

San Diego Convention Center, 111 W Harbor Dr., San Diego, CA 92101

2,000 ATTENDEES | 400 SPEAKERS | 200 EXHIBITS

Program Guide



Revision Date:
 March 1, 2018

10 TECHNICAL TRACKS

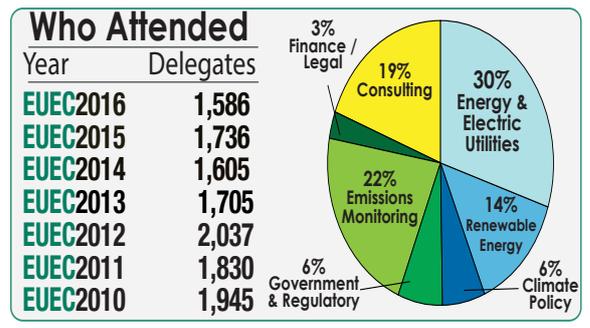
- A. REGULATORY UPDATE
- B. CEMS & EMISSION TESTING
- C. MERCURY POLLUTION CONTROL
- D. POWER GEN & ENERGY SERVICES
- E. SO2, NOX & SCR CONTROL
- F. RE: SOLAR, WIND & FLEX GEN
- G. O&M, DDD, PLANT PERFORM.
- H. ELG, CCR, CCS & FGD
- I. WATER & 316(B)
- J. BATTERY & ENERGY STORAGE

Keynote Panelists:



EUEC colocated with CLEAN CAR EXPO

EUEC 2018: The 21st Annual Energy, Utility & Environment Conference, is USA's largest professional networking & educational event of its kind, held March 5 to 7, 2018, at the San Diego Convention Center, San Diego, CA.



Clean Car Expo(CCE) co-located across the hall in the Sails Pavilion is open to public from 6 to 9 pm on March 5 and 6th, after EUEC ends each day at 6 pm.

Clean Car Expo showcases zero emission and alternate fuel vehicles, from major auto companies and new developers, including electric bikes, solar charging stations, battery and energy storage technologies, EV, PHEV, fleet, buses, bucket trucks, fuel conversion technologies.. see www.CleanCarExpo.com

California Air Resource Boards Zero Emission Vehicle Regulations Requires Manufacturers to Produce ZEVs in 2018 to 2025 models.

Alternate Fuel & Zero Emission Vehicles
 HYBRID • EV • PHEV • CNG • ZEV • FLEET
CleanCarExpo.com FREE ADMISSION
 MARCH 5 - 6, 2018 | 6-9 PM | SAN DIEGO, CA

Keynote Speaker at EUEC 2018 Monday March 5, 2018
ANALISA BEVAN — 10:30AM - 11:00AM
 Assistant Division Chief, ECAIS
 California Air Resources Board

	XL Hybrid	El Dorado National		Food Service		BYD	
144	237	339	435	533	636	843	926
	Zelectric	US Hybrid	Complete Coach Works		Chevy CNG		
119	220	316	416	513	615	714 813	820 920
		Blume Energy			Chevy BOLT	716 Quick Charge Power CARB	Incept3D
113	215	214	313	414	514	714 813	814 914
		Sundial Energy	Clean Cities CSE		Total Temp Tech MyFC	709 Wild Cat Lumina Decision	710 Ambi Labs Mitsu-bishi Perkins Solar
107	208	208	307	408	508 607	608 707	808 908
		HULA CAR Motors		Altruistic Bounce ZERO		Pedego Electric Bike	
101	201	301	401	402 501	601		

DATE	CLEAN CAR EXPO (Exhibit Hours)
Monday Mar. 5th	Set-up 1pm - 5pm
Monday Mar. 5th	Exhibit hours 6pm - 9pm
Tuesday Mar. 6th	Exhibit hours 6pm - 9pm
Wednesday Mar 7th	Tear Down 8am - 11am

Media Partners



EUEC 2018 SCHEDULE

Sunday March 4th	
7:00 am - 7:00 pm	Registration
12:00 pm - 6:00 pm	Exhibit Set-up
5:00 pm - 7:00 pm	Welcome Reception
Monday March 5th	
7:00 am - 7:00 pm	Registration
12 pm - 6:00 pm	Exhibits Open
9:00 am - 12:00 pm	Plenary Session
12:00 pm - 1:00 pm	Networking Lunch 1
1:00 pm - 3:00 pm	Tech Session 1
3:00 pm - 3:30 pm	Networking Break 2
3:30 pm - 5:30 pm	Tech Session 2
4:00 pm - 6:00 pm	Networking Reception 3
6:00 pm - 9 pm	Clean Car Expo
Tuesday March 6th	
9:00 am - 6:00 pm	Exhibits Open
7:30 am - 9:30 am	Tech Session 3
9:30 am - 10:00 am	Networking Break 4
10:00 am - 12:00 pm	Tech Session 4
12:00 pm - 1:00 pm	Networking Lunch 5
1:00 pm - 3:00 pm	Tech Session 5
3:00 pm - 3:30 pm	Networking Break 6
3:30 pm - 5:30 pm	Tech Session 6
4:00 pm - 6:00 pm	Networking Reception 7
6:00 pm - 9 pm	Clean Car Expo
Wednesday March 7th	
9:00 am - 12:00 pm	Exhibits Open
7:30 am - 9:30 am	Tech Session 7
9:30 am - 10:00 am	Networking Break 8
10:00 am - 12:00 pm	Tech Session 8
12:00 pm - 4:00 pm	Exhibit Tear Down

REGISTRATION COST INCLUDES:

- Admission to 400+ presentations in 10 track rooms
- 13 food and beverage tickets (\$300 value)
- 8 networking breaks & meals served in exhibit halls
- Flash Drive containing 400 presentations with audio (\$495 value)
- Free spouse registration and admission to Clean Car Expo

Keynote

Monday, March 5th, 2018. 9:00 AM - 12:00 PM
San Diego Convention Center | 111 W. Harbor Dr. | San Diego, CA.



SDG&E PROGRAMS ON RENEWABLES, ENERGY STORAGE & EVS
MIKE SCHNEIDER — 9:00AM - 9:30AM
Chief Environmental Officer, and VP of Operations & Sustainability, San Diego Gas & Electric (SDG&E), & Southern California Gas Co. (SoCalGas)



US EPA AIR PROGRAMS UPDATE
REID HARVEY — 9:30AM - 10:00AM
Director, Clean Air Markets, Office of Air Programs
U.S. Environmental Protection Agency



CURRENT ACTIVITIES OF THE DOE OFFICE OF COAL & CARBON MANAGEMENT
Joseph Givie III — 10:00AM - 10:30AM
Director of Coal Business Operations
U.S. Department of Energy



ADVANCED CLEAN CAR AND ZERO EMISSION VEHICLE PROGRAMS
Analisa Bevan — 10:30AM - 11:00AM
Assistant Division Chief, ECARS
California Air Resources Board



HIGHLIGHTS OF EUEC2018 AND CLEAN CAR EXPO
DR. PRABHU DAYAL — 11:00AM - 11:30AM
Chairman | EUEC



SPEAKER FORMAT

- All speakers limited to 20 minutes using PowerPoint
- Speakers introduces themselves. Two speakers serve as co-chairs
- Each session is 2 hours long with 6 speakers.

MISSION STATEMENT

EUEC facilitates information exchange and fosters cooperation between industry, government, and regulators for the protection of our environment and energy security.

TRACK A ADVISORY BOARD



In the 21 year history of EUEC, this track is one of the most popular, with capacity attendance. Presentations are made by leaders and experts on current regulations that impact the electric utility industry. Updates on upcoming regulations, and discussions from regulatory and industry perspectives. Practical examples and case histories provide senior utility executives and decision makers options and strategies for compliance.

Monday | 1PM - 3PM

A1. REGULATORY UPDATE - CAA & EPA

A1.1 ELECTRIC ENERGY AND CLEAN AIR ACT, 2018 - 2020

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

A1.2 RECONSIDERING EPA RECONSIDERATIONS

SESSION SPONSOR & CO-CHAIR - Jay Holloway, Partner, Williams Mullen

A1.3 FURTHER TRIALS AND TRIBULATIONS OF THE GUIDELINE ON AIR QUALITY MODELS

SESSION SPONSOR & CO-CHAIR - Gale Hoffnagle, Sr. Vice President & Technical Director, TRC Environmental Corporation

A1.4 EPA'S REGULATORY AGENDA UNDER THE TRUMP ADMINISTRATION

David Jordan, Partner, ERM

A1.5 ZERO EMISSIONS CREDITS ADDRESSING NUCLEAR GENERATION-AT-RISK

Kenneth Dubin, Senior Electric Analyst, U.S. Energy Information Administration (EIA)

A1.6 THE CURIOUS CASE OF CLEAN AIR ACT CIVIL PENALTY INFLATION

Kurt Kissling, Attorney, Pepper Hamilton LLP

Monday | 3:30PM - 5:30PM

A2. ELECTRIC UTILITY CHALLENGES

A2.1 CLEAN AIR ACT INITIATIVES IN THE TRUMP ERA: WHAT TO EXPECT

CO-CHAIR - Alexandra Bromer, Partner, Perkins Coie LLP

A2.2 ENERGY & AIR QUALITY REGULATION UNDER THE TRUMP ADMINISTRATION

Scott Osbourn, Principal, Trinity Consultants

A2.3 AIR REGULATORY CHALLENGES FACING THE NATION'S ELECTRIC COOPERATIVES

Daniel Chartier, Regulatory Director, Environ. Policy, Nat'l Rural Electric Coop. Assoc.

A2.4 POLICY SHIFTS AND MARKET DIRECTIONS

Marc Chupka, Principal, The Brattle Group

A2.5 DEVELOPING A FRAMEWORK FOR INTEGRATED ENERGY NETWORK PLANNING

Adam Diamant, Technical Executive, EPRI; Tom Wilson and Daniel Brooks

A2.6 REPEAL? REPLACE? THE FUTURE OF THE CLEAN POWER PLAN & GHG REGULATION

Allison Wood, Partner, Hunton & Williams LLP

Tuesday | 7:30AM - 9:30AM

A3. NAAQS, SSM & CAA

A3.1 MODELING APPROACHES FOR STARTUP, SHUTDOWN AND MALFUNCTION EVENTS

Robert Paine, Associate Vice President, AECOM; Chris Warren

A3.2 PHOTOCHEMICAL MODELING W/ CAMX FOR OZONE INTER-PRECURSOR TRADING

Qi Zhang, Sr. Air Quality Engineer, Providence Eng. & Env. Group; James Red

A3.3 TAKING THE CAA INTO THE 21ST CENTURY AND BEYOND: A PROPOSAL

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

A3.4 OZONE AND PM2.5 - SIL'S, MERPS, AND MORE

CO-CHAIR - Richard Hamel, Senior Air Quality Meteorologist, ERM

Tuesday | 10AM - 12PM

A4. NSR

A4.1 NSR 2018 - UPDATE AND RECENT DEVELOPMENTS

CO-CHAIR - Ken Weiss, Partner, ERM

A4.2 THE UTILITY NEW SOURCE REVIEW ENFORCEMENT INITIATIVE--ONE LAST UPDATE?

Makram Jaber, Partner, Hunton & Williams LLP

A4.3 DECONSTRUCTING NSR ENFORCEMENT: MINIMIZING PLANT EXPOSURE

CO-CHAIR - Eric Hiser, Partner, Jordan Hiser & Joy, PLC

A4.4 PSD PERMITTING UNDER THE 2017 GUIDELINE ON AIR QUALITY MODELS

J. Stephen Beene, Sr. Consultant, Trinity Consultants; N. Sule & C. Otto Chambers

A4.5 IS NSR REFORM POSSIBLE? SETTLEMENT TRENDS AND YOUR REAL NSR RISK

Liz Williamson, Attorney, Williams Mullen

A4.6 THE FUTURE OF NEW SOURCE REVIEW - OPTIONS AND PROSPECTS FOR REFORM

Joel Beauvais, Partner, Latham & Watkins

Tuesday | 1:00PM - 3:00PM

A5. UTILITY IMPACTS & EPA COMPLIANCE

A5.1 TURNING THE BATTLESHIP: HOW THE TRUMP EPA IS CHARTING A NEW COURSE

SESSION SPONSOR & CO-CHAIR - Mack McGuffey, Partner, Troutman Sanders LLP

A5.2 WHAT WILL COOPERATIVE FEDERALISM MEAN IN THIS ADMINISTRATION?

CO-CHAIR - Shannon Broome, Partner, Hunton & Williams LLP

A5.3 CORONADO GENERATING STATION REGIONAL HAZE BART ALTERNATIVE

Bill McClellan, Manager, Air Quality Services, Salt River Project

A5.4 BACK TO BASIC ON COMPLIANCE

Claudette Horn, Sr. Manager, Environmental Services, PNM Resources

A5.5 MIND THE (ENFORCEMENT) GAP: CITIZEN SUITS IN THE TRUMP ERA

Angela Levin, Partner, Troutman Sanders LLP

A5.6 ENVIRONMENTAL AFFAIRS IN AN ERA OF COOPERATIVE FEDERALISM

Keith Harrison, Environmental Compliance General Manager, Southern Power Company

A6. PERMITS & COMPLIANCE

A6.1 THE PIECEMEAL APPROACH TO THE CLIMATE REGULATION PUZZLE
 Megan Berge, Partner, Baker Botts LLP

A6.2 STRATEGIC ANALYSIS OF GHG PROGRAMS: MITIGATION AND ADAPTATION
CO-CHAIR - Jesse Frederick, Vice President, WZI, Inc.

A6.3 CHALLENGES WITH PERMITTING FOR INCREASED CAPACITY
 Mary Hauner-Davis, Manager, Air/Noise Department, Burns & McDonnell Engineering

A6.4 PERMITTING COMBINED CYCLE COMBUSTION TURBINES - THEN AND NOW
 J. Dwain Kincaid, Senior Consultant, Air Quality Services, LLC

A6.5 WINGING IT - CONFUSION AND COMPLIANCE WITH NESTING BIRD REGULATIONS
SESSION SPONSOR & CO-CHAIR - David Lee, Sr. Biologist, Davey Resource Group

A6.6 MINIMIZING ENVIRONMENTAL RISKS ON TRANSMISSION LINE PROJECTS
 Claire Kwiatkowski, Environmental Associate, Sargent & Lundy



A7. AIR PROGRAMS & PERMITTING

A7.1 SCE SANTA BARBARA EM. GENERATOR PROJECT - PART 1; SITING & PERMITTING
CO-CHAIR - Michelle Nuttall, Sr. Project Manager, Southern California Edison; Sara Head, Yorke Eng.

