

Rocky Mountain Utility Efficiency Exchange

Rocky Mountain Utility Exchange facilitates a networking and professional development conference for staff representatives of energy and water utilities serving Colorado and neighboring states who are responsible for the design and delivery of customer-centric utility programs, including resource efficiency, load management/growth, distributed energy, and customer/member service operations. This event attracts about 150 utility and government staff as well as trade allies that provide products and services to support utility programs. The agenda focuses on utility best practices, case studies, and lessons learned.

Committee Members

- Tyler Christoff, City of Aspen
- Alan Stoinski, Cheyenne Fuel, Light and Power
- Gabriel Caunt, Colorado Springs Utilities
- Brian Tholl, City of Fort Collins
- Christmas Wharton, Grand Valley Power
- Alantha Garrison, Gunnison County Electric Association
- Joy Manning, High West Energy
- Steve Beuning, Holy Cross Energy
- Chuck Finleon, Longmont Power & Communications
- Robert Love, Longmont Power & Communications
- Tracey Hewson, City of Loveland
- Chris Michalowski, Mountain Parks Electric
- Bryce Brady, Platte River Power Authority

- David White, Poudre Valley REA
- Gary Myers, Tri-State Generation and Transmission Association
- Ron Horstman, Western Area Power Administration
- Trina Zagar-Brown, White River Electric Association
- Ann Kirkpatrick, Xcel Energy
- Megan Moore-Kemp, Yampa Valley Electric Association

Staff

- Ed Thomas, Executive Director
- Tiger Adolf, Operations Director
- Sharon Dobson, Registration Manager
- Sandy Humenik, Coordinator
- Kim Adams, Webmaster

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13th Rocky Mountain Utility Exchange

Practicing Customer-Centricity

**September 24 – 27, 2019
Aspen, Colo.**

Featured Sponsors



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Topic Key

- CE** Customer Engagement
- MS** Management Strategies
(Climate Goals / Business Models)
- LG** Load Growth
- FL** Flexible Load Management *(Demand Response / Distributed Energy Resources)*
- EE** Energy Efficiency
- RG** Renewable Generation

**Presentation slides online at
www.utilityexchange.org/13th-RMUE-resources**

Tuesday, September 24, 2019

12:00 - 1:00 pm	LUNCH BUFFET in Davis Commons Buffet lunch with opportunity to network	
	Workshop 1 Residential Customer Engagement Tactics	Workshop 2 Combining Healthy Homes with Energy Efficiency
1:00 pm	<p>Fresh Tactics For Connecting With Residential Customers</p> <p><i>Ann Kirkpatrick, Xcel Energy; Steve Mannhard, Uplight; Lisa Pucelik, Slipstream; Michael Levinson, Group 14 Engineering; and Phil Scarbro, EFI</i></p> <p>How can ice cream and hand-held fans engage customers and influence their buying decisions? It takes a village of bold initiatives and great vendor partners to meet the challenge of growing a stagnant rebate product by 20% in a single cooling season. Advanced analytics helped target customers, who received a personalized invitation to special weekend customer events at their neighborhood retail stores, where they found instant rebates available. Trade partners could get instant rebates through a new mid-stream offering as well. Behind the scenes, key retail associates were thoroughly trained, and then effectiveness was measured through a secret shopper.</p> <p>We'll also explore a program on instant rebates that was recently deployed in Massachusetts with Lowe's and 8 utilities. The technology performed flawlessly in the field and increased program participation by 166%. Based off of recent case studies and reports, we will be presenting on the importance of utility incentives evolving to innovative technology to increase customer engagement and participation. Come learn how these comprehensive campaigns performed their goals to get customers to bite (buy) before their ice cream melted.</p> <p>CE EE 2.00 BPI CEUs</p>	<p>Reaching for the Holy Grail: Improved Health Outcomes from Residential Energy Efficiency Upgrades</p> <p><i>Kim DeVoe, Fort Collins Utilities; Judy Olsen, Tacoma-Pierce County Health Department; Larry Zarker, Building Performance Institute; and Joe Medosch, Hayward Score</i></p> <p>This interactive workshop will demonstrate how energy reduction does more than reduce kilowatts, it also makes the indoor environment healthier. Air sealing incentives that reduce air leakage also reduces contaminate pathways, asthma triggers, pest entry points and, improves comfort. But we usually promote our efficiency programs with messaging around the energy savings they will see, which may not be the case if a comprehensive project is not done, and may not be the trigger for a customer to take action.</p> <p>This workshop will feature activities to allow participants to prioritize what measures make a home healthier and more comfortable. We will review what facts are known from the studies of home interventions to improve occupant health. In addition, we will identify the barrier with implementation and what must happen to overcome these barriers.</p> <p>We have three key takeaways for this workshop session:</p> <ol style="list-style-type: none"> 1. For each participant to leave with a clear idea of what collaborations are needed to make a positive difference in health and efficiency outcomes. 2. Make a commitment to participate in bringing about these collaborations. 3. Bring what you've learned back to your Utility for future program design discussions. <p>EE 2.00 BPI CEUs</p>

Tuesday, September 24, 2019 (cont.)

