PLMA is the National Voice of Demand Response Practitioners

PLMA (Peak Load Management

Alliance) is a non-profit organization founded in 1999 as the national voice of demand response. It is a community of experts and practitioners dedicated to sharing knowledge, education, and providing resources to promote inclusiveness in the design, delivery, technology, and management of solutions addressing energy and natural resource integration. PLMA membership enables easyaccess to a wealth of information about demand response. The combination of the conferences, archive of past presentations and contacts with members of the organization is hard to match. Richard Philip, Duke Energy

PLMA members share expertise to

educate each other and explore innovative approaches to demand response programs, price and rate response, regional regulatory issues, and technologies as the energy markets evolve.

Become a PLMA Member at www.peakload.org

MEMBERSHIP BENEFITS INCLUDE...

Networking & Relationships Expertise & Knowledge Sharing Thought Leadership Training Courses & DR Dialogues Market Intelligence Industry Recognition



April 16-18, 2018 Coronado, Calif.



Monday, April 16, 2018

8:00 - 9:00 am SHARED EVOLUTION TRAINING & INTEREST GROUP BREAKFAST

9:00 am - 4:00 pm | Evolution of Demand Response to Distributed Energy Resources: Fundamentals and Path Forward

Interest Group Activities

Interest Group Track 1

PLMA International

Co-chairs: Scott Coe, GridOptimize, and Ross Malme, Skipping Stone

9:00 am The PLMA International Interest Group has been initiated to bring together members who are interested in developing new activities for PLMA members from outside of North America and to connect with international energy companies and technology providers interested in the work of PLMA. The group will be holding its first event focused on developing services to attract and benefit PLMA members around the world. During the session, attendees will have the opportunity to discuss the advantages and challenges of the different proposals for implementation, including a number which have already been brought to the group, including:

- On-Site Overseas Workshops
- Sister Utility Information Exchange
- On-Line Collaboration Tools
- International-Variant Training Courses
- Service & Solution Opportunity "Clearing House"
- Cross-Training
- Policy-Maker Information/Education
 Sessions

Interest Group Track 2 Women in Demand Management Co-chairs: Melissa Knous, Duke Energy;

Co-chairs: Melissa Knous, Duke Energy; Erika Diamond, EnergyHub; and Lenore Zeuthen, Zeuthen Management Solutions

9:00 am | Industry & Career Deep Dive Erica Keating, Southern California Edison with Sarah Colvin, ecobee

Erica and Sarah will discuss their career paths and how they came to their current professional positions, where they see the industry going, and the opportunities they see for both companies and employees, followed by a question and answer session. This session is not for women only, but anyone interested in advancing their career in energy management.

10:00 am | Mentoring Pilot Report Out

Mentors and Mentees will provide feedback on their experiences to date and we will discussion considerations for a full program launch.

10:30 am | Get to Know the Women in DM

We'll play a light icebreaker game to facilitate networking, which we encourage you to continue throughout the conference.

Monday, April 16, 2018 (cont.)

Interest Group Track 1 (cont.)

Interest Group Track 2 (cont.)

11:00 - 12:00 pm SHARED EVOLUTION TRAINING & INTEREST GROUP LUNCH

DER Integration Part 1

Co-chairs: Rich Barone, Hawaiian Electric Company, and John Powers, Extensible Energy

12:00 pm | Hot, Cold, and Shocking: What Leading Storage Options Can and Cannot Do

Moderator John Powers, Extensible Energy; Amrit Robbins, Axiom Exergy, with Matt Owens, Stem

Adapting storage technologies to deliver both customer and grid value requires careful consideration of the entire time domain at scales from milliseconds to days. We'll talk with leading providers of diverse storage solutions to explore options for a variety of customer and grid applications.

1:00 pm | Portland General Electric: Flexible Load and DER Development

Coreen Henry, Portland General Electric; Graham Horn, Enbala; and Nick Bengtson, CLEAResult

The team implementing PGE's innovative DER portfolio optimization project will discuss program design, technology considerations, and program implementation issues.

