

OCE Success Talk: Katherine Peretick, Director of Engineering, NRStor Inc.

Title: Compressed Air Energy Storage Collaboration

Abstract: NRStor is building the world's first commercial fuel-free compressed air energy storage (CAES) project, and has partnered with The University of Waterloo to learn more about how the project truly interacts with its surroundings, including with the larger electrical

grid. Once the facility is up and running, NRStor will provide the University with all the real-world operational data from the machine, enabling research into how CAES can be used most effectively to improve the operation and efficiency of the electrical grid.



OCE Success Talk: Claudio Canizares, Professor, University of Waterloo

Title: Overview of Collaborative Research at ECE on Energy Storage Systems **Abstract:** This talk will focus on providing an overview of some of the energy storage (ES) research work being carried out at the ECE Department and funded by NSERC Energy Storage

Technologies (NEST) Network and NSERC CRD Compressed Air Energy Storage (CAES) grants, supported by the Ontario Centres of Excellence (OCE) and in collaboration with multiple industry partners. An outline of the projects being carried out on ES modeling, simulation, and grid integration will be provided first, describing then in more detail our research work on flywheels, batteries, and CAES that is being performed in collaboration with NRStor Inc.