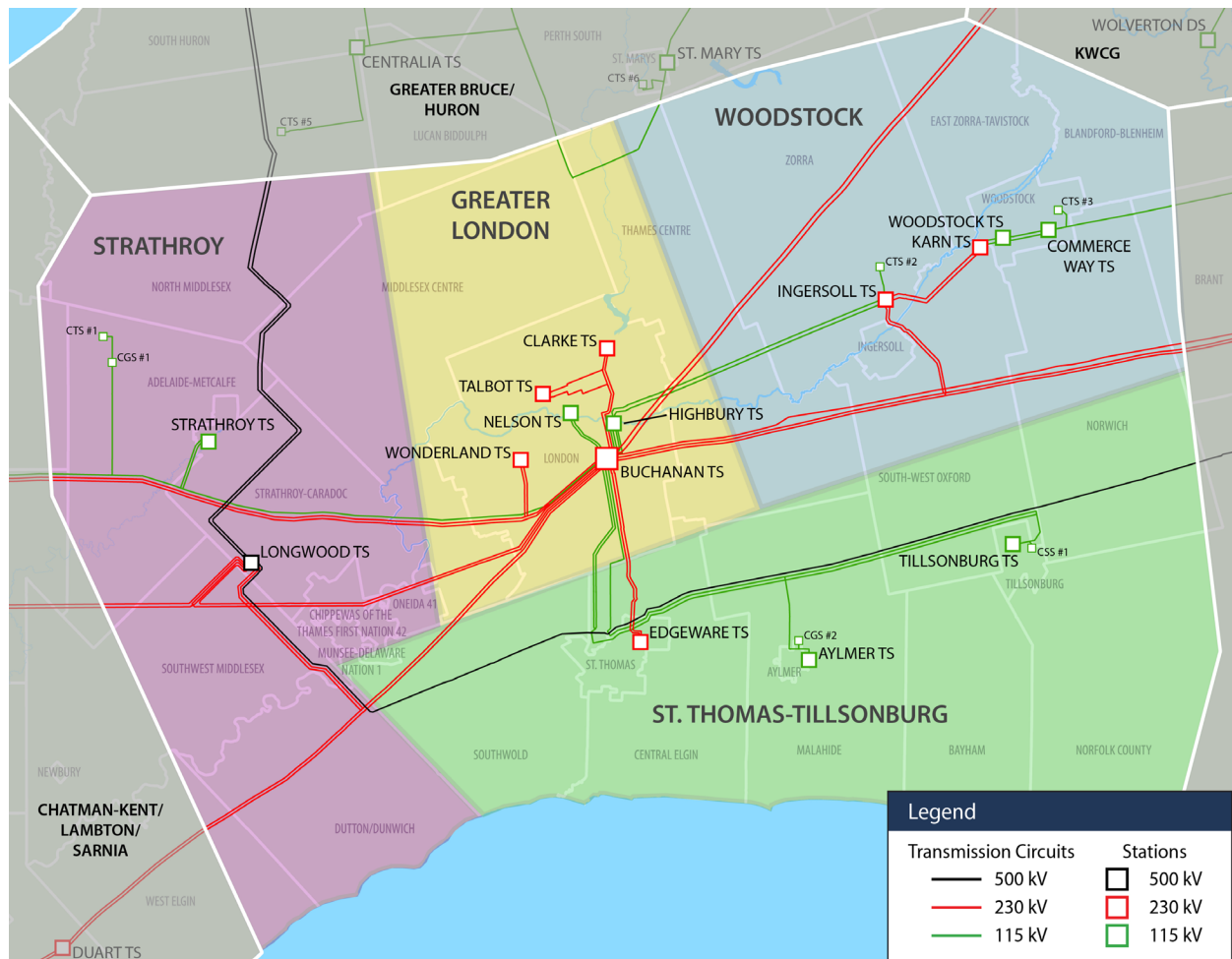
The London Area also includes several Indigenous communities that may be potentially impacted or may have an interest based on treaty territory, traditional territory or traditional land uses. These communities include: Aamjiwnaang First Nation, Caldwell First Nation, Chippewas of Kettle and Stony Point First Nation, Chippewas of the Thames First Nation, Eelūnaapèewi Lahkèewiit (Delaware Nation), Mississauga of the Credit First Nation, Munsee-Delaware Nation, Oneida Nation of the Thames, Walpole Island First Nation (Bkejwanong Territory) and Six Nations of the Grand River represented by Six Nations Elected Council, as well as the Haudenosaunee Confederacy Chiefs Council.

