



Niagara Region Scoping Assessment Outcome Report

September 16, 2026

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1. Introduction

This Scoping Assessment Outcome Report is part of the Ontario Energy Board's regional planning process, as defined through the Transmission System Code, Distribution System Code, and Independent Electricity System Operator (IESO) license.

This is the third cycle of regional planning for the Niagara Region. It was initiated in March 2026 with a Needs Assessment (NA) led by Hydro One Networks Inc. (Hydro One) and a Technical Working Group (TWG) comprised of Hydro One, the IESO and the Local Distribution Companies (LDCs) with assets in the region. A Needs Assessment Report published on July 20, 2026, on the [Hydro One website](#), identifies needs requiring further regional coordination. In this Scoping Assessment, the TWG reviewed the nature and timing of all the needs identified in the region through the Needs Assessment process, to determine the most appropriate planning approach.

The Scoping Assessment process considers which of three potential planning approaches is most appropriate for addressing the region's needs, including: an Integrated Regional Resource Plan (IRRP) – where both wires and non-wires solutions have the potential to address the needs and are considered as alternatives; a Regional Infrastructure Plan (RIP), which considers only wires (transmission and distribution) solutions; or a local plan undertaken by the transmitter and the affected local distribution company or customer, where no further regional coordination is needed.

This Scoping Assessment Outcome Report:

- Lists the needs requiring more comprehensive planning, as identified in the Needs Assessment report.
- Reviews the areas to be studied and the potential for grouping of needs on a geographic basis (if splitting the region into sub-regions would be beneficial). This Scoping Assessment does not recommend splitting the region into sub-regions.
- Considers impacts on planning assumptions and potential outcomes on needs resulting from local and provincial policy goals.
- Determines if an IRRP is the appropriate regional planning approach where there are needs requiring regional coordination or more comprehensive integrated planning. This Scoping Assessment recommends an IRRP.
- Establishes the Terms of Reference for an IRRP.
- Establishes the composition of the IRRP Technical Working Group.

2. Technical Working Group

The Scoping Assessment was carried out with the following participants:

- Alectra Utilities
- Canadian Niagara Power Inc.
- Grimsby Power Inc.
- Hydro One Networks Inc. (Distribution)
- Hydro One Networks Inc. (Transmission)
- Independent Electricity System Operator (IESO)
- Niagara on the Lake Hydro Inc.
- Niagara Peninsula Energy Inc.
- Welland Hydro Electric System Corp.

3. Categories of Needs, Analysis and Results

3.1 Overview of the Niagara Region

The Niagara electrical region is located between Lake Ontario and Lake Erie, and includes one upper-tier municipality (Regional Municipality of Niagara) and 13 lower-tier municipalities: Fort Erie, Grimsby, Lincoln, Niagara Falls, Niagara-on-the-Lake, Pelham, Port Colborne, St. Catharines, Thorold, Wainfleet, Welland, West Lincoln, and Haldimand County. For electricity planning purposes, the planning region is defined by electricity infrastructure boundaries, not municipal boundaries.

To raise awareness and share information about the regional planning process in the Niagara region, the IESO invites Indigenous communities that may be potentially impacted or may have an interest based on treaty territory, traditional territory or traditional land use to participate in engagement initiatives:

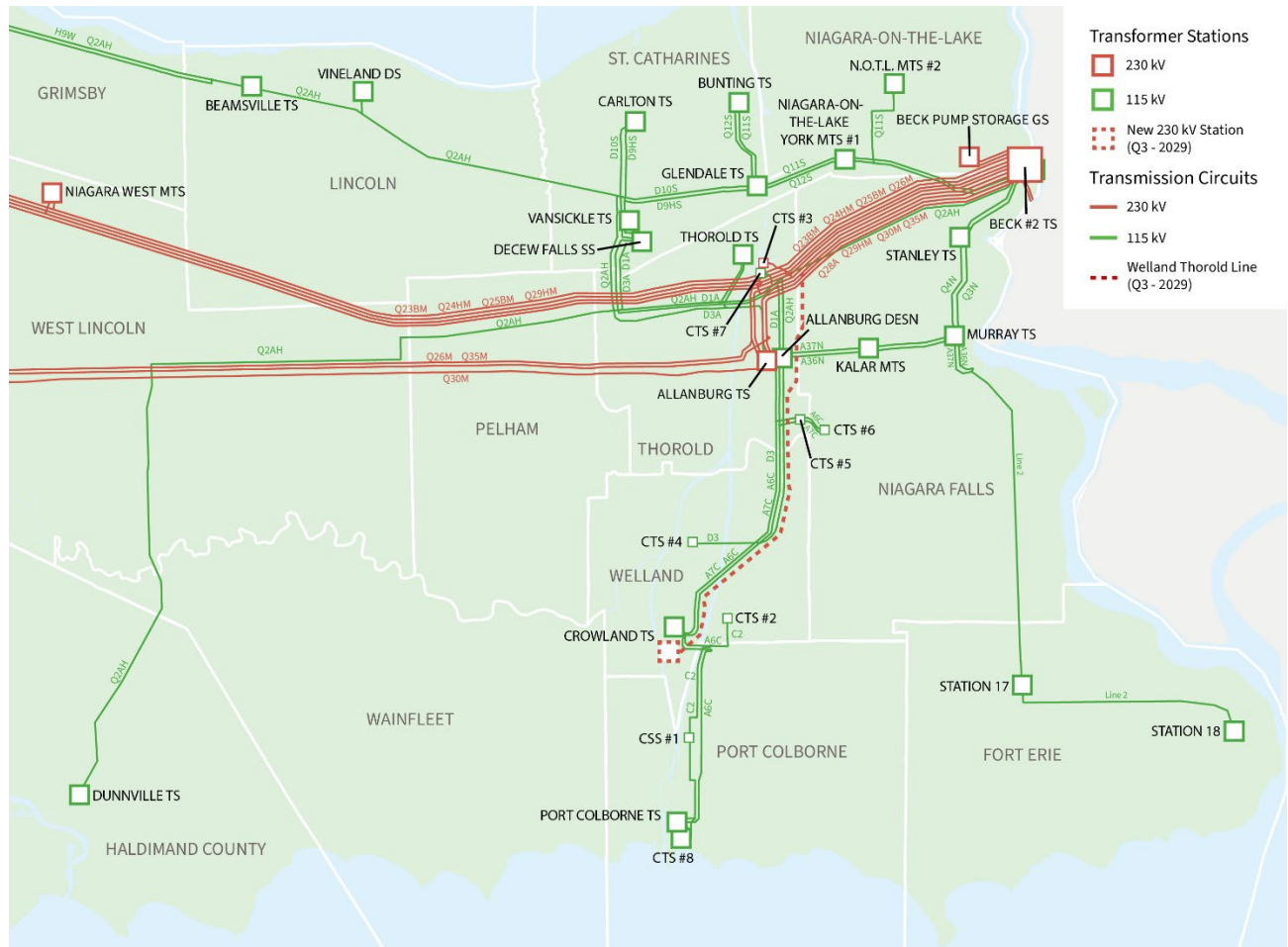
- Mississaugas of the Credit First Nation
- Oneida Nation of the Thames
- Six Nations of the Grand River as represented by Six Nations Elected Council as well as the
- Haudenosaunee Confederacy Chiefs Council

