Electric Utilities Attending EUEC
Includes senior management & technical experts from Generating Companies attending & speaking at EUEC

AES
ALLETE
Alliant Energy Corporation
Alstom Power
Ameren Corporation
American Electric Power
American Municipal Power, Inc.
Arizona Public Service Company
Associated Electric Cooperative, Inc.
Basin Electric Power Cooperation
Big Rivers Electric
Buckeye Power
Burbank Water & Power
Calpine Corporation
Carbon Creek Energy
Central Iowa Power Cooperative
Central Minnesota Municipal Power Agency
City Water Light and Power
Clarke Public Utilities
Cleco Corporation
Con Edison
Consumers Energy
Deseret Power
Dominion Generation
DTE Energy
Duke Energy
Dynegy
East Kentucky Power Cooperative
Electricité de France
Empire District Electric Company
Entergy Services
Eversource Energy
Exelon Power
Florida Power & Light Company
GDF Suez
Guam Public Utilities Commission
Hoosier Energy
Idaho Power Company
Independence Power & Light
Intermountain Power Service Corporation
Kansas City Board of Public Utilities
Kansas City Power & Light
Korea Electric Power Corporation
KU Energy, LLC
LG&E
Lower Colorado River Authority
Luminant
Madison Gas & Electric
Michigan South Central Power Agency

MidAmerican Energy Company
Minnesota Power
Minnkota Power Cooperative, Inc.
Montana-Dakota Utilities Company
Muscatine Power and Water
Nebraska Public Power District
Newmont Nevada Energy Investment
NextEra Energy
NiSource
Northern Indiana Public Service Co. (NIPSCO)
Northern Star Generation
NorthWestern Energy
Nova Scotia Power
NRECA
NRG Energy
NV Energy
ODEC
Oklahoma Gas & Electric Company
Old Dominion Electric Cooperative
Omaha Public Power District
Orange Grove Energy
Pacific Gas & Electric
PCPS Energy
Portland General Electric
PPL EnergyPlus LLC
PPL Montana LLC
PSE
Raven Power
Rochester Public Utilities
Rodan Energy Solutions Inc.
Rural Electric
Sacramento Municipal Utility District
Salt River Project
SAN DIEGO GAS AND ELECTRIC
Santee Cooper
SCANA
Schneider Electric
Sempra US Gas and Power
Southern California Edison
Southern Company
Southern Power Company
Sunflower Electric Power Corporation
Tennessee Valley Authority
Texas Municipal Power Agency
Tri-State Generation and Transmission
Tucson Electric Power
Vectren Corp.
Westar Energy
Western Farmers Electric Cooperative

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What is EUEC?

EUEC2016: The 19th Annual Energy, Utility & Environment Conference, is USA’s largest professional networking & educational event of its kind, to be held February 3 to 5, 2016, at the San Diego Convention Center, San Diego, CA, with 2,000 delegates, 400 speakers and 200 exhibits.

HISTORY: The first EUEC conference was held in 1995 in Tempe, Arizona. 17 annual EUEC conferences were held in Arizona until 2014, and then moved to San Diego in 2015.

REGISTRATION COST INCLUDES:

- Admission to any of the 400+ presentations in 10 track rooms
- 13 food and beverage tickets ($300 value)
- 8 networking breaks & meals served in exhibit halls
- Flash Drive containing 400 presentations with audio ($495 value)
- Free spouse registration and welcome reception (495 value)
Tuesday | Feb. 2nd
7:00 am - 7:00 pm Registration
12:00 pm - 6:00 pm Exhibit Set-up
5:00 pm - 7:00 pm Welcome Reception

Wednesday | Feb. 3rd
7:00 am - 7:00 pm Registration
12 pm - 7:00 pm Exhibits Open
9:00 am - 12:00 pm Plenary Session
12:00 pm - 1:00 pm Networking Lunch 1
1:00 pm - 3:00 pm Tech Session 1
3:00 pm - 3:30 pm Networking Break 2
3:30 pm - 5:30 pm Tech Session 2
5:00 pm - 7:00 pm Networking Reception 3

Thursday | Feb. 4th
7:00 am - 7:00 pm Exhibits Open
7:30 am - 9:30 am Tech Session 3
9:30 am - 10:00 am Networking Break 4
10:00 am - 12:00 pm Tech Session 4
12:00 pm - 1:00 pm Networking Lunch 5
1:00 pm - 3:00 pm Tech Session 5
3:00 pm - 3:30 pm Networking Break 6
3:30 pm - 5:30 pm Tech Session 6
5:00 pm - 7:00 pm Networking Reception 7

Friday | Feb. 5th
7:00 am - 12:00 pm Exhibits Open
7:30 am - 9:30 am Tech Session 7
9:30 am - 10:00 am Networking Break 8
10:00 am - 12:00 pm Tech Session 8
12:00 pm - 4:00 pm Exhibit Tear Down

ALL 8 NETWORKING EVENTS ARE HELD IN EXHIBIT HALL

Mission Statement
EUEC facilitates information exchange and fosters cooperation between industry, government, regulators, academia and stake-holders for the protection of our environment and energy security.
<table>
<thead>
<tr>
<th>Track</th>
<th>A</th>
<th>B</th>
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</tr>
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<tbody>
<tr>
<td></td>
<td>Sessions</td>
<td>AIR POLICY &amp; REGS</td>
<td>CEMS &amp; AIR QUALITY</td>
<td>MERCURY CONTROL</td>
<td>ENERGY POLICY &amp; SECURITY</td>
<td>CONTROL TECHNOLOGIES</td>
<td>RENEWABLE ENERGY</td>
<td>OPERATIONS &amp; MGMT</td>
<td>CLIMATE, ELG &amp; CCS</td>
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<td>1:00PM to 3:00PM</td>
<td>Regulatory Update</td>
<td>CEMS &amp; Air Quality</td>
<td>Hg Control Demonstrations</td>
<td>Energy Policy &amp; Security</td>
<td>Control Tech.</td>
<td>Renewable Energy Markets</td>
<td>Decommissioning of Power Plants</td>
<td>Climate Change &amp; GHG</td>
<td>Wastewater Mgmt.</td>
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<td>3:30PM to 5:30PM</td>
<td>CCP - Clean Power Plan</td>
<td>CEMS &amp; MATS</td>
<td>Activated Carbon - Hg</td>
<td>Sustainability Projects &amp; Data</td>
<td>ESP &amp; PM</td>
<td>Waste to Energy</td>
<td>Compliance Strategies &amp; Plant Conversions</td>
<td>Post COP21 &amp; Inventories</td>
<td>Water &amp; Electric Utilities</td>
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<tr>
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<td>7:30AM to 9:30AM</td>
<td>NAAQS</td>
<td>EPA Regulatory Update</td>
<td>Hg Control Technologies</td>
<td>Transmission &amp; Distribution</td>
<td>SO2, SO3 &amp; Additives - DSI</td>
<td>Renewable Development Analysis</td>
<td>Power Plant &amp; Boiler Optimization</td>
<td>ELG - Utility Perspective</td>
<td>316b</td>
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<td>NSR</td>
<td>PM, CEMS</td>
<td>DSI &amp; Activated Carbon</td>
<td>Smart Grid &amp; Micro Grid</td>
<td>SO2, SO3 &amp; Additives - WFGD</td>
<td>Renewable Project Development</td>
<td>EHS &amp; EMIS</td>
<td>CCR &amp; ELG Compliance Mgmt</td>
<td>FGD Wastewater - ZLD</td>
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<td>Next Gen. Compliance Strategies</td>
<td>Modeling - 1hour So2</td>
<td>Hg MATS Compliance</td>
<td>Energy &amp; Environment</td>
<td>NOx CONTROL</td>
<td>Solar &amp; Wind</td>
<td>EHS &amp; Risk Mgmt.</td>
<td>CCR &amp; ELG</td>
<td>FGD Wastewater</td>
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<td>111(D)- CPP Compliance</td>
<td>Modeling</td>
<td>Hg Control Tech</td>
<td>Energy Efficiency</td>
<td>SCR</td>
<td>Solar &amp; PV</td>
<td>Operations &amp; Optimization</td>
<td>Coal Ash &amp; FGD</td>
<td>316(b), ELG, Wastewater</td>
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<td>7:30AM to 9:30AM</td>
<td>Permits &amp; Compliance</td>
<td>Monitoring Testing &amp; HCL</td>
<td>Young Power Professionals</td>
<td>Natural Gas</td>
<td>Remediation</td>
<td>Community Solar</td>
<td>Operations &amp; Mgmt.</td>
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<td>Water Sustainability</td>
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<td>Permitting, Air Policy &amp; Regulations</td>
<td>Air Quality - Fenceline Monitoring</td>
<td>Distributed Generation</td>
<td>Compliance Tech &amp; Strategies</td>
<td>Renewable Energy &amp; Geothermal</td>
<td>Operations &amp; Mgmt.</td>
<td>CCS II</td>
<td>Water Supply &amp; Security</td>
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</tbody>
</table>

Preliminary Program - Subject to Change
### A1. REGULATORY UPDATE

**A1.1 ELECTRIC GENERATOR REGULATORY UPDATE**
Co-chair - John Kinsman, Sr. Director - Environment, Edison Electric Institute

**A1.2 VIEW FROM THE CLEAN POWER PLAN TRENCH**
Co-chair - Jay Holloway, Partner, Sutherland, Asbill & Brennan LLP

**A1.3 NEW DEVELOPMENTS IN STATE ENERGY POLICY**
John Finnigan, Lead Counsel, Environmental Defense Fund

**A1.4 A MINNESOTA UTILITY OUTLOOK ON CLEAN POWER PLAN REQUIREMENTS**
Michael Cashin, Environmental Policy Advisor, Minnesota Power (ALLETE)

**A1.5 HOW EPA MADE A MUCKERY OF THE GUIDELINE ON AIR QUALITY MODELS**
Gale Hoffnage, Senior Vice President, TRC Companies, Inc.

**A1.6 ENVIRONMENTAL DISPATCH: THE NEW PARADIGM?**
Block Andrews, Associate Environmental Engineer, Burns & McDonnell; Mike Borgstadt

### A2. CPP - CLEAN POWER PLAN

**A2.1 WORKING TOWARD THE BEST STATE PLAN UNDER EPA’S NEW CLEAN POWER PLAN**
Co-chair - Eric Hiser, Partner, Jorden Bischoff & Hiser, PLC

**A2.2 THE CLEAN POWER PLAN: TOWARD IMPLEMENTATION AND COMPLIANCE**
Co-chair - Marc Chupka, Principal, The Brattle Group

**A2.3 THE “NEW” CLEAN POWER PLAN**
William Campbell, Principal Engineer, Environmental Consulting and Technology

**A2.4 CPP LITIGATION: EPA REGULATION OF GHGS UNDER THE CLEAN AIR ACT**
Allison Wood, Partner, Hunton & Williams LLP

**A2.5 IMPACTS OF CPP POLICY SCENARIOS ON FOSSIL FUEL WHOLESALE POWER MARKETS**
Phillip Graeter, Associate, Energy Ventures Analysis

**A2.6 EXPECTED EFFECTS OF THE CLEAN POWER PLAN**
Walter Wooten, Director of Sales, Energy & Utilities, 360factors, Inc.; Randall Rosengarten

### A3. NAAQS

**A3.1 PROBABILISTIC & SOURCE CHARACTERIZATION TECHNIQUES IN AERMOD COMPLIANCE**
Session Sponsor & Co-chair - Sergio Guerra, CPP, Inc.; Ron Petersen

**A3.2 2016: A YEAR OF INTENSIVE ACTIVITY FOR SO2 NAAQS IMPLEMENTATION**
Robert Paine, Associate VP, AECOM; David Heinold, Mary Kaplan & Bob Iwanchuk

**A3.3 SO2 NAAQS DESIGNATIONS & IMPLEMENTATION OF THE DATA REQUIREMENTS RULE**
Joe Hammond, Principal Consultant, Trinity Consultants

**A3.4 REDEFINING AQ REGULATION TO ADDRESS HEALTH RISKS FROM CLIMATE CHANGE**
Sonja Sax, Senior Environmental Health Scientist, Ramboll Environ

**A3.5 THE NEW OZONE NAAQS: ISSUES AND IMPLICATIONS**
Richard Hamel, Senior Project Manager, Environmental Resources Management (ERM)

**A3.6 UNPACKING THE REVISED OZONE NAAQS**
Session Sponsor & Co-chair - Brian O’Neal, Air Permitting Manager, Black & Veatch

### A4. NSR

**A4.1 NSR 2016 - THE CHALLENGE CONTINUES**
Co-chair - Ken Weiss, Managing Partner-Global Power Service, ERM

**A4.2 RECENT DEVELOPMENTS IN NSR SETTLEMENTS & CONSENT DECREES IMPLEMENTATION**
Jay Holloway, Partner, Sutherland, Asbill & Brennan LLP