	Workshop 3 A Review of Holy Cross Energy's Recent Activities	Workshop 4 Electrification of Transportation Workshop
3:00 pm	<p><i>Steve Beuning, Holy Cross; and Jenna Weatherred, Holy Cross</i></p> <p>This briefing will cover several areas of interest to the region, covering recent developments at Holy Cross Energy. These developments include:</p> <ol style="list-style-type: none"> 1. Status update on HCE's 70/70/30 transition to high renewable content in its power supply. 2. New rate structure for retail customers. 3. New utility programs including support for beneficial electrification. <p>With advances in technology and changes in energy markets, utilities now have the opportunity to bring on new cleaner energy resources at costs comparable to our existing supply. This will allow Holy Cross Energy to meet its clean energy goals at no additional cost while maintaining the reliable and safe service our members have come to expect and we believe this model can be duplicated elsewhere. We are also building new member energy efficiency, demand response and beneficial electrification programs that can be adopted by other utilities trying to reach similar goals.</p> <p>MS RG 2.00 BPI CEUs</p>	<p><i>Zach Owens, Colorado Energy Office; Christian Willis, Colorado Energy Office; Alantha Garrison, Gunnison County Electric Association; Eric Van Orden, Xcel Energy; and Eric Mallia, FleetCarma</i></p> <p>This workshop is intended to provide a comprehensive overview of electric vehicle programs, policies, and technologies to enhance utility understanding and involvement in supporting EV load growth, customer engagement, and EV grid services in the context of the state of Colorado. The session will begin with perspectives from two different utilities, including Gunnison County Electric Association (GCEA), a small rural cooperative, and Xcel Energy, a large vertically integrated utility.</p> <p>The workshop will continue with insights from the Colorado Energy Office (CEO), including information about Governor Polis's Executive Order from January 2019 for widespread electrification of the transportation sector and what it means for utilities. They will present program and policy updates including implementation of EV DC fast charging corridors grant program, Charge Ahead Colorado, CDOT's electric bus funding, the ZEV program, and updates to VW Beneficiary Mitigation Plan.</p> <p>The workshop will conclude with an update from FleetCarma, including technologies and programs that are being used in the industry for managing EV load growth to ensure it is a benefit rather than a cost to the electricity system, utilities, and their customers.</p> <p>This workshop intends to be interactive as we will seek input, ideas, and questions from participants to help formulate the results of our report out session on Thursday at this year's RMUE conference.</p> <p>LG MS</p>

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Wednesday, September 25, 2019

7:30 – 9:00 am	BREAKFAST BUFFET AND FIRST-TIMERS ORIENTATION in Davis Commons Buffet breakfast with opportunity to network <i>First-Timer Orientation with Joy Manning, High West Energy</i>
	<i>Roundtable Co-Chairs: Jackie Ducharme, Xcel Energy; and Bryce Brady, Platte River Power Authority</i>
9:00 am	Welcoming Remarks <i>Jackie Ducharme, Xcel Energy; and Bryce Brady, Platte River Power Authority</i>
9:15 am	Roundtable Discussion with Utility and Government Agency Introductions <i>Co-Chairs Jackie Ducharme, Xcel Energy; and Bryce Brady, Platte River Power Authority</i> Brief introduction by a designated representative from each utility and government agency present on the one topic they would most like to discuss during the roundtable and the one item that they would most like to learn or share during this event (such as new programs being considered or launched, etc.) 1.00 BPI CEUs
10:15 am	REFRESHMENT BREAK hosted by Landis + Gyr
10:30 am	Roundtable Discussion of Hot Topics
12:00 pm	LUNCH BUFFET in Davis Commons Buffet lunch with opportunity to network
	<i>General Session 1 Co-Chairs: Tyler Christoff, City of Aspen; and Steve Beuning, Holy Cross Energy</i>
2:00 pm	Keynote: What Would Amazon Do? Transforming DSM Programs and Rates to be More Customer-Centric <i>Tom Hines, Arizona Public Service; and Lon Huber, Navigant</i> Discover how Arizona Public Service is reinventing its efficiency, demand response, electric vehicle, and solar programs for all customer classes to address peak load and emission reduction challenges. Learn how APS is engaging with trade allies and other stakeholders such as thermostat manufacturers whose geo-fencing programming risks increasing customer bills. As for reinventing rates, hear Lon's vision now being considered by utility CEOs and regulators to learn from Netflix, Amazon, and others to create subscription-like energy rates that better engage customers to help meet utility challenges. CE MS
2:30 pm	Customer Insights: Informing the Future <i>Gabe Caunt, Colorado Springs Utilities with Allie Marshall, Cadmus</i> To support Colorado Springs' new energy vision, Utilities is accelerating the deployment of demand-side management opportunities through an expanded residential and commercial efficiency portfolio. Importantly, Utilities seeks to align its new programs with customers' needs, to help customers overcome barriers to engaging with efficiency, and to support customers in reaching their efficiency goals. This process began by gathering primary residential and commercial customer data, combined with secondary research to inform the final program models. Next, Utilities developed bottom up program designs, as well as updated its potential study. Finally, Utilities will launch the redesigned programs to help their customers save energy and money while contributing to the community's vision for a stable, efficient future. CE MS

