AESP's 27th National Conference & Expo

Destination Innovation

February 13-16, 2017
Orlando, Florida

Monday, February 13, 2017	
7:30 AM – 6:00 PM	**Registration Desk Open**
8:00 AM – 3:30 PM	**Pre-conference Training Courses** (Extra Fee) ***Build It and They Will Come – Program Planning, Design & Implementation*** Trainer: Charley Budd, CB&I Earn .5 CEUs This hands-on course covers a variety of program implementation and program management topics such as program operational processes, developing Requests for Proposals and contractor selection, using program tracking data and understanding evaluators. The course includes several modules that begin with a high level overview and transition to group exercises that dive into the details, data and issues that program implementers face every day. Participants will review and use program operations manuals, program tracking data, and program documentation to solve practical and common problems, and to simulate common program management issues. Class discussions will draw out useful insights and experiences from participants. Instructors are experienced in the real world successes and failures of program management at utilities and consulting firms. This course is designed for the DSM professional with at least 2-3 years of DSM program experience. **OR** ***Critical Thinking – Enhance your skills for decision making, leadership and communications*** Trainer: Jim Walters, Power of Learning This workshop is founded on an understanding that leading business today requires the ability to bridge differing opinions, ask crucial questions, and having the know-how to overcome territorial domains; without it poor decisions almost always result. Indeed, the ability to think logically and comprehensively to evaluate a situation (critical thinking) is vital for optimum decision-making. Key areas of focus include learning, bias, reasoning, questioning, fallacy, the process of critical thinking based on the work of The Foundation for Critical Thinking, and intellectual growth. The workshop is presented in an engaging and fun manner in order for participants to increase their thinking awareness as the first step to sharpening their thinking skills. It is akin to the baseball player asking Why do I have to keep my eye on the ball? I have already done that once. If we are not aware of our thinking, we have no chance of improving it. The overarching goal of this workshop is to

	provide the motivation for participants to become less self-centered and more fair-minded thinkers. Participants can expect to: • Enrich their personal and work life significantly • Know how to elevate their thinking • Know how to correct error at every level of the organization
4:00 – 5:30 PM	**A special closed-door session for attendees who work in a utility company only.** We will address topics that are of specific interest to utility staff, through facilitated open dialogue. All attendees are encouraged to participate and speak freely in a vendor-free environment. Today's topics are • Piloting Success – Fly higher! Hear of lessons learned and best practices from others on how to implement successful pilot programs • The Rules of Procurement – Contracting success is not just hiring the right people. Let's talk data security, sub-contractors, insurance, processing requirements and more.
5:30 – 7:00 PM	**Opening Reception – Expo Hall**
7:15 – 8:15 PM	**New Professionals and New Members Event**
Tuesday, February 14, 2017	
7:00 AM – 5:30 PM	**Registration Desk Open**
7:15 – 8:15 AM	**Networking Breakfast - Expo Hall**
8:15 – 10:00 AM	**Opening Plenary** Welcome Addresss and Industry Awards: John Hargrove, AESP Keynote Presentation: Derreck Kayongo ***Observe Differently – Where Innovation Begins*** Derreck Kayongo's account of his life journey – from a refugee escaping strife-torn Uganda to CEO of a human rights organization and founder of Global Soap Project – tells us some fundamental truths about the qualities needed to survive, succeed and find meaning. And these principles hold true whether you're an individual or an organization. With incredible heart and humor, his message will open your eyes to look at the world differently – and this is the important starting point to identifying the opportunities that are all around us.
10:00 – 10:30 AM	**Networking Refreshment Break - Expo Hall**

10:30-11:45 AM	**Session 1A: Marketing -** ***Brand & Design Thinking Innovation – Using DSM as a Springboard***
	Moderator: LeAndra MacDonald, Nexant **Speakers**: Bill LeBlanc, E Source and Danielle Marquis, AM Conservation Group Being a utility used to be more straightforward. Back in the day, state regulators told us how much we could charge customers for electricity and dictated our profit margin. We built power plants and distributed electricity to customers. In many circles, our industry was seen as a beacon of modern times. Forty years later, that world has changed dramatically. Regulators want us to obtain a growing percentage of electricity from renewable sources that are intermittent. There's a car maker positioning itself as an energy innovation company. Our customers want to generate their own power. It's all threatening disruption of our industry, and we're still operating in a regulatory environment that stifles the creativity and vision required to steal their thunder. So, how can we reinvent ourselves as innovators and avoid the fate of the phone companies? This session will explore how our industry can use design thinking to better structure DSM services for the needs of our customers, employ rapid prototyping techniques to iteratively improve our service offering and brand them in a way our customers covet. We can be seen as innovators by focusing on our customers and our strengths in the marketplace, then reimagining how we position ourselves.
10:30-11:45 AM	**Session 1B: Evaluation (Rapid Fire) -** ***What's it Worth? And for How Long?***
	Moderator: Kurt Hauser, Missouri River Energy Services ***Seriously! Measure Lifetimes Need Work Sooner, Not Later! Gaps and New Approaches to Estimating EULs*** **Speaker:** Lisa Heidell Skumatz, Econservation Institute The math is simple. Measure lifetimes (EULs) have a direct and substantial impact on the numerator of benefit/cost (B/C) computations. Doubling (or halving) a measure's lifetime dramatically affects the benefit part of the equation – with varying impacts for short- vs. longer-lived measures. However, we invest in impact evaluations on one, two (or occasionally three-) year cycles, but have not really examined EULs in more than 20 years. How is this a problem? We assembled the measure lifetimes used by agencies for more than 60 measures. Our analysis showed that of the measures examined, the average variation was 66 percent, and the median was 40 percent. The difference in actual years of median lifetime is as high as 35, with the median and average at 5 and 6.4 years, respectively. The impact of this matters more for measures with shorter lifetimes, but the point remains the same: not only are the values not well researched, they vary widely and this directly affects the computed savings valued in the B/C test. ***Organized Madness – Technical Reference Manuals and the Elements of Demand-Side Management Programs*** **Speaker:** Zack Tamble, QuadROI Leveraging a proprietary database of more than a dozen Technical Reference Manuals (TRMs), this presentation will focus on what is actually documented within TRMs and observe the consistency across various regions and states. We will observe the various states that have a TRM and which types of TRMs exist in terms of format and applicability. The speaker will identify what are the outlier technology measures not addressed in most TRMs; and also reveal which value types (e.g. annual energy savings, incremental cost, and measure life) are consistent across TRMs, which have

