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Who should attend?
INDUSTRY LEADERS AND POLICY MAKERS:
• CORPORATE ENERGY & SUSTAINABILITY EXECUTIVES
• RENEWABLE ENERGY ENTREPRENEURS
• BUSINESS DEVELOPMENT PROFESSIONALS
• UTILITY AND ENERGY EXECUTIVES
• LAWYERS, ACCOUNTANTS AND CONSULTANTS
• U.S. LEGISLATORS, GOVERNMENT AGENCIES
• SCIENTISTS AND RESEARCHERS

INVESTORS:
• COMMERCIAL & INVESTMENT BANKS
• VENTURE CAPITALISTS AND PRIVATE EQUITY
• CORPORATE AND INSTITUTIONAL INVESTORS
• DEAL LAWYERS AND CONSULTANTS
• PROJECT DEVELOPERS

DECISION MAKERS:
• ELECTRIC UTILITIES
• ELECTRIC VEHICLES
• ARCHITECTS/ENGINEERS/SCIENTISTS
• CO-GENERATORS/SELF-GENERATORS
• CNG (COMPRESSED NATURAL GAS)
• FUEL SUPPLIERS
• INDEPENDENT POWER PRODUCERS
• EQUIPMENT MANUFACTURERS
• POWER INDUSTRY CONSULTANTS
• DESIGNERS AND CONSULTANTS
• PROJECT DEVELOPERS
• RESEARCH AND DEVELOPMENT ORGANIZATIONS
• HUMAN RESOURCE MANAGERS AND RECRUITERS
• CONTINUOUS EMISSION MONITORS AND SPECIALISTS

Year Delegates
EUEC2012 2,037
EUEC2011 1,830
EUEC2010 2,345
EUEC2009 1,783

3% Consulting
19% Energy & Electric Utilities
22% Emissions Monitoring
14% Renewable Energy
6% Government & Regulatory
6% Climate Policy

EUEC2013 Format
• All sessions 2 hours long
• 6 Speakers per session
• 20 minutes per speaker

Network with 2,000 delegates in 200 company exhibit area
with 9 networking lunches, receptions & breaks
600 speakers make presentations in 10 track program

REGISTRATION COST   Sept 1    Oct 1      Current    Dec 1     Jan 1     On-Site
Attendee Full                        $695       $795       $795      $895       $995     $1,395
Speaker/Gov’t/VIP                $595       $695       $695      $795       $895     $1,295
3-Day Conference                $395       $495       $495      $595       $695     $1,095
The Department of Energy’s overarching mission is to advance the national, economic, and energy security of the United States; to promote scientific and technological innovation in support of that mission; and to ensure the environmental cleanup of the national nuclear weapons complex.

The Edison Electric Institute (EEI) is an independent, nonprofit center for public interest energy and environmental research. EEI brings together member organizations, the Institute’s scientists and engineers, and other leading experts to work collaboratively on solutions to the challenges of electric power.

EEI works closely with all of its members, representing their interests and advocating equitable policies in legislative and regulatory arenas.

C TRADE is a global renewable energy project development company that has constructed nine turnkey Clean Development Mechanism (CDM) biogas to energy projects using waste manure and biomass to capture methane biogas to produce electricity and finance using carbon credits in the Philippines and India.

Electric Power Research Institute

The Electric Power Research Institute (EPRI) is an independent, nonprofit center for public interest energy and environmental research. EPRI brings together member organizations, the Institute’s scientists and engineers, and other leading experts to work collaboratively on solutions to the challenges of electric power.

EPRI's members represent over 90% of the electricity generated in the United States. EPRI's members include 100 utility companies, 113 trading companies and marketers, 22 independent power producers, numerous electric co-ops, and 127 industrial, governmental, and institutional organizations. EPRI's mission is to promote scientific and technological innovation in support of that mission; and to ensure the environmental cleanup of the national nuclear weapons complex.

The Department of Energy’s overarching mission is to advance the national, economic, and energy security of the United States; to promote scientific and technological innovation in support of that mission; and to ensure the environmental cleanup of the national nuclear weapons complex.

C TRADE is a global renewable energy project development company that has constructed nine turnkey Clean Development Mechanism (CDM) biogas to energy projects using waste manure and biomass to capture methane biogas to produce electricity and finance using carbon credits in the Philippines and India.

The Edison Electric Institute (EEI) is the association of U.S. Shareholder-Owned Electric Companies. Its members serve 95 percent of the ultimate customers in the shareholder-owned segment of the industry, and represent approximately 70 percent of the U.S. electric power industry. EEI also has more than 70 international electric companies as Affiliate Members, and more than 200 industry suppliers and related organizations as Associate Members. Organized in 1933, EEI works closely with all of its members, representing their interests and advocating equitable policies in legislative and regulatory arenas.
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<td>Regulatory Update II</td>
<td>HCL Monitoring</td>
<td>Hg Control &amp; Bromine</td>
<td>Fracking &amp; Sustainable Development</td>
<td>Distributed Generation</td>
<td>Compliance Technologies &amp; Strategies</td>
<td>Tailoring Rule/NSR/GHG BACT</td>
<td>Biofuels / Ethanol / Biodiesel</td>
<td>Sustainability Projects</td>
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<td>NAAQS</td>
<td>PM, Opacity &amp; Visibility</td>
<td>Control Technologies</td>
<td>Energy Policy</td>
<td>Renewable Development Analysis</td>
<td>Power Plant &amp; Boiler Optimization</td>
<td>Planning &amp; GHG Reporting</td>
<td>Biomass / Cofiring in Power Plants</td>
<td>Sustainability Reporting</td>
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<td>Compliance Strategies</td>
<td>Emission Testing &amp; Monitoring</td>
<td>MATS</td>
<td>State, Regional &amp; Infrastructure</td>
<td>New Technology</td>
<td>EHS &amp; Risk Management</td>
<td>California Cap &amp; Trade</td>
<td>Biogas &amp; MSW</td>
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<td>GHG Strategies Post Kyoto</td>
<td>Biogas / MSW / LFG</td>
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<td>Permits &amp; Compliance</td>
<td>Modeling</td>
<td>Activated Carbon &amp; Hg Sorbents</td>
<td>Managing Risk &amp; Project Finance</td>
<td>Project Development / IP</td>
<td>Natural Resource Mgmt. - HCP</td>
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### A1. REGULATORY UPDATE I

**A1.1 REPORT FROM THE SCENE OF THE TRAIN WRECK -- UPDATE ON THE IMPACT OF NEW EPA RULES & ACTIONS ON ELECTRIC UTILITY GENERATION**
Jay Holloway, Partner, Winston & Strawn LLP

**A1.2 THE NEXT FOUR YEARS: HOW THE OUTCOME OF THE ELECTION WILL IMPACT THE CLEAN AIR ACT AGENDA**
Roger Martella, Attorney, Sidley Austin LLP

**A1.3 IS FEDERALISM ALIVE UNDER THE CLEAN AIR ACT?**
Bill Wehrem, Partner, Hunton & Williams LLP

**A1.4 UTILITY REGULATORY UPDATE: IMPLICATIONS & STRATEGIC CONSIDERATIONS FOR COMPLIANCE**
Block Andrews, Strategic Environmental Solutions Director, Burns & McDonnell

**A1.5 RECENT REGULATORY DEVELOPMENTS AFFECTING PERMITTING OPTIONS**
Thomas Eckhison, Partner, LeClairRyan

**A1.6 FIRST CAIR, THEN CSAIR. WHAT’S NEXT?**
Daniel Chartier, Director - Environmental Markets & Air Quality Programs, Edison Electric Institute

### A2. REGULATORY UPDATE II

**A2.1 POWER GENERATOR REGULATIONS, 2010-2020**
John Kinsman, Sr. Director, Environment, Edison Electric Institute

**A2.2 UPDATE TO COAL UNIT RETIREMENTS & GRID RELIABILITY**
M. Gary Helm, Sr. Markel Strategist, PJM Interconnection

**A2.3 EPA PROPOSAL TO REVISE MATS EMISSION LIMITS FOR NEW ELECTRIC GENERATING UNITS**
Ralph Roberson, President, RMB Consulting & Research

**A2.4 CLEAN AIR ACT ABACK – THE MACT CONUNDRUM**
Peter Belmonte, Sr. Partner, Environmental Resources Management; Robert Fraser

**A2.5 UTILITY REGULATORY UPDATE: IMPLICATIONS & STRATEGIC CONSIDERATIONS FOR COMPLIANCE**
Mike Borgstadt, Manager - Resource Planning, Burns & McDonnell Engineering Co.

**A2.6 STARTUP & SHUTDOWN ALLOWANCES - A CASE STUDY ON UNIT START UP**
Patrick Leeming, Software Services Manager, Babcock & Wilcox Power Generation Group; John Downs

**A2.7 UPDATE ON GREENHOUSE GAS NSPS REGULATIONS**
Tauna Szymanski, Senior Associate, Hunton & Williams LLP

### A3. NAAQS

**A3.1 THE STATE OF THE NAAQS**
Kurt Kissing, Attorney at Law, Pepper Hamilton LLP

**A3.2 COMPLIANCE CHALLENGES POSED BY THE NAAQS FOR SO2, NO2, & PM2.5**
Robert Paine, Technical Director, AECOM; David Heinold & Robert Ivanchuk

**A3.3 REGULATORY UPDATE & IMPLICATIONS OF THE PM2.5 NATIONAL AIR QUALITY STANDARD**
Robert McCann, Principal Director Air Resources, Golder Associates Inc.

**A3.4 AMBIENT SO2 STANDARD: NONATTAINMENT, UNCLASSIFIABLE, MODELING, MAINTENANCE (OR INFRASTRUCTURE) SIP, ... WHERE ARE WE?**
Harold Robbins, President, Bison Engineering Inc.

