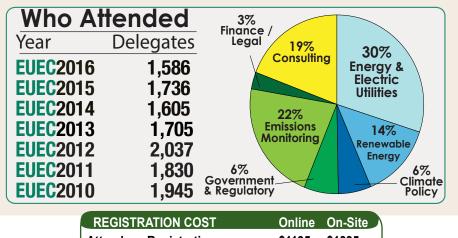
What is FUFC.

EUEC2017: The 20th Annual Energy, Utility & Environment Conference, is USA's largest professional networking & educational event of its kind, held February 8 to 10, 2017, at the San Diego Convention Center, San Diego, CA, with 1,500 delegates, 400 speakers and 150 exhibits. **HISTORY:** The first EUEC conference was held in 1995 in Tempe, Arizona. 17 annual EUEC conferences were held in Arizona until 2014, and then moved to San Diego in 2015.

SCHEDULE EUEC 2016 - February 3 to 5, 2016 in San Diego, CA. EUEC 2017 - February 8 to10, 2017 in San Diego, CA EUEC 2018 - March 5 to 7, 2018 in San Diego, CA

See www.euec.com



Attendee - Registration \$1195 \$1395 Utility/Gov't/VIP \$695 \$1395 One Day \$495 \$895

REGISTRATION COST INCLUDES:

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



21st Annual EUEC 2018 | San Diego Convention Center, San Diego CA

EUEC | P.O. Box 66076, Tucson, AZ 85728 (p) 520.615.3535 | (f) 602.296.0199 | info@euec.com | www.euec.com



1,500 ATTENDEES

400 SPEAKERS

150 EXHIBITS

Program Guide TECHNICAL TRACK

TECHNICAL TRACKS

A. REGULATORY UPDATE B. CEMS, AQ & MODELING C. HG, DSI, MATS, ACI D. ENERGY POLICY & SECURITY E. SO2, NOX, SCR F. RE, SOLAR, WIND, NUCLEAR G. O&M, EHS, DDD H. GHG, ELG, CCS & CCR I. WATER, 316(b), FGD J. BATTERY & STORAGE



EUEC | P.O. Box 66076, Tucson, AZ 85728 | (p) 520,615,3535 | (f) 602,296,0199 info@euec.com www.euec.com

20th Annual Conference & Expo Wednesday Feb 8 to Friday Feb 10, 2017

San Diego Convention Center

111 W Harbor Dr., San Diego, CA 92101

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EUEC WELCOME RECEPTION BY THE WATERFRONT Tuesday, February 7th, 2017, 5 pm to 7 pm



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



Call golf course to reserve & pay: (855) 574-5356 Discounted EUEC Rate \$103 per Player

> Rancho Bernado Inn Golf Course 17550 Bernardo Oaks Drive San Diego, CA 92128

M	edia	
		rti

Partners	Tuesday Feb. 7t
1 archers	7:00 am - 7:00 pm
	12:00 pm - 6:00 pm
	5:00 pm - 7:00 pm
BENCHMARK	
P(TELLIGEN()E www.mit	Wednesday Feb
	7:00 am - 7:00 pm
CONTENT IN CONTENT Your Think Tank	12 pm - 6:00 pm
	9:00 am - 12:00 pm
COGA	12:00 pm - 1:00 pm
	1:00 pm - 3:00 pm
	3:00 pm - 3:30 pm
Bloomberg	3:30 pm - 5:30 pm
DINA Clean	4:00 pm - 6:00 pm
Cities	
U.S. Department of Energy	Thursday Feb. 9
	9:00 am - 6:00 pm
Crowd Reviews Buyers Cuide Based On Client Reviews	7:30 am - 9:30 am
	9:30 am - 10:00 am
INSTITUTE OF KEVIEW	10:00 am - 12:00 pm
COMPANIES	12:00 pm - 1:00 pm
	1:00 pm - 3:00 pm
🕖 Eco-Business 🛛 🔤 🦉	3:00 pm - 3:30 pm
POWERING THE GRAFT GRID	3:30 pm - 5:30 pm
Krishnan Associates	4:00 pm - 6:00 pm
MAPSearch	
THE MCILVAINE COMPANY	Friday Feb. 10th
DeveryAL	9:00 am - 12:00 pm
PennWell	7:30 am - 9:30 am
EQUIPMENTE	9:30 am - 10:00 am
	10:00 am - 12:00 pm
EVENTS	
WE WORLD ARENA	12:00 pm - 4:00 pm

	El	JEC	2017	SCHEDULE
- .				
Tuesday		Feb		
7:00 am	-	7:00	•	Registration
12:00 pm	-			Exhibit Set-up
5:00 pm	-	7:00	pm	Welcome Reception
Wednes	dd	xy	Feb	. 8th
7:00 am	-	7:00	pm	Registration
12 pm	-	6:00	pm	Exhibits Open
9:00 am	- 1	2:00	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
Thursday	y	Feb). 9th	า
9:00 am	-	6:00	pm	Exhibits Open
7:30 am	-	9:30	am	Tech Session 3
9:30 am	- 1	0:00	am	Networking Break 4
10:00 am	- 1	2:00	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
Friday	Fe	eb. 1	0th	
9:00 am	- 1	2:00	pm	Exhibits Open
7:30 am	-	9:30	am	Tech Session 7
9:30 am	- 1	0:00	am	Networking Break 8
10:00 am	- 1	2:00	pm	Tech Session 8
12:00 pm	-	4:00	pm	Exhibit Tear Down

ALL 8 NETWORKING EVENTS ARE HELD IN EXHIBIT HALL SPEAKER FORMAT

- All speakers limited to 20 minutes using PowerPoint
- Submit abstract online and select track and session of choice
- Each session is 2 hours long with 6 speakers and 2 co-chairs



Wednesday, February 8, 9:00 AM - 12:00 PM San Diego Convention Center | 111 W. Harbor Dr. | San Diego, CA.