Wednesday, September 25, 2019 (cont.)

3:00 pm	Program Design with Rapid Prototyping <i>John Phelan, Fort Collins Utilities</i> Designing your next program using the principles of innovation through rapid prototyping will help it serve the needs of participants and stakeholders from day one. Testing prototypes to verify underlying assumptions ensures that your program does not stumble out of the gate by understanding customer acceptance and interest before you invest too much time and money. The presentation will cover the key characteristics of effective prototypes: fidelity, functionality and flexibility and how Fort Collins used the toolkits from the Bloomberg Mayors Challenge to design the EPIC Loan Program and win \$1M. Testing and learning supports idea evolution to gain insight to improve and develop the concepts and idea evaluation to explore whether the idea will achieve the intended results. This intro will help shift your perspective from "go slow to go fast" towards "fail early for success." CE MS
3:30 pm	REFRESHMENT BREAK hosted by EFI <i>General Session 2 Co-Chairs: Ron Horstman, Western Area Power Administration; and David White, Poudre Valley REA</i>
3:45 pm	Avoiding One Way Roads—How to Design a Two Way Street for Business Customer Engagement <i>Chad Miller, Consumers Energy with Andrew Mielcarek, ILLUME Advising</i> A strong energy waste reduction (EWR) strategy often includes very strategic programs targeting business customers. Understanding these customers, from small business to large strategic accounts, can be challenging and meeting their individual needs even more difficult. Through innovative customer research and journey mapping, Consumers Energy has been able to enhance their approach to commercial customer engagement. Consumers Energy employed a unique blend of primary research including: ethnographic research with different business customer segments, focus groups with previous participants and nonparticipants, and internal workshops to align their team on the optimal customer interaction strategy. Through this work, Consumers Energy was able to build strong internal alignment on their desired customer service and carry forward a consistent and tailored approach to addressing customer needs and interest. These efforts resulted in increased alignment and focused customer outreach strategies. CE EE
4:15 pm	Uniting Programs to Simplify the Customer Journey <i>Rob O'Connell, Xcel Energy; Kristin May, Xcel Energy; Clayton Reed, CLEAResult</i> Xcel Energy's Home Energy Squad program joined forces with the Home Energy Audit program, Home Performance with Energy Star program, CLEAResult, and even partner utilities and regional implementers to simplify the customer journey, lower prices, and deliver more energy savings. Customers benefit by combining multiple program offerings into one streamlined customer journey. Xcel Energy benefits by increasing participation in all its program offerings. This initiative grew out of challenges experienced by each program individually including: inconsistent participation, cost-effectiveness, customer engagement, and complicated customer journeys. Find out how these challenges were addressed and how the project team found new ways to remove barriers and collaborate across programs and stakeholders to reimagine the customer journey. CE EE 0.50 BPI CEUs

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Wednesday, September 25, 2019 (cont.)

