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IEA-2025-00051  
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**Re: Toronto Integrated Regional Resource Plan (IRRP) – Identified Wire Options and Third Transmission Line into Toronto**

Toronto and Region Conservation Authority (TRCA) understands that the Independent Electricity System Operator (IESO) is currently undertaking an Integrated Regional Resource Plan (IRRP) for Toronto. Significant electricity demand is expected in the future and this study aims to scope the City's needs, develop solutions, and make recommendations to address capacity by 2044. This planning exercise will recommend wire and non-wire options, including a new recommended transmission line option in Toronto and Transformer Station (TS) expansions. Following this study, required Environmental Assessments (EA) will be initiated by a selected proponent to further determine alternatives, and implement the recommendations of the IRRP.

Recommended wire and non-wire options were presented to stakeholders in a July 2025 webinar detailing proposed options to address forecasted electricity demand. Wire options include new infrastructure development such as station expansions, new transmission lines, and energy infrastructure upgrades. Non-wire options include solutions such as energy efficiency initiatives and demand management and will be assessed in future stages of the study.

The following wire options and TS expansions are being considered by IESO:

- Upgrades to existing transmission lines in the Manby to Riverside corridor
- Build a new transformer station (Downsview TS)
- Expand the existing Scarboro TS
- Expand the existing Basin TS or build a new station
- Build a third transmission line into Toronto. Three potential options have been identified:
  - An overland route from Cherrywood TS to Leaside TS
  - A mix of overland and underground route segments from Cherrywood TS to the Port Lands (Hearn TS)
  - A submarine route from Bowmanville SS or Cherrywood TS to the Port Lands (Hearn TS)

## 1. Impacts to Existing Projects and Initiatives

TRCA has established existing partnerships with municipalities and various agencies to identify opportunities for restoration and enhancement of public lands for conservation and nature-based recreation. This includes transforming transmission corridors into much needed public green space in urban and rural areas, such as [The Meadoway](#) project done in partnership with the Weston Family Foundation and the City of Toronto. From our work with our government agency and community partners we note that strong interest exists in maintaining and enhancing ecosystem attributes and achieving active transportation within and around hydro corridors that may be considered for more detailed study and review as part of this initiative.

The Meadoway is one example of the important linkages and partnerships included in TRCA's [Trail Strategy](#) to complete, expand, manage, and celebrate the Greater Toronto Region Trail Network. Through this project a significant portion of the Gattineau Hydro Corridor was transformed into a vibrant 16-kilometer stretch of urban greenspace, multi-use trail, and meadow habitat linking neighborhoods and community destinations from the East Don River through Scarborough to the Rouge National Urban Park.

As a [High Line Network](#) member, The Meadoway has become a global example of infrastructure corridor revitalization. Durham Region used The Meadoway as inspiration for their own [visioning study](#) that proposes a pedestrian and cycling route and linear park across the Gattineau Hydro Corridor in their region.

Three potential line options and TS expansions have been identified, each providing unique challenges.

### a. Cherrywood TS to Leaside TS (overland) and Cherrywood TS to the Port Lands (Hearn TS) (overland and underground)

These routes have the potential to impact existing restoration efforts and trail infrastructure in The Meadoway, which were funded by the Weston Family Foundation and federal government grants such as the Natural Infrastructure Fund. Further, many ravines in the corridor contain north-south trail network connections that utilize The Meadoway as an east-west spine trail. For example, a newly constructed multi-use trail bridge over the Metrolinx rail line at the East Don River and the Gattineau Hydro Corridor has recently been completed as part of the East Don Trail with significant City of Toronto and federal funding. These trail networks are well used for recreation and commuting and have been undertaken with overwhelming public support.

The Region of Durham, City of Pickering, Parks Canada, and TRCA are also working to implement elements of The Meadoway eastward into Durham and to connect trail networks near the Cherrywood TS to other areas, e.g., Altona Forest, Duffins Creek, etc. TRCA's Trail Strategy as well as Region of Durham and City of Pickering initiatives should be considered through detailed consultation with these governments and agencies, including TRCA, as part of any future study of these segments.

These line options should also consider the Ontario Line project, for example, which is currently being constructed by the Province within the Don River area and has already required the relocation/upgrade of Hydro One lines within the study area.

**b. Scarborough TS Expansion**

This proposed expansion should consider the approved trail alignment in The Meadoway Municipal Class Environmental Assessment (2020). This area is the last gap in the multi-use trail network and is anticipated to begin detailed design in 2028 (pending funding).

**c. Bowmanville SS or Cherrywood TS to the Port Lands (Hearn TS) (submarine)**

This route has potential to impact Tommy Thompson Park and TRCA planning and EA approved works along the Scarborough waterfront and within the Ashbridge's Bay area, depending on the preferred route and alignment. Any infrastructure that may be proposed, should avoid areas that have experienced significant restoration and investment by TRCA and its partners. TRCA is also a co-proponent with the City of Toronto on the Scarborough Bluffs West Project, a Comprehensive EA process being undertaken along the shoreline which coincides with areas that would be considered for the submarine option. In addition, TRCA is implementing shoreline components of the Provincially approved EA for the Scarborough Waterfront Project including in-water works from Bluffers Park eastwards into Rouge National Urban Park.

Lastly, TRCA is conducting work on the Lake Ontario shoreline within Pickering and Ajax and is actively involved in reviews related to elements of the Duffins Creek Water Pollution Plant expansion as part of the York Durham Sewage System upgrades directed by the Province. This project contemplates a major outfall / diffuser system that will extend into Lake Ontario, potentially coincident with the submarine option being considered.