The Métis communities invited to participate in engagement activities are:

- Métis Nation of Ontario
- Niagara Region Métis Council

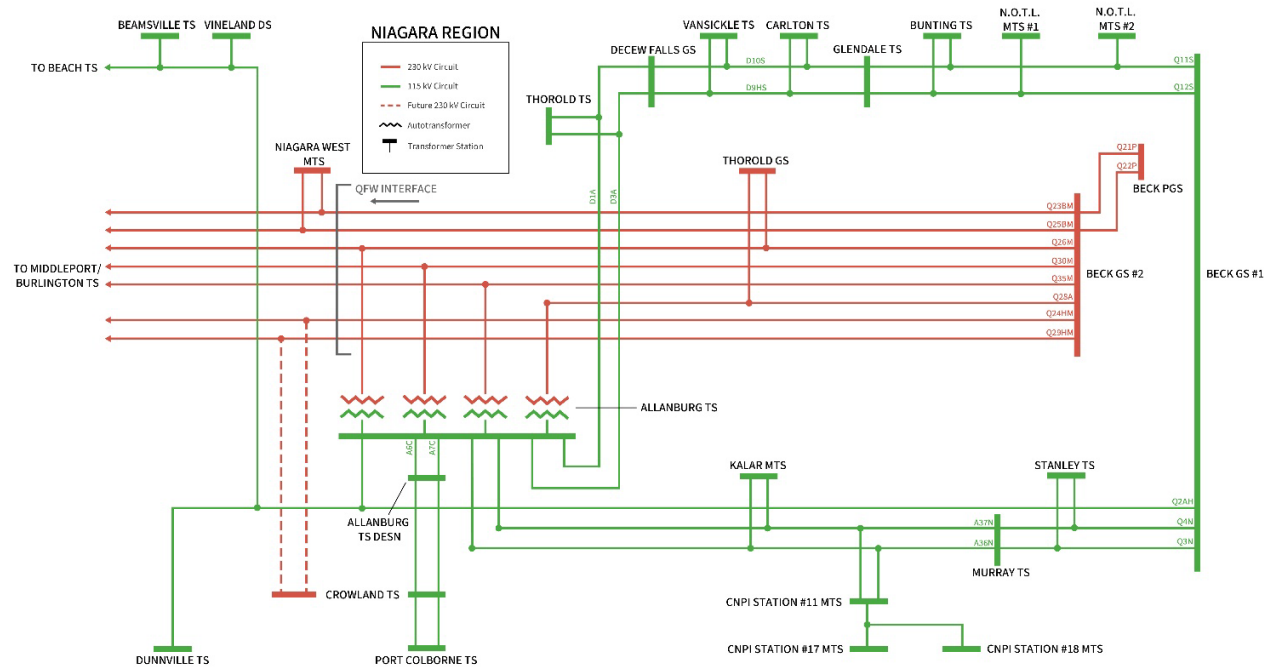
An overview of the Niagara electrical region and the location of the electrical infrastructure is shown in **Figure 1**. This region is summer-peaking (i.e., electricity demand is highest during the summer months), and is characterized by some forecast load growth, particularly in areas near the Welland Canal.

Figure 1 | Overview of the Niagara Electrical Region



The region is supplied by 115 kV and 230 kV transmission lines and stations that connect at the Allanburg transformer station (TS) located in the City of Thorold. The four 230/115 kV autotransformers at Allanburg TS provide the major source of supply to the area. The Niagara electrical region is also characterized by large transmission-connected generating facilities, such as: Sir Adam Beck #1, Sir Adam Beck #2 in the City of Niagara Falls, Decew Falls GS in the City of St. Catharines, and Thorold GS. An overview of the electrical infrastructure that currently supplies the region is provided in the single line diagram in **Figure 2**.