1:30 pm | Hi Honey, I'm (Smart) Home... but You Already Knew That, Didn't You? Fei Wang, GTM Research

The potential for connected devices to become grid assets goes beyond smart thermostats. Ms. Wang will look at several utility case studies and discuss aspects of integrating connected devices into grid operations.

- Vendor landscape: Vendors offering hardware and software solutions are divided into various categories.
- **Partnerships:** Vendors with complementary capabilities and shared targeted customers frequently form partnerships.
- Utility case studies: Beyond traditional demand response programs with smart thermostats, some utilities have been experimenting with incorporating additional residential distributed energy resources.

Thermostat

Co-chairs: Justin Chamberlain, CPS Energy, and Olivia Patterson, Opinion Dynamics

12:00 pm | Kick-off and White Paper Moderators: Olivia Patterson, Opinion Dynamics and Justin Chamberlain, CPS Energy

12:10 pm | Smart Thermostats in BGE's Smart Energy Rewards

Amanda Janaskie, Baltimore Gas & Electric

Amanda will be discussing Baltimore Gas and Electric's Smart Energy Rewards program and the evolution of their program from a paging based system to a dynamic Wi-Fi based thermostat program.

12:55 pm | ULME Partnership Discussion: Thermostat Programs – Lessons from the Trenches

Moderator: Olivia Patterson, Opinion Dynamics Panelists: David Kaintz, Southern California Edison; Mike Smith, National Grid; Jeremy Morrison, Duke Energy; Brian Doyle, Xcel Energy; and Justin Chamberlain, CPS Energy

Discussion on the lessons learned from Utilities that are running thermostat programs.

- What was the genesis of your Thermostat program?
- What are the drivers behind your thermostat programs? EE vs DR
- What are your highlights?
- What would you change/What keeps you up at night?
- How do see your program evolving over the next 5 years?

1:40 pm | EPRI: Persistent Wi-Fi Project *Christine Hertzog, EPRI*

Learn how EPRI is seeking to help solve the challenge of Wi-Fi thermostats going offline.

1:50 pm | Wrap up and Introduction to 37th PLMA Conference

Monday, April 16, 2018 (cont.)

2:00 pm SHARED EVOLUTION TRAINING & INTEREST GROUP REFRESHMENT BREAK

DER Integration Part 2

Co-chairs: Rich Barone, Hawaiian Electric Company, and John Powers, Extensible Energy

2:30 pm | Update on Federal DER and Storage Developments Steven Shparber, Nelson Mullins Riley &

Scarborough

Mr. Shparber, formerly in-house counsel at PJM Interconnection, will discuss recent Federal regulatory initiatives including FERC rulemaking around storage and distributed energy resources. This topic is particularly timely in the wake of FERC Order 841, issued in February 2018, and FERC's upcoming technical conference on DER aggregation.

3:00 pm | Thermal Climb: Increasing Role of Electric Water Heaters

Moderator: Rich Barone, Hawaiian Electric Company; Austin Chambers, Itron; Mitch Vanden Langenberg, Dairyland Power Cooperative; Matt Carlson, Aquanta; and Melissa Knous, Duke Energy

Two (2) grid interactive water heater vendors along with one of their utility partners, will be led through a panel discussion across several key topics. Topics could include:

- The possible use cases for Grid Interactive Waters Heaters – and living examples
- Best market opportunities and what drives them
- New frontiers: distribution/locational support – targeted GIWH

Customer Engagement

Co-chairs: Meridith Nierenberg, Orange and Rockland Utilities; Andrea Simmonsen, Idaho Power Company; and Sharyn Barata, Opinion Dynamics

2:30 pm | Customer Engagement Interest Group Welcome by Co-Chairs *Presented by Customer Engagement Co-Chairs*

2:35 pm | Expert Panel – It's a Customer Journey, Not a kW Destination Moderator Sarah Colvin, ecobee; Keisha Clarke-

English, Baltimore Gas & Electric; Brian Kirchman, ComEd; and Keith Canfield, CLEAResult

The customer journey represents the sum of experiences a participant will have with your company and brand. It's about far more than the individual transactions (think typical utility program silos!) and requires shared value and ongoing innovation to be sustainable. Join our expert panel as we discuss approaches to designing comprehensive programs centered around the customer journey.

