

Program At - A - Glance

Track	A	B	C	D	E	F	G	H	I	J
Sessions	Air Policy & Regulations	CEMS & Modeling	Mercury Multi-Pollutant Control	Energy Policy & Security	Renewable Energy	Operations & Mgmt	GHG, Carbon Mgmt	Alternative Fuel Technologies & CCS	Sustainability & Water	Energy Efficiency & Mgmt.
Room										
Monday February 3										
1 1:00PM to 3:00PM	Regulatory Update	HCL Monitoring	Hg Control Demonstrations	Shale Gas /LNG/ Natural Gas	Renewable Energy Mgmt & Planning	Compliance Technologies & Strategies	Carbon Footprint & Green Projects	Fossil Fuel Innovations	Energy Sustainability	Energy Efficiency
2 3:30PM to 5:30PM	Regulatory Update - GHG	CEMS & MATS	Hg Control & Activated Carbon	Fracking & Sustainable Development	Renewable Energy/Siting /Transmission	Decommissioning Power Plants	Tailoring Rule/NSR/ GHG -BACT	Biofuels / Landfill Gas!	Sustainability Projects	Energy Mgmt.
Tuesday February 4										
3 7:30AM to 9:30AM	NAAQS	PM, Opacity & Visibility	Control Technologies	Energy Policy & Security	Renewable Development Analysis	Power Plant & Boiler Optimization	GHG Strategies	Biomass / Cofiring in Power Plants	Wastewater Mgmt.	Smart Grid
4 10:00AM to 12:00PM	NSR	SF6 & Emissions Monitoring	BART Case Studies	Energy & Climate	Renewable Project Development	EHS & EMIS Management	Corporate Strategies & Risk Mgmt.	CCS: Carbon Capture & Storage	316b	Energy Efficiency & Mgmt.
5 1:00PM to 3:00PM	CAA: State Rights vs. Federal Oversight	SO2, SO3, NOX & Additives	Dry Sorbent Injection	Project Finance	Wind	Operations & Management	CA Cap & Trade & GHG Strategies	CCS II	Water Sustainability	Demand Response & Energy Efficiency
6 3:30PM to 5:30PM	Compliance Strategies	Cement & PM	MATS	EHS & Risk Management	Solar/PV/ Batteries/ Storage	Coal ASH / CCP	Electric & Natural Gas Vehicles		Water & Electric Utilities	Energy Mgmt. II
Wednesday February 5										
7 7:30AM to 9:30AM	Permits & Compliance	Modeling I	Activated Carbon						Water - Regulatory Updates	
8 10:00AM to 12:00PM	TRI, MACT, MATS	Modeling II	SCR						Water Management	
9 1:00PM to 3:00PM	Air Policy & Regulations	Fabric Filters/ PM/Opacity	Control Technologies							

USA's Largest
EUEC2014
 Energy, Utility & Environment Conference
 Feb 3 - 5 | Phoenix, AZ

600 Speakers
 2000 Attendees
 200 Exhibits

17th Annual
 Phoenix Convention Center
 100 N. 3rd St., Phoenix, AZ 85004



PROGRAM GUIDE



EUEC Super Bowl Party & Welcome Reception

When: Sunday Feb 2nd (3 to 10 pm)

Where: Hyatt Regency "Networks" Bar & Grill

Pick up your free drink tickets at Registration



Mitchell Baer



John Kinsman



Mike Miller



Prabhu Dayal

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Exhibits

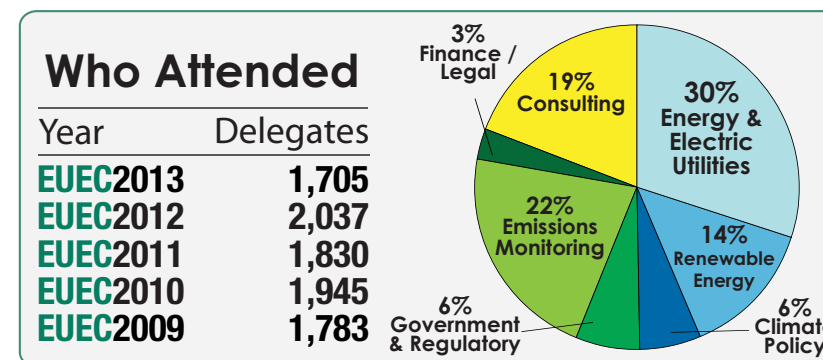
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What is EUEC?

EUEC2014: The 17th Annual energy, utility & environment conference & expo is USA's largest professional networking & educational event of its kind held Feb 3-5, 2014 at the Phoenix Convention Center, Phoenix, Arizona.

NETWORK MARKETING WITH 2,000 DELEGATES
at 11 lunches, receptions and breaks in 3-days in 200 company exhibit area.



REGISTRATION COST INCLUDES:

- 11 networking meals tickets for 3 days (\$300 value)
- EUEC Flash Drive with audio - (mailed after event) (\$495 value)
- Attend all 600 presentations & exhibits for 3 days

REGISTRATION COST	Nov 1	Dec 1	Jan 1	On-Site
Attendee Full	\$795	\$895	\$995	\$1,395
Speaker/Gov't/VIP	\$695	\$795	\$895	\$1,295

Directors



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.



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.



Mike Miller - Director, Environment, 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.

EUEC2014 Exhibit & Network Schedule

Sunday | Feb. 2nd

7:00 am - 7:00 pm Registration
1:00 pm - 7:00 pm Exhibit Set-up

Monday | Feb. 3rd

7:00 am - 7:00 pm Registration
7:00 am - 10:00 am Carry in Set-up
9:00 am - 12:00 pm Plenary Session
12:00 pm - 1:00 pm Network Lunch 1
1:00 pm - 3:00 pm Tech Session 1
3:00 pm - 3:30 pm Network Break 2
3:30 pm - 5:30 pm Tech Session 2
5:00 pm - 7:00 pm Network Reception 3

Tuesday | Feb. 4th

7:30 am - 9:30 am Tech Session 3
9:30 am - 10:00 am Network Break 4
10:00 am - 12:00 pm Tech Session 4
12:00 pm - 1:00 pm Network Lunch 5
1:00 pm - 3:00 pm Tech Session 5
3:00 pm - 3:30 pm Network Break 6
3:30 pm - 5:30 pm Tech Session 6
5:00 pm - 7:00 pm Network Reception 7

Wednesday | Feb. 5th

7:30 am - 9:30 am Tech Session 7
9:30 am - 10:00 am Network Break 8
10:00 am - 12:00 pm Tech Session 8
12:00 pm - 4:00 pm Exhibit Tear Down

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.

Keynote

Monday, February, 9:00 AM - 12:00 PM

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



EPA REGULATORY UPDATE

Janet McCabe 9:00 AM - 9:30 AM

Acting Assistant Administrator | U.S. Environmental Protection Agency



ELECTRIC UTILITY SOLUTIONS FOR REGULATORY CHALLENGES

Alan R. Hodnik — 9:30 AM - 10:00 AM

Chairman, President & CEO | Allete



FOSSIL ENERGY AND AMERICA'S ENERGY SECURITY

Hon. Chris Smith — 10:00 AM - 10:30 AM

Principal Deputy Assistant Secretary | Fossil Energy | U.S. Department of Energy



ENVIRONMENTAL & ENERGY POLICIES

Phil Sharp — 10:30 AM - 11:00 AM

President | Resource for the Future



THE CHALLENGE & PROMISE OF ENERGY SYSTEMS INTEGRATION

Dr. Bryan Hannegan — 11:00 AM - 11:30 AM

Associate Laboratory Director | National Renewable Energy Lab



HIGHLIGHTS OF EUEC2014

Dr. Prabhu Dayal — 11:30 AM - 12:00 PM

Chairman | EUEC



Monday | February 3

1PM - 3PM

Session Sponsor
and Co-Chair



John Kinsman



Michael Cashin

A1. REGULATORY UPDATE

A1.1 CAA REGULATION OF POWER GENERATORS THROUGH 2020

(Chair) John Kinsman, Sr. Director - Environment, Edison Electric Institute

A1.2 "ALL THE ABOVE" ENERGY POLICY: NOT REALLY

Block Andrews, Strategic Environmental Solutions Director, Burns & McDonnell

A1.3 WHERE ARE WE ON INTERSTATE TRANSPORT?

Daniel Chartier, Director - Environmental Markets & Air Quality Programs, EEI

A1.4 ENERGY FORWARD RESPONSE TO ELECTRIC GENERATION ENVIRONMENTAL CHALLENGES

(Chair) Michael Cashin, Environmental Policy Manager, Minnesota Power (ALLETE)

A1.5 IMMINENT DEATH OF COAL GENERATION?: AIR, WATER & WASTE REGULATIONS DURING OBAMA'S SECOND TERM

Jay Holloway, Partner, Winston & Strawn LLP

A1.6 THE STATE OF THE NAAQS

Kurt Kissling, Attorney, Pepper Hamilton LLP

3:30PM - 5:30PM

Session Sponsor
and Co-Chair



Nicholas Martin



Andrew Byers

A2. REGULATORY UPDATE - GHG

A2.1 UPDATE ON GREENHOUSE GAS NSPS REGULATIONS

Tauna Szymanski, Senior Associate, Hunton & Williams LLP

A2.2 MECHANISMS & SCENARIOS FOR REGULATING EXISTING PLANTS UNDER SECTION 111D

(Chair) Andrew Byers, Project Manager, Black & Veatch

A2.3 UTILITY PERSPECTIVE ON REGULATION OF GHG EMISSIONS FROM EXISTING POWER PLANTS UNDER CAA SEC. 111(D)

(Chair) Nicholas Martin, Manager - Environmental Policy, Xcel Energy

A2.4 PLANTWIDE APPLICABILITY LIMITS & GREENHOUSE GAS EMISSIONS

Ken Snell, Sr. Environmental Consultant, Sargent & Lundy LLC; Laura Schwer

A2.5 CLEAN AIR ACT & GREENHOUSE GAS CONTROL COST IMPACTS ON THE REFINING & PETROLEUM INDUSTRY

Bill Smalling, Attorney, The Law Office of C. William Smalling

A2.6 EPA'S BIOGENIC CO2 DEFERRAL RULE-- THE IMPACT OF THE RECENT COURT VACATUR

Scott Osbourn, Practice Group Leader, Golder Associates

Tuesday | February 4

7:30AM - 9:30AM

Session Sponsor
and Co-Chair



Robert Paine



Lucy Fraiser

A3. NAAQS

A3.1 DEALING WITH IMPLEMENTATION OF THE 1-HOUR SO2 NAAQS: CHALLENGES & OPTIONS

(Chair) Robert Paine, Technical Director, AECOM

A3.2 UPDATE & IMPLICATIONS OF THE PM2.5 NATIONAL AMBIENT AIR QUALITY STANDARD, REGULATIONS, & MODELING GUIDANCE

Robert McCann, Principal, Golder Associates Inc.

A3.3 INTERSTATE TRANSPORT IN THE SUPREME COURT: THE COURT CONSIDERS EPA V. EME HOMER CITY GENERATION, L.P.

E. Carter Chandler Clements, Esq., Associate, Hunton & Williams LLP; Norman Fichtthorn

A3.4 1-HOUR NO2 MODELING & THE EPA SIL

Everest Yan, Senior Engineer, PCR Services Corporation; Heidi Rous

A3.5 RECENT REDUCTIONS IN NAAQS - GOOD SCIENCE OR PERPETUATION OF DOGMA ON HEALTH CONSEQUENCES OF LOW-LEVEL AIR POLLUTANTS?

(Chair) Lucy Fraiser, Principal, Zephyr Environmental

A3.6 REGIONAL AIR QUALITY MODELING ANALYSIS IN THE WEST - BACKGROUND & TRANSPORT FOR NAAQS & OTHER INDICATORS

Tom Moore, Air Quality Program Manager, WRAP/WESTAR

Tuesday | February 4

10AM - 12PM

Session Sponsor
and Co-Chair



Makram B. Jaber



Liz Williamson

A4. NSR

A4.1 RECENT DEVELOPMENTS IN NSR

Gary McCutchen, Principal, RTP Environmental

A4.2 THE UTILITY NEW SOURCE REVIEW ENFORCEMENT INITIATIVE - MORE THAN A DECADE OLD & IT KEEPS GOING, & GOING, & GOING

(Chair) Makram B. Jaber, Partner, Hunton & Williams LLP

A4.3 THE NEW ERA OF NEW SOURCE REVIEW SETTLEMENTS: UPDATE ON SETTLEMENTS & CONSENT DECREE IMPLEMENTATION

(Chair) Liz Williamson, Partner, Winston & Strawn LLP

A4.4 NSR UPDATE 2014 - CONTINUING CHALLENGES TO ELECTRIC UTILITIES

Kenneth Weiss, Partner, ERM

A4.5 NSR REFORM RULE-THE NEW NSR ENFORCEMENT APPROACH: PRACTICAL CONSIDERATIONS TO AVOID THE NEXT ROUND OF ENFORCEMENT

Mark Thimke, Attorney, Foley & Lardner LLP; Michael Zebell, ERM

A4.6 POLLUTION CONTROL PROJECT EMISSIONS INCREASES & PERMITTING IMPLICATIONS

Dave Helm, Environmental Consultant, Sargent & Lundy; Ken Snell

A5. CAA: STATES RIGHTS VS. FEDERAL OVERSIGHT

A5.1 EPA'S STARTUP, SHUTDOWN, & MALFUNCTION SIP CALL TO STATES

Randy Brogdon, Attorney, Troutman Sanders LLP

A5.2 EPA DISAPPROVAL OF STATE REGIONAL HAZE PLANS

(Chair) Mack McGuffey, Partner, Troutman Sanders LLP

A5.3 EPA'S DISAPPROVAL OF ARIZONA'S REGIONAL HAZE PLAN

Eric Massey, Air Director, Arizona Department of Environmental Quality

A5.4 GHG PERMITTING EXPERIENCE IN TEXAS

Larry Moon, Principal, Zephyr Environmental Corporation

A5.5 GHG REGULATIONS UNDER THE CLEAN AIR ACT

Brian Toth, Manager of Environmental Assessment, Southern Company

A5.6 BETTER THAN BART: AN ALTERNATIVE COMPLIANCE STRATEGY

Eric Hiser, Partner, Jordan Bischoff & Hiser, PLC

1PM - 3PM

Session Sponsor
and Co-Chair



Mack McGuffey

A6. COMPLIANCE STRATEGIES

A6.1 WHAT IS THE BACKGROUND CONCENTRATION?

