



CampusEnergy2019

February 26 - March 1, 2019 | New Orleans, LA | Hilton New Orleans Riverside

TIMES AND CONTENT SUBJECT TO CHANGE

Monday, February 25

10:00 am – 7:00 pm	Registration Open – 1 st Floor Registration Counter
10:30 am – 1:00 pm	CLOSED MEETING – IDEA Executive Committee Meeting & Lunch – Trafalgar (3 rd Floor)
12:00 pm – 4:00 pm	CLOSED MEETING – IDEA Board of Directors Meeting & Luncheon – Marlborough A&B (2 nd Floor)
1:00 pm – 5:00 pm	Thermal Distribution Workshop – Separate registration fee required, see separate program for detailed content – Churchill A & B (2 nd Floor)
5:00 pm – 6:30 pm	Welcome Reception – For all Workshop participants and IDEA Board of Directors – Churchill D (2 nd Floor)

Tuesday, February 26

7:00 am – 7:00 pm	Registration Open – 1 st Floor Registration Counter
7:00 am – 8:00 am	Breakfast – For registered Workshop participants – Churchill D (2 nd Floor)
8:00 am – 5:00 pm	Thermal Distribution Workshop – Separate registration fee required, see separate program for detailed content – Churchill A (2 nd Floor)
8:00 am – 5:00 pm	Microgrid Workshop – Separate registration fee required, see separate program for detailed content – Churchill B (2 nd Floor)
12:00 pm – 4:00 pm	Exhibitor Table and Poster Exhibit Set Up – Grand Salon (1 st Floor)
12:00 pm – 1:00 pm	Workshop Luncheon – For Distribution and Microgrid Workshop attendees only – Churchill D (2 nd Floor)
4:00 pm – 5:00 pm	Campus Forum Meeting – Jackson (3 rd Floor) A forum for open dialogue among college/university campus energy personnel only. (Attendees are limited exclusively to institutional end-users. No business partners please.)
5:00 pm – 6:30 pm	Opening Reception for All Conference + Workshop Attendees with Business Partner Exhibitors – Grand Salon (1 st Floor) <i>Sponsored by Ameresco & BOND</i>

Wednesday, February 27

7:00 am – 7:00 pm	Registration Open – 1st Floor Registration Counter
7:00 am – 8:00 am	Continental Breakfast with Business Partner Exhibitors – Grand Salon (1st Floor) <i>Sponsored by I.C. Thomasson Associates, Inc.</i>
7:15 am – 7:45 am	Speaker Orientation Meeting – Marlborough B (2 nd Floor)
8:00 am – 8:30 am	Opening Session – Grand Ballroom A-C (1 st Floor) Introductions – Rob Thornton, IDEA President & CEO Welcome to IDEA – Jim Lodge, Vice President Strategy & Business Development, Clearway Energy, IDEA Chair Welcome to New Orleans – John Peri, President & CEO, Enwave Energy Corporation, Conference Host
8:30 am – 10:00 am	Opening Plenary Panel Discussion – Grand Ballroom A-C (1 st Floor) Campus Energy and Business Partner Leaders discuss current trends, emerging technologies, utility industry evolution and navigating risks/rewards to a more resilient, efficient and lower-carbon future for campus energy systems. <i>Panelists include:</i> <i>André Canguçu, Chief Business Developer, ENGIE North America</i> <i>Sam Chatterton, Vice President, Johnson Controls, Inc</i> <i>Carlyle Coutinho, President and Chief Operating Officer, Enwave Canada</i> <i>Josh Keniston, Vice President, Dartmouth College</i> <i>Joan Kowal, Senior Director, Energy Strategy & Utilities, Emory University</i> <i>Jim Lodge, Vice President, Strategy & Business Development, Clearway Energy</i> <i>Bob Manning, Director of Engineering & Utilities, Harvard University</i> <i>Juan Ontiveros, Associate Vice President, Utilities & Energy Management, University of Texas at Austin</i> <i>Meghan Riesterer, Assistant Vice President, Campus Energy & Sustainability, Oberlin College</i> <i>Moderated by Rob Thornton, IDEA</i>
9:30 am – 4:00 pm	Spouse/Guest Tour – Bus will depart from the Hilton Riverside
10:00 am – 10:45 am	Refreshment Break with Business Partner Exhibitors – Grand Salon (1st Floor) <i>Sponsored by ConEdison Solutions & Ramboll</i>
10:00 am – 10:45 am	Poster Exhibits – Grand Salon (1st Floor) Presenters will be available by their posters to answer questions. Poster presentations and presenters are listed at the end of the program, they are also included in the conference mobile app.