4:45 pm	<p>Targeting Retail Incentives to the Customers Who Need Them Most: Lessons From the First Two Years of Platte River's Shift Model Program</p> <p><i>Adrien Kogut, Platte River Power Authority; Brian Tholl, City of Fort Collins; and Marti Frank, Efficiency for Everyone</i></p> <p>In 2017, Platte River Power Authority began piloting an innovative approach to its appliance program. Data from across the US show most appliance incentives are paid on high-priced products. Seeking to address this gap and reach customers buying at the lowest price points, Platte River focused its program on entry-level ENERGY STAR® models, working to shift customers away from cheap inefficient models to the cheapest ENERGY STAR models. This approach showed results from the first month and continues to have a substantial impact on retail sales. Market share of incented ENERGY STAR models show double and triple-digit increases; Sales of inefficient models have been nearly eliminated. This presentation will describe Platte River's program strategy and activities, quantitative results, lessons learned, and future plans.</p> <p>CE EE 0.50 BPI CEUs</p>
5:15 pm	<p>Sponsor Showcase Lightning Round</p> <p>Lightning-fast round of introductions to companies that offer leading-edge technology and service innovations. Emphasis will be on field applications and utility case studies. Listen closely to capture the secret word to enter to win a prize.</p> <p>Presenters:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p><i>Jamie Mascarin, AM Conservation Group</i></p> </div> <div style="text-align: center;">  <p><i>John Fowler, Landis + Gyr</i></p> </div> <div style="text-align: center;">  <p><i>Brian Carlin, Nexant</i></p> </div> </div>
5:30 - 7:00 pm	<p>Poster Session and Networking Reception</p> <p><i>Co-Chairs Christmas Wharton, Grand Valley Power; Tracey Hewson, City of Loveland; and Trina Zagar-Brown, White River Electric Association</i></p> <p>Keep your Sponsor Showcase Lightning Round secret word ballot while you visit the posters and listen to the presentations to capture the secret word to enter to win a prize.</p> <ul style="list-style-type: none"> Promoting the Value of Residential Energy Efficiency in the Real Estate Market Kirk Longstein, Fort Collins Utilities with Kim DeVoe, Fort Collins Utilities Shifting from Energy Assessments to Project Facilitation in Ag Michael Turner, Colorado Energy Office with Brian Carlin, Nexant Permanent Magnet Synchronous Motors for Commercial Refrigeration Mark Martinez, QM Power Are Your Customer Engagement Strategies Getting Desired Results? Jen Loomis, Opinion Dynamics Total Energy Saving—Shared Role Drives Projects that Save Electricity and Natural Gas Tanuj Gulati, Energy Insight Optimizing the Telecommunications Industry Through Energy Efficiency Optimization Steven Hiersche, Franklin Energy with Adam Dubicki, TDS Piloting the Future of Lighting in School Education Kits Rob O'Connell, Xcel Energy

Presentation slides online at
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Thursday, September 26, 2019

7:30 – 9:00 am	<p>BREAKFAST BUFFET in Davis Commons</p> <p>Buffet breakfast with opportunity to network</p> <p><i>General Session 3 Co-Chairs: Joy Manning, High West Energy; and Tracey Hewson, City of Loveland</i></p>
9:00 am	<p>Colorado's Energy Storage Study</p> <p><i>Michael Turner, Colorado Energy Office</i></p> <p>Industry experts predicts that in the next 12 years, energy storage will mirror solar's growth between 2010 and 2015, which was 700 percent. The growth of this technology will be vital to integrating more renewable energy onto the grid and helping achieve Governor Polis' clean energy vision. This could lead to numerous energy saving benefits, greater resiliency and a more efficient electric grid overall. In February, 2019 CEO issued a solicitation for proposals to investigate and develop strategies for Colorado that target the development of the energy storage sector. The report aligns Colorado's competitive advantages with energy storage industry needs, placing emphasis on those that would accelerate industry emergence and growth. CEO will discuss the report findings and recommendations to accelerate the development of commercially viable storage technologies.</p> <p>FL RG</p>
9:30 am	<p>Residential Solar and Battery Customer Response to Time of Day Rates</p> <p><i>Leland Keller, Fort Collins Utilities</i></p> <p>As one of many distribution utilities seeking to achieve 100% renewable electricity supply in the not-too-distant future, Fort Collins Utilities will coordinate with customers investing in their own distributed generation and storage resources. Under the Fort Collins Utilities Time of Day rate structure, energy consumed during on-peak hours costs three times the off-peak rate (a 16 cent/kwh differential). This also presents an opportunity for solar customers to sell energy back into the grid at on-peak rates. Learn about how residential solar PV customers are responding to the mandatory Time of Day rate, benefits of using storage to arbitrage against the rate, and how Fort Collins Utilities is supporting the arbitrage play.</p> <p>FL RG</p>
10:00 am	<p>Resource Curves—Time to Value Efficiency</p> <p><i>Adam Scheer, Recurve</i></p> <p>Innovations in hourly savings methods make it now possible to value and incentivize the realized time value of energy efficiency interventions. Pacific Gas and Electric is leveraging Advance Metering Infrastructure (AMI), standardized and automated calculation tools, to enable meter-based performance program designs that are targeting steep ramping periods that support grid needs and calculate actual carbon off sets. This presentation will include a detailed description of the methods, the core elements of program design (like a time based targeted incentive) and the key lessons learned from this program.</p> <p>FL MS</p>
10:30 am	<p>REFRESHMENT BREAK hosted by EFI</p> <p><i>General Session 4 Co-Chairs: Brian Tholl, City of Fort Collins; and Christmas Wharton, Grand Valley Power</i></p>
10:45 am	<p>Electrification of Transportation Report Out Session</p> <p><i>Alantha Garrison, Gunnison County Electric; Eric Van Orden, Xcel Energy; Zach Owens, Colorado Energy Office; Christian Willis, Colorado Energy Office; and Eric Mallia, FleetCarma</i></p> <p>This session will summarize the key takeaways from the Electrification of Transportation workshop on Tuesday, including a synthesizing of input, ideas, and questions from all utilities that participated. Couldn't make it to the Tuesday workshop? That's okay! We will briefly cover the core concepts discussed and deliver some suggestions on where some opportunities may exist for utility involvement and leadership with EVs. The intention is to help guide a collective effort from Colorado electric utilities, governments, and industry to work together to enhance and prepare for increased electric vehicle adoption across the state. We will also provide information about additional resources on EV topics covered in the workshop from those who participated.</p> <p>FL MS</p>