Figure 2 | Electricity Infrastructure in the Niagara Region



3.2 Previous Regional Plans

For the first cycle of the regional planning process for the Niagara electrical region, Hydro One Transmission published the Needs Assessment Report in April 2016, followed by a Local Planning Report, published in November 2016. Together, these reports formed the Regional Infrastructure Plan (RIP) finalized in March 2017. The planning cycle identified the need to address thermal overload concerns on the 115 kV Q4N circuit located in the Niagara Falls area and low power factor concerns at Thorold TS. The thermal overload issue was addressed through conductor uprating as part of the Beck SS #1 Refurbishment project, which was completed in 2019, while the low power factor issue has continued to be monitored. In addition, transformer capacity upgrades were completed in the Niagara-on-the-Lake area, with new and replacement transformers placed in service in 2021 to increase local transformation capacity.

The second cycle of regional planning concluded in July 2023 with the publication of the RIP, where the following needs and action plans were determined:

- **230 kV Circuit Q28A Capacity Upgrade** – Uprate the 230 kV circuit between Beck 2 SS and Abitibi Junction in the Niagara Falls/Thorold area. Planned in-service date: Q2-2027.
- **Lincoln Area Station Capacity** – Construct a new 230/27.6 kV, 50/83 MVA transformer station. Planned in-service date: Q4-2027.
- **Crowland TS Station Capacity** – Convert station to 230 kV with a new 230/27.6 kV, 75/125 MVA transformer and construct approximately 18 km of new double-circuit transmission line between Abitibi Junction and Crowland TS located in the City of Welland. Planned in-service date: Q3-2029.

- **Murray TS Station Capacity** (City of Niagara Falls) – Replace existing 75 MVA transformers T11 and T12 with new 100 MVA units. Planned in-service year: 2027. Planned asset renewal in-service date: Q4-2032. Planned station capacity in-service date: 2031.
- **Carlton TS Load Transfer** (City of St. Catharines)– Transfer excess load from Carlton TS to Bunting TS. Planned in-service date: Q4-2029.
- **Thorold TS Asset Replacement** – Replace transformer T1. Completed date: Q4-2023.
- **Glendale TS Asset Replacement** (Thorold/St. Catharines area) – Replace transformers T1 and T2. Planned in-service date: Q4-2031.
- **Carlton TS Asset Replacement** (City of St. Catharines) – Replace existing low-voltage switchgear. Planned in-service date: Q1-2028.
- **Bunting TS Asset Replacement** (City of St. Catharines) – Replace existing transformers T1 and T2. Planned in-service date: Q3-2035.
- **Murray TS Asset Replacement** (City of Niagara Falls) – Replace transformers T13 and T14. Planned in-service date: Q4-2032.
- **Vansickle TS Asset Replacement** (City of St. Catharines) – Replace existing low-voltage switchgear. Planned in-service date: Q4-2034.
- **Allanburg TS Asset Replacement** (City of Thorold) – Replace transformer T3. Planned in-service date: Q4-2032.
- **D1A/D3A Asset Replacement** (City of Thorold) – Refurbish the 115 kV transmission line section between Gibson Junction and Thorold TS. Completed date: Q4-2023.
- **Q2AH Asset Replacement** (Township of West Lincoln) – Refurbish the 115 kV transmission line section between Rosedene Junction and St. Anns Junction. Planned in-service date: Q4-2031.

3.3 Needs Identified

The Needs Assessment for the third planning cycle, led by Hydro One, provided an update on needs identified in the previous planning cycle and the implementation of projects recommended to address them. The Needs Assessment identified new or updated needs in the Niagara electrical region using the 10-year station-level non-coincident demand forecast provided by the local distribution companies (LDCs), updated end-of-life asset condition information from Hydro One, as well as the electricity demand side management (eDSM) and distributed generation (DG) forecast provided by the IESO.

These needs may be updated, expanded, or contracted during the needs assessment phase of the IRRP, resulting from refined demand forecasts which will be produced during the forecasting phase of the IRRP or from updated asset condition assessments.

3.3.1 Station Capacity Needs

Station Capacity Needs refer to the ability of a station to deliver power from the grid down to the distribution system. **Table 1** shows the status of the needs identified in the Needs Assessment report and/or updated from previous RIPs. The status of the needs and the recommended solution are specified in the table.

Table 1 | Station Capacity Needs

#	Asset	Need Year	Impacted LDCs	Needs Assessment Outcome	Status
1	Murray TS (T11/T12)	2031	Canadian Niagara Power Inc. Niagara Peninsula Energy Inc.	Replace T11/T12 with higher capacity equipment.	Coordinated Regional Planning Required
2	Allanburg DESN TS	2028	Niagara Peninsula Energy Inc. Hydro One Distribution	Replace with higher capacity equipment, if needed. Further regional coordination required.	Coordinated Regional Planning Required
3	Carlton TS	2028	Alectra Utilities Corporation	Load transfers to Bunting TS (and Vansickle). Replace with higher capacity equipment, if needed. Further regional coordination required.	Coordinated Regional Planning Required
4	Vineland DS	>2035	Niagara Peninsula Energy Inc. Hydro One Distribution	N/A.	Coordinated Regional Planning Required

3.3.2 Supply Capacity Needs

Supply Capacity Needs refer to the ability of the system to supply power through the transmission lines to a local area. **Table 2** shows transmission line-related needs identified in the NA report and/or updated from previous RIPs. The status of the needs and the recommended action are also specified in the table.

