# **2015 ACEEE National Conference on Energy Efficiency as a Resource: A Retrospective**

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### Introduction

The American Council for an Energy-Efficient Economy (ACEEE) convened its 2015 National Conference on Energy Efficiency as a Resource in Little Rock, Arkansas, from September 20 to 22, 2015. The conference presented an extensive look at the progress made in using energy efficiency as a resource across the country, as well as looking at emerging developments for the future. This was ACEEE's eighth biennial conference on this topic and the second held in the southeast region. As with the seventh EER Conference in Nashville, Tennessee, there was a very significant number of new attendees converging from utilities, businesses, and government, eager to learn about energy efficiency as a resource and acquire information about successful approaches.

The conference was comprised of a mix of plenary sessions including keynote addresses, and individual presentations in breakout sessions. The breakout sessions were grouped into five tracks: examples of successful energy efficiency programs, T&D and other additional benefits of energy efficiency, policy mechanisms for encouraging utility energy efficiency, evaluation and use of data, and a miscellaneous track for other key topics.

This report gives a chronological summary of the content presented at the conference. The actual presentations are posted on the ACEEE web site at <a href="http://aceee.org/conferences/2015/eer">http://aceee.org/conferences/2015/eer</a>.

## Conference Proceedings: Monday, September 21, 2015

### Conference Welcome, Introductions, and Keynote Address

Martin Kushler, senior fellow of the Utilities, State, and Local Policy Program at ACEEE, welcomed conference participants and reviewed the history of the *Energy Efficiency as a Resource* conference, noting with some humor that it has corresponded directly with a 600% increase in gas and electric utility energy efficiency spending since 2001. Mark Stodola, mayor of Little Rock, Arkansas, welcomed all the guests to the city and praised the benefits of energy efficiency for local economic development in Little Rock. Lamar Davis, commissioner, Arkansas Public Service Commission, welcomed everyone to Arkansas. He remarked on the expansion of advanced energy and efficiency to date and reasons to harness energy efficiency as a resource in the future, including economic growth and environmental protection.

Steven Nadel, executive director of ACEEE, introduced keynote speaker Janet McCabe, acting assistant administrator, Office of Air and Radiation, US Environmental Protection Agency (EPA). She spoke on *Energy Efficiency and the Clean Power Plan*. Ms. McCabe described how the process of gathering input shaped the final plan, noting the unprecedented outreach and public engagement process over a two-year period went beyond anything EPA had done before. She discussed a number of aspects relating to implementation of the plan, and answered questions from the audience.

### Regional Round-Up: Utility Energy Efficiency Highlights from around the United States

Moderator: Maggie Molina, American Council for an Energy-Efficiency Economy Presenters: Northeast: Jim O'Reilly, Northeast Energy Efficiency Partnerships Southeast: Mandy Mahoney, Southeast Energy Efficiency Alliance Midwest: Stacey Paradis, Midwest Energy Efficiency Alliance

South-central: Doug Lewin, South-Central Partnership for Energy Efficiency as a Resource

Northwest: Susan Stratton, Northwest Energy Efficiency Alliance Southwest Howard Geller, Southwest Energy Efficiency Project

California Steve Schiller, California Energy Efficiency Industry Council

During this session, attendees heard from executive directors or policy directors from each of the six Regional Energy Efficiency Organizations (REEOs), as well as the California Energy Efficiency Industry Council. During opening remarks, the speakers highlighted some key trends and results, including the upward trend in investments in energy efficiency as a utility resource across most of the nation (except some setbacks in the Midwest region), that electricity savings in leading states are 1.5-2% as a percentage of sales or more, and the importance of addressing the low-income customer segment across the country (and in particular this issue was highlighted for the Southeast). During the panel discussion, speakers raised several emerging opportunities and challenges, many of which were subsequently discussed in breakout sessions. They included:

- The integration of demand response and energy efficiency to address growing concerns with peak electricity demand, as well as policy implications of this integration
- The role of on-bill and other financing tools as complementary approaches to traditional programs
- The role of policies such as integrated resource planning, energy efficiency targets for utilities, and utility business models
- Emerging program strategies such as geotargeting and market segmentation

#### **Poster Presentations**

Conference participants took the opportunity to view the posters listed below and speak with the presenters during lunch time period.