	a wide distribution and what are the contributing factors. One objective of this presentation is to contribute to the standardization of the technical assumptions catalogued within TRMs. ***Opportunities for "Next Gen" Thermostats and Updated EULs. State Laws I Need to Worry About*** **Speaker:** Michael Santulli, SERA A recent, extensive survey of the number, types, and ages of wall thermostats in five states in the West, Midwest, and Northeast, has yielded valuable estimates for single family, multifamily and commercial buildings. The study identified the types of thermostats on site, and this has revealed the potential market for upgrading to wireless and newer models. Furthermore, with information on the ages of existing thermostats, the removal patterns and ages of removed thermostats, we can develop updated EULs (measure lifetimes) of both old-style and programmable thermostats. We will also discuss the new state laws that are affecting the thermostat world – and where they provide opportunities and barriers to thermostat replacement. ***Pump It Up: Are Cold Climate Heat Pumps Living Up to their Promise?*** **Speaker:** Abiodun Iwayemi, Vermont Energy Investment Corporation In many northern climate zones, the cold climate heat pump (CCHP) is being promoted as an energy efficient and environmentally friendly alternative to expensive heat sources such as fuel oil and electric baseboard heat. So what is the real impact of CCHPs? Efficiency Vermont has been providing incentives for purchasing these devices with the promise of lower heating bills. It has also quantified the savings achieved by these devices in homes in Vermont using AMI data and submetered data, and estimated CCHPs' demand impact on the Vermont power grid. The methodology used here is directly applicable in other northern climates; and the approach of combining AMI and submetered data is applicable in all climate zones.
10:30 - 11:45 AM	**Session 1C: Implementation -** ***Help Me, Help You***
	Moderator: Bobby Robertson, CLEAResult ***Integrated Demand-Side Management Reshapes Hospitality's Potential*** **Speaker:** Craig Henry, Honeywell Every utility looks for additional ways to engage nonresidential customers into demand response programs. By adding nonresidential customers into their programs, utilities are able to shed more load, yet impact fewer customers. Commercial buildings consume 19 percent of U.S. energy annually. The lodging market alone makes up 7 percent of the commercial building sector. This presentation will examine how targeting the hospitality market can affect major impact on the grid by being able to target the sector for demand response programs. ***Energy Concierge Program Focuses on Holistic Approach and End-to-End Technical Assistance for Hotels and Motels*** **Speakers:** Judy Simon, ICF and Sue Forcier, NPEI Niagara Falls, Ontario, a destination with over 12 million visitors every year, is an ideal location for an innovative energy efficiency pilot program focused on hotels and motels -- a sector with historically low participation in energy conservation programs. With funding from the Independent Electricity System Operator, Niagara Peninsula Energy Inc. has been running the 18-month long Energy Concierge pilot program since July 2015. The program (delivered in collaboration with

	Enbridge Gas Distribution and Ontario Restaurant Hotel & Motel Association, and managed by ICF International) is field-testing a comprehensive natural gas and electricity-savings strategy in a jurisdiction where collaboration between the gas and electric utilities is uncommon. ***Serving Up Savings: Delivering Awareness to the Doorsteps of Restaurant Franchisees*** **Speaker:** Matt Matenaer, Focus on Energy Wisconsin's Focus on Energy Chain Stores and Franchises Program is the first of its kind in the United States that singularly serves restaurants, convenience, retail and grocery stores with five or more branded locations. The program provides personalized service based on the needs of each franchise. Creating awareness of energy efficiency opportunities and available utility incentives to restaurant franchisees, however, can be difficult. Individual franchisees face challenges similar to that of a small business. While it has been found that restaurants are the most energy intensive commercial building type, operators' primary focus tends to be on other non-energy priorities. What are some of the strategies from Wisconsin's program that you can apply to your own?
11:45 AM - 1:30 PM	**Networking Lunch - Expo Hall**
Noon - 1:15 PM	**Chapter Lunch Meetings**
1:45 - 2:45 PM	**Session 2A: Implementation - Cupid's arrow – striking Energy Efficiency love into Property Owners and Tenants**
	Moderator: Cheryl Bowman, CenterPoint Energy ***All in Together: Partnering to Help Multifamily Tenants and Owners Save Electricity, Gas, and Water*** **Speaker:** Patrice Ignelzi, Applied Energy Group A group of utilities and water agencies have come together to offer a new type of behavior-change program to a market that has rarely been targeted – whole multifamily complexes. While most programs target either tenants or building owners/managers, the "unit" here is the entire set of tenant and common area accounts. The concept gained regulatory favor when proposed because of two groundbreaking characteristics: targeting whole multifamily complexes rather than individual customers, and the partnership of the electric and gas utilities, and water agencies to generate savings in all three types of resources jointly. Hear of the challenges and solutions in aggregating accounts to the whole-complex level, and about the experimental design strategy that the program employs. ***Utilities Overcoming the Split Incentive to Reach Tenant Spaces*** **Speaker**: Marta Schantz, Waypoint Building Group Ever try to incorporate energy efficiency into tenant spaces? With utility incentives? And tenant-and-landlord buy-in? This split-incentive is a significant barrier to including energy efficiency into Tenant Improvement (TI) projects. Utilities often struggle to reach the stakeholders who benefit most from energy savings opportunities: tenants. The optimum time to improve tenant space efficiency is during lease turnover; however, fit-outs happen so fast, stakeholders frequently miss efficiency opportunities and in turn, utility incentives. Influencing fit-out projects in the leased commercial office market is challenging for utilities due to the fast turnaround times, short payback period requirement, and general lack of customer knowledge on emerging energy efficient technologies. Waypoint Building Group, National Grid, and Eversource Energy have developed a

