

PANEL 3 SESSION SCHEDULE
(FINAL)

Panel 3: Commercial Buildings: Technologies, Design, Operations, and Building Industry Trends		
	LEAD AUTHOR/ORGANIZATION	TITLE
Mon 8/13	Session 1 8:30 am - 10:00 am HVAC Controls: the Solution to All Your Grid and Resource Needs	Aditya Keskar, University of Michigan <i>Experimental Investigation of the Additional Energy Consumed by Building HVAC Systems Providing Grid Ancillary Services</i>
		Ed Smyth <i>Sustainable Quality 3: Beyond Widgets for Optimizing RTU Portfolio Performance</i>
		Katherine Wang, Energy Solutions <i>Market Characterization Study of VRF Controls for Automated Demand Response</i>
	Session 2 10:30 am - 12:00 pm Smooth Operator: Technology to Keep Buildings in Line	Jessica Granderson, Lawrence Berkeley National Laboratory <i>Commercial Fault Detection and Diagnostics Tools: What They Offer, How They Differ, and What's Still Needed</i>
		Jennifer Chiodo, Cx Associates <i>Driverless Buildings: Harnessing Software for Uber Deep Savings</i>
		Bryce Dvorak, Michaels Energy <i>The E Doesn't Stand for Easy: EIS in the Real World</i>
Tues 8/14	Session 1 8:30 am - 10:00 am Asilomar's Greatest Session: Unrelated but Incredible Topics	Yin Ma, ERS <i>How to Keep Phantoms from Coming Back as Zombies</i>
		Robert Fares, American Association for the Advancement of Science <i>Improving Characterization of Miscellaneous Energy Loads in Energy Demand Models</i>
		Eva Urbatsch, Bonneville Power Administration <i>How *You* Doing: A More Granular Analysis of Predictive Performance of Simulation Models in Commercial Buildings</i>
	Session 2 10:30 am - 12:00 pm Revenge of the Nerds: From Data to Solution	David Baylon, Ecotope, Inc. <i>Commercial Building Energy Performance in the Pacific Northwest, 1980 to 2010</i>
		Katie Lewis, U.S. Energy Information Administration <i>Comparison of Energy Data for Green-certified and Non-certified Buildings in the 2012 Commercial Buildings Energy Consumption Survey (CBECS)</i>
		Craig Roussac, Buildings Alive Ltd. <i>For Building Operators, What Difference Does a Target Make?</i>

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		LEAD AUTHOR/ORGANIZATION	TITLE
Wed 8/15	Session 1 8:30 am - 10:00 am Mullets and "the Rachel": Retrofits are Still Cool	Ruth Taylor, Pacific Northwest National Laboratory	<i>Installation and Configuration: the Key First Step to Delivering Promised Savings from Connected Lighting Systems</i>
		Matthias Haase, SINTEF Building and Infrastructure	<i>Deep Energy Retrofitting of European Shopping Malls</i>
		Jim Kelsey, kW Engineering	<i>Developing ASHRAE's First Standard for Commercial Energy Audits Or; "How I Spent My Summer Vacation(s)"</i>
	Session 2 10:30 am - 12:00 pm The Elephant in the Program: Dealing with the Very Energy Intensive	Mike Christianson, Energy 350	<i>Indoor Cannabis Growing – Taming the Wild West</i>
		Heidi Fuchs, Lawrence Berkeley National Laboratory	<i>Characteristics and Energy Use of Volume Servers in the U.S.</i>
		Neil Wittberg, Go Sustainable Energy	<i>The Boy in the Bubble: Abundant Caution Causing Excessive Waste in Hospitals</i>
Thurs 8/16	Session 1 8:30 am - 10:00 am DOAs, RTUs, and VAVs: More than just TLAs	Christy Love, RDH Building Engineering	<i>Dedicated Outside Air Systems for Small Commercial Buildings: Significant Savings Potential in an Underserved Market Segment</i>
		Jerine Ahmed, Southern California Edison	<i>CAT on a Hot Tin Roof: Getting Climate Appropriate Technologies onto Rooftops in Hot Dry Climates</i>
		Josh Weissert, Energy 350	<i>Advanced RTU Controls - Opening Up a New Retrofit Market</i>
	Session 2 10:30 am - 12:00 pm Getting HVAC'y with it: Cutting Edge Technologies	David Roe, LiquidCool Solutions	<i>Liquid-cooled Server Technology that Dramatically Reduces Electricity in Building-connected Data Centers and Enables 95% Waste Heat Reuse</i>
		Greg Cunniff, Taco, Inc.	<i>Early HVAC System Modeling and Efficiency Comparison Tool Using the New Building Energy Efficiency Ratio (BEER)</i>
		Cameron Kinney, ERS	<i>Tuning Up Your Steam Trap Assessment Program</i>

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Fri 8/17	Session 1 8:30 am - 10:00 am The Ewoks of EE: How Small Spaces can Perform against the Big Guys	Anthony Fryer, State of Minnesota	<i>The Future is Bright: Novel Approaches for Finding Small Commercial Sector Energy Savings</i>
		Sudeshna Pabi, Electric Power Research Institute	<i>Control Upgrades to Enable Energy Efficiency in Small and Medium Commercial Buildings</i>
		Gwelen Paliaga, TRC Energy Services	<i>Current Practice for Design and Control of High Thermal Mass Radiant Cooling Systems, and Opportunities for Future Improvements</i>
	Session 2 10:30 am - 12:00 pm Not the Evil Empire: Large Buildings are Your Friends	Sean Brennan, Urban Green Council	<i>Comparing Central and Modular HVAC Systems in NYC</i>
		Jim Paull, ERS	<i>Optimizing the Use of Smart Windows and BIPV towards Achieving Net-zero in High-rise Buildings</i>
		Chad Worth, Energy Solutions	<i>A Cannonball of Opportunity: The Hidden Savings Potential from Large Commercial Pools</i>