*M&V* 2.0: *Can Automated In-situ Measurement Provide Accurate Savings Numbers?* Cody Taylor, US Department of Energy

A Comprehensive Examination of Energy Consumption in the Lower 48 States: A Dual Humanistic and Climate Approach

Christopher Craig, University of Arkansas, Fayetteville

Using Energy Efficiency to Go beyond Coal

Al Armendariz, Sierra Club

Savings on Aisle 9: How a Market Segment Approach Delivers Comprehensive Savings for Grocers Brenda Hunt, CLEAResult

Your Energy Manager: Long Term Engagement Brings Big Energy Savings

Martin Bond, Community Energy Services Corporation

Cars, Not Faster Horses: Savings Measurement Software Enables Energy Efficiency to Measure-as-You-Go

Jamie Peters, EnergySavvy

It's Time to Embrace Tradable Credits: The Energy Efficiency Registry and EPA's Clean Power Plan Patricia Stanton, CLEAResult

*Insights from 10+ Years of Energy Efficiency Programs* 

S. Balakrishnan, anb Systems

Pumping System Evolution: The Next Generation of Utility Programs

Stephen Putnam, Grundfos Pumps

Unlocking the Residential HVAC Energy Efficiency Resource Base: How a New Sales Data Source Transformed the 2015 DOE Furnace Rulemaking

Stephen Bickel, D+R International

Energy Efficiency in the Clean Power Plan

Nikolaas Dietsch, US Environmental Protection Agency

### Session 1A: Lighting Programs

Program managers and implementers shared innovative thinking in lighting program design and execution in communities, small business, commercial sector, and municipalities.

Moderator: Rebecca Foster, Vermont Energy Investment Corporation

The Great Light Bulb Exchange

Elizabeth Murphy, The United Illuminating Company

One-Stop Efficiency Shop®: Hope Is Not a Strategy

Kristen Funk, Center for Energy and Environment

Emerging Strategies for LED Street Lighting Conversion

Brian Buckley, Northeast Energy Efficiency Partnerships

Transforming the Commercial Lighting Market

Andre Javier-Barry, D+R International

### Session 1B: Energy Efficiency as a T&D Resource

Presenters from utility, consulting, and regional energy efficiency organizations explained how targeted energy efficiency initiatives defer investment in electric distribution infrastructure and enhance reliability.

Moderator: Nancy Jenkins, Southern California Edison

Targeted Energy Efficiency for Transmission and Distribution Reliability

Richard Aslin, Pacific Gas and Electric

Not Your Usual Suspects: How a Michigan Utility and an Environmental Group Collaboratively Developed a Pilot Project to Defer a Distribution System Upgrade with Energy Efficiency

Chris Neme, Energy Futures Group and Teri VanSumeren, Consumers Energy

Using Geographically Targeted Energy Efficiency to Deter T&D Investment

Elizabeth Titus, Northeast Energy Efficiency Partnerships

Con Edison's Integrated Demand Side Management Potential Model

Michael Harrington, Con Ed

### Session 1C: Regulatory Mechanisms for Energy Efficiency

There are three primary disincentives for utilities to pursue energy efficiency: the need for cost recovery, the lack of a financial return on investment, and the throughput incentive.

Researchers presented findings that performance incentives address the rate of return in many states and that decoupling is the preferred regulatory mechanism to counteract the throughput incentive. Lost revenue adjustment mechanisms (LRAM), while also geared toward the throughput incentive, was not found to be as strong an approach as full revenue decoupling.

Moderator: Natalie Treat, Northeast Energy Efficiency Partnerships

Beyond Carrots for Utilities: Recent Trends in Performance Incentive Mechanisms for Utility Energy Efficiency Programs

Seth Nowak, American Council for an Energy-Efficient Economy

Valuing Efficiency: A Review of Lost Revenue Adjustment Mechanisms

Annie Gilleo, American Council for an Energy-Efficient Economy

The Link between Revenue Decoupling Mechanisms and Increased Utility-Led Energy Efficiency Will Nissen, Fresh Energy and Samantha Williams, Natural Resources Defense Council

### Session 1D: Evaluation, Measurement, and Verification Methods Issues

Four presentations all demonstrated the importance of evaluation, measurement, and verification (EM&V) to support energy efficiency as a resource. Topics included a regional energy efficiency database; the role of technical reference manuals (TRMs); and examples of how EM&V is used to enable energy efficiency to be a reliable grid resource.