	utility incentive program, Sustainable Office Design (SOD), as a means of overcoming these barriers to deliver integrated and innovative lighting and controls solutions to this space. ***Come and Knock on our Door: How Multifamily Digital Marketing Invites Programs in for Savings*** **Speaker**: Katie Mueller, Focus on Energy Imagine a marketing campaign that bring your customers to you. For 2016 the Focus on Energy Multifamily Energy Savings and Direct Install Program re-evaluated its marketing methods. Outreach included association involvement, traditional mail campaigns and Energy Advisor relationships. As a 15-year comprehensive Program, they were constantly looking for new ways to engage with customers. What if the Program could get multifamily property owners to invite them in and open the door to finding out more about the Program? This became the strategy for 2016 marketing, centered around inbound, digital marketing. Instead of hammering in a message, the Program provided customers with meaningful, helpful content that would draw customers toward the Program. Two content pieces were developed: a 2016 Preventative Maintenance Calendar and a Heating Season Guide. The two-page calendar contained seasonal checklists to help maintain the property, and could be printed on any office computer. It contained a number of tips that had little to nothing to do with energy efficiency, providing content that would engage the customer, regardless of their interest in the Program, and establish the Program as a trusted resource. Customers were then prompted to download the Guide which provided a more in-depth look at energy-savings opportunities. Focusing on both energy and non-energy benefits, the 12-page PDF outlined ways a customer could save energy during the heating season and beyond. Recommendations incentivized by the Program were hyperlinked directly to the website. Both pieces were promoted digitally through email blasts and LinkedIn campaigns. Each piece was placed behind a form on a landing page. This required users to submit their information in order to download the content, thus generating leads for the Program. Later in the year, the Program launched a follow-up piece: The Summer Savings Guide. This piece provided similar valuable content to the Heating Season Guide, continuing with the seasonal theme of the campaign.
1:45 PM – 2:45 PM	**Session 2B: Utilities Only Session - Real Utility Issues, Real Utility Solutions**
	Facilitators: Raegan Bond, PowerStream; Bill Clemens, DTE Energy; and Trish Walker, Liberty Utilities **A special closed-door session for attendees who work in a utility company only.** Would you like to hear best practices on vendor management? How utilities integrate DSM into their operations, or how regulatory strategy influences program design? Get the answers when you join this utilities-only workshop to discuss these internal challenges faced by other utilities. Facilitators will lead small groups, helping to ensure that everyone leaves with insights on important issues, and pick up a new utility contact.
1:45 PM – 2:45 PM	**Session 2C: Marketing - Customer Satisfaction & The Games We Play**

	Moderator: Jeff Adams, Alliant Energy ***Sizing up the Competition: Why Americans like their bank more than their utility and what you can do about it*** **Speaker:** John Hazen, J.D. Power We all love to complain about our insurance company, our bank, and the airlines we fly. Yet, utilities still trail way behind these other industries in overall customer satisfaction. J.D. Power will share highlights from the firm's latest Customer Satisfaction Index (CSI) Studies and discuss how utilities fare in comparison to other industries in this key metric. Topics will also include key factors that influence the customer experience and satisfaction and where utilities still lag in comparison to other sectors; the role energy efficiency plays in this dynamic, and best practices from other industries that can help move the needle. ***The Cheesy Broccoli – Rewards and Energy Efficiency are Good for You*** **Speaker:** Kevin Duffy, ICF We know that rewards programs work in other industries, but can rewards programs successfully deliver energy savings and program participation along with persistent customer engagement and satisfaction for utilities? Discover how the Consumers Energy Smart Energy Challenge program delivers engaged and satisfied customers along with energy savings through gamification, rewards, competition, traditional marketing, and community-based social marketing.
2:45 PM – 3:30 PM	**Networking Refreshment Break - Expo Hall**
3:30 PM – 4:30 PM	**Topic Committee and Chapter Leadership Meetings**
	DSM Business Issues/Policy Implementation Marketing Market Research, Evaluation & Greenhouse Gas Pricing & DR Tools & Technology Chapter Leadership
4:30 – 5:00 PM	**Poster Session**
	Join this interactive session to learn three interesting tools or technologies you need to know about now. Three posters, three five-minute presentations. Just the facts, not sales pitches. • Advanced Refrigeration Controls, presented by HDR Consulting • Rewards Energy Platform, presented by ThinkEco • Combined Air and Water Technology, presented by Rheem
5:00 – 6:30 PM	**Networking Reception – Expo Hall and Expo Prize Drawings**
Wednesday, February 15, 2017	

7:15 AM – 5:00 PM	**Registration Open**
7:15 – 8:30 AM	**Networking Breakfast – Expo Hall**
8:30 – 9:45 AM	**Session 3A: General Session – *Market Transformation: What does it mean for us, really?***
	Moderator: Laura Schauer, ILLUME Advising P**anelists:** Lark Lee, Tetra Tech; Dave Hyland, Schneider Electric; Lisa McLeer, GE; Michele Negley, CLEAResult; Jeff Mitchell, NEEA; and Anita Hart, NV Energy Market transformation is a continually evolving discussion with a seemingly moving target. Regulatory context is first and foremost foundational for how we all address and apply market transformation planning and research. And the use and application of market transformation, whether it be a “need to watch” issue or a formal framework or an opportunity to glean savings, feeds into the many nuances surrounding the issue. Regardless of where you sit in our energy efficiency space – a program administrator, a program implementer, an evaluator, a policymaker, a market actor –market transformation is affecting our business. This dynamic session will bring together a diverse group of industry professionals, including manufacturers, program administrators, and evaluators, to discuss their perception of market drivers, how market transformation is affecting each of their respective businesses, and future direction and needs given our markets are moving faster than ever.
9:45 - 10:30 AM	**Networking Refreshment Break - Expo Hall**
10:30 - 11:45 AM	**Session 4A: Marketing - *It’s Really Hard to Give Away Money***
	Moderators: Amanda Townsend, Oncor and Matt Gibbs, Evergreen Consulting ***Contractor Marketing and Outreach: Growing a residential efficiency program from the inside out*** **Speaker:** Alyssa Spiel, WECC Effective consumer marketing is a significant contributor to the success of residential energy efficiency programs. Just as vital, however, are marketing and outreach efforts directed at the contractors, trade allies and retailers operating within the utility’s boundaries. After all, many program implementers rely heavily on third parties to promote products, equipment, and related incentives to customers in order to achieve savings goals. Without adequate knowledge, support and sales tools, trade allies and retailers cannot properly promote — or implement — energy-efficient products, services, or equipment to a utility’s customers. We will learn about the value of (1) marketing an energy efficiency program to contractors (2) effective contractor outreach and education, and (3) examples of the impact of outreach and sales tools on actual residential energy efficiency programs. ***Is your HVAC Manufacturer Helping Promote Utility Programs?*** **Speaker:** Kevin DeMaster, Mitsubishi Electric Cooling and Heating DSM programs are always faced with the challenge of getting trade allies to participate in their programs. Increasing pressures on the implementer and utility to meet goals require objective thinking and to continuously evaluate ways to make this happen. In this presentation, you will find