Gale Hoffnagle, Air Quality Consulting Practice Leader, TRC Environmental Corporation

A6.2 SO2 AMBIENT MONITORING CASE STUDY FOR COAL-FIRED POWER PLANTS

Mary Kaplan, Senior Project Specialist, AECOM; Tom Weissinger, Raven Power; Frank Tringale & Robert Paine, AECOM

A6.3 HOW TO ADDRESS THE THREATS OF MANDATORY APRIL 2015 LOWER POST MATS SO2 EMISSION LIMITS

(Chair) Howard Ellis, President, Enviroplan Consulting; Allen Dittenhofer, Michael Hirtler, Julia Shannon & Ganesh Srinivasan

A6.4 UTILITY & INDUSTRIAL BOILERS & THE NEW COMBUSTION RULES

Lillian Woolley, Senior Environmental Engineer, Barr Engineering; Erik Boleman

A6.5 CLOSING THE LOOP ON COMPLIANCE MANAGEMENT

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

A6.6 HOW TO GET A COMBUSTION TURBINE PERMITTED IN AN EXPEDITED MANNER - CASE STUDIES FROM RECENT LICENSING PROJECTS

Anand Yegnan, Senior Consultant, ERM; Julie Ross & Mark Garrison

3:30PM - 5:30PM

Session Sponsor
and Co-Chair
Howard Ellis

Co-Chair
Margery Moore

Wednesday | February 5

Monday | February 3

7:30AM - 9:30AM A7. PERMITS & COMPLIANCECo-Chair
Lynn Gresock**A7.1 NEW POWER PLANT DEVELOPMENT: OVERCOMING OPPOSITION**

(Chair) Lynn Gresock, Vice President, Tetra Tech, Inc.

A7.2 AQ PERMITTING CHALLENGES FOR THE NATIONAL BIO & AGRO-DEFENSE FACILITY

Ron Petersen, Vice President, CPP, Inc.; Anke Beyer-Lout

A7.3 CASE STUDY OF EXISTING COMBUSTION TURBINES & THE NEW 1-HOUR NOX STANDARD

Dwain Kincaid, Senior Consultant, Air Quality Services, LLC

A7.4 USE OF "REPRESENTATIVE DATA" IN THE WAKE OF SIERRA CLUB V. E.P.A., 705 F.3D 458 (D.C. CIR. 2013)

Samuel Lofland, Attorney, Ryley Carlock and Applewhite; James Sanderson & Albert Acken

A7.5 PLANNING A NEW GENERATION UNIT - DOES YOUR DESIGN TEAM INCLUDE AN AIR DISPERSION MODELER?

Thomas Pritcher, Senior Engineer, Environmental Consulting & Technology

A7.6 QUANTIFYING & COMMUNICATING THE AIR QUALITY BENEFITS

Frederick Sellars, Vice President, Tetra Tech, Inc.

10AM - 12PM

A8. TRI, MACT, MATSSession Sponsor
and Co-Chairs**A8.1 THE FINAL MATS RULE: WHERE ARE WE NOW?**

(Chair) Michael Rossler, Manager - Environmental Programs, EEI

A8.2 MERCURY IN FUEL & STACK GASES

Mary Archer, Project Manager, NextEra Energy; Vic Vickery & Roberto Garcia, Portnoy Environmental, Inc. (PEI); Ed Zillioux, Zillioux Environmental, LLC (ZxEnv); John Hampp & Mary Archer, NextEra Energy / FPL

A8.3 INTEGRATED ASSESSMENT OF TOXICS IN A SOUTHWESTERN REGIONAL WATERSHED

Leonard Levin, Technical Executive, EPRI; Krish Vijayaraghavan, ENVIRON; Joel Herr, Systech; Robert Goldstein, EPRI

A8.4 THE MATS CONUNDRUM

(Chair) Peter Belmonte, Sr. Partner, ERM; Robert Fraser

A8.5 TUNE-UPS & ENERGY ASSESSMENTS FOR MACT AT UTILITY PLANTS

Brian Petermann, Manager - Air Quality Compliance, Segal Inc.

A8.6 TRI 101

Leah Blinn, Client Program Manager - Environmental & Infrastructure, CB&I; Amanda Black



Peter Belmonte



Michael Rossler

1PM - 3PM

A9. AIR POLICY & REGULATIONS**ROOM CHANGE 221A**Session Sponsor
and Co-Chair**A9.1 MAJOR SOURCE BOILER MACT - ARE YOU READY?**

Danielle Musa, Project Engineer, ERM; Daniel Goldstein

A9.2 STRATEGIC ENVIRONMENTAL CONSIDERATIONS FOR EGU PROJECTS

Deborah Walden-Hersh, Manager of Consulting Services - Austin, Trinity Consultants; Paul Greywall & Melissa Dakas

A9.3 ACCELERATING THE NEPA PROCESS

(Chair) Carolyn Dunmire, Sr. Project Mgr., Ecosphere Environmental Services; Richard Knox

A9.4 CONTROLLING GAS TURBINE EMISSIONS IN THE FUTURE

(Chair) Sara J. Head, Vice President, AECOM; Bonnie Marini, PhD, Siemens Energy, Inc.

A9.5 AIR PERMITTING CONSIDERATIONS FOR COMBUSTION TURBINE GAS PATH UPGRADES FOR TO IMPROVE OUTPUT & EFFICIENCY

Jon Perry, Senior Project Manager, ERM; Robert Fraser & Merritt McGlynn

Carolyn
DunmireCo-Chair
Sara J. Head**B1. HCL MONITORING****B1.1 FTIR MEASUREMENT OF HCL FOR UTILITY & CEMENT INDUSTRIES**

Matt Swanson, VP of Sales, California Analytical Instruments, Inc.; Kevin Ramazan

B1.2 TUNABLE DIODE LASER (TDL) BASED HCL CEMS DEVELOPMENT CHALLENGES TO MEET EPA'S DRAFT PERFORMANCE SPECIFICATIONS

Tim Kuiken, Midwest Regional Sales Manager, Cemtek Environmental; Keith Crabbe

B1.3 HCL CONT. EMISSIONS MONITORING USING CAVITY RING-DOWN SPECTROSCOPY

Curt Dvonch, Sales & Applications Engineer, Tiger Optics; Graham Leggett

B1.4 CONTINUOUS MONITORING OF HCL USING FTIR

(Chair) Sylvie Bosch-Charpenay, Senior Applications Scientist, MKS; P. Zemek & B. Marshik

B1.5 MEASURING HCL USING HOT/WET EXTRACTIVE FTIR CEMS

Luc Sevrette, Manager - CEM Products, Gasmet Technologies; Jim Cornish

B1.6 CHALLENGES WITH HCL MONITORING & HOW TO SOLVE THEM

Steve Gibbons, Business Development Manager, ABB Inc.

1PM - 3PM

Co-Chair
Sylvie Bosch-
Charpenay**B2. CEMS & MATS****B2.1 915 J MERCURY PROCESS MONITOR**

Andrew Mertz, Analytical Engineer, Ohio Lumex; Joseph Siperstein

B2.2 PSEG FOSSIL - CEMS EMIS INTEGRATION

Joel R Resig, Sr. Environmental Engineer, PSEG Fossil; David Hinchey Jr., PSEG Fossil; Patrick G. Hecht P.E., URS

B2.3 HG & HCL MONITORING STRATEGIES FOR MATS

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

B2.4 SORBENT TRAP MONITORING - FIELD EXPERIENCE

Phil McMaster, Eastern Regional Sales Manager, Altech Environment U.S.A.; Jurgen Reinmann, ESA Deutschland

B2.5 MATS RULE NOTIFICATION & REPORTING REQUIREMENTS

Steve Norfleet, Project Manager, RMB Consulting & Research, Inc.

B2.6 LOW EMITTING ELECTRIC UTILITY STEAM GENERATING UNIT (LEE) STATUS PRESENTS CHALLENGES & BENEFITS

David L. Elam Jr, Principal, TRC Environmental Corporation

B2.7 HG CEMS WITHOUT CALIBRATORS

(Chair) Richard Hovan, Director Environmental Business Development, Durag Group

3:30PM - 6:00PM

Session Sponsor
and Co-ChairsRichard
HovanCo-Chair
Russell Berry

Tuesday | February 4

B3. PM, OPACITY & VISIBILITY**B3.1 DIGITAL OPACITY MEASUREMENT THE 301 TEST**

(Chair) Shawn Dolan, President, Virtual Technology LLC

B3.2 CONDENSABLE PM MITIGATION USING DSI

Steve Baloga, V.P. Environmental Services, Novinda Corporation

B3.3 'TIS THE SEASON: DRIVERS OF WINTERTIME FINE PARTICULATE POLLUTION IN PHX AZ

(Chair) Ira Domskey, Planning Consultant to the Director, Maricopa County Air Quality Dept.

B3.4 EXPERIENCE IN USING PCME 181WS (WET STACK PM-CEM)

Ed McCall, General Manager, PCME; William Averdick

B3.5 USING PM2.5 MEASUREMENTS FROM COAL-FIRED BOILERS IN PERMITTING OR EMISSION CALCULATIONS

Lillian Woolley, Senior Environmental Engineer, Barr Engineering

B3.6 PM2.5 EMISSIONS UPDATE- THREE YEARS LATER DO WE KNOW ANY MORE?

Bob Farmer, Program Director - Air Quality, ERM; Jeff Twaddle & Larry Hottenstein

7:30AM - 9:30AM

Co-Chairs
Shawn Dolan
&
Ira Domskey

Tuesday | February 4

Wednesday | February 5

10AM - 12PM

Session Sponsor
and Co-Chair

James Wacker

B4. SF6 & EMISSIONS MONITORING**B4.1 INTERFERENCE-FREE PLASMONIC MERCURY SENSING IN SIMULATED FLUE GAS**

Jay James, Founder, Picoyune

B4.2 NEW SULFUR HEXAFLUORIDE MEASUREMENT METHOD

Bob Mueller, Director - Process Chemicals, Airgas Specialty Gases

B4.3 CONTINUOUS EMISSIONS MONITORING OF SUBSTATION ASSETS

(Chair) James Wacker, Director of Business Development, INCON

B4.4 SF6 LEAK DETECTION PROGRAM

Laura Brewer, Associate Compliance Specialist, Burns & McDonnell; Jerry Bauer

B4.5 EPRI VEE STUDY

Allison Dolan, Visible Emissions Consultant, Virtual Technology LLC; Destinee Mack, Mack Inc.

B4.6 DEMONSTRATION OF A DIFFERENTIAL ABSORPTION LIDAR FOR EMISSIONS MEASUREMENT

Michael Wojcik, Senior Scientist, Space Dynamics Laboratory; B. Crowther & R. Lemon, Space Dynamics Laboratory Prasad Valupadas; L. Fu, B. Leung, Q. Huda & Z. Yeng, Alberta Environment Environmental Sustainable Resource Development; A. Chambers, Alberta Innovates Technology Futures

1PM - 3PM

Session Sponsor
and Co-ChairsDeborah
Padwater**B5. SO2, SO3, NOX & ADDITIVES****B5.1 SCR BYPASS SYSTEM FOR NOX MEASUREMENTS**

(Chair) Deborah Padwater, Strategic Industry Manager, SICK AG

B5.2 POWDER-SORBENT ALTERNATIVES TO SO3 FOR ESP CONDITIONING

Thomas Gale, Director of Technology Development, Novinda Corporation

B5.3 PSD CRITICAL PROCESSES - MEASURING YOUR PERFORMANCE ON-LINE & IN REAL TIME

Jeff DeNigris, Sales Mgr - Process, Malvern Instruments Inc

B5.4 SELECTION OF A PROPER METHOD FOR MEASUREMENT OF SULFUR TRIOXIDE - SULFURIC ACID MIST EMISSIONS FROM SOLID FUEL & NATURAL GAS-FIRED GENERATION FACILITIES

Kevin Crosby, VP- Technical, The Avogadro Group, LLC

B5.5 A MEASUREMENT METHOD FOR ACCURATE DETERMINATION OF H2SO4/SO3 IN COLD FLUE GAS EXHAUST

(Chair) Curtis Laush, Senior Scientist, Geosyntec

B5.6 INACCURACIES OF NOX MONITORS & USE OF FUEL FLOW OVER STACK GAS FLOW

Robert Mallowney, President, Monitor Tech Corporation

3:30PM - 5:30PM

B6. CEMENT & PM**B6.1 USING A NIST-TRACEABLE QUANTITATIVE AEROSOL GENERATOR FOR PM CEMS CALIBRATION**

Jamie Berg, Research Scientist, Cooper Environmental Services; Troy Pittenger & John A Cooper, Cooper Environmental Services; Chuck Dene, EPRI

B6.2 DIOXIN EMISSION FROM CEMENT KILNS - LESSONS LEARNED

(Chair) Robert John Schreiber, President, Schreiber Yonley & Associates

B6.3 CLINKER SUBSTITUTION & THE ROLE OF FLYASH

John Kline, Principal, Kline Consulting; Charles Kline

B6.4 IN THE ABSENCE OF DATA, HOW TO ESTIMATE PM2.5 EMISSIONS FOR CEMENT, COAL, AND LIME MATERIAL HANDLING

Mike Remsberg, Managing Director, Trinity Consultants; Deborah Walden-Hersh & Kate Gross

B6.5 A COMPARISON OF PROPOSED PM CPMS LIMITS

(Chair) Robert Baxter, President, B3 Systems, Inc.

Co-Chairs
Robert John
Schreiber

&

Robert Baxter



Curtis Laush

B7. MODELING I**B7.1 COLLECTING ON-SITE METEOROLOGICAL DATA IS MORE THAN JUST A GOOD IDEA**

Jared Anderson, Senior Air Dispersion Modeler, Wenck Associates, Inc.

B7.2 ANALYSIS OF REAL-TIME & FORECAST AIR QUALITY MODELING SYSTEM

(Chair) Jesse The, President, Lakes Environmental Software; B. Matthews & M. Hammer

B7.3 EVALUATION OF NON-DEFAULT OPTIONS IN AERMOD FOR REPRESENTATIVE INDUSTRIAL EMISSIONS SOURCES

Idania Zamora, Senior Associate, ENVIRON; Ted Bowie & Snetu Karania

B7.4 DISPERSION MODELING AS A TOOL FOR NONATTAINMENT STUDIES FOR SO2 - A CASE STUDY FOR UTILITIES IN NORTHEAST OHIO

(Chair) George Schewe, Principal Consultant, Trinity Consultants; Dr. Abhishek Bhat

B7.5 VARIABLE EMISSIONS IN AIR QUALITY MODELING

Richard Hamel, Air Quality Meteorologist, ERM; Beth Barfield & Mark Garrison

B7.6 INVESTIGATION OF BORON BEHAVIOR IN COAL-FIRED POWER PLANT

Naoki Noda, Research Scientist, Central Research Institute of Electric Pwr. Industry; Shigeo It

7:30AM - 9:30AM

Session Sponsor
and Co-ChairsGeorge
Schewe

Jesse The

B8. MODELING II**B8.1 MACT, MATS, & MODELING: ONE "M" LEADS TO ANOTHER**

Richard Hamel, Air Quality Meteorologist, ERM

B8.2 USING DISPERSION MODELING & THERMAL RADIATION MODELING FOR AN LNG STORAGE FACILITY SAFETY STUDY

John Hinckley, Senior Consultant, RSG, Inc.