A7.2 SCE SANTA BARBARA EMERGENCY GENERATOR PROJECT - PART 2: PROPOSITION 65
 Sara Head, Principal Scientist, Yorke Engineering; Michelle Nuttall, Southern Cali. Edison

A7.3 PERMITTING CHALLENGES FOR RICE GENERATION TO SUPPLEMENT RENEWABLE ENERGY SOURCES
 Mary Kaplan, Air Quality Meteorologist, AECOM; Chris Warren and Robert Paine

A7.4 BEST PERMITTING PRACTICES - A MAP FOR PERMITTING COMBINED CYCLE POWER
 Amber Isaac, Process Engineer, APTIM



A8. REGULATORY IMPACTS

A8.1 WHAT'S IT TAKE TO CHANGE YOUR MIND IF YOU ARE THE GOVERNMENT?
CO-CHAIR - Charles Knauss, Partner, Hunton & Williams LLP

A8.2 REGULATORY DEVELOPMENTS IN THE TRUMP ADMINISTRATION
 Michael Goo, Regulatory Counsel, ICAC

A8.3 2015 OZONE NAAQS - IMPLEMENTATION UPDATE AND IMPACTS
 Arijit Pakrasi, Director, APTIM

A8.4 NSR OFFSETS FOR NEW POWER PROJECTS IN SOUTH COAST; COST AND AVAILABILITY
 Bhaskar Chandan, AQ Analysis and Comp. Supervisor, South Coast Air Quality Mgmt.; Andrew Lee

A8.5 GAS TURBINE REGULATORY REGULATIONS AND ENFORCEMENT CASE STUDIES
CO-CHAIR - Ben Sehgal, Senior Staff Engineer, California Air Resources Board



TRACK B ADVISORY BOARD



An excellent "must attend" training session for experts and operators of CEMs. This Track includes EPA policy and procedures for accurate monitoring, reporting, and auditing of emissions pursuant to Part 75 of the Acid Rain Program and the Clean Air Interstate Rule. Presentations on how to submit monitoring plans, QA/QC tests, and Emissions & Generation Resource Integrated Database (eGRID).

Other expert presentations and programs include MATS, egrid, RATA, Appendix D & E, Electronic Monitoring data, QA/QC program for Cylinder gases. AQ and fence line monitoring, and modeling.

B1. CEMS & EPA'S EGRID

B1.1 REVIEW OF EGRID2016
CO-CHAIR - Travis Johnson, Environmental Protection Specialist, U.S. Environmental Protection Agency

B1.2 LASER DISPERSION SPECTROSCOPY AND CEM APPLICATIONS
 Graham Leggett, Vice President, Product Management, MIRICO Ltd.

B1.3 PEMS DEPLOYMENT IN SAUDI ARABIA
 Brian Swanson, President, CMC Solutions; Jessica Palmer

B1.4 PS18 CERTIFICATION TEST RESULTS AT COAL FIRED POWER PLANT IN MIDWEST UTILIZING CEMTEK'S HCI TDL MONITOR
 Gary Cacciatore, Business Development Manager, Cemtek Environmental

B1.5 CONTINUOUS EMISSION MONITORING SYSTEM(CEMS) PROGRAM BEST PRACTICES
 Eric Wiley, Managing Consultant, Trinity Consultants

B1.6 Q & A DISCUSSION EGRID
 Travis Johnson, Environmental Protection Specialist, U.S. Environmental Protection Agency



B2. CEMS & TESTING

B2.1 TESTING MANAGEMENT FOR RATA, PERMIT LIMITS, REGULATIONS AND CONTRACTS
CO-CHAIR - Brian Petermann, Area Lead - Air Quality Compliance, POWER Engineers, Inc.

B2.2 MEETING DEMAND WHILE COMPLYING WITH STARTUP AND SHUTDOWN EMISSIONS
 Taylor Jones, System Specialist, Environmental Systems Corp (ESC)

B2.3 NH3 SLIP BY EXTRACTIVE METHODS
 Matt Swanson, Vice President, Sales, CAI, Inc.

B2.4 STRATIFICATION TESTING - WHEN IS IT REQUIRED?
 Dan Todd, President, Air Quality Services, LLC; Paul Siegel and Chris Wehner

B2.5 NEXT-GEN CRDS ANALYZERS FOR MONITORING AMMONIA SLIP IN SCR PROCESSES
 Jeremiah Riddle, President, Tiger Optics



B3. ESP & PARTICULATE EMISSIONS

B3.1 THE EFFECT OF 3-PHASE POWER SUPPLY AND SMART CONTROLLER ON ESP
Reza Sharafy, Product Manager, KraftPowercon Sweden AB

B3.2 MORE CASE STUDIES OF THREE PHASE POWER SUPPLIES IMPROVING ESP PERFORMANCE
John Knapik, ESP Solutions Consultant, Babcock and Wilcox

B3.3 AGING TR SETS ON ELECTROSTATIC PRECIPITATORS - THE HIDDEN LIABILITY
Paul Leanza, Business Development Manager, KraftPowercon; Dan Holt

B3.4 WINTERTIME PM 2.5 COMMUNITY MONITORING – NORTH POLE ALASKA
CO-CHAIR - Randall Baxter, Scientist, Information Technology, T&B Systems; David Bush, David Yoho, Kenneth Underwood



B4. PM, CEMS, DUST EMISSIONS

B4.1 COROMAX FOR POWER PLANTS
CO-CHAIR - Mads Kirk Larsen, Global Sales Manager, FLSmidth Airtech

B4.2 NEW GORE LOW DRAG MEMBRANE - REVERSE AIR BAGHOUSE CASE STUDY
John Knotts, Business Development Leader, W.L. Gore and Associates

B4.3 MONITORING LOW LEVEL DUST EMISSIONS & DETECTION OF ABATEMENT FAILURE
Odette Alsen, Regional Manager, envea - Altech Environment U.S.A.

B4.4 SAUDI ARAMCO'S SAOO FLARE MINIMIZATION ACHIEVEMENTS
CO-CHAIR - Ahmad Al-Otaibi, Environmental Coordinator, Saudi Aramco; Ensan El-Ayoubi

B4.5 IMPROVED MEASUREMENT OF LOW PARTICULATE EMISSIONS FROM GAS TURBINES
CO-CHAIR - Kevin Crosby, V.P., Technical, Montrose Air Quality Svcs; Glenn England, Ramboll-Environ



B5. AIR QUALITY MODELING

B5.1 BACKGROUND VS. NEARBY SOURCES - TESTING EPA'S NEW GUIDANCE
CO-CHAIR - George Schewe, Principal Meteorologist, Trinity Consultants; Brian Otten

B5.2 SOLUTIONS TO NEW U.S. EPA MODELING REGULATIONS
Christopher Occhipinti, Project Professional, NTH Consultants, Ltd.

B5.3 LOW-LEVEL FUGITIVE PARTICULATE EMISSIONS IN AERMOD
Arijit Pakrasi, Director, APTIM

B5.4 REGIONAL HAZE RULE SECOND DECADAL REVIEW - A BUMPY ROAD AHEAD
Robert Paine, Associate Vice President, AECOM; Jeff Connors

B5.5 DEVELOPMENT OF IMPROVED BUILDING DOWNWASH ALGORITHMS IN AERMOD
CO-CHAIR - Sergio Guerra, Senior Environmental Engineer, CPP, Inc.; Ron Petersen

B5.6 CHARACTERIZING PARTICULATE EMISSIONS FROM EVAPORATION POND MISTERS
Mannie Carpenter, Sr. Engineer, Stantec Consulting Svcs; Amber Summer, Kathy Houed



B6. MEASUREMENT TECHNOLOGIES

B6.1 SOLVING COMPLIANCE ISSUES USING FTIR MULTIGAS MEASUREMENT TECHNOLOGY
Jim Cornish, Sales and Support Manager, Gaset Technologies

B6.2 UNDER-REPORTING OF NOX BY AS MUCH AS 80%. WITH REGULATORY APPROVAL
Robert Mallowney, President, MonitorTech Group

B6.3 AIR QUALITY FORECASTING AND MGMT USING MACHINE LEARNING AND IOT
SESSION SPONSOR & CO-CHAIR - Neil Gerber, Director, New Energy & Environment, IBM

B6.4 PASSING RATA WITH QUANTUM CASCADE/TUNABLE DIODE LASER ANALYZER
David McMillen, Business Development Manager, Emerson



B7. ADVANCED TECHNOLOGIES

B7.1 NEW LASER MEASUREMENT TECHNOLOGY
Bernadette Shahin, National Applications Manager, M&C TechGroup North America

B7.2 DSI SAVINGS THROUGH REAL TIME SO3/H2SO4 MEASUREMENT
CO-CHAIR - Dan Kietzer, National Product Manager, SICK, Inc.; Chris Psootka

B7.3 PEMS SYSTEM EVOLUTION TO MEET CHANGING POWER PLANT CONDITIONS
Brian Swanson, President, CMC Solutions; Jessica Palmer and Eugene Simon

B7.4 COST EFFECTIVE OPTICAL GAS IMAGING FOR DETECTION OF SF6
Sat Sandhu, Thermography Services Support Manager, Fluke; Justin Sheard

B7.5 ABB REPLACES THE DUMBBELL DESIGN OXYGEN ANALYZER
Bruce Herman, ABB Process Analytics

B7.6 SMART THERMAL TESTING FOR AUTOMOBILE ELECTRONICS
John Booher, CEO, Total Temp Tech



B8. FENCELINE MONITORING & REMOTE SENSING

B8.1 COMMUNITY-BASED AIR TOXICS FENCELINE MONITORING AND INITIATIVES
Charles Lee, PH.D., CM, Principal Consultant, Trinity Consultants; Steve Walters

B8.2 THE D-FENCELINE MEASUREMENT SYSTEM - ADVANCED REMOTE SENSING SOLUTION
Gilad Shpitzer, CEO, Co-Founder, Atmosfir Optics; Dr. Robert Kagann, Dr. Yael Etzioni

B8.3 EMERGING OPEN-PATH/EXTRACTIVE TECHNOLOGIES AND VALIDATION TECHNIQUES
CO-CHAIR - Peter Zemek, SVP - Emerging Tech., Montrose Env. Grp; Daniel Cavicchio, Jr., Block Eng.

B8.4 REAL TIME, LOW LEVEL VOC MONITORING IN STATIONARY AND MOBILE PLATFORMS
LJ Sears, Technical Director, RJ Lee Group

B8.5 A FENCE LINE STUDY OF FUGITIVE EMISSIONS USING THE DV3000
James Matley, Global Sales Executive, Duvax Technologies Ltd.

B8.6 LASER DISPERSION SPECTROSCOPY FOR REMOTE SENSING
Graham Leggett, Vice President, Product Management, MIRICO; Damien Weidmann, Arun Kannath, Johnny Chu, Mohammed Belal



ADVISORY BOARD



This Track provides presentations on Advanced Mercury Control technologies and strategies, for compliance with MATS emission limits including Hg, DSI, MATS, ACI, & Amended Silicates.

Monday | 1PM - 3PM

C1. Hg MATS COMPLIANCE

C1.1 LOWERING MERCURY COMPLIANCE COSTS THROUGH OPTIMIZATION

SESSION SPONSOR & CO-CHAIR - Richard MacPherson, President/CEO, ME2C; John Pavlish, Nicholas Lentz, Marcus Sylvester, James Trettel

C1.2 COST SAVINGS ASSOCIATED W/ MATS COMPLIANCE OPERATING AS LOW EMITTING

Brandon Kibler, Project Manager, Novinda Holdings, Inc.; Jeremy Hayes, Black Hills Energy; Clifton Brown and James Butz, Novinda Holdings, Inc.

C1.3 HOW THE RIGHT OPTIMIZATION TEAM CAN IMPROVE YOUR MATS COMPLIANCE STRATEGY

Regina Rodriguez, Chief Operating Officer, Carbonxt; Christine Valcarce, Lindsey Costin, David Mazyck

C1.4 OPTIMIZING ACI COST-PERFORMANCE WITH ADVANCED PAC PRODUCTS

Martin O'Brien, Applications Engineer, Calgon Carbon; Richard Mimna, Jenalle Brewer and Michael Pealer

C1.5 EFFECTIVENESS OF MERCURY CONTROL STRATEGIES: A SURVEY OF MATS IMPLEMENT.

CO-CHAIR - Connie Senior, VP of Technology, ADA-ES, Inc.; Sharon Sjostrom

Monday | 3:30PM - 5:30PM

C2. ACTIVATED CARBON

C2.1 KINETIC CHEMISTRY MODEL FOR MERCURY REMOVAL BY ACI

Guisu Liu, Founder, Reaction Analytics Solutions Corp.

C2.2 HG BEHAVIOR IN HYBRID FILTER WITH INJECTION AND COATING OF AC IN CPP

Jin-Ho Sung, Researcher, Yonsei University; Yong-Chil SEO, Se-Won Park, Ha-Na Jang & Seung-Ki Back

C2.3 FUTURE OF THE ACTIVATED CARBON INDUSTRY

CO-CHAIR - David Mazyck, Chief Executive Officer, Carbonxt; Curt Larson, Regina Rodriguez, Dennis Baranik

C2.4 OPTIMIZING ACI USAGE TO REDUCE COSTS, AVOID CORROSION, IMPROVE ASH

John Satterfield, Sr. Field Service Engineer, Cabot Norit Activated Carbon

Tuesday | 7:30AM - 9:30AM

C3. Hg CONTROL TECHNOLOGIES

C3.1 AS-ULTRA PERFORMANCE IN THE MOST CHALLENGING CONFIGURATIONS

CO-CHAIR - Thomas Gale, Director of Technology Development, Novinda Holdings, Inc.