The Technical Working Group is led by the IESO and consists of the Local Distribution Company (LDCs) in the region including Hydro One Networks Inc., Entegrus Powerlines Inc., EARTH Power Inc., London Hydro Inc., and Tillsonburg Hydro Inc., in addition to the local transmitter, Hydro One Transmission. The group will use regional planning engagement initiatives to incorporate input while developing the IRRP for the region.

The London Area region is supplied by a network of 230 kV and 115 kV circuits. The 230 kV network is supplied from the bulk transmission system primarily through Longwood TS, and in part through Middleport TS (east of the region). The 115 kV network is supplied through 230/115 kV autotransformers primarily from Buchanan TS and Ingersoll TS, and in part from Burlington TS (east of the region). The TWG has decided upon four sub-regions for the purposes of regional planning, each of which include both 230 kV and 115 kV subsystems.

The four sub-regions are Greater London, St. Thomas-Tillsonburg, Strathroy, and Woodstock, as shown in Figure 1 below.

Figure 1 | London Area Electricity Infrastructure



The current regional planning cycle began with the [Needs Assessment](#) report published by Hydro One in November 2024, which identified areas that require further review and assessment, and need to be coordinated with broader regional planning.

Following the Needs Assessment, the IESO engaged and led the development of the [Scoping Assessment Outcome Report](#) that was published in April 2025. This report determined that a comprehensive and integrated approach is needed to address the identified needs. The TWG, led by the IESO, will develop this IRRP by taking into consideration input from communities and interested stakeholders.

The IRRP will include recommendations to maintain reliability of supply to the region over the next 20 years (2024-2043). To develop the IRRP, the TWG will work to gather data, identify needs and issues, examine integrated options, and recommend actions and implementation plans.

The goal of the IRRP is to illustrate the integration of the forecasted electricity demand growth, conservation and demand management (CDM) with transmission and distribution system capability, relevant community plans, other bulk system developments, and the potential of distributed energy resources (DERs). Both non-wires and wires solutions will be examined, and communities and stakeholders will be engaged on the options.

This is the third cycle of regional planning for the London Area. The first cycle was completed in 2017 with an IESO Integration Regional Infrastructure Plan (IRRP) focused only on the Greater London subregion, followed by Hydro One's Regional Infrastructure Plan (RIP). The second cycle was initiated in 2020 with Hydro One's Needs Assessment which recommended a RIP and was completed in 2022. The previous IRRP mainly focused on near-to-medium term needs. It explored distribution level solutions for near-term needs, and recommended monitoring for the development of new needs in the long-term. The first cycle recommendations are available in the [2017 London Area Integrated Regional Resource Plan](#) and on the London Area regional planning [webpage](#).

London Area Integrated Regional Resource Plan

The TWG is responsible for gathering data and assessing the adequacy and security of the electricity supply to the region, and, through this engagement, recommending an integrated set of actions to meet the needs of the region.

Their work is intended to focus on, but is not limited to the following areas, as outlined in the 2025 London Area Scoping Assessment Report (Section 3.3):

- Station capacity needs
- Line/system capacity needs
- Load security & restoration needs
- Asset renewal needs

Through the IRRP process, additional needs may be identified or the ones identified may be revised.

ENGAGEMENT OBJECTIVES AND SCOPE

The objective of this engagement plan is to ensure that interested communities and stakeholders understand the scope of the IRRP and can provide input into the development of the document.

The IESO is seeking input to ensure the IRRP:

- Aligns with community perspectives on local needs
- Incorporates options to meet the growing electricity demand in the London Area taking into consideration local energy priorities
- Ensures a reliable source of electricity in the region over the next 20 years.

As a general principle in engagement, the IESO strives to make relevant information available throughout the development of an IRRP to enable meaningful feedback to the process and decisions to be made. Through the planned initiatives to engage communities and stakeholders, the IESO will seek input on:

- Local and regional growth and economic development
- Plans and projects that may have an impact on local growth rates and electricity demand (e.g., community development, regional transit expansion, electrification, large incremental loads connecting to the system, significant DER projects, etc.)
- Options for addressing local electricity needs, including non-wires alternatives (e.g., eDSM and DERs) and local support and interest for developing those options in the near- (five year), medium- (10 year) and long-term (20 year)
- Information from municipal plans including the implementation of those projects that could impact electricity use, specifically from community energy plans, energy reporting/eDSM plans, official plans and secondary plans

Topics out of scope for discussion include:

- Projects and plans already underway as part of the previous planning cycle
- Policy-level decisions or direction
- Provincial procurements
- Local connection requirements of any individual projects unless there is an opportunity to align with broader regional needs