Thursday, September 26, 2019 (cont.)

11:15 am	<p>CBIL: A Sandbox For Utilities and Building Owners to Evaluate Traditional Energy Savings and Other Non-Traditional Benefits <i>Stephanie H. Johnson, U.S. Department of Energy; and Grant Wheeler, National Renewable Energy Laboratory</i></p> <p>The Commercial Buildings Integration Laboratory (CBIL) in the Energy Systems Integration Facility (ESIF) is operated with feedback from a technical advisory board of building owners and utilities to evaluate interactive commercial building loads, with a focus on building occupants. The CBIL leverages partnerships with utility programs to advance the science of grid-interactive efficient buildings, with an initial project portfolio that includes RTU coordination using complex controls to improve the efficiency and grid service potential. NREL, DOE, CLEARresult, and ComEd are scoping the next tranche of equipment to test including HVAC, refrigeration equipment, water heaters and advanced building controls. This laboratory includes the infrastructure to emulate three commercial buildings and leverages the ESIF infrastructure including energy storage, electric vehicles, MW-scale PV and grid emulators to enable hardware-in-the-loop validation of technologies under different grid conditions.</p> <p>CE EE</p>	
11:45 am	<p>What Are Our Large Business and Community Customers Asking from Their Utility... <i>Bill Conrad, Xcel Energy with Justin Fletcher, PowerSecure</i></p> <p>What are businesses customers and communities asking for from their electric and gas utilities. Bill Conrad, Xcel Energy, will present on how they are meeting the increase in requests for partnerships and collaboration to support communities and business customers sustainability goals around zero carbon, renewable energy and energy efficiency. Along with Bill will be Justin Fletcher of PowerSecure presenting on how they support utilities with customer requests for increased resiliency and demand response at their critical facilities.</p> <p>CE MS</p>	
12:00 pm	<p>LUNCH BUFFET in Davis Commons Buffet lunch with opportunity to network</p>	
	<p>Track A – Gas <i>Co-Chairs: Alan Stoinski, Cheyenne Fuel, Light and Power; and Ann Kirkpatrick, Xcel Energy</i></p>	<p>Track B – Electric <i>Co-Chairs: Gary Myers, Tri-State Generation and Transmission; and Chris Michalowski, Mountain Parks Electric</i></p>
2:00 pm	<p>Stepping on the Gas with C&I Thermostats <i>Chad Wallis, CenterPoint Energy with Jeana Swedenburg, Cadmus</i></p> <p>In recent years, Wi-Fi and smart thermostats have swept the residential DSM world, but what can this technology offer to the commercial and industrial sector? Vectren, a natural gas utility in Ohio, realized significant savings after introducing a new rebate offering for Wi-Fi thermostats to its commercial and industrial customers. This presentation will review verified natural gas savings from the program's first two years of operation and highlight lessons learned from introducing a familiar technology to a new sector. The presentation will also compare Vectren's program performance to other "early adopters" that are on the front lines of proving Wi-Fi and smart thermostat technology can work in commercial and industrial settings.</p> <p>CE EE</p>	<p>Case Study—Energy Savings from Dark Sky Lighting in a Townhome Neighborhood <i>Gary Schroeder, Fort Collins Utilities</i></p> <p>Saddlebrook Townhomes, a community of 117 townhomes in Fort Collins, CO, replaced overly-bright porch lights on every residence and glaring post-top lights with dark-sky-friendly LED fixtures. In addition to realizing substantial energy savings, residents are experiencing a friendlier night-time environment as well as greater safety and security. The project was a collaboration between the neighborhood and Fort Collins Neighborhood Services, Utilities, and Police as well as Colorado State University and the National Park Service. To celebrate the project, the community recently hosted a star gazing night through the Northern Colorado Astronomical Society using their large telescopes to view constellations that were invisible before the retrofit. Before and after photos with lighting metrics and lessons learned will be shared.</p> <p>CE EE 1.50 BPI CEUs</p>