	1A: Metering, Monitoring, Control & Commissioning <i>Churchill A</i> <i>Moderator: Nathan Ninemire, Burns & McDonnell</i>	1B: District Energy & CHP <i>Churchill B</i> <i>Moderator: Tim Peer, BOND</i>	1C: Energy Management, the Digital Plant & Cyber Security <i>Churchill C</i> <i>Moderator: Justin LaJeunesse, BOND</i>	1D: Master Planning, System Design & Construction Approaches <i>Churchill D</i> <i>Moderator: Kevin Fox, Jacobs</i>
10:45 am – 11:15 am	Load Management Systems – Critical Equipment for Successful CHP Projects – <i>Saqib Khattak, CHA Canada</i>	CHP Sensitivity Analysis – Predicting the Variability of Economic Performance – <i>Casey Reimann, Jacobs</i>	Convergence of IT and OT Across Information and Control in Modern Campus Power-Plant Operations – <i>Tom McDonnell, Rockwell Automation</i>	A Path to Neutrality – Princeton University Infrastructure Master Plan – <i>Ted Borer, Princeton University; Justin Grissom, Burns & McDonnell</i>
11:15 am – 11:45 am	HVAC Monitoring For Measurement & Verification and Ongoing Commissioning – <i>Michael Kingsley, OBG, Part of Ramboll</i>	Cogeneration at the US Capitol – <i>Karim Moore, Architect of the Capitol; Tom Parker, James Thompson, Burns & McDonnell</i>	OT & IT Integration and the Cybersecurity Dilemma That Needs to be Addressed – <i>Scott Smith, OSIsoft</i>	District Energy Master Plan for UC Davis Primate Research Center – <i>Joseph Yonkoski, UC Davis</i>
11:45 am – 12:15 pm	Garbage In = Garbage Out; Understanding the Effects of Uncertainty – <i>Brian Wodka, RMF Engineering</i>	Advantages of Compound Cycle Cogeneration – <i>Ryan Corrigan, Bernhard TME</i>	Informatics Driven Central Plant Optimization – <i>Don Guan, Alex Huang & Kayvan Torkashvan, National Institutes of Health</i>	University of Massachusetts, Amherst North Chiller Plant – <i>Ted Mendoza, University of Massachusetts; Eric Chrencik, RMF Engineering; Jane Weinzapfel & Winifred Stopps, Leers Weinzapfel Associates</i>
12:15 pm – 1:45 pm	Campus Energy Recognition and Networking Luncheon – <i>Grand Ballroom A-C (1st Floor)</i> <i>Sponsored by Burns & McDonnell & ONICON</i>			
1:45 pm – 2:30 pm	Dessert & Coffee with Business Partner Exhibitors – <i>Grand Salon (1st Floor)</i> <i>Sponsored by Rentech Boiler Systems, Inc. & Siemens</i>			
	Poster Exhibits – <i>Grand Salon (1st Floor)</i> Presenters will be available by their posters to answer questions. Poster presentations and presenters are listed at the end of the program, they are also included in the conference mobile app.			
	2A: Redundancy, Reliability & Resiliency <i>Churchill A</i> <i>Moderator: Roger Copeland, Jacobs</i>	2B: Campus Strategies for System Design and Operations <i>Churchill B</i> <i>Moderator: Bob Smith, RMF Engineering</i>	2C: Thermal Energy Storage <i>Churchill C</i> <i>Moderator: Guy Frankenfield, DN Tanks</i>	2D: Master Planning, System Design & Construction Approaches (contd.) <i>Churchill D</i> <i>Moderator: Blake Ellis, Burns & McDonnell</i>