Table 2 | Supply Capacity Needs

#	Asset	Need Year	Impacted Stations	Needs Assessment Outcome	Status
1	D9HS/D10S Vansickle TS x Louth Jct.	2035	Carlton TS, Bunting TS, NOTL #1, NOTL #2	Further regional coordination required.	Coordinated Regional Planning Required
2	D1A/D3A	2026	Vansickle TS, Carlton TS, Bunting TS, NOTL #1, NOTL #2	N/A	Coordinated Regional Planning Required
3	A37N/A36N	2031	Kalar MTS, CNPI Station #11, #17, #18, Murray TS, Stanley TS	N/A	Coordinated Regional Planning Required

3.3.3 Bulk System Considerations

Bulk System Considerations refer to Queenston Flow West (QFW) interface limits that can affect broader economic operation by potentially affecting local system reliability. The QFW interface is a major bulk electricity transmission corridor that carries power generated in the Niagara electrical region westward into the rest of the provincial grid. It is one of the most important transmission gateways in southern Ontario.

Local reliability adverse effects might be due to operational control actions which may be required to manage limits (e.g., remedial action schemes or load rejection), or to limitations of generation resource procurement opportunities through the IESO's competitive mechanisms, which would

further introduce economic constraints and limit available options for addressing local needs. Further coordinated study in the next phase of the planning cycle is recommended, as summarized in **Table 3**.

Table 3 | Bulk System Considerations

Interface	New or Updated Need	Needs Assessment Outcome	Status
QFW	Supply limitations on the QFW interface	N/A	Coordinated Regional and Bulk Planning Required

3.3.4 Asset Replacement Needs

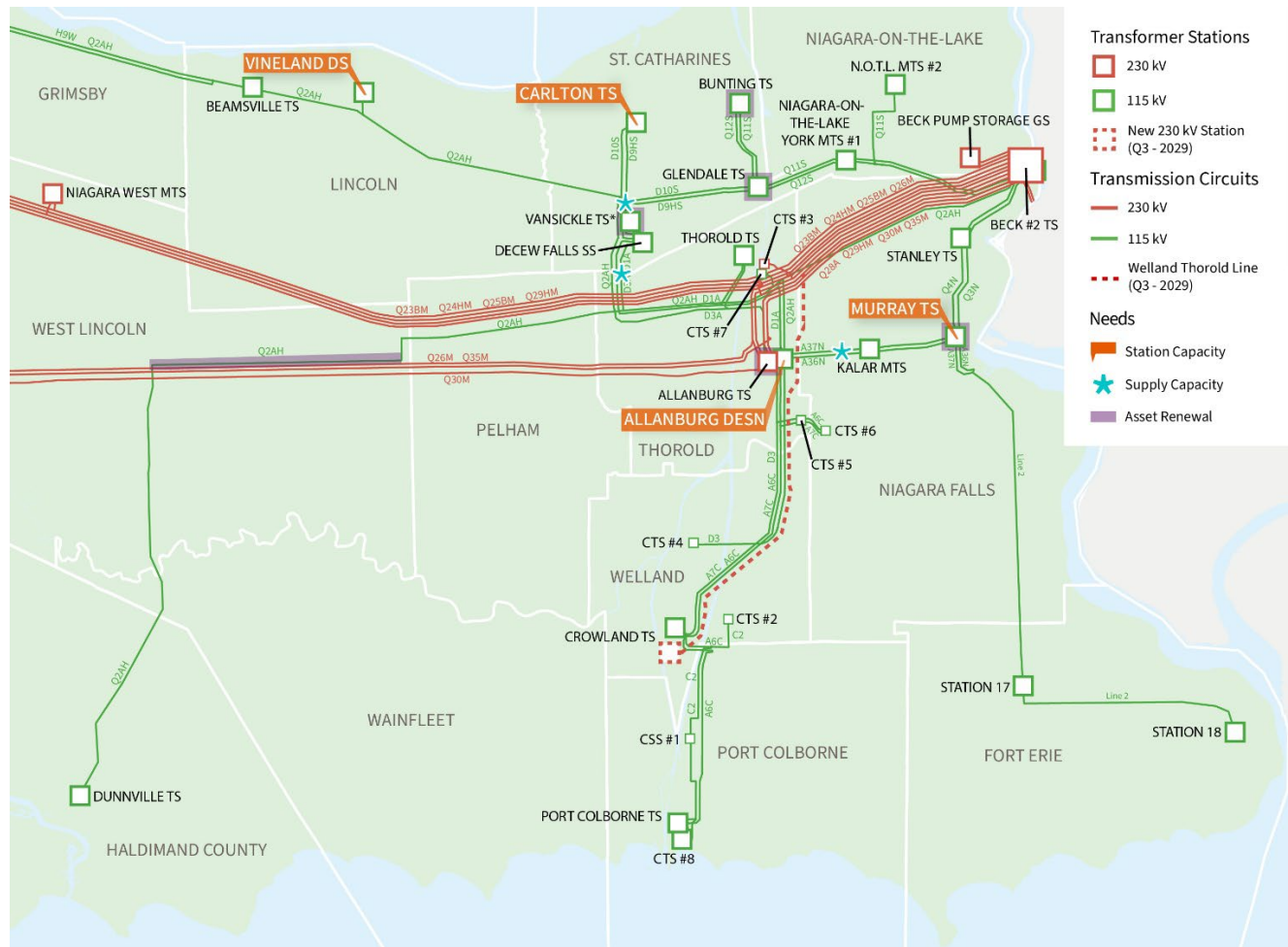
Asset Replacement Needs are identified when the equipment is at the end of life or when its condition is deteriorated enough to require replacement. **Table 4** presents the asset replacement needs identified in the Needs Assessment and/or updated from previous RIPS. The table highlights impacted LDCs, recommended solutions, and status of the need.