	out some examples of innovative strategies, marketing, behavioral angles, and data analytics that are being deployed by a manufacturer and Implementers to foster these high attribution activities to increase trade ally program participation. ***The Race to the Finish: How Increased Transparency Helps Trade Allies and Programs Win*** **Speaker:** Erin Soman, Focus on Energy How would you feel if you were asked to run a marathon, but never kept informed of your progress? Reaching the goal would be daunting. While programs don't ask as much from trade allies, there is still the need for increased transparency and recognition. Wisconsin's Focus on Energy Business Incentive Program had just over 450 registered trade allies associated with nearly 70 percent of the applications processed and savings delivered in 2015. With more than 2,600 participating business customers in 2015, the ratio between business customers and registered trade allies shows the impact of trade allies. Trade allies had proven their efforts were more far reaching than what the program could achieve on its own.
10:30 – 11:45 AM	**Session 4B: Cross Cutting -** ***Partnerships Leading to Innovation (Panel)***
	Moderator: Tim Michel, PG&E ***ENERGY STAR® Retail Products Platform - Midstream Market Transformation Year One Review*** **Panelists**: Peter Banwell, U.S. EPA, Energy Star; Sara Conzemius, ILLUME Advising; Art Christianson, The Home Depot; and Scott Fable, PG&E Traditional energy efficiency program designs that target appliances, electronics and other consumer products are encountering cost-effectiveness barriers because of decreasing unit energy consumption (UEC), which is a consequence of successful ENERGY STAR focused programs and federal minimum efficiency standards. A collaboration of energy efficiency program sponsors and ENERGY STAR has created the ENERGY STAR Retail Products Platform (ESRPP) to overcome these barriers and transform the market for energy efficient consumer products. The coordinated efforts of program sponsors build the large scale the market needed to influence market actors and enables uniform implementation processes to control program costs. In 2016, program sponsors and a group of ENERGY STAR retail partners initiated a pilot to assess this nationally-scalable platform for a midstream program design. This session will present an update on key elements of the platform, an overview discussing the pilot's portfolio of five products categories, a presentation of implementation tactics, and a summary of some early findings and lessons learned from the first year of the pilot.
10:30– 11:45 AM	**Session 4C: Implementation -** ***Split Personalities: HVAC***
	Moderator: Michael Lascola, AEP ***Changing the Residential Heating and Cooling Paradigm*** **Speaker:** Rick Nortz, Mitsubishi Electric Cooling and Heating Advancing energy efficiency goals, improved building codes, and equipment baselines are challenging conventional DSM program design approaches and limiting results for residential programs. What will it take to shift the discussion and program designs to achieve a level of higher energy efficiency savings? In this presentation, the focus will be on ductless mini-split heat pumps as a solution that addresses displacing the large home HVAC load, all the way to complete home

	zoning that challenges the current thinking on zoning a home for energy efficiency and comfort. Learn how these systems with their energy efficient inverter compressors and no duct work flip the current paradigm on residential HVAC. ***Pushing the Ductless Heat Pump Envelope*** **Speakers:** Jeff Scott, EnWin Utilities Ductless heat pumps have shown great promise in delivering energy savings. However, utilities have had varying degrees of success in leveraging this technology in energy efficiency programs, with very limited reach into cold climates. You will have an opportunity to take a look at an aggressive strategy that one Ontario, Canada, local distribution company is piloting to deliver energy savings and also assist limited-income customers in a unique way. The pilot targets a moderate income community in southwestern Ontario with an estimated 98 percent of homes relying on electric baseboard heating and 80 percent relying on window air conditioners. ***Improving, Expanding, and Evaluating Residential Energy Efficiency Services*** **Speakers:** Jacqueline Berger, APPRISE and Anne-Marie Peracchio, New Jersey Natural Gas New Jersey Natural Gas' SAVEGREEN Project provides energy efficiency incentives that are complementary to the New Jersey Clean Energy Programs managed by the state. The residential programs provide grants or on-bill repayment plans to assist with the purchase and installation of furnaces/boilers, water heaters and other whole-home performance work. This presentation will share evaluation data that shows how utility engagement can enhance a state energy efficiency program. Increased benefits were achieved by recruiting and developing a large contractor base, increasing affordability of energy efficiency services through financing and rebates, expanding customer participation through marketing, and improving the safety and quality of service delivery through technical improvements and quality control.
11:45 AM - 1:30 PM	**Networking Lunch – Expo Hall**
Noon – 1:15 PM	**Chapter Lunch Meetings**
12:30 – 1:15 PM	**Cupcake Dash**
1:30 – 2:45 PM	**Session 5A (Panel): Marketing - *The Digital Express – Hopping the Train to Digital Innovation***
	Moderator: Kristin Laursen, Michaels Energy ***Digital Transformation with LIVE Focus Group*** **Speakers:** Ashley Nichols, KSV and Linda Dethman, Research Into Action The changes we see with the application of digital technology in all aspects of human society are known as digital transformation. Digital transformation is much more than what happens on your website. It's about the entire customer experience, and how digital can bolster and improve satisfaction. The resounding message from the energy industry is this: our digital platforms are not working hard enough for us, and they aren't working for our customers. So how do you make your digital platforms work harder for you, and make everything easier for your customers? A key ingredient to effective digital communication is a nuanced understanding of your customers. Segmentation and machine learning often fuel digital platforms day to day. And focus groups reveal deep, rich insights about customer motivations, barriers, habits, beliefs and preferences. These insights allow marketers to hear and make use of customer stories and to get the words,

