



Monday, February 9

11:00 am – 6:30 pm	Registration Open
1:00 pm – 5:00 pm	Workshop: Thermal Distribution – Plaza Ballroom Salon E
5:00 pm – 6:30 pm	Cocktail Reception – For all workshop participants – Plaza Ballroom Salon F

Tuesday, February 10

7:00 am – 6:30 pm	Registration Open
7:00 am – 8:00 am	Breakfast – For all workshop participants – Plaza Ballroom Salon F
8:00 am – 5:00 pm	Workshop: Thermal Distribution (cont'd) – Plaza Ballroom Salon E
8:00 am – 5:00 pm	Workshop: Microgrids + Electrical Distribution Systems – Governor's Square 15
12:00 pm – 1:00 pm	Lunch – For workshop participants – Plaza Ballroom Salon F
12:00 pm – 4:00 pm	Exhibitor Table Set Up – Plaza Exhibit Foyer
5:00 pm – 6:30 pm	Opening Cocktail Reception with Business Partner Exhibitors – Plaza Exhibit Foyer – Generously Sponsored by Trane

Wednesday, February 11

7:00 am – 7:00 pm	Registration Open
7:00 am – 8:15 am	Continental Breakfast with Business Partner Exhibitors – Plaza Exhibit Foyer – Generously Sponsored by Thermo Systems LLC
7:00 am – 8:00 am	Canadian Forum Meeting – Plaza Ballroom Salon D
7:15 am – 7:45 am	Speaker Orientation Meeting – Governor's Square 17
8:15 am – 8:30 am	<p>Introductions – Rob Thornton, IDEA President & CEO</p> <p>Welcome to IDEA – Ken Smith, IDEA Chair</p> <p>Welcome to Denver – Nate Cesarz, Conference Program Technical Chair Location: Plaza Ballroom ABC</p>
8:30 am – 10:00 am	<p>Clean Energy for the Next Generation – This panel of experienced industry leaders will discuss emerging trends in clean energy deployment and optimization on campuses and communities in the context of a rapidly-changing utility and energy marketplace. Topics will include: CHP, microgrids, sustainability, master planning, energy integration, environmental compliance, energy policy trends and resource management strategies.</p> <ul style="list-style-type: none"> • Bryan Birosak, Director of Utility Services, University of Colorado Boulder (Conference Host) • Scott Clark, National Practice Leader, OnSite Energy & Power Group, Burns & McDonnell • Tom Nyquist, Executive Director of Engineering and Utilities, Princeton University • Juan Ontiveros, Associate Vice President of Utilities, Energy and Facilities Management, The University Texas at Austin • Meghan Riesterer, Assistant Vice President of Energy Management and Sustainability, Oberlin College • Ken Smith, President & CEO, Ever-Green Energy Location: Plaza Ballroom ABC