C3.2 CIRCULATING DRY SCRUBBER MERCURY CONTROL PRB COAL-FIRED POWER PLANTS

Terence Ake, Principal Engineer, Babcock Power, Inc.; Roderick Beittel

C3.3 INNOVATIVE SORBENT TRAP MEASUREMENT TECHNIQUES: HG, SO3, NH3, HCL, SE

Alexandra Sipershteyn, Product Manager, Ohio Lumex

C3.4 RAPID RESPONSE TESTING TO ENSURE MATS COMPLIANCE

CO-CHAIR - Nicholas Lentz, Field Tech. Manager, Midwest Energy Emissions Corp.; John Pavlish and James Trettel

C3.5 MERCURY CAPTURE IN THE WET SCRUBBER WITH CXT-WETJECT™

Regina Rodriguez, Chief Operating Officer, Carbonxt; Christine Valcarce, David Mazyck

Tuesday | 10AM - 12PM

C4. DSI & ACI

C4.1 EXPERIENCE WITH RETROFITTING HYDRATED LIME INJECTION SYSTEMS

Jon Norman, Manager - Sales and Technology, United Conveyor Corporation

C4.2 LANCE-LESS DSI TECH ALLOWS CONT. OPERATION OF EXISTING ESPS

Bob Mastropietro, Technical Sales Engineer, Nol-Tec Systems

C4.3 STRATEGIC USE OF TEMPORARY INJECTION SYSTEMS (PAC AND DSI)

SESSION SPONSOR & CO-CHAIR - Mike Gregory, Business Development - Capital Equipment, IAC

C4.4 SODIUM SORBENTS FOR HIGHER EFFICIENCY

SESSION SPONSOR & CO-CHAIR - Michael Atwell, Manager, Solvay Chemicals; Cornelia Cretiu

Tuesday | 1:00PM - 3:00PM

C5. Hg CONTROL TECHNOLOGIES

C5.1 USE CHEMISTRY-BASED CFD TO INVESTIGATE DSI OPTIMIZATION OPTIONS

Guisu Liu, Founder, Reaction Analytics Solutions Corp

C5.2 EFFECTIVE AND SIMPLE MERCURY CONTROL IN PLANTS CONFIGURED WITH WET FGD

CO-CHAIR - Thomas Gale, Director of Technology Development, Novinda Holdings, Inc.

C5.3 A NOVEL IRON OXIDE-BASED MATERIAL FOR CAPTURING MERCURY VAPOR

Yongheng Huang, Manager, Viviron Technology

C5.4 LANCE-LESS INJECTION TECHNOLOGY AT SOUTHERN COMPANY

Sean Dooley, Key Account Manager, Nol-Tec Systems

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ADVISORY BOARD FOR TRACK D



This Track includes - Transmission & Distribution; Demand and Rates, Energy Policy, Cyber Security, Power Plant conversion Technologies, Distributed Generation, Building Technologies, CHP, & Grid Stability.

Monday | 1PM - 3PM

D1. PLANT PERFORMANCE



D1.1 THE IMPORTANCE OF POWER PLANT PERFORMANCE TESTS

SESSION SPONSOR & CO-CHAIR - William Stark, Vice President, Environmental Services, Leidos; Michael Giampetro



D1.2 THERE'S MORE THAN JUST A TEST

Mike Hartman, Principal Environmental Specialist, McHale Performance; Dave Price



D1.3 DEAERATOR OPEX AND RELIABILITY UPGRADE & BOILER EMISSION IMPROVEMENT

Rick Nijmeijer, International Sales Manager, Stork Thermeq B.V.



D1.4 MANAGING LOGISTICS FOR SCHEDULED OUTAGES IN POWER & ENERGY

Angela Eliacostas, Founder and President, AGT Global Logistics; Jordan Mock



D1.5 NEW TECHNOLOGY IN-SERVICE API-653 TANK BOTTOM INSPECTIONS USING CERT.

Ron Marsden, General Manager, Manta Robotics; Zach Chapman

Monday | 3:30PM - 5:30PM

D2. POWER PLANT CONVERSION TECHNOLOGIES



D2.1 THE CARBON CHALLENGE FOR THE POWER INDUSTRY

Bruce Rising, Executive Advisor, ADI Analytics, LLC



D2.2 IOT WILL NOT DELIVER ITS POTENTIAL - UNLESS IT SOLVES THIS CHALLENGE

CO-CHAIR - Harry Sim, CEO, Cypress EnviroSystems



D2.3 COAL TO GAS CONVERSION ADVANTAGES: CASE STUDY

Joe Brown, Head of Aftermarket Sales, MHPS



D2.4 OPERATING THE EXISTING AQCS SYSTEM AFTER NATURAL GAS CONVERSION

Suzette Puski, Principal Business Dev. Spec., Babcock Power



D2.5 COAL TO GAS CONVERSION: BLACK-END IMPLICATIONS

Karen Whitehead, Mechanical Engineer, Boiler & Air Quality, Black & Veatch Corporation



D2.6 OLD SMOKEY POWER - TRANSFORMING AGING POWER PLANTS

Peter Belmonte, Vice President & Director, Power Generation, TRC

Tuesday | 7:30AM - 9:30AM

D3. CYBER SECURITY SAFETY & EFFICIENCY



D3.1 WHAT THE WORLD MUST KNOW URGENTLY ABOUT NUCLEAR SECURITY
CO-CHAIR - Phrantceena Thate-Halres, CEO, Total Tactical Defense



D3.2 SAFETY IN THE ELECTRICITY AND PETROLEUM INDUSTRIES
 Fred Mayes, Senior Energy Analyst, U.S. Energy Information Administration



D3.3 CYBER SECURITY FOR POWER: WHERE REGULATION AND REALITY CONVERGE
 Mark Rabuano, Manager, NERC Services, NAES Corporation



D3.4 PLANNING FOR THE FUTURE: NATION'S FIRST CYBER-SECURE UTILITY MICROGRID
 Jim Dodenhoff, Dir. of Business Dev, IPERC



D3.5 INNOVATION IN ENERGY EFFICIENCY PROGRAM DESIGN
 Ian Metzger, Program Development Engineer, Lockheed Martin Energy



D3.6 LOWER GLOBAL WARMING POTENTIAL WITH CO2 HEAT PUMP WATER HEATERS
 Cheryn Metzger, Senior Research Engineer, Pacific Northwest National Laboratory

Tuesday | 10AM - 12PM

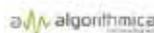
D4. T&D, GAS TURBINES



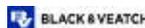
D4.1 GAS FUEL FLEXIBILITY FOR GAS TURBINE DISTRIBUTED POWER GENERATION
CO-CHAIR - Michael Welch, Industry Marketing Manager, Siemens Industrial Turbomachinery Ltd.



D4.2 FUTURE "ENERGY" UTILITY: DEEP DECARBONIZATION OF ENTIRE ENERGY ECONOMY
 Bill Leighty, Founder, The Leighty Foundation



D4.3 PREDICTING AND DETECTING GAS TURBINE MALFUNCTIONS
 Patrick Bangert, CEO, Algorithmic Technologies, Inc.



D4.4 SITING & PERMITTING FOR TRANSMISSION & DISTRIBUTION
 Brian O'Neal, Project Manager, Black & Veatch Corporation

Tuesday | 1:00PM - 3:00PM

D5. ENERGY POLICY, DEMAND & RATES



D5.1 GRID MODERNIZATION POLICY DEVELOPMENTS IN CALIFORNIA
CO-CHAIR - Larissa Koehler, Senior Attorney, Environmental Defense Fund



D5.2 ONE GOAL, MANY PATHS TO RESILIENCY
 Carmen Henrikson, Associate Vice President, TRC Energy Services



D5.3 A TALE OF TWO ISSUES – ISO-NE OPERATIONS DURING NATURAL GAS CURTAILMENT AND IMPACTS FROM THE GLOBAL WARMING SOLUTIONS ACT
 Stephen Slocomb, Principal, Epsilon Associates



D5.4 ENERGY ECONOMICS AND A SUSTAINABLE ELECTRICITY POLICY
CO-CHAIR - Daniel Mussatti, Senior Energy Economist, US NRC



D5.5 CURRENT TRENDS AND DEVELOPMENTS FOR ELECTRIC UTILITY RATES
 Ted Kelly, Principal & Senior Project Manager, Burns & McDonnell

Tuesday | 3:30PM - 5:30PM

D6. BUILDING TECHNOLOGIES



D6.1 ON THE ROAD TO ZNE - CITIES REACHING AHEAD
 Farhad Farahmand, Project Manager, TRC Energy Services



D6.2 SMARTPNEUMATICS - MAKING DUMB BUILDINGS SMART
CO-CHAIR - Harry Sim, CEO, Cypress EnviroSystems



D6.3 USING PASSIVE COOLING STRATEGIES TO REDUCE THERMAL COOLING LOAD
 Ahmad Zamzam, Architect, Shamayel Development Company



D6.4 EV CHARGING STATIONS IN SAN DIEGO BUILDINGS
 David Gatcha, Relations Ambassador/Multifamily Properties, Verdani Partners

Wednesday | 7:30AM - 9:30AM

D7. CHP



D7.1 COMBINED HEAT AND POWER SOLUTIONS FOR DISTRICT HEATING APPLICATIONS
CO-CHAIR - Dalia El Tawy, Director-Thermal Power Solutions, Siemens



D7.2 ENERGY & AIR POLLUTION REDUCTION FROM COGENERATION AT JOHNS HOPKINS
 John Kumm, Senior Engineer, EA Engineering, Science and Technology



D7.3 KILLING TWO BIRDS WITH ONE STONE: 'SMART' COUPLING ENERGY-EFFICIENT CHP TO THE GRID
CO-CHAIR - Anthony Cirillo, Senior Project Director, AECOM - Power Division



D7.4 MEDIUM VOLTAGE AUXILIARY BOILERS AND FUEL GAS DEWPOINT HEATING SYSTEMS
 David Taylor, Director of Technical Sales, Chromalox



D7.5 POWER/WATER SOLUTIONS: USING THERMAL ENERGY FROM CHP PLANTS
 Ben Laurent, Senior Process Engineer, Heartland Water Technology, Inc.

Wednesday | 10AM - 12PM

D8. DISTRIBUTED GEN & GRID TECHNOLOGY



D8.1 POLICY AND TECHNOLOGY TRENDS STRENGTHENING CRITICAL INFRASTRUCTURE
 Joe Hoellerer Manager, Government Relations, Security Industry Association



D8.2 HYBRID SOLUTIONS PROVIDING GRID STABILITY AND RENEWABLE INTEGRATION
 Dalia El Tawy, Director-Thermal Power Solutions, Siemens



D8.3 NATURAL GAS ASSETS TO SUPPORT THE EVOLVING ELECTRIC GRID
CO-CHAIR - Hua Fang, Director, Black & Veatch Management Consulting, LLC



D8.4 WATER-FREE COMBINED CYCLE DISTRIBUTED POWER GENERATION
CO-CHAIR - Michael Welch, Industry Marketing Manager, Siemens Industrial Turbomachinery, Ltd.



D8.5 SMART CIT-HY WINDBUS AUXERRE FRANCE
 Emmanuel Schuddinck, CEO, Justy Energies Engineering



D8.6 SIMULATING SOLAR PHOTOVOLTAIC TECHNOLOGY DIFFUSION AND GRID STABILITY
 Jacob Monroe, PhD Student, North Carolina State University; Emily Berglund

ADVISORY BOARD TRACK E



This Track provides presentations on Advanced technologies and strategies, for compliance with SO₂, NO_x, CO₂ emission limits at coal-fired boilers. Includes SCR, DSI, and measurement and control in the cement and ash industry. Waste to Energy and Waste management.

Monday | 1PM - 3PM

E1. CONTROL TECHNOLOGIES

-  **E1.1 NOX CONTROL, AND A LOT MORE, WITH CATALYTIC CERAMIC FILTERS**
Rod Gravley, Technology Director, Tri-Mer Corporation; Kayla Olson, Kevin Moss
-  **E1.2 EVALUATION AND APPLICATION OF AN AIR QUALITY MODELING SYSTEM TO ANALYZE IMPACTS OF INDUSTRIAL FACILITIES**
Roberto San Jose, Head Professor, Technical University of Madrid (UPM); Jun L. Pérez, Rosa Maria Gonzalez-Barras
-  **E1.3 ACID GAS REMOVAL CHARACTERISTICS OF CA(OH)₂ IN A REAL SITE**
Han Jae-Won, Han-Yang University; Young-Ok Park, Korea Institute of Energy Research; Hui-Taek Kim, Han-Yang University
-  **E1.4 FULL-SCALE DEMONSTRATION OF ENZYME-ENHANCED COAL COMBUSTION**
CO-CHAIR - Wei-Ping Pan, Professor, Western Kentucky University
-  **E1.5 IT'S ALL IN THE DUST CAKE**
Nathan Schindler, Technical Sales Manager, Evonik Corporation; Florin Popovici, Emission Control Engineering Consulting

Monday | 3:30PM - 5:30PM

E2. WASTE TO ENERGY & WASTE MANAGEMENT

-  **E2.1 PLASMA GASIFICATION; THE NEXT GENERATION OF WASTE-TO-ENERGY SERVICES**
CO-CHAIR - Richard Fish, President, ALTER NRG CORP.; Kal Bhojak
-  **E2.2 BIODIESEL PRODUCTION FROM WASTE FRYING OIL**
Mohamed M. Aboabboud, Professor, El-Merghib University; Dr. Hesham G. Ibrahim
-  **E2.3 ELECTRICITY PRODUCTION FROM SRF USING A DOWNDRAFT GASIFICATION PROCESS**
Se-Won Park, Researcher, Yonsei University; Lee, Sung, Seo, Yonsei University; Oh, Samho environ-Tech; Gu, Institute for Advanced Engineering
-  **E2.4 ENERGY FROM MUNICIPAL SOLID WASTE WITH MINIMAL CARBON EMISSION**
Surendra Saxena, Professor Emeritus, FIU; Siva Pillai, Innovision

Tuesday | 7:30AM - 9:30AM

E3. SO₂, NO_x & SNCR

-  **E3.1 HIGH ACCURACY IN-SITU SO₃, SO₂ & H₂SO₄ SENSOR FOR COMBUSTION SOURCES**
CO-CHAIR - Bob Finken, Senior Vice President, Montrose Air Quality Services; Dr. Peter Zemek
-  **E3.2 SUCCESSFUL SAMPLE HANDLING SYSTEMS FOR SO₂ AND NO_x AT SCR**
Philipp Zimmel, Area Sales Manager, JCT Analysentechnik GmbH
-  **E3.3 IMPROVE PLANT ECONOMICS WITH EFFICIENT AMMONIA BASED DESULFURIZATION**
David Repp, Sales Director, Jiangnan Environmental Technology, Inc.; Jie Li
-  **E3.4 OPERATING CHALLENGES OF EXISTING AIR QUALITY CONTROL SYSTEMS**
Suzette Puski, Principal Business Dev. Spec., Babcock Power
-  **E3.5 EXPLORING OXIDATION AND SCR CATALYST ON GAS FIRED UNITS**
Emily Kunkel, Senior Environmental Associates, Sargent & Lundy; Raj Giakwad, Dave Helm
-  **E3.6 HUMIDITY CONTROL OPTIMIZING DRY SCRUBBER OPERATION**
Jeff Bossong, COO, H2O LLC