Keisha from BGE will discuss employing feedback from their DR focus group; Brian from ComEd will bring experience from a customer-centric rate design program; and Keith will round out this panel sharing examples of integrating thermostat data with customer feedback loops to continuously improve on program design.

Wi-fi hosted by EnergyHub

Electric Power Alley hosted by Landis+Gyr

Download the Socio app on your mobile device, and give it a shake to see more info on agenda, speakers, and sponsors (or enter code PLMA).

Monday, April 16, 2018 (cont.)

4:00 pm | Through the Looking Glass Moderators: John Powers, Extensible Energy, and Rich Barone, Hawaiian Electric Company

Open discussion/brainstorm on what the group should focus on for remainder of 2018.

3:35 pm | Breakout Sessions

Join your fellow utilities and vendors to discuss. brainstorm, and share challenges and best practices in this small group format. The following small group discussions will be facilitated:

- Utilizing the Digital Customer Experience for **Demand Response Programs**
- Enhancing the Customer Journey
- How to Measure the Success of your Customer Engagement Strategies (EM&V)

4:20 pm | Wrap up and Introduction to 37th PLMA Conference

Presented by Customer Engagement Co-Chairs

4:30 -5:30 pm

8:00 -

7:00 -

8:00 am

9:00 am

PLMA Interest Group Meetup on the Thomas Lawn

All interest group and training registrants are welcome to attend to network and learn how to make the most of the Conference activities.

Board of Directors Meeting 6:00 -

8:00 pm (for Board members and At-Large Representatives only)

Welcome Reception: Hotel del Coronado, Paseo North Lawn Open to all conference attendees at no additional fee, compliments of PLMA 10:00 pm members. Not a member? Join us anyway and see what you're missing.

Tuesday, April 17, 2018

BREAKFAST BUFFET in Sponsor Lounge

Session Co-chairs: Andrea Simmonsen, Idaho Power Company, and Joseph Childs, Eaton

Opening Remarks 8:00 am

PLMA Chair Michael Brown, Berkshire Hathaway, NV Energy

Welcoming Remarks

8:30 am Lisa Davidson, Director of Customer Programs & Assistance, San Diego Gas & Electric and Randy McWilliams, Senior Director, Facilities Services and Engineering, San Diego Padres

Western Utility Perspectives of Demand Response, DER, Load Growth, and More

Moderator Mark Martinez, Southern California Edison; Kent Walter, Arizona Public Service; Fabienne Arnoud, Pacific Gas & Electric; Brad Mantz, San Diego Gas & Electric; Richard Barone, Hawaiian Electric; and Darren Hanway, SoCal Gas

Discover how utilities in California and other Western States, as well as Hawaii, are repurposing traditional demand response initiatives to meet an emerging technological future through dynamic retail pricing, distributed energy resources, and beneficial load growth goals for peak load management, renewable integration, grid resiliency, and much more.

Tuesday, April 17, 2018 (cont.)

Leveraging Legacy Technology Platforms for the New DER World Moderator Richard Philip, Duke Energy; Wayne Callender, CPS Energy; Mitch Vanden Langenberg, Dairyland Power Cooperative; and Derek Kirchner, DTE Energy

Learn how utilities are leveraging legacy technology platforms to address new requirements for DER integration, dynamic pricing, and more. Emphasis will be given 10:00 am to the challenges of smaller utilities. Strategies to ensure a smooth migration from legacy to modern technology platforms will also be discussed. Presenters will discuss how AMI and DA systems augment legacy DR and improve its functionality. The session will provide audience members with creative ways that existing resources can be enhanced to support utility business objectives.