**A3.5 HOW ELECTRIC POWER COMPANIES CAN BEST DEAL WITH THE CHALLENGES OF STATES DEVELOPING SIPS TO DEMONSTRATE ATTAINMENT OF THE 1-HOUR SO2 NAAQS**
Howard Els, President, Enviroploan Consulting; Dr. Allen Dittemhofer & Michael Hirtler, CCM

**A3.6 RECENT HAPPENINGS REGARDING THE EXCEPTIONAL EVENT RULE**
Samuel Lofland, Attorney, Ryley Carlock & Applewhite; James Sanderson
**Wednesday | January 30**

**A7. PERMITS & COMPLIANCE**

**A7.1 PERMITTING OF NEW AIR QUALITY CONTROL EQUIPMENT ADDITIONS FOR "ALPHABET SOUP" COMPLIANCE: SUCCESSES & CAUTIONS**
Steven Babler, Air Quality Engineer, Segas Inc.; Brian Petermann

**A7.2 CONVERTING FROM COAL TO NATURAL GAS - CHANGES TO COMPLIANCE MONITORING**
John Downs, Regulatory Manager, Babcock & Wilcox Power Generation Grp.; Mark Holt

**A7.3 QUALITY ASSURANCE CONSIDERATIONS FOR METEOROLOGICAL DATA USED IN POWER PLANT PERMITTING**
Ping Wan, Senior Principal Engineer, Bechtel Power Corporation

**A7.4 DO I REALLY NEED TO MODEL?**
Teresa Raine, Principal Consultant, ERM

**A7.5 AIR PERMITTING FOR RECIPROCATING ENGINE PROJECTS FOR ELECTRICITY GENERATION**
Mary Hauner-Davis, Manager, Air/Noise Department, Burns & McDonnell; Minda Nelson

**A7.6 STREAMLINING THE PERMITTING PROCESS – CASE STUDIES FROM GAS-FIRED COMBUSTION TURBINE LICENSING**
Anand Tegnas, Senior Consultant/Project Manager, ERM; John Sherwell, Maryland DNR; Julie Ross, Mark Garrison, & Jennifer Rannery, ERM

**A8. CLEAN AIR POLICY**

**A8.1 WHAT'S A PLANT TO DO? NAVIGATING CONFLICTS BETWEEN STATE PRIMACY & FEDERAL OVERSIGHT**
Eric Hiser, Partner, Jorden Bischoff & Hiser, PLC

**A8.2 SUMMARY OF REGIONAL EMISSIONS & AIR QUALITY TRENDS, 1999-2010**
Eugene Trisko, Attorney at Law, On behalf of ACCCE

**A8.3 WILL THE REFINING INDUSTRY SURVIVE THE CLEAN AIR ACT? (OR, WILL THE NEXT STRAW BREAK THE CAMEL’S BACK)**
Bill Smaling, Attorney at Law, C.William Smaling, Attorney at Law, PLLC.

**A8.4 CAN THIS PROPOSED POWER PROJECT BE BUILT?**
Eri Ottersburg, Senior Engineer, SLR International; Ray Hendricks, Portland General Electric

**A8.5 EPA’S REGIONAL HAZE PROGRAM - A NEW AGENDA FOR VISIBILITY**
Norm Fichthorn, Partner, Huntton & Williams LLP; Aaron Rynn

**A9. AIR POLICY & REGULATIONS**

**A9.1 ADVANCED SELECTIVE CATALYTIC REDUCTION SYSTEM OPERATING ON A COAL FIRED BOILER IN TAIWAN**

**A9.2 THE ONE-HOUR WARS: HOW TO WIN**
Mark Garrison, Partner, ERM

**A9.3 OBTAINING AN EXTENSION ON THE 18 MONTH CONSTRUCTION DEADLINE FOR YOUR PSD PERMIT**
Eri Ottersburg, Senior Engineer, SLR International; Ray Hendricks, Portland General Electric

**A9.4 DEVELOPING A WTO COMPATIBLE CARBON TAX TO BUILD A CLEAN HYBRID POWER SYSTEM**
Katiein Knox, Graduate Research Associate, University of Denver; Stephen Sewalk

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**Monday | January 28**

**B1. CEMS & MATS**

**B1.1 SOFTWARE CEMS & ALTERNATIVE TO HARDWARE**
Joseph Miller, Technical Consultant - Environmental, Rockwell Automation

**B1.2 MERCURY & AIR TOXICS STANDARDS (MATS) CEMS DESIGN & NEW MONITORING REQUIREMENTS**
Keith Crabbe, Engineering Manager, Cermetek Environmental; Tim Kuiken

**B1.3 SO2 SOURCE EMISSION SAMPLING METHODOLOGIES**
David Ostaszewski, Senior Managing Engineer, O’Brien & Gere Engineers

**B1.4 CEMS SYSTEMS SPECIFICALLY FOR COMBINED CYCLE POWER PLANTS**
Deborah Padwater, Strategic Industry Manager - Power, Sick Malhak GmbH

**B1.5 MERCURY & AIR TOXICS STANDARDS (MATS) EMISSION TESTING REQUIREMENTS, RECOMMENDATIONS & COST COMPARISONS**
Rick Krenzke, Project Director, TRC; Mike Martin, Senior Project Manager, TRC Environmental Corporation; Jeff Burdette

**B1.6 FULL-SCALE MULTISITE EVALUATION OF THE MULTIELEMENT SORBENT TRAP SAMPLING (ME-ST) METHOD FOR HALOGEN**
John Pavlish, Sr. Research Advisor, Energy & Environmental Research Center; Jeffrey Thompson

**B2. HCL MONITORING**

**B2.1 HCL EMISSIONS MEASUREMENT USING FTIR**
Sylvie Bosch-Chapeney, Senior Applications Scientist, MKS Instruments; Barbara Marshik, Peter Zemek

**B2.2 HCL MONITORING - BEST PRACTICES & FIELD EXPERIENCE**
Heimo Breton, Head of Corp. Solutions Center, SICK Process Automation

**B2.3 FTIR MONITORING SYSTEM PROVIDES TIGHTER CONTROL ON EMISSIONS FROM CARBON CAPTURE PROCESS**
Jim Cornish, Technical Sales & Support, Gasmet Technologies; Luc Sevrette

**B2.4 HCL CEMS**
Phil McMaster, North Amer. Mgr-Sales, Perma Pure, LLC; Seth Morell, Sales & Marketing Coordinator, Altech Environment U.S.A.

**B2.5 REQUIREMENTS OF PS-18 FOR FTIR MEASUREMENT OF HCL FOR UTILITY & CEMENT INDUSTRIES**
Kevin Ramazan, Vice President, FTIR Operations, California Analytical Instruments, Inc.

**B3. PM, OPACITY & VISIBILITY**

**B3.1 AN UPDATED REVIEW OF PM SPIKING FOR PM CEMS CALIBRATION**
Robert Baxter, President, B3 Systems, Inc.; Derrick Hinkle

**B3.2 DIGITAL CAMERA BASED CONTINUOUS EMISSION MONITORING**
Shawn Dolan, President, Virtual Technology LLC

**B3.3 PM2.5 EMISSIONS TEST METHODS COMPARISON, LIMITATIONS & BENEFITS**
Kevin Crabby, Technical Director, Avogadro Group; Craig Thiry

**B3.4 APPLICATION OF MOBILE DEVICES FOR VISIBLE EMISSIONS**
Sue Sung, Dir - EHS Technology, Trinity Consultants; Adam Williams & Nick Petro

**B3.5 PM MONITORING OPTIONS UNDER THE UTILITY MATS RULE**
Steve Norfleet, Project Manager, RWB Consulting & Research, Inc.; Jon Konings, We Energies

**B3.6 PRACTICAL PM-CEMS & PM-CPMS FOR WET AND DRY FGD PLANT**
William Averdieck, Managing Director, PCME
## B4. MERCURY MEASUREMENT

**B4.1 TECHNICAL ADVANCES IN HG CEM'S - UPDATE**
- Dan Kietzer, Business Development Manager, SICK Process Automation

**B4.2 MERCURY SPECIATION MEASUREMENTS FROM BOILER TO STACK**
- James Wright, Director - Advanced Monitoring Solutions, Clean Air Engineering; T. Rodak, J. McKeever

**B4.3 MONITORING MERCURY & NON-MERCURY HAP METALS WITH A SINGLE CEMS**
- Dougas Barth, Business Development Mgr., Pall Corporation; Craig Peterson & Marty Ladner

**B4.4 ELEMENTAL MERCURY IN SOIL BY SEQUENTIAL EXTRACTION FOR COMPLIANCE WITH ILLINOIS RISK BASED CLEAN-UP**
- Don Cortes, Chief Scientific Officer / VP, STAT Analysis Corporation; Surendara Kumar

**B4.5 RESULTS FROM A GOLD NANOPARTICLE MERCURY DETECTION SYSTEM**
- Jay James, Founder, Picouyune; Donald Lucas Ph.D., Lawrence Berkeley National Laboratory; Catherine Kshash, UC Berkeley

**B4.6 BEST PRACTICE CONSIDERATIONS FOR EPA PS 12B – SOLID SORBENT METHOD FOR CONTINUOUS MERCURY MONITORING**
- Robert Brunette, Scientist, Eurolins Frontier Global Sciences; Eric Roland, Gerard van Der Jagt, Ryan Nelson

## B5. EMISSION TESTING & MONITORING

**B5.1 TRANSFORMING NATURAL GAS LEAK DETECTION AT HIGHWAY SPEEDS**
- Chris Vale, Energy & Natural Gas Program Manager, Picarro inc.

**B5.2 FIELD TESTING OF AN IN SITU SO3/SO2/H2O CONTINUOUS REAL-TIME MONITOR**
- Curtis Laush, Senior Scientist, IMACC

**B5.3 FLUE GAS CONTAMINANT MEASUREMENT FROM OXY-COMBUSTION IN A COAL-FIRED POWER PLANT**
- Kenneth Wang, Sr. Staff Scientist, American Air Liquide; Morgane Riviere, Air Liquide France

**B5.4 ONGOING FIELD TEST EXPERIENCES WITH THE AUTOMATIC SORBENT TRAP MONITORING SYSTEM**
- Jurgen Reimann, Branch Manager, Environnement S.A Deutschland; Seth Morrell, Alltech Environmental USA

**B5.5 CONTINUED AUTOMATION OF CEMS**
- Graham Leggett

**B5.6 CONTINUOUS WAVE CAVITY RING-DOWN SPECTROSCOPY FOR ENVIRONMENTAL APPLICATIONS**
- Graham Leggett, Global Product & Sales Manager - Environmental Division, Tiger Optic

## B6. MONITORING & REPORTING

**B6.1 MATTs MONITORING - HOW WILL EPA DETERMINE COMPLIANCE? HOW WILL YOUR DAHS DEMONSTRATE COMPLIANCE?**
- John Downs, Regulatory Manager, Babcock & Wilcox Power Generation Grp.; Joel Millard

**B6.2 FUTURE CHALLENGES FOR CEMS DAHS SYSTEMS**
- Mark Shell, Chief Technology Officer, Environmental Systems Corporation

**B6.3 OPTIONS FOR DEMONSTRATING MATTs COMPLIANCE - ADVANTAGES & DISADVANTAGES**
- Diane Fischer, Air Quality Control Services Area Leader, Black & Veatch

**B6.4 15 YEARS OF MERCURY SPECIATION EMISSIONS MEASUREMENTS USING MODIFIED EPA METHOD 30B**
- Gerard Van der Jagt, Mercury Laboratory Manager, Eurofins Frontier Global Sciences; Robert Brunette, Eric Roland, Ryan Nelson, Darren Miller, David Westby

**B6.5 MEASURING ZERO POLLUTANTS**
- Robert Davis, Vice President - Environmental Sustainability, Aigas

**B6.6 NEW RULES FOR EPA PROTOCOL GASES**
- Robert Davis, Vice President - Environmental Sustainability, Aigas

**B6.7 SF6 & DECOMPOSITION GAS ANALYSIS THROUGH NON DISPERSE INFRARED TECHNOLOGY**
- Vaughan Williams, International Sales Director, Energy Maintenance Technologies; Neil Kane, Kevin York

