OPENADR UTILITY CASE STUDY

Energy Storage
Consolidated Edison

PROJECT GOALS

Consolidated Edison (Con Ed) has been working to integrate a variety of distributed energy resources for and with its customers. Energy storage resources is one type of DER that led Con Ed to look to OpenADR as part of a solution built into their Demand Response Management System (DRMS). Con Ed’s DRMS manages enrollment, validation, dispatch, and performance calculation of Demand Response resources.

Con Ed’s goal in this use case was to make dispatch OpenADR-ready and OpenADR-friendly. In order to better integrate energy storage resources, Con Ed was looking in particular to leverage the OADR Report Service for purposes of battery telemetry. Report Service is one of several OpenADR capabilities (along with DR Event (signaling) Service, Registration Service, and others.)
PROJECT IMPLEMENTATION

OpenADR was integrated into the Con Ed DRMS Control Module, called webDistribute. The overall functionality of webDistribute provides operational excellence through enhanced functionality to support program enrollments, validations, and event calling. The module also enables streamlined enrollments and operational DR functions.

OpenADR’s Report Service initially targeted only storage resources and was used for battery telemetry to meet program requirements. The DRMS manages all aggregators of any resource as Vertical Top Nodes (VTN), as defined in the OpenADR architecture.

TECHNICAL INTEGRATION AND PARTNERS

Providers of Distributed Energy Resource Management Systems (DERMS) generally integrate the OpenADR protocols on behalf of their utility customers. Those providers typically test and certify their integration with the OpenADR Alliance, to ensure interoperability with the systems managed by the utility’s program partners.

About OpenADR Alliance

The OpenADR Alliance brings together system operators, utilities, aggregators, controls vendors and solution providers to support the growth of this international standard (IEC 62746-10-1) Industry stakeholders worldwide work to foster the development, adoption and compliance of the OpenADR standard through collaboration, education, training testing and certification. There are currently over 250 certified OpenADR products. Collaboration includes technical working groups – most recently the creation of an Electric Vehicle Interest Group.