B8.3 EVALUATION OF NO2 PREDICTIONS BY THE PLUME VOLUME MOLAR RATIO METHOD (PVMRM) & OZONE LIMITING METHOD (OLM) IN AERMOD USING NEW FIELD OBSERVATIONS

Vincent Tino, Senior Consultant, Epsilon Associates, Inc.; E. Hendrick, S. Hanna & B. Egan

B8.4 BACKGROUND CORRECTED AMBIENT NO2 MEASUREMENTS

(Chair) Thomas McKarns, President & Owner, ECO PHYSICS; W. Moser, ECO PHYSICS AG

B8.5 AIR QUALITY IMPACT MANAGEMENT SYSTEMS FOR INDUSTRIAL UTILITIES USING COMPREHENSIVE AIR QUALITY MODELS

Roberto San Jose, Professor, UPM; J. Pérez, R. González, A. Zamora, A. Yoldi & N. Cifuentes

10AM - 12PM

Session Sponsor
and Co-Chair

Thomas McKarns

B9. FABRIC FILTERS/PM/OPACITY**ROOM CHANGE 221B**

1PM - 3PM

B9.1 NOVEL FABRIC FILTER FOR SUSTAINED REDUCTION OF HG EMISSION

(Chair) Shulong Li, Senior Scientist, Milliken and Company

B9.2 DESIGN CONSIDERATIONS FOR FABRIC FILTERS W/ EXTREMELY LOW EMISSION RATES

Michael Widico, Vice President, KC Cottrell Inc.

B9.3 DSI IMPACT ON VISUAL OPACITY

Anthony Silva, Advisory Engineer, Babcock & Wilcox; Robert Snyder

B9.4 FABRIC FILTER MEDIA INNOVATION FOR COAL-FIRED POWER PLANTS

(Chair) Vishal Bansal, Principal Engineer, CLARCOR Industrial Air, Formerly GE Power & Water's Air Filtration; Jeff Ladwig

B9.5 NEW CONTINUOUS OPACITY MONITORING SYSTEM QA/QC & OPERATIONAL REQS

Dave Ostaszewski, Senior Managing Engineer, O'Brien & Gere

B9.6 REDUCING EMISSIONS WITH DONALDSON MEMBRANE'S TETRATX® EPTFE FILTER MEDIA

Edward Ricketts, Account Manager, Donaldson Membranes; Jim Griffin

Co-Chairs
Vishal Bansal

&

Shulong Li

Monday | February 3

1PM - 3PM

Session Sponsor
and Co-Chair



C1. HG CONTROL DEMONSTRATIONS

C1.1 FLEXIBLE FEED SYSTEMS COMPATIBLE W/ A RANGE OF ENV. CONTROL REAGENTS
Cliff Brown, VP Applied Engineering, Novinda Corp.; James Butz & Benjamin Bernardo, Novinda; Andrés Orlando, Jenike & Johanson

C1.2 AUTOMATING MERCURY COMPLIANCE ON EGUS WITH WFGDS

(Chair) Bruce Keiser, Research Fellow, Nalco; John Meier, JerryYuan & Tommy Chen

C1.3 MERCURY COMPLIANCE WITHOUT CO-BENEFITS ACHIEVED USING ACI

(Chair) Noah Meeks, Research Engineer, Southern Company; Brad Donat

C1.4 BASF'S MERCURY SORBENT HX(TM) - A MERCURY MATS COMPLIANT TECHNOLOGY

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

C1.5 KILL TWO POLLUTANTS W/ ONE SORBENT - COMBINED HG & SO₃ CTRL USING SBS INJECTION

Sterling Gray, Business Development Manager, URS Corporation; Ramsay Chang, EPRI; Carl Richardson & John Currie, URS

C1.6 RE-EMISSION DRIVERS & OPTIONS

Philip Elliott, Business Unit Manager - Engineering Services, STEAG Energy Services LLC

3:30PM - 6:00PM

Session Sponsor
and Co-Chair



C2. HG CONTROL & ACTIVATED CARBON

C2.1 MORE THAN "JUST CARBON." HOW ADVANCED ACTIVATED CARBON PRODUCTS OFFER SUPERIOR MERCURY CONTROL & ENHANCED VALUE FOR SPECIFIC CUSTOMER NEEDS
Richard Mimna, Senior Research Associate, Calgon Carbon Corporation

C2.2 EMO®

(Chair) Bobby Chen, Client Program Manager, CB&I; Randall Moore

C2.3 MATS HG COMPLIANCE WITH TEXAS LIGNITE & PRB BLENDS

Marcus Sylvester, Vice President of Sales, Midwest Energy Emissions Corp.

C2.4 MAXIMIZING MERCURY OXIDATION BY SCRS FOR MATS COMPLIANCE

Bruce Keiser, Research Fellow, Nalco, an Ecolab Company; Stephen Potter, Duke Energy; John Meier, Bradley Bartz & Ed Grodecki, Nalco

C2.5 ASSESSING FGD CORROSION RISK FOR BROMINE-BASED HG CONTROL TECH.

Gary Blythe, Project Manager, URS Corporation; John Grocki, Advantage Resources Consulting, LLC; Ben Bayer, URS Corporation; Casey E. Smith, LCRA

C2.6 LATEST RESULTS IN ADVANCED POWDERED ACTIVATED CARBON MERCURY CONTROL

(Chair) Joe Wong, CTO, ADA Carbon Solutions; Robert Huston & Sheila Glesmann

C2.7 HOLISTIC PERSPECTIVE ON MERCURY REMOVAL FROM FLUE GAS

Barna Heidel, Head of Dept., U of Stuttgart, IFK; T. Schwaemmle, F. Silvio & G. Scheffknecht

Tuesday | February 4

7:30AM - 9:30AM

Session Sponsor
and Co-Chair



C3. CONTROL TECHNOLOGIES

C3.1 IMPROVED DSI PERFORMANCE WITH OPTIMIZED HYDRATED LIME

(Chair) Jim Dickerman, Director Flue Gas Treatment, Lhoist N. America; Melissa Sewell

C3.2 CDS SCRUBBER HUMIDIFICATION SYSTEM - KEY ASPECTS IN THE DESIGN, O&M

Robert Van Durme, P.E., Market Manager - FGD, Lechler Inc.

C3.3 AMENDED SILICATES AS-HGX AS A COST-EFFECTIVE OPTION FOR MERCURY CONTROL IN COAL FIRED GENERATING UNITS

Jim Butz, Vice President - Product Management, Novinda

C3.4 REACT MULTIPOLLUTANT CONTROL FOR WPS/WESTON 3

H. James Peters, EVP Business Development, Hamon Corporation

C3.5 INNOVATIVE IN-DUCT SCR SOLUTION ACHIEVES NOX REDUCTION TARGET

Keith Morris, Operations Director, Doosan Power Systems Americas; Robert Taylor, Doosan Babcock, UK

C3.6 HCLAR™ TECHNOLOGY: A SOLUTION BASED ALTERNATIVE TO DRY SORBENT INJECTION FOR HCL ABATEMENT

(Chair) Ian Saratovsky, Tech. Development Mgr., Fuel Tech K. Schulz, C. Smyrniotis & E. River

Tuesday | February 4

10AM - 12PM

Co-Chair
Pat Mongoven

C4. BART CASE STUDIES

C4.1 ASHWORTH GASIFIER - COMBUSTOR FOR CRAWFORDSVILLE, INDIANA POWER PLANT
Thomas Hewson, CEO, ClearStack Power LLC; Robert Ashworth, ClearStack Power; Bill Harrington, Sterling Energy Group

C4.2 MOVING BEYOND THE MYTH OF MERCURY RE-EMISSION -- ACHIEVING RELIABLE & ECONOMIC HG EMISSION REDUCTION IN YOUR WET FGD

Joe Stuart, Director of Commercial Development, TDC, a division of Genesis Energy Limited; Steve Feeney, Babcock & Wilcox

C4.3 LIMESTONE SLURRY PROCESS TECHNOLOGY FOR FGD PROJECTS

Jeff Doherty, President, Semi-Bulk Systems, Inc.; Charles Alack

C4.4 REGIONAL HAZE RULE IMPLEMENTATION - UPDATE & CHALLENGES

Kenneth Snell, Sr. Env. Consultant, Sargent & Lundy LLC; Bernard Mount, Sargent & Lundy

C4.5 CASE STUDY - OPTIONS FOR HCL & SO₂ REMOVAL IN CFB BOILERS

(Chair) Pat Mongoven, Business Development Mgr. Mississippi Lime, Inc; Mark DeGenova

C4.6 THE REGIONAL HAZE PROGRAM - IMPLEMENTATION DURING THE FIRST PLANNING PERIOD & WHAT COMES NEXT

Aaron Flynn, Associate, Hunton & Williams LLP

C5. DRY SORBENT INJECTION (DSI)

C5.1 NEVER TOO MUCH DATA: USE OF ADVANCED STACK TESTING TECHNOLOGIES TO SUPPORT DRY SORBENT INJECTION EVALUATION STUDIES

Thomas Dunder, Lead Field Engineer, TRC Environmental Corporation

C5.2 ELEMENTS OF A SUCCESSFUL DRY SORBENT INJECTION TRIAL

(Chair) Joshua Allen, Applications Engineer, Natronx Technologies

C5.3 A CASE STUDY OF BICARBONATE DSI AT A BASELOAD PRB STATION

(Chair) Michael Atwell, Market Development Manager, Solvay Chemicals; Marco Riccio

C5.4 COAL FIRED UTILITY EMISSION COMPLIANCE WITH DRY SORBENT INJECTION

Geoffrey Urwin, Product Mgr.-Sorberent Injection, Clyde Bergemann Pwr Grp; James Fisher

C5.5 OPTIMIZING THE DSI/ESP INTERACTION

Timothy Fuller, Tech. MGR., Babcock & Wilcox Power Generation Group; Anthony Silva

C5.6 PERFORMANCE IMPROVEMENTS FOR DSI SYSTEMS

Jon Norman, DSI Tenhology Manager, United Conveyor Corporation; Michael Atwell

C6. MATS

C6.1 DSI & ACI - MEETING MATS STANDARDS

(Chair) Michael Thiel, Technical Services Manager, Nol-Tec Systems

C6.2 THE MATS REPORTING DILEMMA: TWO SYSTEMS IS TOO MANY

John Downs, Environmental Manager, B&W Power Generation Group

C6.3 FUEL QUALITY & MATS FOR COAL-FIRED PLANTS: THE RIPPLE EFFECT

Connie Senior, Director-Technology Development, ADA-ES, Inc.; Greg Filippelli

C6.4 MATS BEST PRACTICES: UNDERSTANDING THE DETAILS

Peter Spinney, Director - Market & Technology, NeuCo, Inc.

C6.5 MATS COMPLIANCE CHALLENGES

Stephanie Sebor, Associate Attorney, Winston & Strawn LLP

C6.6 CUSTOMIZED ELEX ELECTRODE EXPERIENCE WITH COAL-FIRED BOILERS

(Chair) Gary Grieco, Consultant, Air Consulting Associates Mick Chambers, Southern Env.

C6.7 DEMONSTRATION OF SO₂ CONTROL WITH BOILER MODELING & FURNACE INJECTION

Noah Meeks, Research Engineer, Southern Company; Mark Pastore, EES, Inc.; Robert Santangeli, Step Combustion; Jerrold Radway, ClearChem, Inc.

C6.8 MERCURY OXIDATION IN THE SCR - LAYER BY LAYER PERFORMANCE

Kyle Neidig, SCR Systems and Catalyst Product Manager, Hitachi Power Systems America

1PM - 3PM

Session Sponsor
and Co-Chair



Joshua Allen



Michael Atwell

3:30PM - 6:00PM

Session Sponsor
and Co-Chair



Michael Thiel



Mick Chambers

Wednesday | February 5

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

Session Sponsor
and Co-Chair



BIOGENIC REAGENTS

Erin B. Heupel



NORIT ACTIVATED CARBON

Brian Tucker

C7.1 PERFORMANCE ADVANTAGES OF WOOD-BASED ACTIVATED CARBON FOR HG CONTROL
(Chair) James Mennell, CEO, Biogenic Reagents; Erin Heupel

C7.2 DEVELOPMENT OF A KINETIC MERCURY CAPTURE TEST FOR ACTIVATED CARBONS
Nicholas Lentz, Associate Director, U of North Dakota; Joe Wong & Chris Vizcaino, ADA-CS

C7.3 NON-HALOGENATED ACTIVATED CARBON FOR MERCURY CAPTURE FROM COAL-FIRED POWER PLANT FLUE-GAS

David Mazyck, CEO, Carbonxt; Heather Byrne & Jack Drwiega

C7.4 PILOT SCALE IN-FLIGHT MERCURY CAPTURE USING CABOT NORIT NOVEL SORBENTS
(Chair) Brian Tucker, Director -Product Dev., Cabot Norit Activated Carbon; M.Xin, P. Adams

C7.5 COMPUTATIONAL MODELING OF ELECTROHYDRODYNAMICALLY-INFLUENCED MERCURY ADSORPTION WITHIN ESPS

Herek Clack, Research Associate Professor, University of Michigan

C7.6 UNDERSTANDING OF MERCURY (HG) BREAKTHROUGH ISSUE & APPLICATION OF SORBENT TRAP METHOD FOR HG SAMPLING & ANALYSIS

Sung Jun Lee, Director of Analytical Division, Apex Instruments Inc.; William H. Howe

10AM - 12PM C8. SCR

Session Sponsor
and Co-Chair



Paulo Oliveira

&

Larry Czarnecki

C8.1 HIGH TEMP. SCR DESIGN & FIELD EXPERIENCE WITH A COAL-FIRED UTILITY BOILER
(Chair) Larry Czarnecki, Principle Process Engineer, Alstom Power; T. Ekman & L. Spagnolo

C8.2 EMERGING CHALLENGES & DESIGN STRATEGIES FOR SCR SYSTEMS

(Chair) Paulo Oliveira, Product Marketing Manager, Alstom Power; Larry Czarnecki

C8.3 CFD MODELING FOR SCR PERFORMANCE OPTIMIZATION

Reid Thomas, Sr. Process Engineer, Fuel Tech, Inc.; Scott Hiedeman, Kansas City Power & Light - LaCygne Generating Sta.; Diane Fischer, Black & Veatch; Dale Pfaff, Fuel Tech, Inc.