INTERESTED PARTIES

Input into the development of the IRRP is encouraged and welcomed from any community members or interested stakeholders, however, those that may be particularly interested include:

- Municipalities (e.g., elected officials and staff in planning, sustainability, climate change and economic development)
- Indigenous communities
- Consumer groups and associations (e.g., community/resident associations, business improvement areas, home builders' associations, etc.)
- Economic development agencies, local boards of trade and/or chambers of commerce

- Academia and research organizations (e.g., colleges and universities)
- Environmental groups and associations
- Other public sector organizations (e.g., hospitals and school boards)
- Energy service providers
- Generators
- Businesses and other private entities
- Residents

The IESO will also conduct targeted outreach to specific stakeholders and communities where unique local needs and issues need further investigation. The content and outcome of these discussions will be shared through the other activities that will be undertaken as part of this engagement initiative.

APPROACH AND METHODS FOR DEVELOPING THE IRRP

Any engagement with communities and interested stakeholders will be conducted in accordance with the IESO's [Engagement Principles](#).

This is a public engagement process. A [dedicated engagement webpage](#) will house all the information for the IRRP while the plan is in development. Engagement sessions will be held throughout the IRRP process to keep all interested parties informed and present opportunities to provide input into IRRP development. Typically, engagement sessions are carried out at three major junctures during IRRP development:

- First engagement on the draft engagement plan and the regional load forecast
- Second engagement on the defined needs and potential options; and
- Third engagement on the options evaluation and draft recommendations.

Based on the results and progress of planning and engagement efforts, additional engagement sessions may be incorporated into the engagement process.

A feedback form will be provided for interested parties to provide their input for consideration in the planning process. Comments will be accepted typically over a three-week period following each engagement session. Written feedback will be posted (with consent) along with IESO responses on the engagement webpage.

In addition to public engagement sessions, one-on-one discussions with key communities and stakeholders, as identified, may take place to help progress through each stage of the IRRP.

Following completion of an IRRP, the full report, including all accompanying appendices and associated datasets, will be archived on the IESO's London Area regional planning

webpage. A high-level schedule of these items is provided below, and it should be noted that these activities and timing may evolve as the IRRP work progresses:

PROPOSED ENGAGEMENT SCHEDULE

Date	Event/Objective	Expected Actions/Notes
April/May 2025	One-on-one discussions with key communities and stakeholders, as identified	<ul style="list-style-type: none"> • Seek input on needs and development to inform demand forecasts • Consider input to inform next engagement phase
November 2025	IRRP engagement launches	<ul style="list-style-type: none"> • Register to attend public webinar #1
December 2025	Public Webinar #1: Draft Demand Forecast and Scenarios <ul style="list-style-type: none"> • Summary of input from targeted discussions • Provide update on planning activities underway • Summarize preliminary regional demand forecast and scenarios, draft engagement plan 	<ul style="list-style-type: none"> • Seek input to inform electricity demand forecast and scenarios • Seek input on draft engagement plan • Post feedback and IESO response to feedback, including rationale
December 15 2025	Feedback due for Public Webinar #1	<ul style="list-style-type: none"> • Feedback posted

Q1 2026	One-on-one discussions with key communities and stakeholders, as identified	<ul style="list-style-type: none"> • Seek input on local priorities, preferences and development to inform potential needs and solutions • Consider input to inform next engagement phase
Q1 2026	Public Webinar #2: Needs and Options Screening <ul style="list-style-type: none"> • Overview of defined needs • Overview of range of potential options/solutions to be examined • Discuss considerations for communities and interested parties to consider in the medium to long-term planning 	<ul style="list-style-type: none"> • Seek input on needs identified • Post feedback and IESO response to feedback, including rationale
Q3 2026	One-on-one discussions with key communities and stakeholders, as identified	<ul style="list-style-type: none"> • Seek input on local priorities, preferences and development to inform recommendations • Consider input to inform next engagement phase
Q3 2026	Public Webinar #3: Detailed Options Analysis and Draft Recommendations <ul style="list-style-type: none"> • overview of options analysis and draft recommendations • Discuss considerations for communities and interested parties to consider in the 	<ul style="list-style-type: none"> • Seek input on proposed plan recommendations • Post feedback and IESO response to feedback, including rationale

	medium- to long-term planning	
October 2026	Finalize IRRP	<ul style="list-style-type: none"> • Post final report online • Engagement will close but the webpage will remain live • Conduct survey on engagement process