10:00 am – 10:45 am	Refreshment Break with Business Partner Exhibitors – Plaza Exhibit Foyer – Generously Sponsored by CHA Consulting, Inc.		
	1A – Master Planning & System Renewal Moderator: Jeff Easton, Burns & McDonnell <i>Plaza Ballroom Salon D</i>	1B – Combined Heat & Power Moderator: Christopher Hastings, Vanderweil Engineers <i>Plaza Ballroom Salon E</i>	1C – Modeling, Measuring & Optimizing System Performance Moderator: Sai Lo, Thermo Systems <i>Plaza Ballroom Salon F</i>
10:45 am – 11:15 am	Master Planning and Upgrades to CHP and Thermal Plant at UC Boulder – <i>Bryan Biroesak, University of Colorado; Juan Suarez, STPCx; Jason Trefz, Trefz Engineering</i>	Small Scale CHP Using the Rankine Cycle: Case Studies from Europe – <i>Ilaria Peretti, Turboden</i>	Real-Time Energy Asset Management: Data for Decisions and Behavior Changes at the University of Virginia – <i>Cheryl Gomez & Scott Martin, University of Virginia</i>
11:15 am – 11:45 am	Energy Master Planning: Case Studies of Campuses in NY State – <i>Rob Neimeier, O'Brien & Gere</i>	Exergy and Water Efficiency in Combined Heat and Power Plants: UT Austin vs. ERCOT – <i>Scott West, Jacobs Engineering Group</i>	Machine Learning to Facilitate District Energy System Optimization: A Pharmaceutical Case Study – <i>Ian Dempster, Optimum Energy</i>
11:45 am – 12:15 pm	Innovations in the Design of a Mechanical Plant for the University of Virginia – <i>Justin Callihan, University of Virginia; Joe Witchger, HGA Architects & Engineers</i>	Biomass and CHP Microgrid in Vermont: Burlington Case Study – <i>Michael Ahern, Ever-Green Energy</i>	Hydraulic Modeling of NRG Energy Center Downtown Minneapolis System – <i>Carl Jauch, NRG Energy Minneapolis; Thomas Lund-Hansen, Reliability Efficiency & Optimization</i>
12:15 pm – 1:15 pm	Campus Energy Networking Luncheon – Plaza Ballroom ABC – Generously Sponsored by Solar Turbines Incorporated		
1:15 pm – 2:00 pm	Dessert & Coffee with Business Partner Exhibitors – Plaza Exhibit Foyer – Generously Sponsored by Chem-Aqua, Inc.		
	2A – Master Planning & System Renewal Moderator: Mitch Ortego, Stanley Consultants <i>Plaza Ballroom Salon D</i>	2B – Combined Heat & Power Moderator: Tim Peer, CHA Consulting <i>Plaza Ballroom Salon E</i>	2C – Microgrids Moderator: Joseph Sullivan, Concord Engineering Group <i>Plaza Ballroom Salon F</i>
2:00 pm – 2:30 pm	Comprehensive Electric Distribution Master Planning at North Carolina State University – <i>Alan Daeke, North Carolina State University; Michael Dempsey, Burns & McDonnell</i>	How Did the University of Alaska Fairbanks Get a New CHP Plant? – <i>Mike Ruckhaus & Chilkoot Ward, University of Alaska, Fairbanks</i>	5MW CHP Microgrid at Gainesville Regional Utilities – <i>Kurt Koenig, Burns & McDonnell; Chuck Heidt, Gainesville Regional Utilities</i>
2:30 pm – 3:00 pm	Balancing Sustainability, Resiliency and the Business Case: City of Saint Paul Ford Site District Energy Study – <i>Jakob Bjerregaard, Ramboll</i>	Red Light, Green Light: Obstacles and Successes of Recent District Energy Systems with Combined Heat and Power – <i>Henry Johnstone, GLHN Architects & Engineers; Neil Kolwey, US DOE SW CHP TAP</i>	Controls Master Planning Process leads to Campus-Wide BAS Upgrade – <i>Cory Abramowicz & Steven Brown, Environmental Systems Design</i>

3:00 pm – 3:30 pm	Demand Side Management Strategies for Campus Labs: Penn State Case Study – <i>Tim Burkhalter & Blake Ellis, Burns & McDonnell</i>	Pros and Cons of Dual Fuel Technology for Combined Heat and Power – <i>Chris Farr & Bret Romero, Jacobs Engineering Group</i>	Mission Critical Microgrids: Multi Case Studies Review – <i>Justin Jurek, Piller USA</i>
3:30 pm – 4:00 pm	Refreshment Break with Business Partner Exhibitors – Plaza Exhibit Foyer – Generously Sponsored by Affiliated Engineers, Inc.		
	3A – Technology, Innovation & System Optimization Moderator: Travis Smith, Smith Engineering <i>Plaza Ballroom Salon D</i>	3B – Chilled Water Plants & Water Management Moderator: Timothy Erwin, O'Brien & Gere <i>Plaza Ballroom Salon E</i>	3C – Harnessing Electrical Assets for Campus Microgrids Moderator: Roger Copeland, Jacobs Engineering Group <i>Plaza Ballroom Salon F</i>
4:00 pm – 4:30 pm	Designing Desuperheater Options for the University of Iowa Low Pressure Steam System – <i>Ben Anderson, University of Iowa; Ben Niedergeses, Stanley Consultants</i>	Improved Chiller Plant Performance Through Air-Dirt Separation at Youngstown State University and University of Akron – <i>Ralph Morrone, University of Akron; John Coggins, Spirotherm</i>	Networking the Emergency Generator Fleet to Expand the University of Iowa Microgrid – <i>Michael Dempsey, Burns & McDonnell</i>
4:30 pm – 5:00 pm	Overrunning Clutches in Dual Driven Turbine and Chiller Trains to Reduce CAPEX, Lower Operating Costs and Increase Operating Flexibility – <i>James Berry & Morgan Hendry, SSS Clutch Company</i>	The WaterHub at Emory University: One Year Later, Moving from Feasibility to Project Execution – <i>Jonathan Lanciani, Sustainable Water</i>	Automation & Protection of a Naval Facility Microgrid with CHP and Standby Generation – <i>Stephen Bowman & Matthew Klebosky, WileyWilson</i>
5:00 pm – 5:30 pm	Innovative Drying Solution for Flooded Steam Pipes – <i>John Digertt, John C. Digertt Inc.</i>	Two Chilled Water Plants, One System? – <i>Jon Bovenkamp & W.A. Liegois, Stanley Consultants</i>	The US DOE National Wind Technology Center Research Facility Provides Insight into the Future of Microgrids – <i>Dan Sandblom, The RMH Group; Mark McDade, NREL/NWTC</i>
5:30 pm – 7:00 pm	Cocktail Reception with Business Partner Exhibitors – Plaza Exhibit Foyer		
7:00 pm – 9:00 pm	Offsite Dinner at Mile High Station – Generously Sponsored by Burns & McDonnell <i>Buses depart from Tower Building Street Level</i>		
Thursday, February 12			
7:00 am – 4:00 pm	Registration Open		
7:00 am – 8:00 am	Continental Breakfast with Business Partner Exhibitors – Plaza Exhibit Foyer – Generously Sponsored by Carrier Corporation		
7:15 am – 7:45 am	Speaker Orientation Meeting – Governor's Square 17		