Thursday, September 26, 2019 (cont.)

	Track A – Gas (cont.)	Track B – Electric (cont.)
2:00 pm	<p>The Future of Gas DSM Programs; Highlights From the 2020-2022 Colorado Gas Efficiency Plans <i>Moderator: Katie Parkinson, Apex Analytics</i> <i>Presenters: Rob Leivo, Atmos Energy; Michelle Beaudoin, Xcel Energy; Penne Fugate, Atmos Energy; Caroline Medlock, Colorado Natural Gas; and Jim Dillon, Black Hills Energy</i></p> <p>This panel be comprised of the regulated Colorado natural gas providers. Presenters will share short (5 minute) highlights from their 2020-2022 DSM plans and discuss programmatic challenges and successes they are encountering. The panel participants will share how natural gas programs are evolving and what opportunities still remain in this sector.</p> <p>EE MS</p>	<p>Heat Pump Technology and Storage <i>Gary Myers, Tri-State Generation & Transmission; Jon Beyer, Tri-State Generation & Transmission; and Kristin May, Xcel Energy</i></p> <p>Hidden Battery—The Evolution of Heat Pump Water Heaters</p> <p>Electric water heaters are the invisible battery in a customer's home. In order to help customers save energy and money on their bills, we're incentivizing heat pump water heaters, which can save over 50% of a customer's hot water energy use, on average. And in order to lead the clean energy transition, we are creating a load shifting program with those water heaters. Thus, this program meets two of Xcel Energy's primary goals: keep customer bills low, and lead the clean energy future.</p> <p>Low Temperature Heat Pumps—Another Great Option for Utilities</p> <p>This presentation will walk you through the collaborative pilot program successfully implemented in 2018 and early 2019. It's another opportunity that keeps the industry at the vanguard of newer HVAC technology ideas and customer-facing energy saving efforts. Gary and Don will, based on first-hand knowledge, outline the many program steps—from site and contractor selection to program general costs, timing, data collection and interpretation, etc. Both Don and Gary welcome a lively discussion and will stand ready to talk "nuts and bolts," as you desire. This program has captured real time data, that brings the project full-circle with data results you will want to see!</p> <p>EE MS 1.50 BPI CEUs</p>

**Plan now to attend the
 14th Rocky Mountain Utility Exchange
 September 29 – October 2, 2020**

Thursday, September 26, 2019 (cont.)

	Track A – Gas (cont.)	Track B – Electric (cont.)
2:00 pm	<p>Protecting and Growing Gas Programs—A Brainstorming Session <i>Moderators: Ann Kirkpatrick, Xcel Energy and Alan Stoinski, Cheyenne Fuel, Light and Power</i></p> <p>Meeting Dth (decatherms) program goals is trickier and trickier these days. This session is a participant rich format. We'll identify the top challenges for each market segment, and break into smaller groups to share ideas and brainstorm new ones, then report out to the larger group.</p> <p>LG MS</p>	<p>Case Study—Energy Savings from Dark Sky Lighting in a Townhome Neighborhood (cont.)</p>
3:30 pm	REFRESHMENT BREAK	
	<p>Track C – Data Analytics <i>Co-Chairs: Bryce Brady, Platte River Power Authority; and Chuck Finleon, Longmont Power & Communications</i></p>	<p>Track D – Change Management for Customer-centric Programs <i>Co-Chairs: Alantha Garrison, Gunnison County Electric Association; and Gabriel Caunt, Colorado Springs Utility</i></p>
3:45 pm	<p>Software Implementation: The Good, The Bad, The Reality <i>Sarah Stanton Johnson, Platte River Power Authority; and Luke Klasinski, Nexant</i></p> <p>Considering moving to a software management platform? This session will offer perspectives from both the utility project lead and software engineer on the software implementation for a residential energy efficiency program. We will cover the good, the bad, and the realities of time involved designing the program, how existing program processes changed, launch, and interactions with the program now.</p> <p>CE EE 1.75 BPI CEUs</p>	<p>Customer-centric M&V <i>Jeff Perkins, ERS</i></p> <p>There is wide agreement across the industry that measurement & verification (M&V) must transition to something new. Talk of change is everywhere, yet all versions of M&V still (as always) leave the customers out of the equation. When it comes to EM&V, customers are treated like specimens, there only to hypothesize a counterfactual. Meanwhile, back at the ranch, the exploding Internet of Things (IoT) is allowing building owners to understand their facility like never before. We should now be engaging customers with building data at a high resolution for every efficiency retrofit completed. The data gathered could serve evaluation, implementation, and yes, even to make the whole effort more customer-centric.</p> <p>CE EE 0.50 BPI CEUs</p>