10:30 am REFRESHMENT BREAK in Sponsor Lounge

Session Co-chairs: Meridith Nierenberg, Orange and Rockland Utilities, and Jason Cigarran, Itron

Thermostats and Beyond: Measuring Residential Savings Potential and Measuring Results at National Grid

Paul Wassink, National Grid; Nicole Buccitelli, Navigant; Poornima Eber, National Grid; and Kathleen Ward, Navigant

Discover how National Grid relies exclusively on thermostat telemetry instead of interval meter data to determine cooling runtimes to estimate A/C unit power draw 11:00 am used for load impact modeling. Beyond BYOT thermostats, there is a potentially large untapped resource of other residential end-uses (e.g., washers, dryers, dishwashers, home EV charging systems), which could now be cost-effective via the latest generation of built-in wireless controls and smart plugs/switches. Learn how National Grid conducted analyses of potential demand savings for various end-uses and enablement strategies.

Winter Demand Response Strategies for Electric and Gas Utilities

Moderator Tyler Rogers, EnergyHub; Andrew Nih, SoCal Gas; and Joe Hull, Midstate Electric Cooperative

Learn how both gas and electric utilities are taking approaches used in summer DR programs and applying them to winter initiatives. SoCal Gas rolled out one of the first natural gas DR programs in the US when it faced winter constraints on its natural gas supply. The program helps save therms by making small tweaks to customers' thermostat schedules and setpoints to create greater resource flexibility for natural gas service. Midstate Electric uses DR in winter to address a large penetration of electric furnaces and heat pumps.

12:00 -LUNCH BUFFET in Sponsor Lounge 1:30 pm

Session Co-chairs: Paul Wassink, National Grid, and Dennis Quinn, Joule Assets

PLMA Awards Program

Dain Nestel, ecobee

The 15th PLMA Awards Program will recognize energy industry leaders for the best peak load and demand response management initiatives from calendar year 2017.

11:30 am

1:30 pm

2:00

3:00

3:30

4:00

4:30

5:30

7:00

	Tuesday, April 17, 2018 (cont.)		Wednesday, April
	Emerging DER Markets: System Truths and Consequences Moderator Michael Brown, Berkshire Hathaway, NV Energy; Toshiro Takebe, Tokyo Electric Power Holdings; Michael Robinson, MISO; Scott Coe, GridOptimize; Brian Asparro, Demand		BREAKFAST BUFFET in Sponsor Lounge
	Energy via EnerNOC; and Matt Owens, Stem What do you get when you couple traditional demand response services with		Commercial Applications Track Co-chairs: Melissa Knous, Duke Energy, and
) pm	renewable energy and storage in California, Central America and Japan? Gain insight into the cost and complexity of implementing DERs at customer sites today and the implications for how future U.S. and global electricity networks could be properly modeled and controlled as well as how the future electricity markets could be activated.		Jenny Roehm, Schneider Electric EV Load Shifting and Demand Response at SCE (Workplace Charging) Carl Besaw, Southern California Edison
) pm	REFRESHMENT BREAK in Sponsor Lounge		SCE's Charge Ready Pilot Program supports California's zero-emission vision
	Session Co-chairs: John Powers, Extensible Energy, and Marissa Hummon, Tendril		by deploying infrastructure to support customer owned and operated charging
) pm	Research and Evaluation in the World of Distributed Energy Resources Dimple Gandhi, PSEG-Long Island, and Olivia Patterson, Opinion Dynamics	8:00 am	stations at certain locations where cars may be parked for four hours or more. By early 2018, 1,000 charging stations will be installed and participating in a load shifting and DR pilot to determine effective load management strategies. EVs' flexible load can provide grid benefits by shifting energy usage or
	Gain insight from utility and evaluator perspectives related to opportunities and challenges associated with initiating PSEG Long Island's Super Saver program as part of the New York Reforming the Energy Vision strategy, to provide enhanced energy efficiency, demand response and time-of-use pricing to 10,500 customers within a capacity-constrained substation.		
	Demand Response Emerging Technology Roadmap (all sectors) Greg Wikler, Navigant		curtailing demand to avoid peak periods.
) pm	Navigant and Lawrence Berkeley National Labs helped develop a DR emerging technology roadmap for SCE that outlines a path forward for implementing advanced enabling technologies that could provide "shift" and "shimmy" services, as identified in the California DR potential study. The roadmap includes using electric vehicles and behind-the-meter storage for DR, along with advancements in conventional end-uses such as HVAC and lighting. It also includes transactive energy, which could transform energy procurement and retail markets.		Think Global, Act Local: Engaging SMEs with Demand Response Solutions Maria Fields, JouleSmart, and Cary Garcia, Local Government Commission California energy management and clean energy policies seek to drive engagement of small and medium businesses (SMBs) to manage their buildings' electricity use more efficiently and sustainably. Levers include dynamic pricing, rebates, incentives and demand response programs. Utility and third-party programs can deliver economic value to participating SMBs by integrating these programs, along with energy savings and improved grid resources. Despite the advances in recent years, some barriers remain. PG&E's Managed Energy Program Pilot helps overcome some barriers by analyzing businesses' electric usage, identifying
) pm	Sponsor Showcase Lightning Round Co-chairs: Paul Miles, PECO, and Ray Pustinger, AESC		
	In this 30 minute session you will hear from several of our sponsors about the essence of their solutions. Our Co-chairs have vetted the presentations and helped the sponsors get their key messages compressed down to 3 minutes. Sponsors will offer specific examples of how they provide value.	8:30 am	
	Presenters: Shane O'Quinn, AutoGrid; Joseph Childs, Eaton; Peter Black, ecobee; Tiffany McCann, EFI; Brad Rittler, Encycle; Amanda Sahl, Google (Nest); Jason Cigarran, Itron; Bill Joiner, Message Broadcast; Rolf Bienert, OpenADR Alliance; and Eric Martin, Tendril		
80 -) pm	NETWORKING RECEPTION in Sponsor Lounge		
			potential savings, and collaborating