Table 4 | Asset Replacement Needs

#	Asset	Need Year	Impacted LDC's	Needs Assessment Outcome	Status
1	Murray TS (T13/T14, T11/T12)	Q4 2032	Niagara Peninsula Energy Inc. Canadian Niagara Power Inc.	Replace T13/T14 with similar equipment. Replace T11/T12 with higher capacity equipment.	Coordinated Regional Planning Required
2	Glendale TS (T1)	Q4 2031	Alectra Utilities Corporation	Replace with similar equipment.	No further Coordinated Regional Planning Required
3	Allanburg TS (T3)	Q4 2032	All	Replace with similar equipment.	Coordinated Regional Planning Required
4	Vansickle TS (LV Switchyard)	Q4 2034	Alectra Utilities Corporation	Replace with similar equipment.	No further Coordinated Regional Planning Required
5	Bunting TS (T3)	>2035	Alectra Utilities Corporation	Replace with similar equipment.	Coordinated Regional Planning Required
6	Q2AH-Rosedene Jct. x St. Anns Jct.	Q4 2031	Hydro One Distribution	Replace with similar equipment.	No further Coordinated Planning Required

The geographic location of the assets and the respective needs listed in the above tables are shown in **Figure 3**.

Figure 3 | Identified Needs in the Niagara Electrical Region



3.3.5 Determination of Study Scope

The TWG has discussed the identified needs in Niagara Region and potential planning approaches to address them. The preferred planning approach is generally informed by:

- Timing of the need, including lead time to develop solutions
- The potential linkages between needs and their required coordination, particularly if across overlapping LDC territories or planning regions
- The opportunity for public engagement to inform outcomes
- The potential for exploring multiple types of options to meet the needs (including non-wires solutions)
- The potential for implications on the upstream bulk power system.
- The opportunity to explore effects of different load forecast scenarios.

As recommended in the NA, many of the needs identified for the Niagara Region require further consideration to:

- Account for updated load forecasts that include high, reference, and low growth scenarios, which encompass a long-term planning horizon (20 years to the future).

- Comprehensively integrate the potential of distributed energy resources (DER), and electricity Demand-Side management (eDSM), as non-wires solutions into the local demand of each distribution station.
- Reevaluate the timing of needs.
- Consider and coordinate the effects of Queenston Flow West (QFW) power transfers at the bulk system level, in the transmission corridors of the Niagara Region.

According to these reasons and considering the additional need to incorporate input from community engagement activities, the TWG recommends developing an IRRP for the Niagara Region, as the next step of the third planning cycle.

The TWG has also determined that, as the identified needs span all areas of Niagara Region, bulk system planning is current underway with the potential to affect the entire area, and there may be alternatives that address multiple needs across the region, there is no benefit to defining sub-regions for separate study within this IRRP process. Therefore, the recommended IRRP scope covers the Niagara Region in its entirety. A draft Terms of Reference for the Niagara Region IRRP is attached in Appendix B.

4. Conclusion and Next Steps

The Scoping Assessment concludes that:

- An IRRP is to be undertaken for the Niagara Region.
- The IRRP Technical Working Group will include the IESO, Hydro One Distribution, Hydro One Transmission, Alectra, Canadian Niagara Power, Grimsby Power, Niagara on the Lake Hydro, Niagara Peninsula Energy, and Welland Hydro Electric System.
- The IRRP will coordinate its findings with the Niagara Bulk Study, and vice-versa.
- An 18-month timeline for completion of the IRRP is expected.

An IRRP was recommended based on:

1. The potential for diverse types of solutions (including wires and non wires), and long-term uncertainty associated with regional development plans and the potential impact of municipal, provincial, and federal decarbonization and electrification policies.
2. Consideration of Bulk-level power transfer which can affect the Niagara Region transmission corridors, and
3. The opportunities for engagement with local communities and stakeholders.

The draft Terms of Reference for the Niagara Region IRRP is attached in Appendix B.

Appendix A – List of Acronyms

Acronym	Definition
DER	Distributed Energy Resource
DESN	Dual Element Spot Network
DSA	Dynamic Security Assessment
DSM	Demand-Side Management
EOL	End of Life
FIT	Feed-in Tariff
GHG	Greenhouse Gas
GS	Generating Station
IESO	Independent Electricity System Operator
IRRP	Integrated Regional Resource Plan
kV	Kilovolt
LAPS	Local Achievable Potential Study
LDC	Local Distribution Company
LMC	Load Meeting Capability
LTR	Limited Time Rating
MNO	Métis Nation of Ontario
MW	Megawatt
NERC	North American Electric Reliability Corporation
NOTL	Niagara-on-the-Lake
NPCC	Northeast Power Coordinating Council

OEB	Ontario Energy Board
ORTAC	Ontario Resource and Transmission Assessment Criteria
PSS/E	Power System Simulator for Engineering
QFW	Queenston Flow West
RIP	Regional Infrastructure Plan
TS	Transformer Station
TWG	Technical Working Group

