



# IDEA 2021

**Powering the Future: District Energy/CHP/Microgrids**  
 Sept. 27-29 | Austin Convention Center | Austin, Texas

**ALL TIMES ARE IN CENTRAL TIME**

*\*Denotes virtual presentation*

*Preliminary Program 9.15.2021*

**TIMES ARE SUBJECT TO CHANGE**

## Sunday, September 26

11:00 am – 1:00 pm	<b>IDEA Executive Committee Meeting &amp; Luncheon – CLOSED MEETING – Hilton Meeting Room 602</b>
12:00 pm – 4:00 pm	<b>IDEA Board of Directors Meeting &amp; Luncheon – CLOSED MEETING – Hilton Salon J</b>

## Monday, September 27

7:00 am – 7:00 pm	<b>Registration Open – Level 1 Foyer</b>
7:30 am – 8:20 am	<b>Pre-Workshop Breakfast – 9A-C</b> For Workshop attendees only.
8:00 am – 4:00 pm	<b>Exhibit Setup – Exhibit Hall 1</b>
8:30 am – 4:00 pm	<b>Microgrid Workshop – 6A&amp;B</b> Separate registration fee required, see separate program for detailed content.
12:15 pm – 1:15 pm	<b>Workshop Luncheon – 9A-C</b> For Workshop attendees only.
4:00 pm – 5:15 pm	<b>Forums – Open meetings for IDEA members to discuss current industry issues by specialty area.</b> <ul style="list-style-type: none"> <li>• <b>District Cooling Forum – Room 4A-C</b></li> <li>• <b>Campus Energy Forum – Room 10</b></li> <li>• <b>Operations &amp; Safety Forum – Room 7</b></li> <li>• <b>District Energy Women’s Initiative – Room 8B</b></li> </ul>
5:15 pm – 6:30 pm	<b>Exhibit Hall Welcome Reception – Exhibit Hall 1</b> <i>Sponsored by Burns &amp; McDonnell, Chem-Aqua &amp; Siemens Energy</i>
7:00 pm – 9:30 pm	<b>Welcome Dinner &amp; Chair’s Banquet – Hilton Salon HJK – 6<sup>th</sup> Floor (Business or business casual attire)</b> <i>Sponsored by Clearway Community Energy, Eaton, ENGIE, Johnson Controls &amp; Thermo Systems</i> <i>Wine Sponsored by Baker Hughes, ENRGISTX, icetec</i>

