



Stanford University

TomKat Center for Sustainable Energy
Precourt Institute for Energy
SLAC National Accelerator Laboratory
Energy and Environment Affiliates Program
Civil and Environmental Engineering
Department of Electrical Engineering

Stanford SmartGrid Seminar

Evolution of Demand Response

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Lawrence Berkeley National Laboratory



1:15pm-2:15pm, Thursday, Oct 30th, Y2E2 101

Abstract: While only a decade ago demand response was being used to support reliable and affordable power delivery by reducing peak load, over the last five years, there has been increased attention to utilize it to integrate clean energy systems. With renewable portfolio standards adoption in 30 states and increasing adoption of behind-the-meter distributed energy resources, demand response is being reconsidered: Can DR be available at different times of the day, seasons of the year and with varying duration and speed? This talk will summarize research done at Lawrence Berkeley National Laboratory on the development and adoption of demand response technologies and methodologies that has been evolving over time to support the changing needs of the electricity grid. It will describe automated demand response, its evolution over a decade as well as its integration with operations of the distribution systems and wholesale markets.

Bio: Sila Kiliccote is a Research Scientist, Group Leader of the Grid Integration Group and Deputy of the Demand Response Research Center in the Energy Storage and Distributed Resources Department at Lawrence Berkeley National Laboratory. Her research interests include methodologies and technologies for demand-side management and their integration with

distribution systems. She received Leadership in Smart Grid Acceleration from GridWeek in 2010 and C3E's Research Leadership award in 2014.