	visuals, and messaging right. This session will paint the picture on where we're headed in the digital transformation era. It will also incorporate a real time focus group discussion that will allow the audience to have a brief window into how consumers think, talk about, and respond to digital marketing -- both what they love and what could send them running in the opposite direction!
1:30 – 2:45 PM	**Session 5B: Evaluation - *The Shortest Distance Between Two Points***
	Moderator: Sharyn Barata, Opinion Dynamics ***Using Data Analytics to Bridge the Gap between M&V 1.0 and 2.0*** **Speaker:** Paul Dobrowsky, ERS Implementation of energy efficiency as a grid resource requires defense that installed measures can confidently provide capacity relief during peaks. Measurement and verification (M&V), often the means of defending these programs, is at a crossroads, with the debate intensifying between traditional M&V approaches and the meter-based approach championed by some as M&V 2.0. Traditional M&V, while the gold standard for high-certainty results required by jurisdictional evaluations, can be relatively cost- and time-intensive. As a result, the industry has looked to M&V 2.0 as an alternative, with real-time, building-level data from Advanced Metering Infrastructure (AMI) reducing project costs and timelines. However, its "black box" methodology leaves many skeptical of the ability of M&V 2.0 to be as accurate and defensible as traditional M&V. This presentation shares the lessons learned from a recent project utilizing a granular M&V methodology that borrows successful aspects of both traditional M&V and 2.0 approaches to maximize accuracy and minimize cost by using predictive analytics on previously collected end-use metered data. While no M&V approach can ever be one-size-fits-all, this hybrid model shows that the best M&V solution is often a tailored combination of both sides. ***Meeting the New York Reforming the Energy Vision Evaluation Challenge*** **Speaker:** Tom Coughlin, National Grid Evaluations must evolve to meet program implementation needs for faster feedback. Detailed file reviews and on-site inspections and verification – a normal part of traditional impact evaluations – can be leveraged to produce valuable feedback for program administrators about how the program is operating in the field, beyond the realization rate. National Grid commissioned an innovative measurement and verification (M&V) study that comprises custom and prescriptive lighting designed to meet the REV challenge. Sites were selected for M&V in the quarter following implementation, and an efficient rolling sample methodology selects sites for desk reviews and on-site verification and metering. The results and findings from this study will be reviewed and include the following outcomes: an independent assessment of the program realization rate meeting best practices precision targets; a quantitative assessment (in kWh) of lost opportunities from the fine-tuning of light levels and lighting controls; and confirmation of measure eligibility and quantitative input to guide expanding prescriptive measures and adjusting incentives. ***A Recipe for Success: Mix One Part Evaluation with One Part Business Process Improvement*** **Speaker:** Trudy Johnson, BC Hydro BC Hydro recently assimilated two similar commercial offers into a single DSM program. After a few months, it became evident that program delivery and operations could be improved and the program was identified as a candidate for a process evaluation. In order to permit implementation of changes in a timely manner, BPI techniques were merged with evaluation practice. Both lines of inquiry proceeded concurrently, intersecting at strategic points to collect information or share

	results, thus creating efficiencies in data collection and enhancing the results obtained in each. Also, the BPI work stream could move forward with implementing changes while the evaluation path addressed the broader evaluation scope and questions, resulting in a formal evaluation report.
1:30 - 2:45 PM	**Session 5C: Tools & Technology (Panel) -** ***What Customers Want you to do with Their Thermostat Data***
	Moderator: Julia Dalla Rosa, ICF ***Data, Data on the Wall: - what value can be created, with it all?*** **Panelists**: George Malek, ComEd; Jeff Shaw, Southern Maryland Electric Cooperative; Michael Britt, Southern Company With more than 70 utilities currently including smart thermostats in their energy efficiency and demand response portfolios, the panel will move past discussing “do smart thermostat programs work?” and into “how are Utilities envisioning using the data and functionality to unlock additional value”. This coast-to-coast group of Utility executives will discuss how they envision unlocking the full potential that exists in the immense amount of Big Data generated by smart thermostats; providing insights into what is being tested today and their visions towards the customer-centric utility. During this session, topics including customer rate plans, new business models and additional services, customer insights to personalize/target marketing, sophisticated load management, and grid stability will be covered. Walk away with a big-picture vision of how Utilities envision smart thermostat data being used to reach broader organizational goals.
2:45 - 3:15 PM	**Networking Refreshment Break – Expo Hall**
3:15 – 4:30 PM	**Session 6A: Policy (Panel) -** ***Both Sides of the Meter Innovations***
	Moderator: James Linder, TVA ***Exploring the Opportunities for Beneficial Electrification - Industry Observations & Real World Experience*** **Panelists:** Blake Woodward, ICF, Lana Lovick, Entergy, and Jeff Smith, Georgia Power Classical demand-side management and energy services include both off-peak load building and load factor improvement programs, as well as energy efficiency programs. Faced with increasing environmental pressures and declining sales and earnings, many utilities are starting to reevaluate beneficial electrification programs and other nontraditional sources of revenue growth. Electrotechnology programs, which promote the displacement of fossil-fueled customer equipment with electric-powered equipment, can help electric utilities increase net margin, improve load factor, enhance customer services, and reduce net service-territory emissions. This panel summarizes industry observations and best practices focused on the value of Electrotechnology programs to utilities and end users, evaluating the feasibility and economics of such programs, and considering regulatory and resource planning topics.
3:15 – 4:30 PM	**Session 6B (Panel): DR - Dynamic Pricing Update – Do we have a Pulse?**
	Moderator: Greg Wikler, Navigant Consulting, Inc.