**A4.3 THE UTILITY NEW SOURCE REVIEW ENFORCEMENT INITIATIVE**
Co-chair - Makram Jaber, Partner, Hunton & Williams LLP

**A4.4 EPA MODELING GUIDANCE CHANGES: IMPORTANT UPDATES FOR NSR PERMITTING**
Robert Iwanchuk, Program Manager, AECOM; Mary Kaplan & Robert Paine

**A4.5 NSR REFORM IMPLEMENTATION CHALLENGES**
Gurinder Saini, Sr. Environmental Engineer, RTP Environmental Assoc. Inc.; Thomas Emmel

**A4.6 OZONE IMPACT ANALYSIS IN PSD PERMITTING**
Lary Moon, Principal, Zephyr Environmental Corporation

### A5. NEXT GEN. COMPLIANCE STRATEGIES

**A5.1 COMPLIANCE WITH THE CLEAN POWER PLAN**
Sponsor & Co-chair - Mack McGuffey, Partner, Troutman Sanders; Randy Brogdon

**A5.2 MATS - WHAT'S NEXT AFTER MICHIGAN V. EPA?**
Stephanie Sebor, Associate Attorney, Winston & Strawn LLP

**A5.3 ECONOMIC IMPACT ON U.S. REFINING INDUSTRY OF CAA & GHG CONTROLS**
Bill Smilling, Attorney, The Law Office of C., William Smilling, PC

**A5.4 WHAT EPA’S “NEXT GEN” COMPLIANCE INITIATIVE MEANS FOR THE POWER SECTOR**
Alexandra Bromer, Counsel, Perkins Coie LLP

**A5.5 NEXT GENERATION COMPLIANCE AND THE CITIZEN SCIENTIST**
Co-chair - David Elam, Principal, TRC Companies, Inc.

**A5.6 THE ROLE OF UTILITIES IN STATE PLAN DEVELOPMENT**
Maureen Gannon, Executive Director-Environmental Services, PNM Resources

### A6. 111(D): CPP COMPLIANCE

**A6.1 POTENTIAL FOR TRACKING & TRADING ENERGY EFFICIENCY UNDER THE CPP**
Co-chair – Kate Wilson, Senior Associate, Cadmus; David Sumi

**A6.2 CARBON CAPTURE & UTILIZATION - STRATEGIES FOR CPP COMPLIANCE**
Erin Heitkamp, Global Sustainability Practice Leader, Wencor Assoc.; Patrick Ahmed, Algenol

**A6.3 HEAT RATE IMPROVEMENT DEMONSTRATION AND CO-BENEFITS**
Sterling Gray, Business Dev. Mgr., AECOM; Kevin O’Boyle & Gus Shearer, ARVOS Inc.

**A6.4 CONTROLLING SLAG & FOULING AS A COMPLIANCE STRATEGY FOR EPA’S CPP**
Ian Saratovsky, Fuel Tech, Inc.; Kent W Schulz, Chris R Smyrnios & Emil P Rivera

**A6.5 RATE VS. MASS: INSIGHTS FROM EPRI’S STATE-LEVEL ANALYSES OF THE CPP**
Victor Neimeyer, Senior Technical Executive, EPRI; David Young & John Bistline, EPRI

**A6.6 THE CLEAN POWER PLAN – STATE AND REGIONAL PERSPECTIVES**
Scott Osbourn, Partner, ERM, Inc.; Mike Kennedy, Duke Energy Florida

**A6.7 COAL BENEFICIATION TO MEET CLEAN POWER PLAN EFFICIENCY TARGETS**
Co-chair - Keith Moore, President, CastellLight Energy Corp
A7. PERMITS & COMPLIANCE
A7.1 PERMITTING CHALLENGES FOR A COMBINED CYCLE COMBUSTION TURBINE
Dwain Kincaid, Senior Env. Consultant, Air Quality Services, LLC
A7.2 COMPLIANCE WITH PERMITS DOES NOT PREVENT CIVIL SUITS UNDER STATE LAW
Co-chair - Michael McMenus, Senior Process Specialist, Kiewit Engineering & Design Co.
A7.3 NEW OEHHA TOXICS GUIDELINES, EFFECTS ON AB2588, AND PERMITTING
Gregory Wolfe, Principal, Yorke Engineering, LLC; Judith Yorke
A7.4 BOILER MACT IMPLEMENTATION – RECORDKEEPING AND DATA MANAGEMENT
Karin Greenacre, Senior Project Manager, TRC Companies, Inc.
A7.5 CITIZEN SCIENCE CAMPAIGN: SPOT THE SMOKE
Shawn Dolan, President, Virtual Technology, LLC; Randi Ryan, Sustainable Skys
A7.6 THE CCR RULE AND CORRECTIVE ACTION: PLAN NOW TO SAVE LATER
Co-chair - Katie Bland, Senior Enviro. Engineer, Burns & McDonnell; John Hesemann

A8. PERMITTING, AIR POLICY & REGULATIONS
A8.1 YOUR PROPOSED SIMPLE- OR COMBINED-CYCLE FACILITY AIR PERMIT
Co-chair - Mary Hauner-Davis, Manager - Air/Noise, Burns & McDonnell; Minda Nelson
A8.2 PERMITTING - MORE THAN PSD AND NPDES PERMITS...
Joseph Takats, Environmental Consultant, WorleyParsons Group Ltd; Jack Senthivel
A8.3 REVIEW OF GHG BACT DETERMINATIONS FOR GAS TURBINES
Co-chair - George Lipka, Consulting Engineer, Tetra Tech, Inc.
A8.4 GREENHOUSE GAS CHALLENGES FOR NEW GAS TURBINE-BASED PLANTS
Terrance Unrein, Associate Manager, Luminate, LLC
A8.5 COMPARISON US/EU REGULATIONS ON AIR POLLUTANTS FROM LARGE FOSSIL FUEL POWER PLANTS
Eric Joos, Expert, Electricité de France (EDF)
A8.6 HEALTH IMPACT ASSESSMENT - TOOL FOR MANAGING PROJECT’S NON-TECHNICAL RISK
Scott Weaver, Partner, ERM; Sharon Quiring CIH & Kristina Mitchell

B1. CEMS & AIR QUALITY
B1.1 FIELD EVALUATION OF AN FTIR CEMS AGAINST PS-15, PS-18 AND PROCEDURE 6
Steve Gibbons, Business Development Manager, ABB Inc.; Jim Peeler, Emission Monitoring
B1.2 COMPARISON OF NO2 MONITORING AND MODELING CONCENTRATIONS FOR CTS
Salahuddin Mohammad, Senior Engineer, Golder Associates Inc.; Kennard F. Kosky
B1.3 EMISSIONS MONITORING BEST MGMT PRACTICES: IS YOUR SYSTEM A CADILLAC OR A VW?
Co-chair - Matthew DeSorbo, Senior Project Manager, Tetra Tech, Inc.; Lynn Gresock
B1.4 MULTI MODULE BAGHOUSE LEAK DETECTOR IMPLEMENTATION
Co-chair - John Brown, PCME Sales Manager, Altech PCME
B1.5 EPA PROTOCOL GAS ACCURACY & TRACEABILITY
Albert Guitjens, U.S. Market Segment Manager - Automotive & Power Generation
Air Liquide America Specialty Gases, LLC

B2. CEMS & HG
B2.1 MATERIALS SELECTION ON CONTINUOUS EMISSIONS MONITORING OF REACTIVE GASES
Roberto Bosco, Principal Applications Engineer, MKS Instruments, Inc.; Peter Zemek
B2.2 A CHEMILUMINESCENCE NOX ANALYZER WITH A DIFFERENCE
Co-chair - Steve Gibbons, Business Development Manager, ABB Inc.
B2.3 RELIABLE HG EMISSIONS MEASUREMENTS: CEMS, PROCESS ANALYZERS, & PEMS
Co-chair - Sharon Sjostrom, CPO, ADA-ES; C. Senior, E. Zipp, C. Wilson & D. Montano
B2.4 SUCCESSFUL MATS CEMS UPGRADE CASE STUDY AT A CITY OF FREMONT UNIT #8
Brian Petermann, Sega, Inc.; Thomas, Teledyne ML; Nielsen, Fagen; Boothe, City of Fremont
B2.5 PORTABLE MERCURY EMISSIONS MONITORING
Alvin Chua, International Sales Manager, Nippon Instruments Corporation

B3. EPA REGULATORY UPDATE
B3.1 EGRID2012 - NEW DATA, RENEWED FOCUS
Travis Johnson, Environmental Protection Specialist, U.S. EPA; Jeremy Schreibels, US EPA
B3.2 MATS ECMS REPORTING UPDATE
Charles R. Fushour II, Clean Air Markets Division, U.S. EPA
B3.3 IMPLEMENTING U.S EPA’S 316(B) RULE
Sean Ramach, Environmental Scientist, U.S. Environmental Protection Agency
B3.4 COMPLIANCE TRAINING
Ben Shegal, Air Resources Board
### B4. PM, CEMS

**B4.1 DIGITAL OPACITY SUCCESS STORIES**  
Shawn Dolan, President, Virtual Technology, LLC; Scot Hicks

**B4.2 PM10/2.5 EMISSIONS FROM GAS-FIRED BOILERS & HEATERS**  
Co-chair - Glenn England, Ramboll Environ; Astin & Benson, Woods Cross; Croghan, Montrose

**B4.3 QUARTERLY PM TESTING: UPGRADEING TO PM CEMS**  
John Brown, PCME Sales Manager, Altech PCME

**B4.4 PM CEMS VS PM CPMS**  
Co-chair - Robert Baxter, President, B3 Systems, Inc.

**B4.5 COMPLIANCE STRATEGY FOR USING PM MONITORS AS A CPMS**  
Rick Krenzke, Project Director, TRC Companies, Inc.

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### B5. MODELING & 1-HOUR SO2

**B5.1 STRATEGIES TO DEAL W/ MONITORED EXCEEDANCES WHEN AERMOD CAN'T BE USED**  
Co-chair - Ron Petersen, Vice President, CPP, Inc.

**B5.2 1-HOUR SO2 AREA DESIGNATION IN THE VICINITY OF A COAL-FIRED POWER PLANT**  
Salahuddin Mohammad, Senior Engineer, Golder Associates Inc.; Kennard F. Kosky

**B5.3 SO2 1-HOUR DESIGNATION MODELING – WHY DO YOUR OWN?**  
George Schewe, Principal Consultant & Meteorologist, Trinity Consultants

**B5.4 1-HOUR SO2 COMPLIANCE CHALLENGES**  
Co-chair - Jeffrey Hanson, Senior Manager - Environmental Services, Alliant Energy Corp

**B5.5 MODELING EMISSION RATES OF SO2 FOR AREA DESIGNATIONS FOR 1-HR SO2**  
Moha Parikh, Project Manager, CH2M; Don Caniparoli

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### B6. MODELING

**B6.1 REVISIONS TO THE TIER-2 AND TIER-3 NO2 MODELING REFINEMENTS**  
Richard Hamel, Partner, Environmental Resources Management; Mark Garrison

**B6.2 SOURCE CHARACTERIZATION REFINEMENTS FOR DISPERSION MODELING APPS**  
Co-chair - Robert Paine, Associate Vice President, AECOM; Mary Kaplan

**B6.3 SINGLE-SOURCE PHOTOCHEM. MODELING FOR PSD PERMITTING FOR OZONE & PM**  
Co-chair - Krish Vijayaraghavan, Ramboll Environ; Ralph Morris

**B6.4 EXPERIENCE WITH THE SCICHEM MODEL**  
Jason Reed, Meteorologist, SLR Intl. Corp.; Bruce Macdonald & Matt Porter

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### B7. MONITORING, TESTING & HCL

**B7.1 PREDICTIVE EMISSIONS MONITORING (PEMS) THE NEXT GENERATION**  
Co-chair - David Triebel, President, Durag Group; Richard Hovan

**B7.2 CASE STUDIES OF MERCURY SORBENT TRAP SAMPLING AT COAL-FIRED BOILERS**  
Daniel Todd, President, Air Quality Services, LLC

**B7.3 EMISSION TESTING ISSUES AND INNOVATIONS**  
Co-chair - Kevin Crosby, VP-Technical, Montrose Air Quality Services, LLC

**B7.4 A COST/BENEFIT ANALYSIS OF HCL CEMS**  
Ed Burgher, Air Quality Measurement Consultant, Tiger Optics; Lisa Bergson & Yu Chen

**B7.5 MEASURING HCL USING HOT/WET EXTRACTIVE FTIR CEMS**  
Jim Cornish, Sales & Support Manager, Gasmet Technologies

**B7.6 PEOPLE-SPECIFIC HEALTH ASSESSMENT & CHARACTERIZATION BY INDOOR AQ**  
Jae Reul Seo, Professor, Korea University; Wanchul Oh, Wachee Chi, Nana Jang

### B8. AIR QUALITY - FENCELINE MONITORING

**B8.1 CONSIDERATIONS FOR SUCCESSFULLY DEPLOYING REAL-TIME PHOTOMETRIC SYSTEMS FOR FENCELINE MONITORING**  
Co-chair - Robert Anderson, TSI Inc.; Scott Norman, Tim Johnson