	4A – Thermal Energy Networks Moderator: Richard Damecour, FVB Energy <i>Plaza Ballroom Salon D</i>	4B – Campus Resiliency Strategies Moderator: Nate Cesarz, Affiliated Engineers <i>Plaza Ballroom Salon E</i>	4C – Renewables & Microgrids Moderator: Robert Smith, RMF Engineering <i>Plaza Ballroom Salon F</i>
8:00 am – 8:30 am	Steam to Hot Water Transition: Duluth Case Study – <i>Michael Burns & Jim Green, Ever-Green Energy</i>	Integrating Standby Power and Steam Turbine Chillers for Better Resiliency at UNC Chapel Hill – <i>Philip Barner, UNC Chapel Hill; John Carlson Sebesta</i>	Initiative for Innovative Living and Next Generation Infrastructure: Chicago Lakeside Development – <i>Pernille Overbye, Ramboll</i>
8:30 am – 9:00 am	Large Thermal Energy System Expansion for the Dell Medical Center at UT Austin – <i>Juan Ontiveros, University of Texas at Austin; Jeff Easton, Burns & McDonnell</i>	Evolving from Standby Diesel Generators to Microgrids – <i>Dave Robinson, Honeywell</i>	University Microgrids Powered by Fuel Cells: Case Studies from Connecticut and California – <i>Ben Toby, FuelCell Energy</i>
9:00 am – 9:30 am	Thermal Energy Networks for Heating and Cooling Downtown Bridgeport – <i>Daniel Donovan, Nupower Thermal; Jens Hansen, Ramboll</i>	New Back-Up Generation for Critical Facilities at the University of Iowa – <i>Ben Anderson, University of Iowa; Jim Nonnenmann & Kevin Voss, PRVN Consultants</i>	Lessons Learned from Integrating High Penetration Renewables Into a Campus Microgrid – <i>Russell Carr, Arup</i>
	5A – Airport System Renewal & Optimization Moderator: Kevin Fox, Jacobs Engineering Group <i>Plaza Ballroom Salon D</i>	5B – Financing & Implementing District Energy Projects Moderator: Henry Johnstone, GLHN Architects & Engineers <i>Plaza Ballroom Salon E</i>	5C – Operators, Training & Experience for Reliable & Efficient Systems Moderator: Maureen O'Rourke, Trefz Engineering <i>Plaza Ballroom Salon F</i>
9:30 am – 10:00 am	Repowering LAX: District Cooling, TES & CHP Blend – <i>Anthony Kirby, Arup</i>	How Collaboration Can Achieve “Best in Class” CHP Project Results – <i>Larry Schuster, University of New Mexico; Jeff Duncan, Vanderweil Engineers</i>	The Foundation for a High Efficiency Plant: Operator Training and Practical Thinking – <i>Brenton Dunham & Hemant Mehta, WM Group</i>
10:00 am – 10:30 am	Total Facility Optimization at Denver International Airport – <i>Josh Foerschler & Aurom Mahobian, Burns & McDonnell</i>	Finding the Money for District Energy System Projects – <i>David Clamage, Saulsbury Hill Financial; Rod Schwass, Jacobs Engineering Group</i>	Chief Engineer’s Log: Real Experiences From Three Decades Of Operating District Energy Systems – <i>Eric Wachtman, Princeton University</i>
10:30 am – 11:00 am	Refreshment Break with Business Partner Exhibitors – <i>Plaza Exhibit Foyer</i> – <i>Generously Sponsored by Van Ness Feldman</i>		