2:30 pm – 3:00 pm	Nuts and Bolts of Design Resiliency: Improved Facility Performance and Availability at Least Cost – <i>Kevin Fox, Jacobs</i>	Third Party Upgrades, Sustainability, Efficiency - Operations and Maintenance of Campus Central Plants – <i>Jon Sorenson, Ameresco</i>	Current Trends in Thermal Energy Storage – <i>John Andrepont, The Cool Solutions Company</i>	Underground Chilled Water Project Approach at Syracuse University for Major Expansion – <i>Derek Guadagnolo, Peterson Guadagnolo Consulting Engineers PC; Dave Warren, Syracuse University</i>
3:00 pm – 3:30 pm	Increased Capacity and Increased Savings: How the Changing Utility Market Impacted Expansion of a 15 year-old Chiller Plant – <i>Jeff Witt, Iowa State University; Matt Wolf, NV5</i>	Achieving Zero Net Energy with 57°F CHW and On-Site Energy Generation – <i>Brett Friedman, Affiliated Engineers; Garrett Roberts, Trane</i>	Thermal Energy Storage System Installation & Optimization at The National Institutes of Health, Bethesda – <i>Taiyo Asano, National Institutes of Health; Nathan Cesarz & Colin Moyer, Affiliated Engineers, Inc</i>	River Campus Electrical Distribution Upgrades – <i>Nik Terpak, CHA Canada</i>
3:30 pm – 4:15 pm	Refreshment Break with Business Partner Exhibitors – <i>Grand Salon (1st Floor)</i> <i>Sponsored by Affiliated Engineers & Carrier</i>			
	Poster Exhibits – <i>Grand Salon (1st Floor)</i> Presenters will be available by their posters to answer questions. Poster presentations and presenters are listed at the end of the program, they are also included in the conference mobile app.			
	3A: Chilled Water System Retrofits & Optimization for Savings <i>Churchill A</i> <i>Moderator: John Andrepont, The Cool Solutions Company</i>	3B: Electric Distribution Reliability and Resiliency <i>Churchill B</i> <i>Moderator: Justin Grissom, Burns & McDonnell</i>	3C: District Heating <i>Churchill C</i> <i>Moderator: Richard Damecour, FVB Energy</i>	3D: Steam to Hot Water Conversion <i>Churchill D</i> <i>Moderator: Paul Holt, University of British Columbia</i>
4:15 pm – 4:45 pm	Western University's Deep Energy Retrofit of the Chiller Plant South – <i>Paul Martin, Western University; Pierre Levesque, P. Eng.</i>	Creating a Reliable Campus Power Distribution Network, with Focus on Power Quality – <i>Sathish Anabathula & William Evans, University of Virginia Facilities Management</i>	Heating Water System Optimization: Coil Performance & Medical Center Project Results – <i>Jeff Creighton, Flow Control Industries, Inc.</i>	Modernizing Municipal Infrastructure – Steam to Hot Water Transition in Duluth – <i>Michael Ahern, Ever-Green Energy</i>
4:45 pm – 5:15 pm	Saving Big on Cooling – <i>Chris Peterson, Ever-Green Energy</i>	Generator HUB: The Critical Building We Hope to Never Use – <i>Chase Davis & Mark Demana, RMF Engineering</i>	District Energy Plant – Boiler Retrofit – <i>Rich Clasby & Jim Feese, Detroit Stoker Company</i>	Converting The University of Virginia District Steam & MTHW to a LTHW Heat Recovery System – <i>Paul Zmick, University of Virginia; Colin Moyer, Affiliated Engineers, Inc</i>
5:15 pm – 6:45 pm	Cocktail Reception with Business Partner Exhibitors – <i>Grand Salon (1st Floor)</i> <i>Sponsored by Jacobs & Solar Turbines</i>			