**B8.2 DEMONSTRATION OF WORLD'S MOST COMPREHENSIVE FENCELINE MONITORING NETWORK USING OPEN-PATH FTIR**  
Matthew McCormick, IMACC, LLC; Ralph Brewer, Robert Specly & Troy Boley

**B8.3 DESIGNING AND IMPLEMENTING PERIMETER AIR MONITORING PROGRAMS**  
Co-chair - Melissa McLaughlin, Project Manager, AECOM; Leo Gendron, AECOM

**B8.4 AIR QUALITY CONSIDERATIONS FOR POWER PLANT SITING AND DEVELOPMENT**  
Karin Fickerson, Program Director, ERM

**B8.5 OPTICAL TECHNOLOGY FOR TRACKING TURBULENCE, VISIBILITY & HAZARDOUS WIND**  
James Shinkle, Optical Scientific; Dr. Ting-i Wang, Sung Kim & Donn Williams
C1. HG CONTROL DEMONSTRATIONS
C1.1 WET SCRUBBER ADDITIVE EVALUATION FOR THE GIBBONS CREEK POWER STATION
Philip Flowers, Project Manager, Texas Municipal Power Agency (TMPA)

C1.2 NEW FULL-SCALE RESULTS ON GORE™ MERCURY CONTROL SYSTEM
Co-chair - Jeff Kolde, Product Specialist, W.L. Gore; Casarino, DeGarbolevski & Knotts

C1.3 ADVANCED MERCURY CONTROL TECH. COMMISSIONING & DEMONSTRATION
Nicholas Lentz, Field Technical Mgr., ME2C; John Pavlish, Marcus Sylvester & James Trettel

C1.4 WHEN MERCURY RE-EMISSION ISN'T
Co-chair - Steven Feeney, Product Line Mgr., Babcock & Wilcox; Joe Stuart, Sulfide Systems, LLC

C1.5 HG RE-EMISSION CONTROL—NEW, SIMPLE, LOW-COST APPROACH DEMONSTRATED
Joe Stuart, President, Sulfide Systems, LLC

C2. ACTIVATED CARBON - HG
C2.1 IMPACTS OF DSI ON ACI FOR MERCURY CONTROL
Sponsor & Co-chair - Richard Mimna, Sr. R&D Associate, Calgon Carbon Corporation

C2.2 ACTIVATED CARBON OVERVIEW WITH SAFE HANDLING PRACTICES
Sponsor & Co-chair - Joe Wong; Robert Huston, Sr. Director - Technical Svcs., ADA-CS

C2.3 MERCURY REMOVAL PERFORMANCE WITH NON-TRADITIONALSORBENTS
Conner Cox, Strategic Project Manager, United Conveyor Corporation; Jon Norman

C2.4 MERCURY ADSORPTION OF ACTIVATED CARBON WITH SIMULATED GAS CONDITION
Sang-Sup Lee, Associate Professor, Chungbuk National University

C2.5 POWDERED ACTIVATED CARBON FOR THE REMOVAL OF HG IN WFGD WASTEWATER
Erica Gonzaga, Engineer, Carbonxt; David Mazyck, Christine Valcarce & Regina Rodriguez

C3. HG CONTROL TECHNOLOGIES
C3.1 DRY SCRUBBER ADDITIVE FACILITATES MERCURY EMISSION COMPLIANCE
Co-chair - Tommy Chen, Lead Chemist, Nalco; Keiser, Yuan, Denny, Showalter & Carson

C3.2 ULTRA ADVANCED AMENDED-SILICATES FOR HG CONTROL IN COLD-SIDE ESPS
Thomas Gale, Director of Tech. Development, Novinda; James R. Butz & Cliff H. Brown

C3.3 FINDING A SOLUTION TO PAC INDUCED SDA SCALING
Co-chair - Jon Miller, Technology Manager - Mercury Control, Albermarle Corp.

C3.4 FABRIC FILTERS FOR EFFICIENT AND SUSTAINED MERCURY REDUCTION
Tim Trimble, Managing Director, TTG Inc.; Eduardo Torres, Dan Mcbride & Xinfei Yu

C4. DSI & ACTIVATED CARBON
C4.1 BALANCE OF PLANT EFFECTS FROM LARGE DSI SYSTEMS
Clifton Brown Jr., VP Applied Engineering, Novinda Corp.; James Butz

C4.2 OPERATIONAL COST SAVINGS WITH NEW DSI/ACI TECHNOLOGIES
Michael Thiel, Regional Sales Manager, Novinda Systems; Mitch Lund

C4.3 REDUCING REAGENT & SORBENT COSTS FOR HG & PARTICULATE MATTER CONTROL
Co-chair - Constance Senior, PhD, VP, ADA-ES; D. Young, S. Sjostrom & D. Bertelson

C4.4 TECH. TO MITIGATE THE IMPACT OF ACTIVATED CARBON INJECTION ON AQ
Rafic Minkara, PhD, PE, Vice President, Headwaters Incorporated

C4.5 POWDERED ACTIVATED CARBON INJECTION RESULTING IN IMPROVED DISPERSION
Sponsor & Co-chair - Regina Rodriguez, Carbon Specialist, Carbonxt; David Mazyck, PhD, Christine Valcarce, PhD & Erica Gonzaga

C5. HG MATS COMPLIANCE
C5.1 PLANT OPERATIONAL EXPERIENCE USING AMENDED SILICATES FOR HG CONTROL
Clifton Brown Jr., VP Applied Engineering, Novinda Corp.; James Butz

DURAG
C5.2 PS-12A COMPLIANCE HGCEMS WITHOUT CALIBRATION GENERATORS
Co-chair - Richard Hovan, Director - Environmental Division, Durag Group

C5.3 REDUCING THE COST OF MERCURY CONTROL AND IMPROVING PLANT OPERATIONS
Session Sponsor & Co-chair - Constance Senior, PhD, VP, ADA-ES; S. Sjostrom & Wilson

C5.4 MINIMIZING COSTS & LOST GENERATION FROM MATS WORK PRACTICE STANDARDS
Peter J. Spinney, Director, Markets & Technology, NeuCo, Inc.

C6. HG CONTROL TECHNOLOGIES
C6.1 MERCURY MONITORING AND TESTING FOR PERFORMANCE EVALUATION
Co-chair - Steve Baloga, VP Environmental Services, Novinda

C6.2 REDUCING OPERATING COSTS AND RISKS OF HG CONTROL WITH FUEL ADDITIVES
Co-chair - Scott Tertuhne, VP, ADA-ES; D. Young, S. Sjostrom, C. Senior & S. Meinhardt

C6.3 PROCESS-INTEGRATED TECH. FOR HG ABATEMENT IN THE CEMENT INDUSTRY
Holger Reinhold, Process Engineer, Scheuch GmbH; Andreas Gangl

C6.4 PAC AND SORBENT HANDLING FOR MERCURY CONTROL
Mitch Lund, Technical Engineer, Nol-Tec Systems
## C7. YOUNG POWER PROFESSIONAL

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C7.1</td>
<td>ARE YOU A RAINMAKER? CAREER ADVICE FOR THE YOUNG POWER PROFESSIONAL</td>
<td>Priscilla Kissinger, Special Projects Manager, Carbonxt</td>
</tr>
<tr>
<td>C7.2</td>
<td>GROWING AS A LEADER</td>
<td>David Mazyck, PhD, CEO, Carbonxt</td>
</tr>
<tr>
<td>C7.3</td>
<td>VERSATILITY &amp; ADAPTABILITY TO GROW YOUR CAREER</td>
<td>Rick Sparrow, President, Lathrop-Trotter Company</td>
</tr>
<tr>
<td>C7.4</td>
<td>THE IMPORTANCE OF INVOLVEMENT WITH INDUSTRY AGENCIES</td>
<td>Jerry Purvis, Director of Environmental Affairs, East Kentucky Power</td>
</tr>
<tr>
<td>C7.5</td>
<td>THE VALUE OF SEEKING OUT UNTRADITIONAL APPROACHES</td>
<td>Conner Cox, Strategic Project Manager, United Conveyor Corporation</td>
</tr>
</tbody>
</table>

### Q&A

Panel Members:
- Desmond Wheatley, CEO, Envision Solar
- Stephen Slocomb, Principal, Epsilon Associates
- Joachim Gloschat, Senior Intelligence & Security Analyst, Gannett Fleming
- Richard Knox, Regulatory Compliance Specialist, Amec Foster Wheeler
Thursday | February 4 | 10AM - 12PM
Submit Abstract

D4. SMART GRID & MICROW GRID
D4.1 MICROGRID – DESCRIPTION OF INSTALLATIONS AND OPERATING EXPERIENCE
Co-chair - Uwe Schmiemann, Marketing & Strategy Mgr., Solar Turbines International

D4.2 MICROGRID DEVELOPMENT - REGULATORY AND LEGAL CONSIDERATIONS
Will DuBois, Partner, Venable LLP

D4.3 SUCCESSFUL MICROGRID IMPLEMENTATION
Session Sponsor & Co-chair - Lucas Oehlerking, Microgrid Solution Lead, Black & Veatch

D4.4 DISTRIBUTED INTELLIGENCE: CHANGING THE CALCULUS FOR SMART GRID INVESTMENT
Tim Wolf, Director of Marketing, Itron Inc.

D4.5 NANO-GRIDS; FUTURE POWER GRIDS - STATE OF THE ART
Adel El Shahat, Assistant Professor, Georgia Southern University; Allen E. Paulson

Thursday | February 4 | 1PM - 3PM
Submit Abstract

D5. ENERGY & ENVIRONMENT
D5.1 FUNDING SUSTAINABILITY FOR SUSTAINABLE OUTCOMES
Co-chair - Doug Smith, CEO - Founder, Village Green Global Inc.; Helen Hannah

D5.2 UTILITY INCENTIVES: DOS AND DON'TS FOR PROJECTS DEVELOPERS
Riccard Chude, Project Manager, Southern California Edison

D5.3 SUSTAINABILITY PROJECTS, SURVEY AND OUTCOMES AT NEW YORK UNIVERSITY
Co-chair - Bapanaiah Penugonda, Associate Professor, NYU College of Dentistry

D5.4 HOW TO ATTRACT WALL STREET INVESTORS TO FINANCE ALTERNATIVE ENERGY
Nadia Miller, Founder, MILLER, CTA

D5.5 BOOM OR Bust: RENEWABLE FUELS MARKETS IN 2016
Jordan Godwin, Biofuels Analyst, Platts

D5.6 MERG EU ENERGY & ENV. POLICY TO ACHIEVE ENERGY INDEPENDENCE FROM RUSSIA
Nadya Zhukova, Student, Burns School of Real Estate & Construction Management

Thursday | February 4 | 3:30PM - 5:50PM
Submit Abstract

D6. ENERGY EFFICIENCY
D6.1 ELECTRONIC UTILITY INVOICING HELPS TO TACKLE ENERGY USE
Co-chair - Lori Herrick, Energy Management Administrator, City of Virginia Beach

D6.2 TABLETS & MOBILE GIS TO SAVE MONEY & TIME ON AERIAL RAPTOR NEST SURVEYS
Matt Alexander, Vice President, Anatum Field Solutions

D6.3 FUNDING LARGE SCALE, RESIDENTIAL TREE PLANTINGS + TECHNOLOGY = ENERGY CONSERVATION FOR EVERYONE!
Co-chair - Kristen Bousquet, Business Development Manager, Arbor Day Foundation

D6.4 VIRTUALIZE ENERGY FUNCTIONS & PROCESSES INTO A CLOUD BASED MODEL
Mark Hauenstein, Managing Partner, UC-Won

D6.5 CPP COMPLIANCE AND REDUCING SYSTEM CONGESTION THROUGH DEPLOYED EE
Robert Neumann, Associate Director, Navigant Consulting; Amanvir Chahal

Submit Abstract

D7. NATURAL GAS
D7.1 FRAC FREE NATURAL GAS - CONSUMERS DO HAVE A CHOICE
Co-chair - Tom Fitzsimmons, President, Carbon Creek Energy; John Harpole, Mercator Energy

D7.2 SMALL SCALE LNG FOR DISTRIBUTED GENERATION – “DOES IT MAKE CENTS”?
Michael Nicoloro, Sr. VP - Energy Services; Sanborn, Head & Associates; Joan Fontaine

D7.3 METHANE REGS IN COLORADO: BUSINESS RISK EXPOSURE FOR NATURAL GAS USERS
Co-chair - Carolyn Dunmire, Senior Project Manager, Ecosphere Environmental Services

D7.4 COMBINED CYCLE SITE LICENSABILITY ANALYSIS: FATAL FLAWS & CRITICAL ISSUES
David Shotts, Partner, ERM; Tom Wickstrom

D7.5 ADDING DUAL-FUEL CAPABILITY AT EXISTING COMBUSTION TURBINE POWER PLANTS
Michael Keller, Senior Project Manager, TRC Companies, Inc.