CURRENT ACTIVITIES OF THE DOE OFFICE OF COAL & CARBON MANAGEMENT Joseph Giove III — 9:00AM - 9:30AM Director of Coal Business Operations U.S. Department of Energy U.S. DEPARTMENT C ENERGY



EVOLVING GRID, CLEANER ENERGY AND NEW CUSTOMER SOLUTIONS CAROLINE CHOI - 9:30AM - 10:00AM Senior Vice President, Regulatory Affairs Southern California Edison



ENVIRONMENTAL REGULATION AND ROLLBACK IN THE TRUMP ADMINISTRATION THOMAS LORENZEN - 10:00 M - 10:30AM Partner | Crowell & Moring LLP crowell



HIGHLIGHTS OF EUEC2017 DR. PRABHU DAYAL - 11:00AM - 11:30AM Chairman | EUEC

Mission Statement

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

EUEC 10 Tack Program At - A - Glance

Track	A Room 1	B Room 2	Room 3	D Room 4	Room 5A
Sessions	REGULATORY UPDATE	CEMS & AIR QUALITY	MERCURY CONTROL	ENERGY POLICY & SECURITY	SO2, NOX & SCR CONTROL
Wednesda	ay February 8				
1:00PM to 3:00PM	Subscription Subscription<	CEMS & Air Quality • RANDALL • MONTROSE • ECO PHYSICS • DR DAS • THERMO FISHER • MIP CEMTREX	Hg MATS Compliance • J.E. CICHANOWICZ • IAC • EIA • ADA-ES, INC. • ME2C	• MINNESOTA POWER • SERA • NREL • STANTEC • EPSILON ASSOCIATES • VENABLE LLC	Control Technologies • CARBONXT • W.L. GORE • JIANGNAN • STEVE FEENEY CONS. • GULF COAST ENVIR.
2 3:30PM to 5:30PM	• THE BRATTLE GROUP • RLS • VAN NESS FELDMAN • RLS • BLACK & VEATCH • 3DEGREES	CEMS & MATS • DTE ENERGY • TRC SOLUTIONS • MOSTARDI PLATT • AXETRIS • AAC Inc.	Activated Carbon • ADA CARBON SOLUTIONS • ALBEMARLE • CABOT NORIT • CABOT NORIT	Plant Conversion • SECURITY INDUSTRY • HOT ROCK ENERGY • UTEP • HOT, INC. • CASTLELIGHT ENERGY	NOx Control • SARGENT & LUNDY • WESTAR ENERGY • MHPS • TRI-MER
	February 9				
3 7:30AM to 9:30AM	NAAQS & SSM Exemptions • JORDEN, HEISER • PERKINS & COIE & JOY • BLACK & VEATCH • AECOM	• TRC SOLUTIONS • MKS INSTRUMENTS • MONTROSE • TIGER OPTICS • CARB • CPP, INC	Hg Control Technologies • CABOT NORIT • NOVINDA HOLDINGS • POLLUTION CONTROL	Demand & Rates • EDF • BURNS & MCDONNELL • NERA • THE ENERGY AUTHORITY • DATACAPABLE	DSI & Sorbents • UNITED CONVEYOR • SOLVAY CHEMICALS • ADA-ES • CAC • FUEL TECH
4 10:00AM to 12:00PM	NSR • AECOM • SUTHERLAND, ASBILL • ERM & BRENNAN • HUNTON & WILLIAMS • ZEPHYR • NAQS	PM, CEMS & ESP • WUNDERLICH-MALEC • SUSTAINABLE SKYS • GLOBAL ANALIZER • ALTECH PCME	DSI & ACI • CABOT NORIT • UNITED CONVEYOR • NOL-TEC	Distributed Generation & Transmission & Distribution • ERM • BLACK & VEATCH • CB&I • CB&I	SCR & NOx Control • EPRI • SCHNEIDER ELECTRIC • MHPS • CO PHYSICS
5 1:00PM to 3:00PM	Clean Air Act Issues • TROUTMAN SANDERS • TROUTMAN SANDERS • HUNTON & WILLIAMS • VIRTUAL TECHNOLOGY	• AECOM • CPP, INC. • ERM • EPIS, LLC • TRINITY CONSULTANTS	• NOVINDA HOLDINGS • NALCO WATER • NOVINDA HOLDINGS	CADMUS • ABT ASSOCIATES • ACCORDANT ENERGY • MILLER CTA	Remediation & Cement • TRS GROUP • CELLTECH LLC • SCHIFF HARDIN • LAFARGEHOLCIM
6 3:30PM to 5:30PM	111(d)- CPP Compliance • XCEL ENERGY • NAVIGANT • BAKER BOTTS • LAW OFFICE OF WILLIAM SMALLING • ILLINOIS INSTITUTE • TRC SOLUTIONS	Air Quality Modeling II • ERM • CPP, INC • TRINITY CONSULTANTS	Young Power Professionals • CARBONXT • LG&E • DTE ENERGY • XCEL ENERGY • UNITED CONVEYOR • EAST KY POWER • ICS CONSULTING	Bulicing Technologies • CONSTELLATION • SIGBT • DYNAMIC AQ • SENSEWARE • ICF INTL. • CYPRESS ENVIRO.	Compliance Tech & Strategies • CHIA NAN UNIVERSITY • KAOHSIUNG UNIV. • SUNGKYUNKWA • SILICON POWER
Friday Fe	bruary 10			-	-
7:30AM to 9:30AM	Air Programs & Permitting • EEI • RAMBOLL ENVIRON • WILLIAM SMALLING • BURNS & MCDONNELL	Air Quality Monitoring • PRAXAIR • NIST • PERMA PURE • CAI, INC. • WUNDERLICH-MALEC • GASMET TECHNOLOGIES		• SEGA • STERLING ENERGY • ACEEE • SIEMENS ENERGY • ARGON NATIONAL LABORATORY	
8 10:00AM to 12:00PM	• LEIDOS • EMPSI • SARGENT & LUNDY • GHD • WZI, INC. • WZI, INC.	• NETRONIX, INC. • TSI, INC. • CEA-LETI/APIX		Natural Gas & Grid Technology • THERESA PUGH CONSULT • RBAC, INC. • LOUIS BERGER • ATENEO DE DAVAO UNIV. • SW RESEARCH INST. • IBM	