## Tuesday, September 28

7:00 am – 7:00 pm	<b>Registration Open – Level 1 Foyer</b>
7:00 am – 7:50 am	<b>Breakfast with Business Partner Exhibitors – Exhibit Hall 1</b> <b>Sponsored by HDR &amp; Rentech Boiler Systems</b>
7:15 am – 7:45 am	<b>Speaker &amp; Moderator Orientation Meeting – Room 5</b> Moderators and Speakers scheduled to present on Tuesday must attend. Coffee and breakfast will be served.
8:00 am – 8:10 am	<b>Conference Opening – Ballroom A</b>
8:10 am – 9:10 am	<p><b>Plenary Panel Discussion 1 – Powering the Future with District Energy/CHP/Microgrids – Ballroom A</b></p> <p>This panel discussion will feature industry innovation, strategies to enhance efficiency and resiliency, and deployment of technologies to reduce carbon emissions and support community environmental targets. District Energy/CHP/Microgrids are a proven approach to provide reliable, efficient energy services to campuses, communities, cities and clusters. What is needed to unlock and accelerated deployment of district energy? Is accounting for carbon the principal metric going forward? As extreme weather events multiply, how will community leaders embrace district energy/CHP/microgrids to support their local economies and keep citizens safe?</p> <p><b>Invited panelists include:</b></p> <ul style="list-style-type: none"> <li>• <b>Justin Carron, Segment Director, Eaton</b></li> <li>• <b>Scott Clark, Vice President, Burns &amp; McDonnell</b></li> <li>• <b>Dan Kelley, Senior Vice President, CenTrio Energy</b></li> <li>• <b>Jim Lodge, President, Clearway Community Energy</b></li> <li>• <b>David Musto, President &amp; CEO, Thermo Systems</b></li> <li>• <b>Juan Ontiveros, Associate Vice President for Utilities and Facilities Management, University of Texas, Austin</b></li> </ul> <p><b>Moderated by: Tim Griffin, RMF Engineering</b></p>
9:15 am – 10:15 am	<p><b>Plenary Panel Discussion 2 – Global Leaders Discuss Industry Innovation &amp; Investment – Ballroom A</b></p> <p>This panel will widen the lens to look at trends and opportunities beyond the US and assume a more global view. What are the emerging industry innovations likely to impact the near future? What strategies are emerging that serve to increase efficiency and increase resiliency? Are new technologies emerging to reduce carbon emissions and support community environmental targets, or is the primary challenge to drive investment in district energy to accelerate scale and increase market share? What policy drivers are working today in Europe, the Middle East and Canada, but are not yet effecting US market conditions?</p> <p><b>Invited panelists include:</b></p> <ul style="list-style-type: none"> <li>• <b>Ahmad Bin Shafar, CEO, Empower</b></li> <li>• <b>Khalid Abdullah Al Marzooqi, CEO, Tabreed</b></li> <li>• <b>Samuel Chatterton, Vice President, Johnson Controls</b></li> <li>• <b>Carlyle Coutinho, President &amp; CEO, Enwave Energy Corp.</b></li> <li>• <b>Krishnan Iyer, President &amp; CEO, Creative Energy</b></li> <li>• <b>Chris Potter, Director of Utilities and Power Plant Operations, Architect of the Capitol</b></li> <li>• <b>Michael Schack, Group Director Operational Marketing, Engie</b></li> </ul> <p><b>Moderated by: Rob Thornton, IDEA</b></p>