C8.4 ADVANCED TECHNOLOGY MULTI-FUNCTIONAL SCR CATALYST PERFORMANCE FOR HIGH NO2 IN MODERN TURBINE POWER PLANTS

Chris Bertole, Catalyst Development Manager, Cormetech, Inc.; Scot G. Pritchard & Mike Close, Cormetech; Katsumi Nochi, MHI

C8.5 SCR CATALYST SELECTION & MANAGEMENT FOR IMPROVED HG OXIDATION

Christopher Reeves, Development Project Manager, Cormetech, Inc.; Chris Bertole, Chris DiFrancesco & Scot Pritchard, Cormetech, Inc.; Katsumi Nochi, MHI

C8.6 HG CONTROL STRATEGIES IN THE PRESENCE OF SO3 USING THE MERSIM MODEL

Brad Adams, President, Reaction Engineering; Brydger Van Offen

1PM - 3:30PM C9. CONTROL TECHNOLOGIES

ROOM CHANGE 221C

Session Sponsor
and Co-Chair



NORIT ACTIVATED CARBON

Brian Tucker

Co-Chair

Mark

Ehrnschwender

C9.1 MEETING THE NEXT LEVEL OF WASTEWATER QUALITY FOR METALS & SELENIUM
(Chair) Mark Ehrnschwender, VP - Business Development & Eng. Svcs., STEAG

C9.2 SELENIUM CONTROL USING COMBUSTION ADDITIVE

Mandar Gadgil, AQCS Engineer, Babcock & Wilcox Company; Gregory Bielawski

C9.3 PILOT SCALE IN-FLIGHT TESTING OF SO3 RESISTANT CABOT NORIT NOVEL SORBENTS

(Chair) Brian Tucker, Director -Product Dev., Cabot Norit Activated Carbon; M. Xin, P. Adams

C9.4 UPDATES ON THE PERFORMANCE OF SELECTED CIRCULATION DRY SCRUBBERS

Shiaw Tseng, Marketing & Technical Manager, Graymont

C9.5 IMPACT OF PAC INJECTION UPSTREAM OF APH ON BASKETS CORROSION...

Jon Miller, Technology Manager - Mercury Control, Albemarle; E. Zhou, D. Royer & G. Lambeth, B. Ghorishi

C9.6 BROMINE ADDITION ON LOW-TEMP CORROSION IN AIR & OXY-FIRED COAL

Jacob Beutler, Senior Engineer, Reaction Engineering; Brad Adams, Tim Shurtz & Kevin Davis

C9.7 ENHANCED MERCURY CONTROL FOR BOILERS THAT REQUIRE ESP FGC

Richard Miller, Vice President Business Development, ADA-ES, Inc.; Ken Baldrey

C9.8 TAKING THE MYSTERY OUT OF ESP POWER SUPPLIES

John Knapik, Applications Engineer, Babcock & Wilcox



MATS/MACT regulations...
Some clear, straightforward answers!

It's the New Year. And while regulations may not be a priority at the moment, eventually MATS/MACT will become a fact, and Solutions enabling regulatory compliance will need to be considered.

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Monday | February 3

1PM - 3PM

Session Sponsor
and Co-ChairCRA Charles River
Associates
Ken DitzelBLACK & VEATCH
Hua Fang**D1. SHALE GAS/LNG/NATURAL GAS****D1.1 THE EFFECT OF SHALE GAS ON POWER MARKETS IN THE NORTHEAST (N.E., NY & PJM)**
Stephen Slocumb, Associate, Epsilon Associates**D1.2 THE GAS-ELECTRIC SYSTEM INTERFACE IN PJM**

Gary Helm, Lead Market Strategist, PJM Interconnection

D1.3 ADEQUACY OF NATURAL GAS INFRASTRUCTURE TO SUPPORT THE ELECTRIC INDUSTRY
(Chair) Hua Fang, Principal Consultant, Black & Veatch**D1.4 MACROECONOMIC PROSPECTS & IMPLICATIONS OF U.S. LNG EXPORTS**Sebastian Mankowski, Consultant, NERA Economic Consulting; Sugandha D. Tuladhar,
Paul Bernstein & David Montgomery**D1.5 LNG EXPORTS: ECONOMIC CONTRIBUTIONS TO THE US ECONOMY & IMPACTS ON US NATURAL GAS PRICES**

(Chair) Ken Ditzel, Principal, Charles River Associates

D1.6 DIMENSIONS OF GAS-ELECTRIC COORDINATION CONCERNS

Todd Schatzki, Vice President, Analysis Group

3:30PM - 6:00PM

Session Sponsor
and Co-ChairTwenty-First
Strategies
Daniel KleinCo-Chair
Sayan
Chakraborti**D2. FRACKING & SUSTAINABLE DEVELOPMENT****D2.1 FRACKING - IMPACT ON U.S. ENERGY, TRADE, & CO2 EMISSIONS**

(Chair) Daniel Klein, President, Twenty-First Strategies

D2.2 TBD

Phil Sharp, President, Resource for the Future

D2.3 OIL & WATER, GAS & TSCA: EPA LOOKS AT HYDRAULIC FRACTURING

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

D2.4 HYDRAULIC FRACTURING & FINANCIAL RESPONSIBILITY REQUIREMENTS: A CASE STUDY OF THE REGULATORY FRAMEWORKS IN NY & PA & POTENTIAL PATHS FORWARD

Elizabeth Kurz, Senior Associate, ICF International; Eric Reeves

D2.5 ASSESSING POTENTIAL UPWARD MIGRATION OF HYDRAULIC FRACTURING FLUID & BRINE THROUGH FRACTURES, FAULTS, & INTACT ROCK

Sam Flewelling, Senior Hydrologist, Gradient; Matt Tymchak & Manu Sharma

D2.6 AN INNOVATIVE LOW-TEMPERATURE WATER RECYCLE & RECOVERY PROCESS FOR TREATMENT OF FLOWBACK & PRODUCED WATER

(Chair) Sayan Chakraborti, Sr. Program Mgr., MRIGlobal; Oguz Capan, Hittite Solar Energy

D2.7 REUSE OF PRODUCED & FLOW BACK WATER FOR HYDRAULIC FRACTURING FLUIDS

James Fajit, Senior Scientist, M-I SWACO a Schlumberger Co.; Tor Palmgren, Alan McKee

Tuesday | February 4

7:30AM - 9:30AM

Co-Chairs
Jeffrey Michel&
Kelly Daly**D3. ENERGY POLICY & SECURITY****D3.1 GAS - ELECTRIC COORDINATION, IS THE TIMING FINALLY RIGHT?**

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

D3.2 THE STATUS OF GERMANY'S ENERGY TRANSITION

(Chair) Jeffrey Michel, Principal, Ing.-Büro Michel

D3.3 BRAZIL'S ENERGY POLICY & REGULATION

Stephen Sewalk, Asst Professor, PhD/JD, U of Denver - Burns School of Mgmt; Laura Newman

D3.4 DEVELOPING & ASSESSING ECONOMIC, ENERGY, & CLIMATE SECURITY & INVESTMENT OPTIONS FOR THE US

Thomas Peterson, President & CEO, The Center for Climate Strategies; Pat Delaquil & Gary Goldstein, DecisionWare Group; Hal Nelson, Claremont Graduate University; Stephen Roe & Jeff Wennberg, The Center for Climate Strategies; Adam Rose, USC

D3.5 WHAT THE WORLD CAN LEARN FROM NUCLEAR SECURITY

Phrantceena Halres, CEO, Total Protections Services Global

D3.6 GRID CYBERSECURITY

John Finnigan, Senior Regulatory Attorney, Environmental Defense Fund

Tuesday | February 4

10AM - 12PM

Session Sponsor
and Co-ChairWINSTON
& STRAWN
LLP

Avril Edwards

Co-Chair
Stephen Sewalk**D4. ENERGY & CLIMATE****D4.1 EPA'S PWR PLANT GHG STANDARDS - NEW DEVELOPMENTS & ENERGY IMPLICATIONS**
(Chair) Averil Edwards, Associate, Winston & Strawn LLP**D4.2 POWER MARKET PRICES, NUCLEAR GENERATION & GHG POLICY**

Marc Chupka, Principal, The Brattle Group

D4.3 EPA REGULATIONS & CARBON TAXES - EVALUATING RELATIVE ECONOMIC IMPACTSSebastian Mankowski, Consultant, NERA Economic Consulting; Scott J. Bloomberg, Mei
Yuan & Anne Smith**D4.4 NUCLEAR ENERGY POLICY**

(Chair) Stephen Sewalk, Asst Professor, PhD/JD, U of Denver - Burns School; Laura Newman

D4.5 CO2 STANDS FOR EXISTING GENERATION SOURCES - WHAT WILL MOVE THE NEEDLE?

Chris MacCracken, Principal, ICF International

D4.6 CLIMATE POLICY CHOICES - RPS, CAP-AND-TRADE & THE IMPLICATIONS FOR ACTIONS (AND EXITS) THAT AFFECT EMISSIONS

Todd Schatzki, Vice President, Analysis Group

D5. PROJECT FINANCE**D5.1 THE EQUATOR PRINCIPLES III: IMPACTS TO PROJECT FINANCE IN THE US & ABROAD**

(Chair) William Stark, Senior Consultant, Leidos

D5.2 FINANCING INTERNATIONAL RENEWABLE ENERGY PROJECTS

Craig O'Connor, Director - Office of Renewable Energy, Export-Import Bank United States

D5.3 CARBON TAX W/ REINVESTMENT ELIMINATES NEED FOR ALTERNATIVE ENERGY SUBSIDIES

Stephen Sewalk, Asst Professor, PhD/JD, U of Denver - Burns School of Mgmt; Laura Newman

D5.4 STRESS-FREE ON-TIME COMPLETION OF REFINERY TURNAROUNDSHariharasuthan Gudalurb, Project Manager, Tech Mahindra; Vishal Chikhalikar, Deborah
Devadason & Pritish Kanagalekar**D5.5 ENERGY COMPANIES & ARCHAEOLOGISTS: COOPERATION OR CHAOS?**

Robert Rowe, Primary Investigator, Atkins

1PM - 3PM

Session Sponsor
and Co-Chairleidos
William Stark**D6. EHS & RISK MANAGEMENT****D6.1 RISK MANAGEMENT & ITS IMPACT ON ENVIRONMENTAL HEALTH & SAFETY**

Tom Barlow, Channel Manager, EtQ

D6.2 A SYSTEMS APPROACH TO MANAGING ENV., HEALTH, & SAFETY PROGRAMS

(Chair) Nick Steinke, Principal, Tellevate; Joseph Tell

D6.3 USING PROBABILISTIC DYNAMIC SIMULATION TO MANAGE RISKS & OPTIMIZE DESIGN

(Chair) Richard Kossik, Principal, GoldSim Technology Group; Jason Lillywhite

D6.4 INNOVATIVE WAY TO MANAGE YOUR RISK - IRMAAS

Vishal Chikhalikar, AVP, Tech Mahindra; Hariharasuthan GB, Jagadeesh Babu Devisetty

D6.5 EFFECTIVE ASSET IDENTIFICATION FOR POWER PLANTS

Jason Harry, Industrial Sales Manager, Marking Services, Inc.

3:30PM - 5:30PM

Session Sponsor
and Co-ChairTellevate
Nick SteinkeGoldSim
Richard Kossik

Monday | February 3

Tuesday | February 4

10AM - 12PM

1PM - 3PM

Co-Chairs
Mark DeSantis
&
Bert Spaeth

E1. RENEWABLE ENERGY MGMT & PLANNING**E1.1 "STAYING APART AT THE SEAMS"**

Rodney Lenfest, Executive VP - Business Development, Boundless Energy; E. John Tompkins

E1.2 AN UNCERTAIN PLANNING FUTURE

Danielle Osborn Mills, Project Manager, Atkins

E1.3 BIG DATA = BIG GAINS ENERGY MARKETS

(Chair) Mark DeSantis, CEO, kWantera; Dr. Steve Lettieri

E1.4 GREEN PRICING PROGRAMS: BEST PRACTICES

Michael Leschke, Green-e Energy Associate, Green-e Energy/Center for Resource Solutions

E1.5 EMERGING REC MARKETS

(Chair) Bert Spaeth, Senior Energy Engineer, Lynx Technologies Inc.

POSTER PAPER - NEARLY NET ZERO ENERGY BUILDING USING INTEGRATED PV BUILDING

Ahmad Alhasan, Associate Professor, College of Technological Studies; Adel Ghoneim

3:30PM - 6:00PM

E2. RENEWABLE ENERGY/SITING/TRANSMISSION

Co-Chairs
Suzanne Leta
Liou
&
George H. Miley

E2.1 NEPA FOR TRANSMISSION LINE PROJECTS

Anntonette Alberti, Sr. Vice President, Haley & Aldrich

E2.2 GRID TRACKER: A NEW POWER & TRANSMISSION ANALYSIS APPLICATION FOR THE WESTERN INTERCONNECTION

(Chair) Suzanne Leta Liou, Project Director - Clean Energy & Transmission, Atkins

E2.3 HOW COMPREHENSIVE COMMUNITY OUTREACH PLANNING CAN BE APPLIED TO CONVENTIONAL POWER PLANT & TRANSMISSION PROJECTS

Marion Trieste, Public Outreach Manager, Haley & Aldrich

E2.4 ALTERNATIVES TO ELECTRICITY FOR TRANSMISSION, FIRMING STORAGE, & SUPPLY INTEGRATION OF LARGE-SCALE, STRANDED, RENEWABLE ENERGY

Bill Leighty, Director, The Leighty Foundation

E2.5 RENEWABLE ENERGY PROJECT SITING USING GEOGRAPHIC INFORMATION SYSTEMS

Jason Sokol, GISP, GIS Group Manager, URS; Diana Smith

E2.6 PROGRESS IN DEVELOPMENT OF A LOW ENERGY NUCLEAR REACTION POWER UNIT

(Chair) George H. Miley, Professor Emeritus, U of Illinois

E2.7 OPTIMIZING RENEWABLES PROJECTS - KEYS FACTORS IN PROGRAM DEVELOPMENT

Dale Pennington, Managing Director, UtiliWorks Consulting, LLC.

Tuesday | February 4

7:30AM - 9:30AM

Co-Chairs
Michael
Messinger
&
William Leighty

E3. RENEWABLE DEVELOPMENT ANALYSIS**E3.1 GUIDE FOR DEVELOPING LARGE-SCALE RENEWABLE PROJECTS AT FEDERAL FACILITIES**

Boyan Kovacic, Project Manager, U.S. Department of Energy

E3.2 IN RESPONSE TO SUPER-STORMS, STATE INITIATIVES FOR DG DEV. FOR GRID SECURITY

Paul MacGregor, Senior Vice President, Nexant; Thomas Flynn

E3.3 ACQUIRING INTELLECTUAL PROPERTY - DUE DILIGENCE ISSUES THAT ARISE OUT OF TECHNOLOGY TRANSACTIONS

Lee Huddleston, Partner, Osha Liang LLP

E3.4 NEW PATENT STRATEGIES IN AN ERA OF PATENT REFORM

(Chair) Michael Messinger, Partner, Sterne Kessler

E3.5 ALASKA'S SOLID STATE AMMONIA SYNTHESIS PILOT PLANT (SSAS-PP) DEONSTRATION SYSTEM FOR RENEWABLE ENERGY (RE)

(Chair) William Leighty, Principal, Alaska Applied Sciences, Inc.