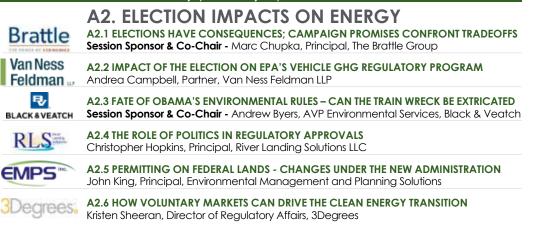
EUEC Program At - A - Glance

Track	Room 5B	Room 7B	H Room 8	Room 9	J Room 10
Sessions	RENEWABLE ENERGY	O&M, DDD, EHS	GHG, ELG, CCR & CCS	WATER 316(B)	BATTERY & STORAGE
Wednesda	y February 8				
1 1:00PM to 3:00PM	Biogas, Biomass, Biodiesel BIACK & VEATCH BIOGAS WORLD PACIFIC BIODIESEL	Decommissioning of Power Plants • SEGA • AECOM • TRC • WESTON SOLUTIONS • BURNS & MCDONNELL • CB&I	CCR & ELG Compliance	Wastewater Mgmt. • ALLIANT ENERGY • OVIVO USA • OVIVO USA • BURNS & • VACOM MCDONNELL • ENVIRONMENTAL STNDS.	Charging & Transportation • ICF • SIERRA CLUB • CHARGEPOINT • MUHU
7 3:30PM	Waste to Energy	Compliance Strategies &	GHG & Green Programs	Water Remediation & 316(b)	EV & PHEV
to 5:30PM	YORKE ENGINEERING GUILD ASSOCIATES ALTER NRG SIERRA ENERGY BLUME DISTILLATION	Decommissioning • WESTON SOLUTIONS • STANLEY CONSULT. • ROCKY MOUNTAIN • WILDLIFE HABITAT • EPSILON ASSOCIATES • HALEY & ALDRICH	• GW UNIVERSITY • DILO COMPANY • FLORESTA • ECC • HOSEO UNIVERSITY • UPM • CDP	• MAKAI OCEAN ENG. • NAU • HUNTON & WILLIAMS • BLACKHAWK TECH. • BURNS & MCDONNELL • RED LION CHEM.	• ENERGY AUTHORITY • EFFICIENT DRIVETRAIN • UNITED CHEMI-CON • EMOTORWERKS • JRP CHARGE CONS. • CLEARESULT
	February 9				
3 7:30AM to 9:30AM	Waste Management, Solar & PV • SCOTT ENVIRONMENTAL® WAKEFOREST UNIV. • GHD SERVICES • ENERGY JUSTICE • SAUDI ARAMCO NETWORK	Power Plant & Boiler Optimization • OVIVO USA • GREAT RIVER ENERGY • MARSULEX • BLAK & VEATCH	CCR Rule SARGENT & LUNDY SIDLEY AUSTIN HALEY & ALDRICH GDS ASSOCIATES	316(b) • EA ENGINEERING • HYDROLOX • OVIVO USA • BURNS & MCDONNELL	Battery & Storage Systems • OPENADR ALLIANCE • BENCHMARK • MISO • YEUNGNAM UNIV.
4 10:00AM to 12:00PM	Renewable Projects & Development • ERM • NREL • LIS SOCIETY • SAGE PLANNING • LEIGHTY FOUNDATION • NAMASTE SOLAR	EHS & EMIS • SPHERA SOLUTIONS • THE ENGINE ROOM • XOVERTIME • TRINITY CONSULTANTS	• SEFA GROUP • NAES CORP. • AECOM • AECOM • BARR ENGINEERING	FGD Wastewater - ZLD • SOUTHERN CO. • CH2M • GE WATER • EES, INC. • OASYS WATER • AQUATECH	• GEOSYNTEC • ADARA POWER • GIRTZ INDUSTRIES • LSIS, CO. • INTERTEK
5 1:00PM to 3:00PM	Solar, Wind & Nuclear • NUSCALE POWER • GEORGIA PUBLIC • SHEERWIND SERVICE COMMISSION • SUNPOWER • ATENEO DE DAVAO	Risk Management, EMIS & Project Finance • U.S. DOE • XOVERTIME • ERM • ENVIANCE • RIZZO ASSOCIATES • HDR	• DUKE ENERGY • BURNS & MCDONNELL • GOLDER ASSOC. • BURNS & ALDRICH	• GE WATER • CAROLLO ENG. • LECHLER • BURNS & MCDONNELL	Back-up Power & Energy Storage • MMR POWER SOLUTIONS • CHROMALOX • SANBORN, HEAD & ASSO.
3:30PM	Solar & PV	Operations & Optimization	FGD, ELG, CCR & CCS	316(b), ELG, Wastewater	Energy Storage Technology
• to 5:30PM	 ILLINOIS STATE UNIV. ONYX SOLAR GO GLOBAL ENVIRON. CLEAN ENERGY COLLECTIVE 	U.S. WATER O THE ENGINE ROOM SUS UNITSPRO PROPELLER	BURNS & MCDONNELL® BARR ENGINEERING UNITED CONVEYOR BURNS & MCDONNELL SARGENT & LUNDY GEOENGINEERS, INC.	SOUTHERN COMPANY P S ANALYTICAL RPS COMPOSITES SCHIFF HARDIN AQUA METROLOGY USF	ARGONNE NATIONAL LABORATORY THE LEIGHTY FOUNDATION GILDEMEISTER ENERGY STORAGE VILLAGE CAPITAL
Friday Fel	oruary 10				
7 7:30AM to 9:30AM	Community & Solar Projects • UNITED ILLUMINATING • BOUFFARD GROUP • PAGURIDAE • CILBURN & ASSOC. • UNITED ILLUMINATING • TRC ENVIRONMENTAL	Health & Safety • BULWARK • CARDIO PARTNER • NYU • NYU • NAT'L SAFETY • COMPLIANCE COUNCIL SOLUTIONS	CCS: Carbon Capture & Storage • SOUTHERN CO. • GASMET • SARGENT & LUNDY • EERC	• BROOKS APPLIED • CRIEPI • SBC CAPTECH • CRIEPI • DOOSAN • HEADWORKS	
8 10:00AM to 12:00PM	Renewable Energy • GEO-ENERGY SERVICES • BAKER ELECTRIC • 3DEGREES SOLAR • LEIGHTY FOUNDATION	• NORTH HIGHLAND • TRANTECH RADIATOR PRODUCTS • HDR	CCS II • FLORESTA SINGAPORE • CANMET ENERGY • EERC • CHENG KUNG UNIV.	• INDRA INST. • EXERGY SYSTEMS • OHIO STATE UNIVERSITY	