D8. DISTRIBUTED GENERATION
D8.1 REACHING NET ZERO AND WWTPS
Paul Hughes, North America Representative, ElectroTherm; Rob Emrich

D8.2 CONSOLIDATION IN THE DISTRIBUTED GENERATION MARKET
Co-chair - Edwin Feo, Chief Operating Officer/Founder, Coronal Group LLC

D8.3 EVALUATING BUSINESS CASE FOR UTILITY-OWNED DISTRIBUTED GENERATION ASSETS
Session Sponsor & Co-chair - Ayaj Kazarabada, Proj. Mgr., Black & Veatch; Ed. H. Overcast

D8.4 MOBILE AND MODULAR GAS TURBINE POWER PLANT SOLUTIONS SUPPORTING DISTRIBUTED POWER - CASE STUDIES
Dalia El Tawy, Program Manager, Solar Turbines Incorporated

D8.5 NET METERING & MARKET FEEDBACK: THE IMPACT OF RETAIL RATE DESIGN ON DISTRIBUTED PV DEPLOYMENT
Naim Darghouth, Lawrence Berkeley National Lab; R. Wiser, G. Barbose & A. Mills

D8.6 DISTRIBUTED STATE ESTIMATION FOR SMART GRIDS
Awaiz Riaz, Graduate Student, Georgia Institute of Technology; A P Meliopoulos

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Friday | February 5 | 7:30AM - 9:30AM
Submit Abstract

Friday | February 5 | 10AM - 12PM
Submit Abstract

Friday | February 5 | 1PM - 3PM
Submit Abstract

Friday | February 5 | 3:30PM - 5:30PM
Submit Abstract

Friday | February 5 | 7:30AM - 9:30AM
Submit Abstract

Friday | February 5 | 10AM - 12PM
Submit Abstract

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## E1. CONTROL TECHNOLOGIES

**E1.1 BEST PRACTICES FOR HANDLING SODIUM SORBENTS**  
Sponsor & Co-chair - Cornelia Cretu-Vasiliu, SOLVAir Natural Solv.; Atwell, Wood & Riccio

**E1.2 REMOTE MONITORING USING HYPERSONIC IMAGING**  
Dr. Robert Kester, CTO, Rebellion Photonics; Nathan Hagan, PhD

**E1.3 AUTOGR Solutions for Commercial, Industrial & Institutional Properties**  
Laurie Wiegand-Jackson, Senior Vice President, IPKeys Power Partners

**E1.4 IT MEETS OT**  
Phil Carroll, Vice President, Finley Engineering Company, Inc.

**E1.5 THE HEART OF THE MATTER - PULVERIZER OPTIMIZATION**  
Co-chair - Paul Garnham, VP LES - USA, Loesche Energy Systems; Dr. Simon Mutzenich

**E1.6 ROBOTICS PROCESS AUTOMATION WITHIN UTILITY PROCESSES**  
Charming Shah, Global BPO Practice, Capgemini

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## E2. ESP & PM

**E2.1 IMPACTS OF REAGENT INJECTION ON FLY ASH RESISTIVITY AND ESP PERFORMANCE**  
Robert Mastropietro, Vice President of Technology, Nol-Tec Systems

**E2.2 HIGH FREQUENCY ENERGIZATION IN INTERMITTENT ENERGIZATION MODE**  
Hardik Shah, Engineer, SE; M. Chambers, SE; G. Grecco, ACA; D. Boll & N. Pellech, Ameren

**E2.3 OPTIMIZING CONTINUOUS WATER WASHING IN WET ESPS WITH PILOT PLANT TESTING**  
Co-chair - Anthony Silva, Advisory Engineer, Babcock & Wilcox; Al Moretti & Chung-Yi Liu

**E2.4 FGD WASTE WATER HANDLING WITH A FOCUS ON MERCURY AND SELENIUM**  
Co-chair - Dave Murphy, Business Development – Waste Water, STEAG SCR-Tech Inc.

**E2.5 WIND BARRIER TYPE DUST CONTROL FOR OPEN STORAGE PILES**  
David Gilroy, Sales Manager, Dust Solutions Inc.

**E2.6 EMC CASE STUDIES - REDUCTION OF PM’S BY THE USE OF THE UNIQUE EM**  
Rod Gravley, Technology Director, Tri-Mer Corporation

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## E3. SO2, SO3 & ADDITIVES - DSI

**E3.1 IMPROVED SO2 CAPTURE WITH HYDRATED LIME DSI**  
Co-chair - Pat Mongoven, Business Development Manager, Mississippi Lime; Curt Biehn

**E3.2 ADVANCES IN AMMONIA BASED DESULFURIZATION**  
Stein Carlsen, Sr. Sales Manager, Jiangnan Environmental Technology, Inc.; Peter Lu

**E3.3 DRY SCRUBBER OPERATING COST REDUCTION STRATEGY & PRACTICE**  
Co-chair - Stewart Nicholson, President, Primex Process Specialists, Inc.; Rodrigo Camargos

**E3.4 DRY SORBENT HANDLING AND MIXING PROCESS MODULES TO SUPPORT TECHNOLOGIES FOR STACK GAS TREATMENTS INCLUDING FGD; HG; AND NOX**  
Charles Alack, Semi-Bulk Systems, Inc.

**E3.5 IMPACT OF MATS ON ESPS AND HOW TO DEAL WITH IT**  

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## E4. SO2, SO3 & ADDITIVES - WFGD

**E4.1 EFFICIENT WFGD OXIDATION USING SULFITE CONTROL**  
Raymond Gansley, Product Engineering Manager - WFGD & SWFGD; Alstom

**E4.2 HORIZONTAL WET SCRUBBING OF SO2, HF & PARTICULATES FROM FLUE GAS EXHAUSTS**  
Joseph Ducket, Environmental Director, SNC Lavalin; Ghsob, Smith, Adams & Godbout

**E4.3 MAKING A COAL-FIRED BOILER WITH A LIME-BASED CDS SYSTEM CCS-READY**  
Co-chair - Shiaw Tseng, Marketing & Technical Manager, GRAYMONT

**E4.4 COAL COMBUSTION CATALYSTS - PERFORMANCE REVIEW**  
Co-chair - John Aronson, President/CEO, AATA International, Inc.

**E4.5 PREPARING POWER PLANT DUCTS & CHIMNEYS FOR LOW TEMPERATURE OPERATION**  
Gary Gerba, Business Development, Hadek

**E4.6 ADVANTAGES OF FIBER REINFORCED PLASTIC IN WET FGD AND POLLUTION CONTROL TECHNOLOGIES**  
Kirit Patel, President, Hadek Natural Solutions Inc.; Mr. Xavier D’hubevert

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## E5. NOx Control

**E5.1 VERY LOW FOOTPRINT NOX-SOX SCRUBBING**  
Session Sponsor & Co-chair - Robert Richardson, CEO, Know-NOx LLC

**E5.2 NOX CONTROL OPTIONS UTILITY BOILERS THROUGH CSAPR & REGIONAL HAZE RULES**  
Co-chair - Blake Slapper, Business Manager, AECom; Giusu Liu & Pat Cotolly

**E5.3 DECONOX: HOW TO REDUCE VOC & NOX USING ONE, INNOVATIVE TECHNOLOGY**  
Holger Reinhold, Process Engineer Industrial Minerals, Scheuch GmbH; Andreas Gangl

**E5.4 THE LATEST DEVELOPMENT OF DENOX SYSTEMS**  
Christian Huebner, Managing Director, M.A.L. Umwelttechnik GmbH; Dr. Xavier D’hubevert

**E5.5 INTRODUCING THE NEW ULTRA LOW NOX CORNER FIRED M-P M BURNER**  
Nathan Hart, Product Manager, Mitsubishi Hitachi Power Systems Americas

**E5.6 REMOVING NOX WITH CATALYTIC CERAMIC FILTERS**  
Rod Gravley, Technology Director, Tri-Mer Corporation

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## E6. SCR

**E6.1 SCR HIGH-PERFORMANCE MIXING & FIELD EXPERIENCE W/ COAL-FIRED BOILER**  
Co-chair - Paulo Oliveira, Marketing Manager, Alstom Power; Piaggi, Spagnolo & Czarnecki

**E6.2 APPLYING COLD SIDE SCR ON BIOMASS FIRED CFB BOILER**  
Co-chair - Stewart Bible, Sr. Catalyst Technologies Manager, Fuel Tech, Inc.; Reid Thomas

**E6.3 DESIGN & CONSTRUCTION CHALLENGES OF CONEMAUGH SCR RETROFIT PROJECT**  
Kristin Patel, Project Associate, Sargent & Lundy; Charles Nelson & Michelle M. Atto

**E6.4 KEEPING THE SCR FIT**  
Co-chair - Paulo Oliveira

**E6.5 EXHAUST GAS PURIFICATION SCR CONTROL SYSTEMS-ULTRA LOW EMISSIONS**  
David Bonner, Sr Project Engineer - Stationary Applications, Hug Engineering Inc.

**E6.6 HOT SCR SYSTEMS FOR LARGE FRAME SIMPLE CYCLE GAS TURBINES**  
Rod Gravley, Technology Director, Tri-Mer Corporation

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**Preliminary Program - Subject to Change**
E7. REMEDIATION

E7.1 PATHWAY FROM DIRTY ENERGY REMEDIATION TO THE ULTIMATE ENERGY SOURCE
Co-chair - Ann McIver, Director, Citizens Energy Group; Peter Schubert

E7.2 E CARBON NANOFIBERS W/ SURFACE ATTACHED ZEROVALENT IRON NANOPARTICLES
Nikhil Reddy Mucha, Graduate RA, NC A&T St. U.; R. Ravella, M. Reddy & L. Zhang

E7.3 NANO-MECHANICS OF NON-BIOLOGICAL MODEL SYS.-CELL INJURY BY NANO-PARTICLES
Tooba Shoaib, Graduate Student, University of Illinois; He, Chen, Nalam & Espinosa-Marzal

E7.4 PUSH-PULL METHOD REMEDIATION OF PETRO. CONTAMINATED SOIL & GROUNDWATER
Co-chair - George Ivey, President & Senior Remediation Specialist, Ivey International Inc.

E7.5 INDUSTRY IMPACT OF THE 2015 EPA UNDERGROUND STORAGE TANK REGULATIONS
Timothy Ericsen, Executive Vice President, Tait Environmental Services, Inc.

E7.6 MANAGING SOLID DRILLING WASTE THROUGH ENGINEERED SOLUTIONS
Blake Scott, President, Scott Environmental Services, Inc.

E8. COMPLIANCE TECHNOLOGIES & STRATEGIES

E8.1 COMPLIANCE WITH NEW REGULATIONS FOR COAL COMBUSTION RESIDUALS
Travis Smith, Senior Chemical Engineer, Hull & Associates, Inc.

E8.2 REGULATORY CHANGE MANAGEMENT
Co-chair - Bobby O’Neal, Director, EHS / Energy & Utilities, 360Factors, Inc.

E8.3 WORD MASTER CLASS
David Carwell, CEO, PleaseTech Ltd; Barye Lyne

E8.4 REGULATION & USE OF UNMANNED AERIAL SYSTEMS (DROGONES) IN UTILITY INDUSTRY
Kelly Daily, Partner, Stinson Leonard Street

E8.5 GROWING YOUR BUSINESS IN WITH NEW AVIATION TECHNOLOGY AND DROGONES
Co-chair - Jonathan Rupprecht, Attorney/Aviation Expert, Rupprecht Law

F1. RENEWABLE ENERGY MARKETS

F1.1 WESTINGHOUSE PLASMA GASIFICATION FOR POWER, FUELS AND CHEMICALS
Co-chair - Richard Fish, President, Westinghouse Plasma Corp.

F1.2 PREDICTING RENEWABLES PERFORMANCE IN EMERGING MARKET
Thaddeus Huettman, O.R. Analyst, U.S. EIA; Michelle Bowman

F1.3 GENERATING CLEAN POWER AND PROFITS
Willem Lange, Director - Utility Marketing, WaterFurnace International, Inc.

