

2015 EPIC Innovation Symposium: Schedule and Room Assignments

December 3, 2015

Lake Natoma Inn, 702 Gold Lake Drive, Folsom, CA 95630

09:00-09:15 Opening Plenary Session. Room: Sutter

Speakers: Maria Sotero, CPUC and Laurie ten Hope, Energy Commission

09:15-10:45 Session A

<p style="text-align: center;">Session 1A: Energy Efficiency in Existing Buildings. Room: Sutter</p> <p>Chair: Adel Suleiman, Energy Commission</p> <p>Discussants:</p> <ul style="list-style-type: none"> • Commissioner Andrew McAllister, Energy Commission • Lisa Baker, Yolo County Housing Authority • Joseph Oldham, San Joaquin Valley Clean Transportation Center <p>Projects:</p> <ol style="list-style-type: none"> 1. Michael Siminovich. UC Davis California Lighting Technology Center (CLTC). <i>From the laboratory to the California marketplace: A New Generation of LED Lighting Solutions</i> 2. Ramachandran Narayanamurthy. EPRI. <i>Climate appropriate HVAC Systems for Commercial Buildings to Reduce Energy Use and Demand.</i> 3. Edward Arens. UCB. <i>Very Low Cost MEMS Based Ultrasonic Anemometer for use in HVAC Ducts.</i> 4. Sharmila Ravula. Robert Bosch, LLC. <i>A Renewable Based Direct Current Building-Scale Microgrid.</i> 	<p style="text-align: center;">Session 2A: Bioenergy and High Fire Risk Areas. Room: Sierra 1</p> <p>Chair: Gina Barkalow, Energy Commission</p> <p>Discussants:</p> <ul style="list-style-type: none"> • Kim Carr, CalFire • Claire Jahns, CA Nat. Resources • Megha Lakhchaura, CPUC <p>Projects:</p> <ol style="list-style-type: none"> 1. Matt Hart. West Biofuels LLC. <i>Modular Biomass Power Systems to Facilitate Forest Fuel Reduction Treatment.</i> 2. Angie Lottes. <i>The Watershed Research and Training Center. North Fork Community Power Forest Bioenergy Facility Demonstration.</i> 3. Thomas Del Monte. Interra Energy, Inc. <i>Interra Reciprocating Reactor for Low-Cost and Carbon Negative Bioenergy.</i> 4. Camille Swezy. Sierra Institute for Community and Environment. <i>Advancing Biomass Combined Heat and Power Technology to Support Rural California, the Environment, and the Electrical Grid.</i> 5. Vincent McDonell. UC Irvine. <i>Pollution Control and Power Generation for Low Quality Renewable Fuel Streams.</i> 6. Ross Buckenham. ABEC #4, LLC. <i>Db a CE&S Dairy Biogas. Dairy Renewable Combined Heat and Power Project.</i> 	<p style="text-align: center;">Session 3A: Real-time Data Analytics for System Operations. Room: Sierra 2</p> <p>Chair: Merwin Brown, CIEE</p> <p style="text-align: center;">Moderated Discussion led by Chair</p> <p>Projects:</p> <ol style="list-style-type: none"> 1. Yvette Oldham, SDG&E. <i>Data Analytics in Support of Advanced Planning and System Operations</i> 2. Tom Martin, PG&E. <i>Grid Operations Situational Intelligence (GOSI) - Real-time Data Visualization.</i> 3. Neal Bartek. SDG&E. <i>Borrego Springs – A Renewable-Based Community Microgrid</i>
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10:45-11:00 Break

2015 EPIC Innovation Symposium: Schedule and Room Assignments (Continued)

11:00-12:30. Session B

<p>Session 1B: Energy Efficiency in New Buildings. Room: Sutter Chair: David Hungerford, Energy Commission Discussants:</p> <ul style="list-style-type: none"> • George Koertzen, Habitat for Humanity San Joaquin County • Brandon De Young, De Young Properties <p>Projects:</p> <ol style="list-style-type: none"> 1. Ronnen Levinson. LBNL. <i>Solar-Reflective "Cool" Walls: Benefits, Technologies, and Implementation.</i> 2. Jonathan Slack. LBNL. <i>Comparing Attic Approaches for Zero Net Energy Homes.</i> 3. Robert Hammon. BIRA Energy, Inc. <i>Cost- and Energy-Efficient Attic Designs for CA Homes.</i> 4. Ammi Amarnath. EPRI. <i>Development and Testing of the Next Generation Residential Space Conditioning System for California</i> 5. Rich Brown. LBNL. <i>Direct Current as an Integrating and Enabling Platform.</i> 	<p>Session 2B: Distributed Energy Future. Room: Sierra 1 Chair: Linda Spiegel, Energy Commission Discussants:</p> <ul style="list-style-type: none"> • Frances Cleveland, Xanthus Consulting International • Peter Klauer, California ISO <p>Projects:</p> <ol style="list-style-type: none"> 1. Tom Tansy. Sunspec Alliance. <i>Smart Inverter Interoperability Standards and Open Testing Framework to Support High-Penetration Distributed Photovoltaics and Storage.</i> 2. Walter Johnson. EPRI. <i>Assessing the Ability of Smart Inverters and Smart Consumer Devices to Enable More Residential Solar Energy.</i> 3. Janie Page. LBNL. <i>Demonstration of Integrated Photovoltaic Systems and Smart Inverter Functionality Utilizing Advanced Distribution Sensors.</i> 4. Ryan Wartena. Growing Energy Labs, Inc. <i>College of San Mateo Internet of Energy.</i> 5. Bruce Rich. Chabot-Las Positas Community College District. <i>Las Positas Community College Microgrid</i> 6. Alfredo Martinez-Morales. <i>UC Riverside. Demonstration of Community Scale Generation System at the Chemehuevi Community Center.</i> 	<p>Session 3B: Data-Driven Asset Management. Room: Sierra 2 Chair: Andy Coleman, EPRI</p> <p style="text-align: center;">Moderated Discussion led by Chair</p> <p>Projects:</p> <ol style="list-style-type: none"> 1. Austen D. Lima. SCE. <i>Outage Management and Customer Voltage Data Analytics.</i> 2. John Carruthers. PG&E. <i>System Tool for Asset Risk (STAR).</i> 3. Rajit Gadh. UCLA. <i>Demonstration of PEV Smart Charging to Support Grid Operational Needs</i>
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12:30-1:30 Lunch Break

