

16th Annual | Jan 28 - Jan 30 Phoenix Convention Center, Phoenix, AZ



2000 Attendees

600 Speakers

200 Exhibits

Program Brochure



Register at euec.com and Save:

Date Now Jan. 1st Jan. 15th On-Site Cost \$895 \$995 \$1,095 \$1,395

Preliminary Program with 600 Speakers

- A Air Policy & Regulation
- **B** Monitoring & Modeling
- C Multi-Pollutant Control Hg
- D Natural Gas & Energy Security
- E Renewable Energy
- F Operations & Mgmt
- G CCS & GHG Mgmt
- H Biofuels & Biomass
- I Sustainability & Water
- J Energy Efficiency

Directors





EPEI RESEARCH INSTITUTE

Bryan Hannegan



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What is EUEC?

EUEC2013: 16th Annual energy, utility & environment conference USA's Largest Professional Networking & Educational Event of its kind

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	Curren	nt Dec	l Jan	1 On-Site
Attendee Full	\$695 \$595	\$795 \$695	\$795 \$605	\$895 \$705		\$1,395 \$4,305
Speaker/Gov't/VIP 3-Day Conference	\$395	\$495	\$695 \$495	\$795 \$595	\$895 \$695	\$1,295 \$1,095

Full/Speaker/Gov't/ VIP Registration includes:

- 8 networking meals served buffet style in exhibit area
- Attend all 600 technical presentations in 3 days
- EUEC Flash Drive with 600 presentations with audio

3-Day Conference Registration includes:

- Network at 8 functions (without meals)
- Attend all 600 technical presentations in 3 days
- Access to the 200 booth exhibit hall all 3 days

Who should attend?

INDUSTRY LEADERS AND POLICY MAKERS:

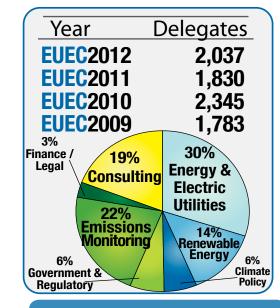
- CORPORATE ENERGY & SUSTAINABILITY EXECUTIVES
- RENEWABLE ENERGY ENTREPRENEURS
- BUSINESS DEVELOPMENT PROFESSIONALS
- UTILITY AND ENERGY EXECUTIVES
- LAWYERS, ACCOUNTANTS AND CONSULTANTS
- U.S. LEGISLATORS, GOVERNMENT AGENCIES
- SCIENTISTS AND RESEARCHERS

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
- CONTINOUS EMISSION MONITORS AND SPECIALISTS



EUEC2013 Format

- All sessions 2 hours long
- 6 Speakers per session
- 20 minutes per speaker





Mitchell Baer - Director, Office of Oil and Gas Analysis, U.S. Department of Energy

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.



Power by Association*

John Kinsman - Senior Director, Environment, Edison Electric Institute

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.



ELECTRIC POWER
RESEARCH INSTITUTE

Bryan Hannegan - Vice President, 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. These solutions span nearly every area of power generation, delivery, and use, including health, safety, and environment. EPRI's members represent over 90% of the electricity generated in the United States. International participation represents nearly 15% of EPRI's total R&D program.



Prabhu Dayal - President, C Trade

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.

Exhibit Schedule

EXHIBIT SET UP

Sunday Jan 27th 1 pm to 7 pm

SHOW TIMES

Mon. Jan 28th - 11 am to 7 pm Tue. Jan 29th - 9 am to 7 pm Wed. Jan 30th - 9 am to 12 pm

EXHIBIT TEAR DOWN

Wed. Jan 30th - 12 to 4 pm

Conference Schedule

Sunday | January 27, 2013

7:00 am - 7:00 pm Registration
7:30 am - 1:00 pm Golf Tournament

1:00 pm - 5:00 pm Pre-Conference Workshops

1:00 pm - 7:00 pm Exhibitor Set-Up

Monday | January 28, 2013

7:00 am - 7:00 pm Registration 8:00 am - 11:00 am Plenary Session 11:00 am - 7:00 pm Exhibit Hall Open

11:00 pm - 1:00 pm Networking Lunch - Exhibit Area

1:00 pm - 3:00 pm Technical Session - 1

3:00 pm - 3:30 pm Networking Break - Exhibit Area

3:30 pm - 5:30 pm Technical Session - 2 4:00 pm - 7:00 pm Exhibitor Invited Guests

5:00 pm - 7:00 pm Networking Reception- Exhibit Area

Tuesday | January 29, 2013

7:30 am - 9:30 am Technical Session - 3 9:00 am - 7:00 pm Exhibit Hall Open

9:30 am - 10:00 am Networking Break - Exhibit Area

10:30 am - 12:00 pm Technical Session - 4

12:00 pm - 1:00 pm Networking Lunch - Exhibit Area

1:00 pm - 3:00 pm Technical Session - 5

3:00 pm - 3:30 pm Networking Break - Exhibit Area

3:30 pm - 5:30 pm Technical Session - 6

4:00 pm - 7:00 pm Exhibitor Invited Guests

5:00 pm - 7:00 pm Networking Reception - Exhibit Area

Wednesday | January 30, 2013

7:30 am - 9:30 am Technical Session - 7
9:00 am - 12:00 pm Exhibit Hall Open

9:30 am - 10:00 am Networking Break - Exhibit Area



Monday, January 28th, 8:00 AM - 11:00 AM

Phoenix Convention Center | 100 N. 3rd St. | Phoenix, AZ 85004



EPA REGULATORY UPDATE

Hon. Gina McCarthy

Assistant Administrator | U.S. Environmental Protection Agency



United States Environmental Protection



NATURAL GAS & AMERICA'S ENERGY SECURITY

Hon. Chris Smith

Deputy Assistant Secretatry | U.S. Department of Energy





REGULATORY CHALLENGES. TECHNOLOGY SOLUTIONS

Mike Morris

Chairman | American Electric Power





IMPACTS OF ENVIRONMENTAL CONTROLS ON THE GENERATION FLEET

Dr. Bryan Hannegan

Vice President | Electric Power Research Institute





SHALE GAS: A GAME-CHANGER FOR US ENVIRONMENTAL POLICY?

Mark Brownstein

Chief Counsel | Environmental Defense Fund





EUEC: LOOKING AHEAD AFTER 15 YEARS OF SUCCESS

Dr. Prabhu DayalChairman | EUEC



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.

Each session is 2 hours with 6 Speakers



Track	Α	В	С	D	Е	F	G	Н		J
Sessions	Air Policy & Regulations	Pollution Monitoring & Modeling	Mercury Multi-Pollutant Control	Natural Gas & Energy Security	Renewable Energy	Operations & Mgmt	GHG, Carbon Mgmt & CCS	Biofuels & Biomass	Sustainability & Water	Energy Efficiency
Monda	ay January 2	8								
1:00PM to 3:00PM	Regulatory Update I	CEMS & MATS	Hg Control Demonstrations	CNG & Shale Gas	Small Scale Renewable & Electric Utilities	Economic Energy & Cybersecurity	Carbon Footprint	Algae	Energy Sustainability	Energy Efficiency
2 3:30PM to 5:30PM		HCL Monitoring	Hg Control & Bromine	Fracking & Sustainable Development	Distributed Generation	Compliance Technologies & Strategies	Tailoring Rule/NSR/ GHG BACT	Biofuels / Ethanol	Sustainability Projects	Energy Mgmt.
Tuesd	ay January 2	29								
37:30AM to 9:30AM	NAAQS	PM, Opacity & Visability	Control Technologies I	Energy Policy	Renewable Development Analysis	Power Plant & Boiler Optimization	Planning & GHG	Biomass	Sustainability Reporting	Smart Grid
410:00AM to 12:00PM	KI\ D	Mercury Measurement	Control Technologies II	CNG: Alternative Fuel & Fleet Mgmt	Renewable Project Development	EHS & EMIS	Corporate Strategies & Bio & Waste Risk Mgmt. Energy		316b	Energy Efficiency & Mgmt. I
5 1:00PM to 3:00PM	Compliance Stratagies	Emission Testing & Monitoring	MATS	State, Regional & Infrastructure	IP & New Technology	EHS & Risk Management	California Cap & Trade	Landfill Gas to Energy	Water Sustainability	Energy Efficiency & Mgmt. II
6 3:30PM to 5:30PM	MACT	Monitoring & Reporting	Dry Sorbent Injection	Clean Transportation Policy	Solar & PV	ASH / CCP	GHG Stratagies	Cofiring in Power Plants	Water & Electric Utilities	Energy Conservation & Storage
	esday Janua	ry 30								
7:30AM to 9:30AM	Compliance	Modeling	Activated Carbon	Energy & Climate	Wind	Operations & Management	CCS: Carbon Capture & Storage		Water - Regulatory Updates	Demand Response
8 10:00AM to 12:00PM	Clean Air Policy	CEMS	Advanced Control Technologies	Managing Risk & Project Mgmt.	EV-PHEV, CPV & Batteries	Natural Resource Mgmt HCP	CCS II		Sustainability Green	
9 1:00PM to 3:00PM	Compliance									

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A1. REGULATORY UPDATE I

Session Sponsor EPA RULES & ACTIONS ON ELECTRIC UTILITY GENERATION

& STRAWN A1.3 IS FEDERALISM ALIVE UNDER THE CLEAN AIR ACT?

| | | | Bill Wehrum, Partner, Hunton & Williams LLP

Thomas Echikson, Partner, LeClairRyan

and Co-Chair Jay Holloway, Partner, Winston & Strawn LLP

WINSTON Roger Martella, Attorney, Sidley Austin LLP

AIR ACT AGENDA

COMPLIANCE

A4. NSR

A4.1 RECENT DEVELOPMENTS IN NSR

A4.2 NEW SOURCE REVIEW SETTLEMENTS IN A CHANGING REGULATORY CLIMATE

A4.3 EPA'S REGIONAL HAZE PROGRAM - A NEW AGENDA FOR VISIBILITY

A4.4 WEAKENING OF THE PSD/NSR HAMMER

Karl Karg, Partner, Latham & Watkins LLP

A4.6 CAUSALITY & EFFECT: EMISSIONS ANALYSES IN RETROSPECTIVE NSR CASES

10AM - 12PM

Session Sponsor

and Co-Chair

Gary McCutchen, Principal, RTP Environmental Associates, Inc.

Liz Williamson, Partner, Winston & Strawn LLP

Norman Fichthorn, Partner, Hunton & Williams LLP; Aaron Flynn

A4.5 THE UTILITY NEW SOURCE REVIEW ENFORCEMENT INITIATIVE – MORE THAN A DECADE OLD & IT KEEPS GOING, & GOING, & GOING.

Makram Jaber, Partner, Hunton & Williams

Marc Chupka, Principal, The Brattle Group

Burns & McDonnell SINCE 1898 **Block Andrews**

Jay Holloway

1PM - 3PM

Monday | January 28

3:30PM - 5:30PM A2. REGULATORY UPDATE II

and Co-Chair

A2.1 UPDATE TO COAL UNIT RETIREMENTS & GRID RELIABILITY

John Kinsman, Sr. Director, Environment, Edison Electric Institute

Session Sponsor M. Gary Helm, Sr. Market Strategist, PJM Interconnection

A1.6 POWER GENERATOR REGULATIONS, 2010-2020

A2.2 FIRST CAIR, THEN CSAPR, WHAT'S NEXT?

Daniel Chartier, Director - Environmental Markets & Air Quality Programs, Edison Electric Institute

A1.1 REPORT FROM THE SCENE OF THE TRAIN WRECK -- UPDATE ON THE IMPACT OF NEW

A1.4 UTILITY REGULATORY UPDATE: IMPLICATIONS & STRATEGIC CONSIDERATIONS FOR

Block Andrews, Strategic Environmental Solutions Director, Burns & McDonnell

A1.5 RECENT REGULATORY DEVELOPMENTS AFFECTING PERMITTING OPTIONS

A1.2 THE NEXT FOUR YEARS: HOW THE OUTCOME OF THE ELECTION WILL IMPACT THE CLEAN

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 Leming, Software Services Manager, Babcock & Wilcox Power Generation Group; John Downs

Tuesday | January 29

7:30AM - 9:30AM A3. NAAQS

and Co-Chair

A3.1 COMPLIANCE CHALLENGES POSED BY THE NAAQS FOR SO2, NO2, & PM2.5

Session Sponsor Robert Paine, Technical Director, AECOM; David Heinold & Robert Iwanchuk

A3.2 THE STATE OF THE NAAQS

Kurt Kissling, Attorney at Law, Pepper Hamilton LLP

A3.3 REGULATORY UPDATE & IMPLICATIONS OF THE PM2.5 NATIONAL AMBIENT 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 Ellis, President, Enviroplan Consultina; Dr. Allen Dittenhoefer & Michael Hirtler, CCM

A3.6 RECENT HAPPENINGS REGARDING THE EXCEPTIONAL EVENT RULE

Samuel Lofland, Attorney, Ryley Carlock & Applewhite; James Sanderson

A5. COMPLIANCE STRATEGIES

A5.1 PRACTICAL NSR COMPLIANCE

Mack McGuffey, Partner, Troutman Sanders LLP

A5.2 PRACTICAL OPERATING PERMIT COMPLIANCE

George Lipka, Consulting Engineer, Tetra Tech EC

A5.3 PRACTICAL COMPLIANCE EXPERIENCE

Maureen Gannon, Executive Director of Environmental Services, PNM Resources Inc.

A5.4 PRACTICAL CONSIDERATIONS FOR ENVIRONMENTAL COMPLIANCE STRATEGY **DEVELOPMENT**

Brian Toth, Climate & Renewable Strategy Manager, Southern Company

A5.5 EPA'S CROSS STATE RULE. THE LITIGATION. IMPLEMENTATION COMPLIANCE

Dave Tripp, Partner, Stinson Morrison Hecker, LLP; Daniel R. Wilkus, Westar Energy

Randy Broadon, Partner/Environmental Practice Group Leader, Troutman Sanders LLP

TŁ **TETRATECH** George Lipka

3:30PM - 5:30PM

Session Sponsor

and Co-Chair

A6. MACT

A6.1 THE UTILITY MACT RULE: ONE YEAR LATER

Michael Rossler, Manager - Environmental Programs, EEI

A6.2 BOILER MACT ENERGY ASSESSMENTS

Robert McCann, Principal Director Air Resources, Golder Associates Inc.; Dorothy Austin, Yina Na

A6.3 MACT COMPLIANCE TECHNOLOGIES

Scott Bayon, Director of Sales, Anguil Environmental Systems, Inc.