E3.6 BOOT STRAPPING POWER SATELLITES

Keith Henson, Founder, L5 Society

E6.7 RENEWABLE ENERGY MANAGEMENT PROJECT

Shree Pal Dangol, Vice President, HEEDS/Nepal

E4. RENEWABLE PROJECT DEVELOPMENT**E4.1 RENEWABLE ENERGY M&A: RECENT TRENDS & DEVELOPMENT JOINT VENTURES**

C. Thomas Paschall, Senior Attorney, Milbank, Tweed, Hadley & McCloy LLP

E4.2 RECENT PURPA DEVELOPMENTS AT FERC

Peter Richardson, Partner, Richardson & Adams, PLLC

E4.3 COMBINING RENEWABLE ENERGY TAX CREDITS & NEW MARKETS TAX CREDITS

James Duffy, Partner, Nixon Peabody LLP

E4.4 THE DEVELOPMENT OF RENEWABLE ENERGY ON BROWNFIELD SITES

Diane Sullivan, Vice President Energy Development, Haley & Aldrich, Inc.

E4.5 RENEWABLE ENERGY & PUBLIC CONTROVERSY IN THE SAN BERNARDINO COUNTY GREENHOUSE GAS REDUCTON PLAN

Michael Hendrix, Project Director-Air Quality & Climate Change, Atkins; Suzanne Liou

E4.6 SITE SUITABILITY ASSESSMENT

John MacDonald, Project Manager, Tetra Tech

E5. WIND**E5.1 WIND & THE UPPER LIMIT OF STORAGE**

Doug Houseman, Vice President of Innovation, EnerNex

E5.2 MIND THE GAP

Aaron Anderson, Project Manager - Renewable Energy Group, Burns & McDonnell

E5.3 WINDGRABBER™ - A MULTIPHASED WIND, VERTICAL AXIS WIND TURBINE SYSTEM WITH ADJUSTABLE INLET AIR SCOOP & EXIT IMPACT-DRAG SECTIONS

Brett Krippene, Owner & President, BCK Consulting; K. L. Starcher & D. Carr, West Texas A&M

E5.4 FERC ESCALATES PURPA DISPUTE IN WEST: IDAHO CASES

Malcolm McLellan, Member, Van Ness Feldman LLP; Marlys Palumbo

E5.5 OPTIMUM PENETRATION OF UTILITY-SCALE GRID-CONNECTED WIND SYS. IN ILLINOIS

Jin Jo, Assistant Professor, Illinois State University; Matt Aldeman

E5.6 INVELOX: AN EFFECTIVE ALTERNATIVE APPROACH FOR WIND POWER PLANTS

Dr. Dayoush Allaei, CTO, SheerWind; Professor Yiannis Andreopoulos, CCNY

E6. SOLAR/PV/BATTERIES/STORAGE**E6.1 CHP SOLAR PANELS: THE TRIFECTA OF ENERGY**

Jeff Seaton, CFMO Deputy Chief of Staff - Energy, Arizona Army National Guard; Knut Hermann, CEM

E6.2 ROOFTOP SOLAR FROM A REAL ESTATE PERSPECTIVE

Michael Manuel, Principal, Goldberg Kohn Ltd.

E6.3 PV END OF LIFE MANAGEMENT

Jim Larson, Principal Consultant, EORM

E6.4 INCREASING UTILITY-SCALE SYSTEM EFFICIENCY & OUTPUT WITH SOLAR TRACKERS

Jay Johnson, VP of Business Development, Exosun

E6.5 COMMUNITY SOLAR: INTELLIGENT PROGRAM DESIGN FOR UTILITIES

(Chair) Paul Spencer, CEO, Clean Energy Collective; Genevieve Liang

E6.6 MAGLEV 2000 POWER STORAGE SYSTEM (MAPS)

Robert Coullahan, President, Readiness Resource Grp; J. Powell & G. Danby, Maglev 2000

E6.7 ROOFTOP SOLAR: CLOUDS ON THE HORIZON FOR ELECTRIC UTILITIES?

(Chair) Greg Odegard, Principal, GO Global Environmental

3:30PM - 6:00PM

Session Sponsor
and Co-Chair



Paul Spencer

Co-Chair
Greg Odegard

Monday | February 3

1PM - 3PM

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Christopher
Wedig



Terry Farmer

F1. COMPLIANCE TECHNOLOGIES & STRATEGIES

F1.1 HOW CAN OIL & GAS COMPLY WITH EVER INCREASING REGULATIONS?

Mikey Landkof, Technical Lead, Enviance

F1.2 IMPACT OF RETROFIT MATS COMPLIANCE AQCS TECHNOLOGIES ON EXISTING WFGD WASTE WATER TREATMENT SYSTEMS

(Chair) Christopher Wedig, Senior AQCS Specialist, CB&I

F1.3 MOBILE TECHNOLOGY FOR ENVIRONMENTAL COMPLIANCE

Elizabeth Drake, President, CS2 Inc.

F1.4 HOLISTIC APPROACHES FOR ACHIEVING & MANAGING ENV. COMPLIANCE

Jeremy Timmons, Vice President Engineering, Neundorfer

F1.5 ELECTROSTATIC PRECIPITATOR POWER & CONTROL LIFE EXTENSION

(Chair) Marty Watson, Business Development Manager, NWL

F1.6 ASSESSING BEST FIT OPERATING PROFILES TO MAXIMIZE EMISSIONS COMPLIANCE EFFICIENCY & EFFECTIVENESS

Scott Tampke, Business Development Manager, Black & Veatch

3:30PM - 6:00PM

Co-Chairs
Edward Malley
&
Keith Moore

F2. DECOMMISSIONING OF POWER PLANTS

F2.1 "RE POWER™ - TRANSFORMING AGING GENERATING SITES THROUGH RETIREMENT, RETROFIT, REPOWERING OR REDEVELOPMENT"

(Chair) Edward Malley, Vice President, TRC Companies, Inc.

F2.2 PLANNING FOR RETIRED PLANT DECOMMISSIONS

Stephen Mitchell, Vice President, Weston Solutions, Inc

F2.3 ENVIRONMENTAL ISSUES FOR DECOMMISSIONING

Russell Light, Environmental Engineer, Sargent & Lundy LLC

F2.4 OPTIMIZED DEMOLITION OF COAL FIRED GENERATION UNITS

Michael T. Hebert, Sr. Consultant, Environmental Consulting & Technology; Marc D. Florian

F2.5 BEST MANAGEMENT APPROACHES TO POWER PLANT DECOMMISSIONING

Christopher Carleo, Senior Program Mgr./VP, AECOM; Gregory Sampson & Michael Malley

F2.6 GENERATION RETIREMENT DECISIONS - UTILITY PERSPECTIVE

John Lescenski, Manager - Engineering & Technical Services, NV Energy

F2.7 RE-ENGINEERING COAL-FIRED POWER PLANTS

(Chair) Keith Moore, President, CastleLight Energy Corp.

Tuesday | February 4

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

Session Sponsor
and Co-Chair



Neel Parikh



William Horvath

F3.1 SOOTBLOWING OPTIMIZATION AT KCPL, HAWTHORN STATION

(Chair) Neel Parikh, Principal Eng., Siemens; P. Rogge & K. Luebbert, Kansas City Pwr & Light

F3.2 IN-FURNACE COMBUSTION BALANCING IMPROVES EFFICIENCY FOR A DUAL TANGENTIAL FIRED BOILER

Scott Affelt, Vice President, Zolo Technologies; Eric Huelson

F3.3 SAFELY INSTALLED TURN-KEY MODULAR SPACE SOLUTIONS FOR ENERGY & UTILITIES

Paul Raiford, Director of Energy Services, Williams Scotsman

F3.4 IMPROVING PLANT PERFORMANCE & MAINTAINABILITY THROUGH PLANT UPGRADES

Justin Schnegelberger, Lead Senior Performance Engineer, Burns & McDonnell

F3.5 ENERGY SAVINGS UTILIZING VFD FOR BOILER FORCED & INDUCED DRAFT FANS

(Chair) William Horvath, General Industries A.E. Team Leader, TMEIC; Marty McDonough

F3.6 IS NOW THE TIME TO DISPATCH MY COAL-FIRED POWER PLANT SEASONALLY?

Mike Borgstadt, Manager - Resource Planning, Burns & McDonnell

Tuesday | February 4

10AM - 12PM

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and Co-Chair



John Easton



Rod
Hildebrand

F4. EHS & EMIS MANAGEMENT

F4.1 DON'T GET RID OF YOUR SPREADSHEET SOLUTIONS, AUGMENT THEM!

David Gloski, President, xOverTime Inc.; Michael Lehane

F4.2 QUALITY MGMT. SYSTEMS TO ACHIEVE BUSINESS STANDARDIZATION & PERFORMANCE

Izak Maitin, Senior Manager, Environmental Standards, Inc.

F4.3 SELECTION & IMPLEMENTATION OF A MOBILE-ENABLED EHS & EMIS

(Chair) Mauri Paz, Sr. Project Manager, E2 ManageTech; Rick Mock

F4.4 KEY FACTORS OF IMPLEMENTING A SUCCESSFUL RISK MANAGEMENT PROGRAM

(Chair) John Easton, Director - Product Management, Medgate, Inc.

F4.5 USING VIRTUAL INVENTORY TO BUILD A BETTER SUPPLY CHAIN

Bob Gibson, Director Business Development, Curtiss Wright

F4.6 ASSET MANAGEMENT IN THE ENERGY & UTILITY SECTOR

Ian Woodbury, CEO, Riva Modeling Systems Inc

F5. OPERATIONS & MANAGEMENT

F5.1 MAXIMIZING ENERGY OUTPUT & REVENUE WITH ADVANCED O&M

Chris Lambert, Global Commercial Manager, First Solar, Inc.; Troy Lauterbach

F5.2 DISCOVER THE DIFFERENCE: OIL-FREE VERSUS OIL-INJECTED

Chuck Westhofen, Business Development Manager, Atlas Copco Rental

F5.3 SCR CATALYST MAINTENANCE & REPAIRS: LIFE EXTENSION

(Chair) Mark Ehrnschwender, VP - Business Development & Engineering Services, STEAG Energy Services LLC

F5.4 EMISSIONS & OPERATIONAL FLEXIBILITY

(Chair) Scott Tampke, Business Development Manager, Project Manager, Black & Veatch

F5.5 AIR EMISSIONS & THE ENDANGERED SPECIES ACT

Andrew Turner, Partner, Hunton & Williams LLP

F5.6 HYDROGEN PURITY & MOISTURE MONITORING IN HYDROGEN COOLED GENERATORS

Christopher Breslin, Dir. Engineering, Environment One Corp; Gus Graham & Steve Kilmartin

1PM - 3PM

Session Sponsor
and Co-Chair



BLACK & VEATCH
Scott Tampke

Co-Chair
Mark
Ehrnschwender

F6. COAL ASH / CCP

F6.1 COAL ASH MANAGEMENT -- THE CHANGING LEGAL LANDSCAPE

(Chair) Jeffrey N. Martin, Partner, Hunton & Williams LLP

F6.2 DENSE SLURRY MANAGEMENT OF ASH & WASTE WATER

Dale Timmons, Program Manager/Business Development, NAES Corporation

F6.3 UPDATE ON ASTM COAL ASH STANDARDS

Gwen Eklund, Director - Power Generation Services, TRC Environmental Corp

F6.4 ASH LANDFILL OPERATION 101

Thomas Gredell, President, GREDELL Engineering Resources, Inc.

F6.5 COAL ASH MANAGEMENT REGULATORY & INDUSTRY UPDATE - PART A

Mike McLaughlin, Senior Vice President, SCS Engineers; May Wall, Winston & Strawn

F6.6 COAL ASH MANAGEMENT: REGULATORY & INDUSTRY PRACTICES UPDATE - PART B

May Wall, Partner, Winston & Strawn LLP

F6.7 DRY BOTTOM ASH CASE STUDY & OTHER BOTTOM ASH SOLUTIONS

Ron Grabowski, VP Business Development, Clyde Bergemann Power Group

F6.8 PLASMA CONVERSION OF COAL ASH INTO SALABLE CONSTRUCTION MATERIALS

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

F6.9 ENERGY PLANNING - SAN JOSE/SANTA CLARA REGIONAL WASTEWATER FACILITY

Arvind Akela, Senior Project Manager, CDM Smith; Joanna De Sa, City of San Jose

3:30PM - 6:00PM

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and Co-Chair



Jeffrey N. Martin

Monday | February 3

Tuesday | February 4

1PM - 3PM

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and Co-Chair

Art Diem

G1. CARBON FOOTPRINT & GREEN PROJECTS**G1.1 USING EGRID DATA FOR CARBON FOOTPRINTING GRID SUPPLIED ELECTRICITY**

(Chair) Art Diem, Environmental Engineer, EPA; Cristina Quiroz, Radium Consulting Group

G1.2 GREEN CARROTS - UTILITY INCENTIVE PROGRAMS & THE IT INDUSTRY

Christa Ansbergs, Field Engineer Sr., Lockheed Martin Corporation; C. Lester, Lockheed Martin Corporation; E. Young & S. Bryant, Philadelphia Gas Works; C. Strecker, PECI

G1.3 NYU INITIATIVES ON OFFICE GREENING & COMMUNITY ENGAGEMENT

Bapanaiah Penugonda, Director Group Practice/ Associate Professor, NYU College of Dentistry; Coby Kalter, Annette Cutugno & Staci Ripkey, New York University

G1.4 BIOENERGY, LAND USE CHANGE AND CARBON EMISSIONS: CHALLENGING THE SEARCHINGER HYPOTHESIS

Roger Sedjo, Senior Fellow, Resources for the Future; Brent Sohngen, Ohio State University; Anne Riddle, Resources for the Future

3:30PM - 6:00PM

Co-Chair
David Shotts**G2. TAILORING RULE/NSR/GHG-BACT****G2.1 THE GHG TAILORING RULE AT AGE 3: HOW MATURE ARE THE GHG BACT DETERMINATIONS FOR POWER GENERATION UNITS**

Art Samberg, Senior Consultant, Golder Associates Inc.

G2.2 THE TAILORING RULE - WHAT A DIFFERENCE THREE YEARS MAKES

Kristine Baranski, Project Engineer, Cardinal Engineering, Inc.

G2.3 CHALLENGES FOR A SOURCE IN TEXAS GETTING A PSD PERMIT FOR GHG

Andrea Adams, Senior Env. Scientist, SAIC; John Packard, South Texas Electric Cooperative

G2.4 TURNING UP THE HEAT: NEW DEVELOPMENTS IN GHG PERMITTING

Doug Huxley, Principal Technologist, CH2M HILL

G2.5 SIMPLE CYCLE AIR PERMITTING IN THE GHG BACT ERA

(Chair) David Shotts, Partner - Air Quality & Climate Change, ERM; Jon Perry

G2.6 GHG BACT DETERMINATIONS & NSPS FOR ELECTRIC UTILITIES

Maren Seibold, Managing Consultant, Trinity Consultants

G2.7 A PREVIEW OF UTILITY AIR REGULATORY GROUP V. EPA: WHAT DOES THIS SUPREME COURT CASE MEAN FOR MY COMPANY?