F1.4 CAN HAWAII ACHIEVE ITS RPS?
Co-chair - Fred Mayes, Senior Energy Analyst, U.S. Energy Information Administration

F1.5 INTELLECTUAL PROPERTY’S ROLE IN THE CLEANTECH REVOLUTION
Susan Betcher, Partner, Perkins Coie & Co-Chair, CleanTech Industry Group

F2. WASTE TO ENERGY

F2.1 AN UPDATE ON RENEWABLE ENERGY FROM MUNICIPAL WASTES
Paul Hauck, Senior Environmental Engineer, CDM Smith

F2.2 WASTE PLASTIC TO LIQUID HYDROCARBON FUEL
Co-chair - Dr. Moinuddin Sarker, PhD, MRSC, CEO and CTO, Waste Technologies LLC

F2.3 MICROALGAE: GHG CO2 & NOx MITIGATION - CCS ECONOMIC DRIVER
Ed Weinberg, President, ESSRE Consulting, Inc.; Robert Mroz, HYTEK-Bio, LLC

F2.4 CLIMATE-FRIENDLY WASTE SYSTEMS: BEYOND “WASTE-TO-ENERGY” INCINERATION AND TRADITIONAL LANDFILLS
Mike Ewall, Esq., Founder & Director, Energy Justice Network

F2.5 WHY BIOMASS? STATUS, CHALLENGES & OPPORTUNITIES IN SMUD REGION
Co-chair - Valentino Tiangco, Biomass Program Manager, SMUD

F3. RENEWABLE DEVELOPMENT ANALYSIS

F3.1 TRANSFORMATION IN THE US GENERATING FLEET: MORE THAN MEETS THE EYE
Daniel Mussatti, Sr. Env. Economist, US Nuclear Regulatory Commission; Andrew Kugler

F3.2 CALIFORNIA GREENHOUSE GAS REDUCTION AND RENEWABLE DEVELOPMENT
Co-chair - Shawn Bailey, Manager Market & Regulatory Analysis, Sempra US Gas & Power

F3.3 ENERGY ASSESSMENTS / ENERGY MANAGEMENT SYSTEMS
Daniel Drott, Director of Business Development for Energy, Intertek

F3.4 REPLACING FOSSIL FUELS WITH SOLAR ENERGY FROM SPACE
Keith Henson, Founder, LS Society

F3.5 RENEWABLE ENERGY MARKET: HYDROGEN TRANSPORTATION FUEL FROM WIND + SUN
Co-chair - Bill Leighty, Director, The Leighty Foundation

Submit Abstract
<table>
<thead>
<tr>
<th>Track</th>
<th>F</th>
<th>Renewable Energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday</td>
<td>February 4</td>
<td>10AM - 12PM</td>
</tr>
<tr>
<td><strong>F4. RENEWABLE PROJECT DEVELOPMENT</strong></td>
<td></td>
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</tr>
<tr>
<td>F4.1 THE POTENTIAL FOR LONGER TENURE FINANCING FOR SOLAR POWER PROJECTS</td>
<td>Edwin Feo, Chief Operating Officer/Founder, Coronal Group LLC</td>
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<tr>
<td>F4.2 INTEGRATING RENEWABLE ENERGIES WATER, SOLAR, WIND, &amp; BIOFUELS WITH PHEV</td>
<td>Catherine [J]J Demauro, CTO, Efficient Drivetrains Inc.; Andrew Frank</td>
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<tr>
<td>F4.3 A COLLABORATIVE APPROACH TO UTILITY SITING USING GIS</td>
<td>Jason Thoene, GIS Manager, ICF International</td>
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<tr>
<td>F4.4 BE PREPARED FOR THE EVER CHANGING MARKET LANDSCAPE</td>
<td>Clayton Jensen, Principal, Energy &amp; Renewables, Forum Equity Partners</td>
<td></td>
</tr>
<tr>
<td>F4.5 THE ROLE OF THE INDEPENDENT ENGINEER IN RENEWABLE PROJECT DEVELOPMENT</td>
<td>Co-chair - William Stark, Vice President - Environmental Services, Leidos</td>
<td></td>
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<tr>
<td>F4.6 REDUCE PROJECT IMPLEMENTATION RISK-CAPITAL NERVE CENTER FOR RENEWABLES</td>
<td>Co-chair - Neil Gerber, Director of Strategy, Energy &amp; Environment, IBM; Biren Gandhi</td>
<td></td>
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<tr>
<td><strong>F5. SOLAR &amp; WIND</strong></td>
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<tr>
<td>F5.1 OVERCOMING OFFSHORE WIND CHALLENGES</td>
<td>Co-chair - Michael Ernst, Director - Federal Regulatory Affairs, Tetra Tech; Jennifer Daniels</td>
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<tr>
<td>F5.2 STORAGE &amp; ENERGY MGMT SOLUTIONS AS THE NEW WAVE IN DISTRIBUTED GENERATION</td>
<td>Co-chair - Edwin Feo, Chief Operating Officer/Founder, Coronal Group LLC</td>
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<td>F5.3 NUSCALE POWER DIVERSE ENERGY PLATFORM (NUDEP)</td>
<td>Chris Colbert, Chief Strategy Officer, NuScale Power</td>
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<tr>
<td>F5.4 STRATEGIES FOR SOLAR INDUSTRY TO PENETRATE COMMERCIAL REAL ESTATE SPACE</td>
<td>Michael Manuel, Principal, Goldberg Kohn Ltd.</td>
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<tr>
<td><strong>F6. SOLAR &amp; PV</strong></td>
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<tr>
<td>F6.1 A SUNNY FUTURE FOR UTILITY-SCALE SOLAR</td>
<td>Co-chair - John Finnegan, Lead Council, Environmental Defense Fund</td>
<td></td>
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<tr>
<td>F6.2 LIFECYCLE &amp; ECONOMIC PERFORMANCE OF COMMERCIAL-SCALE SOLAR PV SYS.</td>
<td>Co-chair - Vivian Xiaowei Liu, Postdoctoral Fellow, DRI; Hoekman, Robbins &amp; Ross</td>
<td></td>
</tr>
<tr>
<td>F6.3 UTILITY-SCALE SOLAR PROJECT COST, PERFORMANCE &amp; PRICING TRENDS IN THE US</td>
<td>Joachim Seel, Sr. Research Assoc., Lawrence Berkeley National Laboratory; Mark Bolinger</td>
<td></td>
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<tr>
<td>F6.4 INTEGRATION LIMITS OF INVERTER BASED PV UNITS IN MICROGRID &amp; DISTRIBUTION SYS.</td>
<td>Ric Austria, Executive Consultant, Pierra Consulting; Ketut Dartawan &amp; Amin Najafabadi</td>
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<td>F6.5 FUGITIVE DUST MITIGATION AND MONITORING FOR PV SOLAR PLANTS IN THE DESERT</td>
<td>Robert Beckius, Systems Engineer, American Ecotech; Joe Palumbo &amp; Andres Quijano</td>
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<thead>
<tr>
<th>Room 5B</th>
<th>Thursday</th>
<th>February 4</th>
<th>1PM - 3PM</th>
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<tbody>
<tr>
<td><strong>F7. COMMUNITY SOLAR</strong></td>
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<tr>
<td>F7.1 THE BENEFITS OF COMMUNITY SOLAR FOR UTILITIES</td>
<td>Co-chair - Eric Steinhofer, VP- Business Dev., Clean Energy Collective; Bart Rupert</td>
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<td>F7.2 EVOLUTION OF COMMUNITY SOLAR...MAXIMIZING THE BENEFITS</td>
<td>Co-chair - Becky Campbell, Community Solar Market Development, First Solar; Rex Steep</td>
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<td>F7.3 IMPLEMENTATION OF SOLAR ENERGY IN HOT, HUMID, &amp; DUSTY CONTEXT</td>
<td>Hisham Mortada, Professor, King Abdul Aziz University; Mohammed Kurdi</td>
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<td>F7.4 ROOFTOP SOLAR IN HAWAII - A MICROCOSM OF THE FUTURE</td>
<td>Greg Odegard, Principal, GO Global Environmental</td>
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<tr>
<th>Room 5B</th>
<th>Friday</th>
<th>February 5</th>
<th>7:30AM - 9:30AM</th>
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<tbody>
<tr>
<td><strong>F8. RENEWABLE ENERGY &amp; GEOTHERMAL</strong></td>
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<td>F8.1 USING SUPERCRITICAL CO2 FOR CLOSED-LOOP GEOTHERMAL POWER</td>
<td>Co-chair - Brian Higgins, CTO, GreenFire Energy</td>
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<td>F8.2 GEOTHERMAL SUSTAINABILITY</td>
<td>Co-chair - Masoud Fathizadeh, Professor, Purdue University Calumet; Dr. G. A. Mansoori</td>
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<td>F8.3 Prep of Cheap NiFe@C Nanoparticles for DSSC Counter-Electrodes</td>
<td>H. Paul Wang, Professor, National Cheng Kung U.; L.Chang, J. Wang, C.Jou &amp; Y.Wei</td>
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<td>F8.4 OPTIMUM PENETRATION OF GRID-CONNECTED RENEWABLE ENERGY GENERATION</td>
<td>Jin Jo, Assistant Professor, Illinois State University; Matt Alderman</td>
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<td>F8.5 SUSTAINABILITY IS SIMPLICITY</td>
<td>Anupama Sharma, Professor, Maulana Azad National IT; Ar. Santosh Tewari</td>
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Wednesday | February 3 | 1PM - 3PM

G1. DECOMMISSIONING OF POWER PLANTS
G1.1 DECOMMISSIONING, DEMOLITION & DECONTAMINATION (DDD) PROCESS
Co-chair - Jeffery Pope. Decommissioning & Demolition Services Mgr., Burns & McDonnell
G1.2 HOW TO MAXIMIZE SCRAP VALUES AS PART OF DECOMMISSIONING PROCESS
Greg Menen, Director - Demolition Scrap Management, Rocky Mountain Recycling
G1.3 NUCLEAR WASTE STORAGE OPPORTUNITIES FOR DECOMMISSIONED POWER PLANTS
Emily Lewis, AAAS Fellow, U.S. DOE, Office of Energy Policy & Sys. Analysis; Lara Pierpoint
G1.4 DECOMMISSIONING SCALABILITY
Co-chair - Richard Cheatham, Scientist 5, CBI; Daniel Davis, Ken Beard & Andrew Schaaf

Submit Abstract
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Submit Abstract
Submit Abstract

G2. COMPLIANCE STRATEGIES & PLANT CONVERSIONS
G2.1 FORMER MANUFACTURED GAS PLANTS (MGP): LEGACIES FROM LAST TWO CENTURIES
Kevin White, Environmental Engineer, Environmental Engineering, Bums & McDonnell Engineering Company, Inc.
G2.2 BIOCONVERSION OF COAL & GAS FIRED POWER STATIONS
Preben Messerschmidt, Project Director, Ramboll Environ
G2.3 REPURPOSING POWER PLANT CHIMNEYS FOR CLEAN RENEWABLE ENERGY
Thomas Farber, Division Manager, Commonwealth Dynamics, Inc.; Jose Franco
G2.4 ENVIRONMENTAL MANAGEMENT SYSTEMS & ISO-14001 CERT. FOR SMALL UTILITIES
Co-chair - Erik Haas, Principal, HMH Consulting LLC; Tom Chappel
G2.5 CCR & ELG: DEVELOPING A SIMULTANEOUS COMPLIANCE STRATEGY
Co-chair - Jonathan Shimko, Director, Power & Water Solutions, Tetra Tech, Inc.
G2.6 EASE OF COMPLIANCE THROUGH DOCUMENT MANAGEMENT
Mark Buckley, President & CEO, Requoridi Inc.

Thursday | February 4 | 10AM - 12PM

G4. EHS & EMIS
G4.1 “FIXING” HUMAN ERROR
Co-chair - Peter Bridle. Executive Director, Pegasus Risk Management
G4.2 INTEGRATING DAS WITH EMIS - KEY CONCEPTS AND CONSIDERATIONS
Greg Gasperecz, Sr VP, EHS, Enviance, Inc.; Philip Black, Wood Group Mustang, Inc.
G4.3 MOBILE-ENABLED ENV. HEALTH & SAFETY MANAGEMENT INFORMATION SYSTEM
Co-chair - Anne Heinrich. Client Manager, E2 ManageTech; Ian Cohen, NexTera
G4.4 INTEGRATING EMMS & EHS MGMT SYSTEM TO ACHIEVE A COHERENT SYSTEM
Nitin Shahani, Green Services Associate Program Manager, Intertek
G4.5 COMBINING COMPLIANCE & ENV. MGMT. FOR A 360° VIEW OF EHS PERFORMANCE
James Miller, Account Executive, Dakota Software; Jeff Cross
G4.6 THE ART OF EVERGREENING COMPLIANCE MANAGEMENT SYSTEMS
Margery Moore, Director, Bloomberg BNA; David Gloski

Thursday | February 4 | 1PM - 3PM

G5. EHS & RISK MANAGEMENT
G5.1 ARC FLASH RISK ASSESSMENT – WHAT DOES IT MEAN?
Dennis Neitzel, Director Emeritus, AVO Training Institute, Inc.
G5.2 DRIVING OPERATIONAL EXCELLENCE BY AUTOMATING RISK MANAGEMENT
Co-chair - Doug Hatler. VP, EHS, Energy & Utilities, 360factors, Inc.
G5.3 5 REASONS WHY MOBILE APPS ARE CHANGING HOW EHS WORKS
Co-chair - John Niemoller. President, Perillon Software Inc.
G5.4 OFFICE OF ENV. HEALTH & HAZARD ASSESSMENT GUIDELINES & CHALLENGES
Everest Yan, Senior Engineer, PCR Services Corporation; Heidi Rous & Alan Sako
G5.5 EHS OF AUTOMATED BIRD CONTROL TECHNOLOGY FOR THE UTILITY INDUSTRY
Jim Beaumont, National Account Manager, BirdBuffer, LLC; Walt Beals & Gary Crawford
G5.6 UTILITY CEMS AND EMISSION INVENTORY DATA IN THE CLOUD
Dan Ahearn, Director of Sales, xOverTime Inc.; David Gloski