7:00 pm – 9:30 pm	Offsite Dinner –Mardi Gras World – Dinner and a fun New Orleans evening <i>Sponsored by Clearway, ENGIE N.A., Enwave & Johnson Controls</i>
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Thursday, February 28	
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7:00 am – 5:30 pm	Registration Open – 1st Floor Registration Counter			
7:00 am – 8:00 am	Continental Breakfast with Business Partner Exhibitors – Grand Salon (1st Floor) <i>Sponsored by RMF Engineering</i>			
7:15 am – 7:45 am	Speaker Orientation Meeting – Marlborough B (2nd Floor)			
	4A: Optimizing Energy & Water – The Energy Water Nexus <i>Churchill A</i> <i>Moderator: Juan Ontiveros, University of Texas at Austin</i>	4B: Planning & Upgrades of Electrical System & Controls <i>Churchill B</i> <i>Moderator: Les Williams, Texas A&M University</i>	4C: Pathways to Decarbonizing <i>Churchill C</i> <i>Moderator: Meghan Riesterer, Oberlin College</i>	4D: Business Models, Contracting & Financing <i>Churchill D</i> <i>Moderator: Sandeep Jain, Advisian</i>
8:00 am – 8:30 am	Energy-Water-District Cooling Nexus: An Examination of Opportunity – <i>Henry Johnstone, GLHN Architects & Engineers, Inc.</i>	Princeton University Substation Upgrade Project – <i>Brad Shuffield, Burns & McDonnell; John Lacenere, Princeton University</i>	Beyond Coal – Ohio University’s Transformation to Cleaner Fuels – <i>Joel Baetens, Ohio University; Vince Basilio, RMF Engineering</i>	Life Cycle Cost Analysis & Its Various ‘Flavors’ – Making Sense of the “Alphabet Soup” – <i>Thomas Phelps, Stantec Consulting</i>
8:30 am – 9:00 am	Campus District Scale Wastewater Reclamation Systems Planned for 2020: WaterHub an Ecoengineered Wastewater Treatment Plant – <i>Bob Salvatelli, Sustainable Water</i>	Control System Planning for Utilities Plants: Evolution vs. Creation – <i>Seth Kinderman, MIT; Dave Howell, POWER Engineers</i>	UC Davis Path to Carbon Neutrality by 2025 – <i>David Trombly, UC Davis</i>	University of MD College Park: An Energy Strategy for a Secure Future – <i>Susan Corry, University of Maryland College Park; Duane Bailey, WGL Energy</i>
9:00 am – 9:30 am	CHP Development: Hindsight is 20/20 – <i>John Solan, Stanley Consultants; Chilkoot Ward, University of Alaska Fairbanks</i>	Control System Upgrade at Minneapolis Energy Center – <i>Tim Johnston, Clearway Energy</i>	Getting to Net Zero – <i>Manus McDevitt, HGA</i>	Contract Considerations for Utility Privatization – <i>Chris Farr, Jacobs</i>

9:30 am – 10:00 am	Revisited Methods for Total Water Conservation – <i>Seth Kraal, Jacobs</i>	OSU Voltage Upgrade – <i>Aaron Campbell, FSB; Mike Hume, Steve Jordan & Ron Warner, Flintco; Dale Alexander & Craig Spencer, Oklahoma State University</i>	Heat Pumps in District Energy Systems – <i>Jens Hansen, Ramboll</i>	Behind the Curtain – The RFQ/RFP Process from the Consultant’s Perspective – <i>Ryan Voorhees, CHA Consulting, Inc.</i>
10:00 am – 10:45 am	Refreshment Break with Business Partner Exhibitors – <i>Grand Salon (1st Floor)</i> Sponsored by Chem-Aqua & NV5			
	Poster Exhibits – <i>Grand Salon (1st Floor)</i> Presenters will be available by their posters to answer questions. Poster presentations and presenters are listed at the end of the program, they are also included in the conference mobile app.			
	5A: Chilled Water System Optimization & Performance Improvement <i>Churchill A</i> Moderator: <i>Travis Smith, Smith Engineering</i>	5B: District Cooling & Trigereneration <i>Churchill B</i> Moderator: <i>Barry Beck, I.C. Thomasson Associates</i>	5C: Integrating Renewables & Low Carbon Solutions <i>Churchill C</i> Moderator: <i>Brian Urlaub, MEP Associates</i>	5D: Business Models, Contracting & Financing (contd.) <i>Churchill D</i> Moderator: <i>Larry Salguero, ENGIE</i>
10:45 am – 11:15 am	The Evolution of the University of Texas at Austin Cooling System & How to Apply their Successes to District Energy Systems – <i>Juan Ontiveros, University of Texas at Austin; Ben Erpelding, Optimum Energy</i>	Choosing Magnetic Bearing Technology for Improved Performance – <i>Kaitlin Logan, Johnson Controls, Inc.</i>	The Evolution of Geothermal through Campus Conversions - Reducing Energy Cost and Optimizing Efficiency – <i>Brian Urlaub & Jeff Urlaub, MEP Associates, LLC</i>	Innovative Contract Vehicle to Accelerate Campus Energy Savings – <i>Andrew Holden, Temple University</i>
11:15 am – 11:45 am	Phased Approach to Campus Wide Chilled Water System Optimization at Clemson – <i>Eric Toback, Optimum Energy; Tony Putnam & Matthew Holbrooks, Clemson University</i>	From Cogeneration to Trigereneration – Why, When and How – <i>Sam Merrick, BYU-Idaho; Jeff Elsner, The RMH Group</i>	UBC Biomass Expansion Project – <i>Paul Holt, University of British Columbia</i>	A Case Study of a Healthcare Energy Infrastructure Project: Ochsner Medical Center – <i>Michael Durham, Bernhard; James Britsch, Ochsner Health System</i>
11:45 am – 12:15 pm	Accelerating Cooling System Performance at Athletic Center and Other Buildings at University of Oregon – <i>Tony Hardenbrook, University of Oregon; Hemant Mehta, WM Group Services</i>	Application of Modern Absorption “New Normal” Technology in Campus District Energy Systems with Life Cycle Analysis – <i>Bin Li, Broad USA</i>	PSU’s Road to Sustainability – <i>Ron Pristash, The Pennsylvania State University; David Goetz, Burns & McDonnell</i>	Partnering Across Boundaries: Bringing Global Leadership to Academic-Municipal Collaboration on District Energy – <i>Katherine Rinas & Herbert Sinnock, Sheridan College</i>