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### Preliminary Program (1/9) ~ Subject to Change
**C.3. CONTROL TECHNOLOGIES I**

**C.3.1 START UP & OPERATING EXPERIENCE NRG INDIAN RIVER NID DFGD**
Mark Riedler, Principal Process Engineer, Alstom Power

**C.3.2 THE FACT & FICTION OF SCR CATALYST REGENERATION**
Mark Ehrenschwender, VP of Business Development, STEAG Energy Services LLC

**C.3.3 MERCURY CONTROL & ITS INTERRELATION TO POWER PLANT OPERATION & OTHER AIR POLLUTION CONTROL TECHNOLOGY**
Mark Sankey, Senior Engineering Specialist, Bechtel Power Corporation; Dan Koza & Michelle Golden

**C.3.4 OPERATING A CIRCULATING DRY SCRUBBER AT LOW & VARIABLE BOILER LOADS**
Terence Ake, Product Manager, Babcock Power Inc.; Roderick Beittel & Anthony Licata

**C.3.5 GAME-CHANGING MULTI-POLLUTANT EMISSIONS CONTROL TECHNOLOGY**
Kevin Crapsay, VP of Corporate Strategy & Development, Eco Power Solutions

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**C.4. CONTROL TECHNOLOGIES II**

**C.4.1 BASF MERCURY SORBENTS - UPDATE ON MINERAL BASED TECHNOLOGIES FOR MERCURY CAPTURE IN COAL-FIRED POWER PLANTS**
William Hanzy, Technical Projects Manager, BASF Corporation; Fabien Rioutl & Xiaolian Yang

**C.4.2 INITIAL OPERATION & PERFORMANCE OF THE INTEGRATED DFGD/WFGD FOR CLIFFSIDE 6**
Harry Gunzburger, Project Manager, Duke Energy; Phil Rader & Dale Love, Alstom

**C.4.3 CODEPENDENCE OF MULTIPOLLUTANT CONTROLS & THE AIR PREHEATER**
John Guffre, Senior Research Scientist, Paragon Air Heater Technologies, Inc.

**C.4.4 EMISSIONS CONTROL SYSTEM UPGRADES FOR INDIAN RIVER UNIT 4**
Steve Bjorklin, Senior Associate Process Engineer, Burns & McDonnell Engineering Company, Inc.; Gerry Hopper, NRG; Kristin Gildborg & Paul Brandt, Burns & McDonnell

**C.4.5 EVALUATION OF HG CONTROL TECHNOLOGIES WHILE OXY-FIRING A PRB COAL**
Bryder Van Otten, Engineer, Reaction Engineering International; Andrew Fry & Brad Adams, Reaction Engineering International; Jost Wendl, Geoff Silcox & Ignacio Preciado, University of Utah; Larry Ball, Praxair

**C.4.6 A HIGH REACTIVE HYDRATED LIME FOR CHALLENGING DSI APPLICATIONS**
Curt Biehn, Manager, Marketing & Technical Services, Mississippi Lime Company; Mark DeGenova, Randy Griffard, Eric Van Rens & Richard Zhang

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**C.5. MATS**

**C.5.1 HCL & MERCURY MITIGATION WITH DSI**
Brent Tideman, Chemical Engineer - Manager, Nol-Tec Systems; Michael Thiel

**C.5.2 MATS COMPLIANCE SOLUTION FOR UNSCRUBBED COAL-FIRED BOILERS**
Jonas Klingspor, Vice President, URS Corporation; Tom Machalek, Blake Stapper, URS; Jeff Kolda, John Darrow, Richard Gebert, Stephen Stark, W.L. Gore and Associates, Inc.

**C.5.3 PREPARING FOR THE MERCURY AIR TOXICS STANDARD (MATS)**

**C.5.4 ADDRESSING MATS & MERCURY RE-EMISSIONS WITH MULTI-POLLUTANT EMISSIONS CONTROL TECHNOLOGY**
Sanjeev Jolly, Vice President of Engineering, Eco Power Solutions

**C.5.5 DECISION MAKING FOR MAT COMPLIANCE**
Joel Millard, KVB-Energetik Reguulary Specialist, Babcock & Wilcox Power Generation Group; Bill Eberhardt

**C.5.6 CO-ABSORPTION OF MERCURY IN A WET FLUE GAS DESULFURIZER**
Joe Stuart, Director of Commercial Development, TDC, division of Genesis Energy Limited; Steve Feeney, Babcock & Wilcox Power Generating Group

**C.5.7 A SYSTEM EVALUATION APPROACH IN IMPLEMENTING DSI FOR MATS COMPLIANCE**
Anthony Silva, Advisory Engineer, Babcock & Wilcox; T. Ruppelli, S. Kumar, & J. Knapiak
C6. DRY SORBENT INJECTION (DSI)

C6.1 BENEFITS OF CONDITIONED AIR IN TRANSLOADING WHEN USING TRONA FOR SO2 & ACID GASES MITIGATION IN COAL FIRED UNITS FLUE GAS STREAM
Jarret McClendon, Applications Engineer, Natronx Technologies

C6.2 THE EFFECT OF DRY SORBENT INJECTION (DSI) REAGENTS ON COAL COMBUSTION BY-PRODUCTS
Jim Dickerman, Director FGT, Lhoist North America; Melissa Sewell

C6.3 DSI FOR SO2, SO3, HCL & HG REMOVAL - ANSWERS TO COMMON QUESTIONS
Jon Norman, DSI Technology Manager, United Convoyor Corporation

C6.4 ACID GAS & MERCURY MATS COMPLIANCE THROUGH SORBENT INJECTION
Chris Linrud, Senior Systems Project Engineer, ADA-ES, Inc.; Cody Wilson, Greg Filipelli, Cameron Martin & Robin Stewart, ADA-ES; Bill Cabo, BCSI

C6.5 OPTIMIZATION OF DRY SORBENT INJECTION & PAC INJECTION FOR COST-EFFECTIVE MULTIPOLLUTANT CONTROL
Kevin Fisher, Senior Engineer, Element 1 Engineering, Inc.; Steve Smokey, Great River Energy

C6.6 STATUS OF THE DRY SORBENT INJECTION PROJECT AT BOARDMAN STATION
Bruce McCampbell, Project Manager, Shaw; Kenneth Fitzgerald & Christopher Wedig

C7. ACTIVATED CARBON & MERCURY SORBENTS

C7.1 RECENT INJECTION TRIALS OF MATS-PAC™ NON-HALOGENATED ACTIVATED CARBON IN COAL-FIRED POWER PLANT FLUE-GAS
Richard Mimna, Senior Research Associate, Calgon Carbon Corporation; Michell Lomago

C7.2 HOW TO GUARANTEE THE LOWEST COST ACTIVATED CARBON TREATMENT SOLUTION
Richard Mimna, Global Business Manager - Emissions Control Technologies, Norit Inc.

C7.3 ACTIVATED CARBON MARKET SUPPLY & DEMAND
Patton Adams, Developmental Engineer, Norit Inc.

C7.4 DEMONSTRATIONS OF AMENDED SILICATES FOR MERCURY CONTROL IN COAL FIRED GENERATING UNITS
Jim Butz, VP of Project Management, Novinda; Cliff Brown & Ben Bernarda

C7.5 IN-FLIGHT MERCURY CAPTURE OF NORIT'S NONCARBON SORBENT VERSUS DARCO HG-1H
Patton Adams, Developmental Engineer, Norit Inc.

C7.6 SORBENT TESTING IN THE LAB AND FIELD
John Kline Principal, John Kline Consulting; Ank Delagrave, Lafarge

C8. SCR

C8.1 RELEASE & TRANSFORMATION OF POISONS IMPLICATED IN SCR CATALYST DEACTIVATION
Balaji Krishnakumar, Sr. Computational Analyst, Niska Energy Associates LLC; Stephen Niska, NEA LLC; Alejandro Jimenez, EPRI

C8.2 SCR CATALYST MANAGEMENT CONSIDERATIONS
Nick Pollock, Chief Technology Officer, CoaLogix; Randy Sadler

C8.3 SELECTIVE CATALYTIC REDUCTION SYSTEMS
Joe Smith, Business Development Manager, Peerless Mg

C8.4 SNOX/TM - THE ECONOMICAL WAY TO TURN HIGH-SULPHUR FUELS INTO POWER WITH REDUCED CO2 EMISSIONS
Peter Ibaak, Business Development Manager, Haldor Topsøe A/S

C8.5 REGIONAL ENVIRONMENTAL REMEDIATION
Gare Henderson, Director of R&D, Gravitational Systems Engineering, Inc.

C8.6 POLLUTION CONTROL COST MINIMIZATION
Jerrald Radway, Chairman, Enerchem

C9. ADVANCED CONTROL TECHNOLOGIES

C9.1 PROSPECTS FOR PASSIVE BIOLOGICAL TREATMENT OF SELENIUM IN FGD WASTEWATERS
James Bays, Technology Fellow, CH2M HILL; Tom Higgins, Dana French, BT Thomas

C9.2 PARTICULATE & MERCURY REMOVAL USING KIMRE(TM) TECHNOLOGY
George C. Pedersen Jr. FE, CEO, KIMRE, INC.

C9.3 UTILITY MATS COMPLIANCE W/ HCL LIMITATIONS & THE CHALLENGES FACING AGING EGUS
Paul Johnson, Project Manager, ADA-ES, Inc.; Andrea Taylor, Tennessee Valley Authority; David Young, John Schminky & Greg Filipelli, ADA-ES, Inc

C9.4 IS THERE A PLACE FOR DSI AT DETROIT EDISON?
William Rogers, Sr. Technological Specialist, DTE Energy; Robin Stewart, Andrew Bertelson, Jordan Copenhafer, Nathan Sonobe & Trent Lynch, ADA-ES, Inc

C9.5 THE LATEST CONTROL TECHNOLOGY OF TRACE ELEMENTS USING HEAT EXCHANGER

C9.6 REACT MULTIPOLLUTANT SYSTEM - AN OPTION TO CONSIDER
Jim Peters, VP Business Development, Hamon

C9.7 STRATIFICATION CONSIDERATION IN DSI OPTIMIZATION
Charles Lockert, President, Green Energy Solutions

C9.8 APPLICATION OF THE DRYFINING™ TECHNOLOGY AT EXISTING POWER UNITS FIRING LOW-RANK COAL
Charles Bullinger, Senior Principle Engineer, Great River Energy; Vladimir Vaysman & Ysein Lu, WorleyParsons

C9.9 ANALYTICAL MGMT. OF SCR CATALYST LIFETIMES & MULTIPOLLUTANT PERFORMANCE
Balaji Krishnakumar, Sr. Computational Analyst, Niska Energy Associates LLC; Stephen Niska, Niska Energy Associates LLC; Farokh Ghoreishi & Carey Tyree, Southern Company
**D1. SHALE GAS & NEW MARKETS**