	6A – Sustainability & Climate Action Plans Moderator: Jeffrey Pollei, University of Wisconsin <i>Plaza Ballroom Salon D</i>	6B – Smart Grid Insights & Electric Upgrades Moderator: Afaan Naqvi, ARUP <i>Plaza Ballroom Salon E</i>	6C – Piping Systems & Performance Moderator: Richard Boscarino, ConEdison <i>Plaza Ballroom Salon F</i>
11:00 am – 11:30 am	Implementing Climate Action Plan Energy Efficiency Goals at GW University – <i>Doug Spengel, George Washington University</i>	Microgrid/Smartgrid Research Facility: Scope, Hazards Analysis and Research Focus – <i>Kevin Krause & David Sereno, Affiliated Engineers</i>	Thin Wall Piping: What's the Big Deal? – <i>David Wade, RDA Engineering Services</i>
11:30 am – 12:00 pm	Sustainability on Campus: Case Studies Including Bowdoin College, University of Maine, University Of Massachusetts and Williams College – <i>Andrew Price, Competitive Energy Services</i>	Centennial Campus Smart Grid Master Plan: North Carolina State University – <i>Jack Colby, NC State University; Ben Dombrowski, Jacobs Engineering Group</i>	Acoustic Wall Thickness Testing and Leak Detection for Aging Pipelines – <i>John Marciszewski, Echologics</i>
12:00 pm – 12:30 pm	Comprehensive Carbon Emission Target Plan for Arizona State University – <i>Roy Torbert, Rocky Mountain Institute</i>	Medium Voltage System Upgrade at a VA Medical Center – <i>Stephen Bowman & Matthew Klebosky, WileyWilson</i>	Benefits Achieved by Piping Campus Systems with Pre-insulated PEXa Rather than Metallic Pipes – <i>Kevin Hale, REHAU</i>
12:30 pm – 2:00 pm	Campus Energy Delegates Luncheon – <i>Plaza Ballroom ABC</i> – <i>Generously Sponsored by Jacobs Engineering Group</i>		
2:00 pm – 2:30 pm	Dessert & Coffee with Business Partner Exhibitors – <i>Plaza Exhibit Foyer</i> – <i>Generously Sponsored by ICETEC</i>		
	7A – Sustainability & Climate Action Plans Moderator: Meghan Riesterer, Oberlin College <i>Plaza Ballroom Salon D</i>	7B – TES & Cooling Technologies Moderator: Ehsan Dehbashi, HGA Architects & Engineers <i>Plaza Ballroom Salon E</i>	
2:30 pm – 3:00 pm	Procuring Offsite Solar Power to Meet Climate Action Plan Goals at GW University – <i>Doug Spengel, George Washington University</i>	The Economics of Energy Storage: Comparing Technologies Using Real-World Examples – <i>John Andrepont, The Cool Solutions Company</i>	
3:00 pm – 3:30 pm	Sustainability through Understanding and Reducing the Water Footprint at Georgia Institute of Technology – <i>Jonathan Lanciani, Sustainable Water</i>	Case Studies of Multi-Energy Absorption Chillers Using CHP and Renewables for Campus Cooling – <i>Piyush Patel, Thermax</i>	
3:30 pm – 4:30 pm	Roundtable Session: Meet Up With the Experts – <i>Plaza Ballroom ABC</i>		
4:30 pm – 5:30 pm	Campus Forum Meeting – A forum for open discussion among college and university personnel – <i>Plaza Ballroom Salon D</i>	Business Partner Forum Meeting – A forum for manufacturers/suppliers and service providers – <i>Governor's Square 12</i>	
5:30 pm	Open Evening – Dinner on your own		
Friday, February 13			
7:30 am – 8:45 am	Breakfast and Technical Tour Presentations – <i>Plaza Ballroom ABC</i>		
9:00 am – 1:00 pm	Technical Tours – <i>Buses depart from Tower Building Street Level. Advanced registration required. See page 10 for details.</i>		