12:15 pm – 1:45 pm	Campus Energy Recognition and Networking Luncheon – Grand Ballroom A-C (1st Floor) <i>Sponsored by Thermo Systems & Trane</i>			
1:45 pm – 2:30 pm	Dessert & Coffee with Business Partner Exhibitors – Grand Salon (1st Floor) <i>Sponsored by Stantec & Wiley Wilson</i>			
	Poster Exhibits – Grand Salon (1st Floor) Presenters will be available by their posters to answer questions. Poster presentations and presenters are listed at the end of the program, they are also included in the conference mobile app.			
2:30 pm – 6:00 pm	Exhibit Hall and Poster Exhibit Tear Down – Grand Salon (1st Floor)			
	6A: Innovative Maintenance Strategies <i>Churchill A</i> <i>Moderator: Brian Wodka, RMF Engineering</i>	6B: Design, Modeling & Optimization for Performance <i>Churchill B</i> <i>Moderator: Tom Phelps, Stantec</i>	6C: Operation & Maintenance Best Practices <i>Churchill C</i> <i>Moderator: Hemant Mehta, WM Group</i>	6D: Managing the Campus Energy Infrastructure & Portfolio <i>Churchill D</i> <i>Moderator: Dave Barkwell, Corix</i>
2:30 pm – 3:00 pm	Using an Intelligent Predictive Maintenance Tool for Detecting & Predicting Equipment Failures at the University of Texas Austin – Sarah Kline, HanAra Software; Juan Ontiveros, University of Texas Austin	Advantages of Reciprocating Engines and Boilers for Variable Steam Demand – Ryan Voorhees, CHA Consulting, Inc.; Eduardo Alcorta, INNIO	Plant Operational Challenges Starting Up 1 MW Steam Turbine Generator – Ken Wysocki, Emory University	SMU's Energy and Facilities Management Transformation – Michael Molina, Southern Methodist University; Jason Haddock, Siemens
3:00 pm – 3:30 pm	Value Based Maintenance Program: Increased Equipment Reliability Utilizing Risk Insights – Shafique Khan, Jacobs	Real-Time Hydraulic Modeling – Stanford University Case Study – Dan Arellano, Stanford University; Thomas Lund-Hansen, Reliability Efficiency & Optimization LLC	Innovative Uses of Cooling Tower Discharge Water – Lex LaMotte, LaMotte Water Management	A Best Practice Approach to University Portfolio Energy Strategy – Bo Poats & Fred James, Siemens; David Shaughnessy, University of Maryland
3:30 pm – 3:45 pm	Refreshment Break			
	7A: Diagnostics, System Dynamics, Valves & Faults <i>Churchill A</i> <i>Moderator: Serge Zinger, Thermo Systems</i>	7B: Innovative Central Plants <i>Churchill B</i> <i>Moderator: Terry Waldron, Waldron Engineering & Construction</i>	7C: Dirty Water, System Cleaning & Microbial Control <i>Churchill C</i> <i>Moderator: Dave Nardi, Wiley Wilson</i>	7D: System Expansion, Modernization, Optimization & Renewal <i>Churchill D</i> <i>Moderator: Mark Worthington, Underground Energy</i>