Moderator: Greg Wikler, Navigant

What's under the Hood? Building Transparency in Energy Efficiency Savings and Underlying EM&V Methods through a Standardized, Integrated Reporting Platform

Patrick Wallace, Northeast Energy Efficiency Partnerships

Showing Me the Savings: TRMs, Big Data, and EM&V 2.0 as Catalysts for Energy Efficiency Savings

Christine Donovan, Vermont Energy Investment Corporation

Defending Energy Efficiency as a Reliable Grid Resource

Isaac Wainstein, ERS

What's Your kW? Defining Peak Demand in Texas

Lark Lee, Tetra Tech and Amy Martin, Frontier Associates

### Session 1E: Energy Efficiency in the Clean Power Plan

Presenters demonstrated how energy efficiency can serve as a state compliance strategy for requirements of the Clean Power Plan. Each emphasized different elements: value, measurement, and potential. Abby Fox and Katie Southworth provided answers and resources to questions pertinent in the Southeast. More information is available through SEEA Clean Power Plan Resource Papers, which explore the role of energy efficiency in compliance strategies for southeastern states.

Moderator: Ken Colburn, Regulatory Assistance Project Quantifying the Value of Energy Efficiency as a Compliance Mechanism Jeff West, ICF International Capturing Energy Efficiency Savings and Implementing Common EM&V Practices to Develop a Successful Framework for EPA's Clean Power Plan

Robert Neumann, Navigant

The Potential for Tracking & Trading Energy Efficiency under the Clean Power Plan

Kate Swayne Wilson, Cadmus

Southeastern Responses to the Clean Power Plan

Abby Fox, Southeast Energy Efficiency Alliance and Katie Southworth, EMV Energy Solutions

### Session 2A: Small Business Programs

Presenters shared successes in expanding participation, energy savings, and customer satisfaction for small commercial programs. Each made recommendations and described best practices, with a focus on marketing, outreach, and customer engagement.

Moderator: Michael Stockard, Oncor

Small Business Energy Savings: Onward and Upward

Edward Musz, ComEd

Small Business Market Engagement: Efficiency, Economy & Equitability

Jake Felton, CLEAResult

The Blitz Is On: An Innovative Customer Approach that Results in Increased Conversion Rates and Cost Effectiveness

Christina Crowell and Farra Layne Vargas, Puget Sound Energy

### Session 2B: Energy Efficiency as a T&D Resource (Examples)

This session, like Session 1B, explored the T&D system benefits of energy efficiency. In particular, speakers gave detailed examples of pilot projects and explained the relationships of the project with, and some challenges of, the evolving electric grid.

Moderator: Scott Hamilton, MISO

Using Energy Efficiency for Distribution System Planning

John Finnigan, Environmental Defense Fund

Energy Efficiency and Reliability: Southern California Edison's Local Capacity Requirements RFO and Preferred Resources Pilot

Mohammed W. Aliuddin, Southern California Edison

Energy Efficiency as a Targeted Transmission and Distribution Resource

Josh Bode, Nexant

Rhode Island's System Reliability Pilot

William E. Dornbos, Acadia Center

### Session 2C: Moving the Mark: Which State Policies Drive Meaningful Energy Efficiency Savings?

Four energy efficiency experts laid out how state energy efficiency resource standards can and have been a primary policy driver of significant, multi-year energy savings from utility programs. They described how EERS function and catalyze other major factors (collaborative processes, funding), as well as how they compare with integrated resource planning.

Moderator: Jill Steiner, Cadmus

Implementation and Outcome from Washington State's Energy Efficiency Resource Standard

Glenn Blackmon, Washington Department of Commerce

Policy in Action: How States Drive Large Investments in Energy Efficiency

Rachel Sholly, Rhode Island Office of Energy Resources

EERS vs. IRPs: Why States Should Not Eliminate EERS

Nick Dreher, Midwest Energy Efficiency Alliance

EERS Advancements in Maryland: EmPower after 2015

Jim Grevatt, Energy Futures Group

### Session 2D: Best Practices in Potential Studies and Integrated Resource Plans

Speakers in this session looked to the future. Takahashi elucidated not only best practices for IRP, but also limitations and caveats of poor IRP. Hudson discussed resource planning techniques used by ETO in their past conservation potential assessments, which have relied on "firm" energy savings estimates, and how to incrementally quantify emerging energy efficiency technology savings beyond past practice. Mosenthal also explored beyond past practices used in EE potential studies, which he suggested we may have been misusing.