TRACK | A | REGULATORY UPDATE ROOM

Wednesday | February 8 | 1PM - 3 PM

EEI	A1. REGULATORY UPDATE - AIR A1.1 ENERGY INDUSTRY REGULATIONS, 2017-2020 Co-Chair - John Kinsman, Sr. Director - Environment, Edison Electric Institute
SUTHERLAND	A1.2 STILL LEGAL TO BURN FOSSIL FUEL TO MAKE ELECTRONS? Session Sponsor & Co-Chair - Jay Holloway, Partner, Sutherland, Asbill & Brennan LLP
CTRC	A1.3 UPDATE ON TRIALS & TRIBULATIONS OF THE GUIDELINE ON AIR QUALITY MODELS Gale Hoffnagle, Sr. Vice President & Technical Director, TRC Environmental Corporation
JORDEN HISER & JOY, PLC	A1.4 REGIONAL HAZE UPDATE: REASONABLE COST OR REASONABLE PROGRESS? Eric Hiser, Partner, Jorden Hiser & Joy, PLC
Hunton&	A1.5 THE NEW ADMINISTRATION AND GHG REGULATION: WHAT SHOULD WE EXPECT? Allison Wood, Partner, Hunton & Williams LLP
BURNS	A1.6 HOW MARKETS & GOVERNMENT AGENCIES ARE REACTING TO THE CPP Block Andrews, Strategic Environmental Solutions Director, Burns & McDonnell
	Wednesday February 8 3:30PM - 5:30PM



Thursday | February 9 | 7:30AM - 9:30AM



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BLACK & VEATCH

A3. NAAQS & SSM EXEMPTION

A3.1 DEVELOPING APPROVABLE LONG-TERM LIMITS UNDER EPA'S SO2 GUIDANCE Co-Chair - Eric Hiser, Partner, Jorden Hiser & Joy, PLC

A3.2 2015 OZONE NAAQS AREA DESIGNATIONS - WHO'S AT RISK? Co-Chair - Mike Knechtel, Air Permitting Section Leader, Black & Veatch

A3.3 HOW TO MODEL NAAQS COMPLIANCE WITH EPA'S REMOVAL OF SSM EXEMPTION AECOM Mary Kaplan, Air Quality Meteorologist, AECOM; Robert Paine

A3.4 WHAT THE DEMISE OF THE "SSM EXEMPTION" MEANS FOR THE POWER SECTOR Perkinscole Alexandra Bromer, Partner, Perkins Coie LLP

TRACK | A | REGULATORY UPDATE ROOM

Thursday | February 9 | 10AM - 12PM

A4. NSR



A4.5 GHG PERMIT COMPLIANCE CASE STUDY FOR NATURAL GAS COMBINED CYCLE UNITS Larry Moon, Principal, Zephyr Environmental Corporation



A4.6 CRASH COURSE IN PSD PERMITTING - KEY CONCEPTS, STRATEGIES AND PITFALLS Piyush Srivastav, President, NAQS - Environmental Experts

Thursday | February 9 | 1PM - 3PM

A5. CLEAN AIR ACT ISSUES

Liz Williamson, Partner, Sutherland, Asbill & Brennan LLP



A5.1 REGIONAL HAZE: ROUND 2 IS JUST AROUND THE CORNER Session Sponsor & Co-Chair - Mack McGuffey, Partner, Troutman Sanders LLP



A5.2 MERCURY AND AIR TOXICS STANDARDS: REGULATORY AND LITIGATION UPDATE Angela Levin, Partner, Troutman Sanders LLP



A5.3 IS FEDERALISM ALIVE UNDER THE CLEAN AIR ACT (REDUX)? William Wehrum, Partner, Hunton & Williams LLP



A5.4 IMPLICATIONS OF RECENT NAAQS UPDATES FOR THE UTILITY SECTOR Divva Aaarwal, Manaaina Consultant, Trinity Consultants



A5.5 CITIZEN SCIENCE 2017 Shawn Dolan, President, Virtual Technology LLC

Thursday | February 9 | 3:30PM - 5:30PM

A6. 111(d): CPP COMPLIANCE A6.1 STATE CLEAN POWER PLAN ACTIVITIES

	Nicholas Martin, Environmental Policy Manager, Xcel Energy; Lauren Quillian
NAVIGANT	A6.2 CAPTURING ENERGY EFFICIENCY (EE) SAVINGS FOR THE CPP

CONSULTING Co-Chair - Robert Neumann, Associate Director, Navigant Consulting, Inc.

- A6.3 ADMINISTRATIVE PATHWAYS FOR AMMENDING EPA REGULATIONS BAKER BOTTS Megan Berge, Partner, Baker Botts LLP
 - A6.4 ECONOMIC EFFECT ON THE U.S. REFINING INDUSTRY OF EPA CLEAN AIR ACT C. William Bill Smalling, Attorney, The Law Office of C. William Smalling, PC Smalling



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A6.6 OLD SMOKEY POWER - THE REGULATORY CONUNDRUM CONTINUES! Peter T. Belmonte, P.E., Vice President & Director, TRC Environmental Corporation