London Area IRRP Engagement Appendices

Appendix

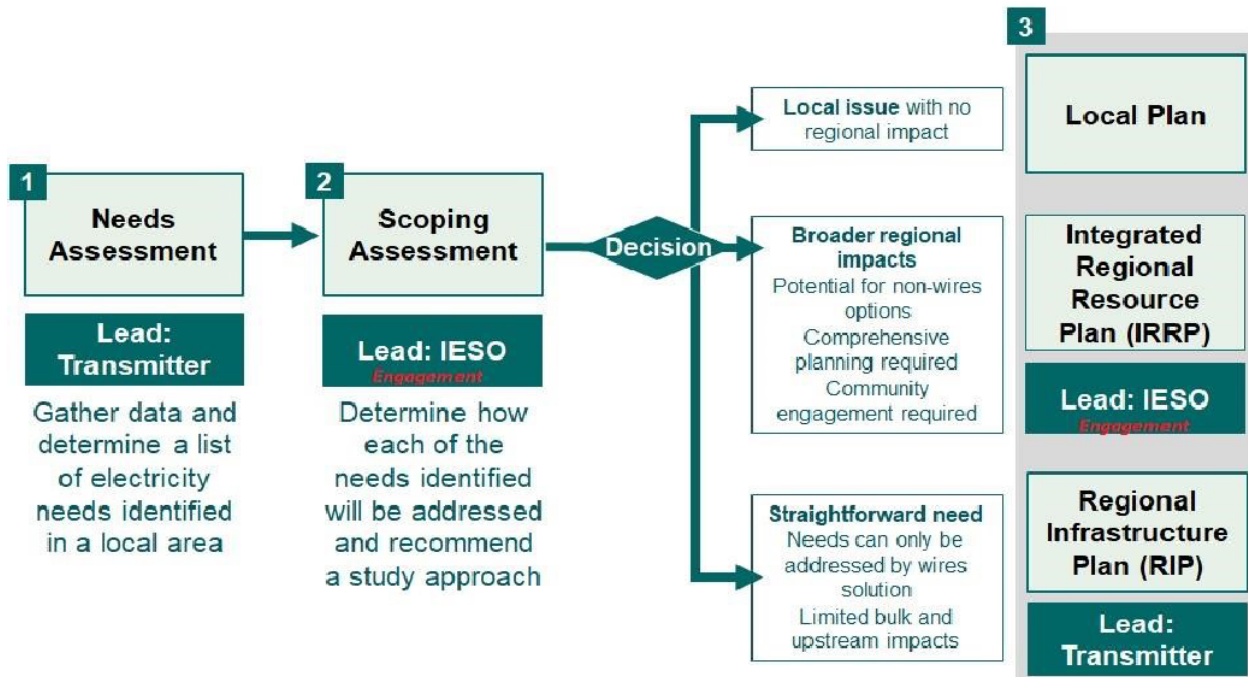
Regional Planning Process

Regional planning is ongoing, with electricity reliability evaluated at least once every five years in each region. Community engagement is a critical part of the planning process and the IESO encourages all interested parties to join this discussion to:

- Learn more about the regional planning process and local electricity needs

- Provide input into shaping a community’s electricity future by discussing options for meeting local needs, including applicable non-wires alternatives, and discussing the local community’s support for development of these options
- Share perspectives for future growth in the area, and how to work together to shape the area’s future electricity supply
- Determine opportunities for coordinating and aligning local planning activities and initiatives with the regional planning process

The following diagram illustrates the steps, parties and outcomes of the regional planning process.



For more information, visit the Regional Planning Process webpage at:

<https://www.ieso.ca/en/Get-Involved/Regional-Planning/About-Regional-Planning/How-the-Process-Works>

Regional Planning Information and Data Availability

Table 1 describes the categories of regional planning information and data and the opportunity for input and timing in which it is typically made available during an IRRP, with updates made to reflect timing specific to this plan.

Table 1 | Summary of Regional Planning Information

Data	Description of Data	Opportunity for Input	Details Regarding Input/Availability
Regional Planning Dashboard	Provides comprehensive overview and status update of the various regional planning activities across Ontario, including the planned engagements for the next two quarters	No	Updated biannually and available for download on the IESO website: Regional Planning (ieso.ca)
Engagement Plan	Describes number of engagements and topics to be discussed at each engagement	Yes	Draft engagement plan posted prior to first IRRP engagement; the final engagement plan is published following a comment period
Planning Assessment Criteria	Technical requirements and performance criteria used to determine needs, including load supply, load security, load restoration etc.	No	Referenced in the IRRP report; and available in the IESO's Market Rules & Manuals Library: Market Rules & Manuals Library (ieso.ca)
Load Forecast (PDF)	LDC's methodologies for forecast development; and methodologies for considering the contribution of energy efficiency savings and embedded generation resources	Yes	High-level summary provided at first IRRP engagement to solicit input on load forecast; draft methodologies are published before the first webinar; final methodologies published with the IRRP
Load Forecast (Spreadsheet)	Forecast annual station peak electricity demand (in megawatts), power factor	Yes	Overview of preliminary forecast is delivered with first IRRP engagement;