	Speakers: Wayne Harbaugh, Baltimore Gas & Electric; Sahar Mishriki, HydroOne; Steve Sunderhauf, Pepco Delmarva Power & Light, Lynn Westerlind, National Grid Time of use prices, and other forms of time-varying rates, have been one of the highest agenda items for policymakers, utilities and advocates in many states and countries. Unfortunately, we are still not seeing the level of adoption as we had hoped to this point. This panel discussion will provide perspectives on utility and policy efforts to move the needle on time-varying pricing initiatives. Speakers will cover topics related to potential and realized load reductions, customer satisfaction survey efforts, links to behavior and other DR initiatives, and key policy drivers. The audience will learn the factors that result in high levels of peak reduction and customer satisfaction associated with successful time-varying rate programs, receive practical insights into how to plan for and implement such programs, and hear details on the benefits of time-varying rates in the context of increasing distributed energy resources.
3:15 – 4:30 PM	**Session 6C: Implementation - Blueprints to Building Success**
	Moderator: Bill Clemens, DTE Energy ***Leveraging Whole-Building Performance Programs for Deeper Savings: Consumers Energy and Building Performance with ENERGY STAR*** **Speakers:** Tracy Narel, U.S. EPA and Amy Glapinski, Consumers Energy The U.S. EPA's Building Performance with ENERGY STAR (BPwES) program offers a framework for sponsors to engage with commercial customers. The program leverages ENERGY STAR's strategic energy management approach to provide a roadmap for improved customer relationships over a multi-year period, while driving whole-building energy improvements including both low or no-cost opportunities, as well as capital projects. The presentation will focus on the ongoing implementation of BPwES by Consumers Energy. Notably, it has been a mechanism for Consumers Energy to increase participation by K-12 school districts, which had historically been hard to reach. The core elements of BPwES that were successfully woven into the program, including: benchmarking, targeted assessments, creating organization-wide energy management action plans, facilitating project implementation, and providing bonus incentives for total energy reduction over baseline will be illustrated. A summary of best practices and next steps for those interested in establishing their own BPwES offerings will be included. ***Strategic Energy Management for C&I Customers: Best Practices Research for Program Design and Optimization*** **Speaker:** Toben Galvin, Navigant Strategic Energy Management (SEM) programs target C&I building operators with an understanding that a longer term customer engagement can yield significant self-sustaining energy savings. Hear the findings from a survey of multiple SEM programs in operation across the United States. Based on interviews conducted with AEP Ohio, Puget Sound Energy, Efficiency Vermont, Energy Trust of Oregon, Northwest Energy Efficiency Alliance, focus on Energy, and Xcel Energy, you will understand the commonalities and differences between the different SEM program design approaches, and receive with a recommendation of best practice considerations for the most successful program design, and discussion with respect to the anticipated investment required and costs to acquire kWh savings. Findings from a recent econometric analysis of the persistence of electric and gas savings from a sample of participants active with the Northwest Energy Efficiency Alliance's SEM program will also be presented.

	Magic Sauce: Uncovering Pathways to Deep, Cost-Effective Savings in California's Nonresidential Portfolio **Speaker:** Jeremy Eddy, Itron Utility energy efficiency programs come in many forms and target widely varying energy savings opportunities. Yet little analysis has been done at a statewide level on which specific programs, as well as which general elements of program design and targeting, are most effective at achieving savings in a cost-effective manner. In 2015, Itron undertook a study for the California PUC to explore questions regarding comparative program reach and effectiveness. Using an extensive dataset consisting of merged program tracking data, CIS data, M&V documentation, and census data, this study examined 163 energy efficiency programs offered through California to nonresidential customers. Indicators that were measured included program reach and cost effectiveness. All of the effectiveness indicators were then combined into a single meta-metric of program effectiveness. The analysis then quantified the correlation between program design elements and the program success meta-metric using regression analysis….and the results may reveal the magic sauce for successful programs.
3:15 – 4:30 PM	**Session 6D: Utilities Only Session: Ask a Utility Expert**
	Moderator: Mark Martinez, SCE **Panelists:** Vicki Nichols, formerly with Georgia Power; Lynn Westerlind, National Grid; Marjorie Geringer, FPL and Cynthia Herron, TVA **A special closed-door session for attendees who work in a utility company only.** Do you have a workplace challenge that you face in program planning, implementation, marketing, research or evaluation? This is your chance to "Ask the Experts." And we don't just mean the panelists up on stage. In a room full of utility practitioners, everyone in the room is an expert. All attendees are encouraged to not just ask questions, but also be part of the answer discussion. This fast-paced format enables our experts to share their knowledge and experience to help you solve challenges you see every day.
4:30 – 5:00 PM	**Poster Session**
	Join this interactive session to learn three interesting tools or technologies you need to know about now. Three posters, three five-minute presentations. Just the facts, not sales pitches. • Smart Energy Valve, presented by HDR Consulting • High Efficiency Dehumidification System, presented by Conservant Systems • Geothermal Heat Pumps, presented by Johnson Consulting Group
5:30 – 7:30 PM	**Special Event**
Thursday, February 16, 2017	