Tuesday | 10AM - 12PM

E4. SCR & NO_x CONTROL

-  **E4.1 SOFT SENSORS FOR SO_x AND NO_x EMISSIONS**
Patrick Bangert, CEO, algorithmica technologies Inc.
-  **E4.2 COMBINED CYCLE PLANT NO_x REDUCTIONS**
Jeff Willilams, Manager, Emerson; J. Nyenhuis
-  **E4.3 CFD MODELING FOR EVALUATING CONVERSION OF COAL TO GAS FIRED BOILER**
Praveen Gonuguntla, Senior CFD Engineer, Tridiagonal Solutions, Inc; Abhay Panwalkar, Bharat Heavy Electricals Limited
-  **E4.4 SELECTABLE CONTROL SYSTEM FOR SCR MANAGEMENT**
CO-CHAIR - Bernadette Shahin, National Applications Manager, M&C TechGroup
-  **E4.5 MINIMIZING NO_x AND HEAT RATE IN CHINESE COAL FIRED UTILITY BOILERS**
Richard Conn, Sr. Director of Technology, Sunco International; Jeff Shan, Sunco International; May Chen, Blue Horizon
-  **E4.6 FAST RAMP HOT SCR'S & UPGRADES TO COMPLY WITH FUTURE NO_x BARCT RULES**
CO-CHAIR - Robert McGinty, Sr. Product Mgr Gas Turbine & Ind. SCR Sys, Mitsubishi Hitachi Power Systems

Tuesday | 1PM - 3PM

E5. WASTE RECYCLING - CEMENT, FLY ASH

-  **E5.1 FASTOX GASIFICATION: PROFITABLY ACHIEVE 100% RECYCLING**
Michael Kleist, VP of Sales and Marketing, Sierra Energy; Mike Hart
-  **E5.2 ADDRESSING FLY ASH RESISTIVITY WHEN CONTROLLING FLUE GAS ACIDITY**
CO-CHAIR - Rabindra Sinha, VP - Sales, Marketing & Technology, ARKAY Technologies
-  **E5.3 CEMENT STABILIZATION OF CONTAMINATED SOIL AND CCR**
Paul Ruehl, US Environmental Remediation Coordinator, Lafarge Holcim
-  **E5.4 CONCRETE AND CEMENT SPEC. COAL FLY ASH FROM A WASTE FLY ASH**
Christopher Poling, Engineering Director, SCB International Materials
-  **E5.5 CONVERT FOOD WASTE TO ENERGY AND PROFITS**
David Blume, CEO, Blume Distillation

E6. COMPLIANCE TECHNOLOGIES & STRATEGIES



E6.1 MERCURY AND PYRITIC SULFUR REDUCTION IN CLEANED ILLINOIS BASIN COALS
CO-CHAIR -Allan Kolker, Research Geologist, U.S. G.S, Liliانا Lefficariu, Southern Illinois University; Maria Mastalerz, Indiana Geological Survey; Agnieszka Drobnik, Indiana Geological Survey, Clint Scott; Anne Scott, U.S. Geological Survey



E6.2 BACT EMISSION LIMITS: THE DEVIL IS IN THE DETAILS
 David Shotts, Partner, ERM



E6.3 FUEL ECONOMY AND EMISSIONS TESTING CONDUCTED ON A REEFER TRAILER
 Olivia Maier, Chemical Engineer, dynaCERT, Inc.; Robert Maier, Ruston Hoffman



E6.4 ULTRA-LOW TURNDOWN IN AN ULTRA-LOW EMISSIONS WORLD
CO-CHAIR -Meville Hedges, Territory Manager, Cleaver-Brooks, Inc.



E6.5 PRE AND POST COMBUSTION NOX CONTROL SYSTEM USING MICROWAVE TECH.
 Valentino Tiangco, Biomass Program Manager, SMUD; Chang Yul Cha, CHA Corporation; Charles Gentry, California Energy Commission

Workshop 4 - Room 5A
ESC | StackVision New User Mini (1-Day) Training
Wednesday March 7, 2018
(7:30 to 4 pm)

Danny Hintzman, ESC dhintzman@envirosys.com
 Email: jbrooks@envirosys.com with questions
 Phone: 512-250-7837, (512) 250-7952



This workshop will provide participants with a greater understanding of ESC's StackVision software. Topics will include: Using CEMscape, CalGas Management, Using StackVision Reports & Creating Linked Reports, Using Filters and Summaries, Data Controller Essentials and an Introduction to StackStudio.

TO REGISTER FOR THIS WORKSHOP

CONTACT : info@euec.com

COST \$100 for EUEC registrants

ADVISORY BOARD TRACK F



This Track provides presentations on Renewable Energy technologies and strategies, including, solar, PV, wind, Nuclear, waste-to-energy, biogas, biomass, biodiesel, financing, and development case studies for peak shaving and FIT programs.

F1. BIOGAS, BIOMASS, BIODIESEL



F1.1 ANAEROBIC MBBR PROCESS FOR HIGH-STRENGTH WASTEWATERS
 Siva Angappan, Headworks Bio, Inc.; Dr. Somnath Basu



F1.2 TORREFIED BIOMASS SUCCESS AT THE PGE BOARDMAN PLANT
CO-CHAIR - Una Nowling, Service Area Leader, Black & Veatch; Randy Curtis, Portland General Electric Boardman Power Plant



F1.3 INDUSTRIAL SYMBIOSIS THROUGH EFFECTIVE PUBLIC-PRIVATE PARTNERSHIPS
 Barry Edwards, Director of Utilities & Engineering, Catawba County



F1.4 DIRECTED BIOGAS SUCCESS AT THE UC SAN DIEGO MICROGRID FUEL CELL
 Clark Crawford, Director, Business Development, FuelCell Energy



F1.5 COMPUTATIONAL FLUID DYNAMICS SIMULATIONS OF ALGAE PHOTOBIOREACTORS
 Andres Philip Mayol, USAID STRIDE Visiting Scholar, The University of Arizona; Aristotle T. Ubando, Alvin B. Culaba and Joel L. Cuello

F2. FLEX GEN & ONSITE POWER



F2.1 POWER PRODUCTION FOR FUTURE SOLID WASTE RESOURCE RECOVERY FACILITY
 Matt Dunn, Principal Engineer, AECOM



F2.2 SOLAR TECHNOLOGY EVOLUTION
CO-CHAIR - Matthias Gewalt, Manager of Solar Practice, Leidos Engineering



F2.3 RECLAIMING CONTAMINATED LAND: DEPLOYING SOLAR ON BROWNFIELDS
SESSION SPONSOR & CO-CHAIR - Cynthia Christensen, Commercial/Utility Sales Director, Namaste Solar



F2.4 FEDERAL FACILITIES: DEVELOPING & FINANCING ENERGY RESILIENCE
 Seth Kirshenberd, Partner, Kutak Rock LLP



F3. RENEWABLE ENERGY & MICROGRID

F3.1 MICROGRIDS AN EFFECTIVE INFRASTRUCTURE ALTERNATIVE

CO-CHAIR - Gregg Edeson, PA Energy Expert, PA Consulting Group
Co-Presenter - Jared Smith, PA Energy Expert, PA Consulting Group



F3.2 THE ART OF SECURING MICROGRID CONTROL SYSTEMS

CO-CHAIR - Jim Dodenhoff, Dir. of Business Dev, IPERC, Tamer Rousan, Ameren



F3.3 STANFORD'S ENERGY SYSTEM LEADING BY EXAMPLE IN EMISSIONS REDUCTION

Fahmida Ahmed, Director, Sustainability and Business Services, Stanford University



F3.4 NATURAL DISASTERS CALL US TO TRANSFORM RESILIENCE

Edward Rightor



F3.5 BUILDING ECONOMIC CASES FOR DISTRIBUTED GENERATION & MICROGRIDS

Peter Lilienthal, CEO, HOMER Energy



F4. RENEWABLE PROJECTS & DEVELOPMENT

F4.1 REDEVELOPMENT OF ELECTRIC UTILITY SITES - INTEGRATING RENEWABLE ENERGY

CO-CHAIR - Steven Putrich, Principal Engineer, Haley & Aldrich



F4.2 BIRD IN THE HAND: SHOTGUNS, DEADLY OIL PITS, CUTE KITTENS & THE MBTA

CO-CHAIR - Samuel Panarella, Associate Professor of Law, University of Montana School of Law



F4.3 THE SHOW MUST GO ON - SOLAR DEVELOPMENT IN WILDLIFE HABITAT

SESSION SPONSOR - David Lee, Sr. Biologist, Davey Resource Group



F4.4 BIGGER MARKET THAN GRID: RE-SOURCE HYDROGEN TRANSPORTATION FUEL

Bill Leighty, Director, The Leighty Foundation



F5. WIND ENERGY

F5.1 THE GROWTH OF OFFSITE WIND & SOLAR FOR CORPORATE, MUNICIPAL & COLLEGES

Kevin Prince, Senior Director, NRG



F5.2 CONTROL OF A SELF-EXCITED INDUCTION GENERATOR IN A WIND TURBINE SYSTEM

CO-CHAIR - Woonki Na, Assistant Professor, California State University, Fresno; Edward Muljadi, Auburn University; Bill Leighty, The Leighty Foundation; Jonghoon Kim, Chungnam National University, Korea



F5.3 WIND ENERGY MARKET TRENDS AND CHALLENGES

Nathan Higgerson, Power Generation Project Manager, Hanson Professional Services, Inc.



F5.4 CONVERTING WINDPLANTS TO DEDICATED, OFF-GRID HYDROGEN FUEL PRODUCT

CO-CHAIR - Bill Leighty, Director, The Leighty Foundation



F6. SOLAR & PV

F6.1 DEMAND CHARGE SAVINGS FROM SOLAR AND ASSOCIATED UTILITY COST SAVINGS

Naim Darghouth, Sr. Scientific/Engineering Assoc., Lawrence Berkeley Nat'l Lab.; Galen Barbose, Andrew Mills, and Ryan Wisler; Pieter Gagnon and Lori Bird, NREL



F6.2 IMPACT OF DEGRADATION RATES ON SOLAR PV PROJECT FINANCIALS

CO-CHAIR - Matthias Gewalt, Manager of Solar Practice, Leidos Engineering



F6.3 A RESOURCE EVALUATION MODEL FOR A SOLAR VORTEX POWER GENERATION SYSTEM

Amy Moore, Post Doctoral Research Assistant, Oak Ridge National Laboratory



F6.4 ENVIRONMENTAL COMPLIANCE CASE STUDY OF A 100 MWE SOLAR POWER PLANT

SESSION SPONSOR & CO-CHAIR - Nathan Goodman, VP and Director of Environmental Compliance, The Baldwin Group



F6.5 TRANSITION TO SOLAR OF AN INDUSTRIAL PRECINCT WITH AN EEN

Lio Hebert, PhD Candidate, Curtin University Sustainability Policy Institute



F7. HYDRO, GEOTHERMAL, & NUCLEAR

F7.1 WHAT 1,000 GEOTHERMAL HEAT PUMPS WILL DO TO YOUR UTILITY

Will Lange, Director of Sales and utility Marketing, WaterFurnace Renewable Energy



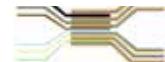
F7.2 BEYOND BASELOAD: NUSCALE DIVERSE ENERGY PLATFORM

Lenka Kollar, Director, Strategy & External Relations, NuScale Power; Chris Colbert



F7.3 GEOTHERMAL ENERGY: SHARING BEST PRACTICES FOR COMMUNITY ENGAGEMENT

Caitlin Smith, Senior Program Manager, United States Energy Association



F7.4 RENEWGeo - SOLAR AUGMENTED GEOTHERMAL ENERGY

CO-CHAIR - Mark Hauenstein, Managing Partner, UC-Won



F8. RENEWABLE ENERGY

F8.1 PV DEGRADATION MITIGATION - A COMMERCIAL PERSPECTIVE

CO-CHAIR - Matthias Gewalt, Manager of Solar Practice, Leidos Engineering



F8.2 GM'S GLOBAL RENEWABLE ENERGY SOURCING BLUE PRINT

Rob Threlkeld, Global Manager - Renewable Energy, General Motors



F8.3 SAN DIEGO STATE UNIVERSITY DEMONSTRATION & PROOF-OF-CONCEPT CENTER

John McMillan, Co-Director SD-REIN, San Diego State University



F8.4 HOW CORPORATE PPAS ARE DRIVING RENEWABLES GROWTH

Scott Nystrom, Director, FTI Consulting



F8.5 PARAMETRIC ANALYSIS FOR COST-OPTIMAL RENEWABLE ENERGY INTEGRATION

Jin Jo, Associate Professor, Illinois State University

ADVISORY BOARD TRACK G



This Track provides presentations on current technologies and strategies, for decommissioning of power plants, boiler optimization, project finance, risk management, EMIS, EHS, Health & Safety, operation and maintenance in the energy industry.