Moderator: Shawn White, Xcel Energy

Searching for Best Practices for Modeling Energy Efficiency in Integrated Resource Planning

Kenji Takahashi, Synapse Energy Economics

Forecasting the Future: Quantifying Uncertainty in Emerging Technologies

Andrew Hudson, Energy Trust of Oregon

Why Potential Studies Can Do More Harm than Good...and What to Do About It

Philip Mosenthal, Optimal Energy

### Session 2E: Energy Efficiency Developments in the South

Speakers put a spotlight on southeast regional developments in energy efficiency as a resource. Two presentations on Arkansas' successes tracked the history of energy efficiency development, including the important role of collaboration. The other two focused on how lessons from past experience with regulatory business models and integrated resource plans lead to benefits such as lower customer utility bills.

Moderator: Cyrus Bhedwar, Southeast Energy Efficiency Alliance

Business Models for Utilities of the Future: Emerging Trends in the Southeast

John Sibley, Southface

Energy Efficiency as a Resource

James Linder, Tennessee Valley Authority

Energy Efficiency in Arkansas: The 5th Year of Comprehensive Programs

Wally Nixon, Arkansas Public Service Commission

Collaboration: One Key to Arkansas's Success

Matt Klucher, Arkansas Public Service Commission

Panelists: Phil Watkins, Southwestern Electric Power Co. and Ken Smith, Arkansas

Advanced Energy Association

## Conference Proceedings: Tuesday, September 22, 2015

### Plenary: The Role of Energy Efficiency in the Utility of the Future

Steven Nadel moderated a panel of state and regional energy efficiency leaders and experts on the significant roles energy efficiency has to play amid numerous major changes are affecting utilities. Changes include flat sales; the use of energy efficiency, demand response, and distributed generation to defer T&D investments; smarter grid; intelligent efficiency; environmental rules; advances in appliance standards; and several more.

Mike Bull of CEE spoke on the E21 Initiative to develop a regulatory framework that better aligns how utilities earn revenue with customer demands and public policy goals. Sue Coakley, NEEP, gave her opening remarks on the Massachusetts Grid Modernization Proceeding. Frank Murray, former president of NYSERDA, discussed the New York Reforming the Energy Vision (REV) process. Jan Berman of PG&E specifically addressed California's energy efficiency policy future, including a doubling of energy efficiency.

Moderator: Steven Nadel, American Council for an Energy-Efficient Economy

Minnesota: Mike Bull, Center for Energy and Environment

Massachusetts: Sue Coakley, Northeast Energy Efficiency Partnerships

New York: Frank Murray, Former President of NYSERDA California: Jan Berman, Pacific Gas and Electric Company

### Session 4A: Residential Programs

In this session, speakers shared best practices and successful approaches in residential energy efficiency programs at the national, state, and utility program level.

Moderator: Jeremy Townsend, CLEAResult

Better Buildings Residential Program Solution Center: Learn from the Highly Effective Residential Energy Efficiency Programs

Danielle Byrnett, US Department of Energy

Statewide Strategies for Localized Savings: The Illinois Home Performance Approach Kelsey Horton, Midwest Energy Efficiency Alliance

Dramatically Increase Residential HVAC Program Participation with an Upstream Approach Jennifer C. Parsons, The United Illuminating Company

# Session 4B: NEBs and Benefit-Cost Test Issues: Valuing the Multiple Benefits of Energy Efficiency

Three consultants demonstrated the value delivered by energy efficiency and how efficiency is systematically undervalued in many ways. Quantifying the nonenergy benefits to ratepayers, utilities, society, and energy efficiency program participants is a crucial step toward capturing these benefits and expanding the energy efficiency resource.

Moderator: Roger Baker, ComEd

Promoting Energy Efficiency for What It Is Really Worth

Tim Woolf, Synapse Energy Economics

NEBs, EULs, and Other Benefit-Cost Issues

Lisa Skumatz, Skumatz Economic Research Associates

Counting More than Energy: Preparing for Direct Measurement of Nonenergy Impacts from Small Residential Energy Efficiency Programs in New York

Alireza Bozorgi, ICF International

### Session 4C: Integrated Resource Planning

In this session the speakers not only described how energy efficiency fits within IRP, but also the IRP process they use and the thinking behind it. For example, in the past, the Tennessee Valley Authority integrated resource plan added in energy efficiency as fixed supply curves into the (predominantly supply-side) resource portfolio, whereas now in their IRP, EE is viewed as a dynamically selectable resource along with demand response.