A6.4 INJECTION OF GAS-PHASE BROMINATED PAC UPSTREAM OF WET SCRUBBERS FOR HG CONTROL

Ron Landreth, Manager Customer Technical Service, Albemarle Environmental Division

A6.5 STATISTICS IN ENVIRONMENTAL POLICY MAKING & COMPLIANCE IN AIR QUALITY: SOURCE TEST DATA INTERPRETATION IN BOILER & UTILITY MACT

Joy Brooks, Senior Associate, ENVIRON International Corporation; Glenn England & Joe

A6.6 OVERVIEW OF THE NON-HAZARDOUS SECONDARY MATERIAL RULE: IS YOUR FUEL A **SOLID WASTE?**

Melissa Hillman, Managing Consultant, Trinity Consultants

1PM - 3PM





and Co-Chair Steven Babler, Air Quality Engineer, Sega Inc.; Brian Petermann

Ping Wan, Senior Principal Engineer, Bechtel Power Corporation

7:30AM - 9:30AM A7. PERMITS & COMPLIANCE

FOR PERMITTING A NEW POWER PLANT

Teresa Raine, Principal Consultant, ERM

A7.4 DO I REALLY NEED TO MODEL?

COMBUSTION TURBINE LICENSING

Session Sponsor SOUP" COMPLIANCE: SUCCESSES & CAUTIONS

Wednesday | January 30

MONITORING

GENERATION

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

Tim Kuiken, Midwest Regional Sales Manager, Cemtek Environmental

B1.3 SO3 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 Maihak GmbH

B1.5 MERCURY & AIR TOXICS STANDARD (MATS) EMISSION TESTING REQUIREMENTS,

RECOMMENDATIONS & COST COMPARISONS Jeff Burdette, Practice Leader, TRC Environmental Corporation

B1.6 FULL-SCALE MULTISITE EVALUATION OF THE MULTIELEMENT SORBENT TRAP SAMPLING (ME-ST) METHOD FOR HALOGEN

John Paylish, Sr. Research Advisor, Energy & Environmental Research Center; Jeffrey Thompson

Session Sponsor and Co-Chair

1PM - 3PM



B2. HCL MONITORING

B2.1 HCL EMISSIONS MEASUREMENTS USING FTIR

Sylvie Bosch-Charpenay, 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 FIELD TRIALS OF OPSIS TUNABLE DIODE LASER FOR HCL MONITORING

(m) James Wright, Director - Advanced Monitoring Solutions, Clean Air Engineering; J. Demkovich

B2.5 IN-DUCT HCL MONITORING

Charles Lockert, President, Breen Energy Solutions

Seth Morrell. Sales & Marketing Coordinator, Altech Environment U.S.A.

B2.7 REQUIREMENTS OF PS-18 FOR FTIR MEASUREMENT OF HCL FOR UTILITY & CEMENT **INDUSTRIES**

Kevin Ramazan, Vice President, FTIR Operations, California Analytical Instruments, Inc.

Tim Kuiken

3:30PM - 5:30PM

Session Sponsor

and Co-Chair

10AM - 12PM

A8. CLEAN AIR POLICY

A8.1 WHAT'S A PLANT TO DO? NAVIGATING CONFLICTS BETWEEN STATE PRIMACY & Session Sponsor FEDERAL OVERSIGHT

and Co-Chair

Eric Hiser, Partner, Jorden Bischoff & Hiser, PLC

Julie Ross, Mark Garrison, & Jennifer Flannery, ERM

A8.2 SUMMARY OF REGIONAL EMISSIONS & AIR QUALITY TRENDS, 1999-2010

Eugene Trisko, Attorney at Law, On behalf of ACCCE

A8.3 CHANGES TO NSPS REGULATIONS ON GHG EMISSIONS & ITS IMPACT ON ELECTRICITY **GENERATING UNITS**

A7.1 PERMITTING OF NEW AIR QUALITY CONTROL EQUIPMENT ADDITIONS FOR "ALPHABET

John Downs, Regulatory Manager, Babcock & Wilcox Power Generation Group; Mark Holt

A7.3 QUALITY ASSURANCE REQUIREMENTS OF MAKING METEOROLOGICAL ASSESSMENTS

A7.2 CONVERTING FROM COAL TO NATURAL GAS - CHANGES TO COMPLIANCE

A7.5 AIR PERMITTING FOR RECIPROCATING ENGINE PROJECTS FOR ELECTRICITY

A7.6 STREAMLINING THE PERMITTING PROCESS - CASE STUDIES FROM GAS-FIRED

Mary Hauner-Davis, Manager, Air/Noise Department, Burns & McDonnell; Minda Nelson

Anand Yegnan, Senior Consultant/Project Manager, ERM; John Sherwell, Maryland DNR;

Jagatheesan (Jack) Senthilvel, Project Manager, WorleyParsons; Joseph Takats

A8.4 WILL THE REFINING INDUSTRY SURVIVE THE CLEAN AIR ACT?(OR, WILL THE NEXT STRAW **BREAK THE CAMEL'S BACK)**

(m) Bill Smalling, Attorney at Law, C. William Smalling, Attorney at Law, PLLC.

A8.5 CAN THIS PROPOSED POWER PROJECT BE BUILT?

(m)Eri Ottersburg, Senior Engineer, SLR International; Ray Hendricks, Portland General Flectric

A9. AIR POLICY & REGULATIONS

A9.1 SNCR TECHNOLOGY FOR FLEETWIDE COMPLIANCE

Session Sponsor Kevin Dougherty, VP of Marketing & Business Development, Fuel Tech, Inc.; Len Johnson, Midwest Generation; Jon Horek, Sargent & Lundy; Kevin Krause, Fuel Tech, Inc.

> A9.2 OBTAINING AN EXTENSION ON THE 18 MONTH CONSTRUCTION DEADLINE FOR YOUR **PSD PERMIT**

(m)Eri Ottersburg, Senior Engineer, SLR International: Ray Hendricks, Portland General Electric

Tuesday January 29

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 Crosby, 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, RMB Consulting & Research, Inc.; Jon Konings, We **Enaeraies**

7:30AM - 9:30AM

Session Sponsor and Co-Chair



John Watson & Judi Chow

and Co-Chair

Preliminary Program (12-2) ~ Subject to Change

10

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10AM - 12PM

B4. MERCURY MEASUREMENT

and Co-Chair

Dan Kietzer

B4.1 TECHNICAL ADVANCES IN HG CEM'S - UPDATE

Session Sponsor Dan Kietzer, Business Development Manager, SICK Process Automation

B4.2 MERCURY SPECIATION MEASUREMENTS FROM BOILER TO STACK

(m) 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

Douglas Barth, Business Development Manager, Pall Corporation; Krag Petterson & Marty

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; Surendra Kumar **B4.5 RESULTS FROM A GOLD NANOPARTICLE MERCURY DETECTION SYSTEM**

Jay James, Founder, Picoyune, Donald Lucas Ph.D., Lawrence Berkeley National Laboratory

B4.6 DURAG'S HM 1400 TRXC @ CEMENT PLANTS

Johannes Kasaianow, PhD, Duraa GmbH

Wednesday | January 30

7:30AM - 9:30AM

Session Sponsor and Co-Chair

B7. MODELING

B7.1 MODELING LAKE RECOVERY FOLLOWING MERCURY EMISSIONS CHANGES

Leonard Levin, Technical Executive, Electric Power Research Institute: Krish Viiavaraahavan, Environ

B7.2 ADVANCED DISPERSION MODELING TECHNIQUES TO ASSIST WITH NAAQS COMPLIANCE

Robert Iwanchuk, Manager - Air Quality Engineering & Studies, AECOM; David Heinold, Richard Hamel & Robert Paine, AECOM; Eladio Knipping & Naresh Kumar, EPRI

B7.3 DOES EPA NEED MORE ADVANCED MODELS FOR SECONDARY FORMATION Gale Hoffnagle, Air Quality Consutling Practice Leader, TRC Environmental Corporation

B7.4 FORECASTING FOR EMISSION COMPLIANCE VIA OPERATIONAL MODELING Scott Tampke, Business Development Manager, Black & Veatch

B7.5 SOLUTIONS TO AERMOD PREDICTED NAAQS EXCEEDANCES DUE TO BUILDING WAKE **EFFECTS**

Ron Petersen, Vice President, CPP, Inc.

B7.6 EVALUATION OF MODELING RESULTS USING A REFINED TECHNIQUE FOR PREDICTING IMPACTS FROM PORTABLE OR TRANSIENT SOURCES (TRANSVAP)

Richard Hamel, Air Quality Meteorologist, AECOM; Thomas Damiana

1PM - 3PM

B5. EMISSION TESTING & MONITORING

B5.1 MEASURING ZERO POLLUTANTS

Session Sponsor (m)Robert Davis, Vice President - Environmental Sustainablity, Airgas and Co-Chair

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 Wong, Senior Staff Scientist, American Air Liquide; Morgane Riviere, Air Liquide

B5.4 ONGOING FIELD TEST EXPERIENCES WITH THE AUTOMATIC SORBENT TRAP MONITORING SYSTEM

Juraen Reinmann, Branch Manager, Environnement S.A Deutschland: Seth Morrell, Altech **Environmental USA**

B5.5 CONTINUED AUTOMATION OF CEMS

Russell Berry, Senior Project Manager, RMB Consulting & Research, Inc.

B8. MONITORING & MODELING

B8.1 A REAL-TIME MODEL FOR PERFORMANCE MONITORING USING EMISSIONS DATA Sastry Munukutla, Emeritus Prof. of Mech. Engg., Tennessee Tech. Univ.

Session Sponsor and Co-Chair

10AM - 12PM

3:30PM - 5:30PM B6. MONITORING & REPORTING

B6.1 MATS COMPLIANCE - HOW WILL EPA DETERMINE COMPLIANCE? HOW WILL YOUR

Session Sponsor DAHS DEMONSTRATE COMPLIANCE?

and Co-Chair John Downs, Regualtory 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 NEW RULES FOR EPA PROTOCOL GASES

(m)Robert Davis, Vice President - Environmental Sustainablity, Airgas

B6.4 SF6 & DECOMPOSITION GAS ANALYSIS THROUGH NON DISPERSIVE INFRARED **TECHNOLOGY**

Vaughan Williams, International Sales Director, Energy Maintenance Technologies; Neil Kane, Kevin York

B6.5 OPTIONS FOR DEMOSTRATING MATS COMPLIANCE - ADVANTAGES & DISADVANTAGES

Diane Fischer, Air Quality Control Services Area Leader, Black & Veatch

C1. HG CONTROL DEMONSTRATIONS 1PM - 3PM

Session Sponsor SCRUBBERS

Monday | January 28

C1.1 APPLYING MONITOR & CONTROL STRATEGIES FOR HG EMISSIONS ACROSS WET FGD

and Co-Chair Bruce Keiser, Research Fellow, Nalco, an Ecolab Company; Jianwei Yuan, Rebecca Stiles & John Meier, Nalco, an Ecolab Company; Stephen Potter, Duke Energy Corporation

C1.2 A NOVEL APPROACH TO MERCURY CONTROL FROM COAL FIRED POWER PLANTS

Jeff Kolde, Product Specialist, W.L. Gore & Associates, Inc.; John Darrow, Rich Gebert, Steve Hardwick, Stephen Stark, W.L. Gore and Associates, Inc.; Jonas Klingspor, Tom Machalek, Blake Stapper: URS Corporation: Ramsav Chana, EPRI

C1.3 PERMANENT SYSTEM INSTALLATION OF A NOVEL MERCURY REMOVAL STRATEGY Philip Elliott, Engineering Services Manager, STEAG Energy Services LLC

C1.4 ADVANCED ACTIVATED CARBONS FOR EFFICIENT MERCURY REMOVAL Brandon Looney, Principle Engineer, Southern Company; Jacqueline Cecil, Robert Huston &

C1.5 FULL SCALE & PILOT SCALE FIELD STUDIES USING NORIT'S CONCRETE COMPATIBLE CARBON (m)Patton Adams, Developmental Engineer, Norit Inc.

3:30PM - 5:30PM C2. HG CONTROL & BROMINE

C2 1 FMOTM

and Co-Chair

Great Lakes A Chemtura Busines

Jon Lehmkuhler

Session Sponsor Bobby Chen, Client Program Mgr., Shaw Environmental & Infrastructure Grp., Randall Moore C2.2 INTERACTION OF HAPS, HG & BROMINATED ACTIVATED CARBON IN COMBUSTION

Erik Rupp, Research Associate, Stanford Univ. Energy Resources Engineering; Jennifer Wilcox C2.3 IN PURSUIT OF THE NEW-PLANT MATS HG CONTROL LIMIT: FULL SCALE TEST RESULTS USING ALSTOM'S KNXTM MERCURY CONTROL TECHNOLOGY WITH NORIT'S PAC PRODUCTS Thomas Pearson, Principal Process Engineer, Alstom Power, Inc. Environmental Control Systems; Brad Donat & John David, Norit Americas Inc.

