

## **QUICK TAKES: TIMELY, RELIABLE NEEDS-FOCUSED EVALUATION: OBTAINING AND APPLYING DATA WITHIN A POLICY STRUCTURE THAT VALUES EVALUATION AND APPLIES THE RESULTS**

*Moderators: Nick Hall, Evaluation Management and Oversight Services and Jessica Burdette,  
Minnesota Department of Commerce*

### **PAPERS:**

#### **International Database of Efficient Appliances (IDEA): A Novel Tool for Efficiency Program Development and Evaluation**

Brian F. Gerke, Lawrence Berkeley National Laboratory  
Michael A. McNeil, Lawrence Berkeley National Laboratory  
Thomas Tu, Lawrence Berkeley National Laboratory

#### **Steady Hand at the Wheel: Using an Incremental, Systematic Approach to Promote an Evaluation Culture in a Federal Organization**

Yaw O. Agyeman, Lawrence Berkeley National Laboratory

#### **Understanding Your Customers: The Effects of Seasonality on Energy Savings on Cape Cod and Martha's Vineyard**

Jake Millette, Opinion Dynamics  
Martin Poirier, Dunsky Energy Consulting

#### **From Before to BECAR: How Comprehensive Reviews Improve a Portfolio**

Bing Tso, SBW Consulting, Inc.  
Kathrine Clarke, SBW Consulting, Inc.  
Bill Hopkins, Puget Sound Energy  
Jim Perich-Anderson, Puget Sound Energy  
Juliana Williams, Washington Utilities and Transportation Commission  
Karen Maoz, DNV GL

#### **Vacation Destination Nantucket – No Walk in the Park When You Are on an Island: Conducting Residential Metering Study and Site Visits on Nantucket Island**

Aquila Velonis, The Cadmus Group, Inc.  
Antonio Larson, National Grid  
Matt Piantedosi, The Cadmus Group, Inc.  
Bradley Jones, The Cadmus Group, Inc.  
David Kim, The Cadmus Group, Inc.

#### **Development of Order-Independent Waterfall Graphics to Enable Comprehensive Understanding of Impact Evaluation Results**

Robert Kasman, Pacific Gas and Electric Company  
Adam Scheer, Pacific Gas and Electric Company  
Rachel Sackman, Pacific Gas and Electric Company  
Rafael Friedmann, Pacific Gas and Electric Company  
Janice Berman, Pacific Gas and Electric Company

#### **Potential Studies – Aligning Achievable Potential with Local Market Conditions and Policy or Planning Objectives Through an Innovative Approach to Economic Screening**

Jim Herndon, Nexant, Inc.  
David Jacot, Los Angeles Department of Water and Power  
Travis Walker, The Cadmus Groups, Inc.

### **SESSION DESCRIPTION:**

**Brian Gerke:** Energy efficiency standards and labeling (S&L) programs for appliances are an important part of most developed economies' energy policy portfolios. It is difficult to evaluate the full impact of these programs on global energy demand, however, since such programs may have significant additional effects beyond the borders of the market being regulated. To address these problems, Lawrence Berkeley National Laboratory is constructing the International Database of Efficient Appliances (IDEA), a flexible database for organizing, aggregating and

storing market and energy-performance data on a variety of appliances, electronics, and other equipment sold worldwide, collected via web-crawling and other data collection techniques. This paper describes the concept behind IDEA, the technical and analytical aspects associated with its development.

**Yaw Agyeman:** This presentation discusses the lessons learned in the effort to instate a culture of evaluation within the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE). Against great odds, including the difficulties of evaluating R&D and technology deployment programs, the political repercussions of negative findings, and the absence of any perceived benefits even when findings are positive, the agency has made great strides in moving the yardstick on evaluation. The modest success achieved has been borne of a careful strategy applying known principles of capacity development, but there are ways to go yet.

**Jake Millette:** Programs that do not fully understand or plan around the unique characteristics of their customers may miss opportunities for savings or set inappropriate goals. This paper discusses how a baseline and potential study, commissioned by Massachusetts program administrator Cape Light Compact (CLC), addresses this challenge and the effect unique customer characteristics have on key drivers of savings potential. Using the example of seasonality, this paper shows how customers' defining characteristics can affect their ability to save energy. The paper also shows how, once tested, previously held assumptions about the market may need to be updated.

**Bing Tso:** This paper presents a comprehensive, ongoing process for independently reviewing a large utility's electric energy savings portfolio. This process, known as the Biennial Electric Conservation Achievement Review (BECAR), has brought together stakeholders in a flexible, cooperative process that augments, rather than supplants, the traditional impact and process evaluation framework. It has led to many positive outcomes, including increased stakeholder confidence that savings are being achieved and that best practices are being followed, as well as recommendations for improvements in program savings estimation, verification, and evaluation practices.

**Aquila Velonis:** Collecting data through site visits and metering studies is commonplace in the energy efficiency industry. But, what does data collection look like in remote regions that are difficult to access or unique vacation destinations with limited resources? This paper reports on approaches that can provide valuable lessons to help guide field work in a variety of remote regions. The information will benefit field-work coordinators and managers planning to execute comprehensive investigations in hard-to-reach territories with unique population demographics.

**Robert Kasman:** This paper proposes the use of normalized waterfall graphics as an improvement to impact evaluation reporting. These graphics can help diverse audiences more quickly and thoroughly understand key results of energy efficiency programs. Taken together, the gross and net waterfall figures serve the needs of all evaluation stakeholders, and our normalization methodology ensures they display order-independent adjustments. The resulting visuals offer a concise, complete, and accurate way to highlight program achievements, provide insights for program planning, and suggest opportunities for program improvement.

**Jim Herndon:** In our recently completed EE market potential study, the Los Angeles Department of Water and Power (LADWP) and Nexant worked together to develop an innovative approach for tailoring the achievable potential analysis to local market conditions and policy imperatives. The use of traditionally rigid economic screening may not accurately capture the market potential available or align with real-world implementation practices in some markets. Therefore, this study applied an alternative approach to include consideration of measure bundles that could be logical, cost-effective additions and deliver deeper energy savings when applied at the aggregate project level.