Demand Response

As demand response has grown to become a significant capacity and energy resource it has also become the main focus of this consulting practice. Demand response offers many advantages, including the potential to help integrate intermittent renewable generation coming onto the electric grid and provide ancillary services and reserves. Demand response is increasingly being used in a very targeted way in collaboration with transmission planners to reduce loads on specific feeders and substations.

Panels and Presentations

Grid Modernization Forum 2017. Moderator for session, "Energy Storage and the Integration of Renewables and Distributed Energy Resources". *March 2017.*

Union of Concerned Scientists. Moderator for session on ISO/RTO perspective, including role frequency regulation and reserves markets, "Workshop on Smart Electric Vehicle Charging". June 2016.

ACEEE National Symposium on Market Transformation 2016. Moderator for session, "Demand Response Gets Smarter: Realizing the Potential of DR on the Distribution System". March 2016.

ACEEE National Symposium on Market Transformation 2016. Co-author, "Market Transformation and the Distribution System Grid". March 2016.

Internet of Energy, Virtual Summit, Smart Grid Observer. Author, "Renewable-Centric Grid of the Future". July 2016.

Grid Modernization Forum 2016. Overall Conference Chairperson. Moderator for session, "Policy and Regulatory Change for Advancing the Smart Grid". Co-author of presentation, "How Evolving State Policies are Fostering New Technology Investment for Control of Distribution System Loads and Advancing Grid Modernization". January 2016.

ACI New Generation Demand Response and Ancillary Services conference. Co-led workshop, "New Generation of Demand Response; Faster Response with Targeted Load Control – Utility Interface Business Models". 2014.

National Summit on Smart Grid and Climate Change. Assisted in Communications Workshop, "Leveraging Tools to Talk about Smart Grid and Climate Change". 2014.

Peak Load Management Alliance. Presented a paper, "Ancillary Services Market Opportunities". 2014.

ACI New Generation Demand Response and Ancillary Services conference. Presented a paper, "Demand Response and Ancillary Services Opportunities for Electric Vehicle Charging Stations". 2014.

Energy, Utility and Environment Conference. Presented a paper, “Role of Demand Response Baselines in Estimating Participant Impacts”. 2013.

Association of Energy Services Professionals Webinar. Moderated a webinar on the integration of demand response with other demand-side resources, “IDSM Developments and Early Lessons”. 2012.

Energy, Utility and Environment Conference. Presented a paper, “Evaluation, Measurement and Verification Variations Across Jurisdictions”. 2011.

Association of Energy Services Professionals Webinar. Moderated a webinar, “NAESB Standards for Measurement and Verification of Demand Response”. 2011.

Peak Load Management Alliance. Moderated a demand response panel that discussed issues surrounding monitoring and verification. 2010.

ISO-New England forward capacity market certification. Completed forward capacity market training that covered resource qualification, critical path monitoring, reconfiguration auctions, bilateral contracting, resource registration, performance testing and settlement.

Projects

Assisted a Massachusetts utility in developing scopes of work for eight peak reduction demonstration projects.

Represented two clients on ISO-NE’s Demand Response Working Group, 2014-present.

Assessed the financial and technical potential for a major demand response provider to sustain market growth and merit additional investment.

Developed profiles of a New England state’s top manufacturing sectors (transportation, chemicals, fabricated metals, machinery and computers & electronic equipment) for demand response and energy efficiency potential.

Provided an independent assessment of the technical capabilities and market potential of an interactive energy management system to manage loads and provide grid ancillary services.

Performed an independent assessment of contractor regression models used to estimate kW impacts from four demand response programs.

Participated in development of NAESB national and state standards for measurement and verification (baselines) for demand response and energy efficiency resources.

Analyzed a PJM capacity price surge in May 2018 and its implications for demand response for a utility.

Examined the implications of legislation in a mid-Atlantic state pertaining to demand response and energy efficiency, with an emphasis on cost effectiveness testing and the manner in which dispatch hours are selected.