



Renfrew Region

Scoping Assessment Outcome Report

September 16, 2026



Introduction

To keep pace with the rapid growth and economic development in the Renfrew region, the Renfrew Technical Working Group (TWG) is implementing a streamlined regional planning process. Specifically, the Scoping Assessment stage, which has traditionally taken 90 days to complete, will be conducted in an accelerated manner and enable the Independent Electricity System Operator (IESO) to move directly into the next phase of the planning process. This approach reflects feedback received through stakeholder engagement and aligns with the government priorities around economic development.

Engagement continues to remain central to the regional planning process. The IESO is committed to working collaboratively with Indigenous communities, municipalities, economic developers, and consumers, each bringing unique perspectives and expertise to shaping Ontario's energy.

The process will be initiated with the release of this Scoping Assessment Outcome Report, which concludes that a single Integrated Regional Resource Plan (IRRP) covering the entire Renfrew region will be undertaken, commencing on September 16th, 2026.

Technical Working Group (TWG)

The Scoping Assessment was carried out with the TWG, which consists of planning representative/s from the following organizations:

- Independent Electricity System Operator (IESO)
- Hydro One Networks Inc. (Hydro One Transmission)
- Hydro One Networks Inc. (Hydro One Distribution)
- Ottawa River Power Corporation (ORPC)

Strategic Context and Rationale

The Renfrew region is experiencing robust electricity needs, driven by:

- Economic development across the region.
- Potential large connection requests in the region.

In response, the IESO expedited the commencement of an IRRP for the Renfrew region, enabling faster response to the emerging needs and aligning with stakeholder expectations and government objectives.

Commitment to Engagement

In alignment with the IESO's [External Relations Engagement Framework](#), meaningful engagement continues to play a vital role in the IESO's planning process. By working closely with Indigenous communities, municipalities, economic developers, and consumers, we bring together diverse perspectives and expertise to support informed decisions about Ontario's energy.

The IRRP process will continue to include:

- Webinars and targeted meetings
- Broad communications
- Ongoing opportunities for feedback and dialogue

The IESO acknowledges that the Renfrew region is the traditional territory of many nations, and is committed to ongoing, meaningful dialogue with Indigenous communities to inform long-term planning in the Renfrew region and across Ontario. To raise awareness about the regional planning cycle in the Renfrew region, and invite participation in the engagement process, the IESO's engagement efforts include outreach to Indigenous communities throughout the development of the plan, including:

- Alderville First Nation
- Algonquins of Ontario
- Algonquins of Pikwakanagan First Nation
- Beausoleil First Nation
- Chippewas of Georgina Island First Nation
- Chippewas of Rama First Nation
- Curve Lake First Nation
- Hiawatha First Nation
- Kitigan Zibi Anishinabeg
- Mississaugas of Scugog Island First Nation

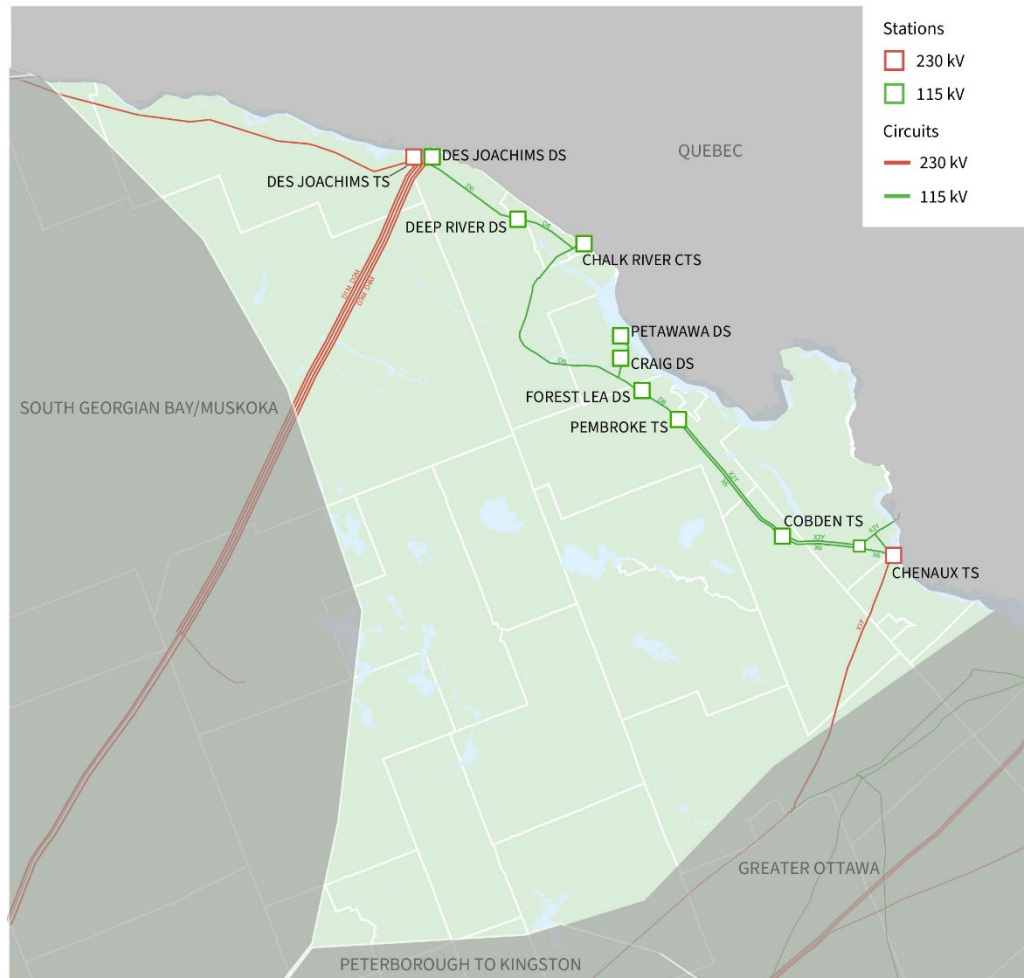
The Métis communities invited to participate in engagement activities are:

- Métis Nation of Ontario
- Métis Nation of Ontario Region 5

Overview of the Region and Background

The Renfrew region is located in eastern Ontario, west of Ottawa, and extends across the Ontario-Quebec border as shown in **Figure 1**. The region includes twelve Indigenous and Métis communities and 18 municipalities, with the majority of the population residing along the Ottawa River.