8 AM - Noon	**Registration Desk Open**
8:00 – 9:00 AM	**Networking Breakfast**
9:00 – 10:15 AM	**Session 7A: Evaluation - *From Discovery to the Big Reveal***
	Moderator: Sherry McCormack, SWEPCO ***Squeezing More Out of C&I Energy Audit Programs: How to Increase Conversion Rates towards Savings*** **Speakers:** Spencer Kurtz, CB&I Most energy efficiency programs offer some form of energy audit support. There is often the question, “how much energy savings is achieved as a result of the audit?” because energy savings are only achieved if the recommendations are implemented. The research has identified over 130 audit programs offered to commercial and industrial customers throughout the country. Audits range in size, scope, and type; from On-line, Off-line, and On-site energy assessments. The presentation draws upon experience from audit program administrators, implementers, and feedback from customers to discuss the challenges that impact the likelihood of customers implementing efficiency measures identified from an assessment. Guidelines will also be delivered for the improvement of converting energy assessments into energy savings. Data from various sources, including the Smart Energy Design Assistance Center (Illinois Department of Commerce and Economic Opportunity), ComEd, and Focus on Energy (PSC of Wisconsin) to provide real-world data also supports this topic. ***That’s All Your “Big Data” Does? Expanding the Use of Building Data in Efficiency Programs*** **Speaker:** Eric O'Neill, Michaels Energy When thinking about “big data” in energy efficiency programs, most people think of interval meter data and “no touch audits.” This is just the tip of the iceberg. In most cases, buildings have automation systems that generate huge amounts of information on their operations. Unfortunately, this useful information is continuously ignored or overwritten and lost. In this vendor neutral session, learn about new technologies that make building data actionable to improve customer experience. Big data can help both program implementers and evaluators, by providing everything from improved building system reliability and efficiency to faster, more accurate, and less intrusive project measurement, verification, and evaluation. ***Making Evaluation Reports Easy to Determine What Works, Why and for Whom*** **Speaker:** Mary Sutter, Grounded Research and Consulting, LLC Evaluation reports typically lack useful data in several important areas. Through discussions on the results of a review within the commercial sector and a review of energy efficiency evaluation methods, this presentation highlights the difficulty in determining what works, why, and for whom – all fundamental questions that evaluation should regularly answer. Using information culled from outside of energy efficiency, several examples of how evaluation reporting could be improved to make it easier for both readers of individual reports and those undertaking future systematic reviews to understand what works, why and for whom, will be provided.
9:00 – 10:15 AM	**Session 7B: Implementation (Panel) - Code Talkers**

	Moderator: Rick Morgan, Morgan Marketing Partners ***Interactive Effects of Code Officials, Code Enhancement Programs, and Baselines*** **Panelists:** Mike Turns, Performance Systems Development; Sue Hanson, Tetra Tech; Liza Bowles, Newport Partners; and Lauren Westmoreland, SEEA The relationship between energy efficiency programs and code enforcement has been garnering discussion across the country as program administrators seek opportunities to capture additional cost-effective energy savings through energy code enhancement programs. Despite state adoption of more stringent energy codes, achieving high compliance often takes a significant amount of time. In this session you will learn about the results of several field studies, creative strategies to engage code officials to help meet program goals, including examples from new construction programs and energy code enhancement programs in multiple utility territories, and how these efforts impact baselines from an evaluation perspective.
9:00 – 10:15 AM	**Session 7C: Business Models -** ***Targeted DSM: Sudafed for T&D Congestion***
	Moderator: Brad Gunter, Florida Power and Light ***Convincing the Engineers —A Rigorous Approach to Assessing Non-Wire Alternatives to T&D Upgrades*** **Speaker:** Lakin Garth, Cadmus While "non-wire alternatives" (NWAs) is the new buzzword in utility planning, distribution planning engineers may not be convinced of the efficacy of the alternatives. Indeed, to engineers used to measuring and building the physical capacity of transmission and distribution investment options, the idea that expansion or upgrades can be avoided or deferred through NWAs may be unsettling. This presentation will describe a rigorous assessment methodology to determine the likelihood that some combination of demand response, distributed generation, storage, micro-grid, and energy efficiency can meet localized electricity needs. ***Not All Measures Are Created Equally: Using M&V Data for Strategic Program Design*** **Speakers:** Michael Ihesiaba, Con Edison and Lucy Neiman, ERS Faced with the challenge of soaring electric demand in the diverse and heavily populated boroughs of Brooklyn and Queens, Con Edison launched an in-depth study to identify the customers and measures with the greatest potential for demand reduction during peak hours. Program designers will combat load constraints with a suite of offerings, including energy efficient equipment replacements and controls installations, load shifting, and customer education. While it is often advantageous to recycle programs from one target territory to the next, Con Edison faced a unique challenge in that the networks most in need of peak demand reductions had significantly different demand profiles than those observed in other regions. More specifically, Brooklyn and Queens both have a 12-hour peak demand period, with the most constrained hours between 7 and 11 p.m. Because the network-specific peak period is unique, recycling load profile assumptions and program offerings from other networks was deemed inappropriate. Instead, Con Edison will utilize data collected through extensive on-site measurement and verification to strategically design programs that will yield demand reductions when and where they are most needed. ***Improving the Performance and Potential of Solar and Energy Efficiency Programs through Locational Targeting*** **Speakers:** Matthew Croucher, CPS Energy and Kenneth Skinner, Integral Analytics

	In 2015, CPS Energy, one of the nation's largest municipal-owned gas and electric utilities, added two innovative solar programs to their energy efficiency and distributed energy portfolio. Using actual data, this presentation will focus on the integration of energy efficiency with the locational benefits of solar and other distributed resources to improve utility energy efficiency planning. By identifying sub-regions of the CPS Energy system that require significant infrastructure investments, this study examines the improvement to overall program cost-effectiveness and achievable potential obtained through locational targeting of energy efficiency and solar programs. Improved cost-effectiveness is achieved by targeting customers in high cost-of-service sub-regions, including areas with older equipment that can benefit from life extension and customers who benefit from specific programs.
9:00 – 10:15 AM	**Session 7D: DR - Integrated Demand Side Management: Achieving the Promise of Engaging Customers to Deliver Peak and Electricity Savings**
	Moderator: Sharon Mullen, Navigant **Speakers**: Tracy Dyke-Redmond, Eversource; Mark S. Martinez, Southern California Edison; Derek Kirchner, DTE Energy; Jess Melanson, Tendril IDSM can increase customer engagement and persistence, drive peak and energy savings, and position the utility as an energy services partner, all at a lower cost. Will this promise be realized? Join utility experts from across the country to hear about residential and C&I pilots and programs that integrate energy efficiency, demand response and distributed energy resources including storage and renewables. Speakers will cover topics related to leveraging energy efficiency equipment to create demand response resources through behavior and educational programs, coordinated marketing, and new technologies. You will hear lessons learned, and how to plan for and implement integrated programs in the future.
10:15 – 10:45 AM	**Networking Refreshment Break**
10:45 AM – Noon	**Session 8A: Behavior Programs (Panel) - The Rewards of Good Behavior (Programs)**
	Moderator: John Augustino, Honeywell ***Impacting Behavior - How are we doing and where are we going?*** **Panelists:** Jeff Adams, Alliant Energy; Leesa Lee, Bidgely; David Drew, Whisker Labs; Neel Gulhar, Oracle Utilities; and Paul Higgins, Navigant Behavioral programs in their current form have become a staple of many utility energy efficiency platforms and a critical contributor to hitting energy efficiency savings goals. This panel will look at these programs from both sides and discuss: • What's working and what's not • Where behavioral solutions are going to deepen impact, increase the depth of engagement, and improve persistence • What new solutions will hit the market in the immediate and not too distant future.
10:45 AM – Noon	**Session 8B: Implementation – The *River Runs Through It***