C2.4 ADVANTAGE OF ALBEMARLE GAS-PHASE BROMINATED ACTIVATED CARBON FOR MERCURY CONTROL IN DRY SCRUBBERS – SDA/CDS APPLICATIONS

Behrooz Ghorishi, R&D Director, Albemarle Corp.; Emma Zhou, John Parks & Will Pickrell C2.5 MAXIMIZING MERCURY CAPTURE UNDER CHALLENGING COMBUSTION SCENARIOS

Marcus Sylvester, VP of Sales, Midwest Energy Emissions Corporation

C2.6 ECONOMICAL, EFFICIENT AND PROVEN HG CONTROL TECHNOLOGY Thomas Gale, Catalyst Manager, Southern Research Institute; George Blankenship

C2.7 THE INFLUENCE OF FUEL CHLORINE & BROMINE ON DIOXINS & FURANS IN THE STACK GAS OF WASTE INCINERATORS & COAL-FIRED POWER PLANTS

Bernhard Vosteen, President, Vosteen Consulting GmbH; Werner Funcke & Berthold Hülk

7:30AM-9:30AM C3. CONTROL TECHNOLOGIES I

C3.1 START UP & OPERATING EXPERIENCE NRG INDIAN RIVER NID DFGD

Session Sponsor Mark Fiedler, Principal Process Engineer, Alstom Power and Co-Chair

C3.2 THE FACT & FICTION OF SCR CATALYST REGENERATION

Mark Ehrnschwender, VP of Business Development, STEAG Energy Services LLC

C3.3 MERCURY CONTROL & ITS INTERRELATION TO POWER PLANT OPERATION & OTHER AIR POLLUTION CONTROL TECHNOLOGY

Mark Sankey, Senior Engineering Specialist, Bechtel Power Corporation, Don Koza. Bechtel Power Corp; Michelle Golden, Bechtel Power Corp

C3.4 MERCURY CONTROL FOR UTILITY BOILERS THAT REQUIRE FLUE GAS CONDITIONING

David Young, Engineer III, ADA-ES, Inc., Ken Baldrey, Brian Donnelly, Greg Filippelli C3.5 PERFORMANCE OF PERNOXIDE FOR NOX CONTROL ON A FULL SCALE TRIAL ON A UTILITY COAL FIRED BOILER

Robert Crynack, Manager - Air Pollution Control, FMC Environmental Solutions; Philip Block, FMC Environmental Solutions; James Jarvis & Sterling Gray, URS Corporation

C3.6 OPERATING A CIRCULATING DRY SCRUBBER AT LOW & VARIABLE BOILER LOADS

Terence Ake, Product Manager, Babcock Power, Inc.; Roderick Beittel & Anthony Licata

C4. CONTROL TECHNOLOGIES II

10AM - 12PM

Session Sponsor

and Co-Chair

C4.1 BASF MERCURY SORBENTS - UPDATE ON MINERAL BASED TECHNOLOGIES FOR MERCURY CAPTURE IN COAL-FIRED POWER PLANTS

William Hizny, Technical Projects Manager, BASF Corporation, Fabien Rioult, PhD - BASF Corporation; Xiaolin Yang, PhD - BASF Corporation

C4.2 GAME-CHANGING MULTI-POLLUTANT EMISSIONS CONTROL TECHNOLOGY Kevin Crapsey, VP of Corporate Strategy & Development, Eco Power Solutions

C4.3 INITIAL OPERATION & PERFORMANCE OF THE INTEGRATED DFGD/WFGD FOR

Raymond Gansley, Manager of Process Engineering, Alstom; Phil Rader & Dale Love C4.4 CODEPENDENCE OF MULTIPOLLUTANT CONTROLS & THE AIR PREHEATER John Guffre, Senior Research Scientist, Paragon Air Heater Technologies, Inc.

C4.5 EMISSIONS CONTROL SYSTEM UPGRADES FOR INDIAN RIVER UNIT 4 Steve Biorklun, Senior Associate Process Engineer, Burns & McDonnell Engineering Company, Inc.; Gerry Hopper, NRG; Kristin Glikbarg & Paul Brandt, Burns & McDonnell C4.6 EVALUATION OF MERCURY CONTROL TECHNOLOGIES WHILE OXY-FIRING A PRB COAL

Andrew Fry, Manager - Engineering R&D, Reaction Engineering International; Brydger Van Otten & Brad Adams, Reaction Engineering International; Jost Wendt, Geoff Silcox & Ianacio Preciado, University of Utah: Larry Bool, Praxair

C5. MATS 1PM - 3PM

C5.1 HCL & MERCURY MITIGATION WITH DSI

Brent Tidemann, Chemical Engineer - Manager, Nol-Tec Systems; Michael Thiel C5.2 MATS COMPLIANCE SOLUTION FOR UNSCRUBBED COAL-FIRED BOILERS

Jonas Klinaspor, Vice President, URS Corporation; Tom Machalek, Blake Stapper, URS; Jeff Kolde, John Darrow, Richard Gebert, Stephen Stark, W.L. Gore and Associates, Inc.

C5.3 PREPARING FOR THE MERCURY AIR TOXICS STANDARD (MATS)

Martin Dillon, PE, PMP, Project Manager, ADA-ES, Inc.; Andrew Szafarz: Alliant Energy, Inc., Sharon Sjostrom, Greg Filippelli, Thomas Campbell, David Young, ADA-ES, Inc.

C5.4 ADDRESSING MATS & MERCURY RE-EMISSIONS WITH MULTI-POLLUTANT EMISSIONS **CONTROL TECHNOLOGY**

Peter Kawa, Senior Vice President-Sales, Eco Power Solutions

C5.5 DECISION MAKING FOR MAT COMPLIANCE

Joel Millard, KVB-Enertec Regualtory Specialist, Babcock & Wilcox Power Generation Group: Bill Eberhardt

C5.6 FORGET ABOUT MERCURY RE-EMISSION -- HOW TO USE YOUR WET-FLUE-GAS DESULFURIZER AS A ROBUST & EFFECTIVE MERCURY ABSORBER

Joe Stuart, Director of Commercial Development, TDC, a division of Genesis Energy

C5.7 A SYSTEM EVALUATION APPROACH IN IMPLEMENTING DSI FOR MATS COMPLIANCE Anthony Silva, Advisory Engineer, Babcock & Wilcox; T. Ruppelli, S. Kumar, & J. Knapik



3:30PM - 5:30PM C6. DRY SORBENT INJECTION(DSI)

Natron

Jarret

McClendon

C6.1 BENEFITS OF CONDITIONED AIR IN TRANSLOADING WHEN USING TRONA OR SBC FOR Session Sponsor ACID GASES MITIGATION IN COAL FIRED UNITS FLUE GAS STREAM

and Co-Chair 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 Conveyor Corporation

C6.4 ACID GAS & MERCURY MATS COMPLIANCE THROUGH SORBENT INJECTION Chris Linrud, Senior Systems Project Engineer, ADA-ES, Inc.; Cody Wilson, Greg Filippelli,

Cameron Martin & Robin Stewart, ADA-ES, Bill Caputo, BCSI

C6.5 OPTIMIZATION OF DRY SORBENT INJECTION & PAC INJECTION FOR COST-EFFECTIVE MULTI-POLLUTANT 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

Wednesday | January 30

7:30AM-9:30AM C7. ACTIVATED CARBON & SCR

Randy Sadler

C7.1 RECENT INJECTION TRIALS OF MATS-PAC™ NON-HALOGENATED ACTIVATED Session Sponsor CARBON IN COAL-FIRED POWER PLANT FLUE-GAS

and Co-Chair William Naylor, VP Operations, Carbonxt, Inc.; Dr. David Mazyck, Carbonxt, Inc.; Dr. Heather Byrne, Dr. Ameena Khan, Jack Drwiega & Caitlin Gross, Clear Carbon Innovations

C7.2 SORBENT TESTING IN THE LAB AND FIELD

(m) John Kline Principal, John Kline Consulting; Anik Delagrave, Lafarge

C7.3 HOW TO GUARANTEE THE LOWEST COST ACTIVATED CARBON TREATMENT SOLUTION Richard Mimna, Senior Research Associate, Calgon Carbon Corporation; Michell Lomago

C7.4 ACTIVATED CARBON MARKET SUPPLY & DEMAND

Rob Nebergall, Global Business Manager - Emissions Control Technologies, Norit Inc.

C7.5 RELEASE & TRANSFORMATION OF POISONS IMPLICATED IN SCR CATALYST

DEACTIVATION

(m)Balaji Krishnakumar, Sr. Computational Analyst, Niksa Energy Associates LLC; Stephen

Niksa, NEA LLC; Alejandro Jimenez, EPRI

C7.6 SCR CATALYST MANAGEMENT CONSIDERATIONS

Nick Pollack, Chief Technology Officer, CoaLogix; Randy Sadler

C7.7 SELECTIVE CATALYTIC REDUCTION SYSTEMS

Joe Smith, Business Development Manager, Peerless Mfg

10AM - 12PM

C8. ADVANCED CONTROL TECHNOLOGIES

Session Sponsor WASTEWATERS

C8.1 PROSPECTS FOR PASSIVE BIOLOGICAL TREATMENT OF SELENIUM IN FGD

and Co-Chair James Bays, Technology Fellow, CH2MHILL; Tom Higgins, Dana French, BT Thomas C8.2 IN-FLIGHT MERCURY CAPTURE OF NORIT'S NONCARBON SORBENT VERSUS DARCO

(m)Patton Adams, Developmental Engineer, Norit Inc.

C8.3 PARTICULATES & MERCURY REMOVAL USING KIMRE(TM) TECHNOLOGY

George C. Pedersen Jr. PE, CEO, KIMRE, INC.

C8.4 REACT MULTIPOLLUTANT SYSTEM - AN OPTION TO CONSIDER

Jim Peters, VP Business Development, Hamon

C8.5 POLLUTION CONTROL COST MINIMIZATION

Jerrold Radway, Chairman, Enerchem

C8.6 DEMONSTRATIONS OF AMENDED SILICATES FOR MERCURY CONTROL IN COAL FIRED

GENERATING UNITS

Jim Butz, VP of Project Management, Novinda; Cliff Brown & Ben Bernardo

Wednesday | January 30

C9. CONTROL TECHNOLOGIES III

1PM - 3PM

Session Sponsor

and Co-Chair

C9.1 REGIONAL ENVIRONMENTAL REMEDIATION

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

C9.2 ANALYTICAL MGMT. OF SCR CATALYST LIFETIMES & MULTIPOLLUTANT PERFORMANCE (m)Balaji Krishnakumar, Sr. Computational Analyst, Niksa Energy Associates LLC; Stephen

Niksa, Niksa Eenrgy Associates LLC; Farrokh Ghoreishi & Corey Tyree, Southern Company

C9.3 MULTI-POLLUTANT CONTROL USING THE CHEM-MOD LLC TECHNOLOGY

Murray Abbott, Manager of Technical Support, Chem-Mod LLC; Sally Wasikowski & George Kotch, Chem-Mod LLC; Jay Gunderson, Energy & Environmental Research Center

C9.4 SNOXTM -THE ECONOMICAL WAY TO TURN HIGH-SULPHUR FUELS INTO POWER WITH **REDUCED CO2 EMISSIONS**

Peter Ibæk, Business Develpment Manager, Haldor Topsoe A/S

C9.5 A NOVEL FOR APPROACH FOR MERCURY CAPTURE

Christopher Polina, Vice President, Mercury Capture Systems; Tom Lesniak

C9.6 UTILITY MATS COMPLIANCE W/ HCL LIMITATIONS & THE CHALLENGES FACING AGING

Paul Johnson, Project Manager, ADA-ES, Inc.; Andrea Taylor, Tennessee Valley Authority; David Young, John Schminky & Greg Filippelli, ADA-ES, Inc.

3:30PM - 5:30PM Session Sponsor

and Co-Chair

C10.1 DEMONSTRATION OF TECHNOLOGY FOR ENHANCED HG CONTROL WITH SDA & **CDS UNITS**

C10. ADVANCED CONTROL TECHNOLOGIES/ DSI

Rebecca Stiles, Sr. Research Chemist, Nalco, an Ecolab Company; Bruce Keiser & Nicholas Eragna, Nalco Company: Steve Smokey, GRE Stanton Station

C10.2 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.

C10.3 STRATIFICATION CONSIDERATION IN DSI OPTIMIZATION

Charles Lockert, President, Breen Energy Solutions

C10.4 A HIGH REACTIVE HYDRATED LIME FOR CHALLENGING DSI APPLICATIONS

Curt Biehn, Manager, Marketing & Technical Services, Mississippi Lime Compay; Mark DeGenova, Randy Griffard, Eric Van Rens & Richard Zhang

C10.5 APPLICATION OF THE DRYFINING™ TECHNOLOGY AT EXISTING POWER UNITS FIRING LOW-RANK COAL

(m) Charles Bullinger, Senior Principle Engineer, Great River Energy; Vladimir Vaysman & Yixin Lu. WorlevParsons

C10.6 THE LATEST CONTROL TECHNOLOGY OF TRACE ELEMENTS USING HEAT EXCHANGER

Naruhito Omine, Engineering Researcher, Babcock-Hitachi K.K.; Noriyuki Imada, Wakako Shimohira, Gouki Sasaki, Atsushi Katagawa, Hiroshi Ishizaka

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Monday | January 28

1PM - 3PM

D1. CNG & SHALE GAS

Session Sponsor and Co-Chair

D1.1 THE EFFECT OF SHALE GAS ON NEW ENGLAND POWER MARKETS

NATURAL GAS & ENERGY SECURITY

Stephen Slocomb, Associate, Epsilon Associates

D1.2 OPTIONS FOR CAPTURING THE VALUE OF SHALE GAS: ENVIRONMENTAL, ECONOMIC & **ENERGY SECURITY PERSPECTIVES**

Joe Marriott, Lead Associate, Booz Allen Hamilton; Robert Murray, Jesse Goellner, & Gary Leatherman

D1.3 SHALE GAS & LNG EXPORT: REGULATION OF A REW PHENOMENON

Les Lo Bauah, Shareholder/Partner, Brownstein

D1.4 ENVIRONMENTAL & ECONOMIC IMPACT ASSESSMENT OF SHALE GAS PRODUCTION & RESOURCES

Sarah Jordaan, Project Manager, EPRI; Sean Bushart

D1.5KELLY A SYSTEMWIDE MODEL TO MEET THE CHALLENGES & MAXIMIZE THE ECONOMIC POTENTIAL FROM SHALE GAS EXTRACTION IN SMALL TOWN COMMUNITIES

Sayan Chakraborti, Senior Program Manager, MRIGlobal; Mark Abashian & Larry Brown, MRIGlobal; Gregory Proctor, Prolific Technology

3:30PM - 5:30PM D2. FRACKING & SUSTAINABLE DEVELOPMENT

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

D2.2 FRACKING: ENVIRONMENTAL REGULATORY & POLICY UPDATE

Megan Roberts-Satinsky, Associate, Venable LLP

D2.3 FRACKING POLICY: WRONG POLICY COULD DERAIL GAS PRODUCTION OVERNIGHT INCREASING COSTS TO HOMEOWNERS & INDUSTRY

(m) Stephen Sewalk, Assistant Professor, University of Denver; Qionglin Dai D2.4 CREATING A SUSTAINABLE ENERGY SYSTEM THROUGH GAS & ELECTRIC

HARMONIZATION

Kelly Daly, Chair - Energy & Environmental Division, Stinson Morrison Hecker LLP

D4. ENERGY POLICY SECURITY

10AM - 12PM

D4.1 LEVERAGING THE LOW COST OF NATURAL GAS TO BRING IT TO UTILIZATION Vijayan Chomatil, Entrepreneur, Kanab Energy

D4.2 NATURAL GAS: AMERICA'S ALTERNATIVE TO GASOLINE?