Appendix B – Niagara Region Integrated Regional Resource Plan (IRRP) Terms of Reference

1. Introduction and Background

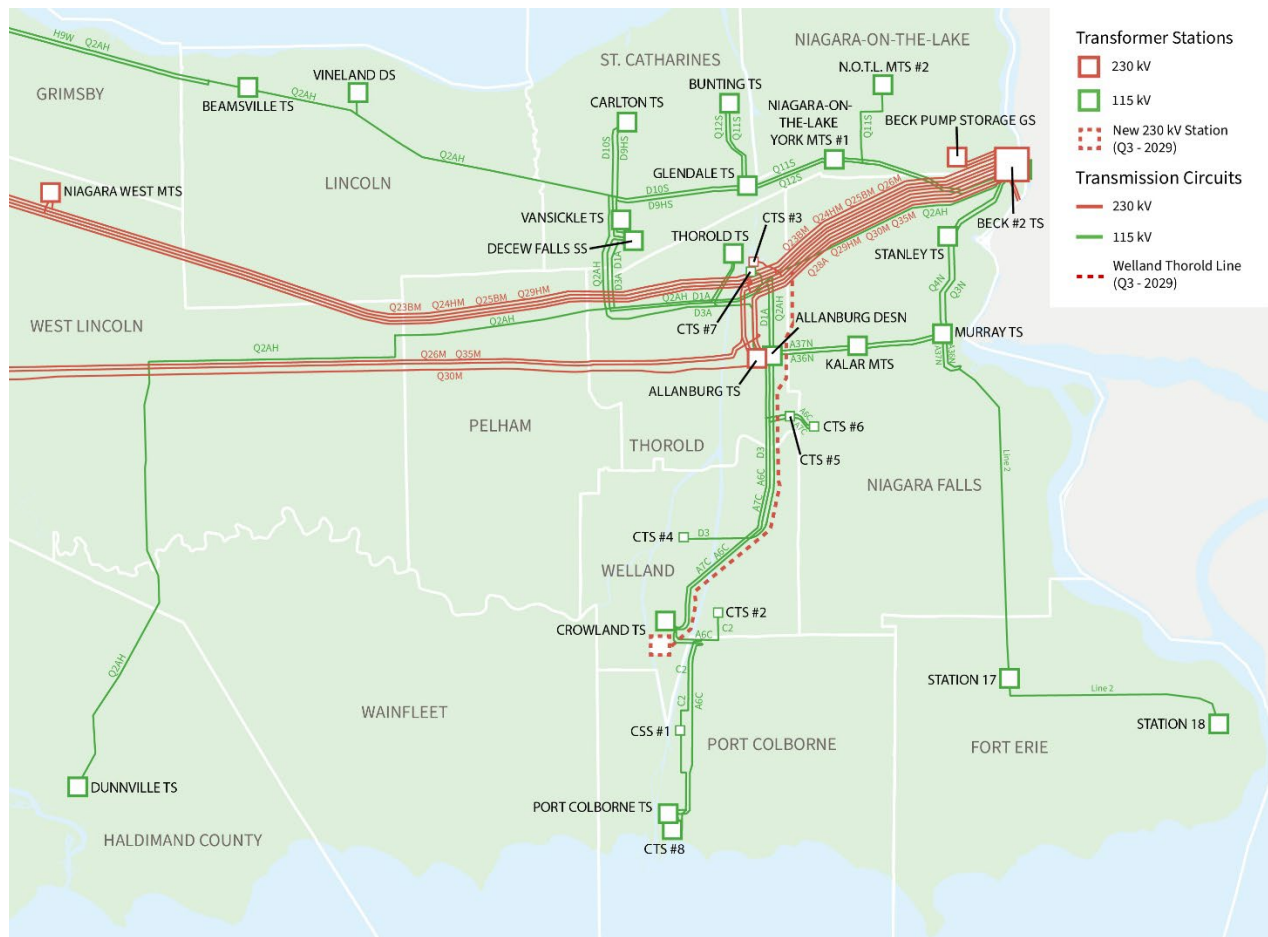
The Niagara Region is one of the 21 electricity planning regions in Ontario as identified through the Ontario Energy Board's (OEB) Regional Planning Process.

These Terms of Reference establish the objectives, scope, roles and responsibilities, deliverables and timelines for an Integrated Regional Resource Plan (IRRP) of the Niagara Region.

1.1 Niagara Electrical Region

The Niagara electrical region is summer-peaking and supplied primarily from 230/115 kV autotransformers at Allanburg TS, with local generation at Sir Adam Beck #1, Sir Adam Beck #2, Decew Falls GS, and Thorold GS. The approximate geographical boundaries of the region are shown in **Figure 4**.

Figure 4 | Overview of the Niagara Region



The region includes the Regional Municipality of Niagara and 13 lower-tier municipalities:

- Town of Fort Erie
- Town of Grimsby
- Town of Lincoln
- City of Niagara Falls
- Town of Niagara-on-the-Lake
- Town of Pelham
- City of Port Colborne
- City of St. Catharines
- City of Thorold
- Township of Wainfleet
- City of Welland
- Township of West Lincoln
- Haldimand County

The Niagara region includes the following Indigenous communities that may be potentially impacted or have an interest based on treaty territory, traditional territory or traditional land use:

- Mississaugas of the New Credit First Nation
- Oneida Nation of the Thames

- Six Nations of the Grand River as represented by Six Nations Elected Council as well as the Haudenosaunee Confederacy Chiefs Council

The Métis communities in the Niagara region include:

- Métis Nation of Ontario
- Niagara Region Métis Council

Engagement on this regional plan may be extended to include additional communities outside of the IRRP area boundaries.