Monday | 1PM - 3PM

G1. DECOMMISSIONING OF POWER PLANTS

-  **G1.1 IN-PLACE RETIREMENT OF POWER PLANTS - KEY CONSIDERATIONS AND APPROACH**
CO-CHAIR - Jeffery Pope, Decommissioning & Demolition Services Mgr., Burns & McDonnell
-  **G1.2 CLOSURE OF THE D-AREA CCR FACILITIES AT THE SAVANNAH RIVER SITE**
Tammy DeRamo, Technical Director, Envirocon; Andrew White and Tripp Winfree
-  **G1.3 SOLVING PCB IMPEDIMENTS TO DECOMMISSIONING**
Stephen Mitchell, Senior Vice President, Weston Solutions, Inc.; J.D Groesbeck
-  **G1.4 CHANGES TO PROJECT OBJECTIVES REQUIRES CHANGES TO PROJECT SCOPE**
CO-CHAIR - Richard Cheatham, Scientist 5, APTIM; Gene Scott, Ken Beard, Andrew Schaaf
-  **G1.5 KCOM'S RIVERTON, KS EMPIRE DISTRICT ELECTRIC POWER PLANT IMPLOSION.**
Joel Spirtas, KCOM Demolition, Commercial / Industrial Demolition and Env. Remediation
-  **G1.6 THE UTILITIES INDUSTRY'S GREATEST CHALLENGE RIGHT NOW - DEMOLITION!**
CO-CHAIR - Tim Barker, D4 Program Director, AECOM

Monday | 3:30PM - 5:30PM

G2. PLANT PERFORMANCE/CHALLENGES

- G 2.1 OPTIMIZATION OF PLANT PERFORMANCE USING MACHINE LEARNING**
Patrick Bangert, CEO, algorithmica technologies Inc.
-  **G2.2 DISRUPTION IN THE UNDERGROUND: INNOVATIVE UTILITY VAULT REPLACEMENT**
CO-CHAIR - Sean Gesell, Manufacturer's Rep, Armorcast Products Company
-  **G2.3 CONNECTICUT UTILITIES TURNKEY SOLUTION TO BENCHMARKING 95% OF THE STATE**
Sheri Borrelli, Senior Business Manager, United Illuminating; Samantha Sojka, Eversource Energy
-  **G2.4 WIND EFFECTS ON AIR-COOLED CONDENSERS: WIND-TUNNEL 2-D FLOW FIELDS**
Ryan Parker, Project Engineer, CPP Wind Engineering
-  **G2.5 THE MULTI-SITE HABITAT CONSERVATION PLAN STRATEGY**
John Richter, Natural Resources Biologist, Black & Veatch Corporation

Tuesday | 7:30AM - 9:30AM

G3. OPERATIONS & PLANT PERFORMANCE

-  **G3.1 EFFECTIVE OPERATOR TRAINING WITH UNISIM OPERATIONS**
Pete Edwards, Vice President, Industrial Design Solutions, Inc.
-  **G3.2 INCREASE EFFICIENCY AND REDUCE DOWNTIME WITH DRY ICE CLEANING**
David Watson, Director, Business Development - Energy and Services, Cold Jet, LLC
-  **G3.3 SF6 EMISSIONS FROM GAS INSULATED SWITCHGEAR (GIS)**
CO-CHAIR - Yasmeen Sultana, Principal, Stantec; Jonya Bлахut
-  **G3.4 DRIVING CULTURAL CHANGE-OPERATIONAL EXCELLENCE THRU OVATION SIMULATION**
Rob Barden, Technical Training, Platte River Power Authority; Johel Comas
-  **G3.5 POWER GENERATION EXCELLENCE THROUGH DATA-DRIVEN INSIGHT**
Mark Scherluebbe, Senior Manager, Ernst & Young; Pat Stiff, WEC Energy Group

Tuesday | 10AM - 12PM

G4. UTILITY DATA MANAGEMENT

-  **G4.1 BETTER MANAGEMENT OF THE COVERSACTIONS ABOUT YOUR DATA**
David Gloski, President, xOverTime; Michael Lehane
-  **G4.2 CONTINUOUS COMPLIANCE MANAGEMENT FOR UTILITY OPERATIONS**
CO-CHAIR - Adam Jackson, Managing Consultant, Trinity Consultants; Colt Sommers, Randall Nelson
-  **G4.3 SPREADING AN EHS CULTURE USING SIMPLIFIED SOFTWARE AND DATA ANALYTICS**
John Niemoller, President, Perillon Software
-  **G4.4 HIGH-FREQUENCY DATA COLLECTION AND ENVIRONMENTAL ACCOUNTING**
SESSION SPONSOR & CO-CHAIR - Kevin Jurica, Senior Solution Manager, Sphera Solutions
-  **G4.5 LEVERAGING TOMORROW'S TECHNOLOGY FOR EHS COMPLIANCE TODAY**
James Jensen, Director - Customer Success, Enablon
-  **G4.6 IMPROVED ENVIRONMENTAL DATA WORKFLOWS FOR ENERGY COMPANIES**
Taylor Ziolkowski, Sales Representative, EarthSoft, Inc.; Emily Mulford, Daniel Alexander, Mitch Beard, Mary Ann Parcher

Tuesday | 1PM - 3PM

G5. PROJECT FINANCE, RISK MGMT

-  **G5.1 HEALTH RISK: KEEPING YOUR POWER PROJECT AFLOAT DURING THE EARLY STAGES**
Joseph Sabato, Senior Scientist, Epsilon Associates
-  **G5.2 MANAGING CONTRACTOR CHANGE WITH UPFRONT AND AGREED UPON RATES**
Brendan O'Brien, Project Engineer, Burns and McDonnell; Jeff Pope
-  **G5.3 A CAPITAL PROJECT RISK MANAGEMENT APPROACH**
CO-CHAIR - Carlos Mendizabal, President, ARETE, Lesli Del Rio
-  **G5.4 INVESTMENT STRATEGIES FOR ENV. MKTS UNDER CURRENT STATE OF NEW REGS**
Nedia Miller, Principal, MILLER CTA
-  **G5.5 HOW TO EFFECTIVELY TRANSFER ENVIRONMENTAL LIABILITIES AND POST-CLOSURE OBLIGATIONS DURING POWER PLANT DECOMMISSIONING**
Doug Willett, Executive Vice President, Environmental Liability Transfer, Inc.

G6. OPERATIONS & OPTIMIZATION

G6.1 A THREE YEAR INTERNATIONAL ENERGY CHALLENGE

Steven Driver, Global Energy Manager, Sanofi



G6.2 OPERATIONAL EFFICIENCY GAINS THROUGH GEOSPATIAL TECHNOLOGY ADVANCES

SESSION SPONSOR & CO-CHAIR - Randy Rhoads, Geospatial Industry Manager, Utilities, Harris Corporation



G6.3 COMBINED CYCLE CYCLING - OPTIMIZING THROUGH BOP IMPROVEMENTS

Kyle Kropf, Engineering Manager, Power Generation Svcs, Black & Veatch Corporation



G6.4 FLUE GAS HUMIDITY MEASUREMENT BENEFITS FOR POWER PLANT APPLICATIONS

Jeff Bossong, COO, H2O LLC

G7. HEALTH & SAFETY

G7.1 FIT-FOR-DUTY TESTING IN THE ENERGY INDUSTRY

Richard Bunch, CEO, WorkSaver Systems



G7.2 LAYERING DO'S AND DON'TS FOR ARC FLASH PROTECTION

Derek Sang, Technical Training Manager, Bulwark Protective Apparel



G7.3 SAFE AND EFFICIENT COMBUSTION CONTROL IN GAS-FIRED BOILERS / TURBINES

Barbara Marshik, Power Market Segment Mgr, Servomex; Stephen Firth, Josh Christian



G7.4 CREATING AN OPERATING CULTURE FOR PREDICTABLE, CONSISTENT PERFORMANCE

CO-CHAIR - Peter Bridle, Managing Partner, Pegasus Risk Management



G7.5 EXECUTION MEASUREMENTS TO INCREASE SAFETY PERFORMANCE

CO-CHAIR - David Klocek, Director, Solutions Consulting, Sphera Solutions

ADVISORY BOARD TRACK H



This Track provides presentations on current technologies and strategies concerning CCS, CCR, ELG and coal ash in the energy industry.

H1. CCR & ELG COMPLIANCE MGMT.

H1.1 NOVEL APPROACHES TO ELG COMPLIANCE

Tyler Cromey, Research Engineer, Southern Company Services



H1.2 DESIGNING A PERFORMANCE TEST PROGRAM FOR A CARBON CAPTURE PROCESS

Rick Krenzke, Project Director, TRC



H1.3 STATES VS FEDS: WHO HAS THE BALL ON WATER AND ASH COMPLIANCE?

CO-CHAIR - Jason Eichenberger, Assoc. Civil Engineer, Burns and McDonnell



H1.4 USE OF SLURRY WALL SYSTEMS TO SUPPORT CCR CLOSURE & CORRECTIVE ACTION

Dale Evans, Senior Director of Technology, Remedial Construction Services; Kate Whysner



H1.5 MASS DISCHARGE METRICS TO SUPPORT REMEDY SELECTION AT COAL ASH SITES

Stephanie Jones, Environmental Engineer, Geosyntec Consultants



H2. COAL ASH, CCR & FGD

H2.1 GEOCHEMICAL ANALYSIS OF COAL ASH CONSTITUENTS IN DRINKING WATER

Paula Panzino, Technical Expert, Haley & Aldrich, Inc.; Jacob Chu, Lisa Bradley



H2.2 RULES SHIFT AMERICA'S RESOURCE ABUNDANCE TO SHORTFALL

Danny Gray, P.E., Executive Vice President, Charah, LLC



H2.3 HOW DENSE SLURRY TECHNOLOGY CAN HELP ACHIEVE ZERO LIQUID DISCHARGE

CO-CHAIR - Dale Timmons, Program Manager, NAES Corporation



H2.4 REQUALIFYING FLY ASH FOR BENEFICIAL USE/SALE USING AMENDED SILICATES

Steve Baloga, P.E., VP Engineering and Environmental Services, Novinda Holdings, Inc.



H2.5 ADVANTAGES OF ZLD COMPLIANT DENSE SLURRY ASH DISPOSAL SYSTEMS (DSS)

Tobias Lutz, Product Manager, Putzmeister Solid Pumps GmbH; Uli Freitag



H2.6 RECLAIMING AND RECYCLING COAL COMBUSTION RESIDUALS FOR BENEFICIAL USE

CO-CHAIR - Bill Fedorka, Executive Director, Advanced Technology and Projects, SEFA



H3. CCR RULE

H3.1 GROUNDWATER MONITORING AT CCR FACILITIES: NEXT STEPS

CO-CHAIR - Tammy Rauen, Senior Engineer, Golder Associates; Craig Schuettpelz, Todd Stong



H3.2 CCR DATA MANAGEMENT: TOOLS TO AUTOMATE DATA COLLECTION & ANALYSIS
Christine Lew, Manager, Environ. Software/Data Mgmt Svcs, Tetra Tech, Michael Ungs



H3.3 CCR RULE LOCATION RESTRICTION FUNDAMENTALS & STRATEGIES

CO-CHAIR - Eric Nelson, Vice President, Senior Project Manager, SCS Engineers



H3.4 SITING & DESIGN OF NEW UWLS AND GWM SYSTEMS PURSUANT TO THE CCR RULE

Gary Pendergrass, Principal Geological Engineer & Environmental Group Leader, GeoEngineers, Inc.



H3.5 HONEY I SHRUNK THE POND: CONSIDERATIONS FOR TANK BASED LOW VOLUME WWT

Dave Guinta, Chemical Engineer, Burns & McDonnell; Jared Troyer, Duke Energy

H3.6 IMPLICATIONS AND STRATEGIES FOR THE CCR RULE LOCATION RESTRICTIONS

Thomas Dehlin, Senior Engineer, Fossil Power Tech., Sargent & Lundy; David Nielson

H4. CCR & ELG

H4.1 CCR INDUSTRY - BENCHMARKING THE INDUSTRY TO PREPARE FOR CHANGE

Mark Rokoff, Vice President, AECOM



H4.2 EVALUATION OF CCR GROUNDWATER MANAGEMENT STRATEGIES

CO-CHAIR - John Hesemann, Regional Environmental Practice Mgr, Burns & McDonnell; Wayne Weber



H4.3 LESSONS LEARNED FROM ELG COMPLIANCE PROJECTS

CO-CHAIR - Kevin McDonough, Vice President of Sales and Marketing, United Conveyor Corporation



H4.4 ENGINEERED IMPOUNDMENTS TO MANAGE CCRs AND LOW VOLUME WASTEWATER

Craig Schuettpelz, Senior Project Engineer, Golder Associates, Ryan Shedivy, Todd Stong, Golder Associates; Jennifer Charles, Great River Energy



H4.5 OPERATE LIKE THERE IS NO TOMORROW WITH CCR UNIT CLOSURES IN MIND

Jason Pokorny, Senior Project Manager, Haley & Aldrich



H4.6 A DETAILED OVERVIEW OF THE KLEENWATER PILOT SYSTEM FOR ELG COMPLIANCE

Mark Pastore, VP Technology, KLeenWater

H5. COAL ASH, CCR & CCP

H5.1 PURSUING 100% CCP BENEFICIAL USE... AND BEYOND

Neal Kochis, Senior Project Manager, Haley & Aldrich



H5.2 CCR LANDFILL CHALLENGES FROM SITING THROUGH CONSTRUCTION

Gabe Lang, Program Manager, Senior Engineer, AECOM; Dave Skeggs, Rachel Combs



H5.3 PROTECTING THE "CLOSED LOOP" IN WET BOTTOM ASH SYSTEMS

CO-CHAIR - Paul Pigeon, Associate, Golder Associates



H5.4 RESEARCH ON DECARBONIZATION OF FLY ASH BY TRIBOELECTRIC SEPARATOR

Youjun Tao, Professor, China University of Mining & Technology; Ling Zhang, Zhang Weichi, Xue Yawen



H5.5 A CLOSURE IN-PLACE SUCCESS, WHILE FACILITATING FUTURE SOLAR FACILITY

Jason Fifarek, Senior Associate, Sargent & Lundy; David Jolivet, Sargent & Lundy; William Skaliitzky, Jeffery Macted, Alliant Energy

H5.6 MICROWAVE-ASSISTED RECOVERY OF REES FROM COAL COMBUSTION PRODUCTS

Megan Macala, Research Scientist, AECOM; Elliot Roth, AECOM; Tracy Bank, AECOM; Phillip Tinker, AECOM; Bret Howard, U.S. Dept. of Energy NETL; Evan Granite, U.S. Dept. of Energy NETL



H6. FGD, ELG & CCR

H6.1 ADVANCES IN NON-BIOLOGICAL POWER WASTEWATER TREATMENT

Charles McCloskey, Industrial Wastewater Business Manager, Evoqua Water Technologies



H6.2 BOTTOM ASH OPTIONS FOR ELG AND CCR COMPLIANCE

CO-CHAIR - Gerald Long, Manager, North America, United Conveyor Corporation



H6.3 RESPONSIBLE MANAGEMENT OF FGD BYPRODUCTS

CO-CHAIR - Keith Ambrose, Chemical Engineer, Duke Energy



H6.4 OPTIMIZING FGD SYSTEMS FOR MERCURY CONTROL AND ELG WASTEWATER

Gary Blythe, Principal Process Engineer, AECOM; Katherine Dombrowski



H6.5 AN INNOVATIVE FINAL CLOSURE AND REVETMENT TECHNOLOGY FOR CCR

Paul O'Malley, Vice President, Sales, Watershed Geo



H7. CCS

H7.1 POLICY PARITY FOR CARBON CAPTURE

CO-CHAIR - Heather Greenley, Program Coordinator, USEA



H7.2 THE U.S. DEPARTMENT OF ENERGY'S MAJOR CCS DEMONSTRATION PROJECTS

CO-CHAIR - Thomas Sarkus, Industrial Partnerships Manager, National Energy Technology Laboratory



H7.3 A METHOD FOR PREDICTING CCR LANDFILL LEACHATE GENERATION VOLUME

Cedric Ruhl, Senior Engineer, Wood Group PLC.