Moderator: Nick Minderman, Xcel Energy

Building the Energy Efficiency Power Plant: TVA's 2015 IRP

Tom Rice, Tennessee Valley Authority

DTE Energy's Long-Term Energy Efficiency Study to Support Integrated Resource Planning Efforts
Manish Rukadikar, DTE Energy

Leveraging Megawatts with Negawatts

Hossein Haeri, Cadmus

### Session 4D: National and Regional Results

Researchers summarized findings of extensive regional (Northwest Power Plan, eSource DSM Insights) and national (LBNL cost study) investigations of energy savings, performance versus goal, and costs.

Moderator: Jenah Zweig, US Department of Energy

Collecting, Aggregating, and Analyzing Energy Efficiency Savings at a Regional Level – and Beyond?

Lakin Garth, Cadmus

How the Cost of Saving a Kilowatt-Hour Has Changed in Recent Years and How Long Are the Savings Lasting?

Ian Hoffman, Lawrence Berkeley National Laboratory

How Are DSM Programs Really Performing?

Katie Ryder, E Source

### Session 4E: Natural Gas Energy Efficiency

This session provided approaches and best practice examples for natural gas energy efficiency programs for meeting energy savings goals and hitting targets, including multifuel programs.

Moderator: Dan Rendler, Sempra Utilities

Meeting Increasing Gas Energy Efficiency Savings Goals in a Challenging Environment
Patrick Michalkiewicz, Peoples Gas & North Shore Gas and Paul Smith, Franklin
Energy

Breaking Good: How New Mexico Gas Company Consistently Meets Its Residential Energy Reduction Targets

Dru Jones, Teco Energy New Mexico Gas Company Program Design: Best Practices of Multi-Fuel Programs Greg Wassel, GoodCents

# Lunch Keynote: Factors that Made Energy Efficiency the Northwest's Second-Largest Resource

Tom Eckman, Northwest Power and Conservation Council

Energy efficiency has met more than half of the load growth in the Pacific Northwest since 1980. Electric loads have been flat for the last decade because energy efficiency savings have offset the equivalent of 1.1% annual load growth since 2006. As a result, energy efficiency grew to become the Northwest's second-largest resource since 2012, after hydroelectric power. Keynote speaker Tom Eckman explained how this regional success in treating energy efficiency as a resource was achieved by applying the principles of equality in cost-effectiveness analysis, symmetry in resource acquisition, and parity in resource planning. He defined three requirements for each of those factors. When consistently applied, they demonstrated the same finding in virtually all scenarios tested: that the least-cost resource strategies rely heavily on energy efficiency to meet both winter electric capacity and annual energy needs.

### Session 5A: Large Commercial and Industrial Programs

Utility, program administrator, and implementation company representatives reported on and described an array of best practice and successful approaches for large commercial and industrial energy efficiency programs.

Moderator: Shea Richardson, CenterPoint Energy

B2B Success: Large C&I – Shake Hands with Your Energy Management Team

Tim Perrin and Greg Baker, Efficiency Vermont

Leveraging Energy Efficiency in Data Centers: Highly Effective Program Design for Specialized Large Customers

Dan Comperchio, Willdan Energy Solutions and Travis Nelson, ComEd Increasing the Value of EE Services for Industrial Customers (and Avoiding Opt Outs)

Neil Beup, United Technologies and Matthew Gibbs, Eversource

Commercial and Industrial Energy Efficiency in Arkansas

Evan Bowers, CLEAResult

### Session 5B: Low-Income: Hard to Reach

This panel identified several current strategies for delivering cost-effective energy efficiency to low-income households. Presenters discussed a statewide, utility-delivered weatherization program, energy savings potential and strategies for implementing energy saving measures in manufactured housing, and lastly, how weatherization can serve as a strategy for utilities' resource acquisition. Following the panel presentations, discussion focused on the role of financing in low-income programs and strategies for increasing demand/participation in low-income programs.