Rob Barnett, Energy Analyst, Bloomberg Government

D4.3 ENERGY POLICY: WHAT'S NEXT?

Room 222C

Mitchell Baer, Director - Office of Oil and Gas Analysis, US DOE

D4.4 ENERGY AND ENVIRONMENT POLICY LEARNINGS FROM 'CASH FOR CLUNKERS'

Shoshannah Lenski, Associate, Strategy & Corporate Development, DTE Energy

D4.5 ELPIPES TO CREATE HIGH CAPACITY IRELAND-UK POWER LINKAGE

Joe Corbett, Head of Technical Services, Mainstream Renewable Power Ltd.; Roger Faulkner, Electric Pipeline Corporation

Session Sponsor and Co-Chair

D5. STATE, REGIONAL & INFRASTRUCTURE

Session Sponsor

1PM - 3PM

and Co-Chair

D5.1 THE VOTES ARE IN - WHAT DOES THAT MEAN FOR THE RENEWABLE INDUSTRY? Barbara Sands, Managing Consultant, PA Consulting

D5.2 THE ARIZONA ENERGY ROADMAP: CREATING A PLAN FOR THE STATE'S ENERGY

Michelle De Blasi, Attorney, Greenberg Trauria LLP; Christopher Davey, EnviroMission D5.3 CUTTING THROUGH THE STATIC: INSIGHTS FOR IMPLEMENTING EFFECTIVE PUBLIC INVOLVEMENT PROGRAMS FOR ELECTRIC INFRASTRUCTURE DEVELOPMENT Diann Strom, Principal, Envirolssues; Diane Adams

D5.4 PRACTICING RISK-AWARE ELECTRICITY REGULATION

Dan Mullen, Senior Manager, Ceres; Ron Binz, Public Policy Consultina; Richard Sedano,

Regulatory Assistance Project; Denise Furey, Regent Square Advisors

Tuesday | January 29

7:30AM - 9:30AM D3. ENERGY POLICY

D3.1 IMPACTS OF POTENTIAL FUTURE RULES & REGULATIONS ON INVESTMENT DECISIONS

Session Sponsor TODAY

and Co-Chair Sebastian Mankowski, Consultant, NERA Economic Consulting; Scott Bloomberg

D3.2 NATIONAL CAP & TRADE LEGISLATION- WHAT YOU NEED TO KNOW TO PREPARE

Larry Goldenhersh, CEO, Enviance

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

D3.5 ELPIPES & BALLISTIC BREAKERS AS ENABLERS FOR AN UNDERGROUND SUPERGRID

Roger Faulkner, Founder & President, Electric Pipeline Corporation

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 MacGreaor, 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**

(m)Stephen Sewalk, Assistant Professor, University of Denver: Vincent Buscarello

3:30PM - 5:30PM

Wednesday | January 30

7:30AM-9:30AM D7. MANAGING RISK & PROJECT MGMT

Session Sponsor PROPOSITION

D7.1 EFFECTIVE PROJECT INFORMATION MANAGEMENT - THE ULTIMATE VALUE

and Co-Chair (m) Sloane Whiteley, Senior Business Consultant, AVEVA

D7.2 CHALLENGES OF SOFT TARGET SECURITY PROTECTION IN THE POWER & UTILITY SECTOR

Jeff Simmerman, Lieutenant Commander USCG (ret), Environmental Resources Management

D7.3 ENERGY PROJECTS- RISKS & MANAGEMENT

Lorne Sivertson, President, Sivertson & Associates Consultina Ltd.

D7.4 ADDRESSING THE CHANGING OIL & GAS REGULATORY LANDSCAPE WITH CLOUD-

BASED COMPLIANCE SOLUTIONS

Mickey Landkof, Senior Sales Engineer, Enviance

10AM - 12PM

D8. PROJECT FINANCE

D8.1 INVESTING IN THE GHG CONSTRAINED FINANCIAL MARKETS IN THE LIGHT OF THE Session Sponsor FINANCIAL REFORM LEGISLATION

and Co-Chair Nedia Miller, Principal, Miller CTA

D8.2 FINANCING RENEWABLE ENERGY PROJECTS: THE ROLE OF EX-IM BANK

Craig O'Connor, Director - Office of Renewable Energy, Export-Import Bank of the US

D8.3 PROJECT FINANCING FOR RENEWABLE ENERGY PROJECTS

John Ravis, Principal, Scully Capital

Monday | January 28

1PM - 3PM

Session Sponsor

and Co-Chair

Session Sponsor

and Co-Chair

E1. SMALL SCALE RENEWABLE & ELECTRIC UTILITIES

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 A NEW VISION FOR CONCENTRATED SOLAR

Zev Rosenzweig, CEO & President, AORA Solar Ltd

E1.4 HOW TO BUY & MARKET RENEWABLE ENERGY CREDITS & MEET STATE MANDATES IN NYISO, PJM & RGGI

Bert Spaeth, Senior Energy Engineer, RS Energy Solutions Inc.

E1.5 STATISTICAL OPTIMIZATION OF MEDIUM COMPONENTS AFFECTING FERMENTATIVE HYDROGEN PRODUCTION FROM CRUDE GLYCEROL BY THERMOTOLERANT KLEBSIELLA SP.

Teera Chookaew, Ph.D Candidate, Prince of Songkla University

E2. DISTRIBUTED GENERATION 3:30PM - 5:30PM

E2.1 THE ECONOMICS OF HYBRID RENEWABLE MICORGRIDS

Peter Lilienthal, CEO, HOMER Energy

E2.2 DISTRIBUTED GENERATION & THE INTELLIGENT GRID: CHALLENGES & PROMISES

Craig Lewis, Executive Director, Clean Coalition

E2.3 SYNCING SCHEDULES FOR RENEWABLE GENERATION & TRANSMISSION

INTERCONNECTION

Molly Cresto, Project Manager, CH2M HILL; Cary Roberts

E2.4 LESSONS LEARNED ADMINISTERING DISTRIBUTED GENERATION INCENTIVE PROGRAMS

Terry Clapham, Distributed Generation Manager, California Center for Sustainable Energy

E2.5 RENEWABLE POWER SOURCE BASED ON LOW ENERGY NUCLEAR REACTIONS

George Miley, Professor Emeritus - University of Illinois; Xigolina Yana, Kyu-Juna Kim, Tapan

Patel, Erik Ziehm, James Madrigal, Bert Stunkard

E2.6 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

Tuesday | January 29

E3. RENEWABLE DEVELOPMENT ANALYSIS

E3.1 BENCHMARK SURVEY RESULTS: RENEWABLE ENERGY & CORPORATE ENERGY **EFFICIENCY**

(m) Margery Moore, Dir. EHS Strategic Alliances, Bloomberg BNA

E3.2 VARYING IMPACTS OF RPS

Marlys Palumbo, Partner, Van Ness Feldman

E3.3 THE ROLE OF ADVANCED PUMPED STORAGE HYDRO TECHNOLOGIES IN PROVIDING **GRID SERVICES & INTEGRATION OF VARIABLE ENERGY RESOURCES**

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Vladimir Koritarov, Project Manager, Argonne National Laboratory

E3.4 ANCILLARY SERVICES ISSUES FROM THE PERSPECTIVE OF A PROJECT DEVELOPER'S **ATTORNEY**

Karl Kumli, Shareholder/Vice President, Dietze and Davis, P.C.

E3.5 TECHNICAL POTENTIAL OF PV PROJECT DEVELOPMENT IN THE US

Milo Terzich, Project Development Director - Americas, Trina USA; Krishna Shah

E3.6 DEVELOPMENT OF A RENEWABLE ENERGY MEASUREMENT SYSTEM

Zelda Roberts, Senior Specialist, National Advisory Council on Innovation

7:30AM - 9:30AM

Wednesday | January 30

Session Sponsor

10AM - 12PM

Session Sponsor

and Co-Chair

7:30AM - 9:30AM

and Co-Chair

Stan Rosinski

E7. PROJECT DEVELOPMENT/ IP

E4.1 NAVIGATING THE BLM ROW GRANT PROCESS FOR RENEWABLE ENERGY PROJECTS

E7.1 PATENT PROTECTION BEST PRACTICES IN THE WAKE OF THE AMERICA INVENTS ACT Lee Huddleston, Partner, Osha Liana, LLP

E7.2 PATENT A PROCESS OR KEEP IT A TRADE SECRET? HOW TO DECIDE AFTER AIA'S EXPANSION OF THE PRIOR USER RIGHTS DEFENSE

Judith Kim, Director, Sterne, Kessler, Goldstein & Fox; Katrina P. Quach **E7.3 CREATION OF A JOINT VENTURE: THE PRELIMINARY LETTER OF INTENT**

Michael Manuel, Principal, Goldberg Kohn Ltd.

Room 223

E7.4 EQUATOR PRINCIPLE COMPLIANCE DEMONSTRATION FOR A PROJECT IN THE US?

William Stark, Senior Consultant, SAIC Energy, Environment & Infrastructure

E7.5 VISUALIZING CHANGE: VISUAL ASSESSMENT TOOLS FOR RENEWABLE ENERGY PROJECTS

John MacDonald, Project Manager, Tetra Tech, Inc.

E7.6 CAPTURING VALUE THROUGH INTELLECTUAL ASSET MANAGEMENT

Thomas McGurk, President & Mana Member, Advanced Biofuel Solutions/McGurk Intellectual Property Advisors

1PM - 3PM

E5. NEW TECHNOLOGY

E5.1 COOL PLASMA GASIFICATION

Track / RENEWABLE ENERGY

Tuesday | January 29

Session Sponsor Robert Prohaska, Director, ESA

10AM - 12PM

and Co-Chair

Session Sponsor (m) Kris Skrinak, President, adaptive ARC, Inc. and Co-Chair

E5.2 ADVANCED GROUND-BASED INSPECTION TECHNOLOGY FOR WIND TURBINE

BLADES Stan Rosinski, Program Manager, Electric Power Research Institute; John Lindberg

E5.3 APPLYING CSP INNOVATIONS FOR CLEANER FOSSIL-FIRED POWER PLANTS IN THE US John Robbins, Senior Director of Sales - Americas, AREVA Solar, Inc.

E5.4 SYNERGIZING ENHANCED GEOTHERMAL, WIND & HYDROGEN FOR POWER **GENERATION**

E4. RENEWABLE PROJECT DEVELOPMENT

E4.3 TRES AMIGAS - CREATING A NATIONAL HUB FOR RENEWABLES

E4.5 EFFECTIVE MESSAGING IN TODAY'S RENEWABLE ENERGY MARKET

E4.7 UTILITY SCALE RENEWABLE ENERGY PROJECT COMPLIANCE

Laura Manz, Senior Vice President, Viridity Energy, on behalf of Tres Amigas

E4.4 ENVIRONMENTAL LITIGATION AGAINST RENEWABLE PROJECT DEVELOPMENT

E4.6 WHO'S THE BOSS? THE IMPACT OF THE 2012 ELECTION ON RENEWABLE ENERGY

E4.2 UTILIZING PURPA TO MARKET RENEWABLE ENERGY Peter Richardson, Partner, Richardson & O'Leary, PLLC

Jim Wedeking, Staff Attorney, Sidley Austin LLP

James McTarnaahan, Partner, Duane Morris

Kevin Wedman, Vice President, Bureau Veritas

Carolyn Parrs, President & CEO, Mind Over Markets

Edward Hinders, Canyon West LLC; Patrick Kelly

E8. BATTERIES, STORAGE & RE DEVELOPMENT

E8.1 ELECTROVAYA'S UTILITY ENERGY STORAGE SOLUTIONS USING LITHIUM ION SUPERPOLYMER BATTERY TECHNOLOGY

Raishekar DasGupta, Vice President - Energy Storage, Electrovaya

E8.2 CHARGING, TESTING & MONITORING: EV BATTERY CHARGING SYSTEMS & **TECHNOLOGY**

Don Karner, President of ECOtality North America, ECOtality

E8.3 FEASIBILITY OF ENERGY STORAGE ON ITALIAN POWER EXCHANGES ANCILLARY

Francesco Vallone, CEO, Celertech; Faddy Ardian

E8.4 MAPS: MAGLEV POWER STORAGE SYSTEM

Robert Coullahan, President, Readiness Resource Group Incorporated: James Powell, Gordon Danby & James Jordan, Maglev 2000; F.H. Griffis New York Polytechnic University

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E8.5 NATIONAL UTILITY RATES DATABASE

David Loomis, Professor of Economics, Illinois State University

3:30PM - 5:30PM E6. SOLAR & PV

E6.1 PV REACHES GRID PARITY

Session Sponsor Lane S. Garrett, P.E., C.E.M., CEO, ULG Energy Solutions, Inc. and Co-Chair

E6.2 OUTLOOK FOR PV DEMADN IN A LOW INCENTIVE MARKET

Paula Mints, Director, Navigant

E6.3 SUNBEAMS FROM SPACE MIRRORS FEEDING SOLAR FARMS ON THE GROUND AT DUSK

Lewis Fraas, President, JX Crystals Inc.