10:00 am – 1:30 pm	<b>Spouse/Guest Program – Austin Way Out Food Tour</b>			
10:15 am – 11:00 am	<b>Refreshment Break with Business Partner Exhibitors – Exhibit Hall 1</b> <i>Sponsored by Affiliated Engineers &amp; CenTrio</i>			
	<b>1A – Campus Systems &amp; CHP</b> <i>Ballroom C</i> <i>Moderator: Joan Kowal, NextEra Energy</i>	<b>1B – Energy in Texas Symposium</b> <i>Room 6</i> <i>Moderator: Jim Riley, Texas A&amp;M University</i>	<b>1C – District Cooling</b> <i>Room 9</i> <i>Moderator: Ayman Fahmy, Kerr Wood Leidal</i>	<b>1D – Thermal Distribution &amp; Thermal Energy Storage</b> <i>Room 10</i> <i>Moderator: Guy Frankenfield, DN Tanks</i>
11:00 am – 11:30 am	<b>Utility Procurement Solutions from District Cooling</b> – <i>Seth Kraal and Craig McCurley, Jacobs; James Parker, Austin Energy</i>	<b>Challenges and Lessons Learned from the Austin Energy Downtown Plant</b> – <i>Imane Mrini, and Michele Bryant, Austin Energy; John Makar and Mark Mikulin, EEA Consulting Engineers</i>	<b>No Lockdown for Customer Comfort – How Empower Delivered During Covid!</b> – <i>Samer Khoudeir, Empower</i>	<b>Energy Storage for Microgrids: Benefits and Options*</b> – <i>John Andrepont, The Cool Solutions Company</i>
11:30 am – 12:00 pm	<b>Resiliency, Sustainability and Efficiency – CHP and Distributed Energy Resources in a New Era of Value and Opportunity</b> – <i>Saverio Grosso, Edison Energy</i>	<b>Case Study: Austin Energy - Austin Community College Chiller Plant</b> – <i>Curtis Williams, Jacobs; James Matlock and Whitney Moyer, Austin Energy</i>	<b>The Impact of Brand and Communications on Performance</b> – <i>Souad Jamal Al Serkal, Tabreed</i>	<b>Using Aerial Thermal IR Imaging to Monitor Underground Piping in District Heating and Cooling Systems</b> – <i>Greg Stockton, AITscan, a Division of Stockton Infrared</i>
12:00 pm – 1:30 pm	<b>IDEA Networking &amp; Recognition Luncheon – Ballroom A</b> <i>Sponsored by Johnson Controls &amp; Thermo Systems</i>			
1:30 pm – 2:15 pm	<b>Dessert and Coffee with Business Partner Exhibitors – Exhibit Hall 1</b> <i>Sponsored by Salas O'Brien</i>			
	<b>2A – Decarbonizing with District Energy</b> <i>Ballroom C</i> <i>Moderator: Paul Zmick, University of Virginia</i>	<b>2B – Geothermal District Energy</b> <i>Room 6</i> <i>Moderator: Carol Denning, Center for Sustainable Energy</i>	<b>2C – Master Planning &amp; Future Proofing</b> <i>Room 9</i> <i>Moderator: Bob Smith, RMF Engineering</i>	<b>2D – Modernizing and Renewal in Canada</b> <i>Room 10</i> <i>Moderator: Patti Wilson, Affiliated Engineers</i> <i>*presentations delivered virtually</i>