1.2 Background

In July 2026, Hydro One completed the [Needs Assessment Report](#) for the Niagara Region. Several needs were identified, and a Scoping Assessment was subsequently commenced to determine the preferred planning approach. An IRRP was recommended because of the need to reassess the anticipated load growth, the potential for diverse types of solutions (including wires and non wires), and the possible effects of bulk-level power flow constraints, particularly along the QFW interface.

2. Objectives

1. To assess the adequacy of electricity supply to customers in the Niagara Region over the next 20 years.
2. To address customer-driven electricity needs by developing a flexible, comprehensive, and integrated electricity plan for the Niagara Region.
3. To develop an implementation plan, while maintaining flexibility in order to accommodate changes in key assumptions over time.

3. Scope

Needs to be Addressed

The IRRP will develop and recommend an integrated plan to meet the needs of Niagara Region. The plan is a joint initiative involving the IESO, Hydro One Distribution, Hydro One Transmission, Alectra, Canadian Niagara Power, Grimsby Power, Niagara on the Lake Hydro, Niagara Peninsula Energy, and Welland Hydro Electric System. As well, the plan will account for input from the community through engagement activities. The plan will integrate the electricity demand outlook scenarios, DSM, DER uptake, transmission and distribution system capabilities, and align with relevant community plans, bulk system developments, and policy direction as applicable.

The Niagara Region IRRP will:

- Prepare a 20-year electricity demand forecast for the Region's stations and establish needs over this timeframe.
- Examine the load meeting capability and reliability of the existing transmission system supplying the Niagara Region, with a focus on the QFW interface. The assessment should consider system reinforcements committed during the last planning cycle, facility

ratings, the performance of transmission elements and transformers, local generation, and other facilities such as reactive power devices.

- Establish feasible integrated alternatives to address remaining needs, considering a mix of DSM, generation, transmission and distribution facilities, and other electricity system initiatives to address the needs of the Niagara Region.
- Evaluate options using decision-making criteria including but not limited to: technical feasibility, economics, reliability performance, environmental and social factors.

The Niagara Region IRRP includes the following needs that were identified in the Needs Assessment and/or updated from previous RIP cycles as requiring to be further studied:

Table 5 | Needs Identified as Requiring Coordination

Need #	Asset	Need Type	Need Year
1	Murray TS (T11/T12)	Station Capacity	2031
2	Allanburg DESN TS	Station Capacity	2028
3	Carlton TS	Station Capacity	2028
4	Vineland DS	Station Capacity	> 2035
5	D9HS/D10S Vansickle TS x Louth Jct.	Supply Capacity	2035
6	D1A/D3A	Supply Capacity	2026
7	A37N/A36N	Supply Capacity	2031
8	Murray TS (T13/T14, T11/T12)	Asset Replacement	Q4 2032
9	Allanburg TS (T3)	Asset Replacement	Q4 2032
10	Bunting TS (T3)	Asset Replacement	> 2035

Other identified needs in the Needs Assessment and/or updated from previous RIP cycles not listed in **Table 5** above will proceed with Local Planning or Regional Infrastructure Planning as appropriate. Hydro One will keep the Working Group informed on project development.

4. Data and Assumptions

The plan will consider the following data and assumptions:

- Demand Data
 - Historical coincident and non-coincident peak demand information and trends for the region
 - Historical weather correction, for median and extreme conditions
 - Gross peak demand forecast scenarios by TS, etc.
 - Coincident peak demand data
 - Identified potential future load customers, including transit expansions, electrification of personal vehicles, space heating/cooling, water heating, and other end-uses due to provincial and local GHG emissions reduction policies and targets
- Conservation and Demand Management
 - LDC DSM plans
 - Incorporation of verified LDC results and other DSM programs/opportunities in the area
 - Long-term conservation forecast for LDC customers, based on region's share of the provincial target found in the DSM Framework
 - Conservation potential studies, if available
 - Potential for DSM at transmission-connected customers' facilities, if applicable
 - Load segmentation data for each TS based on customer type (residential, commercial, institutional, industrial)
 - Local building codes, energy performance requirements, etc.
- Local resources
 - Existing local generation resources, including distributed energy resources (DER), district energy resources, customer-based generation, as applicable
 - Existing or committed renewable generation from Feed-in Tariff (FIT) and non-FIT procurements
 - Expected performance/dependability/output of local generation and storage resources coincident with the local peak demand period
 - Future district energy plans, combined heat and power, energy storage, or other generation proposals, including requirements for on-site back-up and emergency generation
- Relevant local and provincial plans and studies, as applicable
 - LDC Distribution System Plans
 - Community Energy Plans and Municipal Energy Plans
 - Municipal policies with an impact on electricity usage
 - Municipal Growth Plans
 - Future transit plans impacting electricity use, including personal vehicle electrification, transit expansion, and transit electrification