Moderator: Lauren Ross, American Council for an Energy-Efficient Economy Duct Hunting: Developing a Comprehensive Statewide Strategy Targeting Hard-to-Reach Customers

Katherine Johnson, Johnson Consulting Group

Reinvigorating Manufactured Home Retrofit Programs

Monica Curtis, Wisconsin Energy Conservation Corporation

How to Address Weatherization within the Energy Efficiency Resource Acquisition Model Jamie Howland, Acadia Center

### Session 5C: Aggressive Energy Efficiency Portfolios

The continued expansion of energy efficiency as a resource in the utility sector calls for effective strategies for entire program portfolios to exceed past levels of performance. In this session, speakers described the key elements from portfolios in Ontario, Arizona, and Northeastern states that contributed to extraordinary energy savings performance. Examples include benchmarking of portfolios, putting efficiency first in the resource loading order, and combining aggressive EERS with decoupling and performance incentives for utilities.

Moderator: Luis Salas, DTE Energy

View from the Northeast: Benchmarking the Costs and Savings from the Most Aggressive Energy Efficiency Programs

Toben Galvin, Navigant

How Ontario, Canada, Is Putting Conservation First

Nik Schruder, Independent Electricity System Operator (IESO)

Delivering High Levels of Energy Savings for Utility Programs: Strategies from Arizona Ellen Zuckerman, Southwest Energy Efficiency Project

When Achievement Exceeds Potential: High Savings in Massachusetts and Rhode Island George Lawrence, Optimal Energy

### Session 5D: Local Government/Utility Partnership

The presentations in this session were on lessons learned from effective energy efficiency programs geared toward communities and their public sector and institutional buildings such as schools, police stations, and senior centers. Best practices were illustrated with numerous examples and case studies. One theme in this session was the value of collaborative team process engaging the program administrators and municipal or community stakeholders.

Moderator: Nick Mark, CenterPoint Energy

STEP-ing into Savings: A Self-Install Program Approach Designed to Draw in Hard-to-Reach Facilities

Catherine Krasner, Midwest Energy Efficiency Alliance

Realizing Energy Efficiency through Direct Collaboration between Utilities and Communities

Thomas Quasius, CB&I and Michael Lascola, AEP Ohio

SCORE/CitySmart: Lessons from the Institutional Sector

John Ashe, CLEAResult

Advancing Municipal Energy Efficiency through Technical Support and Guidance
Diana McCarthy-Bercury, Eversource and Marianne Graham, ICF International

### Session 5E: Lightning Session on Behavior and EE/DR Integration

Six panelists condensed their findings into brief talks in this lightning session on the related topics of behavior-based programs and integrated demand-side management.

Moderator: Carl Nelson, Center for Energy and Environment

Proactive Consumer Engagement for Efficiency Gains, Increased Satisfaction, and Transformation Steve Nguyen, Bidgely Inc.

Allow Us to Reintroduce Ourselves: Effective Tools for Engaging Customers to Leverage Smart Meter Data Analytics and Energy Efficiency

Carrie Harkness, Consumers Energy

Customers Know Best When It Comes to Behavior Change: Are You Listening?

Ashlie Ossege, Direct Options

Why Bundling Makes Sense: EE, DR and the Smart Grid

Matthew Tolliver, EcoFactor

The Behavioral Layer Cake: How Layering Peak Day Messaging Increases the Value of Behavioral Energy Efficiency

Matt O'Keefe, Opower

Increasing the Potential of Energy Efficiency through Integrated Demand Management Programs
Steve Hambric, Comverge

### Session 6A: CHP Programs

A key finding from the CHP session was that the market for CHP is changing, and a variety of new drivers have the potential to increase the use of CHP in the future. A major theme focused on emerging interest and involvement in CHP from utilities, driven by greater attention to the need for grid reliability/resiliency and the need for emissions reductions to comply with the EPA's Clean Power Plan. The information presented also covered model utility program design strategies and best practice approaches that have resulted in the successful deployment of CHP projects.

Moderator: Meegan Kelly, American Council for an Energy-Efficient Economy From Threat to Asset: How CHP Can Benefit Utilities

Anne Hampson, ICF International

Transforming the Market for CHP: How Maryland Created the Market

Tim Witting, Pepco & Delmarva Power C& I Energy Savings Program CHP - All Sizes Fit One (Program): Turning the Agony to Ecstasy with Micro CHP as a Conservation Resource

Jon Feldman, Independent Electricity System Operator (IESO)

### Session 6B: Multifamily Programs

Although more and more energy efficiency programs have started to target the multifamily sector, there is still significant energy savings potential especially when it comes to the low-income/affordable multifamily community. To help realize this potential, relationship building with stakeholders, including trade allies and buildings owners, is a must.