Thursday, September 26, 2019 (cont.)

	Track C – Data Analytics (cont.)	Track D – Change Management for Customer-centric Programs (cont.)
4:15 pm	<p>A Collaborative Specification to Solve Energy Efficiency Data Needs and Bring Connected Devices Into Programs <i>Amy Jiron, U.S. Department of Energy with Greg Barker, Energy Solutions</i></p> <p>Connected devices have the potential to solve energy efficiency programs' greatest needs, such as enabling measure development, allowing accurate measurement and verification, and enabling simple data-based program designs. However, this requires a clear approach and data specifications that clearly align with manufacturer capabilities and utilities' needs. With U.S. DOE funding, Energy Solutions and NREL piloted the development of a common specification for connected device data with engagement from utilities nationwide to understand their data needs for creation and approval of rooftop HVAC Advanced Retrofit Controls measures. Five HVAC technology manufacturers provided data samples from their connected controls and specification input, and the team crafted a common specification consistent with data standardization terminology. Utilities can leverage the resulting consensus-based specification to collect uniform data to create or update their program measures.</p> <p>EE FL 0.50 BPI CEUs</p>	<p>Focusing on the Customer In A Big Way; Enterprise Wide Customer Experience Training <i>Heather Hemphill, Xcel Energy with Jackie Ducharme, Xcel Energy</i></p> <p>As customers are exposed to more and more great experiences, their expectations continue to rise for all of their service providers. And with new entrants into the utility industry every day, deepening customer relationships is more important than ever. Xcel Energy's Customer Experience Training effort is aimed at helping employees see how they can best interact with customers and improve relationships so they will remain Xcel Energy customers in the future. This in person training launched in April 2018 and will take several years to complete as it is enterprise wide, but transforming the customer experience will be a journey, and this training is just one way Xcel Energy is committed to success.</p> <p>CE MS 0.50 BPI CEUs</p>
4:45 pm	<p>Maximizing the Value of an Rf Network Investment Using Intelligent Line Sensors <i>Josh Snoddy, Holy Cross Energy with Steve Kenny, Landis+Gyr</i></p> <p>Utilities have been investing heavily in deploying network infrastructure to support communications for electric, water, and gas AMI. These multi-purpose networks can be easily leveraged to provide additional value to the utility and ultimately the energy consumer. Landis+Gyr has partnered with Holy Cross Energy to integrate 5610 intelligent line sensors onto the existing AMI network infrastructure. During outage situations, these line sensors provide precise information that is used to send crews directly to fault locations, resulting in lower O&M costs for Holy Cross and faster restoration times for the consumer.</p> <p>FL MS</p>	<p>Goldilocks and the Three Clean Energy Options <i>Eric Van Orden Xcel Energy</i></p> <p>Utilities and governments are increasingly offering multiple clean energy options to different customer segments such that the customer feels like theirs is "just right". This presentation will include some of the key features of clean energy programs such as location, commitment, cost, and technology while sharing the challenge of packaging the perfect balance of each to meet many different customer's needs, from homeowners, renters, small businesses, large businesses and more. Additionally, as programs get more complex while also going beyond the early adopters, there is a need to engage with customers in a simple and convenient way. Full disclosure: This presentation will include more than three options. But, the Goldilocks theme stays the same. Some customer's might want it "hot," others "cold".</p> <p>CE RG 0.50 BPI CEUs</p>
6:30 - 7:30 pm	<p>Networking Reception at W Aspen on the WET Deck 550 S Spring St, Aspen, CO 81611</p>	