Data	Description of Data	Opportunity for Input	Details Regarding Input/Availability
	assumptions: information is subject to redaction and/or aggregation to protect against identifying specific customer electricity usage		draft data published before webinar engagement and comment period; final dataset published with IRRP report
Load Forecast – Energy Efficiency (Spreadsheet)	Forecast of annual peak demand reductions from energy efficiency (in megawatts), at a level of granularity consistent with the forecast annual station peak electricity demand	Yes	Provided with the forecast annual station peak electricity demand (draft data published before the first webinar and comment period, and final data with IRRP report)
Load Forecast – Embedded Generation (Spreadsheet)	Forecast of annual peak demand reductions from embedded generation resources (contracted embedded generation, in megawatts), at a level of granularity consistent with the forecast annual station peak electricity demand	Yes	Provided with the forecast annual station peak electricity demand (draft data published before the first webinar and comment period, and final data with IRRP report)

Historical Demand	Historic electricity demand data (in megawatts), may be summer, winter, or both depending on peak load characteristics of the region, and may include select years and/or focus on select stations/areas; information is subject to redaction and/or aggregation to protect against identifying specific customer electricity usage	No	Data posted prior to first IRRP webinar to solicit input on load forecast; published with the IRRP report
Transmission end-of-life (EOL) Information	Asset age data for major transmission facilities owned by Hydro One; a ten-year outlook of other transmission asset owner EOL information to be provided as part of the Needs Assessment at the outset of each regional planning cycle	No	Hydro One data is updated every five years and is available to interested stakeholders via the IESO website; a consolidated list of EOL information for all transmission asset owners will be updated annually
Transmission System Assumptions	Includes transmission facilities assumed in the IRRP analysis such as new facilities and expected in-service dates, transmission infrastructure ratings (e.g., line conductor, transformer ratings, etc.), seasonality, etc.; some information may be redacted to mitigate potential system security risks	No	Facilities in scope of the IRRP and expected in-service dates are published in the Scoping Assessment Outcomes Report that precedes the IRRP, with additional detail published in the IRRP report

Resource Assumptions	May include operational assumptions such as hydroelectric output, capacity factor assumptions, power factor assumed in the analysis, etc. Operational performance of individual facilities may be deemed commercial sensitive	No	General and/or aggregate assumptions by resource type are published with the IRRP report
Planning Scenarios	Planning contingencies studied in the analysis; some contingencies and extreme events are subject to redaction to mitigate potential system security risks	Yes	Summary published with the IRRP report
System Needs	Summary of needs identified, timing and location of needs, including any applicable capacity requirements, EOL considerations, load restoration and supply security needs, etc.	No	Presented in materials provided in advance of the second IRRP engagement about the needs identified in the region; and published with the IRRP report published with the IRRP report
Non-Wires Options Evaluation (PDF)	Energy efficiency potential for areas with system needs, if applicable as a feasible option (annual and/or cumulative potential, in kilowatts and/or megawatts); sources of energy efficiency information and data	Yes	Preliminary information discussed at the third engagement with opportunity for stakeholders to provide feedback; and published with the IRRP report

Non-Wires Options Evaluation (Spreadsheet and/or PDF)	Detailed characterization of system needs, i.e., load and energy not served, for areas with system needs where non-wires options are feasible (for select years within the study period, in megawatts); information is subject to redaction and/or aggregation to protect against identifying specific customer electricity usage	No	Summary provided with engagement materials prior to the third engagement, where options are presented and discussed; draft data provided following comment period; and final data published with the IRRP report
Economic Assessment Assumptions	<p>Cost of each alternative considered, expressed in terms of Net Present Value; and including assumptions such as the following:</p> <p>Year which cash flows are expressed</p> <p>Discount and inflation rates (in percent)</p> <p>Life expectancy of the options considered (in years)</p> <p>Exchange rates</p> <p>Identification of the least cost resource for a region</p>	Yes	Preliminary information provided and discussed at the third IRRP engagement on solution options, with an opportunity to provide feedback; and final assumptions are published with the IRRP report