TRACK	A	REGULATORY	UPDATE
ROOM	1		

	Friday February 10 7:30AM - 9:30AM		Wednesday Febru
EEI	A7. AIR PROGRAMS & PERMITTING A7.1 OVERVIEW AND UPDATE OF INTERSTATE TRANSPORT ISSUES Riaz Mohammed, Manager, EEI	Randall Environmental	B1. CEMS & AIR QUAI B1.1 PROJECT MANAGEMENT TIPS FOR Co-Chair - Joanne Randall, President,
ENVIRON	A7.2 PM2.5 EMISSION FACTORS FOR NATURAL GAS-FIRED ENGINES Session Sponsor & Co-Chair - Glenn England, Principal Consultant, Ramboll Environ; Jasmine Urisk, CEPEI; Kevin Crosby, Montrose Air Quality Services	MONTHONE	B1.2 FLOW STUDY UTILIZING MULTIPLE S Bob Finken, Senior Vice President, Mor
C. William Smalling	A7.3 A PROPOSAL FOR U.S. CLEAN AIR ACT REFORM FOR A GLOBAL WORLD Bill Smalling, Attorney, The Law Office of C. William Smalling, PC	ELD PHYSIES	B1.3 NEW ADVANCEMENTS IN NOX AI Co-Chair - Thomas McKarns, Principal,
9	A7.4 CRITICAL ISSUES FOR NATURAL GAS POWER PLANT SITING AND LICENSING Co-Chair - David Shotts, PE, Partner, ERM; Tom Wickstrom	ADR DAS	B1.4 CEMS CLOUD APPLICATIONS FOR Nathan Downs, Service Manager, DR
ERM	A7.5 AIR PERMITTING CHALLENGES FOR DISTRIBUTED GENERATION Rhiana C. Dornbos, PE, Project Engineer, NTH Consultants, Ltd.; Jeffrey P. Jaros	SCIENTIFIC	B1.5 OVERVIEW: CEMS SAMPLE HAND Jeremy Whorton, Applications and Sol
BURNS	A7.6 FROM A THEORETICAL AIR PERMIT TO ACTUAL COMPLIANCE – LESSONS LEARNED Mary Hauner-Davis, Manager, Burns & McDonnell; Laura Rose, Old Dominion Electric	CEMTREX	B1.6 INSITU MULTIGAS ANALYZER Ravi Narayan, VP of Business Developr
	Friday February 10 10AM - 12PM		Wednesday February
			B2. CEMS & MATS
leidos	A8. WATER & LAND COMPLIANCE A8.1 REGULATORY CHALLENGES ASSOCIATED W/ PERMITTING WASTE CONVERSION TECH Co-Chair - George Namie, Sr. Air Quality Specialist, Leidos	DTE Energy	B2.1 MEASUREMENT VARIABILITY BETW Co-Chair - Tony Bazzi, Lead Engineer,
Discreption the Laurada	A8.2 IMPLEMENTING NATIONWIDE PERMIT PROGRAM & OTHER PERMITTING STRATEGIES Co-Chair - Valisa Nez, Environmental Regulatory Specialist, Sargent & Lundy, LLC		B2.2 EPA REFERENCE METHOD UPDATE Co-Chair - Rick Krenzke, Project Direct
	A8.3 ADVANCES IN GHG MITIGATION Jesse Frederick, Vice President, WZI Inc.	mostardi=platt	B2.3 CONTINUOUS MONITORING DAT Joseph Macak, Vice President & Princi
EMPS	A8.4 SITING, PERMITTING, & OPERATING FACILITIES IN SAGE GROUSE HABITAT	SICK	B2.4 REAL TIME SO3 MONITORING IN P Dan Kietzer,National Product Manage
GHD	David Batts, Principal, EMPSi – Environmental Management & Planning Solutions, Inc. A8.5 TIPS FOR SUCCESSFUL GHG DATA REPORT PREPARATION AND VERIFICATIONS	SERA	B2.5 MERCURY-CONTAINING THERMO Lisa Skumatz, Principal, SERA- Skumatz
	Subbarao Nagulapaty, Associate, GHD	a::etris	B2.6 TDLS IN COMPACT OEM MODULE Emmanuel Thierry, Sales Manager, Axe
		A.C.	B2.7 LOW LEVEL TNMNEOC MEASUREN Sucha Parmar, Technical Director, Atm
			Thursday February 9
			B3. REGULATORY UPD
			B3.1 MATS ELECTRONIC REPORTING RI Co-Chair - David Elam, Vice President
		ACONTROLE	B3.2 OPTIMIZE YOUR CEMS OR SCR FO Co-Chair - Kevin Crosby, VP, Technico
		California Air Resources Beard	B3.3 GAS TURBINE REGULATORY REGU Ben Sehgal. Training Section, California
		• mks	B3.4 A COMPARISON OF PS 15 AND PI Steve Wright, Specialist - Industrial Proc