Thursday | February 4 | 3:30PM - 5:30PM

G6. OPERATIONS & OPTIMIZATION
G6.1 SAFETY MANAGEMENT LEADERSHIP: YOUR ROLE IN ACHIEVING SAFETY EXCELLENCE
Dr. Wes Scott, Director, Consulting Services, National Safety Council
G6.2 PUMPING SYSTEMS EVOLUTION
Co-chair - Jessica Morrison. Business Development Manager, Grundfos; Stephen Putnam
G6.3 CONTINUOUS PERFORMANCE ASSURANCE AT BUDGET CONSTRAINED POWER PLANTS
Rodrigo Camargos, Process Optimization Engineer, Primex Process Specialists; S. Nicholson
G6.4 AN INTERNATIONAL APPROACH TO SUSTAINABILITY
Steven Driver Ph.D., Global Energy Program Manager, Sanofi Genzyme
G6.5 CAP AND TRADE POSITION MANAGEMENT WITH COMPLIANCE
David Gloski, President, xOverTime Inc.; Dan Ahearn
G6.6 VIGILANCE: BUILDING A CULTURE OF HIGH RELIABILITY
Co-chair - Bob Newhouse. President, Newhouse Consultants

Prepared by: PEGASUS RISK MANAGEMENT | ©Preliminary Program - Subject to Change
**G7. OPERATIONS & MANAGEMENT**

**G7.1 INTERNET OF FACILITIES - SMART CAMPUS INITIATIVE AT ARGONNE NATIONAL LAB**
Dejan Ristic, Energy/Pressure Systems Engineer, Gr. Leader, Argonne National Laboratory

**G7.2 CHANGE CULTURE & ACHIEVE ENERGY MANAGEMENT SUCCESS IN HEALTHCARE**
Kim Hughes, Senior Initiative Manager, Northwestern Energy Efficiency Alliance

**G7.3 UNCERTAIN FUTURE OF UTILITIES: SCENARIOS TO INNOVATE IN AGE OF DISRUPTION**
Co-chair - Dave Herman, CEO, Anthros Consulting; Rob Snyder, Director - Business Development, NAES Corporation

**G7.4 INTERNET OF THINGS: CONVERGENCE OF BIG DATA**
Co-chair - Phil Carroll, Vice President, Finley Engineering Company, Inc.

**G7.5 PORTFOLIO O&M: ONE PLANT, FLEET BENEFITS**
Douglas Machon, Director - Business Development, NAES Corporation

**G7.6 STAKEHOLDER OUTREACH AND THE ROLE IT PLAYS**
Loren Locher, Director of Public Affairs, TRC Companies, Inc.

**G8. O&M**

**G8.1 CULTIVATING THE UTILITY WORKING ENVIRONMENT**
Kevin Smith, Senior Consultant, Ephektiv

**G8.2 SITUATION AWARENESS & HIGH PERFORMANCE HMI CONCEPTS IN POWER SYSTEMS**
Ricardo Olsen, Electronics Engineer, CEEE-GT

**G8.3 ELECTRIC UTILITY RATE STUDIES WITH PUBLIC INVOLVEMENT**
Co-chair - Chris Deffenbaugh, Public Involvement Specialist, Burns & McDonnell; Ted Kelly, Senior Consultant, Virtual Incentives

**G8.4 POSITIVE ENERGY: ACQUIRING & RETAINING CUSTOMERS THE RIGHT WAY**
Co-chair - Derek Dressler, Senior Vice President of Sales, Virtual Incentives

**H1. CLIMATE CHANGE & GHG**

**H1.1 ADDRESSING CLIMATE CHANGE UNDER THE NEW CEQ GUIDELINES**
Co-chair - Bruce Macdonald, Principal Scientist, SLR International Corporation

**H1.2 BIRDS, CLIMATE CHANGE AND POWERLINES**
David Lee, Senior Biologist, Davey Resource Group

**H1.3 FUNDING AFRICAN POWER INFRASTRUCTURE, CLIMATE CHANGE & US CARBON TAX**
Co-chair - Stephen Sewalk, Burns School of Real Estate & Construction; Lydia Patton, Co-Founder and Principal Consultant, RSG

**H1.4 ELECTRIC POWER GENERATION GHG MEASUREMENT PROTOCOL REVISION**
Colin High, Co-Founder and Principal Consultant, RSG

**H2. POST COP21 & INVENTORIES**

**H2.1 SUSTAINABLE PATENT STRATEGIES**
Co-chair - Michael Messinger, Director, Sterne Kessler

**H2.2 CARBON EMISSIONS REPORTING: IMPACT FOLLOWING CPP & COP21**
Co-chair - Hari Gupta, Director, Coriolis Enterprises, Inc.

**H2.3 PRIVATE SECTOR OPPORTUNITIES & PARTICIPATION UNDER THE PARIS AGREEMENT**
Douglas Marett, Head of Energy & Environment, Grue + Hornstrup

**H2.4 ENERGY, ENVIRONMENT, AND COMMUNITIES: LOCAL V. GLOBAL CLIMATE GOALS**
Deidre Sanders, Environmental Justice Manager, Pacific Gas & Electric Company

**H3. ELG - UTILITY PERSPECTIVE**

**H3.1 ELG COMPLIANCE STRATEGIES FOR UTILITIES**
Patricia Scroggin, Sr. Water/Wastewater Treatment Consultant, Burns & McDonnell

**H3.2 IMPLEMENTATION OF THE ELG RULE**
Jared Morrison, Manager - Water & Wastewater Programs, Westar Energy

**H3.3 COMPLIANCE ISSUES ASSOCIATED WITH IMPLEMENTATION OF THE ELG RULE**
Gerald Butcher, Sr. Environmental Coordinator, Western Farmers Electric Cooperative

**H3.4 ELG & OTHER RULES EFFECT ON THE GENERATION FLEET**
Block Andrews, Director of Strategic Environmental Solutions, Burns & McDonnell

**H3.5 COMPLIANCE ISSUES ASSOCIATED WITH IMPLEMENTATION OF THE ELG RULE**
Jerry Purvis, Environmental Affairs Manager, East Kentucky Power Cooperative

**H3.6 COMPLIANCE ISSUES ASSOCIATED WITH IMPLEMENTATION OF THE ELG RULE**
Maggie Skelton, Chemical Engineer Boswell Station, Minnesota Power
## Thursday | February 4 | 10AM - 12PM

### H4. CCR & ELG COMPLIANCE MGMT.

**H4.1 CCR COMPLIANCE – ALTERNATIVE CLOSURE SCHEDULES?**
Jason Eichenberger, Sr. Civil Engineer, Burns & McDonnell; Black Andrews; Jay Holloway

**H4.2 ASH CONTAINMENT STRUCTURES: ENG. TO COMPLY WITH U.S. EPA’S NEW CCR RULE**
David Lutz, Vice President, NTH Consultants, Ltd.; Brad Venman

**H4.3 U.S. EPA’S FINAL CCR RULE EXISTING ASH PONDS CLOSE IN PLACE OR CLEAN CLOSE**
Douglas Dahlberger, Project Engineer, Sargent & Lundy; James Perry

**H4.4 CCR RULE COMPLIANCE & COMPLIANCE STRATEGY CONSIDERATIONS**
Paul Caprio, VP, EA Engineering, Science, and Technology, Inc., PBC; Richard Waterman

**H4.5 CRR AND ELG COMPLIANCE STRATEGIES**
Session Sponsor & Co-chair - Michael Preston, CE Section Leader, Black & Veatch

**H4.6 CCR STABILIZATION FOR IMPOUNDMENT CLOSURE**
Co-chair - John Hesemann, Department Manager, Burns & McDonnell; Jeffery Pope

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## Thursday | February 4 | 1PM - 3PM

### H5. CCR & ELG

**H5.1 LIFE CYCLE ANALYSIS OF CO-FORMED COAL/HYDROCHAR BRICUETTES**
S. Kent Hoekman, Research Professor, DRI; X. Liu, DRI; L. Felix & W. Farthing, GTI

**H5.2 COMPLIANCE COSTS FOR THE FEDERALLY PROMULGATED CCR AND ELG**
Patricia Scroggin, Section Manager - Process, Burns & McDonnell Engineering Company

**H5.3 CCR LANDFILL CONSTRUCTION & OPERATION UNDER SUBTITLE D**
Co-chair - Thomas Greddel, President, GREDELL Engineering Resources, Inc.

**H5.4 KLEENWATER-ADVANCED I-PRO FOR ELG COMP., POND CLOSURES & WATER RE-USE**
Mark Pastore, VP Technology, EES, Inc.; David Martin, ProChem, Inc.

**H5.5 “BRAVE NEW WORLD”: CCR RULE COMPLIANCE STRATEGIES FOR ELECTRIC UTILITIES**
Co-chair - Steven Putrich, VP Engineering, Haley & Aldrich; McDaniel & Pokorny

**H5.6 RECLAIMING AND RECYCLING COAL FLY ASH FOR BENEFICIAL REUSE**
Bill Fedorka, Director, Engineering, The SEFA Group

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## Thursday | February 4 | 3:30PM - 5:30PM

### H6. COAL ASH & FGD

**H6.1 COAL ASH MANAGEMENT: LEGAL, REGULATORY AND INDUSTRY UPDATE**
Mike McLaughlin, Senior Vice President, SCS Engineers; May Wall, Winston & Strawn LLP

**H6.2 GEOTECHNICAL & ENV. STABILIZATION OF PONDED FLY ASH USING CAO**
Co-chair - Michael Schantz, Director - NBD, Lhoist North America; Nancy Cardona, UNC Charlotte

**H6.3 DENSE SLURRY ASH MGMT: PROCESS EFFICIENCY & ENV. PERFORMANCE**
Session Sponsor & Co-chair - Dale Timmons, Program Manager, NAES Corporation

**H6.4 CEMENT PRODUCTS FOR SOLIDIFICATION/STABILIZATION OF CONTAMINATED SOIL**
Paul Ruehl, Solidification/Stabilization Specialist, Lafarge North America

**H6.5 METALS ANALYSIS FOR FGD WASTEWATERS AND COAL COMBUSTION RESIDUALS**
Richard Burrows, Corporate Technical Director, TestAmerica Inc.

**H6.6 EXPERIENCE WITH FLUE GAS DESULFURIZATION, ZERO LIQUID DISCHARGE (FGD-ZLD)**
Patrick Randall, Sales Director, Aquatech; J. Michael Martell

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## Friday | February 5 | 7:30AM - 9:30AM

### H7. CCS: CARBON CAPTURE & STORAGE

**H7.1 FTIR PROVIDES TIGHTER CONTROL ON EMISSIONS FROM CARBON CAPTURE PROCESS**
Jim Cornish, Sales & Support Manager, Gasmet Technologies

**H7.2 EARLY CCS OPPORTUNITIES: COAL TO LIQUIDS VIA FISCHER-TROPSCH SYNTHESIS**
Co-chair - Thomas Tarka, NETL/U.S. DOE; Summers, NETL/DOE; Turner, ESPA; White, Noblis

**H7.3 W.A. PARISH POST-COMBUSTION CO2 CAPTURE AND SEQUESTRATION PROJECT**
Co-chair - Ted McMahon, Project Mgr., U.S. DOE; Tony Armbrister & Petra Nova

**H7.4 CURRENT STATUS OF CO2 CAPTURE TECHNOLOGY DEVELOPMENT IN KEPCO**
Jeom-In Baek, Sr. Researcher, KEPCO; Eom, Lee, Jo, Jega, & Shim, KEPCO; Yi & Ryu, KIER

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## Friday | February 5 | 10AM - 12PM

### H8. CCS II

**H8.1 CO2 ABSORPTION KINETICS STUDY IN PHYSICAL SOLVENTS AND MIXTURE**
Co-Chair - Fan Shi, Sr. Materials Scientist, NETL/AECOM; Nicholas Siefert & David Hopkinson

**H8.2 ON-LINE AEROSOL MEASUREMENTS FROM COAL FIRED FLUE GAS IN PILOT SCALE POST-COMBUSTION CO2 CAPTURE**

**H8.3 FIELD-SCALE MODELING OF LOCAL CAPILLARY TRAPPING DURING CO2 INJECTION INTO A SALINE AQUIFER**
Bo Ren, Research Assistant, The University of Texas at Austin; Larry W. Lake, University of Texas at Austin; Steven L. Bryant, University of Calgary

**H8.4 CO2 HYDRATE FORMATION AND LCC ANALYSIS FOR COOLING APPLICATION**
Shai Kim, Graduate Student, Korea University; Yong Tae Kang

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## Friday | February 5 | 1PM - 3PM

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© Preliiminary Program - Subject to Change
I. WASTEWATER MANAGEMENT

I.1 Reactor Vessels to Manage & Treat Wastewater at Ash Ponds & Landfills
Mark Kroplak, CEO, Liberty Hydro, Inc.