**D1.1 THE EFFECT OF SHALE GAS ON NEW ENGLAND POWER MARKETS**
Stephen Slocomb, Associate, Epsilon Associates

**D1.2 OPTIONS FOR CAPTURING THE VALUE OF SHALE GAS: ENVIRONMENTAL, ECONOMIC & ENERGY SECURITY PERSPECTIVES**
Joe Moriarty, Lead Associate, Booz Allen Hamilton; Robert Murray, Jesse Goellner, & Gary Les Lo Baugh

**D1.3 SHALE GAS & LNG EXPORT: REGULATION OF A NEW PHENOMENON**
Les Lo Baugh, Shareholder/Partner/Brownstein

**D1.4 KELLY A SYSTEMWIDE MODEL TO MEET THE CHALLENGES & MAXIMIZE THE ECONOMIC POTENTIAL FROM SHALE GAS EXTRACTION IN SMALL TOWN COMMUNITIES**
Sayan Chakrabarti, Senior Program Manager, MRIGlobal; Mark Abashian & Larry Brown, MRIGlobal; Gregory Proctor, Prolific Technology

**D2. FRACKING & SUSTAINABLE DEVELOPMENT**

**D2.1 PUBLIC CONFIDENCE & HYDRAULIC FRACTURING: FINANCIAL RESPONSIBILITY AS AN ECONOMIC TOOL FOR RISK-SHARING**
Kerry Schlichting, Senior Associate, ICF International; Libby McCuough

**D2.2 FRACKING: ENVIRONMENTAL REGULATORY & POLICY UPDATE**
Megan Roberts-Satinsky, Associate, Venable LLP

**D2.3 FRACKING POLICY: WRONG POLICY COULD DERAILED GAS PRODUCTION OVERNIGHT INCREASING COSTS TO HOMEOWNERS & INDUSTRY**
Stephen Sewalk, Assistant Professor, University of Denver; Vincent Buscarello, Qionglin Dai & Katelin Knox

**D2.4 CREATING A SUSTAINABLE ENERGY SYSTEM THROUGH GAS & ELECTRIC HARMONIZATION**
Kelly Daly, Chair - Energy & Environmental Division, Stinson Morrison Hecker LLP

**D2.5 ENVIRONMENTAL & ECONOMIC IMPACT ASSESSMENT OF SHALE GAS PRODUCTION & RESOURCES**
Sarah Jordaan, Project Manager, EPRI; Sean Bushart

**D3. ENERGY POLICY**

**D3.1 IMPACTS OF POTENTIAL FUTURE RULES & REGULATIONS ON INVESTMENT DECISIONS TODAY**
Sebastian Mankowski, Consultant, NERA Economic Consulting; Scott Bloomberg

**D3.2 NATIONAL CAP & TRADE LEGISLATION- WHAT YOU NEED TO KNOW TO PREPARE**
Larry Goldenhersh, CEO, Enviromission

**D3.3 ENERGY POLICY IN THE WHITE HOUSE 2013 OBAMA VS. ROMNEY**
Kelly Carnes, President, CEO, TechVision21

**D3.4 CONSIDERING ENVIRONMENTAL & CULTURAL VALUES IN TRANSMISSION PLANNING**
Byron Woertz, Senior Project Manager, Western Electricity Coordinating Council

**D6. ENERGY & CLIMATE**

**D6.1 CLIMATE & THE PUBLIC TRUST DOCTRINE- PUBLICITY STUNT OR REAL THREAT?**
Allison Wood, Partner, Hunton & Williams LLP

**D6.2 ACHIEVING SIGNIFICANT CARBON EMISSION REDUCTIONS FROM COGENERATION THROUGH NEW MARKET-BASED INCENTIVES**
Paul MacGregor, Senior Vice President, Nexant; Tom Flynn

**D6.3 ADOPT A CARBON TAX WITH REINVESTMENT & CONVERT NATURAL GAS TO GASOLINE TO REDUCE EMISSIONS OVER 50% IN 20 YEARS**
Qionglin Dai, Graduate Research Associate, University of Denver; Stephen Sewalk

**D6.4 ENERGY & ENVIRONMENT POLICY LEARNINGS FROM ‘CASH FOR CLUNKERS’**
Shoshannah Lenski, Senior Associate, Strategy & Corporate Development, DTE Energy

**D4. ENERGY POLICY - NATURAL GAS**

**D4.1 SHALE GAS IMPACTS ON US ELECTRIC POWER CO2 EMISSIONS**
Daniel Klein, President, Twenty-First Strategies

**D4.2 NATURAL GAS: AMERICA’S ALTERNATIVE TO GASOLINE?**
Bob Barnett, Energy Analyst, Bloomberg Government

**D4.3 ENERGY POLICY: WHAT’S NEXT?**
Mitchell Baer, Director - Office of Oil & Gas Analysis, US DOE

**D4.4 LEVERAGE THE LOW COST OF NATURAL GAS TO BRING IT TO UTILIZATION**
Vijayan Chomattil, Entrepreneur, Kanab Energy

**D5. STATE, REGIONAL & INFRASTRUCTURE**

**D5.1 THE VOTES ARE IN - WHAT DOES THAT MEAN FOR THE RENEWABLE INDUSTRY?**
Barbara Sands, Energy Expert, PA Consulting Group

**D5.2 THE ARIZONA ENERGY ROADMAP: CREATING A PLAN FOR THE STATE’S ENERGY SECTOR**
Michelle De Blasi, Attorney, Greenberg Traurig LLP; Christopher Davey, EnviroMission

**D5.3 CUTTING THROUGH THE STATIC: INSIGHTS FOR IMPLEMENTING EFFECTIVE PUBLIC INVOLVEMENT PROGRAMS FOR ELECTRIC INFRASTRUCTURE DEVELOPMENT**
Diann Strom, Associate, Envirotissues; Diane Adams

**D5.4 PRACTICING RISK-AWARE ELECTRICITY REGULATION**
Dan Mullin, Senior Manager, Ceres; Ron Brnz, Public Policy Consulting; Richard Sedano, Regulatory Assistance Project; Denise Furey, Regent Square Advisors

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Room 222C | Room 222C | Room 222C
D7. MANAGING RISK & PROJECT FINANCE

D7.1 ADDRESSING THE CHANGING OIL & GAS REGULATORY LANDSCAPE WITH CLOUD-BASED COMPLIANCE SOLUTIONS
Mickey Landkof, Senior Sales Engineer, Enviance

D7.2 LIFE AFTER SANDY - ENVIRONMENTAL EFFECTS
Bapanaiah Penugonda, Group Practice Director & Associate Professor, NYU College of Dentistry

D7.3 INVESTING IN THE GHG CONSTRAINED FINANCIAL MARKETS IN THE LIGHT OF THE FINANCIAL REFORM LEGISLATION
Nedia Miller, Principal, Miller CTA

D7.4 FINANCING RENEWABLE ENERGY PROJECTS: THE ROLE OF EX-IM BANK
Craig O’Connor, Director – Office of Renewable Energy, Export-Import Bank of the US

D7.5 PROJECT FINANCING FOR RENEWABLE ENERGY PROJECTS
John Rosis, Principal, Scully Capital

E1. RENEWABLE ENERGY MARKETS

E1.1 ONTARIO’S FIT
Peter Black, Director, Brant Renewable Energy

E1.2 RENEWABLE ENERGY CERTIFICATES: DEMYSTIFYING THE CURRENCY OF US & STATE RENEWABLE ENERGY MARKETS
Alex Pennock, Manager, Green-e Energy - Center for Resource Solutions

E1.3 HOW TO BUY & MARKET RENEWABLE ENERGY CREDITS & MEET STATE MANDATES IN NYISO, PJM & RGGI
Bert Spaeth, Senior Energy Engineer, RS Energy Solutions Inc.

E1.4 UTILIZING PURPA TO MARKET RENEWABLE ENERGY
Peter Richardson, Partner, Richardson & O’Leary, PLLC

E2. DISTRIBUTED GENERATION

E2.1 THE ECONOMICS OF HYBRID RENEWABLE MICROGRIDS
Peter Lilienthal, CEO, HOMER Energy

E2.2 DISTRIBUTED GENERATION & THE INTELLIGENT GRID: CHALLENGES & PROMISES
Craig Lewis, Executive Director, Clean Coalition

E2.3 LESSONS LEARNED ADMINISTERING DISTRIBUTED GENERATION INCENTIVE PROGRAMS
Terry Clapham, Distributed Generation Manager, California Center for Sustainable Energy

E2.4 FEASIBILITY & CONSUMER BENEFITS OF MEETING THE RENEWABLE PORTFOLIO STANDARD FOR DISTRIBUTED GENERATION IN ILLINOIS
Jin H. Jo, Assistant Professor, Illinois State University; Jared Hayden & Sarah Noll

E3. RENEWABLE DEVELOPMENT ANALYSIS

E3.1 BENCHMARK SURVEY RESULTS: RENEWABLE ENERGY & CORPORATE ENERGY EFFICIENCY
Margery Moore, Dir. EHS Strategic Alliances, Bloomberg BNA

E3.2 VARYING IMPACTS OF RPS
Marlys Palumbo, Partner, Van Ness Feldman

E3.3 DEVELOPMENT OF A RENEWABLE ENERGY MEASUREMENT SYSTEM
Zelda Roberts, Senior Specialist, National Advisory Council on Innovation

E3.4 SCREENING INSIDE THE FENCE RENEWABLE ENERGY OPPORTUNITIES - TURN YOUR LOAD INTO AN ASSET
Michael Zebell, Senior Consultant, ERM; John Clancy, Godfrey & Kahn
E4. RENEWABLE PROJECT DEVELOPMENT

E4.1 NAVIGATING THE BLM ROW GRANT PROCESS FOR RENEWABLE ENERGY PROJECTS
Robert Prohaska, Director, ESA

E4.2 TRES AMIGAS - CREATING A NATIONAL HUB FOR RENEWABLES
Laura Marz, Senior Vice President, Viridity Energy, on behalf of Tres Amigas

E4.3 ENVIRONMENTAL LITIGATION AGAINST RENEWABLE PROJECT DEVELOPMENT
Jim Wedelking, Staff Attorney, Sidley Austin LLP

E4.4 EFFECTIVE MESSAGING IN TODAY’S RENEWABLE ENERGY MARKET
Carolyn Pans, President & CEO, Mind Over Markets

E4.5 WHO’S THE BOSS? THE IMPACT OF THE 2012 ELECTION ON RENEWABLE ENERGY
James McCamagher, Partner, Duane Morris

E4.6 SYNCING SCHEDULES FOR RENEWABLE GENERATION & TRANSMISSION INTERCONNECTION
Molly Cresto, Project Manager, CH2M Hill; Cary Roberts

E5. NEW TECHNOLOGY

E5.1 ADVANCED GROUND-BASED INSPECTION TECHNOLOGY FOR WIND TURBINE BLADES
Stan Rosinski, Program Manager, Electric Power Research Institute; John Lindberg

E5.2 APPLYING CSP INNOVATIONS FOR CLEANER FOSSIL-FIRED POWER PLANTS IN THE US
John Robbins, Senior Director of Sales - Americas, AREVA Solar, Inc.

