

Finding Value in Local Energy Markets

Grid Innovation Fund Project Details

Lead Proponent: Powerconsumer Inc

Partners: NODES, Elexicon Energy, Newmarket Tay Power Distribution

Strategic Area(s):	Enabling Non-wires alternatives
Project Total Cost:	\$1,625,905
Year Contracted:	2020
Location:	Newmarket and Durham Region
Economic Development:	3 jobs

Project Objectives

This project will develop a software platform that could facilitate transactions between distributed energy resource (DER) owners or DER aggregators and local distribution companies. The platform would be used to simulate the operation of future local energy market in five unique localities within the Newmarket Tay and Elexicon service territories.

The five simulations aim to unpack and reveal real time costs of delivered electricity to customers thereby quantifying potential energy and cost benefits for customers and the distribution system, and demonstrating how local resources could meet local needs.

Expected Outcomes

The simulation is intended to provide insights on potential energy, capacity and cost savings, to local distribution companies (LDCs) and customers, by 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.

Quantifiable outcomes include energy and demand reductions, customer bill savings, reliability and resiliency improvements at the distribution level.