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Energy Storage Solutions for Zero Carbon 2050 Electric Distribution Systems

Version 1 (October 2024)

Context: This project will address systemic economic, regulatory, and technological barriers facing the adoption of electricity storage technologies by utility companies. Utilities such as Toronto Hydro and Halton Hills Hydro are interested in exploring and developing solutions to further support renewables, avoid expensive utility asset upgrades, and evolve their distribution systems to be smart, intelligent, and robust.

Solution: Work will include determining the optimum size of energy storage.

Impact: The improvement of scheduling, dispatching and utilization of energy resources, and in general, will help achieve sustainable growth.

CUE's Role: CUE will leverage funds from the joint NSERC Alliance-Mitacs Accelerate grant to conduct research and advise Toronto Hydro as it modernizes its energy grid.

Partners:

Toronto Hydro, Halton Hills Hydro,
NSERC, Mitacs

Timeline:

August 2022 - August 2027

Research team:

Thiago Ramos Fernandes, Barbara
Rosado, Enielma Cunha da Silva,
Gabriel Alvarenga

Key stats

2 Software

9 Tech reports