Friday, September 27, 2019

7:00 - 8:30 am	BREAKFAST BUFFET in Davis Commons Buffet breakfast with opportunity to network	
	Workshop 5 – Resiliency	Workshop 6 – Low Income
8:30 - 10:30 am	<p>Preparing for the Next Fire: Energy Resilience in Aspen and the Upper Roaring Fork Valley <i>Bryan Hannegan, CEO, Holy Cross Energy; Kevin Brehm, Rocky Mountain Institute; Ashley Perl, City of Aspen; and Mona Newton, CORE</i></p> <p>Aspen and the Upper Roaring Fork Valley are at risk from threats that could disable electricity transmission. In Summer 2018, the community was keenly aware of this risk, as the Lake Christine Fire came within minutes of severing a key transmission line. To identify appropriate and scalable solutions and to prepare for the next fire, Holy Cross Energy (HCE) partnered with Rocky Mountain Institute (RMI) to investigate and enable community-driven resilience solutions. During Winter and Spring 2019, RMI engaged stakeholders in the Upper Roaring Fork Valley through a series of stakeholder interviews, focus groups, and workshops to explore: What are critical loads in the Upper Roaring Fork Valley? How will these functions be impacted by a major disruption? What can be done to maintain service to these loads in case of a major disruption? This workshop will explore findings of the work, as well as the community-engaged process which led to the solutions.</p> <p>FL MS</p>	<p>Solar; Low Income Access to Local Renewables <i>Trina Zagar-Brown, White River Electric Association</i></p> <p>Piceance Creek Solar Farm; Low Income Access to Local Renewable Energy. The PCS is a 4 MW solar farm located in the Piceance Creek area. PCS blocs of power are available to WREA's membership for a guaranteed monthly solar production credit which is applied to monthly bills. In addition, WREA has collaborated with Northwest Colorado Council of Governments to utilize grant money (collected from a Rio Blanco County environmental fine) to prepay for blocs of solar production power to be applied to low income housing tenants who reside at the Meeker Housing Authority rental units. It is an excellent collaboration providing increased member access to efficient and cost effective, local renewable energy. Housing authority tenants will receive guaranteed production credits applied to their electric bills.</p> <p>MS RG</p> <p>Uncovering the Value of Retro-Commissioning for Low Income Communities <i>Ann Cruz, Xcel Energy; Brooke Pike, Energy Outreach Colorado; and Michael Levinson, Group 14 Engineering</i></p> <p>Low income communities offer unique opportunities for retro-commissioning (RCx) DSM offerings, at a time when market rate RCx programs are becoming less cost effective. Nonprofit facilities and multifamily buildings that house an 80% or less AMI population typically have minimal maintenance resources and equipment is often not operating per design intent. This combination yields significant opportunities for RCx measures with quick paybacks. With Group 14 Engineering as the RCx vendor, Xcel Energy and Energy Outreach Colorado experimented with RCx outreach and program implementation innovations at two sites. This session will showcase program innovations and offer two 2019 case studies around what works and what doesn't for low income retro-commissioning DSM. The session will also highlight program design elements that can increase measure implementation rate and reduce RCx study costs.</p> <p>CE EE 2.00 BPI CEUs</p>

Friday, September 27, 2019 (cont.)

		Workshop 7 – Window Attachments
10:30 am - 12:30 pm		<p>Saving Automatically with Smart Window Attachments <i>Erika Burns, Attachments Energy Rating Council; Katherine Cort, Pacific Northwest National Laboratory; and Stacy Lambricht, Hunter Douglas</i></p> <p>The session will educate attendees about the utility program potential of automated window attachments, share results from research and field studies, and explain the new rating and certification program for window attachment products. Katie Cort of the Pacific Northwest National Laboratory (PNNL) will discuss energy savings research on automated window shades and the potential for window attachments to integrate with other smart technologies, including smart thermostats and lighting controls. Erika Burns of the Attachments Energy Rating Council (AERC) will give an overview of the organization, explain the residential and commercial rating and certification programs, and provide examples of how utilities can use AERC ratings in their programs. Stacy Lambricht of Hunter Douglas will highlight the non-energy benefits that automated window shades bring and how utilities can encourage adoption of automated window attachments by highlighting those benefits with customers.</p> <p>CE EE 2.00 BPI CEUs</p>

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www.cityofaspen.com/543/Energy-Efficiency

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Platte River Power Authority generates and delivers reliable, low-cost and environmentally responsible electricity to its owner communities of Estes Park, Fort Collins, Longmont, and Loveland, Colorado, where it is distributed by each municipal utility to residents and businesses. www.prpa.org



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Energy Outreach Colorado, a statewide nonprofit, is a national leader in energy issues impacting low-income consumers. We help limited-income Colorado families and seniors afford home energy through energy efficiency improvements to lower home costs, emergency home heating repair, energy bill payment assistance, behavior-change education and advocating for affordable energy policies. www.energyoutreach.org



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