2:15 pm – 2:45 pm	<b>Decarbonized and Reliable Power for Data Centers</b> – <i>Robert Bouwens, Siemens Energy</i>	<b>Clean District Thermal Energy System Master Planning – A Case Study on System Considerations*</b> – <i>Brendan Hall, Mitch DeWein, CHA Consulting, Inc.</i>	<b>Condition Assessment, Planning, and Continued Opportunity</b> – <i>David Goetz, Burns &amp; McDonnell; Mason Miller, Ashley Energy, LLC</i>	<b>From Explosion to Renovation – The 10 Year Journey to Project Initiation in Ottawa*</b> – <i>Tomasz Smetny-Sowa, ESAP; Jim Manson, FVB; Joseph Marra, Engie</i>
2:45 pm – 3:15 pm	<b>The Art of Heat Pump Chillers</b> – <i>Rajesh Dixit, Johnson Controls; Ayman Fahmy, Kerr Wood Liedal</i>	<b>Utilizing Lake Water Geothermal Cooling for Garlock's Process Needs*</b> – <i>Michael Masny, CHA</i>	<b>How Digital Twin Will Transform Chilled Water Systems: A Case Study on How Good is Getting in</b>	

		<i>Consulting, Inc.; Andrew Geoghan, Garlock Sealing Technologies</i>	<b>the Way of Great</b> – <i>Vanessa Freidberg, Siemens Energy Inc.</i>	
3:15 pm – 3:45 pm	<b>Innovative Decarbonization in Downtown Vancouver*</b> – <i>Kieran McConnell, Creative Energy</i>	<b>Multi-Source Heat Pump System for Large-Scale Applications</b> – <i>Gaylord Olson, Seasonal Storage Technologies; Yao Yu, North Dakota State University</i>	<b>LEED/Sustainability Update</b> – <i>Tim Griffin, RMF Engineering</i>	<b>Exceptional Design and Environmental Excellence: Modernizing a District Energy System in Canada*</b> – <i>Don Grant, ESAP; Tomasz Smetny-Sowa, ESAP</i>
3:45 pm – 4:15 pm	<b>Refreshment Break with Business Partner Exhibitors</b> – <i>Exhibit Hall 1</i> <b>Sponsored by Austin Energy &amp; CHA Consulting</b>			
4:15 pm – 5:15 pm	<b>Meet the Experts Roundtables</b> <b>Panelists include:</b> <ul style="list-style-type: none"> <li>• <i>Malcolm Harkness, Director, Development, Clearway Community Energy</i></li> <li>• <i>Justin Carron, Global Segment Director, Eaton</i></li> <li>• <i>John Givens, Campus Energy Investments Developer, ENGIE</i></li> <li>• <i>Rajesh Dixit, Director - Global Product Management (Building Technologies &amp; Solutions), Johnson Controls</i></li> <li>• <i>Kevin Porter, Account Executive, Thermo Systems</i></li> </ul> <b>Moderated by Scott Szycher, IDEA Membership Manager</b>			
5:15 pm – 6:45 pm	<b>Reception with Business Partner Exhibitors</b> – <i>Exhibit Hall 1</i> <b>Young Professionals Group (YPG) Meet Up</b> <b>Virtual Happy Hour</b> <b>Sponsored by Jacobs, Solar Turbines &amp; Trane</b>			
6:45 pm	<b>Open Evening</b> – Enjoy an open evening to explore Austin, TX and experience the city on your own.			