Multifamily housing is complicated and programs face steep challenges, but there are many opportunities to overcome these obstacles and bring greater energy savings to the multifamily community.

Moderator: Michael Jarrett, American Council for an Energy-Efficient Economy Lighting Up Energy Savings in the Multi-Family Market

Brody Vance, Franklin Energy

Energy Efficiency for All: Quantifying and Capturing the Large Efficiency Potential in the Multifamily Affordable Housing Sector

Annika Brink, National Housing Trust

Bridging the Gap: Leveraging Energy Efficiency, Financing, and Utility Incentives for Moderate Rehab Projects

Elizabeth Glynn, Center for Sustainable Energy and Mark Pignatelli, ICF International

### Session 6C: Promising Areas of Utility Energy Efficiency Expansion

Program administrators seek new markets and new approaches to achieve and sustain high energy savings. Toward that end, presenters in this session found that: agriculture programs can yield significant savings in markets historically underserved by programs, such as poultry famers in Arkansas; utilities can gain additional value and revenue for programs by participating in capacity auctions, as demonstrated by ComEd's experience in PJM; and California utilities can gain savings credits and help achieve high savings by working with building code officials to increase compliance.

Moderator: Dan York, American Council for an Energy-Efficient Economy

Creating Best Practices for Energy Code Compliance in California

Sally Blair, NORESCO

From VFDs to LEDs: How the American Farmer Can "Harvest" the Benefits of Energy Efficiency Cody Allen, ICF International and Beau Blankenship, Entergy

Energy Efficiency and Capacity Auctions: An Update

Roger Baker, ComEd

### **Session 6D: Innovative Approaches**

Innovation in program design is the common thread linking the conclusions in two disparate program areas: smart thermostats and healthcare.

Moderator: Amy Ellsworth, Cadmus

Don't Be Fooled Again: Smart Thermostats and Residential Demand Response – Market Review, Design Considerations, and Early Findings of Savings Potential

Pace Goodman, Navigant

Groundbreaking Healthcare Program Generates Innovative Approach to Accessing Hard-to-Reach Customers

Craig Owen, Willdan Energy Solutions and Gerard Nesbitt, Southern California Edison

### Session 6E: Public Power

While energy efficiency programs funded and administered by investor-owned utilities (IOUs) are the largest and often get the most attention, this session provided visibility to public and cooperative utilities' efficiency efforts. Speakers presented examples of strong energy efficiency programs in federal utilities (TVA), a cooperative (Ouachita Electric Cooperative Corporation), and municipal utilities. While they do face fewer barriers to implementing energy efficiency programs compared to IOUs, the municipally owned utilities surveyed are providing leadership in this area and have significant energy-saving opportunities available.

Moderator: Lisa Haislip

Energy Efficiency in the Municipal Utility World

Brendon Baatz, American Council for an Energy-Efficient Economy

Lowering Costs and Improving Stakeholder Experiences in Energy Efficiency Programs

Dan Ridings, CLEAResult and Frank Rapley, Tennessee Valley Authority

On-Bill Financing and Collection of Energy Efficiency Improvements

Mark Cayce, Ouachita Electric Cooperative

### Conclusion

This conference presented extensive information documenting how energy efficiency retains its status as the lowest-risk, lowest-cost, cleanest utility system resource. This holds true both in states and regions with well-established, well-funded energy efficiency portfolios, as well as those jurisdictions that are in earlier stages of creating the policies, programs, and practices for an energy-efficient economy. ACEEE presented a comprehensive agenda of topics, but a particular highlight was the coverage of the issue of the role of energy efficiency in the Clean Power Plan, a topic that has gained prominence and importance in the industry this year. Readers are encouraged to examine all of the actual presentations from the conference, which are available on the ACEEE web site.

### To Access Conference Presentation Slides

ACEEE has posted slide presentations from conference breakout sessions and plenary sessions. Available presentations are individually hyperlinked in the conference program. They may be accessed by visiting <a href="http://aceee.org/conferences/2015/eer">http://aceee.org/conferences/2015/eer</a>.