Download the Socio app for more agenda information

T BUFFET in Sponsor Lounge rcial Applications Track **Residential** Applications Track 1elissa Knous, Duke Energy, and Co-chairs: Justin Chamberlain, CPS Energy, Roehm, Schneider Electric and Chris Ashley, EnergyHub Shifting and Demand Thermal Load-Shifting Strategies at SCE (Workplace and Program Considerations For **Electrically Heated Homes** Southern California Edison Ted Leopkey, NB Power; Ajit Pardasani, National Research Council Canada; and ge Ready Pilot Program Giles Counsell. Siemens Canada alifornia's zero-emission vision Located on the East coast of Canada, ng infrastructure to support NB Power with Siemens Canada and wned and operated charging National Research Council of Canada certain locations where cars partnered to conduct a series of ked for four hours or more. experimental studies to evaluate the 18, 1,000 charging stations peak reduction potential from direct alled and participating in a load control in residential homes ig and DR pilot to determine using electric resistance heating. The ad management strategies. research spans 3 years culminating with e load can provide grid a 600 home pilot which quantified the shifting energy usage or opportunity and identified the strategies for using the thermal storage capacity of demand to avoid peak periods. homes to reduce peak. bal, Act Local: Engaging

long-term to monitor and improve

performance.

Wednesday, April 18, 2018

Combining Demand Response and Energy Efficiency to Drive Increased Customer Value

Amanda Janaskie, Baltimore Gas & Electric; Amev Baves, Baltimore Gas & Electric: and John White, ICF

With sleek user interfaces, advanced messaging capability, and the potential to deliver significant energy savings, smart thermostats have disrupted traditional DSM program designs. As consumer interest rises, utilities have been faced with a new dilemma... Embrace the smart thermostat into energy efficiency programs? By doing so, the energy efficiency teams may inadvertently cannibalize other initiatives such as legacy load control programs. This case study describes the integration of BGE's Quick Home Energy Checkup (QHEC) to include a smart thermostat offering and enrollment into **BGE's PeakRewards Demand Response** Program.

9:00 am

Wednesday, April 18, 2018 (cont.)

Commercial Applications Track Co-chairs: Melissa Knous, Duke Energy, and Jenny Roehm, Schneider Electric

Going with the Flow — Water Resources for Fast Acting Capacity Richard Barone, Hawaiian Electric, and Yvette Maskrey, Honeywell Smart Energy

In preparation of the shutdown of the Hawaiian Commercial & Sugar (HC&S) operations announced in January of 2016, Maui Electric Company, Ltd. developed a contingency plan to meet electrical demand on the island of Maui after the power purchase agreement terminated. Fast acting (ten minute) demand response was identified as one of the measures to mitigate the expected reserve capacity shortfall. This presentation will highlight the background of the project, and specifically highlight one of the customers, the municipal water company, that was approached as one of the first customers to help. Utilities will gain best practices and lessons learned for similar project implementations.

