



AESP ONLINE WEBCAST

*Pilots – Program Design,
Best Practices, Results*

Launching May 2017

There are Two Kinds of Pilots -- Good Pilots or Dead Pilots **The Why, What, and How of Successful Pilot Design**

As utilities across the country move beyond the “low-hanging energy savings fruit”, innovative utility interventions and program designs are increasingly important to support a new wave of promising technologies bridge ‘the chasm’ and achieve scale. While utilities often pilot emerging technologies on a limited basis, these products often struggle to subsequently achieve scale in both utility portfolios and the broader market. Hear from Opinion Dynamics on how to design pilots for maximum impact and knowledge transfer into portfolios, and learn from Energy Solutions how large scale demonstrations can lay the groundwork for a successful transfer into utility programs and beyond

Speakers:

Kessie Avseikova, Opinion Dynamics

Teddy Kisch, Energy Solutions



Kessie Avseikova is a Senior Project Manager at Opinion Dynamics. Over the course of her tenure at Opinion Dynamics, Ms. Avseikova has led a variety of research and evaluation projects for energy clients, including process and impact evaluations of residential, commercial, industrial, and community-based energy efficiency programs, marketing evaluation of residential lighting programs, and commercial and residential baseline and appliance saturation studies.



Teddy Kisch manages Energy Solutions’ Emerging Technology and Market Development Practice Area, where he focuses on identifying and evaluating new energy technologies and commercialization strategies to accelerate their adoption in the market. In his free time, Teddy enjoys rock climbing, river rafting, and bike touring.

So you want to get to Zero? How to pilot a utility-run ZNE program

Zero net energy (ZNE) is still uncharted territory in most utilities' energy efficiency (EE) programs. While most EE programs offer incentives for high-performance or whole building options, few provide guidance or incentives on getting to ZNE. With the growing buzz around ZNE, more communities and organizations are showing interest. The design and construction community are starting to respond to the Architecture 2030 Challenge (promoting carbon neutrality of all buildings by 2030). States such as California have already adopted statewide ZNE goals (California's Big Bold Goals), and many other states are starting to adopt city- and county-wide energy plans, calling for energy use reduction. Utilities are continuously seeking ways to engage the community and improve customer satisfaction. In this brown bag, we will look at the steps one Midwest utility took to launch a pilot ZNE program for its customers. The webinar will focus on lessons learned from non-utility programs that have successfully promoted community-scale ZNE, and how those lessons helped shape the pilot program design.

Speakers:

Tiina Aardemae, DNV GL
Celia King-Scott, DNV GL



Tiina Aardemae is a Senior Engineer (LEED AP BD+C,) with DNV GL's Program Development and Implementation group. Her background includes energy efficiency program implementation, data and quality management, and software product management. Prior to joining DNV GL, Ms. Aardemae worked as a distribution grid engineer and utility customer project manager.



Celia King-Scott is a Senior Engineer (P.E., LEED AP, BEMP) with DNV GL's Sustainable Buildings and Communities group. She develops whole building energy performance models for buildings, communities and cities. Celia also provides technical support and review of whole building design incentive applications for utility programs across the United States.

How Smart Home Energy Management changes the way customers see their home.

DTE Energy is co-creating with its customers a platform that provides customers a pathway to the Smart Home. During a recent pilot, DTE demonstrated how to bridge what customers are looking for in home automation to the smart grid. Home energy management has been the cornerstone of DTE Insight since its launch in 2014, and this recent pilot illustrated how a wide variety of home automation devices change how customers interact with their home. With DTE Insight, the smart meter becomes one of the key elements of the design. The platform enables customers to answer lingering questions about how best to optimize their home automation settings. By bridging these technologies, customers can identify their opportunities, see the patterns of their day, and explore the best options for the home automation technology that meets their daily needs.

Speaker:

Joel Miller, DTE



Joel Miller is the Supervisor for Energy Management Tools at DTE Energy where he has led the development and commercialization of DTE Insight since 2013. His primary focus are those processes that gain deep insight into customer behaviors, market potential, and the application of emerging technology that delivers an excellent customer experience.

Innovating is Demand-ing: Overcoming the challenges presented from a demand management pilot

The power (kW) and delivery (distribution) component of customers' electricity bills continue to rise due to market and regulatory changes while energy (kWh) costs remain relatively stable. Shifting customers' attention from managing energy to managing power requires education, tools and motivation. This online presentation will explore the regulatory pressures that led to the genesis of a demand management pilot in Wisconsin and provide an in-depth discussion of the program design challenges presented to the team and how they were overcome. The session will also explore the possibilities of modifying the pilot design to incorporate a demand response element in which both customer satisfaction and utility coincident demand savings are maximized.

Key Takeaways:

- Discussion of the regulatory pressures surrounding the invention of the pilot design
- Summary of the challenges presented to the pilot team during design phase and how they were overcome, including ideal metering infrastructure and customer education best practices
- Overview of the customer engagement portal, including customized dashboard widgets for demand event feedback, real-time email/text notifications sent to facilities staff for demand threshold alerts, and tools for tracking demand savings goals and load shedding strategies
- Other key innovation opportunities to scale this for both customer demand management and demand response purposes

Speakers:

Mark Brown, Accelerated Innovations
Matthew Matenaer, Franklin Energy Services



Mark Brown serves as Chief Operating Officer at Accelerated Innovations, a St. Paul-Minnesota based technology solutions provider focused on transforming data into actions that strengthen communities and eliminate waste. AI's MyMeter customer engagement platform leverages advanced utility metering infrastructure to provide insights on energy savings opportunities within homes and buildings and achieve measurable behavioral energy efficiency impacts.