I.2 Energy Neutrality in Wastewater Treatment
Tom Stanley, CTO, GE Water & Process Technologies; GE Power & Water

I.3 Minimizing Water Footprint by Implementing Semi-Batch Reverse Osmosis
Session Sponsor & Co-chair - Dr. Rick Stover, EVP, Desaltech

I.4 ELG Compliance at Coal Fired Power Stations
Session Sponsor & Co-chair - Michael Preston, Section Leader, Black & Veatch

I.5 National Nutrient Reduction Strategy Update
Diane Martini, Senior Water/Wastewater Consultant, Burns & McDonnell; Sarah Gilstrap

I.6 An Update on the Water Research Center
Tyler Cromely, Research Engineer, Southern Company Services, Inc.

II. WATER & ELECTRIC UTILITIES

II.1 Modeling Electricity Sector Vulnerabilities Related to Water Temperatures
Jordan Macknick, NREL; Macknick, Brinkman, Ibanez, Tomberlin, Hunsberger, Kandt & Miara

II.2 The Latest Technological Updates in Oil Spill Containment Systems
Bill Gannon, President, Solidification Products International, Inc.; John Panaro

II.3 Energy Savings Through Pipe Selection
Rosemary Smud, Sales Engineer, American Cast Iron Pipe; Maury Gaston

II.4 Enhance Coordination Between Electric and Water Utilities
Nushat Thomas, Team Leader, U.S. Environmental Protection Agency; Lauren Wisniewski

II.5 BR Risk Mgmt; Predictive Model Development for Disinfection Byproducts
Jeromy Jones, AQCS Manager, Burns & McDonnell

II.6 SCE Storm Water Mgmt & Flood Preparedness Improvement Initiative
Co-chair - Denise Yaffe
Mandiri Martin, Senior Water/Wastewater Consultant, Burns & McDonnell; Sarah Gilstrap

III. 316(B), ELG, WASTEWATER

III.1 EPA’s 316B Rule: How to Achieve Compliance
Greg Seegert, Chief Ichthyologist, EA Engineering, Science & Technology

III.2 Impacts of EPA 316B on Power Plant Cooling Water Intakes
Roman Carter, National Account Manager, Intralog / Hydrolax; Tim Woodrow

III.3 Clean Water Act Rule: Expanding Risk & Liability for Project Proponents
Kerry McGrath, Associate, Hunton & Williams; Deidre G. Duncan

III.4 316(B) Impingement Compliance: Understanding De Minimis
Session Sponsor & Co-chair - Radhika de Silva, Sr. Project Mgr, HDR Engineering; Mark Bailey

III.5 316(B) - Overview of Technical Feasibility and Cost Evaluation Study
Jay Rooney, Senior Associate, Sargent & Lundy LLC; Ken Snell & Mehrdad Salehi

III.6 Implementing U.S. EPA’s 316(B) Rule
Co-chair - Sean Ramach, Environmental Scientist, U.S. Environmental Protection Agency

IV. FGD WASTEWATER - ZLD

IV.1 ZLD Approach by Applying Spray Dryer Evaporator (SDE™) Technology
Co-chair - Paulo Oliveira, Product Marketing Manager, Alstom Power, Inc.; Phil Rader

IV.2 Thermal ZLD System Using a SDE in a Waste to Energy Plant
Robert Van Durme, P.E., Key Account Manager, Lechler Inc.; Ashwin Patni

IV.3 FGD ZLD Process Impact on Heat Rate & Other Plant Parameters
Benjamin Laurent, Senior Process Engineer, Heartland Technology Partners

IV.4 Processing Power Plant Waste to High Marketable Commodities
Robert Bobeck, Technical Sales, Dustex LLC; Patrick Paul

IV.5 Update on B&W ZLD Activities
Steven Feeney, Product Line Manager, Babcock & Wilcox; Mike Kildas

IV.6 Forward OSOMIBS Based High Water Recovery Solutions
Sponsor & Co-chair - Mary Theresa Pendergast
Director, Oasys Water; John Tracy

V. FGD WASTEWATER

V.1 Pre-Fabricated Process Equipment Solution to Meet ELG & CCR Standards
Co-chair - James Peterson, President, Frontier Water Systems

V.2 Effects of Mercury Control Technologies on FGD Wastewater Quality
Mandi Richardson, Sr. Chemist, AECOM; Blythe, AECOM; Dene, EPRI; Acharya, Southern Co.

V.3 ELG and CCR Compliance - The Dollars are in the Details
Jeremy Jones, AQCS Manager, Burns & McDonnell

V.4 ELG Compliance Solutions - An In-Depth Look at FGD Flowrate Impacts
Jeromy Jones, AQCS Manager, Burns & McDonnell

V.5 Recent Advances in Wastewater Measurements of HG, AS and SE Using AFS
Co-chair - Warren Combs, R&D Manager, P S Analytical; Cornelius Brombach

V.6 Effect of Operating Conditions of FGD Unit on Form of Selenium in Liquor
Hiroyuki Akihia, Research Scientist, CRIEPI; Naoki Noda, Hironi Shirai & Shigeo Ito

VI. 316(B), ELG, WASTEWATER

VI.1 Approaches to ELG Compliance for FGD Waste Waters
Kristen Bell, Senior Associate, Sargent & Lundy

VI.2 Green Alternatives for Water Supply Development
Henry Hunt, Sr. Project Manager, Layne - Ranney Collector Wells

VI.3 Control of Dreissneld Mussels with a More Rational Use of Copper
David Hammond, Ph.D., Senior Scientist, Earth Science Labs, Inc.

VI.4 Compliance with Both 316(B) and the Endangered Species Act
Harriet Nash, NOAA’s National Marine Fisheries Service; Ashfield, U.S. Fish & Wildlife Svc.

VI.5 316(B) Strategies for Advanced Intake Screen Retrofits
Co-chair - Mark David Bell
Sponsor, Sales Manager, Bilfinger Water Technologies

VI.6 316(B) Overview of Impingement Technology Selection Procedure
Co-chair - Mehrdad Salehi, Sr. Associate, Sargent & Lundy LLC; Ken Snell & Jay Rooney
I7. WATER SUSTAINABILITY
I7.1 THE ENERGY-WATER NEXUS: RESILIENT, SUSTAINABLE COMMUNITIES AND CHP
Co-chair - Scott Hutchins, Stakeholder Engagement, U. S. Department of Energy
I7.2 WATER BALANCE ANALYSIS, MONITORING, & MGMT. TOOL FOR POWER PLANTS
Charlie He, Assoc. VP, Carollo Engineers; E. McLeskey, G. Carpenter, J. Dressang & C. Chiu
I7.3 SUPPORTING THE HEART OF THE WATER - ENERGY - FOOD NEXUS
Maury Gaston, Manager of Marketing Services, American Cast Iron pipe
I7.4 MONETIZING WATER EFFICIENCY - THE RESNET WATER EFFICIENCY RATING INDEX
Co-chair - Steve Baden, Executive Director, RESNET
I7.5 PREVENTIVE SAFETY MEASURE FROM POLLUTED SURFACE WATER LEAKAGE IN BLDNGS
Nasser Alhemiddi, Professor, King Saud U.; A. Alhemiddi, M. Arch. & A. Alhemiddi, B. Arch
I7.6 WATER REUSE FOLLOWING GROUNDWATER EXTRACTION & TREATMENT
Christina Rain, P.E., Project Engineer, Langan Treadwell Rollo; Graber, Glenn & Shipman

I8. WATER SUPPLY & SECURITY
I8.1 A SOLUTION TO OUR WATER SUPPLY PROBLEM
John Wilson, Territory Manager, American Cast Iron Pipe, Maury Gaston
I8.2 DREDGING YOUR RESERVOIR: ENHANCING THE RESILIENCY OF YOUR WATER SUPPLY
Session Sponsor & Co-chair - Sarah Howard, Sr. Scientist, Black & Veatch; Elizabeth Quinnan
I8.3 AN INNOVATIVE SOLUTION TO PREDICTIVE WATER MODELING FOR UTILITIES SECTOR
Kenn Cygan, Director, Naico, an Ecolab Company; April YeYoung Yi
I8.4 WEANING OURSELVES FROM OUR WASTEFUL WATER WAYS
Ned Daugherty, Principal Architect, H2O Futures
I8.5 ENGAGING A UNIVERSITY ON WATER CONSERVATION
Co-chair - Kyle Mann, Energy Efficiency Program Specialist, CA State University Fullerton
I8.6 GIS-FORECASTED SURFACE HYDROLOGY FOR REDUCING RISKS OF FOOD PRODUCTION
Abdrabehnabi Abdelhady, Professor, Damanthoun Univ; Aggag, Abdelatly & Bahnassy

I9. FLEET
I9.1 A CLIMATE-STABILIZING CALIFORNIA FLEET, VERSUS AIR RESOURCE BOARD GOALS
Co-chair - Brett Williams, Mgr. - EV Initiatives; Center for Sustainable Energy; Jessica Jinn
I9.2 COMPARING PEV CONSUMER INCOMES TO NEW-CAR BUYERS
Amy Lopez, Director of Corporate Engagement, Electrification Coalition
I9.3 HOW CITY FLEETS CAN BECOME A CATALYST FOR A NATIONAL EV TRANSIT
I9.4 MAKING FLEET TELEMATICS DATA ACTIONABLE AND MATTER
Co-chair - Norma Havens, Co-National Sales Manager, USA Fleet Solutions; Bob Belknap
I9.5 COMING CHALLENGE TO US SUBURBIA, GROWING CHINESE CAR FLEET
Alexandra Malazdrewicz, Burns School of Management; Stephen Sewalk & Lydia Patton

J1. FLEET
J1.1 A CLIMATE-STABILIZING CALIFORNIA FLEET, VERSUS AIR RESOURCE BOARD GOALS
Michael Bullock, Transportation Committee Chair & Retired Satellite Sys.Eng., Sierra Club
J1.2 COMPARING PEV CONSUMER INCOMES TO NEW-CAR BUYERS
Amy Lopez, Director of Corporate Engagement, Electrification Coalition
J1.3 HOW CITY FLEETS CAN BECOME A CATALYST FOR A NATIONAL EV TRANSIT
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Co-chair - Norma Havens, Co-National Sales Manager, USA Fleet Solutions; Bob Belknap
J1.5 COMING CHALLENGE TO US SUBURBIA, GROWING CHINESE CAR FLEET
Alexandra Malazdrewicz, Burns School of Management; Stephen Sewalk & Lydia Patton

J2. EV, PHEV & CHARGING
J2.1 INTELLIGENT ELECTRIC VEHICLE CHARGING SYSTEM
Prateek Saxena, Director, Tech Mahindra
J2.2 COMPREHENSIVE EV FAST CHARGING SOLUTIONS FOR 21ST CENTURY UTILITIES
Co-chair - Paul Glenney, Director, Products & Services, NRG EVgo; Michael Krauthamer
J2.3 ZERO-EMISSION VEHICLE MARKETS: DISADVANTAGED COMMUNITIES & CALIFORNIA
Brett Williams, Sr. Project Manager, EV Initiatives, CSE; John Anderson & Ria Langheim, CSE
J2.4 VEHICLE-GRID INTEGRATION USING ISO/IEC 15118 GLOBAL INTEROPERABILITY STANDARD
Stephen Davis, CEO, KnGrid; Mike Ferry & Michelle Bogen, Center for Sustainable Energy
J2.5 USING THE FLEET OF PHEVS FOR ENERGY STORAGE OF BOTH SOLAR AND WIND
Co-chair - Andrew Frank, CTO, Efficient Drivetrains Inc.; Andrew A Frank & JJ DeMauro
J2.6 INFORMATION CHANNELS FOR REACHING PLUG-IN ELECTRIC VEHICLE CONSUMERS
Clair Johnson, Transparency Specialist, Center for Sustainable Energy; Brett Williams

J3. BATTERY & STORAGE SYSTEMS
J3.1 ACTIA EV SOLUTIONS
Co-chair - Greg Fritz, EV Business Unit Manager, ACTIA Corp
J3.2 ENERGY STORAGE + EV CHARGING - DRIVING ELECTRIC VEHICLE ADOPTION
Vic Shao, CEO, Green Charge Networks
J3.3 BUSTING MYTHS & BREAKING GROUND: VEHICLE TO GRID STORAGE FRONTIER
Co-chair - Scott Fisher, Director of EV to Grid, NRG EVgo
J3.4 IMPROVE FUEL CONSUMPTION WITH ENVIRONMENTAL FRIENDLY DLCAP
Toshihiko Furukawa, Senior Manager/Engineer, United Chemi-Con
J4. BATTERY & STORAGE

J4.1 GRID-SCALE ENERGY STORAGE PROVIDING COST-EFFECTIVE PEAKING CAPACITY
Co-chair - Kiran Kumaraswamy, Director, AES Energy Storage; Kate McGinnis

J4.2 ENERGY STORAGE USED FOR FREQUENCY REGULATION & GRID FIRMING
Co-chair - Paul B. Scott, VP Tech., Transpower; David Rosewater, Sandia Corporation

J4.3 LEGAL ISSUES AND OPPORTUNITIES FOR ENERGY STORAGE SYSTEM PROJECTS
Chris Locke and Brennan Bentley, Farella Braun + Martel; Steven Branoff, Ramboll Environ