**These noted recreational trail, infrastructure, and restoration projects, along with many others, if impacted by electricity expansion, could result in significant public and stakeholder concern. This includes added costs to this project and other projects that could be avoided or mitigated by close coordination with key stakeholders. TRCA recommends that the preferred line options consider projects being designed and recently constructed in the interest of community and environmental benefits, and that recommendations be made for avoidance and minimization of impacts (e.g., alignment, access, staging, construction timing / duration, etc.).**

**If a detailed analysis of each line option is not completed prior to choosing a preferred line option, it is also recommended that IESO identify, through consultation with relevant agencies, anticipated impacts that the preferred option may have so that electricity providers and the subsequent EA stage can consider the potential costs and impacts to existing and planned recreational trail, infrastructure expansion, and restoration projects. TRCA staff are available to assist with identifying project specific conflicts along each line.**

## **2. Impacts to TRCA Regulatory and Commenting Interests**

TRCA staff have reviewed the study area associated with this project in accordance with the Conservation Authorities Act and associated regulations, including mandatory commenting on Planning Act and Environmental Assessment Act applications. TRCA undertakes review and commenting functions in accordance with this legislative framework and our own policy document.

Several high-level comments and feedback are provided below, and these should be considered as the IRRP progresses. All wire options being considered at this time (except for Downsview TS, which has yet to be determined) intersect with TRCA regulated areas and will require permits under the current regulatory framework of the Conservation Authorities Act and Ontario Regulation 41/24.

TRCA has arrangements with municipal partners and Hydro One for stewardship projects within hydro corridors across the study area that should be considered. In addition, Conservation Ontario (which TRCA is part of) also has a Memorandum of Understanding with Hydro One that should be considered as part of this project.

Irrespective of the legislative and regulatory framework applied to this project, TRCA can support subsequent provincial or local proponents similar to how we work with other provincial and federal government agencies including Metrolinx, Waterfront Toronto, Parks Canada (Rouge National Urban Park), Ports Toronto, etc. Through a service level agreement or other process, TRCA's design and delivery capabilities and detailed science-based, local knowledge could be leveraged to identify baseline environmental conditions and undertake monitoring work if requested. In addition, TRCA operates a Voluntary Project Review (VPR) process for proponents exempt from TRCA's regulation under which a comprehensive review is completed on detailed design and project construction activities to ensure impacts are avoided/mitigated, and social and environmental benefits of infrastructure projects are maximized.

### **a. New Third Transmission Line into Toronto**

While no detailed routes beyond high-level presentation slides and maps have been provided to TRCA staff, the three new line options have potential for significant environmental impact and will cross numerous valley systems, TRCA owned property, and require work within Lake Ontario.

Development pressures within Toronto are resulting in added stressors to the few remaining natural systems within our jurisdiction, and it will be extremely important to ensure that impacts to the form and function of these areas are avoided to the extent possible. Construction of a new transmission line could result in significant impacts to erosion hazards associated with steep slopes, sensitive watercourses and wetlands, the regulatory floodplain, and natural hazards along the Lake Ontario shoreline. Where impacts cannot be avoided, studies will be required to inform appropriate siting of

transmission lines to ensure impacts are minimized and mitigated, causing no new natural hazards or aggravation to existing hazards.

TRCA staff are available to help coordinate any potential work within Lake Ontario, or along the shoreline, through Aquatic Habitat Toronto (AHT) to ensure that all relevant stakeholders, including provincial and federal agencies, are involved as needed.

While it is understood that options are being looked at within existing transmission corridors, there is also the possibility that TRCA-owned lands may be impacted (e.g., the Hearn TS connection for the submarine option). If TRCA-owned lands will be impacted further consultation will be required with TRCA planning, property, and archaeology staff.

**b. Expansions to Transformer Stations and Upgrades to the Existing Manby to Riverside Corridor**

The expansions of selected transformer stations should ensure that all new and expanded infrastructure is located outside of hazardous lands vulnerable to flooding, erosion and slope instability and TRCA regulated features important for natural hazard management, including river and stream valleys, wetlands and shorelines. Any impacts to the crossings of Etobicoke Creek and the Humber River as a result of upgrades to the existing Manby to Riverside corridor, will need to be minimized and mitigated, if avoidance is not possible.

**TRCA recommends that IESO continue to keep staff involved as the study progresses to ensure TRCA's regulatory and commenting interests are considered in this important infrastructure study, and impacts are avoided, minimized, and mitigated.**

**It is further recommended that IESO and future project implementation proponents consider TRCA's Voluntary Project Review (VPR) service level agreement, where applicable, to ensure TRCA's capacities are fully leveraged in support of this project.**

As a commenting agency and technical advisor, TRCA staff will continue to review the next stages of this project as per our roles under the Conservation Authorities Act and Environmental Assessment Act. TRCA will comment throughout the detailed design stage and provide comments to ensure that all infrastructure solutions align with [TRCA's The Living City Policies](#), where required. **While avoidance, minimization and mitigation of impacts is preferred, [TRCA's Ecosystem Compensation Guideline](#) is a useful tool for proponents when impacts are unavoidable. Furthermore, TRCA also conducts specialized training on ecosystem components and mitigation best practices related to work around water and in sensitive environments, which could be delivered to proponents and contractors involved in this project.**

Should you have any questions, require clarification, or wish to meet to discuss any of the above remarks, please contact the undersigned at [\(437\) 880-2385](tel:437-880-2385) or [beth.williston@trca.ca](mailto:beth.williston@trca.ca)

Sincerely,



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