	Moderator: Charley Budd, CB&I ***Moving Midstream: Building Internal and Regulatory Support, Engaging the Market, and Integrating with the Portfolio*** **Speaker:** Chris Burmester, Energy Solutions Across the nation, program administrators are launching midstream programs to increase claimable energy savings and program participation. Compared to downstream programs that provide rebates directly to end-use customers, midstream programs provide strategic engagement, support and incentives to a relatively small number of market actors as a means of encouraging them to stock and sell more high efficiency products and equipment. Although midstream programs have proven to increase participation, the shift to midstream programs often requires a paradigm shift with regulators and also within program administrator organizations. They require new program marketing strategies where channel relationships, and understanding of market actors' business models and drivers, are far more important than visually appealing websites and campaigns. They also require modifications to traditional program administration processes in order to avoid double dipping and effectively integrate them into the larger program portfolio. ***The Supply Chain Was Just Sitting There: How an Energy Efficiency Program Exceeded Its Goals and Transformed the Upstream Marketplace*** **Speaker:** Howard Merson, Vermont Energy Investment Corporation VEIC researched a state's HVAC market and took an unconventional approach to transforming it. Under the auspices of Efficiency Vermont's structure for implementing innovative programs, the strategic planning staff held day-long seminars with "upstream" market leaders. In these meetings, manufacturers, manufacturer representatives, and distributors were shown ways to increase distributor revenues. Partnerships evolved from this process, and resulted in deep collaboration on sales, marketing, inventory, and training. The outcomes: improvements in stocking practices, fewer financial barriers for suppliers, many more efficient products brought to market, and a compendium of best practices. The upstream program has delivered significant increases in energy savings, compared to "downstream" rebate programs for end users. Depending on the product, sales increased from 600 percent to 10,500 percent. Efficiency Vermont has begun to bring a similar program to NYSERDA and Con Edison. This presentation describes the upstream business concepts and their effects on market transformation. It also discusses the value proposition for supply channel partners, which is paying attention to distributors' most critical metric – their return on net assets. ***Making Downstream actionable: leveraging a digital Marketplace with innovative incentive design and limited-time promotions to scale program participation*** **Speakers:** Alex Katzman, Enervee and Ram Dhanekula, San Diego Gas & Electric Downstream appliance programs are often promoted in brick and mortar retail stores and not well integrated into the online shopping experience. Today over 80% of appliance purchases are researched online before a purchase is made, even if many appliance purchases still occur in the local store. As appliance purchases typically take from 3 weeks to 9 months to complete, utilities have the opportunity to provide guidance to their customers on the most energy efficient models that are also highly reviewed and affordable. With a digital Marketplace, utilities enable their customers to easily compare, sort and filter all current models based on today's lowest prices, incentives offered, energy score, energy savings and user review ratings. This enhanced customer experience when paired with digital marketing such as newsletters, paid search/social and retargeting can scale your downstream programs cost effectively. SDG&E will present a case study on how it has been able to increase program participation by up to 237% by offering limited time

	promotions to its customers.
10:45 AM - Noon	**Session 8C: Cross Cutting (Panel) -** ***Plan Your Trip with a Customer Journey Map***
	Moderator: Ted Ykimoff, Consumers Energy ***Understanding the Customer Journey in Creating World Class Customer Experiences*** **Panelists:** Emily McGraw, Consumers Energy; Ryan Fantino, CLEAResult; and Anne Dougherty, ILLUME Advising Consumers Energy embarked on an ambitious project to create a "world class customer experience" by focusing on how it feels when customers engage with its energy efficiency programs. As part of a series of efforts, Consumers Energy enlisted a research and design partner to support its re-envisioning of the customer journey with its program team and implementation contractors. Taking seriously the experience of customers, it set out to identify the pain-points of the programs and to redesign 13 distinct initiatives in order to create a seamless journey for customers. While such mapping is not unusual, this effort was unique in that it focused on not only looking at the customer experience at the program level, but on the interplay between programs, and how over time we could create an experience that not only engaged customers effectively but set the utility on a path toward being viewed by its customer as a total solutions provider. Through workshops, primary and secondary research and visualization exercises, the journey mapping team created a future state vision for Consumers Energy's programs that has become a True North as it moves forward.
Noon – 2:00 PM	**Lunch and Closing Plenary Session**
    2:00 PM	Closing Remarks Keynote Presentation: Yvonne Camus ***"Not if - but when - things go wrong"*** The US Navy Seals might be younger, stronger and better trained, but Yvonne Camus beat them in "the world's toughest race". Her story begins back when she was a single mom and a busy executive that decided to take on the Eco-Challenge. It's an international, multi-faceted race and competition — that usually drew competing teams from the likes of SWAT and military special forces. Each team comprised a mandatory mix of both men and women, racing non-stop, 24 hours a day, over a rugged 300-mile (500 km) course, participating in such disciplines as trekking, whitewater canoeing, horseback riding, sea kayaking, scuba diving, mountaineering, camel-back riding, and mountain biking. Yvonne's rookie team of amateur athletes used communication skills, grit, and practical savvy to become the first "inexperienced" team to complete the grueling competition. However they ran into near constant problems throughout: equipment failure, environmental hazards and physical injuries. Using this incredible story as a backdrop Yvonne talks about managing stress, problem solving on the fly and how to prepare for risky situations. Yvonne says we can't let fear, anxiety and stress stop us from reaching for success and with her help you too can overcome all obstacles. **Conference Adjourns**