E6.4 HOW TO SURVIVE THE MULTI-FACETED U.S. SOLAR MARKET

Boris Schubert, CEO, Q.CELLS North America

E6.5 GREENING THE GRID

Troy Dalbey, North American Manager, Upsolar Group

E6.6 BEST PRACTICES FROM SCE'S SOLAR PV PROGRAM

Mark Nelson, Director of Generation Planning & Strategy, Southern California Edison

OTHER - SOLAR OBSERVING DEMONSTRATION Chris Reich, CEO, Solar Astronomer: TeachU

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Monday | January 28

1PM - 3PM

F1. ECONOMIC ENERGY & CYBERSECURITY

Session Sponsor GRID and Co-Chair

Brian Lenane, Senior Principal, SRA International

F1.2 CONDUCTING A RISK BASED METHODOLOGY FOR COMPLIANCE & CYBER SECURITY

F1.1 A PARADIGM SHIFT IS REQUIRED IF THE U.S. IS GOING TO HAVE A MORE SECURE SMART

REQUIREMENTS
(m) Jerome Farquharson, Practice Manager, Burns & McDonnell Engineering Company; Michael Welch

F1.3 EFFECTIVE REGULATORY APPROACHES TO SMART GRID CYBER SECURITY

Terry Jarrett, Commissioner, Missouri Public Service Commission

F1.4 DESIGNING AN EFFECTIVE SECURITY PROGRAM

Joachim Gloschat, Physical Security Specialist, Security Management Solutions, LLC

F1.5 CYBER THREATS TO INDUSTRIAL CONTROL SYSTEMS: FACT OR FICTION

Marty Edwards, Director - Control Systems Security Program; Department of Homeland Security

F1.6 SECURITY OPERATIONS CENTER: A ADAPTIVE APPROACH

Jeff Hawks, Director, Information Systems, Wyle Laboratories; Scott Sanders (Wyle)

3:30PM - 5:30PM F2. COMPLIANCE TECHNOLOGIES & STRATEGIES

Session Sponsor and Co-Chair

F2.1 ASSESSMENT OF GREENHOUSE GAS RETROFIT ISSUES FOR COAL FIRED POWER PLANTS Joy Gloria, Engineer, Sargent & Lundy, LLC; David Bahr, Sargent & Lundy, LLC; John Chang, USEPA

F2.2 LOWER RISK AND REDUCED COST - ESP TO PJFF CONVERSION

Mark Aldrich, Regional Executive, Hamon

F2.3 RE-ENGINEERING COAL-FIRED GENERATING PLANTS Keith Moore, President, Castle Light Energy Corp

F2.4 STRATEGIES FOR PATENTING "GREEN" TECHNOLOGIES Erica Lowthers, Patent Agent, Sim. IP Practice

F2.5 ADVANCES IN FUEL LEAN GAS REBURN

Charles Lockert, President, Breen Energy Solutions

F2.6 WET FGD NOZZLE TECHNOLOGY - CAN A BETTER NOZZLE SELECTION HELP IMPROVE

SCRUBBER PERFORMANCE?

Robert Van Durme, P.E., Senior Account Manager, Lechler Inc.

F2.7 AIR PERMITTING OF IPL'S EAGLE VALLEY PROPOSED REPLACEMENT COMBINED CYCLE

Richard Benedict, Director of Project Development, Indianapolis Power & Light Co. (IPL); Tom Rarick & Robert Fraser, Environmental Resources Management

Tuesday | January 29

PLANT

7:30AM-9:30AM F3. POWER PLANT & BOILER OPTIMIZATION

and Co-Chair

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

F3.2 IN FURNACE LASER-BASED MEASUREMENTS SYSTEM TO OPTIMIZE COAL COMBUSTION ON 600MW COAL-FIRED BOILER

Scott Affelt, Vice President, Zolo Technologies

F3.3 IMPROVED HEAT TRANSFER MANAGEMENT THROUGH SOOTBLOWING OPTIMIZATION ON A CYCLONE FIRED UNIT

Jeremy Brown, Project & Applications Engineer, Babcock & Wilcox PGG

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 Krajna, Lakeland Electric; Dr. Harun Biligren, Lehigh University

F3.5 USE OF OXYGEN ENHANCED COMBUSTION TO ENHANCE BOILER OPERATIONS

Larry Bool; Sr. Development Professional, Praxair, Inc; Stefan Laux, David Thompson & Sho Kobayashi

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

Tuesday | January 29

F4. EHS & EMIS

F4.1 ENSURING REGULATORY COMPLIANCE IN A DECENTRALIZED ORGANIZATION

Sponsor & Co-Chair - Richard Waterman, Vice President, EA Engineering, Science, & Technology, Inc.; Kathy French, LS Power Development, LLC

F4.2 EMIS - INCIDENT REPORTING SYSTEM

Mark Chrisos, Director of HSE & Security, InterGen

F4.3 EMIS DESIGN & IMPLEMENTATION PLANNING FOR ONE OF THE LARGEST US STATE-**OWNED UTILITIES**

Rick Mock, Principal, E2ManageTech; Brian Holmes, Santee Cooper

F4.4 EHS GLOBAL AUDITING TRENDS

(m) Margery Moore, Dir. EHS Strategic Alliances, Bloomberg BNA

F4.5 LEVERAGING MODERN TECHNOLOGY FOR EMIS SUCCESS

Don Smith, Regional Director, Perillon Software

F4.6 THE SAFETY LEADERS BRAIN-HOW SAFETY LEADERS ARE WIRED DIFFERENTLY & WHY THIS MAKES ALL THE DIFFERENCE TO BUSINESS

Michelle Brown, Operations Manager, Sentis USA; Elizabeth Prazeres

10AM - 12PM

Session Sponsor and Co-Chair



Richard Waterman

F5. EHS & RISK MANAGEMENT

F5.1 OIL SPILL RISK EVALUATION FOR SUBSTATION OIL-FILLED EQUIPMENT

Kris Macoskey, Principal, Civil & Environmental Consultants, Inc.; Emory McLean

F5.2 RISK MANAGEMENT & ITS IMPACT ON ENVIRONMENTAL HEALTH & SAFETY

Tom Barlow, Channel Manager, EtQ; Glenn McCarty

F5.3 MANAGING AND REDUCING RISK: ENVIRONMENTALLY PREFERRED CHEMICALS IN YOUR COMPANY'S MAINTENANCE PROGRAM

Jim Collins, Business Development Mgr.- Energy Markets, CRC Industries

F5.4 ENVIRONMENTAL GREEN SHOP AWARD PROGRAM

Robert Trapani, Environmental Engineer, State of Arizona Department of Transportation F5.5 IMPLEMENTING ISO 31000 INTO EHS

Johannes Swanepoel, Product Marketing Manager, Enablon

F5.6 MOVING FROM EHS COMPLIANCE TO PERFORMANCE

David Hoffman, Sustainable Supply Chain SME, Enablon

F5.7 REDUCING HUMAN HEALTH RISKS FROM CARBON DIOXIDE VENTING ASSOCIATED WITH CARBON CAPTURE OPERATIONS

John Shrock, Senior Scientist, ECT, Inc.

1PM - 3PM

Session Sponsor and Co-Chair



Swanepoel & David Hoffamn

3:30PM - 5:30PM

Session Sponsor

and Co-Chair

F6. 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

A. Gwen Eklund, Director - Power Generation Services. TRC

F6.4 BEYOND ASH PONDS

Thomas Higgins, Global Technology Leader - Power Water & Process, CH2M HILL; Dennis Fink & Dana French

F6.5 COAL COMBUSTION RESIDUALS CASE STUDY: GHENT GENERATING STATION

Stephen Henson, Process Engineer, Kiewit Power; Raymond Eric Zbacnik, Kiewit Power; Scott Straight, LG&E and KU Energy

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Wednesday | January 30

7:30AM - 9:30AM F7. OPERATIONS & MANAGEMENT

and Co-Chair

Gill Eapen

F7.1 TRUE GRIT: 7 CORE PRACTICES OF RESILIENT LEADERS

Session Sponsor Autumn Krauss, Chief Scientist, Sentis; Kellie Lewis

F7.2 ENERGY BENCHMARKING IN NYC

David Ahrens, Managing Director, Energy Spectrum

F7.3 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

F7.4 MILL PRE-FIRE DETECTION SYSTEMS

Richard Hovan, Principal Consultant, EPA Systems, LLC

F7.5 MANAGING ENVIRONMENTAL COMPLIANCE AND RESOURCE RECOVERY DURING TRANSMISSION & DISTRIBUTION SYSTEM CONSTRUCTION

Robert Ferrell, Sr. Mgr, Business Development, URS Corporation; Lauren Andersen, Ray Hinkle **F7.6 VALUE OF DESIGN FLEXIBILITY**

Gill Eapen, CFO, VEEDIMS

10AM - 12PM

and Co-Chair



F8. NATURAL RESOURCE MGMT. - HCP

F8.1 PROGRAMATIC PERMITTING FOR VEGETATION MANAGEMENT

Session Sponsor Michael Warner, President - Project Manager, Transcon Environmental, Inc.

F8.2 AN INTEGRATED ECOLOGY & DESIGN APPROACH TO WETLAND RESTORATION

Mark Laska, Ph.D., CEO / President, Great Ecology

F8.3 RESILIENCE & ADAPTABILITY: WEIGHING THE RISKS & BENEFITS OF FISH CONSUMPTION **IN RURAL ALASKA**

Lawrence Duffy, Professor of Chemistry and Biochemistry, University of Alaska Fairbanks; Philip Loring, Kriya Dunlap, Arleigh Reynolds & Ralston Purina

F8.4 THE BUSINESS CASE FOR AN OPERATIONS & MAINTENANCE HABITAT CONSERVATION

William Coleman, Supervisor, Habitat Conservation Plan Program, Pacific Gas & Electric

F8.5 GREEN INFRASTRUCTURE & HCP'S - A NEW TOOL FOR BETTER CONSERVATION

(m) Kris Hoellen, Director, The Conservation Fund

F8.6 PROJECT STREAMLINING & STEWARDSHIP BENEFITS OF PARTNERING WITH THIRD PARTY **MITIGATION PROVIDERS**

(m) Kris Hoellen, Director, The Conservation Fund

F8.7 PROACTIVELY PINPOINTING HAZARDOUS VEGETATION ON THE FRINGES OF POWER

LINE RIGHT-OF-WAY CORRIDORS USING LIDAR & IMAGERY DATA

Alex McCracken, Product Consultant, Exelis

1PM - 3PM

F9. OPERATIONS MANAGEMENT & EHS

F9.1 PLANNING THE POWER PRODUCTION: SHORT-TERM FORECASTING OF ITALIAN Session Sponsor ELECTRICITY MARKET & COMBINATORIAL OPTIMIZATION

and Co-Chair Faddy Ardian, Staff, Celertech; Ilaria Cannata & Francesco Vallone F9.2 OPTIMIZATION OF SCR CATALYST MANAGEMENT PLANNING

Kyle Neidig, Product Manager - SCR Catalyst, Hitachi Power Systems America, Ltd.

F9.3 ON PREVENTING SERIOUS INJURIES & FATALITIES

Jim Spigener, Senior Vice President, BST

F9.4 CONTRACTOR SAFETY: ISSUES, BEST PRACTICES & APPROACHES

Jim Spigener, Senior Vice President, BST

G1. CARBON FOOTPRINT

1PM - 3PM

Session Sponsor

and Co-Chair

Session Sponsor

and Co-Chair

G1.1 NATURAL VS ANTHROPOGENIC GHG EFFECT: A COMPENDIUM

Dejan Ristic, Pressure/Energy Systems Engineer-Group Leader, Argonne National Laboratory

G1.2 "MASS PRODUCED" PRODUCT CARBON FOOTPRINTS TO FACILITATE BUSINESS DECICISONS & LCA EDUCATION IN LARGE COMPANIES Christoph, Meinrenken, Associate Research Scientist, Columbia University, Klaus S. Lackner

G1.3 USING EGRID DATA FOR CARBON FOOTPRINTING GRID SUPPLIED ELECTRICITY

Art Diem, Environmental Engineer, USEPA; Cristina Quiroz, TranSystems

G2. TAILORING RULE/NSR/GHG-BACT

G1.4 IS WOOD BIOENERGY CARBON NEUTRAL?

Roger Sedjo, Senior Fellow, Resources for the Future; Xiaohui Tian, Ohio State University

3:30PM - 5:30PM

G2.1 UPDATE ON GREENHOUSE GAS NSPS REGULATIONS

Tauna Szymanski, Senior Associate, Hunton & Williams LLP

G2.2 GHG BACT AS CO2 INJECTION FOR EOR

Mary Ellen Ternes, Attorney, McAfee & Taft

G2.3 BEST AVAILABLE CONTROL TECHNOLOGY FOR GREENHOUSE GASES

Deanne Dutton Hughes, Principal, Cardinal Engineering

G2.4 IMPLICATIONS OF THE EGU GHG NSPS ON GHG BACT DETERMINATIONS: WHAT DOES

IT ALL MEAN?

Kate Graf, Senior Consultant, Geosyntec Consultants

G2.5 NSR APPLICABILITY UNDER TAILORING RULE

Angela Morrison, Attorney, Hopping Green & Sams, PA; Max Lee, Koogler and Associates,

G2.6 NSR APPLICABILITY UNDER TAILORING RULE, PART IIMax Lee Ph.D., P.E., President, Koogler and Associates, Inc.; Angela Morrison, Hopping

G2.7 HURDLES OF IMPLEMENTING THE TAILORING RULE AT LANDFILLS

David Thorley, Director of Air, Waste Management: Angela Morrison, Hopping Green & Sams, P.A.

January 29 Tuesday |

G3. PLANNING & GHG REPORTING

7:30AM - 9:30AM

Session Sponsor

and Co-Chair

G3.1 WISCONSIN'S APPROACH TO QUANTIFYING EMISSION IMPACTS OF CLEAN ENERGY INITIATIVES (FOCUS ON ENERGY)

David Sumi, Executive Director, The Cadmus Group

G3.2 COMPILATION & ANALYSIS OF NEW MEXICO'S GHG EMISSIONS INVENTORY DATA 2008 - 2011

Michael Schneider, Environmental Scientist, State of NN Environment Department Air Quality Bureau

G3.3 EXPERIENCES WITH GHG PERMITTING UNDER NSR

David Jordan, Partner, ERM

G3.4 APPLICATION OF HESTIA METHODS TO THE CITY OF PHOENIX, USA

Igor Razlivanov, Postdoc, ASU; Kevin Gurney & Yang Song, ASU; Yuyu Zhou, Joint Global Change Research Institute, College Park,

G3.5 HIGH-RESOLUTION GLOBAL FOSSIL FUEL CO2 EMISSION INVENTORY FOR 1992 TO 2010 USING INTEGRATED IN-SITU & REMOTELY SENSED DATA IN A FOSSIL FUEL DATA **ASSIMILATION SYSTEM**

Salvi Asefi-Naiafabady, Postdoctoral Scholar, Arizona State University; Peter Rayner, Jianhua Huang, Yang Song, Kevin Gurney

G3.6 VULCAN: NATIONAL SCALE HIGH RESOLUTION QUANTIFICATION OF FOSSIL FUEL CO2 EMISSIONS

Kevin Gurney, Associate Professor, Arizona State University; Yuyu Zhou, DOE; Daniel Mendoza, Purdue Univ; Vandhana Chandrasekaran & Jaor Razlivanov, ASU

Session Sponsor USE IN U.S. AGRICULTURAL CROP PRODUCTION

Michigan State University (MSU).