## Wednesday, September 29

7:00 am – 5:00 pm	<b>Registration Open</b> – <i>Level 1 Foyer</i>			
7:00 am – 7:50 am	<b>Breakfast with Business Partner Exhibitors</b> – <i>Exhibit Hall 1</i> <b>Sponsored by Rexnord &amp; Suez Water Technologies &amp; Solutions</b>			
7:15 am – 7:45 am	<b>Speaker &amp; Moderator Orientation Meeting</b> – <i>Room 5</i> Moderators and speakers scheduled to present on Wednesday must attend. Coffee and breakfast will be served.			
	<b>3A – Water Treatment</b> <i>Ballroom C</i> <b>Moderator: Bob Salvatelli, Sustainable Water</b>	<b>3B – Future Fuels</b> <i>Room 6</i> <b>Moderator: Lalit Agarwal, University of Nebraska, Lincoln</b>	<b>3C – System Expansion, Modernization &amp; Optimization</b> <i>Room 9</i> <b>Moderator: Paul Zmick, University of Virginia</b>	<b>3D – Tools &amp; Technologies</b> <i>Room 10</i> <b>Moderator: Tim Griffin, RMF Engineering</b>

8:00 am – 8:30 am	<b>Using Electrochlorination Systems to Produce Stabilized Bromine for Cooling Tower Disinfection Applications</b> – Andrew Boal, De Nora Water Technologies	<b>Hydrogen - Fueled CHP</b> – Kurt Koenig and Daniel Foulds, HDR	<b>Is Bigger Always Better? Evaluating Central vs. Distributed Generation in System Expansions</b> – Jeffrey Johnson, Epsilon Industries Inc.; David Goetz, Burns & McDonnell	<b>Optimizing District Energy with Analytics Software</b> – Celeste Cizik, Group14 Engineering; and Michael O'Malley, Xcel Energy
8:30 am – 9:00 am	<b>Impact of Water Treatment on University Sustainability Initiatives</b> – Marc Lind, Nalco Water	<b>Using Hydrogen-Fueled Gas Engine Generators to Reduce the Carbon Footprint of District Energy Power Plants and Systems</b> – Christian Mueller, INNIO Jenbacher	<b>The New Modular: Breaking the “Chiller in A Box” Stereotype</b> – Zack Taylor and Tom Brady, Stellar Energy; Jason Beiter, JE Dunn Construction	<b>An Innovative Software Tool for Non-technical Users to Identify Business Opportunities for District Energy and Community Microgrids*</b> – Gavin Dillingham, Houston Advanced Research Center
9:15 am – 9:45 am	<b>Biofilm Monitoring in Chilled Water Systems</b> – James Gleason, Suez	<b>Deep Decarbonization of CHP using Hydrogen as a Fuel</b> – Douglas Willham, Siemens Energy Inc.	<b>UTSA Plant Rebuild: Performing Open Heart Surgery While the Patient’s Still Awake</b> – Jesse Cabrera and Tarek Tousson, Stanley Consultants; Rene Colunga, The University of Texas at San Antonio	<b>Modernizing and Decarbonizing Within the Confines of a Century-Old Plant</b> – Matt Linder and Joe Witchger, HGA; Michael Burns, Ever-Green Energy
9:45 am – 10:15 am	<b>Environmental Footprint Benefits from Boiler Water Treatments Improvements</b> – Richard Salazar, SUEZ Water Technologies and Solutions	<b>Hydrogen-Capable Gas Turbines for Carbon Neutral Power Generation</b> – Wes Harris, Siemens Energy, Inc.		<b>Green Energy Burning Blue</b> – Janet Reiser, Hydrogen Technologies
10:15 am – 11:00 am	<b>Refreshment Break with Business Partner Exhibitors – Exhibit Hall 1 Sponsored by NextEra Energy Resources</b>			
	<b>4A – Controls, Monitoring, Metering, and Data Management</b> Ballroom C Moderator: Serge Zinger, Thermo Systems	<b>4B – CHP &amp; Waste Heat District Energy</b> Room 6 Moderator: Michael Burns, Ever-Green Energy	<b>4C – System Expansion, Modernization &amp; Optimization, Cont’d</b> Room 9 Moderator: Roger Copeland, Jacobs Engineering	<b>4D – District Energy Modernization &amp; Innovation</b> Room 10 Moderator: Chase Dube, UT Austin *presentations delivered virtually
11:00 am – 11:30 am	<b>CHP and Building Chilled Water and Steam Energy Monitoring Lessons Learned*</b> – John Beaudry, Jacobs	<b>CHP Case Study and the Roadmap to Hydrogen</b> – Roberto Garcia, Baker Hughes	<b>Bronx Zoo - Single-Pipe Hydronic Distribution &amp; Waste Heat Recovery Improvements</b> – Kevin Duffy, Ramboll	<b>The Potential for Development of District Cooling Networks: A Case Study in Paris (France)*</b> – Remi Patureau, Efficacity