Figure 1 | Renfrew Region Map



The following transmission projects from previous IRRP recommendations in 2022 are completed or underway to help improve reliability in the region:

1. 115kV D6 Line Refurbishment (between Chalk River CTS-1 and Petawawa JCT) – Under construction, expected completion in December 2027
2. Des Joachims T6 Autotransformer Replacement – In service, completed in June 2026.

Based on updated transmitter technical studies and Regional Infrastructure Plan (RIP) findings, the following recommendations from the previous IRRP were no longer required or revised:

1. New station at Pembroke TS T1/T2 – The transmitter's detailed study resulted in a higher Limited Time Rating (i.e. the maximum electrical load or capacity that electricity infrastructure, such as a transformer or transmission line, can safely handle for a brief, specific period during an

emergency or outage). As a result, the station capacity need is no longer expected to occur during the current short-term planning period.

2. Forest Lea DS Load Transfer – The transmitter’s detailed study resulted in a higher Planned Loading Limit (i.e. the maximum electricity demand or capacity up to which a station, transformer, or distribution circuit can be safely loaded under normal operating plan). As a result, a load transfer to Craig DS is no longer required.
3. New High Voltage Distribution Station (HVDS) in Petawawa – During the RIP phase following the previous IRPP, an abnormality was identified in the historical demand of Petawawa DS which resulted in a net load increase. Adjusting for the increased net demand due to a generator refurbishment, the recommendation was revised to be monitored and triggered if high load growth materializes.

Scoping Assessment Outcome Report Details

This Scoping Assessment Outcome Report is part of the Ontario Energy Board’s (OEB or Board) regional planning process. The Board endorsed the Planning Process Working Group’s Report to the Board in May 2013 and formalized the regional planning process and timelines through changes to the Transmission System Code and Distribution System Code in August 2013.

The third cycle of regional planning for the Renfrew region began with the Needs Assessment (NA) phase in May 2026 led by Hydro One Networks Inc. (Hydro One) and carried out by the TWG. The NA is the first step in the regional planning process, and was finalized on July 13, 2026¹.

As part of the Scoping Assessment, the TWG reviewed the nature and timing of all the known needs specified during the NA phase in the region to determine the most appropriate planning approach to address them. The planning approaches considered include:

- **An Integrated Regional Resource Plan (IRRP)** led by the Independent Electricity System Operator (IESO) – through which a greater range of options, including non-wires alternatives, are to be considered and/or closer coordination with communities and stakeholders is required;
- **A Regional Infrastructure Plan (RIP)** led by the transmitter – which considers more straightforward wires only option with limited engagement; or
- **A Local Plan (LP)** undertaken by the transmitter and affected Local Distribution Company (LDC) – for which no further regional coordination is required.

The needs identified within the NA report were characterized depending on whether further regional coordination is required. Needs that can be resolved or delayed through coordinated planning between Hydro One Transmission and Hydro One distribution and do not require further regional planning and are summarized in **Table 1**. Majority of the identified needs were found to have interdependencies with other system assets or needs, or present potential opportunities for solutions involving a combination of wires and non-wires alternatives and require engagement to inform studies. **Table 2** summarizes needs identified for further regional coordination:

¹ [2026 Renfrew Needs Assessment, Hydro One](#)

Table 1 | Needs Determined in the NA that Do Not Require Further Regional Coordination

#	Need	Need Type	Need Description
1	Cobden DS	Station Capacity	Projected to reach capacity in 2029 under normal growth summer forecast and in 2028 under summer High growth scenario.

Table 2 | Needs Determined in the NA as Requiring Further Regional Coordination

#	Need	Need Type	Need Description
2	Cobden TS (T1/T2)	Station Capacity	Projected to reach capacity in 2033 under summer High growth scenario.
3	115 kV D6 circuit	Supply Capacity	Projected to reach capacity in 2031 under summer high growth scenario.
4	115 kV X2Y circuit	Supply Capacity	Projected to reach capacity limits at the end of study period (2035) following loss of circuit X6 and summer high growth scenario.
5	115 kV D6 circuit	System Reliability and Operation	Voltage issues identified in 2035 for normal summer forecast and in 2031 for High growth summer forecast.
6	115kV X2Y circuit Load Restoration	Load Restoration	Projected to exceed thermal ratings of circuit X2Y when complete load of Cobden TS needs to be restored following loss of circuit X6 in 2029 under normal growth scenario and 2028 under high growth scenario.

Conclusion

This Scoping Assessment concludes that a single IRRP covering the Renfrew Region will be undertaken, with work commencing on September 16th, 2026. The IRRP is expected to be completed within an 18-month timeframe, enabling timely identification and resolution of electricity needs across the region. As technical studies and engagement progress, additional needs may be identified and incorporated. The expedited planning approach enables the IESO to respond more quickly to regional and provincial electricity needs, supporting economic development and aligning with stakeholder priorities.

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