H7.4 FTIR MONITORING SYSTEM PROVIDES TIGHTER CONTROL ON EMISSIONS FROM C

Jim Cornish, Sales & Support Manager, Gasmet Technologies



H7.5 IMPROVED ECONOMICS FOR CARBON CAPTURE RETROFITS AT EXISTING PC PLANTS

Robert James, General Engineer, US DOE NETL; Eric Grol, Jeff Hoffmann, Travis Shultz, US DOE NETL; Eric Lewis, Leidos



H8. RARE EARTH ELEMENTS

H8.1 RECOVERY OF RARE EARTH METALS FROM COAL COMBUSTION RESIDUALS

Joseph Laurino, President, Periodic Products, Inc.; Zachary Huba



H8.2 TEA OF BIOLOGICAL PROCESS FOR REE RECOVERY FROM END-OF-LIFE MATERIALS

CO-CHAIR - David Reed, Research Scientist, Idaho National Laboratory; Y. Jiao, D. Park, A. Brewer, S. Singer, W. Bourcier LLNL, V. Thompson, Y. Fujita, M. Crain-Zamora, M. Yim, M. Jindra, V. Nguyen, INL; H. Jin, M. Gupta, J. Sutherland, Purdue; L. Ho, BioReactor Sci, S. Woods, NTEC; L. Lammers, UC Berkeley



H8.3 RARE EARTH ELEMENTS IN COAL AND COAL COMBUSTION PRODUCTS

Elliot Roth, Research Engineer, NETL/AECOM; Megan Macala, AECOM/NETL; Ronghong Lin, ORISE; Tracy Bank, AECOM/NETL; Bret Howard, NETL; Evan Granite, NETL; Yee Soong, NETL



H8.4 DETERMINATION OF RARE EARTHS IN COAL COMBUSTION BY-PRODUCTS

CO-CHAIR - Evan Granite, Research Chemical Engineer, USDOE / NETL; Elliot Roth -NETL, Tracy Bank - NETL, Mary Anne Alvin - NETL, Ken Ladwig - EPRI



H8.5 RECOVERY OF RARE EARTH ELEMENTS FROM NORTH DAKOTA LIGNITE COAL

Daniel Laudal, Manager-Major Projects, Inst. for Energy Studies, University of North Dakota;



ADVISORY BOARD TRACK I



This Track provides presentations on current technologies and strategies, concerning water and wastewater management, including 316 (b), cooling towers, FGD, ZLD, coal ash, and remediation in the energy industry.

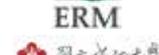
Monday | 1PM - 3PM

11. WASTEWATER MANAGEMENT

-  **11.1 PARTNERING WITH BIG INDUSTRY TO REDUCE NUTRIENT POLLUTION**
Sarah Gilstrap, Senior Environmental Scientist, Burns & McDonnell Engineering Company
-  **11.2 CCR WATER SAMPLING AND ANALYSIS DATA QUALITY ISSUES**
CO-CHAIR - David Thal, Principal Chemist, Environmental Standards, Inc.; Vitale, Gable, Dicken, Martin
-  **11.3 A PROMISING ASH POND WATER TREATMENT METHOD UTILIZING FLYASH**
Lisa Andrews, Environmental Engineer and Tom Radue, Vice President, Barr Engineering; Jeong-Yun Won, Barr Engineering; Maggie Skelton, Minnesota Power
-  **11.4 EFFECTIVE CLARIFICATION TO MEET TIGHT TRACE METAL LIMITS**
SESSION SPONSOR & CO-CHAIR - Dennis Fink, Water for Power Lead, Jacobs; Thomas E. Higgins and Mary McCloud
-  **11.5 THERMAL EVAPORATIVE WASTEWATER TREATMENT: SCALE CONTROL & MGMT**
Todd Whiting, Sr. VP Power Generation Operations, Purestream Services

Monday | 3:30PM - 5:30PM

12. WATER TREATMENT & FLOOD MITIGATION

-  **12.1 A PARADIGM SHIFT IN WATER TREATMENT**
Aaron Morrison, President & CEO, Chaoticwaters, Inc.
-  **12.2 WATER UNDER THE BRIDGE - DETECTION & CONTAINMENT OF LEAKS & SPILLS**
Chris Chase, Environmental Systems Manager, InterOcean Systems, LLC; Seung C. Lee, Shinhan Technologies Co., Ltd.
-  **12.3 ALTERNATE SOURCE DEMONSTRATION USING MULTIVARIATE STATISTICS**
CO-CHAIR - Natasha Hausmann, Senior Scientist, ERM; Brian Bjorklund
-  **12.4 CAPACITIVE DEIONIZATION OF A METAL-CONTAMINATED UNDERGROUND WATER**
H. Paul Wang, Professor, National Cheng Kung University, Chong, Nat'l Cheng Kung Univ; J. Wang, Univ. of Cal, San Diego; Wei, Tunghai University, Lin, National Tsing-Hua University
-  **12.5 FLOOD MITIGATION MEASURES - WHEN, WHERE, AND HOW**
Jeff Roushey, Senior Product Engineer, ILC Dover LP; Steve Brady
-  **12.6 NEW YORK UNIVERSITY COMMITMENT AND INITIATIVES FOR SUSTAINABILITY**
Bapanaiah Penugonda, Associate Professor/Group Practice Director, New York University Dentistry; P. Buccigrossi, D. Jung-Hyun, K. Baron

Tuesday | 7:30AM - 9:30AM

13. 316(b)

-  **13.1 INTER-YEAR VARIABILITY IN IMPINGEMENT AND ENTRAINMENT RATES**
Greg Seeger, Chief Ichthyologist, EA Eng.; J. Rager & J. Vondruska, EA; D. Dixon, EPRI
-  **13.2 PEER REVIEWER IDENTIFICATION, SELECTION AND MANAGEMENT**
CO-CHAIR - Christopher Wiggins, Sr. Aquatic Scientist, Burns & McDonnell
-  **13.3 USE OF CFD TO OPTIMIZE A FISH RETURN DISCHARGE LOCATION**
Nathaniel Olken, Principal Engineer, Alden Research Laboratory
-  **13.4 A CONSORTIUM APPROACH TO 316(B) FOR FACILITIES ON THE MISSISSIPPI RIVER**
Kurtis Schlicht, Technical Director, Environmental Resources Management
-  **13.5 GREEN ALTERNATIVES FOR WATER SUPPLY DEVELOPMENT**
Henry Hunt, Sr. Project Manager, Layne-Ranney
-  **13.6 CASE STUDY OF RETROFITTING THE DAIRYLAND MADGETT PLANT INTAKE**
CO-CHAIR - Brett DeRousse, National Account Manager, Hydrolox; Mike McCullick; Dairyland Power

Tuesday | 10AM - 12PM

14. FGD WASTEWATER & ZLD

-  **14.1 INNOVATIVE FGD WASTEWATER TREATMENT AND ZLD OPTIONS**
Malcolm Man, Executive Vice President, Saltworks Technologies, Inc.; Ben Sparrow
-  **14.2 SELENIUM: HOW SULFUR'S LITTLE BROTHER COULD AFFECT WASTEWATER TREATMENT**
CO-CHAIR - Nick Nelson, Vice President, Barr Engineering
-  **14.3 ENTRAINMENT STUDIES AT THE ALLIANT EDGEWATER GENERATING STATION ON LAKE MICHIGAN**
CO-CHAIR - Christopher Wiggins, Sr. Aquatic Scientist, Burns & McDonnell
-  **14.4 USING BRINE ENCAPSULATION TECH. TO MANAGE POWER PLANT WASTEWATER**
Clark Harrison, Director of Business Development, Purestream Services; Todd Whiting
-  **14.5 WATER REUSE - ZERO LIQUID DISCHARGE IN A COMBINED CYCLE PLANT**
Kenneth Chen, Process Specialty Engineer, Fluor Enterprises; Americus Mitchell, Joe Guida
-  **14.6 COMBINED BRINE CONCENTRATION - SOLIDIFICATION FGD BLOWDOWN TREATMENT**
Lanny Weimer, Market Dev./Global Product Mgr, SUEZ Water Technologies & Solutions

Tuesday | 1PM - 3PM

15. FGD WASTEWATER & ELG

-  **15.1 PILOTING FOR SUCCESS**
Krystal Perez, Industrial Water-Power Practice Lead, Jacobs; Tim Harrison, Heyward Suber; Jeffrey Tudini
-  **15.2 FO TECHNOLOGY FOR FGD WASTEWATER PRODUCES ELG COMPLIANT STREAM**
CO-CHAIR - Margarita Luis, Vice President - Inside Sales, Fluid Technology Solutions, Inc.; Fabian Solberg; Eisenmann
-  **15.3 NEW NANO-FILTRATION TECHNOLOGY FOR TREATMENT OF FGD WASTEWATER TO MEET ELG**
Jonathan Chen, Process Engineer, BKT
-  **15.4 FGD WASTEWATER TREATMENT**
Mike Preston, Industrial Water Treatment Section Leader, Black & Veatch
-  **15.5 INTEGRATED APPROACH TO PLANT WATER AND ELG**
SESSION SPONSOR & CO CHAIR Jim Dougherty, President - Environmental, Babcock Power
-  **15.6 CUSTOM FIBERGLASS REINFORCED PLASTIC PIPING APPLICATIONS IN WET FGD SLURRY AND WASTEWATER PROCESSING**
Kira Kaleps, Sales & Business Development Manager, RPS Composites

Tuesday | 3:30PM - 5:30PM

16. 316(b), ELG, WASTEWATER

16.1 LOW VOLUME WASTEWATERS: COLLECTING DATA FOR CRITICAL DECISIONS

CO-CHAIR - Karen Burchardt, Associate Environ. Engineer, Burns and McDonnell, Douglas Randall



16.2 REAL TIME ORGANIC DISCHARGE CONTROL FOR FGD WASTEWATER

Amanda Scott, Industrial & Environmental Mgr, SUEZ - Water Technologies & Solutions



16.3 ONLINE MULTI-METALS WATER ANALYZER FIELD DEMONSTRATION

Troy Pittenger, R&D Director, Cooper Environmental Services; Brian Edge



16.4 SECTION 316(A) COMPLIANCE ON LARGE FRESHWATER RIVERS

Christopher Wiggins, Sr. Aquatic Scientist, Burns and McDonnell



16.5 LARGE DIAMETER FRP EQUIPMENT FOR CORROSION RESISTANT SERVICE

Tom Rhone, Regional Sales Manager, Ershigs, Inc., Denali Companies

Wednesday | 7:30AM - 9:30AM

17. 316(b), COOLING & WASTEWATER

17.1 ONLINE SELENIUM SPECIATION ANALYSIS TO AID ELG COMPLIANCE PROGRAMS

Vladimir Dozortsev P.h.D., Development Manager, Aqua Metrology Systems Ltd.



17.2 EFFECTS OF COOLING WATER INTAKES ON FEDERALLY LISTED SPECIES

Brandon Johnson, Sr. Project Manager, Stantec



17.3 PHOTODEGRADATION OF IBUPROFEN BY G-C3N4/BI2WO6/RGO UNDER VISIBLE LIGHT

Shou-Heng Liu, Professor, National Cheng Kung University

17.4 FAILURE POTENTIAL OF RETROFITTED VFD IN COOLING TOWER

Sarah AlKanderi, Research Assistant, Kuwait Institute for Scientific Research, Al-Bassam

Wednesday | 10AM - 12PM

18. WATER SUPPLY & SECURITY

18.1 SPECIAL TOXICOLOGICAL CONSIDERATIONS FOR CCR CONSTITUENTS

CO-CHAIR - Lisa Bradley, Principal Toxicologist, Haley & Aldrich



18.2 IT'S NOT JUST WATER – THE SCIENCE AND IMPORTANCE BEHIND COLLECTING REP

CO-CHAIR - Michael McMenus, Sr. Process Specialist, Kiewit Engineering



18.3 RESILIENCE & ADAPTATION: EVALUATING RISKS TO THE YUKON RIVER WATERSHED

Lawrence Duffy, Professor, University of Alaska Fairbanks; KL Dunlap, BH Dainowski



18.4 ENERGY EFFICIENCY IN WATER/WASTEWATER SYSTEMS

Guru Navaneetham, Engineering Supervisor, Lincus, Inc.; Sabarish Vinod and Jorj Nofal

ADVISORY BOARD



This Track provides presentations on current technologies and strategies, concerning energy storage, batteries, charging, EV, and PHEV

Monday | 1PM - 3PM

J1. EV CHARGING HYBRID & FLEETS

J1.1 HYBRIDIZATION OF COMMUTER PASSENGER RAIL

Dave Cook, CTO, Rail Propulsion Systems



J1.2 ELECTRIFYING FLEETS: CAN IT BE DONE?

CO-CHAIR - Glenn Carver, VP of Sales, Green4U Technologies, Inc.; Tim Echols, State of Georgia



J1.3 LARGE BATTERY ENERGY STORAGE: STATIONARY AND V2G

Paul Scott, VP - Advanced Technologies, TransPower; Joshua Goldman



J1.4 MODELING ENERGY-SAVING FREIGHT DELIVERY SCENARIOS

Amy Moore, Postdoctoral Research Associate, Oak Ridge National Laboratory



J1.5 EV TO GRID INTEGRATION - HOW IT WORKS. WHY IT MATTERS.

Preston Roper, Chief Marketing & Operating Officer, eMotorWerks



J1.6 DRIVE ON SUNSHINE WITH ENVISION SOLAR'S EV ARC

Lucia Asbury, Marketing Manager, Envision Solar



Monday | 3:30PM - 5:30PM

J2. BATTERY, ENERGY STORAGE & TRANSPORTATION

J2.1 HEAVY RAIL WAYSIDE ENERGY STORAGE SYSTEMS FOR PASSENGER AND FREIGHT

Brian Yanity, Research Engineer, Rail Propulsion Systems



J2.2 ELIMINATING THE HARM OF BUNDLED-COST OR BUNDLED-BENEFIT CAR PARKING

CO-CHAIR - Michael Bullock, Transportation Advisor, Evolved Wireless, Inc.



J2.3 OPTIMIZING POWER PLANTS USING ENERGY STORAGE SYSTEMS

Dalia El Tawy, Director, Thermal Power Solutions, Siemens Energy Inc.