- Pathways to Decarbonization and Powering Ontario's Growth reports
- Criteria, codes and other requirements
 - Ontario Resource and Transmission Assessment Criteria (ORTAC)
 - Supply capability
 - Load security
 - Load restoration requirements
 - NERC Reliability Standards and NPCC Reliability Criteria and Directories, as applicable
 - OEB Transmission System Code
 - OEB Distribution System Code
 - Reliability considerations, such as the frequency and duration of interruptions to transmission delivery points
 - Other applicable requirements, including municipal requirements
- Existing system capability
 - Transmission line ratings as per transmitter records
 - System Limits as modelled, defined and determined by the IESO and incorporated into the IESO Power Flow base cases
 - Transformer station ratings (10-day LTR) as per asset owner
 - Load transfer capabilities
 - Technical and operating characteristics of local generation
- Asset renewal considerations/sustainment plans
 - Transmission assets
 - Distribution assets, as applicable
- Other considerations, as applicable

5. Technical Working Group

The IRRP Technical Working Group will consist of planning representatives from the following organizations:

- Alectra Utilities
- Canadian Niagara Power Inc.
- Grimsby Power Inc.
- Hydro One Networks Inc. (Distribution)
- Hydro One Networks Inc. (Transmission)
- Independent Electricity System Operator (IESO)
- Niagara on the Lake Hydro Inc.

- Niagara Peninsula Energy Inc.
- Welland Hydro Electric System Corp.

Authority and Funding

Each entity involved in the study will be responsible for complying with regulatory requirements as applicable to the actions/tasks assigned to that entity under the implementation plan resulting from this IRRP. For the duration of the study process, each participant is responsible for their own funding.

6. Engagement

Integrating early and sustained engagement with communities and stakeholders in the planning process was recommended and adopted by the provincial government to enhance the regional planning and siting processes in 2013. These recommendations were subsequently referenced in the 2013 Long Term Energy Plan. As such, the Technical Working Group is committed to conducting plan-level engagement throughout the development of the Niagara Region IRRP.

In accordance with the [IESO's External Relations Engagement Framework](#), a formal engagement initiative will be undertaken to inform IRRP development. An engagement webpage will be developed to host all materials for the Niagara Region IRRP including webinar recordings, feedback forms, response to feedback and other materials related to the study. An engagement plan will be made available for comment during the early stages of the IRRP's development, outlining the timing of engagement and information sharing. The data and assumptions as outlined in Section 4 will help to inform the scope of community and stakeholder engagement to be considered for this IRRP.

7. Activities, Timeline, and Primary Accountability

Table B-2 | IRRP Timelines & Activities

Activity	Lead Responsibility	Deliverable(s)	Timeframe
1. Prepare Terms of Reference considering stakeholder input	IESO	Finalized Terms of Reference	October 2026
2. Develop the planning forecast scenarios for the Niagara region		Long-term planning forecast scenarios	Q4 2026 – Q1 2027
Establish historical coincident and non-coincident peak demand information	IESO		
Establish historical weather correction, median and extreme conditions	IESO		
Establish gross peak demand forecast for High, Reference, and Low scenarios, for Summer and Winter seasons	LDCs		
Establish existing, committed, and potential DER	IESO, LDCs		

Establish near- and long-term conservation forecast based on planned energy efficiency activities and codes and standards	IESO		
Develop planning forecast scenarios for sensitivity analyses	IESO		
3. Confirm load transfer capabilities under normal and emergency conditions	LDCs	Load transfer capabilities under normal and emergency conditions	Q1 2027
4. Provide and review relevant community plans, if applicable	LDCs, communities, stakeholders, and IESO	Relevant community plans	Q1 2027
5. Complete system studies to identify needs over a 20-year time horizon			
- Obtain DSA / PSS/E base case - Apply reliability criteria as defined in ORTAC and other applicable criteria to demand forecast scenarios	IESO	Summary of needs based on demand forecast scenarios for the 20-year planning horizon	Q1 – Q2 2027
Confirm and refine the need(s) and timing/load levels			
6. Develop options and alternatives		Develop flexible planning options for forecast scenarios	Q3 - Q4 2027
Conduct a screening to identify which wires and non-wires solutions warrant further analysis	IESO		
Verify the load meeting capability (LMC) of the system to better determine timing of needs and support options development	IESO		
Develop screened-in energy efficiency options	IESO and LDCs		

Develop screened-in local generation/demand management options, with consideration for previous LAPS findings	IESO and LDCs		
Confirm the transmission and distribution alternatives: advancement of EOL transformer replacement plans and/or load transfers	IESO, Hydro One Transmission, and LDCs		
Develop portfolios of integrated alternatives	IESO, Hydro One Transmission, and LDCs		
Technical comparison and evaluation	IESO, Hydro One Transmission, and LDCs		
7. Plan and undertake community & stakeholder engagement		• Community and Stakeholder Engagement Plan Input from local communities, First Nation communities, and Métis Nation of Ontario	Ongoing as required
Early engagement including with local municipalities and First Nation communities within study area, First Nation communities who may have an interest in the study area, and the Métis Nation of Ontario	IESO, Hydro One Transmission, and LDCs		
Develop communications materials	IESO, Hydro One Transmission, and LDCs		
Undertake community and stakeholder engagement	IESO, Hydro One Transmission, and LDCs		
Summarize input and incorporate feedback	IESO, Hydro One Transmission, and LDCs		

8. Develop recommendations and implementation plan based on community and stakeholder input	IESO	• Implementation plan • Monitoring activities and identification of decision triggers Procedures for annual review	Q4 2027 – Q1 2028
9. Prepare the IRRP report detailing the recommended near, medium, and long-term plan for approval by all parties	IESO	IRRP report	April 2028

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