11:30 am – 12:00 pm	<b>SCADA Modernization for Increased Resiliency and Operational Awareness*</b> – Kyle Campbell, RoviSys	<b>District Energy System Fueled by Industrial Waste Heat*</b> – Ankur Mehrotra, HCE Energy Inc.; Richard Allen, Hamilton Chamber of Commerce	<b>Oil-free Turbo Compressor Technology in Symbiosis District Energy Systems</b> – Drew Turner, Danfoss	<b>District-Scale Geexchange Fields*</b> – Ruben Arellano, Associated Engineering
12:00 pm – 12:30 pm	<b>Migrating Obsolete, Proprietary Generator Controls to Improve Ease of Support and Reliability</b> – Jack Overly, RoviSys	<b>Large Scale Heat Extraction from Facebook to Local District Heating Network, Odense Denmark*</b> – Jens Hansen, Ramboll	<b>The WaterHub® – Risk Mitigation Through Decentralized Water Reclamation and Reuse</b> – Bob Salvatelli, Sustainable Water Juan Ontiveros, University of Texas at Austin	<b>Princeton Resilient Campus - Defining the Future of Energy with a Resilient, Carbon-Neutral Campus*</b> – Chris Davidson, Siemens Smart Infrastructure; Xiaofan Wu, Siemens
12:30 pm – 2:00 pm	<b>IDEA Annual Business Meeting and Recognition Luncheon</b> – Ballroom A <i>Sponsored by Clearway Community Energy, Eaton, ENGIE</i>			
2:00 pm – 2:45 pm	<b>Dessert and Coffee Networking Break with Business Partner Exhibitors</b> – Exhibit Hall 1 <i>Sponsored by Siemens Smart Infrastructure</i> Raffle prizes to be awarded, must be present to win.			
2:45 pm – 5:30 pm	<b>Exhibit Hall Tear Down</b> – Exhibit Hall			
	<b>5A – Chilled Water Systems</b> Ballroom C Moderator: Tom Parker, Burns & McDonnell	<b>5B – System Planning &amp; Operations: Post-COVID</b> Room 6 Moderator: Rajesh Dixit, Johnson Controls	<b>5C – Operations, Monitoring &amp; Maintenance</b> Room 9 Moderator: Tim Peer, BOND	<b>5D – District Energy Modernization &amp; Innovation, Cont'd</b> Room 10 Moderator: Chase Davis, RMF Engineering <small>*presentations delivered virtually</small>
2:45 pm – 3:15 pm	<b>Connecting the Dots – How the University of Denver Is Building a New District System by Networking Local CHW Plants</b> – Chris Sanchez, Burns & McDonnell; Lynn Bailey, University of Denver	<b>Post COVID Utility Master Planning for a Medical District (TECO)</b> – Bradley Shuffield, Burns & McDonnell; Michael Manoucheri, TECO	<b>New Approaches to Solids Removal and Filtration - A Modular Approach for Variable Flow Rates</b> – Jim Phene, Epiphene, Incorporated	<b>Optimized Control of a Hybrid Variable Primary, Primary-Secondary Flow Chilled Water System*</b> – Rory Peters, Ever-Green Energy; Tyler Peterson, Novaspect
3:15 pm – 3:45 pm	<b>2000-ton Electric Chiller Significantly Reduced RED Rochester's Carbon Footprint*</b> – Ryan Voorhees, CHA Consulting, Inc.; Craig Avalone, RED-Rochester, LLC	<b>Clean Air Strategies for Mitigating Airborne Infection in Buildings</b> – Jon Douglas, Johnson Controls	<b>How Energy Harvesting is Key to Unlocking True Value of Steam Trap Monitoring</b> – Rafael Reyes, Everactive	<b>District Energy and Wastewater Heat Recovery*</b> – Aaron McCartie, Associated Engineering
3:45 pm – 4:15 pm	<b>Refreshment Break</b> – Foyer			

4:15 pm – 5:15 pm	<p><b>Closing Panel Discussion – District Energy: Where Do We Go From Here? – Ballroom A</b></p> <p>Looking ahead to 2030 and beyond, how will district energy evolve to support local economies, deliver energy efficiency and reduce carbon emissions? What technologies will help to accelerate the energy transition? How will public and private actors converge or collaborate to drive innovation? What are the areas of uncertainty or policy impediments that demand collective focus and action? How can IDEA members actually “power the future”?</p> <p>Invited panelists include:</p> <ul style="list-style-type: none"> <li>• <b>Lalit Agarwal, Executive Director, University Operations, University of Nebraska – Lincoln</b></li> <li>• <b>Brian Mueller, Chief Development Officer, Vicinity Energy</b></li> <li>• <b>Mark Spurr, Principal, FVB Energy</b></li> <li>• <b>Paul Zmick, Director, UVA Energy &amp; Utilities, University of Virginia</b></li> </ul> <p><b>Moderated by: Gordon Judd, Clearway Community Energy</b></p>
5:15 pm – 6:00 pm	<b>Virtual Happy Hour</b>

### Thursday, September 30

7:30 am – 8:50 am	<b>Breakfast Briefing with Pre-Tour Overview Presentations – Convention Center Room 9</b>
9:00 am – 1:00 pm	<p><b>Technical Tours of Host District Energy Systems – University of Texas at Austin and Austin Energy</b></p> <p><i>Advanced registration required. Availability may be limited.</i></p>
9:00 am – 4:00 pm	<p><b>District Energy/CHP Master Class – Juan Ontiveros, UT Austin – Convention Center Room 9</b></p> <p><b>Including technical tour of UT Austin</b></p> <p><b>Sponsored by: HanAra Software, Jacobs, Optimum Energy, Burns &amp; McDonnell, and CB&amp;I Storage Solutions</b></p>