REFINING & MARKETING

G4. CORPORATE STRATEGIES & RISK MGMT

and Co-Chair Adam Diamant, Technical Executive, EPRI; Neville Millar, Ph.D. & G. Philip Robertson, Ph.D.,

G4.2 SUMMARY OF RECENT OBSERVATIONAL STUDIES OF THE IMPACTS OF CLIMATE CHANGE & IMPLICATIONS FOR THE ELECTRIC UTILITY INDUSTRY

G4.3 CARBON TAX OR "CAP-&-TRADE" SYSTEMS & ITS COST & PRICE EFFECT ON U.S.

Howard Balentine Technical Leader - Air Quality, AECOM; Gregory Derevianko

G4.4 HESS CORPORATION'S NEXT GENERATION CLIMATE CHANGE STRATEGY

G4.5 ENVIRONMENTAL & CARBON REPORTING & DISCLOSURE: A NEW PARADIGM

G4.6 INVESTING IN THE GHG CONSTRAINED FINANCIAL MARKETS IN THE LIGHT OF THE

G4.1 CREATING GREENHOUSE GAS EMISSIONS OFFSETS BY REDUCING NITROGEN FERTILIZER

Wednesday | January 30

G7. CCS: CARBON CAPTURE & STORAGE

G7.1 CARBON CAPTURE UTILIZATION & STORAGE (CCUS) KNOWLEDGE BASED TOOLS FROM THE DOE/NETL CARBON STORAGE

G7.2 CO2 CAPTURE VIA SORBENT ENHANCED WATER GAS SHIFT

Lu, Hong Lu & Massoud Rostam-Abadi, ISGS; Elaine Everitt, DOE

Nauven, Codexis, Inc.: Dr. Svlvie Fradette, CO2 Solution Technologies Inc.: Dr. Geert Versteeg, Procede Group BV

Laboratory; Steve Herron & Paul Myles, Worley Parsons

Terry Unger, Associate, ICF International; Kerry Schlichting

1PM - 3PM

G5. CALIFORNIA CAP-AND-TRADE

(m) Bill Smalling, Attorney at Law, C. William Smalling, PLLC

(m) John Fillo, Principal Consultant, Trinity Consultants Inc

(m) Michal Pelzig, Senior Manager Reporting, Hess Corporation

G5.1 CAP-&-TRADE IN CALIFORNIA

FINANCIAL REFORM LEGISLATION

Nedia Miller, Founder, MILLER, CTA

Session Sponsor Gillian Marks, President, The Climate Advisor and Co-Chair

G5.2 CARBON CREDIT CAPITAL - DECISION SUPPORT TOOL FOR COST EFFECTIVE **COMPLIANCE TO AB-32 CAP-AND-TRADE**

Luca Nencetti, Director of Engineering, Carbon Credit Capital, LLC G5.3 KICK-OFF FOR CALIFORNIA'S AB 32: HOW WILL THE MARKET WORK?

Andrew Van Horn, Managing Director, Van Horn Consulting

G5.4 CARBON PROJECT TYPES TARGETED FOR CALIFORNIA COMPLIANCE MARKET **PROTOCOLS**

Dick Kempka, Vice President Business Development, The Climate Trust

G5.5

Tuesday | January 29

10AM - 12PM

Steve Fine

3:30PM - 5:30PM G6. GHG STRATEGIES - POST KYOTO

and Co-Chair

LAFCCC

Session Sponsor Olof Bystrom Ph.D, Team Lead - Project Assessments, UNFCCC

G6.2

Dirk Forrister, IETA

G6.3 CARBON FOOTPRINT OF A PRESIDENTIAL ELECTION

Art Samberg, Senior Consultant, Golder Associates Inc.

G6.4 THE EMERGING POST-KYOTO CLIMATE POLICY FRAMEWORK AS EXPLAINED THROUGH **NEW ENVIRO-ECONOMIC METRICS**

(m) Stephen Sewalk, Assistant Professor, University of Denver; Vincent Buscarello



Olof Bystrom

Dirk Forrester

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

William Steen, Sr. Chemical Engineer, URS; Carl Richardson & Tom Machalek, URS; Yongqi

G7.3 ENZYMATIC TECHNOLOGY FOR LOW-COST CARBON DIOXIDE CAPTURE

Jonathan Carley, Vice-President - Business Development, CO2 Solutions Inc.; Dr. Luan

G7.4 A CASE STUDY OF PERFORMANCE, COST & FEASIBILITY OF A CO2 CAPTURE-READY **COAL POWER PLANT**

Eric Grol, Energy Analyst, U.S. Department of Energy/National Energy Technology

G7.5 INTEGRATION OF SHALE GAS PRODUCTION WITH CCS

Jinsheng Wang, Research Scientist, CanmetENERGY, Natural Resources Canada; David Rvan, Edward J. Anthony, Andrew Wiaston

G7.6 FUNDING MECHANISMS ADDRESSING THE LONG-TERM LIABILITY OF CCS ACTIVITIES

G8. CCS II

G8.1 POST-COMBUSTION CO2 CAPTURE & THE RELATIVE BENEFITS OF SOLID SORBENTS Travis Starns, Director of Projects, ADA-ES, Inc.; Holly Krutka, Martin Dillon, Sharon Sjostrom G8.2 500 MTPD COAL-FIRED CO2 CAPTURE PROJECT UPDATE. INCLUDING MHI AMINE **EMISSION REDUCTION TECHNOLOGY & HEAT INTEGRATION SYSTEM**

Steven Holton, Dir. Business Development, Mitsubishi Heavy Industries America, Inc.: Steven Holton, Tatsuya Tsujiuchi, Takahito Yonekawa, & Paul Wood, MHIA; Takuya Hirata, Hiromitsu G8.3 APPLICATION OF A NOVEL FROTH-BASED STRUCTURED PACKING FOR ABSORPTION **BASED POST COMBUSTION CCS**

Zhenshuo Liu, Sr. Staff Engineer, Westec Environmental Solution; William H. Hargrove, Frank

G8.4 CARBON CAPTURE & STORAGE AT NATURAL GAS COMBINED CYCLE POWER PLANTS IN CALIFORNIA

Julian Isham, Geology Manager, Shaw E&I

G8.5 THE PLAINS CO2 REDUCTION (PCOR) PARTNERSHIP: A REGIONAL CARBON SEQUESTRATION PARTNERSHIP IN THE INTERIOR PLAINS OF NORTH AMERICA

Edward Steadman, Deputy Associate Director for Research, Energy & Environmental Research Center; J. Harju, C. Gorecki, L. Botnen, D. Daly, W. Peck, M. Jensen, S. Smith, J. Sorensen, J. Hamling, R. Klapperich & K. Anagnost

G8.6 EVALUATION OF CO2 CAPTURE FROM EXISTING COAL FIRED PLANTS BY HYBRID SORPTION USING SOLID SORBENTS (CACHYS™)

Nicholas Lentz, Associate Director for Energy Technology Applications, University of North Dakotal; Charles K. Thumbi, Daniel A. Laudal & Steven A. Benson, UND; Srivats Srinivasachar, Envergex LLC

G9. CCS III 1PM - 3PM

G9.1 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

G9.2 HITACHI'S CARBON DIOXIDE SCRUBBING TECHNOLOGY WITH H3-1 ABSORBENT FOR **COAL FIRED POWER PLANTS**

Eiji Miyamoto, Engineering Researcher, Babcock-Hitachi K.K.; Koichi Yokoyama, Shigehito Takamoto, Hirofumi Kikkawa, Toshio Katsube, Jun Shimamura (Babcock-Hitachi K.K.), Sona Wu, Sandhya Eswaran (Hitachi Power Systems America, Ltd.)

10AM - 12PM

7:30AM - 9:30AM

Session Sponsor

and Co-Chair

Session Sponsor and Co-Chair

Session Sponsor

and Co-Chair

Monday | January 28

1PM - 3PM

H1. ALGAE

H1.1 RENEWABLE SOLAR BIOBUTANOL PRODUCTION UTILIZING CARBON DIOXIDE AS THE Session Sponsor **SOLE FEEDSTOCK**

and Co-Chair Bruce Dannenberg, CEO & Founder, Phytonix Corporation

H1.2 UTILIZATION OF LIQUID EFFLUENT FROM AN ANAEROBIC DIGESTER (DLE) AS A NUTRIENT **SOURCE FOR ALGAE GROWTH**

(m)Greg Karr, Program Manager, MRIGlobal; Jennifer Jackman, Scott Shore & Kristine Krebs H1.3 WATER SUSTAINABILITY THROUGH THE USE OF AN ALGAE-BASED ADVANCED

BIOLOGICAL TREATMENT

Rick Johnson, Director, Business Development, AlgEvolve

H1.4 ENERGY & WATER RESOURCE EFFICIENT PRODUCTION OF MICROALGAE LIPIDS

Kelsey Price, Student Researcher, University of New Hampshire; Ihab Farag

H1.5 ALGAE GROWTH IN PHOTOBIOREACTORS USING A REMOVABLE JACKET OF COLORED

Daniel Eltringham, Student Researcher, University of New Hampshire; Marian Elmoraghy & Ihab Faraa

3:30PM - 5:30PM H2. BIOFUELS / ETHANOL / BIODIESEL

H2.1 EVALUATION OF AS-RECEIVED & PRETREATED NORTHEAST BIOMASS FOR PRODUCTION Session Sponsor OF BIOFUELS & VALUE-ADDED PRODUCTS

and Co-Chair Nii Ofei Mante, Research Associate - Thermochemical Conversion 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 Srinivas, Principal Engineer, TDA Research, Inc.; Michael V. Mundschau, Erik W.

Andersen, Steven D. Dietz, Brady J. Clapsaddle & Steven C. Gebhard

H2.3 POST ELECTION POLITICS & CELLULOSIC ETHANOL DEVELOPMENT

Christopher Standlee, Executive Vice President, Abengoa Bioenergy

H2.4 STATISTICAL OPTIMIZATION OF ENZYMATIC HYDROLYSIS OF OIL PALM TRUNK FOR PRODUCTION OF GLUCOSE, XYLOSE & ETHANOL

Pongsak Noparat, Student, Department of Industrial Biotechnology, Faculty of Agro-Industry, Prince of Songkla University; Sompong O-Thong, Poonsuk Prasertsan

H2.5 UTILIZATION OF AN AIR BLANKET TO KEEP BIODIESEL DRY

Scott Grossbauer, Global Sales Manager, Donaldson Company

Tuesday | January 29

7:30AM - 9:30AM H3. BIOMASS

H3.1 EUCALYPTUS PLANTATIONS IN FLORIDA USA: ECONOMIC ANALYSIS OF BIO-ENERGY & Session Sponsor CARBON SEQUESTRATION POTENTIAL

and Co-Chair 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 CFD MODELING OF BIOMASS COMBUSTION FOR A 500MW COAL-FIRED BOILER CONVERSION

Baiyun Gong, Staff Scientist, Nalco Mobotec; Guisu Liu, Liming Shi, Brian Higgins & Ed Pozzobon

H3.4 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

H4. BIO & WASTE ENERGY

10AM - 12PM

Session Sponsor

and Co-Chair

Session Sponsor

and Co-Chair

3:30PM - 5:30PM

Session Sponsor

and Co-Chair

H4.1 PERMITTING A NEW & INNOVATIVE WASTE CONVERSION TECHNOLOGY IN NEW **JERSEY**

Alan Sawyer, Managing Director, NRG Energy, Inc.; Greg Seher, Atlantic County Utilities Authority; Marcus Scrimgeour & Greg McCarran, SCS Engineers, PC

H4.2 CARBON CAPTURE FROM CEMENT FLUE GAS & CONVERSION OF CARBON TO NEW **VALUE IN BIOPLASTICS**

(m) John Kline, Principal, John Kline Consulting; Brian Sefton & Shannon LaGuardia, Oakbio Inc.

H4.3 BRINGING BIOGAS TECHNOLOGY TO ORGANIC WASTE MARKETS IN THE US Emily Viau, CEO, Bioenergy Frontiers, Inc.

H4.4 PARTNERING WITH COAL: PROGRESS. OPPORTUNITIES & CHALLENGES WITH MSW-**DERIVED FUELS**

Mark Hall, Executive Vice President, Lakeside Energy/Dongara; Melissa Hillman, Trinity Consultants

H4.5 SUSTAINABILITY IN AN URBAN ENVIRONMENT THROUGH ANAEROBIC DIGESTION John McDowell, Project Manager, Eisenmann Corporation

1PM - 3PM H5. BIOGASIFICATION & SWM

H5.1 BIOMETHANE VEHICLE FUEL

Harrison Clay, President, Clean Energy Renewable Fuels

H5.2 BIOCHAR. A SOLUTION FOR SOLID WASTE MANAGEMENT

Ricardo Aguirre, Director of Stormwater Engineering, CVL Consultants

H5.3 DISTRIBUTED-SCALE BIOMASS GASIFICATION POWER

Chris Zygarlicke, Deputy Associate Director for Research, Energy & Environmental Research Center

H5.4 BIOCHAR UTILIZATION IN AN INTEGRATED SYSTEM FOR BIOENERGY CROP PRODUCTION & CARBON SEQUESTRATION

(m) Greg Karr, Program Manager, MRIGlobal; Andrew Miller, Ryan Krause & Donnie Bowman, MRIGlobal: Nathan Nelson & Arthur Fink, Kansas State University

H6. COFIRING IN POWER PLANTS

H6.1 LOW-CARBON CO-FIRING Paula Calabrese, Senior Vice-President & Chief Strategy Officer, ReCommunity Energy LLC

H6.2 ZERO WASTE POWER PLANTS USING PLASMA GASIFICATION TECHNOLOGY

Louis Circeo, Chief Scientist, Applied Plasma Arc Technologies, LLC

H6.3 GIANT KING GRASS AS AN ENERGY CROP IN THE UNITED STATES

Carl Kukkonen, CEO, VIASPACE Inc.

H6.4 COOL PLASMA GASIFICATION

(m) Kris Skrinak, President, adaptive ARC, Inc.

H7. BIOMASS - SWM/ LFG

H7.1 ENERGY FROM MUNICIPAL SOILD WASTE WITH ZERO CARBON EMISSION

Surendra Saxena, Professor, CleanHydro-Innovision

H7.2 CASE STUDIES DEMONSTRATING VIABLE LFG BENEFICIAL USE PROJECTS AT SMALL LANDFILLS

Brian Stuver, Client Service Manager, Joyce Engineering

H7.3 LANDFILL GAS-TO-ENERGY: SOLUTION OR PROBLEM?