2015 EPIC Innovation Symposium: Schedule and Room Assignments (Continued)

1:30-3:00. Session C

<p>Session 1C: Energy Efficiency in Agriculture and Water Sectors. Room: Sutter Chair: Michael Lozano, Energy Commission Discussants:</p> <ul style="list-style-type: none"> • Carolyn Cook, CA Department of Food and Agriculture • Rob Neenan, California League of Food Processors <p>Projects:</p> <ol style="list-style-type: none"> 1. Olivier Jerphagnon. PowWow Energy, Inc. <i>Irrigation Optimization and Well Pump Monitoring to Reduce Energy and Water Consumption.</i> 2. Chris Terrell. Wexus Technologies. <i>Wexus Energy and Water Management Mobile Software for the Agricultural Industry.</i> 3. Erik Desormeaux. Porifera. <i>Water and Energy Savings Utilizing Innovative Forward Osmosis Systems for Irrigation and Indirect Potable Reuse.</i> 4. Onder Caliskaner. Kennedy Jenks Consultants. <i>Raw Wastewater Filtration to Increase Organic Removal Efficiency and Achieve Significant Electrical Savings.</i> 5. Sadrul Ula. UC Riverside. <i>Bringing Energy Efficiency Solutions to California's Water Sector with the use of Customized Energy Management System and Supervisory Control and Data Acquisition System.</i> 6. John Maulbetsch. Maulbetsch Consulting. <i>Evaluation of Cost, Performance and Water Conserving Capability of Hybrid Cooling.</i> 	<p>Session 2C: Renewable Generation and Advanced Energy Storage. Room: Sierra 1 Chair: Mike Sokol, Energy Commission Discussants:</p> <ul style="list-style-type: none"> • Jim Blatchford, California ISO • Erik Desrosiers, ARPA-e <p>Projects:</p> <ol style="list-style-type: none"> 1. Stephan Barsun. Itron, Inc.. <i>Improving Solar & Load Forecasts: Reducing the Operational Uncertainty Behind the Duck Chart.</i> 2. Carlos Coimbra. UC San Diego. <i>High-Fidelity Solar Power Forecasting Systems for the 392 MW Ivanpah Solar Plant (CSP) and the 250 MW California Valley Solar Ranch (PV).</i> 3. Case P. van Dam. UC Davis. <i>Improving Short-Term Wind Power Forecasting through Measurements and Modeling of the Tehachapi Wind Resource Area.</i> 4. Steve Eneedy. Geysers Power Company, LLC. <i>Investigating Flexible Generation Capabilities at the Geysers.</i> 5. Parker Wells. UC Los Angeles. <i>Low-Cost Thermal Energy Storage for Dispatchable CSP.</i> 6. Philippe Bouchard. EOS Energy Storage, LLC. <i>Utility Demonstration of Znyth™ Battery Technology to Characterize Performance and Grid Benefits.</i> 	<p>Session 3C: Advancements in Systems Architecture. Room: Sierra 2 Chair: Walt Johnson, EPRI</p> <p style="text-align: center;">Moderated Discussion led by Chair</p> <p>Projects:</p> <ol style="list-style-type: none"> 1. Bryan Pham. SCE. <i>Substation Automation 3 Phase 3 Demonstration.</i> 2. Hilal Katmale. SDG&E. <i>Monitoring, Communication, and Control Infrastructure for Power System Modernization</i> 3. Sunil Chhaya. EPRI. <i>Distribution System Aware Vehicle to Grid Services for Improved Grid Stability and Reliability.</i>
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3:00-3:30 Closing Plenary. Room: Sutter.

Speakers: Kevin Barker, Energy Commission and JR DeLaRosa, California Natural Resources Agency

3:30-4:30 Post-Symposium Workshop: How to Apply to EPIC. Room: Sutter