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Dual Participation of Local Demand Response Resources

Version 1 (October 2024)

Context: Local Demand Response is a Toronto Hydro Non-Wires Alternatives program, aimed at leveraging behind-the-meter Distributed Energy Resources to address short-term station capacity constraints, and avoid distribution system upgrades.

Problem: Lack of coordination between the transmission/bulk system and Toronto Hydro risks conflicting dispatch instructions and underutilization of assets.

Solution: To develop a dual participation model and platform for better coordination and lower costs.

Impact: Build resilient infrastructure, promote sustainability, and foster innovation.

CUE's Role: CUE collaborated with Toronto Hydro and Power Advisory LLC, with support from the IESO Grid Innovation Fund and the Ontario Energy Board's Innovation Sandbox, to lead the development of tools that will enable the proposed dual participation model.

Partners:
Toronto Hydro

Timeline:
2023-2024

Research team:
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Key stats

Prototype software
Prototype platform
9 Tech reports