J4.4 AN ADVANCED LEAD-ACID BATTERY FOR INTEGRATION WITH RENEWABLE ENERGY
Collin Mui, Lead Nanofabrication Engineer, Gridtential Energy, Inc., Daniel Moorman, Steve Hinajosa & Christiaan Beekhuis

J4.5 HIGHER LEVELS OF RENEWABLES W/ GRID-SCALE COMPRESSED AIR ENERGY STORAGE

J4.6 ADVANCED LEAD-ACID BATTERY FOR INTEGRATION WITH RENEWABLE ENERGY
Collin Mui, Lead Nanofabrication Engineer, Gridtential Energy, Inc., Daniel Moorman, Steve Hinajosa & Christiaan Beekhuis

J4.7 HIGHER LEVELS OF RENEWABLES W/ GRID-SCALE COMPRESSED AIR ENERGY STORAGE

J5. BACK-UP PWR & THERMAL ENERGY STORAGE

J5.1 THERMAL ENERGY STORAGE - “VIRTUAL BATTERIES”
Co-chair - Guy Frankenfield, Manager - TES & Biofuels, DN Tanks

J5.2 BACK-UP POWER: ADVANCED FUEL CELL TECH. PROTECTING 21ST CENTURY APPLICATIONS
Vito Coletto, Director of Sales, Altergy Systems

J5.3 HYDROGEN AS ENERGY STORAGE & FUEL FOR STEAM INJECTED GAS TURBINE PLANT
Co-chair - Joshua Partheypean, Research Assistant, West Texas A&M University; William Jim Rogers, West Texas A&M University; Edward Hinderer, Paramount Energy West

J6. UPS, FLOW & LI-ION BATTERIES

J6.1 DEVELOPMENT OF LITHIUM ION BATTERY MATERIALS FOR GRID APPLICATIONS
Co-chair - Dee Strand, Chief Scientific Officer, Wildcat Discovery Technologies; Ye Zhu

J6.2 FIRE SAFETY AWARENESS OF LITHIUM ION BATTERIES
Matt Dunn, Principal, AECOM

J6.3 COST REDUCTIONS FOR LITHIUM ION BATTERIES THROUGH TECHNOLOGY
Co-chair - Dr. Rajshekar DasGupta, Vice President Technology, ElectroVaya

J6.4 BEYOND BATTERY MGMT: ENABLING ESS INTEGRATION IN GRID ECOSYSTEMS
Michael Worry, President and CEO, Nuvation Engineering

J6.5 SEAWATER FLOW BATTERY FOR CLEAN COLD-IRONING & FLEET VEHICLE FUELING
Peter Schubert, Professor, Indiana University-Purdue University Indianapolis

J6.6 SGIM ADVANCED BATTERIES
Pavel Bulia, CEO, SGiM; Boksha, Tampa, Ziegenbalg, Jewell, Chow, Foster, Hogan, Progr, Salagaj, Rylov, Zavorotnyi, Saeed, AlDamer, Molchanov, Strukov, Golubeva & Piltik

Thursday | February 4 | 10AM - 12PM

Thursday | February 4 | 1PM - 3PM

Thursday | February 4 | 3:30PM - 5:30PM

Your Ad Here

$1,000

Your one page company advertisement in the EUEC Program Guide distributed to 2,000 delegates.

Send your ad to info@euec.com by January 8th final deadline
Electric Utilities Attending EUEC

Includes senior management & technical experts from Generating Companies attending & speaking at EUEC

AES
ALLETE
Alliant Energy Corporation
Altstrom Power
Ameren Corporation
American Electric Power
American Municipal Power, Inc.
Arizona Public Service Company
Associated Electric Cooperative, Inc.
Basin Electric Power Cooperation
Big Rivers Electric
Buckeye Power
Burbank Water & Power
Calpine Corporation
Carrick Creek Energy
Central Iowa Power Cooperative
Central Minnesota Municipal Power Agency
City Water Light and Power
Clarke Public Utilities
Cleco Corporation
Con Edison
Consumers Energy
Deseret Power
Dominion Generation
DTE Energy
Duke Energy
Dynegy
East Kentucky Power Cooperative
Electricité de France
Empire District Electric Company
Energy Services
Eversource Energy
Exelon Power
Florida Power & Light Company
GDF Suez
Guam Public Utilities Commission
Hoosier Energy
Idaho Power Company
Independence Power & Light
Intermountain Power Service Corporation
Kansas City Board of Public Utilities
Kansas City Power & Light
Korea Electric Power Corporation
KU Energy, LLC
LG&E
Lower Colorado River Authority
Luminant
Madison Gas & Electric
Michigan South Central Power Agency
MidAmerican Energy Company
Minnesota Power
Minnkota Power Cooperative, Inc.
Montana-Dakota Utilities Company
Muscatine Power and Water
Nebraska Public Power District
Newmont Nevada Energy Investment
NextEra Energy
NiSource
Northern Indiana Public Service Co., (NIPSCO)
Northern Star Generation
NorthWestern Energy
Nova Scotia Power
NRECA
NRG Energy
NV Energy
ODEC
Oklahoma Gas & Electric Company
Old Dominion Electric Cooperative
Omaha Public Power District
Orange Grove Energy
Pacific Gas & Electric
PCPS Energy
Portland General Electric
PPL EnergyPlus LLC
PPL Montana LLC
PSE
Raven Power
Rochester Public Utilities
Rodan Energy Solutions Inc.
Rural Electric
Sacramento Municipal Utility District
Salt River Project
SAN DIEGO GAS AND ELECTRIC
Santee Cooper
SCANA
Schneider Electric
Sempra US Gas and Power
Southern California Edison
Southern Company
Southern Power Company
Sunflower Electric Power Corporation
Tennessee Valley Authority
Texas Municipal Power Agency
Tri-State Generation and Transmission
Tucson Electric Power
Vectren Corp.
Westar Energy
Western Farmers Electric Cooperative
TURNKEY EXHIBIT BOOTH PACKAGE INCLUDES:

1. Fully furnished exhibit booth with 6’ draped table, (2) chairs, waste basket & carpet
2. One free full registration to exhibit & attend conference
3. One free speaking opportunity at EUEC 2017
4. 8 Networking lunches(2), receptions(2) & breaks (4) held in exhibit hall
5. 50% discount at $695 for company employees ($1395 regular)
6. Marketing to mailing list of 50,000 professionals
7. Pre and post conference attendee list of 2,000
9. 10 complimentary passes for “first time” utility clients and guests

STEP 1. SELECT TYPE OF EXHIBIT BOOTH

<table>
<thead>
<tr>
<th>COST</th>
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<tbody>
<tr>
<td>(10’ x 8’) Standard Fully Furnished Exhibit Package</td>
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<tr>
<td>(20’ x 8’) Premium Double Booth by entry</td>
<td>$15,000</td>
</tr>
<tr>
<td>(20’ x 8’) Standard Double Booth</td>
<td>$10,000</td>
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STEP 2. ENTER CHOICE OF BOOTH NUMBER FROM FLOOR PLAN

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<th>1st</th>
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STEP 3. ENTER NAME OF FREE REGISTRANT

<table>
<thead>
<tr>
<th>Full Name</th>
<th>Email</th>
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STEP 4. CONTACT INFORMATION:

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<thead>
<tr>
<th>Name:</th>
<th>Company Name:</th>
<th>Address:</th>
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<tbody>
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<tr>
<th>City:</th>
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<table>
<thead>
<tr>
<th>Email:</th>
<th>Phone:</th>
<th>Fax:</th>
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<tr>
<th>COMMENT:</th>
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<table>
<thead>
<tr>
<th>Authorized Signature (required):</th>
<th>Date:</th>
</tr>
</thead>
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</tbody>
</table>

STEP 5. FAX TO 1-602-296-0199 or E-MAIL TO INFO@EUEC.COM

Show Rules: Application implies that exhibitor will abide by Conference show rules. Please copy this contract for your files. Exhibitor hereby agrees to protect, defend, indemnify and save the San Diego Convention Center, its owners, its operator, EUEC, and each of their respective parents, subsidiaries, affiliates, employees, officers, directors, and agents harmless against all claims, issues or damages to persons or property, governmental changes or fines and attorney fees arising out of or caused by its installation, removal, maintenance, or use of exhibit materials and to agree to indemnify EUEC for any costs, demands, actions, or legal proceedings, and to release, defend, hold harmless, and agree to pay for any and all liabilities, judgments, and other legal actions against EUEC. The exhibitor also agrees to indemnify San Diego Convention Center for any costs, demands, actions, or legal proceedings, and to release, defend, hold harmless, and agree to pay for any and all liabilities, judgments, and other legal actions arising out of or caused by its installation, removal, maintenance, or use of exhibit materials.

1. One Page Advertisement In Show Guide – $1,000 (Deadline Jan 5th)

   The Conference Guide is the official, up-to-date information on the EUEC event. One page color advertisement distributed to 2,000 delegates, is continuously referenced multiple times a day by all attendees. You can have your logo included or do two facing page ads.

2. Session Sponsor & Company Logo Ad – $500 per session

   Sponsor a Technical Session that you are Co-chairing and speaking for only $500, with your company logo prominently advertised among the leading experts in the industry.

3. Advertisement in ENERGYNews – $500 per issue (50,000 distribution)

   Leverage the EUEC network to reach 50,000 professionals in the energy utility and environment sector in North America. Place your logo and advertisement on ENERGYNews (linked to your website) announcing your new product, service or just your exhibit and speaking topics!

4. Attendee Lanyard And Badge Holders – $3,000

   This package includes logo placement on lanyards of the attendee name badge holders.

5. Golf Sponsor – $3,000

   Exclusive sponsorship of the 2015 EUEC golf tournament with recognition at the opening breakfast, and closing awards luncheon. Includes two foursomes in the tournament, welcome banner at the course, tee signs and sponsor logo on the pairings form. A custom golf gift with company logo will be given to each player.

6. Hotel Key Cards – $5,000

   Effectively place your business card in every attendee’s pocket. Four-color custom design imprinted on Hotel Key Cards distributed to all attendees staying at official show hotels.

7. Your Logo On Flash Drive Conference Proceedings – $8,000

   What’s more important to the conference delegates after the event than the complete conference proceedings? This package allows maximum take-home exposure with your logo on the top of every credit-card type flash drive. A full electronic brochure advertisement of your company is included in the flash drive.

8. Lunch / Reception Sponsorship – $5,000 - $15,000

   As a Network Reception sponsor you will have your name and logo in front of conference attendees on each meal ticket.

8. Corporate Furnished Offices for client meetings - $1,500 (3-days)

   ($5,000 for non-exhibiting companies)

   Exhibiting Companies can invite your clients, partners and business associates into a hardwalled private furnished office to conduct business. The private meeting rooms are located next to the exhibit hall. See floor plan. 10 x 10 offices are furnished with table and 4 chairs. Cost is $1,500 for three days of conference. Upgradable to size(10 x 20) with sofas and tables, with food, etc.

CONTACT

Phone: (520) 615-3535
email: info@euec.com
## EUEC Welcome Reception by the Waterfront

- **Date and Time:** Tuesday, February 2nd, 2016, 5 pm to 7 pm
- **Details:** Network with EUEC colleagues, clients & guests. RSVP for complimentary hors d’oeuvres and beverage tickets.

- **Location:** Roy’s Restaurant Behind San Diego Convention Center

## Hotels

- **All Hotels located in Waterfront or Gaslamp District**
- **Walking distance to the Convention Center**
- **Reserve at** [https://compass.onpeak.com/e/66EUE16/4#hotels](https://compass.onpeak.com/e/66EUE16/4#hotels)
- **or call EUEC housing onPeak @ (855) 203-3367.**

### Hotel Rates

<table>
<thead>
<tr>
<th>Hotel Name</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manchester Grand Hyatt San Diego</td>
<td>$269</td>
</tr>
<tr>
<td>San Diego Marriott Marquis &amp; Marina</td>
<td>$269</td>
</tr>
<tr>
<td>Hilton San Diego Gaslamp</td>
<td>$269</td>
</tr>
<tr>
<td>Hard Rock Hotel San Diego</td>
<td>$249</td>
</tr>
<tr>
<td>Embassy Suites San Diego Bay</td>
<td>$239</td>
</tr>
<tr>
<td>Residence Inn Gaslamp</td>
<td>$239</td>
</tr>
<tr>
<td>San Diego Marriott Gaslamp Quarter</td>
<td>$229</td>
</tr>
<tr>
<td>The decennial Suites San Diego</td>
<td>$159</td>
</tr>
<tr>
<td>The Sofia Hotel</td>
<td>$150</td>
</tr>
</tbody>
</table>

### Warning

- Beware of unauthorized phone solicitation.
- Booking through onPeak or euec.com is the ONLY secure way to reserve.

## EUEC Golf Event

- **Name:** Fifth Annual EUEC 2016 Golf Tournament
- **Location:** Rancho Bernardo Inn Golf Course
- **Address:** 17550 Bernardo Oaks Drive San Diego, CA 92128
- **Date & Time:** Saturday, February 6th, 2016 at 8:00 AM
- **Cost:** $115

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**Preliminary Program - Subject to Change**