J2.4 LITHIUM ION BATTERY SAFETY MONITORING

Steve Cummings, Sr. Applications Engineer, Nexceris; Nick Frank, Scott Swartz, William Dawson



J2.5 ROLLING ENERGY STORAGE-ELECTRIC VEHICLES * CHARGING

Kevin Wood, Transportation Specialist, Center for Sustainable Energy



J2.6 HIGH UTILIZATION LOCAL ACCESS, (HULA) DEPLOYING THE TRANSPORTATION AS A SERVICE MODEL

Peder Norby, and Angus Clark, CEO HulaCar,



J2.7 ELECTRIFYING THE FUTURE: ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

Nicole Lewandowski, Sales Manager, SemiConnect



J3. ENERGY STORAGE SYSTEMS



J3.1 IMPLICATIONS DUE TO THE ABSENCE OF USE CASE TESTING STANDARDS
Cory Schaeffer, Senior Consultant, Leidos Engineering



J3.2 THE VALUE OF OPTIONALITY IN DEPLOYING GRID STORAGE
Co-Chair - Max Henrion, CEO, Lumina Decision Systems; Kimberly Mullins



J3.4 RECENT ENERGY STORAGE PROJECTS COMPLETED AT SOUTHERN CALIF. EDISON
Jennifer Lee, Principal Manager, Emerging Technology & Valuation (ET&V), Southern California Edison



J3.5 PLANNING FOR INTELLIGENT DISPATCH OF ESS
John H. Holmes, Industry Alliance Officer, University of California San Diego



J3.6 SOLAR BATTERY PACK - DEMAND SIDE MANAGEMENT PROGRAM
Jimmy Kim, CEO, SolarBox®, Irvine, Ca

J4. BATTERY PACK DSM GRID & STORAGE



J4.1 CHALLENGES IN LIB MATERIAL DEVELOPMENT FOR ENERGY STORAGE APPLICATIONS
CO-CHAIR - Dee Strand, Chief Scientific Officer, Wildcat Discovery Technologies



J4.2 OPERATIONAL CHANGES ON LIFE AND PERFORMANCE
Taylor Kelly, Director of Energy Storage, Intertek



J4.3 MODELING AND EVALUATING HYBRID SOLAR-HYDROGEN FUEL CELLS
Ehsan Kamel, Assistant Professor, New York Institute of Technology; Nicolas Vizcaino



J4.4 DEPLOYMENT OF EOS' ZNYTH BATTERY & REAPING ECONOMIC BENEFITS IN CA
Philippe Bouchard, SVP, Business Development & Marketing, Eos Energy Storage



J4.5 EV CHARGING STATIONS IN SAN DIEGO BUILDINGS
David Gatcha, Relations Ambassador/Multifamily Properties, Verdani Partners



J4.6 TESLA POWER WALL - FEASIBILITY WITH DEMAND CHANGES
John Perkins, Perk Solar

J5. EV, STORAGE & ONSITE POWER



J5.1 MAINTAINING SYSTEM VOLTAGE WITH BATTERY STORAGE
Ashley Johnson, Business Development Director, GP Strategies; Gary Tindall, AES Corporation; Craig Dalziel



J5.2 ENERGY GENERATION AND STORAGE USING FLOATING PV PLANT ON LAKE MEAD
CO-CHAIR - Ehsan Kamel, Assistant Professor, New York Institute of Technology; Peter Baron



J5.3 TRUE LONG DURATION ENERGY STORAGE
Matthew Barnett, Business Development Director, Highview Power



J5.4 C-FREE HYDROGEN FUEL EFFICIENCY STORED AND DELIVERED FOR TRANSPORT
Bill Leighty, Director, The Leighty Foundation; Jack Swearingen, David White, Matthew Kern, WindToGreen, LLC



J5.5 LINKER-CONTROLLED POLYMERIC PHOTOCATALYST FOR HIGHLY EFFICIENT HYDROGEN
Yiou Wang, PhD Student, University College London



J5.6 ENABLING LARGE SCALE RENEWABLES IN THE WESTERN U.S.
Robert Schulte, Principal, Schulte Associates; Fredric Fletcher

J6. ENERGY STORAGE TECHNOLOGIES



J6.1 ENERGY STORAGE < \$ 1.00 / KWH CAPEX: HYDROGEN & AMMONIA FUELS
CO-CHAIR - Bill Leighty, Director, The Leighty Foundation



J6.2 LIFE AND SAFETY OF LITHIUM-ION
Taylor Kelly, Director of Energy Storage, Intertek



J6.3 ENERGY STORAGE AT GROUNDWATER BANKS
Mark Beuhler, General Manager, Willow Springs Water Bank; Lon W. House, Water and Energy Consulting



J6.4 HYDROGEN AS ENERGY STORAGE MEDIUM AND FUEL FOR SIGT
Joshua Partheepan, Assistant Professor, West Texas A&M University, Emily Hunt



J6.5 ECONOMIC DISPATCH OF LIQUID AIR POWER & STORAGE
William Conlon, President, Pintail Power LLC;

J6.6 INCREASE GRID RESILIENCY AND COMBAT EXPENSIVE PEAK DEMAND CHARGES
Carl Mansfield, General Manager & Founder, Sharp's Energy Systems and Services Group

Workshop 3 - Room 3:
**Fundamentals and Practical Aspects of
Waste Heat Recovery**
Wednesday March 7, 2018 (7:30 to 4 pm)

Clement Joly, SoftInWay
Email: Clement.joly@Softinway.com
Phone: 316-680-0839



This workshop will provide engineers working in the energy and utility space with a better understanding of what waste heat recovery systems are in the context of nuclear, fossil and renewable energies. The workshop will cover everything from assessment, opportunities, development and challenges for waste to energy processes to fluid properties and selection while diving into thermodynamic cycles and design of waste heat recovery system components using both theoretical and real-life examples.

TO REGISTER FOR THIS WORKSHOP

CONTACT : info@euec.com

COST \$300 for EUEC registrants

EUEC2018 EXHIBIT FLOOR PLAN & MEETING ROOMS

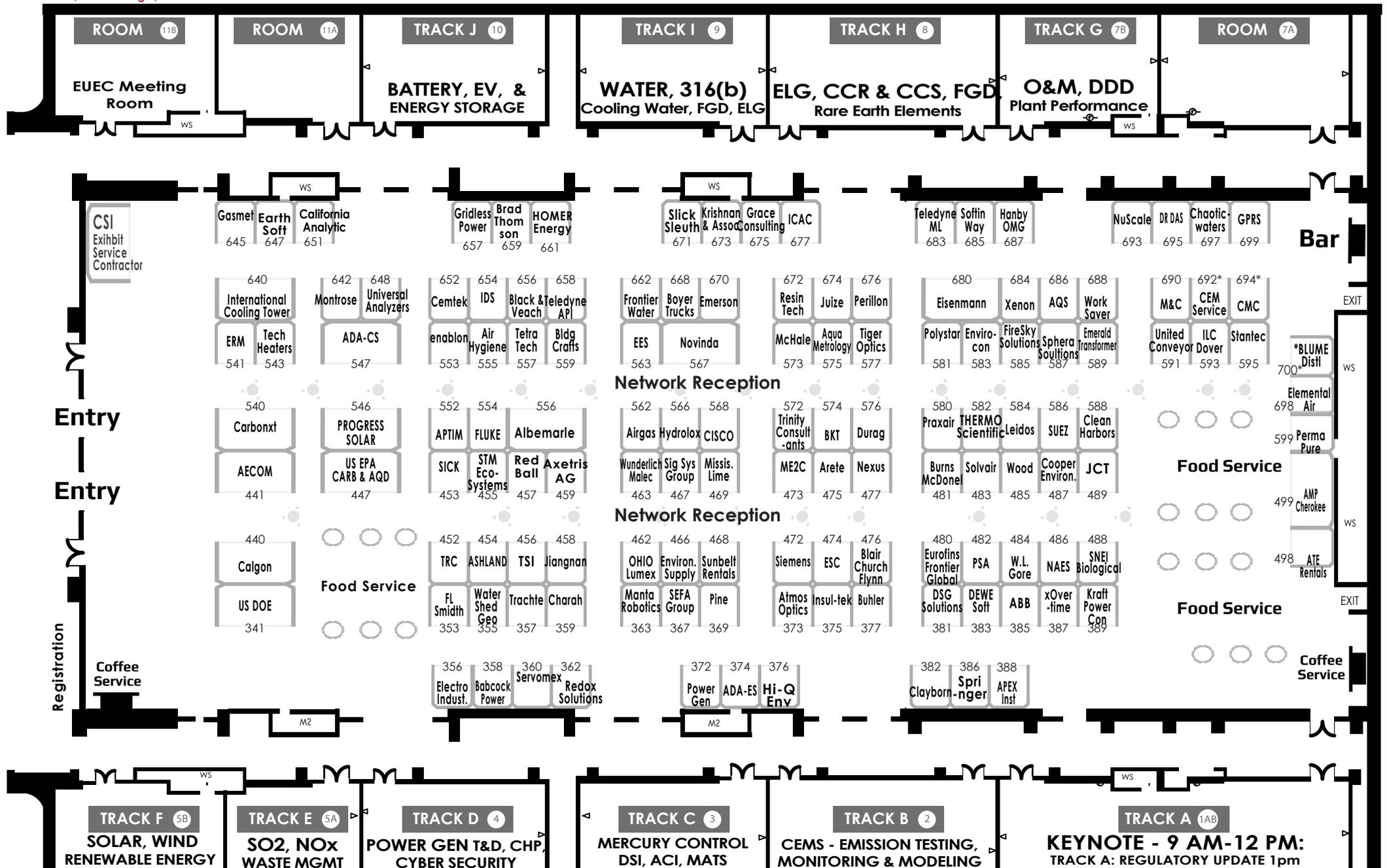


EXHIBIT BOOTH & SPEAKER PACKAGE (\$5,000)

1. One 10' x 8' exhibit booth, 6' table, 2 chairs, waste basket & carpet
2. One free speaker or exhibitor registration to EUEC 2018
3. Network with 1,700+ delegates at (11) receptions held in exhibit hall
4. Marketing to mailing list of 50k Professionals
5. Pre and post conference attendee list
6. Exhibitor Advertisement in program, web, and newsletter
7. Tickets to Welcome Reception Sunday 3/4/18 (5 pm to 7 pm)
8. VIP rate for all clients and guests

EXHIBIT SHOW HOURS

Sun. Setup	12 pm to 6 pm
Mon. Mar 5	12 pm to 6 pm
Tues. Mar 6	9 am to 6 pm
Wed. Mar 7	9 am to 12 pm
Breakdown	12 pm to 4 pm

NETWORK RECEPTIONS located in Exhibit Hall

AM Breaks	9:30 am to 10 am
Lunches	12 pm to 1 pm
PM Breaks	3 pm to 3:30 pm
Receptions	5 pm to 6 pm

Not to Scale

Booth Number - Exhibiting Companies

- | | | |
|----------------------------------|-------------------------------------|---------------------------------|
| 385 ABB, Inc. | 670 Emerson | 546 Progress Solar |
| 547 ADA Carbon Solutions | 553 Enablon | 457 Red Ball Technical Gas |
| 374 ADA-ES | 583 Envirocon | 362 Redox Solutions |
| 498 Advanced Test Equipment | 563 Environ. Energy Svcs. (EES) | 672 ResinTech |
| 441 AECOM, Inc. | 466 Environmental Supply Co. | 367 SEFA Group, Inc, The |
| 555 Air Hygiene | 474 Environmental Systems(ESC) | 360 Servomex |
| 686 Air Quality Services | 541 ERM | 453 SICK |
| 562 Airgas | 480 Eurofins Frontier Global | 472 Siemens Industry, Inc. |
| 556 Albemarle | 585 FireSky Solutions | 467 Signature Systems Group |
| 499 AMP Cherokee | 353 FL Smidth | 671 Slick Sleuth (InterOcean) |
| 388 Apex Instruments | 554 Fluke Corporation | 488 SNEI Biological |
| 552 APTIM | 662 Frontier Water Systems | 685 SoftInWay |
| 575 Aqua Metrology Systems | 645 Gasmet | 483 SOLVAir Solutions |
| 475 Arete | 699 GPRS | 587 Sphera Solutions |
| 454 Ashland Performance Mats | 657 Gridless Power | 386 Springer |
| 373 Atmosfir Optics | 687 Hanby Env. / OMG Solutions | 595 Stantec Consulting |
| 459 Axetris AG | 376 Hi-Q Environmental Products | 455 STM Ecosystems |
| 358 Babcock Power | 661 Homer Energy | 586 Suez |
| 574 BKT | 566 Hydrolox | 468 Sunbelt Rentals |
| 656 Black & Veatch | 593 ILC Dover | 543 Technical Heaters, Inc. |
| 476 Blair, Church & Flynn | 654 Industrial Design Solutions | 658 Teledyne API |
| 700 Blume Distillation | 677 Inst. of Clean Air Comp. (ICAC) | 683 Teledyne Monitor Labs |
| 668 Boyer Trucks | 375 Insul-tek | 557 Tetra Tech, Inc. |
| 659 Brad Thompson Company | 640 Int'l Cooling Tower (ICT) | 582 Thermo Scientific |
| 377 Buhler Technologies | 489 JCT | 577 Tiger Optics, LLC. |
| 559 Building Crafts, Inc | 458 Jiangnan Environmental | 357 Trachte LLC |
| 481 Burns & McDonnell | 674 Juize | 452 TRC Companies, Inc. |
| 440 Calgon Carbon | 389 KraftPowercon | 572 Trinity Consultants |
| 651 California Analytical Corp. | 673 Krishnan & Assoc | 456 TSI, Inc. |
| 540 Carbonxt, Inc. | 584 Leidors | 341 U.S. DOE, Office Clean Coal |
| 692 CEM Service Group, Inc. | 690 M & C Tech Group NA | 591 United Conveyor Corp. |
| 652 Cemtek Environmental, Inc. | 363 Manta Robotics, LLC | 648 Universal Analyzers, Inc. |
| 697 Chaoticwaters | 573 McHale & Associates | 586 University of Tulsa, The |
| 359 Charah, Inc. | 473 Midwest Energy Emissions | 484 W.L. Gore & Associates |
| 568 CiSCO | 469 Mississippi Lime Company | 355 Watershed geo |
| 382 Clayborn Lab | 642 Montrose Environmental | 485 Wood |
| 588 Clean Harbors | 486 NAES | 688 Work Saver Systems |
| 694 CMC Solutions | 477 Nexus Solutions, Inc. | 463 Wunderlich-Malec |
| 487 Cooper Environmental | 567 Novinda | 684 Xenon, Inc. |
| 383 DEWESoft | 693 NuScale | 387 xOverTime |
| 695 DR DAS LTD | 462 Ohio Lumex | |
| 381 DSG Solutions | 482 P S Analytical | |
| 576 Durag, Inc. | 676 Perillon | |
| 647 EarthSoft | 599 Perma Pure | |
| 680 Eisenmann | 369 Pine | |
| 356 Electro Industries/GaugeTech | 581 Polystar Containment | |
| 698 Elemental Air | 372 Power-Gen | |
| 589 Emerald Transformer | 580 Praxair | |