TRACK B CEMS & AIR QUALITY ROOM 2

oruary 8 | 1PM - 3PM

	Wednesday February 8 1PM - 3PM
	B1. CEMS & AIR QUALITY
Randall	B1.1 PROJECT MANAGEMENT TIPS FOR SUCCESSFUL SOURCE TEST AND RATA
Environmental	Co-Chair - Joanne Randall, President, Randall Environmental
MONTHONE	B1.2 FLOW STUDY UTILIZING MULTIPLE STYLE MEASURING DEVICES Bob Finken, Senior Vice President, Montrose Air Quality Services; Scott R. Miller
<u> </u>	
TED PHYSIES	B1.3 NEW ADVANCEMENTS IN NOX ANALYZER ELECTRONICS FOR EASIER SERVICING Co-Chair - Thomas McKarns, Principal, ECO PHYSICS; Matthias Kutter & Ahmad Nabiyar
A-DR DAS	B1.4 CEMS CLOUD APPLICATIONS FOR DATA SECURITY AND ACCESS
C DI DAS	Nathan Downs, Service Manager, DR DAS LTD; Andrew C. Montz
ThermoFisher	B1.5 OVERVIEW: CEMS SAMPLE HANDLING SYSTEMS FOR TRS & H2S ODOR MEASUREMEN
SCIENTIFIC Jeremy Whorton, Applications and Solutions Engineer, Thermo Fisher Scientific	
CEMTREX	B1.6 INSITU MULTIGAS ANALYZER
	Ravi Narayan, VP of Business Development, MIP Cemtrex, Inc.
	Wednesday February 8 3:30PM - 5:50PM
DTC English	B2. CEMS & MATS
3)	B2.1 MEASUREMENT VARIABILITY BETWEEN HG SORBENT TRAPS & PROCESS MONITORS
	Co-Chair - Tony Bazzi, Lead Engineer, DTE Energy; Grant Hilbers
CTRC	B2.2 EPA REFERENCE METHOD UPDATES AFFECTING MERCURY AND AIR TOXIC STANDAR Co-Chair - Rick Krenzke, Project Director, TRC
Mossife per can rely on	
mostardi 🔵 platt	B2.3 CONTINUOUS MONITORING DATA UNCERTAINTY AND REGULATORY COMPLIANCE Joseph Macak, Vice President & Principal Consultant, Mostardi Platt
CIOK	B2.4 REALTIME SO3 MONITORING IN POWER PLANTS
SICK	Dan Kietzer, National Product Manager, SICK, Inc.
	B2.5 MERCURY-CONTAINING THERMOSTATS: ANNUAL OUTFLOW MEASUREMENT
SERA	Lisa Skumatz, Principal, SERA- Skumatz Economic Research Associates, Inc
avetric	B2.6 TDLS IN COMPACT OEM MODULE TO MEASURE HCL, NH3 OR H2O Emmanuel Thierry, Sales Manager, Axetris; Rui Protasio
a	Emmanuel Thierry, Sales Manager, Axetris; Rui Protasio
AC	
	B2.7 LOW LEVEL TNMNEOC MEASUREMENTS
	B2.7 LOW LEVEL TNMNEOC MEASUREMENTS Sucha Parmar, Technical Director, Atmospheric Analysis & Consulting Inc.
	B2.7 LOW LEVEL TNMNEOC MEASUREMENTS
	B2.7 LOW LEVEL TNMNEOC MEASUREMENTS Sucha Parmar, Technical Director, Atmospheric Analysis & Consulting Inc. Thursday February 9 7:30AM - 9:30AM
	B2.7 LOW LEVEL TNMNEOC MEASUREMENTS Sucha Parmar, Technical Director, Atmospheric Analysis & Consulting Inc. Thursday February 9 7:30AM - 9:30AM B3. REGULATORY UPDATE
	B2.7 LOW LEVEL TNMNEOC MEASUREMENTS Sucha Parmar, Technical Director, Atmospheric Analysis & Consulting Inc. Thursday February 9 7:30AM - 9:30AM
	B2.7 LOW LEVEL TNMNEOC MEASUREMENTS Sucha Parmar, Technical Director, Atmospheric Analysis & Consulting Inc. Thursday February 9 7:30AM - 9:30AM B3. REGULATORY UPDATE B3.1 MATS ELECTRONIC REPORTING REQUIREMENTS
	B2.7 LOW LEVEL TNMNEOC MEASUREMENTS Sucha Parmar, Technical Director, Atmospheric Analysis & Consulting Inc. Thursday February 9 7:30AM - 9:30AM B3. REGULATORY UPDATE B3.1 MATS ELECTRONIC REPORTING REQUIREMENTS Co-Chair - David Elam, Vice President - Project Director, TRC
	B2.7 LOW LEVEL TNMNEOC MEASUREMENTS Sucha Parmar, Technical Director, Atmospheric Analysis & Consulting Inc. Thursday February 9 7:30AM - 9:30AM B3. REGULATORY UPDATE B3.1 MATS ELECTRONIC REPORTING REQUIREMENTS Co-Chair - David Elam, Vice President - Project Director, TRC B3.2 OPTIMIZE YOUR CEMS OR SCR FOR COST BENEFIT Co-Chair - Kevin Crosby, VP, Technical, Montrose Air Quality Services, LLC B3.3 GAS TURBINE REGULATORY REGULATIONS
	B2.7 LOW LEVEL TNMNEOC MEASUREMENTS Sucha Parmar, Technical Director, Atmospheric Analysis & Consulting Inc. Thursday February 9 7:30AM - 9:30AM B3. REGULATORY UPDATE B3.1 MATS ELECTRONIC REPORTING REQUIREMENTS Co-Chair - David Elam, Vice President - Project Director, TRC B3.2 OPTIMIZE YOUR CEMS OR SCR FOR COST BENEFIT Co-Chair - Kevin Crosby, VP, Technical, Montrose Air Quality Services, LLC
• •	B2.7 LOW LEVEL TNMNEOC MEASUREMENTS Sucha Parmar, Technical Director, Atmospheric Analysis & Consulting Inc. Thursday February 9 7:30AM - 9:30AM B3. REGULATORY UPDATE B3.1 MATS ELECTRONIC REPORTING REQUIREMENTS Co-Chair - David Elam, Vice President - Project Director, TRC B3.2 OPTIMIZE YOUR CEMS OR SCR FOR COST BENEFIT Co-Chair - Kevin Crosby, VP, Technical, Montrose Air Quality Services, LLC B3.3 GAS TURBINE REGULATORY REGULATIONS Ben Sehgal. Training Section, California Air Resources Board B3.4 A COMPARISON OF PS 15 AND PROCEDURE 1 AND PS 18 AND PROCEDURE 6
CONTRACTOR Augusta para contra	B2.7 LOW LEVEL TNMNEOC MEASUREMENTS Sucha Parmar, Technical Director, Atmospheric Analysis & Consulting Inc. Thursday February 9 7:30AM - 9:30AM B3. REGULATORY UPDATE B3.1 MATS ELECTRONIC REPORTING REQUIREMENTS Co-Chair - David Elam, Vice President - Project Director, TRC B3.2 OPTIMIZE YOUR CEMS OR SCR FOR COST BENEFIT Co-Chair - Kevin Crosby, VP, Technical, Montrose Air Quality Services, LLC B3.3 GAS TURBINE REGULATORY REGULATIONS Ben Sehgal. Training Section, California Air Resources Board B3.4 A COMPARISON OF PS 15 AND PROCEDURE 1 AND PS 18 AND PROCEDURE 6 Steve Wright, Specialist - Industrial Process, MKS Instruments, Inc.
• •	B2.7 LOW LEVEL TNMNEOC MEASUREMENTS Sucha Parmar, Technical Director, Atmospheric Analysis & Consulting Inc. Thursday February 9 7:30AM - 9:30AM B3. REGULATORY UPDATE B3.1 MATS ELECTRONIC REPORTING REQUIREMENTS Co-Chair - David Elam, Vice President - Project Director, TRC B3.2 OPTIMIZE YOUR CEMS OR SCR FOR COST BENEFIT Co-Chair - Kevin Crosby, VP, Technical, Montrose Air Quality Services, LLC B3.3 GAS TURBINE REGULATORY REGULATIONS Ben Sehgal. Training Section, California Air Resources Board B3.4 A COMPARISON OF PS 15 AND PROCEDURE 1 AND PS 18 AND PROCEDURE 6 Steve Wright, Specialist - Industrial Process, MKS Instruments, Inc. B3.5 PS 18 COMPLIANCE WITH CAVITY RING-DOWN SPECTROSCOPY
• mks	B2.7 LOW LEVEL TNMNEOC MEASUREMENTS Sucha Parmar, Technical Director, Atmospheric Analysis & Consulting Inc. Thursday February 9 7:30AM - 9:30AM B3. REGULATORY UPDATE B3.1 MATS ELECTRONIC REPORTING REQUIREMENTS Co-Chair - David Elam, Vice President - Project Director, TRC B3.2 OPTIMIZE YOUR CEMS OR SCR FOR COST BENEFIT Co-Chair - Kevin Crosby, VP, Technical, Montrose Air Quality Services, LLC B3.3 GAS TURBINE REGULATORY REGULATIONS Ben Sehgal. Training Section, California Air Resources Board B3.4 A COMPARISON OF PS 15 AND PROCEDURE 1 AND PS 18 AND PROCEDURE 6 Steve Wright, Specialist - Industrial Process, MKS Instruments, Inc.