Mike Ewall, Director, Energy Justice Network

E7.4 KEY CONSIDERATIONS FOR LANDFILL GAS TO METHANE PROJECTS

(m) Joel Cervelloni, Principal Consultant, PA Consulting; TBD

Wednesday | January 30

Session Sponsor

and Co-Chair

7:30AM - 9:30AM

11. ENERGY SUSTAINABILITY

11.1 RENEWABLE ENERGY - SHOW ME THE GREEN!

11.2 GREEN CLAIMS & GREENWASHING - THE GRASS REALLY GREENER?

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

11.5 OPTIMAL USE OF ALTERNATIVE ENERGY SOURCES FOR SUSTAINABLE ENERGY

11.6 COLLABORATIVE ADVANCEMENT OF SUSTAINABILITY IN THE ELECTRIC POWER

Ken McKinnon, Executive Committee Member, Yukon Environmental & Socio-economic

Charles Franklin, Senior Counsel, Akin Gump Strauss Hauer & Feld

Duane Rosa, Professor of Economics, West Texas A&M University

Greg Odegard, Consultant, GO Environmental

Tuesday | January 29

14. 316B

Session Sponsor

10AM - 12PM

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 Heinen, Sr. Scientist, Environmental Consulting & Technology; Mark Gerath & Steve Cibik, ECT

14.6 COMPARISON OF ENTRAINMENT AT ADJACENT INTAKES WITH & WITHOUT LARGE SLOT-WIDTH WEDGE-WIRE SCREENS: A CASE FOR WEDGE-WIRE SCREENS TO REDUCE **ENTRAINMENT**

Normandeau; Robert Matty, Exelon Power; Jason Kinnel, Veritas Economic Consulting

Monday |

Session Sponsor

and Co-Chair

1PM - 3PM

January 28

Saskatchewan

Assessment Board

MANAGEMENT

INDUSTRY

11.4 YESAB - THE YUKON WAY

3:30PM - 5:30PM | 12. SUSTAINABILITY PROJECTS

Jessica Fox, Manager Sustainability, EPRI; Todd Maki

Session Sponsor and Co-Chair

12.1 SUSTAINABLE ALTERNATIVES: REDUCING FOSSIL FUELS CONSUMPTION IN MILITARY FAMILY HOUSING COMMUNITIES

Ryan Mielke, Senior Marketing Manager, Lend Lease; John Karelis

12.2 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 **12.3 CREATING THE MINDSET OF SUSTAINABILITY**

Warren Te Bruuge, CEO & Founder, Manzimvula Ventures, Inc.

12.4 EMPLOYEE ENGAGEMENT & PROJECT INVESTMENTS: CREATING A SUSTAINABILITY **CONTINUUM**

Devin Hodge, Sustainability Program Manager, Argonne National Laboratory

12.5 WIRE & CABLE EFFICIENCY

Evan Birenbaum, Program Manager, Southern California Edison; Carol Godfrey, Southwire

Tuesday | January 29

7:30AM-9:30AM 13. SUSTAINABILITY REPORTING

Session Sponsor and Co-Chair

13.1 SUSTAINABILITY: MORE THAN "CHECKING THE BOX" (m) Joel Cervelloni, Principal Consultant, PA Consulting, TBD

13.2 PRIDE & PREJUDICE - REPORTING IN CIVIL SOCIETY IN THE 21ST CENTURY

Yolanda Pagano, Director, Sustainable Strategies & Solutions, O'Brien & Gere

13.3 RAISING THE BAR: NEW CHALLENGES FOR CORPORATE SUSTAINABILITY REPORTING

Jacob Kislevitz, Senior EHS&SR Specialist, Hess Corporation; Michal Pelzig

13.4 SUSTAINABILITY REPORTING & VERIFICATION: A SYMBIOTIC RELATIONSHIP

(m) John Fillo, Principal Consultant, Trinity Consultants, Inc.

15. 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 TAKING ZEEWEED* MBR TECHNOLOGY TO THE NEXT LEVEL

Brian Arntsen, Global Domain Leader UFMBR, GE Water & Process Technologies

15.4 COMMERICAL ENERGY EFFICIENT WASTEWATER TREATMENT & WATER REUSE - IMET

TECHNOLOGY

Mehmet A. Gencer, CEO, IMET Corporation

15.5 ZERO LIQUID DISCHARGE FOR COMPLIANCE

Kristen Jenkins, Global Technology Lead - Industrial Water, CH2MHILL; Thomas Higgins

15.6 NEW AERATOR FOR WASTE LAGOONS

Jim Dartez, President, Reliant Water Technologies

15.7 USE MUNICIPAL RECLAIM WATER & HIGH CYCLES OF CONCENTRATION FOR COOLING

TOWERS - SAVE WATER & ENERGY - BUT WAIT, THERE'S MORE.... Ivan Cooper, Practice Leader, Golder Associates

16. WATER & ELECTRIC UTILITIES

I6.1 UNDERSTANDING THE ENERGY/WATER NEXUS & DEVELOPING CONSENSUS-BASED

Mary Doyle Kenkel, Executive Director, Center to Advance Energy & Water Management

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

Shintaro Honjo, Research & New Technologies Engineering Manager, Mitsubishi Heavy Industries America, Inc.; M. Ito, N. Inaba, & S. Sugita, MHI America, Inc.; T. Ushiku, T. Nagayasu, T. Fukuda & S. Kagawa, MHI, Ltd.

16.3 AN OVERVIEW OF THE WATER RESEARCH CENTER

Jeff Wilson, Principal Research Engineer, Southern Company; Richard Breckinridge EPRI; Jay Wos SRI

16.4 DESIGN & OPERATIONAL CHALLENGES ASSOCIATED WITH CONDITIONING

Zachry Bahr, Mechanical Engineer, Burns & McDonnell

16.5 WATER RISK & OPPORTUNITY FOR ELECTRIC UTILITIES

Peter Flaherty, Sr. Engineer, ERM; Skelly Holmbeck

16.6 IMPINGEMENT 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

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and Co-Chair

Robert Blye, Vice President, Normandeau Associates, Inc; Paul L Harmon & Brian Lees,

Session Sponsor and Co-Chair

1PM - 3PM

3:30PM - 5:30PM

Monday | January 28

Wednesday | January 30

7:30AM - 9:30AM 17. WATER - REGULATORY UPDATES

Session Sponsor and Co-Chair

17.1 CALIFORNIA STORM WATER & RENEWABLE ENERGY & ELECTRIFYING MIX S. Wayne Rosenbaum, Partner, Stoel Rives LLP

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

17.3 RECENT CHANGES IN STATES' SUSTAINABLE WATER USE POLICY

David Van Wie, Associate, AMEC Environment & Infrastructure

17.4 THE EVOLVING REGULATION OF THERMAL DISCHARGES

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

10AM - 12PM

Session Sponsor

and Co-Chair

18. SUSTAINABLILITY GREEN

18.1 DODO-SAPIENS: WHY WE NEED REGENERATIVE, BIO-BASED BUILDINGS

(m) Eric Corey Freed, Founding Principal, organic ARCHITECT

18.2 BIODEGRADABLE HYDRAULIC OILS & CLEANERS

Dr. Todd Tarrant, President, Hydro Safe, Inc.

18.3 SPILLS, SINS & STARBUCKS: HOW WE DESIGNED OUR CITIES AROUND OIL

(m) Eric Corey Freed, Founding Principal, organicARCHITECT

18.4 ACCELERATING SUSTAINABILITY SOLUTIONS FOR ORGANIZATIONS

Raj Buch, Practice Lead, Arizona State University

18.5 FRESHWATER FREE FOOD PRODUCTION WITH NO WASTE

(m) Mark Edwards, Professor, ASU

18.6 CLIMATE INDEPENDENT FOOD PRODUCTION WITH ALGAE

(m) Mark Edwards, Professor, ASU

J1. ENERGY EFFICIENCY

1PM - 3PM

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

Pallavi Madakasira, Analyst, Lux Research

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3:30PM - 5:30PM

Session Sponsor

and Co-Chair

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 COLLABORATION FOR SMALL BUSINESS ENERGY EFFECIENCY SUCCESS

Judy Sunde, Project Manager Market Strategies, Omaha Public Power District; Kristi

Wamstad-Evans, City of Omaha

J1.5 MOVING THE HOUSING MARKET TO ENERGY EFFICIENCY

Steve Baden, Executive Director, RESNET

J1.6 HIGH INTENSITY LIGHTING WITH NEXT GENERATION LIGHT SOURCES: A TECHNOLOGY **SURVEY WITH KEY PRODUCT INSIGHTS**

Ahmed Shuja, CTO, BritePointe Inc.

J2. ENERGY MGMT

J2.1 ISO 50001 - IMPLEMENTATION & ALTERNATIVES

Bryan Chen, Senior Engineer, ARCADIS US; William Allemon

J2.2 ENERGY MANAGEMENT IMPLEMENTATIONS USING ISO 50001 & SEP - CRITICAL RISK &

BUSINESS ECONOMIC BENCHMARK'S

Don MacDonald, Director - Sustainability & Energy Management, UL DQS

J2.3 CUSTOMER ENGAGEMENT BEYOND CUSTOMER ENROLLMENT

Gail Allen, Sr. Manager - Customer Solutions, KCP&L

J2.5 HARNESSING WASTED ENERGY FROM GAS PIPES

J2.4 ON-BILL REPAYMENT PROGRAMS SPUR GREEN JOBS, CLEAN ENERGY & RATEPAYER SAVINGS

Brad Copithorne, Director of Financial Innovation, Environmental Defense Fund

Lee Palles, Vice President - Sales & Marketing, Langson Energy; Richard Langson

J2.6 THE BENEFITS OF REAL TIME ENERGY PRICING FOR UTILITIES & THEIR CUSTOMERS

Pritesh Gandhi, CEO, Ambient Devices

Tuesday | January 29

J3. SMART GRID

7:30AM - 9:30AM

J3.1 CYBER SECURITY IMPLEMENTATION APPROACH FOR UTILITY SMARTGRID INITIATIVES (m) Jerome Farquharson, Practice Manager, Burns & McDonnell Engineering; Rahul

Session Sponsor and Co-Chair

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

Frank Pendleton, Program Manager, MRIGlobal; Sayan Chakraborti & Scott Klamm

J3.3 HURRICANE SANDY TURNS SMART GRID PLANS UPSIDE DOWN

John Finnigan, Senior Regulatory Attorney, Environmental Defense Fund

J3.4 EXTRACTING VALUE OUT OF AMI DATA

(m)Peter Siggins, Partner, PA Consulting Group

J3.5 ACHIEVING CONSUMER ENGAGEMENT REQUIRES MORE THAN SOCIAL MEDIA. A DIGITAL STRATEGY IS ESSENTIAL

(m)Peter Sigains, Partner, PA Consulting Group

Room 228A

Room 228A

ENERGY EFFICIENCY & MGMT | Trock /

Tuesday | January 29

10AM - 12PM

Session Sponsor

and Co-Chair

J4. ENERGY EFFICIENCY & MGMT I

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

(m) Charles Bullinger, Senior Principle Engineer, Great River Energy; Vlad Vaysman & Yixin Lu, Worley Parsons

J4.2 EDUCATION & COLLABORATION WILL HELP US BECOME MORE ENERGY EFFICIENT **SOCIETIES**

Chris Hartmann, Executive Vice President & CEO, Rexel Holdings USA

J4.3 IMPACTS OF SEVERE WEATHER PHENOMENA ON THE ELECTRICITY INFRASTRUCTURE Michael Kintner-Meyer, Staff Engineer, Pacific Northwest National Laboratory; Jim Dirks, Chunlian Jim, Will Gorrissen, Jennie Rice

J4.4 NEW BIO-CONTROL APPROACH BOOSTS POWER PLANT PRODUCTION BY 10%

Tom Muilenberg, Commercial Operations Manager, MIOX Corporation

J4.5 RESULTS & LESSONS LEARNED FROM A BEHAVIOUR-BASED CONSERVATION PILOT PROGRAM FOR SMALL BUSINESSES

Owen Rogers, Lead Developer, Pulse Energy

1PM - 3PM

Session Sponsor

and Co-Chair

J5. DEMAND RESPONSE

J5.1 ROLE OF DEMAND RESPONSE BASELINES IN ESTIMATING PARTICIPANT IMPACTS

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

J5.2 DEMAND RESPONSE ENVIRONMENTAL IMPACT STUDY Rvn Hamilton

Rebecca Butler, Field Operations Project Manager, EnerNOC, Inc.

Ryn Hamilton J5.3 IMPORTANCE OF AVAILABILITY PAYMENTS TO DEMAND RESPONSE

Aaron Breidenbaugh, Director of Regulatory Affairs, EnerNOC, Inc.; Phil Martin & Dr. Paul

Troughton

J5.4 MARKET SOLUTIONS TO INCENTING ENERGY EFFICIENCY

Craig Glazer, Vice President Federal Govt. Policy, PJM Interconnection

J5.5 DEMAND RESPONSE & THE VALUE IT OFFERS UTILITY, COMMERCIAL, & INDUSTRIAL

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

3:30PM - 5:30PM J6. ENERGY CONSERVATION & STORAGE

Session Sponsor **GLOBAL DEMAND** and Co-Chair

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

Hilary Flynn, Senior Analyst, Lux Research; Brian Warshay, Steven Minnihan, Matthew Feinstein

J6.2 MACRO LEVEL ENERGY HARVESTING

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

J6.3 ENERGY CONSERVATION HYBRID STREET SWEEPER

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

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

Donald Ousterhout, Partner, Reed Smith LLP: Amy Koch

Wednesday | January 30

J7. ENERGY EFFICIENCY & MGMT II

7:30AM - 9:30AM

Session Sponsor

and Co-Chair

J7.1 INTERN PROGRAM HELPS INDUSTRIES ACHIEVE ENERGY & WATER SAVINGS David Carter, Pollution Prevention Specialist, Kansas State University

J7.2 WHAT BUSINESSES CHOOSE ENERGY RETROFITS? THE CHARACTERISTICS THAT PREDICT PARTICIPATION IN THE ENERGIZE PHOENIX PROJECT

Michael Kuby, Professor, Arizona State University; Anna Berlin, Samantha Neufeld, Scott Kelley, George Oliver, Michael Dalrymple, Alex Castelazo

J7.3 OPPD INTERN BENCHMARKS HEALTHCARE CONSORTIUM FOR ENERGY EFFICIENCY

Andrew Smith, Energy Efficiency Intern, Kansas State University

J8.1 RECAPTURING LOST MW & BOOSTING PLANT EFFICIENCY FROM LOWER RANK COALS (m) Charles Bullinger, Senior Principle Engineer, Great River Energy

J8.2 IMPROVING BOILER PERFORMANCE AT XCEL'S COMANCHE STATION USING GE'S **ZONAL COMBUSTION MONITORING SYSTEM**

J8. POWER PLANT OPERATIONS & EFFICIENCY

Antonio Marquez, Lead Engineer, General Electric; Neil Widmer, Santosh Nareddy & David Moyeda, General Electric; Gregory George, Xcel Energy

J8.3 VERSATILITY OF NEW GENERATION DS® LOW NOX BURNER

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

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J8.4 A STANDARDS BASED INFORMATION & OPERATIONS INTEGRITY MANAGEMENT MATURITY MODEL

(m)Sloane Whiteley, Senior Business Consultant, AVEVA

10AM - 12PM Session Sponsor

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Maximize your exposure as a sponsor at one of the USA's largest **Energy Utility & Environment Conference & Expo.**

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

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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.