Residential Applications Track Co-chairs: Justin Chamberlain, CPS Energy, and Chris Ashley, EnergyHub

Delighting SDG&E Customers with Instant Rebates at Big Box Retailers

Yeye Zhang, Nest; Shoshana Pena, San Diego Gas & Electric; and Nick Schuder, CLEAResult

Over Black Friday 2017, SDG&E was the first utility in the U.S. to offer a validated instant rebate for smart thermostats at brick-and-mortar stores in its service territory. In partnership with Lowe's, CLEAResult, and Nest, SDG&E customers were able to instantly validate their account credentials through a simple tool on their smartphones, which then generated a secure barcode that could be used at check out to apply the discount. When combined with a robust marketing campaign, the validated instant rebate drove more SDG&E customers to buy smart thermostats like Nest in its first week than the existing mail-in rebate did the whole year.

9:30 am **REFRESHMENT BREAK in Sponsor Lounge**

Wi-fi hosted by EnergyHub

Electric Power Alley hosted by Landis+Gyr

Presentation slides and conference photos will be online at www.peakload.org/37th-Conf-Resources

Wednesday, April 18, 2018 (cont.)

Customer Engagement Track Co-chairs: Amy Bryan, Jackson EMC, and Kitty Wang, Energy Solutions

Customer Motivators: Demonstrating the Value of Smart Meters with Peak Time Rewards *Fouad Dagher, National Grid, and Caitlin Hewlitt, Oracle Utilities*

In this session, you will learn how a large NY utility is: demonstrating the value of their smart meter rollout while simultaneously increasing customer satisfaction and engagement; providing monetary incentives to customers without altering their billing system; empowering customers with tools and information to manage their own energy usage.

10:00 am

10:30 am

The Surprising Benefits of Integrating a DR CRM Solution into Residential DR Programs Elena Hill, KCP&L; Jubin Kothari, Energy Datametrics; and Barry Ledford, CLEAResult

KCP&L launched its first DR program in 2005 and learning over the following 10 years, compiled a list of crucial requirements. With Customer Engagement on top of the list, the challenge was developing a comprehensive program (DI, DIY, BYO) that could quickly and costeffectively scale. KCP&L was interested in utilizing software solutions to address common barriers - customer enrollment, account validation, device deployment and tracking, and DIY service requests that converted to DI. With the unprecedented success of the program (28,000 devices in 2017), this presentation will explore the benefits of an integrated, best of breed DR CRM that increased participation, savings, customer satisfaction, and connected devices that will provide utility DR benefits for many years - all at reduced and predictable costs.

Business Use Cases Track Co-chairs: Clayton Engel, Consumers Energy, and Phil Austen, ICF

Small Business Demand Response Energy Efficiency Program Case Study

Jeremy Morrison, Duke Energy

The presentation will provide a review of Duke Energy's small business EE and DR program being operated in 3 Midwest and 2 Southeast states. The review will include an overview with the results of the first two years of operations, customer engagement and education, lessons learned and improvement opportunities. The presentation will include actual examples of customer interactions and equipment operation along with some initial EM&V results.

Data Analytics for Optimizing Demand Response: Lessons Learned

Gerardo Galdamez Entergy, and Terry Rohrer, Connected Energy

Data Analytics can make the difference between success and failure for Demand Response programs. Gerardo Galdamez and Terry Rohrer will share insights gained from agricultural and smart thermostats programs, including how data analytics are used to measure and optimize all aspects of these critical programs, including recruitment, yield, ISO filings, auditing, and energy efficiency. 11:00 am

Wednesday, April 18, 2018 (cont.)