Allison Wood, Partner, Hunton & Williams LLP

Tuesday | February 4

7:30AM - 9:30AM

Co-Chair
Heidi Rous**G3. GHG STRATEGIES****G3.1 REFLECTION OF THE NEW FINANCIAL REFORM LEGISLATION IN THE GHG CONSTRAINED MARKETS**

Nedia Miller, Principal, MILLER CTA

G3.2 CHALLENGES IN EVALUATING GHGS FROM POWER PROJECTS UNDER CEQA

(Chair) Heidi Rous, Vice President, PCR Services Corp

G3.3 CARBON ACCOUNTING METHODS FOR ESTIMATING SCOPE 3 EMISSIONS

Chet Chaffee, Director of Sustainability, FirstCarbon Solutions (FCS)

G3.4 IMPACTS OF CARBON PRICE ON TRANSMISSION EXPANSION

Byron Woertz, Sr. Project Mgr., Western Electricity Coordinating Council; Keegan Moyer

G3.5 GHG/SUSTAINABILITY REPORTING & VERIFICATION: ADDING VALUE & CREDIBILITY

Kevin Johnson, Vice-President, Cventure LLC; Wiley Barbour

G4. CORPORATE STRATEGIES & RISK MGMT

10AM - 12PM

G4.1 UPDATE ON ASTM CLIMATE CHANGE STANDARDS

Gwen Eklund, Director - Power Generation & GHG Services, TRC Environmental Corporation

G4.2 LEVERAGING GRI REPORTING & ISO 14001 ENVIRONMENTAL SYSTEMS BY IMPROVING ENERGY PERFORMANCE METRIC PROCESSES

Don MacDonald, Director - Sustainability, UL DQS

G4.3 A CLIMATE FOR CHANGE: IMPACTS OF CARBON REGULATION

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

G4.4 CLIMATE OUT OF BALANCE - LIVING IN THE NEW CLIMATE NORMAL

(Chair) Howard Balentine, Technical Leader, AECOM

G4.5 NEW OFFSET SUPPLY: COASTAL WETLANDS

Doug Huxley, Principal Technologist, CH2M HILL

Co-Chair
Howard
Balentine**G5. CA CAP-AND-TRADE & GHG STRATEGIES**

1PM - 3PM

G5.1 CAP & TRADE LEGISLATION - MAPPING A PATH FROM CALIFORNIA TO D.C. BY 2016

(Chair) Larry Goldenhersh, CEO & Founder, Enviance

G5.2 CALIFORNIA CAP-AND-TRADE: ITS TRACK RECORD SO FAR & THE CHALLENGES AHEAD

(Chair) Lily Mitchell, Senior Associate, Hanna and Morton LLP

G5.3 MAGLEV SPACE LAUNCH

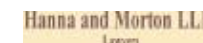
Robert Coullahan, President, Readiness Resource Group, Inc.; James Powell & Gordon Danby, Maglev 2000

G5.4 CO2 CAPTURE & CONVERSION: CO2 UTILIZATION STRATEGY

Kevin Crapsey, Vice President, Corporate Strategy & Development, Eco Power Solutions; Sanjeev Jolly & Wayne Littleford

G5.5 WHAT I HEARD AT EPA'S GHG NSPS LISTENING SESSION

Bob Fraser, Partner, ERM

Session Sponsor
and Co-Chair

Lily Mitchell

Co-Chair
Larry
Goldenhersh**G6. ELECTRIC & NATURAL GAS VEHICLES**

3:30PM - 5:30PM

G6.1 MEASUREMENT OF GASEOUS IMPURITIES IN HYDROGEN FUEL

(Chair) Randall Bramston-Cook, Principal, Lotus Consulting; Edward Bramston-Cook, Lotus Consulting; David Blekman, PhD, California State University Los Angeles

G6.2 NATURAL GAS VEHICLES: ADDRESSING THE INFRASTRUCTURE CHALLENGE

(Chair) Robert Kaineg, Senior Associate, Charles River Associates

G6.3 EVALUATING THE RISKS & OPPORTUNITIES FOR UTILITIES WITH THE GROWTH OF ELECTRIC VEHICLES & ROOFTOP PHOTOVOLTAICS

Kiran Kumaraswamy, Senior Manager, ICF International

G6.4 CONNECTING SOLVING CHALLENGES FOR THE PLUG-IN NETWORK

Forrest North, COO, Recargo Inc

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and Co-ChairCRA Charles River
Associates
Robert KainegCo-Chair
Randall
Bramston-Cook

Monday | February 3

1PM - 3PM

Co-Chair
Christopher
Zygarlicke

H1. FOSSIL FUEL INNOVATIONS

H1.1 INNOVATIVE POLYGENERATION: THE KEY TO LOW-RISK COAL UTILIZATION

(Chair) Christopher Zygarlicke, Deputy Associate Director for Research, EERC

H1.2 GAS CONVERSION APPROACHES

John West, Director AMS Proposals, Hitachi Power Systems America

H1.3 PROGRESS IN ENERGY & COMBUSTION SCIENCE - ELSEVIER JOURNAL

Norman Chigier, Editor: Progress in Energy & Combustion Science, Carnegie Mellon

H1.4 NATURAL GAS GENERATION OPTIONS - THE PATH TO AN AIR PERMIT

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

H1.5 INNOVATION & FOSSIL FUELS CAN PROFITABLY REDUCE CO2 EMISSIONS

Matthew Sindlinger, CEO, Unlimited Green Fuel

3:30PM - 6:00PM

Co-Chairs
Randall
Bramston-Cook
&
Arthur Nash

H2. BIOFUELS / LANDFILL GAS

H2.1 LARGE SCALE BIOMASS GASIFICATION PLANT INTEGRATED TO A PC-BOILER

Tyler Biddle, Service Engineer, Metso; Juhani Isaksson

H2.2 CASE STUDY: CHALLENGES OF PERMITTING LANDFILL GAS TO ENERGY PROJECTS

Thomas Durham, Sr. Environmental Engineer, DTE Biomass Energy; Michael Kotyk, DTE Biomass Energy; Christopher Locke, Farella Braun + Martel; Steven Branoff, Environ Corp

H2.3 TANANA RIVER SCHOOL DIST.- CONVERTING WOOD INTO HEAT & EDU. DOLLARS

(Chair) Arthur Nash, Assistant Energy Extension Prof, U of Alaska Coop Extension; D. Huang

H2.4 NEXT-GENERATION PLANTS & THE OPERATIONS CONUNDRUM

Douglas Machon, Director - Business Development, NAES Corporation

H2.5 ONLINE, DIRECT MEASUREMENT OF VOLATILE SILOXANES IN ANAEROBIC DIGESTER & LANDFILL GASES BY GAS CHROMATOGRAPHY WITH MASS SPECTROMETRIC DETECTION

(Chair) Randall Bramston-Cook, Principal, Lotus Consulting; Edward Bramston-Cook

H2.6 CALIBRATION STANDARDS FOR MEASUREMENT OF VOLATILE SILOXANES IN ANAEROBIC DIGESTER & LANDFILL GASES

Edward Bramston-Cook, Technical Director, Lotus Consulting; Randall Bramston-Cook, Lotus Consulting; Santos Puente, VICI Metronics

H2.7 CELLULOSIC SUGARS TO FUELS & BEYOND

Christopher Standlee, Executive Vice President, Abengoa Bioenergy

Tuesday | February 4

7:30AM - 9:30AM H3. BIOMASS/ COFIRING IN POWER PLANTS

Session Sponsor
and Co-Chair

S. Kent
Hoekman

H3.1 HUMAN HEALTH RISK ASSESSMENT FOR A BIOMASS-FUELED POWER PLANT PROJECT

Christopher Long, Principal Scientist, Gradient; Peter A. Valberg

H3.2 BIO-ENERGY FOREST PLANTATIONS FOR THE SOUTHEASTERN UNITED STATES

Jeff Wright, Manager Hardwood Development, ArborGen Inc.

H3.3 WATERPROOF WOOD PELLETS VIA HYDROTHERMAL CARBONIZATION (HTC)

(Chair) S. Kent Hoekman, Research Professor, Desert Research Institute; Larry Felix, Gas Technology Institute; Grady Coble, Parker Towing Company

H3.4 ASH DEPOSITION MODELING INCORPORATING MINERAL MATTER TRANSFORMATIONS APPLIED TO BIOMASS CO-FIRING

Brad Adams, President, Reaction Engineering; K. Davis, H. Wang & J. Valentine

H3.5 ALLOCATION OF CARBON FOOTPRINT IN AN INTEGRATED ALGAL BIOREFINERY USING FUZZY FRACTIONAL PROGRAMMING

Aristotle Ubando, Assistant Professor, De La Salle University; Joel L. Cuello, The University of Arizona; Alvin B. Culaba & Raymond R. Tan, De La Salle University

Tuesday | February 4

H4. CCS: CARBON CAPTURE & STORAGE

10AM - 12PM

H4.1 RECLAIMER WASTE DISPOSAL OPTIONS FOR AMINE-BASED POST-COMBUSTION CO2 CAPTURE PROCESSES

Katherine Dombrowski R&D Project Manager, URS Corporation; Jean Youngerman, URS Corporation; Andrew Sexton, Trimeric Corporation; Paul Nielsen, Eric Chen & Gary Rochelle, UT Austin; Prachi Singh, IEAGHG

H4.2 INTEGRATION OF SOLID SORBENT CO2 CAPTURE TECHNOLOGY TO PROVIDE FLEXIBLE CO2 CAPTURE OPTIONS IN A TIME OF REGULATORY UNCERTAINTY

William Morris, Sr. Research Engineer, ADA-ES, Inc.; Sharon Sjoström

H4.3 EVALUATION OF THE IMPACT OF ION'S CO2 CAPTURE PROCESS ON PULVERIZED COAL POWER PLANT EMISSIONS

(Chair) Nathan Brown, Director of Research & Development, ION Engineering; Nathan Brown, Greg Staab, John Kay, Rene Kupfer, Jason E. Bara, Alfred E. Brown

H4.4 THE PLAINS CO2 REDUCTION (PCOR) PARTNERSHIP: A REGIONAL CARBON SEQUESTRATION PARTNERSHIP IN THE INTERIOR PLAINS OF NORTH AMERICA

Wesley Peck, Research Manager, EERC; E. Steadman, J. Harju, C. Gorecki, L. Botnen, D. Daly, M. Jensen, J. Sorensen, S. Smith, J. Hamling, R. Klapperich, & K. Anagnost

H4.5 CO2 CAPTURE & CONVERSION IN CEMENT INDUSTRY

John Kline, Principal, Kline Consulting; Charles Kline

H5. CCS II

H5.1 WORLD'S LARGEST RECTISOL WASH UNIT

Wolfgang Schoerner, Project Director, Linde Engineering

H5.2 ESTIMATING CARBON CONTENT OF ARBORGEN POPULUS CLONES AT FOUR RESEARCH TRIALS IN NORTH CAROLINA

Shawn Shifflett, Graduate Student, North Carolina State University; Jeff Wright, ArborGen; Dennis Hazel & Elizabeth Nichols, NCSU

H5.3 CRYOGENIC CARBON CAPTURE

(Chair) Larry Baxter, Founder/Owner, Sustainable Energy Solutions; David Frankman

H5.4 PROJECT UPDATE OF 500 TPD DEMONSTRATION PLANT FOR COAL-FIRED POWER PLANT

Tatsuya Tsujiuchi, Research Eng., Mitsubishi Heavy Industries America; T. Wu, T. Yonekawa, P. Wood, Mitsubishi Heavy Industries America; T. Hirata, H. Nagayasu, T. Kamijo, Y. Kubota, Mitsubishi Heavy Industries; M. French, T. Wall & N. Irvin, Southern Company Services

1PM - 3PM

Co-Chair
Larry Baxter

11. ENERGY SUSTAINABILITY**11.1 ARE ENERGY FORECASTING MODELS DRASTICALLY UNDERSTATING THE NEED FOR NEW BASELOAD GENERATION?**

Chris Nichols, Analyst, National Energy Technology Laboratory

11.2 SUSTAINABLE ENERGY IN AMERICA 2013 FACTBOOK

Lisa Jacobson, President, Business Council for Sustainable Energy; Bloomberg

11.3 ENVIRONMENTAL SUSTAINABILITY: THE FIVE FORCES ANALYSIS

Dejan Ristic, Energy Systems Engineer - Gr. Leader, Argonne National Laboratory

11.4 COMPARATIVE ANALYSIS OF BEST-IN-CLASS UTILITIES

Lee Matthews, Sr. Mgr Env. Systems & Analysis, TVA

11.5 ADVANCING SUSTAINABILITY IN THE ELECTRIC UTILITY SUPPLY CHAIN

Barbara Gomez, Vice President & Chief Procurement Officer, APS & Chair, Electric Utility Industry Sustainable Supply Chain Alliance

Co-Chairs
Mark Edwards
&
Scott Sanders**12. SUSTAINABILITY PROJECTS****12.1 KILL THE CUP: WASTE REDUCTION AT COFFEE SHOPS**

Drew Beal, Co-Founder & Executive Director, Social Ventures for Sustainability; Mike Taylor

12.2 ABUNDANCE: PRODUCING FOOD & FUEL WITH NET ZERO WATER

(Chair) Mark Edwards, Professor, Arizona State University

12.3 THE "LIVING LANDFILL" A DESIGN FOR SUSTAINABLE WASTE MANAGEMENT

(Chair) Scott Sanders, VP Strategic Innovation, Wyle, Inc.; Keith Coble

12.4 SUSTAINABILITY 2.0

Evan Birenbaum, Program Manager, Southern California Edison

12.5 ONLINE DETERMINATION OF AS, SE & HG IN POWER PLANT DISCHARGE WATER

Warren Corns, Technical Director, PS Analytical

12.6 SUSTAINABILITY PROJECT BASED LEARNING MODEL & USING THE CROSS-FUNCTIONAL TEAM APPROACH

Thomas Miller, President, ZMassociates Environmental Corporation; Tamara Sicard, PhD

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and Co-Chair

Bernard Duesel

Co-Chairs
Kenneth
Braunstein**13. WASTEWATER MANAGEMENT****13.1 POWER PLANT WASTEWATER MANAGEMENT - FOCUS ON ZLD**

(Chair) Bernard Duesel, VP Technology Heartland Technology Partners, LLC; Craig Clerkin

13.2 SUSTAINABLE WASTEWATER TREATMENT SOLUTION PROVIDES ENERGY REDUCTION & IMPROVED NUTRIENT REMOVAL

Bulbul Ahmed, Research & Development Manager, In-Pipe Technology Company, Inc.; Andrew Newbold, In-Pipe Technology Company, Inc.

