

Energy Management Platform for Autonomous and Multi-Market Participation of DERs

Grid Innovation Fund Project Details

Lead Proponent: Survalent Technology Corporation

Partners: Oakville Energy Corporation, Elexicon Energy Inc., London Hydro, Hydro One, and Enova Power

Strategic Area(s): Wholesale Market Integration

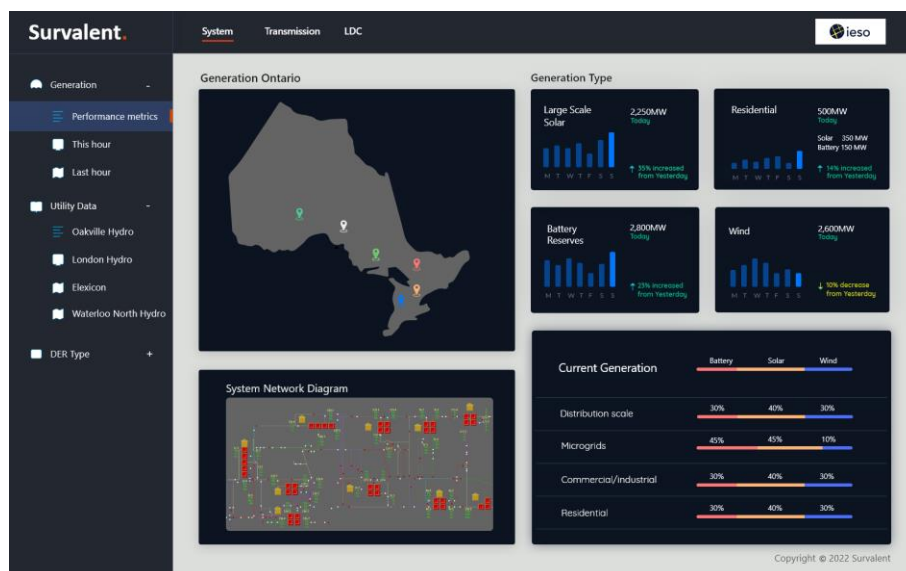
Project Total Cost: \$1,000,125

Year Contracted: 2020

Status: Active

Location: Across Hydro One, Oakville Hydro, London Hydro, Enova Power and Elexicon Energy service territories in Ontario

Economic Development: 10 jobs



Survalent Project Tool - Framework and Demonstration Multi Market Model (FDMMM)

Project Objectives

The project aims to establish a framework and approach for a real-time information platform that aggregates the LDCs' Advanced Distribution Management Systems (ADMS) data to enable the growth of autonomous and market participation for distributed energy resources (DERs).

The project will build upon existing DERs and processes that LDCs already have in place. It is the enabling platform to provide visibility (access to data) and control across the tiers of the electricity grid in Ontario (IESO, TSO, LDCs) to develop a program to provide quantifiable benefits.

Expected Outcomes

The project aims to build upon existing DERs and processes that LDCs already have in place. It is the enabling platform to provide visibility (access to data) and control across the tiers of the electricity grid in Ontario (IESO, TSO, LDCs) to develop a program to provide quantifiable benefits. It will simulate market participation of DERs to provide insights on potential energy, capacity, and cost savings, to LDCs and customers, from utilizing local resources to meet local needs. The results aim to inform a business case for LDCs on how they can plan and invest to integrate DERs into distribution systems to meet current and future needs.

If successful, this project will demonstrate the multi-market model for DERs where real-time data and network conditions are used to make collaborative decisions on DER dispatch for overall grid benefit.

The projected outcomes include:

- A framework and demonstration of a Multi-Market Model (FDMM) platform.
- LDC and IESO training for the developed platform.
- Next steps to scale the platform across Ontario and applicability to other jurisdictions.
- Analysis of DER data collected by the platform.