Customer Engagement Track Co-chairs: Amy Bryan, Jackson EMC, and Kitty Wang, Energy Solutions

Effects of Behavioral Spillover in PG&E's 2017 SmartRate[™] Program Christine Hartmann, Pacific Gas & Electric, and Aaiysha Khursheed, Opinion Dynamics

Rate-based demand response (DR) programs, such as PG&E's SmartRate[™] program, provoke distinct challenges related to developing appropriate baselines for load impact estimates. The time-dependent electricity rates of the SmartRate[™] program may lead customers to shift their electricity use to non-peak hours regardless of whether an event is in effect. These "spillover" effects can lead to biased estimates of baseline usage, which in turn affect evaluations of program impacts, cost-effectiveness, and future electricity usage forecasts. In our evaluation of PG&E's SmartRate™ program in 2017, we examine the extent of this programmatic spillover and use our findings to address the challenge of adjusting the baseline accurately to estimate load impacts.

Business Use Cases Track Co-chairs: Clayton Engel, Consumers Energy, and Phil Austen, ICF

Innovation in Integration of Demand Response and Energy Efficiency

George Pohndorf, Snohomish County PUD

Presentation and discussion of a unique and innovative approach to deeply integrating demand response and energy efficiency. This program (Energy Savings Purchase Agreement), provides real-time energy management, installed equipment and behavioral approaches as a service to the customer. Demand response is optimized through third party facility energy management and integration with the utility through alignment of incentives among the customer, building manger and the utility. Also, through providing energy management with no incremental bill impact to the customer, it overcomes traditional barriers to customer participation and adoption. Finally, as this approach creates value streams to the utility for both capacity and energy savings, it is more cost effective to the utility than traditional approaches.

11:30 -1:00 pm LUNCH BUFFET in Sponsor Lounge

Wednesday, April 18, 201<u>8</u> (cont.)

Session Co-chairs: Lynn Stein, E Source, and Benn Messer, Research In<u>to Action</u>

Forward-Looking Research Panel

Elta Kolo, GTM Research; Brenda Chew, SEPA; Bridget Meckley, Smart Energy Consumer Collaborative; and Erin Erben, EPRI

The research is done, but what does that mean for you? This forward-looking panel will allow you to hear from the experts how the changing DR landscape, including markets, technology, and behavior are likely to impact programs and the industry.

- Wholesale markets changing (e.g., availability of capacity, resource procurement) are not a setback for DR, but there are implications from a changing resource mix in wholesale markets alongside the landscape of third parties and their respective market shares.
- 1:00 pm • Utilities are approaching advanced DR applications with a variety of purposes and methods for calling on changes in load, and how existing DR is being leveraged.
 - The new energy economy is more decentralized and personalized than ever before; how can stakeholders help consumers navigate the scope and functionality of energy marketplaces, energy management tools, rewards programs and menus of optional products and services.
 - The potential for connected devices to become grid assets is not limited to smart thermostats, but now include connected home appliances, and more recently voice-control devices. Data collected by smart devices, analytics enabled by software solutions providers, and direct load control capabilities by utilities can further optimize demand side management.

2:00 pm Closing Remarks and Welcome to Austin Derek Kirchner, DTE Energy

2:30 pm Adjourn

2:30 pm Join us for a frozen dessert and final networking opportunity.

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UTILITY CO-HOST

San Diego Gas & Electric We are an innovative company that delivers clean, safe and reliable energy to better the lives of our customers in San Diego and south Orange counties. Today, 43 percent of the electricity we deliver to homes and businesses comes from renewable sources. And we are well on our way to reaching California's 50 percent renewable energy goal by 2030. Learn more about SDG&E's initiatives in energy efficiency and demand response at www.sdge.com.