3:45 pm – 4:15 pm	Optimizing Chilled Water Plants with Mixed Energy Assets & Cogeneration Dynamics – <i>John Rundell & Travis Smith, Smith Engineering</i>	Transforming GHG Emissions into Marketable Products: An Update One Year Later – <i>Bruce Ander, Markham District Energy</i>	Dirty Water is Costly! Critical Flushing Requirements for New Building Connections – <i>Russell Buras, Purge Rite LLC</i>	Wild Flow, Concourse Expansion & Other Adventures at Denver International Airport – <i>Haven Cassidy, Denver International Airport; Jeff Easton, Burns & McDonnell</i>
4:15 pm – 4:45 pm	Fault Detection & Diagnostics – Application of Technology to Drive Building Energy Performance – <i>Mitch Lampley, Vanderbilt University</i>	Versatile CHP Plant for Capital Region Medical Center – <i>Gary Farmer, MTU Onsite Energy</i>	Environmental Impact of Online Tube Cleaning Systems – <i>George Mason University – John Gibbemeyer, George Mason University; Michael Richardson, Innovas Technologies</i>	Eastern Michigan University Campus CHP Upgrades – <i>Jack McCormick, Commonwealth Associates</i>
4:45 pm – 5:15 pm	Form & Function, Large Scale CHP in an Urban Environment – <i>Jesse Conklin, BOND; Dominick Roveto, Ellenzweig; Michael Thornton, Vanderweil</i>	Bifurcating a Central Plant for Redundancy and Reliability – <i>Jay Ehrfurth, The Boldt Company; Mark Geronime, MRMC Thermal</i>	Microbiological Control & Considerations of Chilled Water/Thermal Storage Systems – <i>Richard Jacobs, Nalco Water an Ecolab Company</i>	Automated Chiller Plant Demand Control – <i>Adam Vesterholt, NYU Langone Health</i>
5:30 pm – 6:30 pm	Campus Forum Meeting – <i>Churchill A (2nd Floor)</i> A forum for discussion among college and university campus energy personnel (exclusively for end-users).		Business Partner Forum Meeting – <i>Magazine (3rd Floor)</i> A forum for manufacturers/suppliers and service providers and those not directly affiliated with a campus energy system.	

Friday, March 1

7:30 am – 9:00 am	Breakfast and Technical Tour Presentations – <i>St. James (3rd Floor)</i>
9:00 am – 1:00 pm	Technical Tours – <i>Advanced registration required. Tulane University and Enwave New Orleans</i>

Poster Exhibits

Poster #1	Texas Tech University GLEAMM Microgrid Research Facility – Advancing Grid Resiliency & Sustainability – <i>Stephen Bayne & BeiBei Helen Ren, Texas Tech University</i>
Poster #2	District Energy System Re-engineering at Brown: Bottom Up Phasing Approach – <i>Jean-Philippe Drouin-Bouffard, Ecosystem; David Larson, Brown University</i>
Poster #3	Energy Resilience in the Broader University Environment – <i>Kristel Watson, Centrica Business Solutions</i>
Poster #4	District Zero: A Decision-Making Tool for Net-Zero Communities – <i>Peter Ellis, Big Ladder Software</i>

Poster #5	Climate Action Planning and Achieving 30% Reduction at Cooper Union – <i>John Rundell, Smith Engineering</i>
Poster #6	BTU, Mass & Energy FLOW Sub-Metering Solution – <i>James Linahan, Emerson</i>
Poster #7	Two Drivers - Better Than One – <i>James Berry & Richard Garrett McKay, SSS Clutch Company</i>
Poster #8	Broadening the Effectiveness of Heat Recovery Chillers – <i>Joe Witchger, HGA Architects and Engineers</i>