E5.3 SYNCRETIZING ENHANCED GEOTHERMAL, WIND & HYDROGEN FOR POWER GENERATION
Edward Hinders, Canyon West LLC; Patrick Kelly

E5.4 SPACE BASED SOLAR POWER AS A REPLACEMENT FOR FOSSIL FuELS
Keith Henson, Founder, LS Society

E5.5 HEAT RECOVERY FROM MUNICIPAL SEWER PIPES
John Houde, Vice-President of Research & Development, Renewable Resource Recovery Corp.; Les Lisk

E5.6 STATISTICAL OPTIMIZATION OF MEDIUM COMPONENTS AFFECTING FERMENTATIVE HYDROGEN PRODUCTION FROM CRUDE GLYCEROL BY THERMOTOLERANT KLEBSIELLA SP. TR17
Tee cla Choankaew, Ph.D Candidate, Prince of Songkla University

E6. SOLAR & PV

E6.1 PV REACHES GRID PARITY
Lane S. Garrett, P.E., C.E.M., CEO, ULG Energy Solutions, Inc.

E6.2 OUTLOOK FOR PV DEMAND IN A LOW INCENTIVE MARKET
Paula Mints, Director, Navigant

E6.3 SUNBEAMS FROM SPACE MIRRORS FEEDING SOLAR FARMS ON THE GROUND AT DUSK & DAWN
John Robbins, Senior Director of Sales - Americas, AREVA Solar, Inc.

E6.4 GREENING THE GRID
Troy Dalbey, North American Manager, Upsolar Group

E6.5 BEST PRACTICES FROM SCE’S SOLAR PV PROGRAM
Mark Nelson, North American Director of Generation Planning & Strategy, Southern California Edison

E6.6 A NEW VISION FOR CONCENTRATED SOLAR
Zev Rosenzwieg, CEO & President, AORA Solar Ltd

E6.7 NATIONAL UTILITY RATES DATABASE
David Loomis, Professor of Economics, Illinois State University

E6.8 HOW TO SURVIVE THE MULTI-FACETED U.S. SOLAR MARKET
Boris Schubert, CEO, Q.CELLS North America

E8. BATTERIES, STORAGE & RE DEVELOPMENT

E8.1 ELECTROVAYA’S UTILITY ENERGY STORAGE SOLUTIONS USING LITHIUM ION SUPERPOLYMER BATTERY TECHNOLOGY
Rajneesh DasGupta, Vice President - Energy Storage, Electrovaya

E8.2 CHARGING, TESTING & MONITORING: EV BATTERY CHARGING SYSTEMS & TECHNOLOGY
Don Karner, President of ECOnality North America, ECOnality

E8.3 FEASIBILITY OF ENERGY STORAGE ON ITALIAN POWER EXCHANGES ANCILLARY MARKET
Dr. Francesco Vallone, President & CEO, Cogenpower

E8.4 MAPS: MAGLEV POWER STORAGE SYSTEM

E8.5 RENEWABLE POWER SOURCE BASED ON LOW ENERGY NUCLEAR REACTORS
George Miley, Professor Emeritus - University of Illinois; Xiaoling Yang, Kyou-Jung Kim, Tapan Patel, Erik Ziehm, James Madrigal, Bert Stunkard

E8.6 UTILITY SCALE RENEWABLE ENERGY PROJECT COMPLIANCE
Kevin Wedman, Vice President, Bureau Veritas
**Monday | January 28**

1PM - 3PM

**Session Sponsor and Co-Chair**
YWELE

**Track 2013 F**

F1. ENERGY CYBERSECURITY
F1.1 A PARADIGM SHIFT IS REQUIRED IF THE U.S. IS GOING TO HAVE A MORE SECURE SMART GRID
Eamonn McCormick, CEO, Tri Modat; Brian Lenane

**F1.2 CONDUCTING A RISK-BASED METHODOLOGY FOR COMPLIANCE & CYBER SECURITY REQUIREMENTS**
Rahul Chhabra, Cyber Security & Compliance Consultant; Burns & McDonnell Engineering; Jerome Farquharson, Michael Welch

**F1.3 EFFECTIVE REGULATORY APPROACHES TO SMART GRID CYBER SECURITY**
Terry Jarrett, Commissioner, Missouri Public Service Commission

**F1.4 CYBER THREATS TO INDUSTRIAL CONTROL SYSTEMS: FACT OR FICTION**
Neil Heathekar, ICS-CERT Deputy Director, Department of Homeland Security

**F1.5 SECURITY OPERATIONS CENTER: AN ADAPTIVE APPROACH**
Jeff Hawks, Director, Information Systems; Wyle Laboratories; Scott Sanders

**F1.6 DESIGNING AN EFFECTIVE SECURITY PROGRAM**
Joachim Gloschat, Physical Security Specialist, Security Management Solutions, LLC

3:30PM - 5:30PM

F2. COMPLIANCE TECHNOLOGIES & STRATEGIES

**F2.1 LOWER RISK & REDUCED COST - ESP TO PJFF CONVERSION**
Mark Aldrich, Regional Executive, Hamon

**F2.2 RE-ENGINEERING COAL-FIRED GENERATING PLANTS**
Keith Moore, President, Castle Light Energy Corp

**F2.3 STRATEGIES FOR PATENTING “GREEN” TECHNOLOGIES**
Etica Lowthers, Patent Agent, Sim. IP Practice

**F2.4 ADVANCES IN FUEL LEAN GAS REBURN**
Charles Lockert, President, Breen Energy Solutions

**F2.5 WET FGD NOZZLE TECHNOLOGY - CAN A BETTER NOZZLE SELECTION HELP IMPROVE SCRUBBER PERFORMANCE?**
Robert Van Durme, P.E., Senior Account Manager, Lechler Inc.

F2.6 AIR PERMITTING OF IPL’S EAGLE VALLEY PROPOSED REPLACEMENT COMBINED CYCLE PLANT
Richard Benedict, Director of Project Development, Indianapolis Power & Light Co. (IPL); Tom Ranick & Robert Fraser, Environmental Resources Management

**F2.7 ON PREVENTING SERIOUS INJURIES & FATALITIES**
James Grant, Vice President, BST

**Tuesday | January 29**

7:30AM - 9:30AM

F3. POWER PLANT & BOILER OPTIMIZATION

**F3.1 USE OF CHLORINE DIOXIDE IN RO SYSTEMS FOR TREATMENT OF BOILER FEED WATER**
Bob Mueller, Director - Process Chemicals, Aigas Specialty Gases

**F3.2 IN FURNACE LASER-BASED MEASUREMENT SYSTEM TO OPTIMIZE COAL COMBUSTION ON 600MW COAL FIRED BOILER**
Scott Affelt, Vice President, Zoito Technologies

**F3.3 IMPROVED HEAT TRANSFER MANAGEMENT THROUGH SOOTBLOWING OPTIMIZATION ON A CYCLONE FIRED UNIT**
Tim Cartmel, Babcock & Wilcox PGG; Jeremy Brown

**F3.4 COAL FLOW OPTIMIZATION WITH B&W PGG’S EVENFLOW SYSTEM**
Tim Fuller, Technology Manager, Babcock & Wilcox Power Generation Group; Bijan Hosseininejad & Eric Fuller, B&W PGG; Alan Murkerson & Joe Krajina, Lakeland Electric; Dr. Harun Bilgen, Lehigh University

**F3.5 USE OF OXYGEN ENHANCED COMBUSTION TO ENHANCE BOILER OPERATIONS**
Larry Boul; Sr. Development Professional, Praxair, Inc; Stefan Lax, David Thompson & Sho Kobayashi

**F3.6 COMBUSTION OPTIMIZATION FOR DECREASED EMISSIONS & IMPROVED EFFICIENCY**
David Earley, President, Combustion Technologies Corporation; Joe Estrada, Duke Energy

10AM - 12PM

F4. EHS & EMIS

**F4.1 ENSURING REGULATORY COMPLIANCE IN A DECENTRALIZED ORGANIZATION**
Richard Waterman, Vice President, EA Engineering, Science & Technology, Inc.; Kathy French, LS Power Development, LLC

**F4.2 EMIS DESIGN & IMPLEMENTATION PLANNING FOR ONE OF THE LARGEST US STATE-OWNED UTILITIES**
Rick Mack, Principal, E2ManageTech; Brian Holmes, Santee Cooper

**F4.3 EHS GLOBAL AUDITING TRENDS**
Margery Moore, Dir. EHS Strategic Alliances, Bloomberg BNA

**F4.4 LEVERAGING MODERN TECHNOLOGY FOR EMIS SUCCESS**
James Jenson, Vice President of Products & Services, Perillon Software

**F4.5 THE SAFETY LEADERS BRAIN—HOW SAFETY LEADERS ARE WIRED DIFFERENTLY & WHY THIS MAKES ALL THE DIFFERENCE TO BUSINESS**
Autumn Krauss, Chief Scientist, Sentis USA; Elizabeth Prazeres & Michelle Brown

**F4.6 MOVING FROM EHS COMPLIANCE TO PERFORMANCE**
David Hoffman, Sustainable Supply Chain SME, Enablon

F5. EHS & RISK MANAGEMENT

**F5.1 OIL SPILL RISK EVALUATION FOR SUBSTATION OIL-FILLED EQUIPMENT**
Kris Macaskey, Principal, Civil & Environmental Consultants, Inc.; Emory McLean

**F5.2 RISK MANAGEMENT & ITS IMPACT ON ENVIRONMENTAL HEALTH & SAFETY**
Tom Barlow, Channel Manager, EQ

**F5.3 ENVIRONMENTAL GREEN SHOP AWARD PROGRAM**
Robert Trapani, Environmental Engineer, State of Arizona Department of Transportation

**F5.4 IMPLEMENTING ISO 31000 INTO EHS**
Johannes Swaynepoel, Product Marketing Manager, Enablon

**F5.5 REDUCING HUMAN HEALTH RISKS FROM CARBON DIOXIDE VENTING ASSOCIATED WITH CARBON CAPTURE OPERATIONS**
John Shrock, Senior Scientist, ECT, Inc.

