

OpenADR Hospitality Industry R&D Project

The OpenADR (Open Automated Demand Response) Hospitality Project is a new part of Hawaiian Electric Company's Fast DR (Demand Response) Pilot Program. In collaboration with the Electric Power Research Institute (EPRI) and Lawrence Berkeley National Laboratory (LBNL), Hawaiian Electric is seeking hospitality industry customers in Waikiki eligible to enroll in Fast DR who are also interested in supporting new learning in the area of demand response.

Under the Hospitality Study Project, DR load management equipment to enable electrical load curtailment strategies and communication will be installed at no cost at the hospitality customer's facility. The customer will receive the economic benefits of Fast DR and participate in DR events. From data gathered during and after DR events, EPRI, LBNL and Hawaiian Electric will better understand DR capabilities and strategies for the hospitality industry in a hot, humid climate. We will also assess the opportunities and desire of the hospitality industry to participate in DR programs.

The Hospitality Study Project seeks to address a gap in the implementation and operational experience of OpenADR in hospitality facilities in a climate such as ours. The findings are expected to result in additional hospitality industry DR projects around the country. In addition, participating hospitality industry customers will be helping to educate and promote awareness of OpenADR options for other important market sectors, such as commercial office buildings.

EPRI, LBNL and Hawaiian Electric will select three to five hospitality industry customers for participation. A preliminary assessment and technical audit will be performed at the customers' facilities to determine eligibility. Participants will be expected to allow installation of DR load management equipment, participate in DR events and assist with follow-up surveys.

What is Open Automated Demand Response (OpenADR)?

The Hospitality Study Project will use OpenADR with advanced features such as real-time feedback and the opportunity for ancillary services essential to assisting in the integration of renewable resources and maintaining power quality, reliability, and security.

OpenADR, as described by LBNL, is "a communication data model designed to facilitate sending and receiving DR signals for a utility or independent system operator (ISO) to electric customers. The intention of the data model is to interact with building and industrial control systems that are pre-programmed to take action based on a DR signal, enabling a DR event to be fully automated, with no manual intervention. The OpenADR specification is a highly flexible infrastructure design to facilitate common information exchange between a utility or ISO and their end-use participants. The concept of an open specification is intended to allow anyone to implement the signaling systems, providing the automation server or the automation clients."

OpenADR facilitates reliable and cost-effective automation of electricity price and electric system grid reliability signals between the customer and the utility. OpenADR provides a non-proprietary, open standardized DR interface that allows utilities to communicate DR signals directly to existing customers using a common language and existing communications, such as the Internet. The "open" aspect of OpenADR reduces barriers for new vendors to enter the market which helps create economies of scale and lower costs. Standardized hardware and communication protocols enable the development of competitive, off-the-shelf products. This low cost automation offers customers and utilities the opportunity to efficiently and effectively implement demand response. To learn more about OpenADR, go to <http://drrc.lbl.gov/> or <http://www.openadr.org/>.

For additional information, please call Fast DR at 94-POWER (947-6937) or visit <https://heco.com/dr>.