13.3 PERFORMANCE EVALUATION OF A VORTEX GENERATING MEMBRANE FOR FLUE GAS DESULFURIZATION WASTEWATER TREATMENT

Behrang Pakzadeh Senior Civil & Environmental Engineer, Southern Research Institute; J. Vos & J. Renew, P.E., Southern Research Institute; J. H. Min, Ph.D., C. Wardle, J. Kim, Ph.D. & H. Hwang, Ph.D., BKT; R. Breckenridge, EPRI; J. Teng, Southern Company Services

13.4 GETTING READY FOR ZERO LIQUID DISCHARGE - SOFTENING OF FGD WASTEWATER

(Chair) Kenneth Braunstein, P.E., Consulting Process Engineer - Water/Wastewater Treatment, URS; Michael Riffe & Dave Berger, Siemens Industry Inc., Water Technologies

13.5 THE POTENTIAL ROLES OF NATIONAL MARINE FISHERIES & US FISH & WILDLIFE SERVICES IN WATER RESOURCES PERMITTING OF POWER PLANTS

Mark Gerath, Principal Scientist - Water Resources, ECT; Andy Flajole, NextEra Energy; John Burnett, HDR; Steve Cibik, ECT

13.6 EFFECTIVE TREATMENT FOR ZEBRA MUSSELS

David Provence, Envirochemical Supervisor, OG&E Energy

Co-Chair
Gregory Allen**14. 316B****14.1 TECH. CONSIDERATIONS FOR 316(B) IMPINGEMENT MORTALITY COMPLIANCE ALTERNATIVES**

(Chair) Gregory Allen, Director of Environmental & Engineering Services, Alden

14.2 COMPLYING WITH EPA'S NEW 316(B) RULE - IMPLICATIONS FOR ELECTRIC UTILITIES

Steve Gruber, Project Manager, Burns & McDonnell Engineering Co. Inc.; Gregory Howick

14.3 316(B) REGULATORY CONTROLS & AFFECTS ON EXISTING POWER PLANT COOLING

Brett DeRousse, National Account Manager, Intralox

14.4 UPDATE ON THE 316B WATER INTAKE RULE

Greg Seegert, Chief Ichthyologist, EA Engineering, Science & Technology

14.5 EPRI FISH PROTECTION RESEARCH IN CONTEXT WITH FINAL 316(B) REQUIREMENTS

David Bailey, Senior Project Manager, Electric Power Research Institute (EPRI)

14.6 IMPACT OF FUTURE CLIMATE CHANGE, CLIMATE POLICY, & REQS FOR ADVANCED COOLING SYSTEMS ON THE ENERGY-WATER NEXUS FOR THERMAL POWER PLANT SITING

Jennie Rice, Senior Research Scientist, Pacific Northwest National Laboratory; L. Clarke, M. Hejazi, M. Huang, R. Leung, H. Li, M. Kintner-Meyer, P. Kyle, S. Morris, T. Seiple, N. Voisin, N. Zuljevic

15. WATER SUSTAINABILITY**15.1 DYNAMIC PROCESS MODELING OF WATER AT POWER PLANTS**

Jason Curl, Senior Technologist, CH2M HILL; Kristen Jenkins

15.2 IMET, SUSTAINABLE WASTEWATER RECOVERY & RE-USE TECHNOLOGY

Mehmet Gencer, CEO, IMET Corporation; Paul Zakrski

15.3 INTEGRATION OF ADVANCED BIOLOGICAL NUTRIENT RECOVERY™ FOR USE IN SUSTAINABLE WATER REUSE APPLICATIONS

Rick Johnson, Vice President, Business Development, Clearas Water Recovery

15.4 TAPPING INTO HIDDEN CAPITAL FOR INFRASTRUCTURE RENEWAL

Dave Robinson, Sales Engineer, Honeywell

15.5 ZLD LANDFILL OPERATIONS - PRAIRIE STATE GENERATING COMPANY

(Chair) Dan Whalen, Vice President, Hanson Professional Services Inc.; Nathan Higgerson, Prairies State Generating Company

15.6 CHARACTERIZING TRACE ELEMENTS EMISSIONS FROM COAL-FIRED POWER PLANTS

Nat Sekhar, Senior Consultant, CH2M Hill

Co-Chair
Dan Whalen**16. WATER & ELECTRIC UTILITIES****16.1 FGD SCRUBBER WSTWATER ZLD SOLID WASTE CHARACTERIZATION & DISPOSAL OPTIONS**

Kirk Ellison, Research Scientist, Southern Company Services

16.2 SECONDARY CONTAINMENT AT LARGEST US SOLAR PROJECT

Jamie Aderhold, VP, C.I. Agent StormWater Solutions

16.3 ZERO LIQUID DISCHARGE & SOLID WASTE STABILIZATION SYSTEM FOR FGD WASTEWATER

Shintaro Honjo, Engineering Manager, Mitsubishi Heavy Industries America, Inc.; S. Miller, Advatech - URS; M. Ito, N. Inaba & S. Sugita, T. Ushiku, T. Nagayasu, T. Fukuda & S. Kagawa

16.4 WASTEWATER TREATMENT & ZERO LIQUID DISCHARGE TECHNOLOGIES

Gordon Maller, Senior Project Manager, URS Corporation, Process Technologies

16.5 THE WATER RESEARCH CENTER (WRC) - A RESOURCE FOR THE INDUSTRY

(Chair) George Offen, Sr. Technical Executive, EPRI; Richard Breckenridge, EPRI; Jeff Wilson, Southern Company; Jay Vos, Jay Renew, & Ben Pakzadeh, Southern Research Institute

16.6 ANTICIPATING COMING REGULATORY CHANGES

Kristen Jenkins, Senior Technologist, CH2M HILL

16.7 PATENT INCREASES POWER PLANT EFFICIENCY & PRESERVES COOLING WATER TEMPS

Vince Marshall, Chief Engineer, Cherokee Energy

Session Sponsor
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George Offen

Wednesday | February 5

7:30AM - 9:30AM

Session Sponsor
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Manitia Moultrie

17. WATER - REGULATORY UPDATES**17.1 SURVIVING NEW EFFLUENT GUIDELINES**

Ivan Cooper, Practice Leader/Principal, Civil & Environmental Consultants

17.2 IMPLICATIONS OF EPA'S PROPOSED CLEAN WATER ACT 316(B) REGULATIONS ON THE POWER INDUSTRY

Kurtis Schlicht, Sr. Consultant, Environmental Resources Management

17.3 THE IMPACT OF THE CWA ON THE UTILITY INDUSTRY

(Chair) Manitia Moultrie, U. S. Power Sector Leader, Golder Associates

17.4 ELG: COMPLIANCE STRATEGY REVIEWS

Patricia Scroggin, Process Section Manager- Energy Division, Burns & McDonnell

17.5 THE IMPORTANCE OF SITE-SPECIFIC FACTORS FOR COMPLIANCE WITH THE FINAL 316(B) EXISTING FACILITIES RULE

Mark Gerath, Principal Scientist - Water Resources, ECT; John Burnett, HDR; Steve Cibik & Erik Heinen, ECT

17.6 DOES FINANCIAL ASSURANCE BELONG IN NEPA?

Paul Bailey, Senior Fellow, ICF International

10AM - 12PM

Session Sponsor
and Co-Chair**BLACK & VEATCH**
Kelly SandersCo-Chair
Sayan
Chakraborti**18. WATER MANAGEMENT****18.1 MEETING PROPOSED EPA EFFLUENT LIMITATION GUIDELINES FOR STEAM GENERATORS**

Michael Preston, Chemical Engineer, Black & Veatch

18.2 LOW COST & HIGH EFFICIENCY WATER DEMINERALIZATION/DESALINATION SYSTEM FOR POWER PLANTS USING LOW TEMPERATURE VACUUM EVAPORATION

(Chair) Sayan Chakraborti, Senior Program Manager, MRIGlobal; Oguz Capan, Hittite Solar Energy; Martin Smith, MRIGlobal

18.3 A NEW COMBINED DESALINATION & REFRIGERATION SYSTEM FOR ENERGY & EXERGY EFFICIENT FRESH WATER & COOLING GENERATION

Iman Janghorban Esfahani, Ph.D student, Kyung Hee University; ChangKyoo Yoo & JeungTai Kim, Kyung Hee University

18.4 WATER CRISIS & WATER REQUIREMENTS OF WHEAT CULTIVATED ON NW COAST

Abd Rab El-Nabi Abd El-Hady, Chairman of Dep. Natural Resources & Agric.Eng., Damanhour University; Eamd Fawzy Abdelaty

18.5 IS THE POWER SECTOR AN UNTAPPED OPPORTUNITY FOR WATER CONSERVATION?

(Chair) Kelly Sanders, Assistant Professor, The University of Southern California

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Monday February 3	
1PM - 3PM	J1. ENERGY EFFICIENCY J1.1 CUTTING YOUR BOTTOM LINE BY IMPROVING INDOOR AIR QUALITY Ray Markey, Western Region Manager, Dynamic Air Quality Solutions J1.2 COMPELLING REASONS TO ACTIVELY ENGAGE YOUR CUSTOMER Victor Brown, Vice President - Business Development, Tendril J1.3 ESTIMATION OF ENERGY SAVING EFFECT OF ELECTRIC PROPULSION SHIP EQUIPPED WITH SUPERCONDUCTING SYSTEM BASED ON ACTUAL NAVIGATION DATA Masayoshi Numano, Research SpecialistNational Maritime Research Institute of Japan J1.4 PREPARATION OF PARAMAGNETIC CUNI@C NANOPARTICLES H. Paul Wang, Professor, National Cheng Kung University; Y.-M. Chiu & C.-L. Wong, Department of Environmental Engineering, National Cheng Kung University J1.5 COATINGS AND ENERGY CONSERVATION Michael Eberbach, Senior Consultant, Measurement & Verification Engineering J1.6 MARKETING ENERGY EFFICIENCY WITH RENEWABLE ENERGY Alden Hathaway, SVP Business Development, Sterling Planet

3:30PM - 6:00PM	J2. ENERGY MANAGEMENT J2.1 PERSUADING CONSUMERS TO UNDERTAKE DEMAND REDUCTION ACTIONS V. Rory Jones, President, PlanetEcosystems, Inc.; Steve Malloy J2.2 HOME AREA NETWORKS - CONSTRUCTIVE OR COSTLY? Dale Pennington, Managing Director, UtiliWorks Consulting, LLC. J2.3 ENVIRONMENTAL LIFE CYCLE ASSESSMENT OF UTILITY DISTRIBUTION POLES Mark Thimons, Director- Construction Sustainability, American Iron and Steel Institute; Keith Killpack, SCS Global Services J2.4 COMMUNITY SOLAR: THE NEXT GENERATION OF UTILITY GREEN PRICING PROGRAMS (Chair) Dan Lieberman, Senior Manager - Utility Partnerships, 3Degrees Inc. J2.5 RIGHT PORTFOLIO OF RENEWABLE, DEMAND RESPONSE & ENERGY EFFICIENCY Prateek Saxena, VP - Utilities, Tech Mahindra J2.6 USING BIG DATA TO ACHIEVE BOTH BREAD & DEPTH SAVINGS Steven Meyers, President, EnerPath J2.7 A FRESH TAKE ON DEMAND RESPONSE Scott McGaraghan, Business Development, Nest Labs
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Tuesday February 4	
7:30AM - 9:30AM	J3. SMART GRID J3.1 BUILDING A "SMART GRID"-- HOW TO GET IT DONE Dale Pennington, Managing Director, UtiliWorks Consulting, LLC. J3.2 THE SMART GRID IS COMING: WHY HOURLY PRICING IS KEY David Becker, Director of Dynamic Pricing, CNT Energy J3.3 OPTIMIZING GENERATION, DISTRIBUTION, RENEWABLES, & DEMAND RESPONSE (Chair) John Dirkman, Sr. Product Manager, Schneider Electric J3.4 MANAGING GRID DYNAMICS WHILE MINIMIZING GHG EMISSIONS & WATER USAGE Matthew Fisher, Sales Manager, Wartsila; Mikael Backman J3.5 RETHINKING UTILITY CYBER SECURITY Eamonn McCormick, Senior Director, Alvarez and Marsal; Brian Lenane

Tuesday February 4	
10AM - 12PM	J4. ENERGY EFFICIENCY & MGMT J4.1 COMMERCIAL BUILDINGS: SMART GRID, DEMAND RESPONSE & ENERGY MGMT (Chair) Mike Zimmerman, Founder & CEO, BuildingIQ J4.2 AGGRESSIVE BUILDING STANDARDS ACROSS THE US Michael Scott, Senior Staff Economist, Pacific Northwest National Laboratory; DS Daly, C Lansing, HC McJeon, PL Patel, M Peterson, JS Rice, Y Zhou J4.3 CREATING WEALTH FROM EFFICIENCY Willem Lange, Director - Utility Market Development, WaterFurnace International J4.4 DO 5 THINGS: ENGAGING CUSTOMERS IN ENERGY EFFICIENCY BEHAVIOR CHANGE Suzanne Shelton, CEO, Shelton Group J4.5 THE PSYCHOLOGY OF SAVING ENERGY Joel Cervelloni, Engagement Manager, Opower J4.6 SHIFTING PEAK ENERGY DEMAND: LAX TO LAGUARDIA Brock Treece, Staff Scientist, AECOM; Michael Conrardy

1PM - 3:00PM	J5. DEMAND RESPONSE/ENERGY EFFICIENCY J5.1 DEMAND SIDE MANAGEMENT & THE SMART GRID Dale Pennington, Managing Director, UtiliWorks Consulting, LLC. J5.2 OPENADR - STANDARDIZE, AUTOMATE & SIMPLIFY DEMAND RESPONSE Barry Haaser, Managing Director, OpenADR Alliance J5.3 HEAT BALANCE IMPACTS OF WALL CLEANING, COMBUSTION MODIFICATIONS, & HEAT TRANSFER SURFACE MODIFICATIONS IN COAL-FIRED BOILERS (Chair) Marc Cremer, VP - Engineering Analysis, Reaction Engineering Intl.; Andrew Chiodo J5.4 ADVANCED DMS FOR FORECASTING, RENEWABLES, DISTRIBUTED ENERGY RESOURCES, & MICROGRID MANAGEMENT John Dirkman, Sr. Product Manager, Schneider Electric J5.5 EFFECT OF THERMAL BRIDGES IN INSULATED WALLS ON AIR-CONDITIONING LOADS USING WHOLE BUILDING ENERGY ANALYSIS Mohamed Fouad Zedan, Professor, King Saud University; Sami AL-SANEA, King Saud University, Saudi Arabia J5.6 "THIRD MILLENNIUM SCORE CARD" - GREEN, LEAN AND CLEAN Vishal Chikhalikar, AVP, Tech Mahindra; Hariharasuthan GB, M. Kartik & D. Devadason
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3:30PM -5:30PM	J6. ENERGY MANAGEMENT II J6.1 AUTOMOTIVE THERMOELECTRIC GENERATORS & HVAC John Fairbanks, Technology Development Manager, US Dept of Energy J6.2 REAL TIME DATA CENTER COOLING SYSTEM Darrell Richardson, CEO, R4 Ventures LLC; Mike Reytblat J6.3 INNOVATION METHODS Shridar Ayer, President, Ambreen and Associates; N. Jayaram J6.4 UTILITY-CONTRACTOR PARTNERSHIPS INCREASE CONVERSION RATES Jason Hanleybrown, CEO, Fast Water Heater Company
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Sunday Workshops

Workshop 1 - Room 221A(9am -12pm)

Permitting & Compliance

Eric Hiser, Jorden, Bischoff & Hiser

Phone: 480-505-3927

Email: ehiser@jordenbischoff.com

This seminar will provide participants with critical information on new developments in clean air regulation, including recent developments in NAAQS, new source review, NESHAP regulation and GHG reporting. The seminar will also address current EPA enforcement priorities, planning and preparing for an inspection, and using the permit process to minimize your enforcement exposure.