**F5.6 ACHIEVING A WORLD CLASS SAFETY CULTURE**
Nicholas Kump, Senior Consultant, Culture Change Consultants

**F6. COAL ASH / CCP**

**F6.1 COAL ASH MANAGEMENT - THE CHANGING LEGAL LANDSCAPE**
Jeffrey N. Martin, Partner, Hunton & Williams LLP

**F6.2 COAL ASH STORAGE & DISPOSAL - LITIGATION & REGULATORY DEVELOPMENTS**
Nash Long, Partner, Winston & Strawn, LLP; May Wall

**F6.3 UPDATE ON ASTM COAL ASH REUSE STANDARDS**
Jeffrey N. Martin, Partner, Hunton & Williams LLP

**F6.4 BEYOND ASH PONDS**
Thomas Higgins, Global Technology Leader - Power Water & Process, CH2M Hill; Dennis Fink & Dena French

**F6.5 COAL COMBUSTION RESIDUALS CASE STUDY: GHENT GENERATING STATION**
Stephen Henson, Process Engineer, Kiewit Power; Raymond Eric Zbaczik, Kiewit Power; Scott Straight, LG&E & KU Energy

Preliminary Program (1/7) – Subject to Change
F7. NATURAL RESOURCE MGMT. - HCP

F8. OPERATIONS & MANAGEMENT

F8.1 TRUE GRIT: 7 CORE PRACTICES OF RESILIENT LEADERS
Autumn Kraus, Chief Scientist, Sents USA; Michelle Brown

F8.2 OUTAGE MANAGEMENT 101 – A GUIDE TO THE EFFECTIVE_PlANNING, EXECUTION & CLOSE OUT OF GENERATING PLANT MAINTENANCE OUTAGES
Phil Webster, Project Manager, Black & Veatch Corporation; Stephen Nelson, Dominic DiBari & Mike Dammann

F8.3 MILL PRE-FIRE DETECTION SYSTEMS
Richard Hovan, Principal Consultant, EPA Systems, LLC

F8.4 MANAGING ENVIRONMENTAL COMPLIANCE AND RESOURCE RECOVERY DURING TRANSMISSION & DISTRIBUTION SYSTEM CONSTRUCTION
Robert Ferrell, Sr. Mgr - Business Development, URS Corporation; Lauren Andersen, Ray Hinkle

F8.5 VALUE OF DESIGN FLEXIBILITY
Gill Eapen, CFO, VEEDIMS

F8.6 ENERGY BENCHMARKING IN NYC
David Ahrens, Managing Director, Energy Spectrum

F8.7 PLANNING THE POWER PRODUCTION: SHORT-TERM FORECASTING OF ITALIAN ELECTRICITY MARKET & COMBINATORIAL OPTIMIZATION
Ilaria Cannata, Strategic Development Director, Cogenpower; Dr. Francesco Valtione

G1. CARBON FOOTPRINT

G2. TAILORING RULE/NSR/GHG-BACT

G3. PLANNING & GHG REPORTING
G4. CORPORATE STRATEGIES & RISK MGMT
G4.1 CREATING GREENHOUSE GAS EMISSIONS OFFSETS BY REDUCING NITROGEN FERTILIZER USE IN U.S. AGRICULTURAL CROP PRODUCTION
Mike Miller, Director - Environment, EPR; Adam Diamant, EPR; Neville Miller, Ph.D. & G. Philip Robertson, Ph.D., Michigan State University (MSU).

G4.2 SUMMARY OF RECENT OBSERVATIONAL STUDIES OF THE IMPACTS OF CLIMATE CHANGE & IMPLICATIONS FOR THE ELECTRIC UTILITY INDUSTRY
Howard Balentine Technical Leader - Air Quality, AECOM; Gregory Derviavko

G4.3 CARBON TAX OR “CAP & TRADE” SYSTEMS & ITS COST & PRICE EFFECT ON U.S. REFINING & MARKETING
Bill Smalling, Attorney at Law, C. William Smalling, PLLC.

G4.4 HESS CORPORATION’S NEXT GENERATION CLIMATE CHANGE STRATEGY
Michal Pelzic, Senior Manager Reporting, Hess Corporation

G4.5 IS CONVERTING COAL TO GAS THE RIGHT MOVE? USING A DRIVER-BASED DECISION APPROACH IN THE FACE OF UNCERTAINTY
Eric Chung, Senior Manager - Power & Utilities Advisory Services, Ernst & Young

G5. CALIFORNIA CAP-AND-TRADE
G5.1 KICK-OFF FOR CALIFORNIA’S AB32: HOW WILL THE MARKET WORK?
Andrew Van Horn, Managing Director, Van Horn Consulting

G5.2 CARBON PROJECT TYPES TARGETED FOR CALIFORNIA COMPLIANCE MARKET PROTOCOLS
Dick Kempka, Vice President Business Development, The Climate Trust

G5.3 THE ROLE OF COMPLEMENTARY MEASURES IN DETERMINING THE STRINGENCY OF THE AB32 CAP
Steve Fine, Vice President, ICF International

G5.4 MARKET FORECAST & COMPLIANCE STRATEGIES FOR A COURT-CHALLENGED AB 32
William Rederbach, President, ClimeCo Corporation

G5.5 CARBON CREDIT CAPITAL - DECISION SUPPORT TOOL FOR COST EFFECTIVE COMPLIANCE TO AB-32 CAP-AND-TRADE
Rena Gielo, Carbon Credit Capital, LLC; Luca Nencetti

G6. GHG STRATEGIES - POST KYOTO
G6.1 CUTTING POWER PLANT CARBON EMISSIONS UNDER THE CLEAN AIR ACT
David Doniger, Policy Director - Climate & Clean Air Program, Natural Resources Defense Council; Daniel Lashof & Starna Yeh

G6.2 HOW WILL THE CARBON TAX IMPACT UTILITIES?
William Rederbach, President, ClimeCo Corporation

G6.3 THE FUTURE OF INTERNATIONAL CARBON OFFSETS - OPERATIONAL EXPERIENCE & NEW MARKET DESIGNS
Olof Bystrom Ph.D., Team Lead - Project Assessments, UNFCCC

G6.4 THE EMERGING POST-KYOTO CLIMATE POLICY FRAMEWORK AS EXPLAINED THROUGH NEW ENVIRONMENTAL ECONOMIC METRICS
Vincent Buscarletto, Research Associate, University of Denver; Stephen Sewalk

G6.5 NEW ESTIMATES OF GLOBAL OFFSET SUPPLY: ACCOUNTING FOR MARKET REALITIES
Steven Rose, Sr. Research Economist, EPR; R. Beach & J. Petrusa, RII International; K. Calvin, J. Edmonds & M. Wise, PNNL; B. McCarr, Texas A&M U.; B. Sohngen, Ohio St. U.; R. Youngman & R. Rosenzweig, Natoursce; A. Diamant & F. de la Chesnaye, EPR

Tuesday | January 29

10AM - 12PM

Session Sponsor and Co-Chair

EPRI

Mike Miller, Director - Environment, EPR; Adam Diamant, EPR; Neville Miller, Ph.D. & G. Philip Robertson, Ph.D., Michigan State University (MSU).

Co-Chair

Eric Chung

1PM - 3PM

Co-Chair

Andrew Van Horn

Co-Chair

Steve Fine

3:30PM - 5:30PM

Session Sponsors and Co-Chair

Olof Bystrom

NRDC

David Doniger

Wednesday | January 30

10AM - 12PM

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UNFCCC

Brian Dressel, Project Manager, DOE/National Energy Technology Laboratory; John Litynski

G7. CCS: CARBON CAPTURE & STORAGE
G7.1 CARBON CAPTURE UTILIZATION & STORAGE (CCUS) KNOWLEDGE BASED TOOLS FROM THE DOE/NETL CARBON STORAGE
Jonathan Carley, Vice-President - Business Development, CO2 Solutions Inc.; Dr. Luan Nguyen, Codexis, Inc.; Dr. Sylvie Fradette, CO2 Solution Technologies Inc.; Dr. Geert Versteeg, Procede Group BV

G7.2 ENZYMATIC TECHNOLOGY FOR LOW-COST CARBON DIOXIDE CAPTURE
William Flederbach, President, ClimeCo Corporation

G7.3 A CASE STUDY OF PERFORMANCE, COST & FEASIBILITY OF A CO2 CAPTURE READY COAL POWER PLANT
Eric Gai, Energy Analyst, U.S. Department of Energy/National Energy Technology Laboratory; Steve Herron & Paul Myles, Warley Parsons

G7.4 FUNDING MECHANISMS ADDRESSING THE LONG-TERM LIABILITY OF CCS ACTIVITIES
Terry Unger, Associate, ICF International; Kerry Schlichting

G7.5 EVALUATION OF ADVANCED SOLVENTS & OTHER COMPETING TECHNOLOGIES FOR CO2 CAPTURE FROM FOSSIL FUEL-FIRED SYSTEMS
Brandon Pavlish, Research Manager, Energy & Environmental Research Center University of North Dakota, Nathan Fiala & John Kay

G7.6 NEUMANN SYSTEMS GROUP’S ADVANCED CARBON CAPTURE SYSTEM FOR COAL-FIRED POWER PLANTS
Dr. Andrew Awtry, Principal Investigator; Jacob Kershman, Chemist, Neumann Systems; Wally Westlake, Andrew Awtry & Robert Fredell

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### Monday | January 28

**H1. ALGAE**
- **H1.1 WATER SUSTAINABILITY THROUGH THE USE OF AN ALGAE-BASED ADVANCED BIOLOGICAL TREATMENT**
  - Rick Johnson, Director, Business Development, AlgEvolve
- **H1.2 UTILIZATION OF LIQUID EFFLUENT FROM AN ANAEROBIC DIGESTER (DLE) AS A NUTRIENT SOURCE FOR ALGAE GROWTH**
  - Greg Karr, Program Manager, MRIGlobal; Jennifer Jackman, Scott Shore & Kristine Krebs
- **H1.3 ENERGY & WATER RESOURCE EFFICIENT PRODUCTION OF MICROALGAE LIPIDS**
  - Kelsey Price, Student Researcher, University of New Hampshire; Ihab Farag
- **H1.4 ALGAE GROWTH IN PHOTOBIOREACTORS USING A REMOVABLE JACKET OF COLORED LEDS**
  - Daniel Eltringham, Student Researcher, University of New Hampshire; Marian Emoraghy & Ihab Farag
- **H1.5 CLIMATE INDEPENDENT FOOD PRODUCTION WITH ALGAE**
  - Mark Edwards, Professor, ASU

### 3:30PM - 5:30PM

**H2. BIOFUELS / ETHANOL / BIODYSEL**
- **H2.1 EVALUATION OF AS-RECEIVED & PRETREATED NORTHEAST BIOMASS FOR PRODUCTION OF BIOFUELS & VALUE-ADDDED PRODUCTS**
  - NI-Ofel Mante, Research Associate - Thermochemoconversion Research, Brookhaven National Laboratory; Thomas E. Amidon & Timothy A. Volk (1) & Suresh P. Babu (2)
- **H2.2 CATALYTIC CONVERSION OF SYNTHESIS GAS INTO FUEL ETHANOL**
  - Girish Srivivas, Principal Engineer, TDA Research, Inc.; Michael V. Mundschou, Erik W. Andersen, Steven D. Dietz, Brady J. Clappadale & Steven C. Gebhard
- **H2.3 CARBON CAPTURE FROM CEMENT FLUE GAS & CONVERSION OF CARBON TO NEW VALUE IN BIOPLASTICS**
  - John Kline, Principal, John Kline Consulting; Brian Sefton & Shannon LaGuardia, Oakbio Inc.
- **H2.4 POST ELECTION POLITICS & CELLULOSE ETHANOL DEVELOPMENT**
  - Christopher Standlee, Executive Vice President, Abengoa Bioenergy
- **H2.5 STATISTICAL OPTIMIZATION OF ENZYMATIC HYDROLYSIS OF OIL PALM TRUNK FOR PRODUCTION OF GLUCOSE, XYLOSE & ETHANOL**
  - Pongsak Naparal, Student; Department of Industrial Biotechnology, Faculty of Agro-Industry, Prince of Songkla University; Sompang O-Thong, Pongsak Noparat, Student, Department of Industrial Biotechnology, Faculty of Agro-Industry, Prince of Songkla University
- **H2.6 UTILIZATION OF AN AIR BLANKET TO KEEP BIODIESEL DRY**
  - Scott Grossbauer, Global Sales Manager, Donaldson Company