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AutoGrid builds software applications that enable a smarter Energy Internet. The company's suite of flexibility management applications allows utilities, electricity retailers, renewable energy project developers and energy service

providers to deliver cheap, clean and reliable energy by managing networked distributed energy resources (DERs) in real time and at scale. AutoGrid Flex has more than 2,500 megawatts of DERs under contract with more than 30 global energy companies around the world. The world's leading energy companies including National Grid, E.ON, BPA, FPL, SCE, Eneco, PGE, CPS Energy, New Hampshire Electric Cooperative, NextEra Energy, and CLEAResult, rely on AutoGrid applications to monitor, predict, optimize and control the operations of millions of connected energy resources. www.auto-grid.com

Eaton 's Energy Automation Solutions division provides a range of power delivery and reliability, automation and control, advanced metering and demand response solutions designed to increase efficiency and smart operations. The business serves customers in the utility, commercial, industrial, mining, renewable energy and other markets. www.eaton.com/smartgrid

Itron is a global technology company. We build solutions that help utilities measure, manage and analyze energy and water. Our broad product portfolio includes electricity, gas, water and thermal energy measurement and control technology; communications systems;



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software; and professional services. With thousands of employees supporting nearly 8,000 utilities in more than 100 countries, Itron empowers utilities to responsibly and efficiently manage energy and water resources. Join us in creating a more resourceful world; start here: www.itron.com.

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CLEAResult is the largest provider of energy efficiency programs and services in North America. Through proven strategies tailored to clients' unique needs and market



dynamics, the combined strength of energy experts and technology-enabled service offerings help CLEAResult change the way people use energy for hundreds of utility and business partners. www.clearesult.com

Connected Energy provides electric utilities with a suite of smart grid solutions that support advanced distribution automation from substations through customer premises. Our solutions collaborate across the grid, helping utilities



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increase efficiency and reliability to improve their financial, operational and environmental performance. Connected Energy combines our experience in applying smart grid solutions with our market-leading technology to successfully serve leading utilities. www.connectedenergy.com

ecobee introduced the world's first smart Wi-Fi thermostat and Room Sensor[™] technology. The ecobee4 Smart Thermostat continues to enhance the customer experience

with its built-in Amazon Alexa voice service and far-field voice recognition. ecobee's commitment to enriching the customer experience extends to the relationship between utilities and their customers. We offer residential and commercial solutions that deliver meaningful savings without compromising comfort, with best-in-class customer service and insights into customer energy usage. Find out more at www.ecobee.com/utilities/.

Energy Federation, Inc. (EFI), the industry leader in delivering energy efficiency solutions, is changing the way people save energy and how Utilities engage with their customers. EFI's leads the market of Utility branded Online marketplaces through disruptive technology and innovative web experiences reaching over 30 Million customers across North America. Our innovative



incentive programs, and product bundle/kit programs help Utilities and ESCOs reach hard to serve customer segments. EFI has issued nearly \$2 billion of incentive payments, sold more than \$40 million in EE products and continues to lead the way in energy efficiency. To learn more about how EFI can help you, visit energyfederation.com and to join our team, visit energyfederation.com/ career. Shop our wholesale selection at www.shopefi.com/wholesale/.

Encycle Corp. is focused on empowering commercial and industrial customers to achieve dramatic improvements in the efficiency of their heating, ventilation and air conditioning systems. The company's game-changing, multi-patented Swarm Logic energy management technology is at the heart of the company's solution

set. Swam Logic establishes a wireless network among HVAC rooftop units (RTUs) and enables them to communicate among themselves autonomously instead of operating in isolation as they've done in the past. This connected group of RTUs adopts the Swarm intelligence to selforganize, synchronize and respond holistically through a cloud-based algorithm that red-flags unnecessary consumption and automatically optimizes electricity usage by controlling the aggregated whole as one unified, coordinated group. www.encycle.com



SILVER SPONSORS (cont.)

Energy Datametrics (EDM) provides software platform and technology services to manage DR and DSM programs. Our products solve an array of

challenges related to customer enrollment, multi-channel (DI, BYO, DIY) management, and unifying data into a singular platform to drive positive customer engagement and high satisfaction. Our platform powers award winning DR programs for leading utilities. www.energydatametrics.com

EnergyHub is the connected home solution for utilities. EnergyHub's Mercury DRMS allows utilities to partner with their customers and deliver more powerful demand



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response using connected devices, while our Bring Your Own Thermostat service makes hundreds of thousands of existing connected homes available to utilities for demand response without a single truck roll. EnergyHub is an independent subsidiary of Alarm.com, the leading technology provider of connected home solutions. www.energyhub.com

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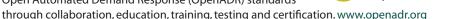
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