TRACK | B | CEMS & AIR QUALITY

ROOM 2

Thursday | February 9 | 10AM - 12PM



B4. PM, CEMS, ESP B4.1 PEMS HARMONIZATION OF PS-16 WITH PART75-SUBPART E

Richard Hovan, Sr. Combustion & Environmental Technical Consultant, Wunderlich-Malec



B4.2 EPA ALTERNATIVE METHOD 082 DIGITAL OPACITY Allison Dolan, Visible Emission Consultant, Sustainable Skys

B4.3 USING PM CEMS FOR PLANT OPTIMIZATION Co-Chair - John Brown, Sales Manager Americas, Altech PCME

B4.4 INNOVATIVE TRUE NO2 CONVERTER FOR RETROFITTING EXISTING NOX ANALYZERS Co-Chair - Charles Odame-Ankrah, Product Development, Global Analyzer Systems Ltd.; Carlyn McGeean, Charles Grimm, Hayward Shaun, Brodie Biggar & Brian Rosentreter

Thursday | February 9 | 1PM - 3PM



TRACK | B | CEMS & AIR QUALITY

ROOM 2

Friday | February 10 | 7:30AM - 9:30AM



B7.1 METHODOLOGY AND STABILITY OF EPA PROTOCOL GAS MIXTURES IPRAXAIR Co-Chair - Mark Malczewski, Sr. RD Analytical Chemist, Praxair; A. Srivastava & A. Boll



B7.2 HCL RESEARCH GAS MIXTURES REQUIRED FOR SI-TRACEABLE EMISSIONS MEASUREMENTS Co-Chair - Cassie Goodman, Research Chemist, NIST; Lacey Brent & Lyn Gameson



B7.3 ACCURATE IR MEASUREMENTS OF LOW LEVELS OF SO2 USING NAFION DRYERS Craia Sunada, VP Product Development, Perma Pure: B. Ficara, M. Savelski & J. Stanzione, Rowan University; T. Smith, C. Sunada & M. Moon, Perma Pure LLC



B7.4 HOW LOW CAN WE GO Matt Swanson, VP, Sales, CAI, Inc.



B7.5 ESTABLISHING A CORRECT CONTINUOUS PARAMETRIC MONITORING SYSTEM Richard Hovan, Senior Environmental Consultant, Wunderlich-Malec; Joseph Miller



B7.6 MEASURING HCL USING HOT/WET EXTRACTIVE PORTABLE FTIR EMISSIONS MONITOR Jim Cornish, Sales & Support Manager, Gasmet Technologies

Friday | February 10 | 10AM - 12PM

B8. AIR QUALITY & FENCELINE MONITORING B8.1 AN IOT APPROACH TO AIR QUALITY MONITORING



B8.2 CONSIDERATIONS FOR CERTIFYING PHOTOMETIRC PM 2.5 & PM 10 MONITORS Co-Chair - Steve Boehm, Sr. Global Product Mgr., TSI Inc; Robert Anderson & Tim Johnson



B8.3 BREAKTHROUGH GENERATION FOR GC-BASED GAS ANALYSIS Hughes Metras, VP Strategic Partnerships, Cea-Leti /Apix; Andreucci & Puget, Apix Analytics



14/5

2 ANALYTICS

B8.5 THE IMPACT OF AUTOMOBILES ON AIR QUALITY Aidan Revie, New Business Director, Emissions Analytics

Co-Chair - Vasileios Nasis, CEO, Netronix, Inc.

Thursday | February 9 | 3:30PM - 5:30PM



B6. AIR QUALITY MODELING II

B6.1 THE FUTURE OF AIR MODELING: APPENDIX W CHANGES AND THEIR SIGNIFICANCE
Richard Hamel, Senior Air Quality Meteorologist, ERM; Mark Garrison, Carlos Szembek,
Thomas Wickstrom & Surya Ramaswamy



Irinity▲	B6.3 USE OF CAMX IN EVALUATING IMPACTS FOR THE REGIONAL HAZE RULE Co-Chair - Christine Chambers, Principal Consultant, Trinity Consultants; J. Jewell & N. Sule
Consultants	Co-Chair - Christine Chambers, Principal Consultant, Trinity Consultants; J. Jewell & N. Sule

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B6.4 SECONDARY PARTICULATE CONCENTRATION AND AMMONIA LEVELS Advisian Tamer Alexan, North America Atmospherics Lead, Advisian; Tina Liu