### Tuesday | January 29

**H3. BIOMASS/ COFIRING IN POWER PLANTS**
- **H3.1 EUCALYPTUS PLANTATIONS IN FLORIDA USA: ECONOMIC ANALYSIS OF BIO-ENERGY & CARBON SEQUESTRATION POTENTIAL**
  - Jeff Wright, Manager, Hardwood Development, ArborGen Inc
- **H3.2 INNOVATIONS IN FLUIDIZED BED TECHNOLOGY: IMPROVING EFFICIENCY WITH INBED HEAT TRANSFER & STAGED GASIFICATION**
  - Patrick Travis, Business Development Manager, Outotec Energy Products
- **H3.3 PRODUCTION & PROPERTIES OF SOLID FUELS FROM HYDROTHERMAL CARBONIZATION (HTC) OF LIGNO-CELLULOSIC BIOMASS**
  - S. Kent Hoekman, Research Professor, Desert Research Institute; Larry Felix, Gas Technology Institute; Grady Coble, Parker Towing Company
- **H3.4 ZERO WASTE POWER PLANTS USING PLASMA GASIFICATION TECHNOLOGY**
  - Louis Circeo, Chief Scientist, Applied Plasma Arc Technologies, LLC
- **H3.5 GIANT KING GRASS AS AN ENERGY CROP IN THE UNITED STATES**
  - Carl Kuukkonen, CEO, VIAPACE Inc.
I. ENERGY SUSTAINABILITY

11.1 RENEWABLE ENERGY - SHOW ME THE GREEN!
Greg Odegard, Consultant, GO Environmental

11.2 GREEN CLAIMS & GREENWASHING - THE GRASS REALLY GREENER?
Charles Franklin, Senior Counsel, Akin Gump Strauss Hauer & Feld

11.3 SUSTAINABLE ENERGY FUTURES: DEVELOPMENT & APPLICATION OF A STRATEGIC ENVIRONMENTAL ASSESSMENT PROCESS FOR ELECTRICITY SECTOR PLANNING
Lisa White, Environmental Engineer, Clifton Associates Ltd.; Bram Noble, University of Saskatchewan

11.4 YESAB - THE YUKON WAY
Ken McKinnon, Executive Committee Member, Yukon Environmental & Socio-Economic Assessment Board

11.5 COLLABORATIVE ADVANCEMENT OF SUSTAINABILITY IN THE ELECTRIC POWER INDUSTRY
Andrew Coleman, Marketing Mgr, Environ & Renewables, EPRI; Todd Maki, Jessica Fox

12. SUSTAINABILITY PROJECTS

12.1 SUSTAINING THE LIFE OF A HISTORIC STRUCTURE: REMEDIATION OF THE NV ENERGY ELKO, NEVADA POWERHOUSE USING OZONE OXIDATION
Edward Handl, Division Manager, JBR Environmental Consultants, Inc.; Jason Benson, NV Energy

12.2 CREATING THE MINDSET OF SUSTAINABILITY
Warren Te Brugge, CEO & Founder, Manzamula Ventures, Inc.

12.3 EMPLOYEE ENGAGEMENT & PROJECT INVESTMENTS: CREATING A SUSTAINABILITY CONTINUUM
Devin Hodge, Sustainability Program Manager, Argonne National Laboratory

12.4 WIRE & CABLE EFFICIENCY
Evan Birenbaum, Program Manager, Southern California Edison; Carol Godfrey, Southwire

12.5 WASTE CONVERSION, ABS2 & SUSTAINABILITY
Lara Helfer, Southern California Impact Assessment Practice Lead, ERMI

13. SUSTAINABILITY REPORTING

13.1 PRIDE & PREJUDICE – REPORTING IN CIVIL SOCIETY IN THE 21ST CENTURY
Yolanda Pagano, Director, Sustainable Strategies & Solutions, O’Brien & Gere

13.2 RAISING THE BAR: NEW CHALLENGES FOR CORPORATE SUSTAINABILITY REPORTING
Jacob Kiselivitz, Senior EHS&R Specialist, Hess Corporation; Michal Pelzig

13.3 DODO-SAPIENS: WHY WE NEED REGENERATIVE, BIO-BASED BUILDINGS
Eric Corey Freed, Founding Principal, organicARCHITECT

13.4 SPELLS, SIGNS & STARBUCKS: HOW WE DESIGNED OUR CITIES AROUND OIL
Eric Corey Freed, Founding Principal, organicARCHITECT

13.5 ACCELERATING SUSTAINABILITY SOLUTIONS FOR ORGANIZATIONS
Raj Buch, Practice Lead, Arizona State University

13.6 FRESHWATER FREE FOOD PRODUCTION WITH NO WASTE
Mark Edwards, Professor, ASU

I4.316B

14.1 SELECTION OF BEST TECHNOLOGY AVAILABLE FOR 316(B) COMPLIANCE
David Bailey, Sr. Project Manager, EPRI

14.2 EPA’s PROPOSED EFFLUENT GUIDELINES & 316(B) RULES – OPERATING IN THE MIDST OF UNCERTAINTY
Averil Edwards, Associate, Winston & Strawn LLP

14.3 A NEW LOOK AT THE 316(B) COOLING WATER INTAKE RULE - NOW WHAT?
Manitia Moultrie, U. S. Power Sector Leader, Golder Associates

14.4 WHAT DO EPA’s NEW 316(B) COOLING WATER INTAKE STRUCTURE REGULATIONS MEAN TO EXISTING POWER GENERATION
Stephen Petron, Global Ecosystem Services Director, CH2M HILL; Christopher Wiggins

14.5 STRATEGIES FOR COMPLIANCE WITH UPCOMING 316(B) REQUIREMENTS
Erik Heinren, Sr. Scientist, Environmental Consulting & Technology; Mark Geraldi & Steve Cibik

14.6 COMPARISON OF ENRAINTMENT AT ADJACENT INTAKES WITH & WITHOUT LARGE SLOT-WIDTH WEDGE-WIRE SCREENS: A CASE FOR WEDGE-WIRE SCREENS TO REDUCE ENRAINTMENT
Robert Bye, Vice President, Normandeau Associates, Inc.; Paul L Harmon & Brian Lees, Normandeau; Robert Matty, Exelon Power; Jason Kinkel, Veritas Economic Consulting

I5. WATER SUSTAINABILITY

15.1 DEVELOPMENT OF POTENTIAL GAME CHANGING COOLING TECHNOLOGIES FOR POWER PLANT WATER CONSERVATION
Jessica Shi, Sr. Project Manager, Electric Power Research Institute; Sean Bushart

15.2 USE OF NON-DISINFECTED MUNICIPAL EFFLUENT
John Oster, Water Engineer, CH2M HILL; Charlie Nichols

15.3 COMMERCIAL ENERGY EFFICIENT WASTEWATER TREATMENT & WATER REUSE - IMET TECHNOLOGY
Mehmet A. Gencer, CEO, IMET Corporation

15.4 ZERO LIQUID DISCHARGE FOR COMPLIANCE
Kristen Jenkins, Global Technology Lead - Industrial Water, CH2M HILL; Thomas Higgins

15.5 NEW AERATOR FOR WASTE LAGOONS
Jim Dantz, President, Reliable Water Technologies

15.6 USE MUNICIPAL RECLAIM WATER & HIGH CYCLES OF CONCENTRATION FOR COOLING TOWERS - SAVE WATER & ENERGY - BUT WAIT, THERE’S MORE....
Ivan Cooper, Principal, Civil & Environmental Consultants, Inc.

I6. WATER & ELECTRIC UTILITIES

16.1 UNDERSTANDING THE ENERGY/WATER NEXUS & DEVELOPING CONSENSUS-BASED SOLUTIONS
Mary Doyle Kenkel, Executive Director, Center to Advance Energy & Water Management

16.2 MHI’S SIMPLE ZERO LIQUID DISCHARGE SYSTEM FOR WET FGD

16.3 AN OVERVIEW OF THE WATER RESEARCH CENTER
Jeff Wilson, Principal Research Engineer, Southern Company; Richard Breckinridge EPRI; Jay Was SRI

16.4 DESIGN & OPERATIONAL CHALLENGES ASSOCIATED WITH CONDITIONING Zachary Bach, Mechanical Engineer, Burns & McDonnell

16.5 WATER RISK & OPPORTUNITY FOR ELECTRIC UTILITIES
Peter Raherty, Sr. Engineer, ERM; Skelly Holmbeck

16.6 IMPELLING MONITORING & MODELING AT 15 POWER PLANTS ON THE OHIO RIVER
Greg Seegert, Chief Ichthyologist, EA Engineering, Science, & Technology; Ron King, Joe Vondruska, Doug Dixon

16.7 ADDRESSING THE NEW EFFLUENT STANDARDS THROUGH PLANT-WIDE MANAGEMENT
Andrew Byers, Associate VP, Black & Veatch; Mike Preston
**Wednesday | January 30**

**7:30AM - 9:30AM**

**I7. WATER SUSTAINABILITY**

**Session Sponsor and Co-Chair**

Erik Heinen, Senior Scientist, Environmental Consulting & Technology; Mark Gerath, Steve Cibik & Larry Danek

**I7.1 CALIFORNIA STORM WATER & RENEWABLE ENERGY & ELECTRIFYING MIX**

David Van Wie, Associate, AMEC Environment & Infrastructure

**I7.2 ELECTRIC POWER RESEARCH INSTITUTE (EPRI) FISH PROTECTION R&D REVIEW: FINE MESH (=2.0 MM) TRAVELING WATER SCREENS & FISH RETURN SYSTEM PERFORMANCE**

Douglas Dixon, Technical Executive, Electric Power Research Institute; Jon Black, Alden Research Laboratory

**I7.3 RECENT CHANGES IN STATES’ SUSTAINABLE WATER USE POLICY**

Erik Heinen

**I7.4 THE EVOLVING REGULATION OF THERMAL DISCHARGES**

Douglas Dixon, Technical Executive, Electric Power Research Institute; Jon Black, Alden Research Laboratory