Mr. Matenaer manages the design and implementation of multiple programs within the Focus on Energy business portfolio. In this position, he oversees staff and budget for implementation, including technical assistance, custom project development, incentive payment, marketing, and trade ally outreach. He has worked in the demand side management industry for over 15 years.

Using Geotargeting to Reach Rural Agricultural Customers for Municipal and Cooperative Utilities

In 2016, WECC utilized geotargeting to reach the underserved agricultural market. This pilot enhanced existing programs, making them more effective in recruiting participants and delivering energy savings to Michigan municipal and cooperative utilities. Using ArcGIS, a Geographic Information Systems mapping software, WECC's Geotargeting Pilot combined underutilized geodata stored in existing energy efficiency program data with other market data to segment each utility's farm services program markets. Agricultural property data from Michigan counties within a utility's territory was cross-referenced with that utility's customer list to identify customers with meters on agricultural properties, creating a targeted customer list. By using a targeted agricultural customer list, WECC is able to more effectively target customers and test different marketing and outreach tactics in the specific markets with the goal of converting them into new program participants. Combining demographic data with geodata to identify underserved populations and their barriers provides a deeper market analysis and a more diverse group of participants.

Key Takeaways:

- Communicating to a targeted list of known agricultural customers enhances realization rates, streamlines outreach efforts targeted to the market segment, and reduces spending on less effective blanket direct mailings.
- Shifting marketing efforts toward a more targeted group of customers will allow for more flexibility to test new, innovative marketing techniques in residential and commercial farms energy efficiency programs.
- Developing a database and visual map of agricultural customers for each utility is time-intensive up front, but provides an invaluable resource.

Speaker:

Liza Minor, WECC



Liza Minor joined WECC in May 2015 as a Research Analyst. In her role, Liza uses ArcGIS mapping and data analysis to segment markets and enhance program performance. Liza holds an M.S. in Urban and Regional Planning from the University of Iowa, where she specialized in Environmental Planning.

Behavior Change Pilots

Benchmarking, Competition and Rewards: An Experimental Approach to Mass-Scale Multi-Family Residential Energy and Water Conservation

Utilizing a randomized encouragement design, two Southern California IOUs and three water agencies have embarked on a 12-month pilot program designed to engage multifamily residential (MFR) complexes to reduce gas and electricity use by 10% each, and water by more than 10% (10-10-10+). With one control (N=1,100) and two treatment groups (N=600 each), The session describes the sampling design and characterization of participating MFRs relative to the population of MFR complexes. The pilot offers competition and rewards to participating MFR complexes using Energy Use Intensities (EUIs) and Building Benchmarking Scores. Previously, benchmarking has had implementation constraints, given labor-intensive data input requirements with previous tools, and a more top-down benchmarking approach might be able to accelerate benchmarking-related conservation. The mass-scale MFR benchmarking approach as well as additional analysis that were needed to implement the pilot program are described. The presenters will share the lessons learned to date for such audacious undertaking.

Speaker:

Hal Nelson, Residential Energy and Water Intelligence (Res-Intel)



Hal Nelson, Ph.D., CFA, is the founder and CEO of Residential Energy and Water Intelligence (Res-Intel) Software. Dr. Nelson is a software developer and energy consultant, and has publications appearing in *Energy Policy*, *Climate Policy*, *The Journal of Artificial Societies and Social Simulation*, and other top journals.

Sustainability at your service: how an Ecoconciierge can boost savings from the hard-to-reach multifamily market

People are at the center of energy issues. So, when it comes to energy efficiency in multifamily buildings, a tenant-focused engagement strategy has legs. The ecoconciierge behavior-based pilot program is funded by ISEIF and is designed to expose multi-family tenants to the benefits of the smart grid and sustainable practices. The ecoconciierge is an in house sustainability resource for building tenants. The ecoconciierge leverages smart meter data and facilitates social activities, such as interactive competitions, in-house trainings, and on-site events, to drive action from tenants and spur engagement in the smart grid. This presentation will highlight the successes and failures of tenant engagement strategies including in-house events, on-site trainings, use of social media, and ecoconciierge office hours. It will also share savings results and outline the methods used to gather data and measure success. It will provide insights on smart grid education techniques. Finally, this presentation will provide a suggested approach for deployment of an ecoconciierge in other multifamily buildings.

Speaker:

Claire Cowan, Seventhwave



Claire Cowan manages large-scale, complex projects that integrate technical, research and communications disciplines under accelerated timelines and demanding conditions. She has eleven years of professional consulting experience for government and utility clients, working on energy efficiency program implementation, market research and evaluation, demand-side management planning and clean energy policy analysis.

The 4Ps of Behavior Change: Implementing a New Marketing Mix in DSM Engagement

Many of us know about the 4 Ps of marketing. What if there was an equivalent concept when it comes to energy-related behavior change? Alliant Energy's Jeff Adams shares results and best practices from the utility's successful implementation of a DSM engagement pilot in Wisconsin. In his presentation, he asks attendees to consider a new concept of the 4 Ps that uses personas, portal, customer paths, and participation data to affect energy-related behavior change.

Speaker:

Jeff Adam, Alliant Energy



Jeff Adams has been with Alliant Energy for 18 serving in a variety of roles including technical sales consultant, account management, and project management. In his current role as Team Lead Customer Programs & Business Support, he manages and supports the development of energy efficiency and conservation programs.