CLEAN CAR EXPO	EUEC2018
SAILS PAVILION	BALLROOM
Mon. 3/5 - 6 pm to 9 pm	9 am to 6 pm
Tue. 3/6 - 6 pm to 9 pm	9 am to 6 pm
Wed. 3/7/18	9 am to 12 pm

10 x 10 Exhibit Booth, with table, two chairs, and one free registration to EUEC is \$2,500

STEP 1. SELECT BOOTH PACKAGE TYPE:	COST
EUEC Ballroom Booth (10' x 8'):	<input type="checkbox"/> Ballroom 2 booth available (\$5,000) <input type="checkbox"/> EUEC overflow in Sails Pavilion (\$2,500)
CCE Sail Pavilion Booth (10'x10'):	<input type="checkbox"/> CCE Premium Booth (\$2,500) <input type="checkbox"/> CCE Standard Booth (\$1,000)

STEP 2. ENTER NAME OF REGISTRANT	Full Name	Email
1. Exhibitor (Free):	_____	_____
2. Exhibitor Rate:	_____	_____
3. Exhibitor Rate:	_____	_____

STEP 3. CONTACT INFORMATION:

Company Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Email: _____ Phone: _____ Website: _____

COMMENT: _____

Authorized Signature (required): _____

Name: _____ Date: _____

FAX TO	1-602-296-0199	E-MAIL TO	INFO@EUEC.COM	ONLINE	WWW.EUEC.COM
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RULES:
 Application implies that exhibitor will abide by Conference show rules. Please copy this contract for your files. Exhibitor hereby assumes entire responsibility and hereby agrees to protect, defend, indemnify and save the San Diego Convention Center, its owners, its operator, EUEC, and each of their respective parents, subsidiaries, affiliates, employees, officers, directors, and agents harmless against all claims, losses or damages to persons or property, governmental charges or fines and attorney's fees arising out of or caused by its installation, removal, maintenance, occupancy or use of the 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 damage. The group agrees to provide a Certificate of Insurance evidencing the coverage described above. This Agreement is governed by the laws of the State of Arizona, with exclusive jurisdiction in the courts in Tucson, Pima County, Arizona

CANCELLATION POLICY: Please see www.euec.com for full cancellation and refund policy. No Commitment until June 1, 2017. 50% refund upto October 1, 2017. No refunds after October 1st, 2017.

Hotels and Area Map



HOTELS

- Walking distance to the Convention Center
- Contact the EUEC Hotels listed below directly, or
 - Reserve online at
 - <http://www.euec.com/hotels-info/>

MANCHESTER GRAND HYATT



(619) 232-1234
EUEC Rate \$259
Available \$259
Deadline

1 0.3 Miles to event
★★★★☆

COURTYARD GASLAMP



(619) 544-1004
EUEC Rate \$219
Available \$219
Deadline

2 0.3 Miles to event
★★★★☆

EMBASSY SUITES



(800) 362-2779
EUEC Rate \$259
Available \$259
Deadline

3 0.7 Miles to event
★★★★☆

HOTEL Z



(866) 866-7977
EUEC Rate \$169
Available \$169
Deadline

4 0.2 Miles to event
★★★★☆

HILTON GASLAMP



(800) 445-8667
EUEC Rate \$285
Available \$285
Deadline

5 0.1 Miles to event
★★★★☆

OMNI HOTEL



(800) 843-6664
EUEC Rate \$259
Available \$259
Deadline

6 0.2 Miles to event
★★★★☆

HARD ROCK HOTEL



(877) 344-7625
EUEC Rate \$269
Available \$269
Deadline

7 0.1 Miles to event
★★★★☆

MARRIOTT GASLAMP



(800) 228-9290
EUEC Rate \$255
Available \$255
Deadline

8 0.2 Miles to event
★★★★☆

WYNDHAM BAYSIDE



(877) 999-3224
EUEC Rate \$159
Available \$159
Deadline

9 1.3 Miles to event
★★★★☆

Warning

Beware of unauthorized phone solicitation.
EUEC does not make phone calls for hotels.

Workshop 1 - Room 5A
Permitting & Compliance
 Sunday March 4, 2018 (1 pm to 4:30 pm)
 Eric Hiser, Jordan, Hiser & Joy, PLC
 Phone: 480-505-3927
 Email: ehiser@jordenbischoff.com

Workshops

**JORDEN HISER
& JOY, PLC**
 - ATTORNEYS AT LAW -

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

Workshop 2 - Room 5B
Air Quality Modelling Challenges
 Sunday March 4, 2018 (1 pm to 4:00 pm)
 Robert Paine, CCM, QEP (AECOM)
 Email: bob.paine@aecom.com
 Phone: 978-905-2352

AECOM

This workshop will thoroughly review the latest developments, on AERMOD as well as new refined modeling approaches such as: Urban dispersion for large industrial areas, Consideration of moist plume thermodynamics (AERMOIST), Consideration of infrequent high emission conditions in probabilistic modeling, Updates to NO2 modeling, low wind speed approaches in modeling, ozone and PM 2.5, precursor emissions.

Workshop 3 - Room 3:
Fundamentals and Practical Aspects of Waste Heat Recovery
 Wednesday March 7, 2018 (7:30 to 4 pm)
 Clement Joly, SoftInWay
 Email: Clement.joly@softinway.com
 Phone: 316-680-0839

SoftInWay
 CORPORATION

This workshop will provide engineers working in the energy and utility space with a better understanding of what waste heat recovery systems are in the context of nuclear, fossil and renewable energies. The workshop will cover everything from assessment, opportunities, development and challenges for waste to energy processes to fluid properties and selection while diving into thermodynamic cycles and design of waste heat recovery system components using both theoretical and real-life examples.

Workshop 4 - Room 5A
ESC | StackVision New User Mini (1-Day) Training
 Wednesday March 7, 2018 (7:30 to 4 pm)
 Danny Hintzman, ESC dhintzman@envirosys.com
 Email: jbrooks@envirosys.com with questions
 Phone: 512-250-7837, (512) 250-7952

ESC

This workshop will provide participants with a greater understanding of ESC's StackVision software. Topics will include: Using CEMscape, CalGas Management, Using StackVision Reports & Creating Linked Reports, Using Filters and Summaries, Data Controller Essentials and an Introduction to StackStudio.

Workshop 5 - Room 11
Digital Marketing & Business Development Techniques
 Wednesday March 7, 2018 (8 am to 12 pm)
 Ravi Krishnan, Krishnan & Associates
 Email: loredana@krishnaninc.com
 Phone: 203-921-1800

Krishnan & Associates
 Innovative Solutions for the Energy Industry

Objectives: Participants learn: 1. Targeted database marketing 2. Digital Market Techniques 3. Webinars 4. Social Media 5. Measurement Tools 6. Internet Optimization 7. Abstract, Article Writing & Repurposing Articles 8. Media Placement & Metrics 9. Advertising 10. Sales & Business Development 11. Customer Intelligence 12. Competitive Intelligence

Workshop 6 - Room 11A
Operational Risk - Outage Restoration
 Wednesday March 7, 2018 (12 pm to 4 pm)
 Peter V. Bridle, Pegasus Risk Management LLC
 Email: pbridle@pegasusriskmanagement.com
 Phone: 832-589-6425

PEGASUS
 RISK MANAGEMENT

Energy and Utility companies need to restore services during extended outages. This 4 hr. workshop has provided Operations Managers, Line Managers and EHS professionals with practical insights, tools and techniques to transform outage restoration to achieve a step change in operating and EHS performance.

7. Tour of Solar Turbines Facility
 Wednesday March 7, 2018 (8 am to 12 pm)
 Chris Lyons, Solar Turbines
 phone: (619) 322-6054
 email: info@euec.com

Tour

Solar Turbines
 A Caterpillar Company

Tour of Solar Turbines Manufacturing and packaging facility, in San Diego, CA. Solar Turbines Incorporated, a subsidiary of Caterpillar is a leading producer of industrial gas turbines and turbomachinery products in the 1 to 22 MW (1590 to 30000 HP) range. Solar designs and manufacturers compressor sets, mechanical drive packages and generators. This site will also allow visitors to see Solar's new 1 MWh energy storage system, and microgrid controller. **Transportation provided by EV Ride Share BOUNCE**

EUEC WELCOME RECEPTION BY THE WATERFRONT
 Sunday, March 4th, 2018, 5 pm to 7 pm

JOE'S
 CRAB SHACK



Pick up complimentary hors d'oeuvres and beverage tickets
 at EUEC Registration Desk

7TH ANNUAL EUEC GOLF EVENT
 Sunday March 4th 2018 at 8:00AM



Rancho Bernardo Golf Course

Join your colleagues from EUEC at the World Famous

Rancho Bernardo Golf Course
 17550 Bernardo Oaks Drive
 San Diego, CA 92128
 (858) 675-8540

Sponsorship

CONTACT

Phone: (520) 615-3535

email: info@euec.com

1. One Page Advertisement In Show Guide – \$1,000

It's not too late to print a one page PDF color advertisement in the EUEC Program Guide. Email a 6" x 9.5" (1/4" bleed) CMYK color pdf file to info@euec.com by February 15th.

The Show Guide is the official, up-to-date information on the EUEC event. One page color advertisement distributed to 1,700 delegates, is continuously referenced multiple times a day by all attendees. You can have your logo included or do two facing page ads.

2. Session Sponsor receive Attendee list \$500 per session

As a Session Sponsor you receive the full contact information of all attendees to your session. The cost is \$500. You may also Co-chair the session you are speaking, with your company logo prominently advertised among the leading experts in the industry.

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

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

4. Attendee Lanyard, with Company Logo and information – \$3,000 (SOLD)

An excellent opportunity to market to every one of the attendees at the sign-in table with logo placement on lanyards of the attendee name badge holders, with your information.

5. Back Packs with Company Brochure & Information Stuffed – \$3,000

An excellent opportunity to market with your company brochure, and other material, stuffed in EUEC Backpack provided to every one of the 1,500 attendees at the sign-in table. Mail to receive by Feb 23rd.

6. Hotel Key Cards – \$5,000

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

7. Your Logo On Flash Drive Conference Proceedings – \$5,000

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

8. Lunch / Reception Sponsorship – \$5,000 each event

As a Network Reception sponsor you will have your name and logo in front of 1,500 conference attendees, and on each meal ticket.

9. COFFEE Break Sponsorship – \$3,000 each event – Monday (SOLD)

– \$3,000 each event –

As a Network Reception sponsor you will have your name and logo in front of 1,500 conference attendees, and on each meal ticket.

Electric Utilities Attending EUEC

AES
Alabama Power Company
ALLETE
Alliant Energy Corporation
Ameren Corporation
American Electric Power
American Municipal Power, Inc.
Arizona Electric Power Cooperative
Arizona Public Service Company
Associated Electric Cooperative, Inc.
Austin Energy
Avista Utilities
Basin Electric Power Cooperation
Big Rivers Electric
Burbank Water & Power
Calpine Corporation
Catawba County Government Utilities
Central Iowa Power Cooperative
Central Minnesota Municipal Power Agency
Clarke Public Utilities
Cleco Corporation
Commonwealth Edison
Con Edison
Con Edison Clean Energy
Connecticut Natural Gas
Constellation Energy
Consumers Energy
CPS Energy
Dakota Gasification Company
Deseret Power
Diamond Generating Corporation
Dominion Generation
DTE Energy
Duke Energy
Dynergy
East Kentucky Power Cooperative
EDF Inc
Edison Electric Institute
Empire District Electric Company
Encina Power Station
ENGIE North America
ENMAX Energy Corporation
Energy
Eversource Energy
Exelon Nuclear
Exelon Power
FirstEnergy Corp.
Florida Power & Light Company
Georgia Power
Grand Bahama Power Company
Great River Energy
Guam Power Authority
Guam Public Utilities Commission
Hawaiian Electric
Hoosier Energy
Independence Power & Light
Intermountain Power Service Corporation
JEA
Kansas City Board of Public Utilities
Kansas City Power & Light
KU Energy, LLC
Lafayette Utilities System
Lansing Board of Water & Light
LG&E
Lhoist North America
Los Angeles Department of Water and Power
Louisville Gas & Electric
Lower Colorado River Authority

Luminant
Madison Gas & Electric
Michigan South Central Power Agency
MidAmerican Energy Company
Minnesota Power
Minnkota Power Cooperative, Inc.
Mohave Electric Cooperative, Inc.
Montana-Dakota Utilities Company
Muscatine Power and Water
Nebraska Public Power District
Newmont Nevada Energy Investment
NextEra Energy
NiSource
Northern Indiana Public Service Co.
Northern Star Generation
NorthWestern Energy
Nova Scotia Power
NRECA
NRG Energy
NV Energy
OGE Energy Corp
Oklahoma Gas & Electric Company
Old Dominion Electric Cooperative
Omaha Public Power District
Oncor Electric Delivery
Oneta Power, LLC
Orange Grove Energy
Pacific Gas & Electric
PCPS Energy
PECO Energy
Platt River Power
Portland General Electric
PPL EnergyPlus LLC
PPL Montana Power Company
Prairie State Generating Co.
Puget Sound Energy - PSE
Riverside Public Utilities
Rochester Public Utilities
Rodan Energy Solutions Inc.
Rural Electric Cooperative
Sacramento Municipal Utility District
Salt River Project
San Diego Gas & Electric
San Diego Water Authority
Santee Cooper
SCANA
Schneider Electric
Seattle City Light
Sempra US Gas and Power
Sierra Power Company
SoCal Gas Co.
Southern California Edison
Southern Company
Southern Connecticut Gas
Southern Power Company
SUEZ
Sunflower Electric Power Corporation
Tenaska
Tennessee Valley Authority
Texas Municipal Power Agency
TransCanada
Tri-State Generation and Transmission
Tucson Electric Power
Twin Oaks Power
Vectren Corp.
WEC Energy Group
Westar Energy
Xcel Energy