**JORDEN BISCHOFF
& HISER, PLC**
—ATTORNEYS AT LAW—

Workshop 2 - Room 221B (9am - 12pm)

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

Robert Iwanchuk, CCM (AECOM)

Robert Paine, CCM, QEP (AECOM)

Phone: 978-905-2352

Email: bob.paine@aecom.com

This workshop will provide an overview of SO2, NO2, and PM2.5, NAAQS regulatory implementation and dispersion modeling procedures, with AECOM-suggested refinements as appropriate.

AECOM

Workshop 3 - Room 221C (10am - 2pm)

Emerging Air Quality, Greenhouse Gas and Energy Requirements

Rich Pandullo, Trinity Consultants

Email: rpandullo@trinityconsultants.com

This workshop will review and assess the regulatory and stakeholder impacts of the new regulations and provide attendees with tools and response strategies to improve the chances for survival

**Trinity
Consultants**

Workshop 4 - 222A (1pm - 5pm)

Designing and Implementing a Cost-effective MATS Filterable Particulate Matter Compliance Demonstration Strategy

TRC Solutions

Our four-hour workshop will be divided into two sessions to address critical issues governing the design and implementation of emission testing programs for Mercury Air Toxics Standards (MATS) compliance. The first session will focus on filterable particulate matter (FPM) measurement, helping participants understand the various FPM compliance demonstration options allowed by MATS. The second session will focus on emission test program design for dry sorbent injection (DSI) systems, helping participants understand how to design test programs that optimize DSI system placement and operation.

TRC

Workshop 5 - 222C (8am - 5pm)

AERMOD Air Dispersion Modeling Course

Lakes Environmental




The AERMOD Air Dispersion Modeling Course provides attendees with a full understanding of the AERMOD modeling system by balancing theory with actual presentation of real world case studies. At the end of this course, participants should be able to understand the basics of AERMOD the US EPA regulatory air dispersion mode for permit applications and risk assessment. This course is intended for air quality professionals working, or planning to work, in the assessment of air pollution impact.

**Lakes
Environmental**

Exhibit Floorplan

Phoenix Convention Center
North Building, 3rd Floor

AVAILABLE BOOTHS

	Premium Corner (10'x10')	\$4,500
	Bronze on red carpet (10'x10')	\$5,000
	Silver Double Booth (20'x10')	\$10,000

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Companies Exhibiting at EUEC 2014

821 ADA Carbon Solutions (ADA-CS)	829 GoldSim Technology Group LLC	426 Universal Analyzers, Inc.
440 ADA-ES, Inc.	815 Grace Consulting, Inc.	327 URS Corporation
227 AECOM, Inc.	427 Great Lakes Solutions	800 US DOE Office of Clean Coal
634 Air Hygiene	602 Heartland Technology Partners, LL	934 Vensoft
326 Airgas	221 Horn Industrial Services	243 VICI Metronics
435 Airtech Environmental Services	441 Hydrazine Neutralizing Solutions	300 VIM Technologies, Inc.
201 Albemarle Corporation	614 Hydrolox	135 xOverTime
926 Albarrie USA	833 ICL Industrial Products	628 Zequanox by MBI
733 Alical Scientific Inc.	133 IEEE	
340 All Erection & Crane Rental	241 IMACC	
640 Altech Environment USA	701 Industrial Accessories Company	
732 America Greener Technologies	627 Kiewit	
728 American Fire Equipment	626 Lakes Environmental Software	
722 APCs	235 Lhoist North America	
741 APEX Instruments, Inc.	234 Lifting Gear Hire	
117 AQS	940 M&C Tech Group North America	
443 Atum Services Inc.	920 Mcllvaine	
315 Avogadro Group, LLC	420 METCO Environmental	
127 AWMA	232 Midwest Energy Emissions Corp.	
421 B3 Systems, Inc.	417 Millennium Instruments	
641 Babcock & Wilcox	223 Mississippi Lime Company	
622 BASF	214 Mitsubishi Heavy Industries	
826 Biogenic Reagents	727 MKS Instruments, Inc.	
226 Buhler Technologies LLC	840 Nalco Air Protection Technologies	
320 Burns & McDonnell	217 Nexus	
633 BWF Envirotec, USA	600 NREL	
900 C Trade	316 Nol-Tec Systems, Inc.	
841 Cabot Norit Activated Carbon	822 North American Dismantling Corp	
801 Calgon Carbon Corporation	740 Novinda	
321 California Analytical Instruments	220 Ohio Lumex Company, Inc.	
617 Carbonxt, Inc.	820 P S Analytical	
735 Catalyst Air Management, Inc.	229 Parker Hannifin Corporation	
401 CB&I	715 PCME Ltd	
714 CEM Service Group	932 Perma Pure, LLC	
121 Cemtek Environmental, Inc.	322 Pine	
333 Chemco Systems	129 Power	
615 CISO - Custom Instr. Services	734 Praxair	
328 Civil & Environmental Consultants	228 Red Ball Technical Gas Services	
716 Clayborn Lab	422 RMB Consulting & Research, Inc.	
400 CleanAir Engineering	216 Roto Wind System	
402 CleanAir Instruments	433 Segal, Inc.	
432 Clean Harbors	700 SICK	
233 Contec Systems Industrial Corp.	323 Siemens Industry, Inc.	
415 Control Analytics, Inc.	215 SNEI Biological	
827 Creative Communications	341 SOLVAir	
623 credit360	334 Southern Environmental, Inc.	
817 Dakota Software Corporation	726 Southern Research Institute	
834 Day & Zimmermann	434 Spectrum Systems, Inc.	
835 Delavan Limited	123 Sper Scientific	
743 DSG Solutions, LLC	314 STEAG Energy Services, LLC	
814 Durag, Inc.	332 Sterling Planet Inc.	
222 EA Engineering, Science & Tech.	922 Superlok USA	
616 Enviance, Inc.	629 Technical Heaters, Inc.	
429 Environmental Consulting & Tech.	335 Teledyne API	
414 Environmental Energy Services	717 Teledyne Monitor Labs	
723 Environmental Supply Co., Inc.	317 Tetra Tech, Inc.	
301 ERM	423 Thermo Bond Building, LLC	
721 EtQ, Inc.	601 Thermo Scientific	
428 Eurofins Frontier Global Sciences	115 Thematize	
832 FLSmidth-AFT Division	635 Tiger Optics, LLC	
621 Fuel Tech, Inc.	729 Trachte Inc.	
720 Gasmet Technologies, Inc.	416 TRC Environmental Corp.	
816 Genstar Tech. Co., Inc.(GENTEC)	329 Trinity Consultants	
241 Geosyntec	303 Trinity Services, Inc.	
632 Golder Associates, Inc.	620 United Conveyor Corp.	

Show Hours | Feb 2 - 5, 2014

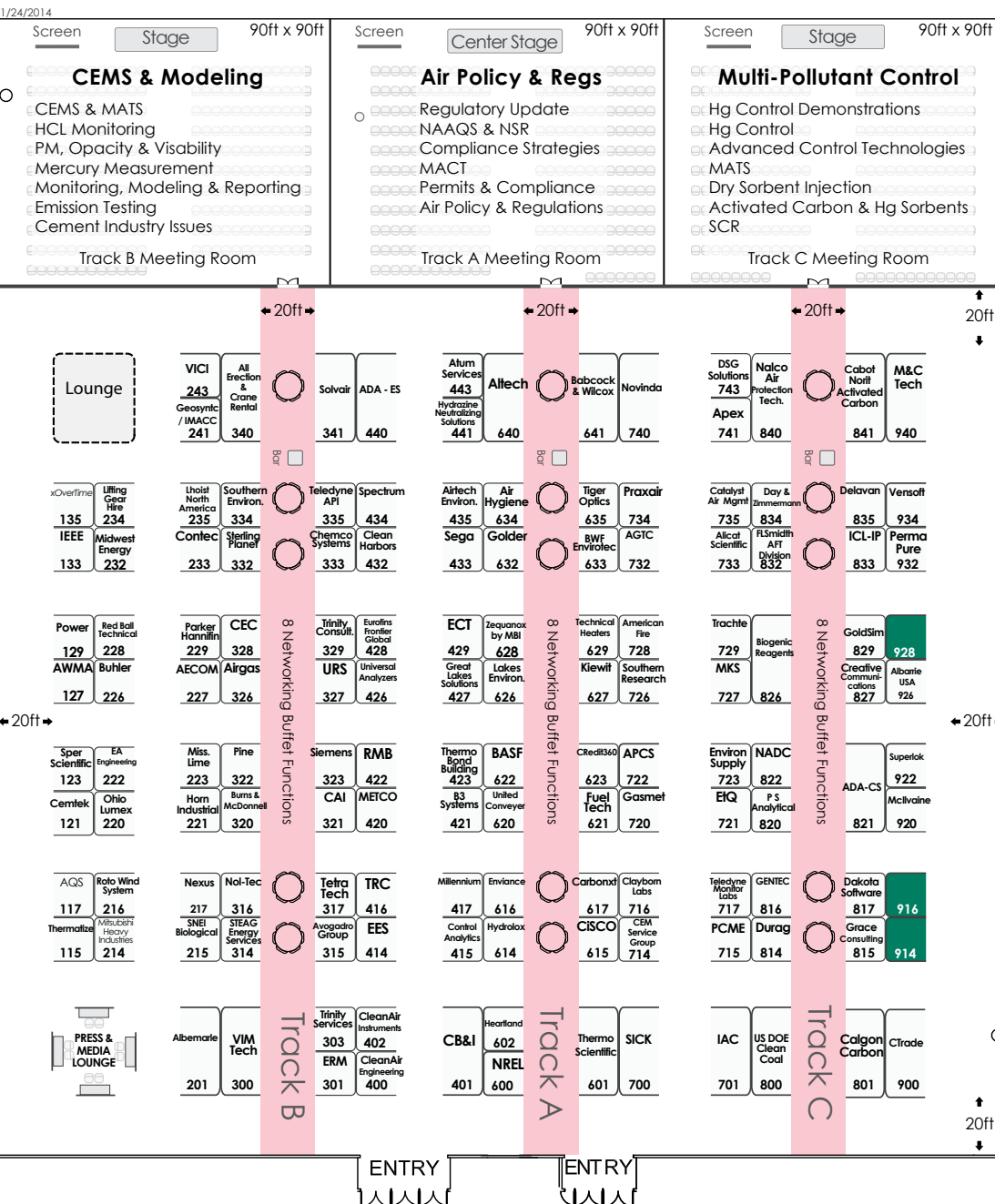
Setup 2/2	1 pm - 7 pm
Carry In 2/3	7 am - 10 pm
Mon 2/3	12 pm - 7 pm
Tue 2/4	9 am - 7 pm
Wed 2/5	9 am - 12 pm
Breakdown 2/5	12 pm - 4 pm

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Map

Phoenix Convention Center
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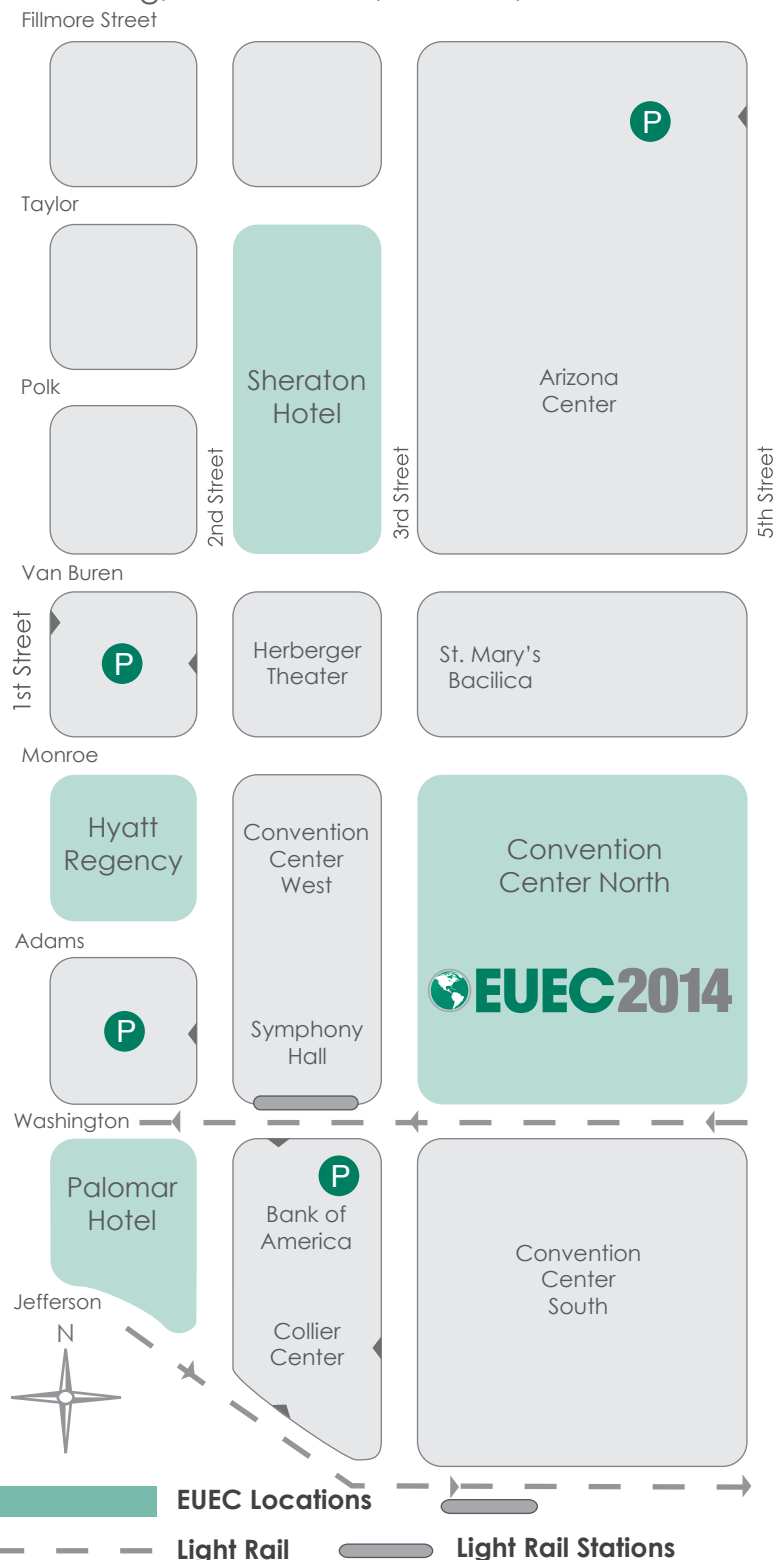
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