**I7. WATER SUSTAINABILITY**

Douglas Dixon, Co-Chair

**I7.5 THE EVOLVING REGULATION OF THERMAL DISCHARGES**

Erik Heinen, Co-Chair

**I7.6 THE EVOLVING REGULATION OF THERMAL DISCHARGES**

Mark Gerath, Co-Chair

**I7.7 THE EVOLVING REGULATION OF THERMAL DISCHARGES**

Steve Cibik, Co-Chair

**I7.8 THE EVOLVING REGULATION OF THERMAL DISCHARGES**

Larry Danek, Co-Chair

**Monday | January 28**

**3:30PM - 5:30PM**

**J1. ENERGY EFFICIENCY**

**J1.1 ENERGY EFFICIENCY THROUGH POWER ELECTRONICS: NAVIGATING THE LANDSCAPE & ASSESSING OPPORTUNITIES FOR MATERIALS INNOVATION**

Pallavi Madakasira, Analyst, Lux Research

**J1.2 COGENERATION UPGRADES FOR INCREASED ENERGY EFFICIENCY**

Arvind Akela, Project Manager, CDM Smith

**J1.3 DOING WELL & GOING GOOD: PROFITING IN THE HOME PERFORMANCE BUSINESS**

Mark Berman, Principal, Davis Energy Group

**J1.4 MOVING THE HOUSING MARKET TO ENERGY EFFICIENCY**

Steve Baden, Executive Director, RESNET

**J1.5 UNBURNED CARBON REDUCTION AND SO3 REMOVAL ONLINE**

Michael Boyko, President & CEO, America Greener Technologies Corporation

**Tuesday | January 29**

**7:30AM - 9:30AM**

**J3. SMART GRID**

**J3.1 CYBER SECURITY IMPLEMENTATION APPROACH FOR UTILITY SMARTGRID INITIATIVES**

Rahul Chhabra, Cyber Security & Compliance Consultant, Burns & McDonnell Engineering; Jerome Farquharson

**J3.2 INTEGRATED SMART GRID POWER DISTRIBUTION & ENERGY CONSERVATION SYSTEM FOR REMOTE & EXTREME CONDITIONS**

Frank Pendleton, Program Manager, MIRGlobal; Sayan Chakraborti & Scott Klam

**J3.3 HURRICANE SANDY TURNS SMART GRID PLANS UPSIDE DOWN**

John Finnigan, Senior Regulatory Attorney, Environmental Defense Fund

**J3.4 ELLIPES & BALLISTIC BREAKERS AS ENABLERS FOR AN UNDERGROUND SUPERGRID**

Roger Faulkner, Founder & President, Electric Pipeline Corporation

**J3.5 ELLIPES TO CREATE HIGH CAPACITY IRELAND-UK POWER LINKAGE**

Roger Faulkner, Electric Pipeline Corporation, Joe Corbett, Head of Technical Services, Mainstream Renewable Power Ltd.
# J4. ENERGY EFFICIENCY & MGMT

## J4.1 APPLICATION OF THE DRYFINING™ TECHNOLOGY AT EXISTING POWER UNITS FIRING LOW-RANK COAL

Charles Bullinger, Senior Principle Engineer, Great River Energy; Vlad Vasyman & Yixiu Lu, Worley Parsons

## J4.2 IMPACTS OF SEVERE WEATHER PHENOMENA ON THE ELECTRICITY INFRASTRUCTURE

Michael Kintner-Meyer, Staff Engineer, Pacific Northwest National Laboratory; Jim Dirks, Chulian Jim, Will Gannessen, Jennie Rice

## J4.3 NEW BIO-CONTROL APPROACH BOOSTS POWER PLANT PRODUCTION BY 7%

Tom Mullenberg, Commercial Operations Manager, MIOX Corporation

## J4.4 LESSONS LEARNED FROM BEHAVIOR-BASED CONSERVATION PROGRAMS FOR SMALL-TO-MEDIUM BUSINESSES

Owen Rogers, Product Lead, Pulse Energy

## J4.5 ACHIEVING CONSUMER ENGAGEMENT REQUIRES MORE THAN SOCIAL MEDIA. A DIGITAL STRATEGY IS ESSENTIAL

Gregg Edeson, Energy Expert, PA Consulting Group

## J5. DEMAND RESPONSE/POWER PLANT OPERATION

### J5.1 ROLE OF DEMAND RESPONSE BASILINES IN ESTIMATING PARTICIPANT IMPACTS

Ryn Hamilton, Consultant, Ryn Hamilton Consulting; Mark Martinez, Southern California Edison

### J5.2 DEMAND RESPONSE & THE VALUE IT OFFERS UTILITY, COMMERCIAL, & INDUSTRIAL USERS

Laurie Wiegand-Jackson, CEO & President, North America Power Partners

### J5.3 RECAPTURING LOST MW & BOOSTING PLANT EFFICIENCY FROM LOWER RANK COALS

Charles Bullinger, Senior Principle Engineer, Great River Energy

### J5.4 IMPROVING BOILER PERFORMANCE AT XCEL’S COMANCHE STATION USING GE’S ZONAL COMBUSTION MONITORING SYSTEM

Gregory George, Xcel Energy; Neil Widmer, Santosh Nareddy & David Moyeda, General Electric

### J5.5 VERSATILITY OF NEW GENERATION DS® LOW NOX BURNER

Joe Brown, Aftermarket Services Product Manager, Hitachi Power Systems America; Peter Jin

### J6. ENERGY CONSERVATION & STORAGE

#### J6.1 GRID STORAGE UNDER THE MICROSCOPE: USING LOCAL KNOWLEDGE TO FORECAST GLOBAL DEMAND

Hilary Flynn, Senior Analyst, Lux Research; Brian Washay, Steven Minnihan, Matthew Feinsein

#### J6.2 MACRO LEVEL ENERGY HARVESTING

Gare Henderson, Director of R&D, Gravitational Systems Engineering, Inc.

#### J6.3 ENERGY CONSERVATION HYBRID STREET SWEEPER

Toshihiko Furukawa, Senior Manager, United Chemi-Con; Abbas Goodarzi, Ph.D US Hybrid Corporation

#### J6.4 REGULATION, DEVELOPMENT & FINANCING OF GRID-SCALE ENERGY STORAGE SYSTEMS

Donald Ousterhout, Partner, Reed Smith LLP; Amy Koch

#### J6.5 SMARTES - MODELING ENERGY STORAGE & PV INTEGRATION

Lucas Oehlerking, Renewable Energy Consultant, Black & Veatch; Sam Scumpham
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Workshop 1 - Room 221C  
Permitting & Compliance  
Eric Hiser, Jorden, Bischoff & Hiser  
Email: ehiser@jordenbischoff.com  
This seminar will provide participants with critical information on new developments in clean air regulation, including recent developments in NAAQS, new source review, NESHAP regulation and GHG reporting. The seminar will also address current EPA enforcement priorities, planning and preparing for an inspection, and using the permit process to minimize your enforcement exposure.

Workshop 2 - Room 222C  
Challenges for Compliance With Short-term PM2.5, NO2, and SO2 Ambient Standards  
Robert Iwanchuk, CCM (AECOM)  
Robert Paine, CCM, QEP (AECOM)  
Email: bob.paine@aecom.com  
This workshop will provide an overview of PM2.5, NO2, and SO2 NAAQS (and PSD increment, as appropriate) implementation and dispersion modeling procedures. It will also review the current status of litigation filed against USEPA to challenge the new 1-hour NAAQS for NO2 and SO2.

Workshop 3 - Room 223  
Emerging Air Quality, Greenhouse Gas and Energy Requirements  
Rich Pandullo, Trinity Consultants  
Email: rpandullo@trinityconsultants.com  
Power generators are facing a tsunami of emerging new regulations that will affect their ability to operate cost-effectively. These include Federal Clean Air Act regulations – such as the GHG Tailoring Rule, Boiler MACT, and Clean Air Transport Rule – that will impose new emission limitations and operational restrictions on combustion sources.

Wednesday 7:30 am - 12 pm  
Workshop - Room 229A  
Technical Strategies for Complying with Current and Future Regulatory Requirements - Dissecting the Economics  
Karen Campbell  
Email: karen.campbell@urs.com  
In recent years, significant advances in technology have improved the performance and reliability of AQCS systems. These advances were necessary to meet the more stringent environmental and regulatory requirements that have been implemented over the last 10 years.

Sunday Workshops  
1:00 pm to 5:00 pm  
contact: info@euec.com  
Workshop 1 - Room 221C  
Permitting & Compliance  
Eric Hiser, Jorden, Bischoff & Hiser  
Email: ehiser@jordenbischoff.com  
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Robert Iwanchuk, CCM (AECOM)  
Robert Paine, CCM, QEP (AECOM)  
Email: bob.paine@aecom.com  
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Workshop - Room 229A  
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Karen Campbell  
Email: karen.campbell@urs.com  
In recent years, significant advances in technology have improved the performance and reliability of AQCS systems. These advances were necessary to meet the more stringent environmental and regulatory requirements that have been implemented over the last 10 years.

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  3600 N Second Ave.
  Phoenix, AZ 85013
  Ph: [602] 604-4900
  EUEC Rate: $103

- **Hotel Palomar**
  2 East Jefferson St.
  Phoenix, AZ 85004
  Ph: (677) 488-1908
  EUEC Rate: $229

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**Sign Up On-Site**

**$500 Dollar Exhibit Booth Discount**

- **Check Items of Interest:**
  - Gold (20’x20’ Booth) $25,000
  - Silver Front Row (20’x10’ Booth) $10,000
  - Premium Corner (10’ x 10’ Corner) $4,500
  - 1 Page Ad in Conference Guide $1,000
  - Session Sponsorship & Logo Ad $500
  - Flash Drive with Audio (not attending) $495

**Reserve New Booth for EUEC 2014:**

Please select your preferred choice of Booth # from the exhibit booth layout.

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**Show Rules.** Application implies that exhibitor will abide by Conference show rules. Please copy this contract for your files. Exhibitor hereby assumes entire responsibility and hereby agrees to protect, defend, indemnify and save the Phoenix Convention Center, its owners, its operator, EUEC, and each of their respective parents, subsidiaries, affiliates, employees, officers, directors, and agents harmless against all claims, losses or damages to persons or property, governmental charges or fines and attorney’s fees arising out of or caused by its installation, removal, maintenance, occupancy or use of the exhibit premises or a part thereof, excluding any such liability caused by the sole gross negligence of the Convention Center and its employees and agents. Exhibitor shall obtain and keep in force during the term of the installation and use of the exhibit premises, policies of Comprehensive General Liability Insurance and Contractual Liability Insurance, insuring and specifically referring to the Contractual Liability set forth in this Exhibit Agreement in an amount not less than $1,000,000 Combined Single Limit for personal injury and property damage. The group agrees to provide a Certificate of Insurance evidencing the coverage described above.

**Payments & Refunds:**

Payment is required by May 1st in order to receive the $500 exhibit booth discount. 100% refund with written notice by August 1, 2013. 50% refund with written notice by November 1, 2013. No refunds after November 1, 2013.

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**Registration Questions?**

Visit our website at www.euec.com or contact EUEC at 1-520-615-3535 or info@euec.com,

**FAX TO:** 1-602-296-0199