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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.

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7. GOLF SPONSOR - \$5,000

Exclusive sponsorship of the 2013 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.

EVENT SPONSORSHIPS

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Your Logo on Monday & Tuesday 5 pm to 7 pm Reception Tickets

The Networking Reception featuring hosted bars, carver tables and heavy appetizers from 5:00 to 7:00 on Monday or Tuesday. Signage with Company logo placed exclusively at sponsor designated bars. As a Network Reception sponsor you will have your name and logo in front of conference attendees on each meal ticket, and signs during the reception on Monday or Tuesday. A full page ad in the official show guide distributed to 2,000 delegates. Get involved as a sponsor and position vourself as a major hospitality player at EUEC.

B. GOLD NETWORK LUNCHEON SPONSOR - \$8,000

Your Logo on Monday & Tuesday 12 to 1 pm Luncheon Coupons

Help quench your target audience's appetite for new ideas, products and services that they are looking for. As a Network Lunch sponsor you will have your name and logo in front of conference attendees on each meal ticket, and signs during the luncheon on Monday or Tuesday, as well as a full page ad in the official show guide distributed to 2,000 delegates.

C. SILVER DELEGATE BREAKFAST SPONSOR - \$5,000

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Fire up the conference by sponsoring the morning breakfast and coffee service offered to delegates on Monday, Tuesday or Wednesday, Your company will be recognized with signage and your name and logo in front of conference attendees on each breakfast & coffee ticket, redeemable at the conference hotels and convention center.

D. BRONZE DELEGATE EVENT BREAK SPONSOR - \$3,000

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Fire up the conference by sponsoring the morning or the afternoon break snack and coffee or beverage service offered to delegates on Monday, Tuesday or Wednesday AM and PM breaks. Your company will be recognized with signage and your name and logo in front of conference attendees on each break on the snack & coffee ticket, redeemable at the networking events in the conference exhibit hall.

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- Logo on Keynote PowerPoint Slide
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Call the EUEC office (520-615-3535) or email info@euec.com

Pre-Conference Workshops & Golf Sunday, January 29th

1:00 pm to 5:00 pm

Workshop 1

Permitting & Compliance

Eric Hiser, Jorden, Bischoff & Hiser

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

Challenges for Compliance With Short-term PM2.5, NO2, and SO2 Ambient Standards

Robert Iwanchuk, CCM (AECOM) Robert Paine, CCM, QEP (AECOM)

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

Emerging Air Quality, Greenhouse Gas and Energy Requirements

Rich Pandullo, Trinity Consultants Allan F. Bedwell, CantorCO2e

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.

BEUEC

Golf Tournament

The Legacy Golf Resort 32nd St., Phoenix, AZ Sunday January 27, 2013

7:30 am Breakfast 8:30 am shotgun start 1:00 pm Awards Luncheon



Cost: \$140 with clubs \$100 without clubs

Includes:

Green fees, cart, range balls, bag handling, gratuities & commissions Breakfast & Awards Lunch in Pavilion.

Check Option for Golf Tournament when you register online or

Contact: info@euec.com Ph: 520-615-3535 WWW.EUEC.COM

1st Prize:

EUEC 2014 Registration for you and a guest with hotel included, entry into 2014 EUEC Golf tournament and the second annual EUEC Golf Trophy

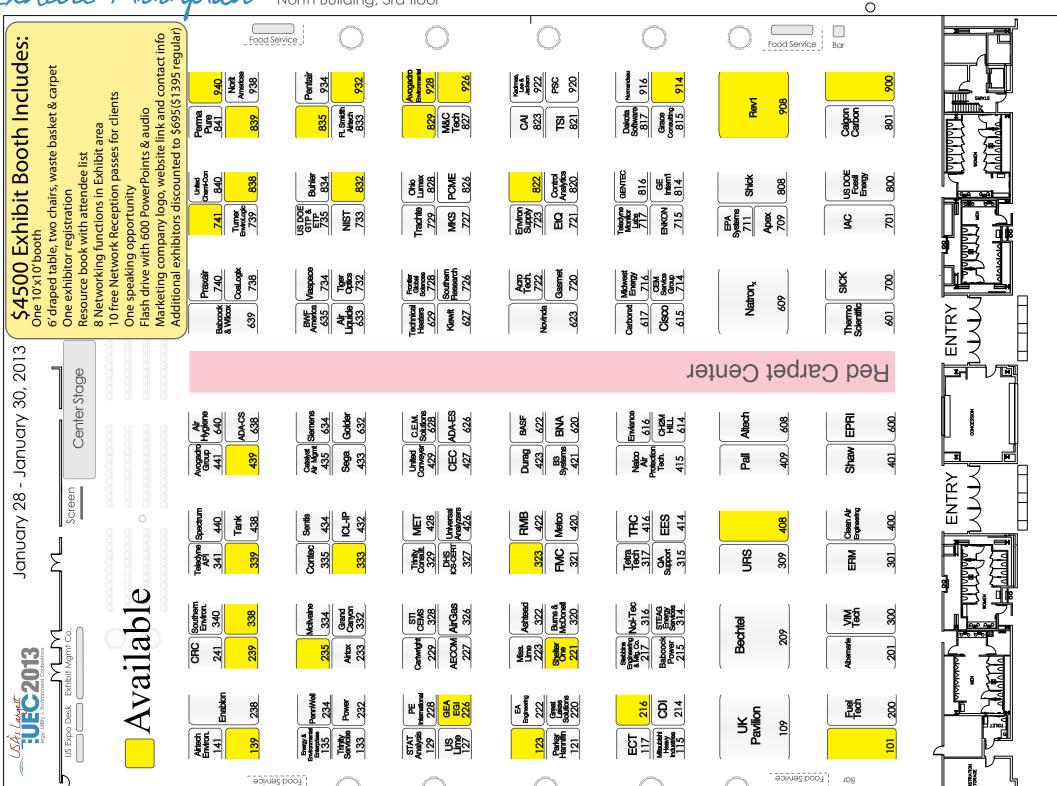
All participants receive a free entry into a \$10,000 hole in one contest

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

Full page (if received by Dec. 31st) — \$1,000

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URS Corporation

US DOE GTP & ETP

VIM Technologies

Viaspace

United Conveyor Corp.

United States Lime & Mineral

US DOE Fossil Energy/Clean Coal

TSI, Inc.

TRC Companies, Inc. **Trinity Consultants**

729

416

329 133

821

739

109

840

429

127

426

309

800

735

734

300

	11010	1/3000	TIG CHOICE / Wallable
722	Acro Technologies, Inc.	816	GENTEC
638	ADA Carbon Solutions	632	Golder Associates. Inc.
626	ADA-ES , Inc.	815	Grace Consulting
227	AECOM, Inc.	332	Grand Canyon Univeristy
640	Air Hygiene	220	Great Lakes Solutions
633	Air Liquide America Spec. Gases	432	ICL Industrial Products
326	Airgas	701	Industrial Accessories Company
141	Airtech Environmental Services	922	Kadrmas, Lee & Jackson
201	Albemarle Corporation	627	Kiewit
608	Altech Environment USA	827	M&C Tech Group North
709	APEX Instruments, Inc.	428	Marsulex Environmental Tech.
322	Ashtead Technology Inc.	334	McIlvaine Company
441	Avogadro Group, LLC	420	Metco Environmental
421	B3 Systems, Inc.	716	Midwest Energy Emissions Corp.
639	Babcock & Wilcox	223	Mississippi Lime Company
215	Babcock Power	115	Mitsubishi Heavy Industries
622	BASF	727	MKS Instruments
209	Bechtel	415	Nalco Air Protection Technologies
620	Bloomberg BNA	609	Natronx Technologies LLC
834	Buhler Technologies LLC	733	NIST
320	Burns & McDonnell Engineering	316	Nol-Tec Systems, Inc.
635	BWF America	938	Norit Americas Inc.
801	Calgon Carbon Corporation	916	Normandeau
823	California Analytical Instruments	623	Novinda
617	Carbonxt, Inc.	828	Ohio Lumex Company
229	Cartwright & Associates	409	Pall Corporation
435	Catalyst Air Management, Inc.	121	Parker Hannifin Corporation
714	CEM Service Group	826	PCME LTD
628	C.E.M. Solutions	228	PE International
214	Cervantes-Delgado, Inc.(CDI)	234	PennWell Corporation
614	CH2M HILL	934	Pentair, formerly TYCO
615	CiSCO - Custom Instr. Services	841	Perma Pure
427	Civil & Environmental Consultants	232	POWER Magazine
400	Clean Air Eng. & Instrument	740	Praxair
738	CoaLogix	920	PSC
335	Contec Systems	315	QA Support, LP
820	Control Analytics	908	Rev1
241	CRC Industries	422	RMB Consulting & Research Inc.
822	Dakota Software Corporation	433	Sega, Inc.
327	DHS ICS-CERT	434	Sentis
423	Durag	401	Shaw Group, Inc.
222	EA Engineering, Science & Tech.	221	Shelter One, Inc.
238	Enablon	808	Shick USA
135	Energy & Environmental Enterprises	700	SICK Maihak, Inc.
715	ENKON Information Systems Inc.	634	Siemens Industry
616	Enviance, Inc.	340	Southern Environmental, Inc.
117	Environmental Consulting & Tech.	726	Southern Research Institute
414	Environmental Energy Services	440	Spectrum Systems Inc.
723	Environmental Supply Co., Inc.	129	STAT Analysis
711	EPA Systems	314	STEAG Energy Services LLC
600	EPRI	217	Stebbins Engineering & Mfg Co.
301	ERM	328	STI CEMS
		438	Tank Connections
721 833	EtQ, Inc. FL Smidth Airtech	436 629	Technical Heaters, Inc.
321	FMC Corp. PerNoxide	341	
728	Frontier Global Sciences	717	Teledyne API
200	Fuel Tech	317	Teledyne Monitor Labs Tetra Tech
720	Gasmet Technologies, Inc.	601	Thermo Scientific
814	GE International, Inc.	732	Tiger Optics



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Ch	eck Items of Interest:			uestions? View our website at www.euec.com ontact EUEC at 1-520-615-3535 or info@euec.com
	Gold (20'x20' Booth)	\$25,000	Exhibit Package:	
	Silver Front Row (20'x10' Booth)	\$10,000	One exhibitor registration	on to attend conference and maintain booth
	Premium Corner (10' x 10' Corner)	\$4,500	 One 10'x10' booth with 10 free exhibit passes for 	one 6' draped table with two chairs r your clients
	1 Page Ad in Conference Guide	\$1,000	 Marketing of your comp 8 Networking functions 	oany logo, website link and contact info in Exhibit area
	Session Sponsorship & Logo Ad	\$500		endee, mailing list & flash drive with 600 PowerPoints
	Flash Drive with Audio	\$495		or company employees (\$1395 regular)
Ext	nibit Booth Selection:	☐ Sa	me location as 2012	1st 2nd 3rd
Plec	ase select your preferred choice of Bo	oth # from the	exhibit booth layout.	
Exł	nibitors: Please list the names of con	npany employ	ees to attend EUEC 2013 at a	50% discount \$695 (\$1395 regular).
	Nam	ne	Email	
Ist	Registrant (Free)			
2nc	d Registrant (\$695)			
				_
3rd	Registrant (\$695)			
Sp	eakers:			
[Send me information	n to speak	at EUEC 2013	
[Send me information	n to chair	and organize a sess	ion at EUEC 2013
	Name of Session:			
Со	ntact Information:			
Nan	ne:			
Con	npany Name:			
Adc	dress:			
City	:		State:	Zip:
Emc	nil:		Phone:	Fax:
Con	nment:			
				Delle
Alith	norized Signature (required):			Date:

Show Rules. Application implies that exhibitor will abide by Conference show rules. Please copy this contract for your files. Exhibitor hereby assumes entire Snow Kules. Application implies that exhibitor will abide by Conterence show rules. Please copy this contract for your tiles. Exhibitor hereby assumes entire responsibility and hereby agrees to protect, defend, indemnify and save the Phoenix Convention Center, its owners, its operators, 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, governental charges or fines and attorney's fees arising out of or caused by its installation, removal, maintenance, occupancy or use of the exhibition 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 damages. The group agrees to provide a Certificate of Insurance evidencing the coverage described above.

Cancellation Policy: By submitting this form you agree to pay for your booth and all added items. 50% refund is available until October 1, 2012 a. After October 1, 2012 a. Refundation and the property damages. 1, 2012 no refunds are avilable.

CONTACT EUEC: P. O. Box 66076, Tucson, AZ 85728 | info@euec.com | p.520-615-3535 | f.602-296-0199



Conference Hotels

Hyatt and Sheraton located one block from Convention Center



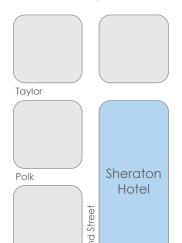
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Conference Sponsorship	Pri	ce			Am	ount
1. One page advertisement in show guide		\$1,000				
2. Technical session sponsor & logo ad		\$500				
3. Hotel key cards		\$8,000				
4. Your logo on flash drive EUEC proceeding	gs	\$8,000				
5. Attendee lanyard and badge holders	\$8,50	0 - SOLD OUT				
6. Attendee registration bags or folio		\$10,000				
7. Golf sponsor		\$5,000				
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A. Platinum network reception sponsor	\$10,000					
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Send back to EUEC via either email, fax or mail