B6.5 AN INNOVATIVE NEW AIR DISINFECTION PROCESS FOR IAQ M°LEKULE Dilip Goswami, Co-Founder and CEO, Molekule; Dr. Yogi Goswami & Jaya Rao

TRACK | C | MERCURY CONTROL

ROOM

Wednesday | February 8 | 1PM - 3PM

C1. HG MATS COMPLIANCE

C1.1 THE FIRST YEAR OF HG EMISSIONS RATE: CONTROL TECHNOLOGY EFFECTIVENESS Co-Chair - J. Edward Cichanowicz, President, J.E. Cichanowicz Inc; Michael Hein, Hein Cichanowicz Analytics, LLC; James Marchetti, James Marchetti, Inc.

eia Listeration Phase	C1.2 HG CONTROL ADDITIONS IN 2015 REFLECTIONS ON MATS COMPLIANCE STRATEGIES Scott Jell, Electricity Analyst, U.S. Energy Information Administration (EIA)
OME2C	C1.3 CREATING "WHITE SPACE" FOR MERCURY COMPLIANCE UNDER MATS RULE Co-Chair - Marcus Sylvester, VP Sales, ME2C; John Pavlish, Nicholas Lentz & James Trettel
IAC	C1.4 PAC INJECTION UPGRADES - DON'T LIVE WITH PROBLEM SYSTEMS Mike Gregory, Project Manager & Capital Sales, IAC
Advancing Cleaner Energy	C1.5 REDUCING MERCURY CONTROL OPERATING COSTS AND RISKS Sharon Sjostrom, Chief Product Officer, ADA-ES, Inc.; Constance Senior

TRACK | C | MERCURY CONTROL ROOM

Thursday | February 9 | 10AM - 12PM



C4.1 DEMONSTRATION OF HIGH DSI COMPATIBILITY BY COMMERCIALLY AVAILABLE ACI John Satterfield, Sr. Field Service Engineer, Cabot Norit Activated Carbon

C4.2 AN UPDATE ON INTERACTIONS BETWEEN DSI & ACI UNITED CONVEYOR Co-Chair - Conner Cox, Strategic Project Manager, United Conveyor Corp; Jon Norman



C4.3 SORB-TEC™ INJECTION TECHNOLOGY DELIVERS SAVINGS FOR DSI & ACI SYSTEMS Co-Chair - Nick Evans, Regional Sales Manager, Nol-Tec Systems

MPR C4.4 CHANGE IN SORBENT DISPERSION AT LOW LOAD, AND EXPERIMENTAL VALIDATION Scott Eisele, Lead Engineer, MPR Associates; Eric ten Siethoff, Jeff Russell & Jonas England

Wednesday | February 8 | 3:30PM - 5:30PM



J.E.

C2. ACTIVATED CARBON C2.1 OPTIMIZING & TURNDOWN OF MERCURY CONTROL REAGENTS UNDER MATS Session Sponsor & Co-Chair - Joe Wong; Speaker - Sheila Glesmann, SVP, ADA-Carbon Solutions; Joe Wong, Robert Huston, Roger Cayton, Ariel Li & Chris Vizcaino

C2.2 LAB SCALE ENTRAINED FLOW ADSORPTION UNIT FOR SORBENT EVALUATIONS ALBEMARLE" Co-Chair - Jon Miller, Technoloay Manager - Mercury Control, Albemarle; Emma Zhou

C2.3 FACTORS ACCELERATING CORROSION IN ACI STORAGE/TRANSPORT SYSTEMS савот Matt Greenfield, Manager, Cabot Norit Activated Carbon; John Satterfield

C2.4 MERCURY CAPTURE IN WET SCRUBBER WHILE MINIMIZING PLANT BALANCE EFFECTS Corbonxi Erica Gonzaga, Applications Engineer, Carbonxt; Christine Valcarce, David Mazyck, Regina Rodriguez & Priscilla Kissinger



C5. HG CONTROL TECHNOLOGIES C5.1 EXPERIENCE USING AMENDED SILICATES FOR MERCURY CONTROL

Thursday | February 9 | 1PM - 3PM



Co-Chair - Clifton Brown, Vice President, Novinda Holdings, Inc.; Brandon Kibler



C5.2 HALIDE-FREE MERCURY OXIDATION ADDITIVE FOR WFGD SCRUBBERS Co-Chair - Nicholas R. Denny, Lead Chemist, Nalco Water, an Ecolab Company: Bruce A. Keiser & Wayne M. Carlson



C5.3 AMENDED SILICATES FOR MERCURY CONTROL – DIRECT AND INDIRECT BENEFITS Steve Baloga, P.E., VP Engineering and Environmental Services, Novinda Holdings, Inc.



C5.4 EMISSIONS OF HEAVY METALS FROM THE COMBUSTION OF COAL AND WASTE FUELS Sang-Sup Lee, Associate Professor, Chungbuk National University; Min Park

Thursday | February 9 | 7:30AM - 9:30AM



C3. HG CONTROL TECHNOLOGIES

C3.1 ADVANCED R&D CAPACITY ESSENTIAL TO EVOLVING DEMANDS FOR HG CONTROL Gerald Adler, Sr. Engineer, Cabot Norit Activated Carbon; John Satterfield

C3.2 AMENDED SILICATE TEST RESULTS FROM MULTIPLE POWER PLANTS & CONFIGURATIONS Thomas Gale, Director of Technology Development, Novinda Holdings, Inc.

C3.3 ACTIVATED FLY ASH FOR MERCURY CAPTURE AT COAL-FIRED POWER PLANTS Pollution Control Co-Chair - Rodolfo Monterroso, COO, Pollution Control Tech.; Krutkramelis & Corcoran



Novinda⁻

Technologies

C3.4 MODIFIED FLY ASH FOR MERCURY CONTROL IN COAL-FIRED POWER PLANT Co-Chair - Yongsheng Zhang, Asso. Professor, NCEPU; Wang & Liu, NCEPU; Pan, WKU

Thursday | February 9 | 3:30PM - 5:30PM

C6. YOUNG POWER PROFESSIONALS

C6.1 GROWING YOUR CAREER: ADVICE FOR THE YOUNG POWER PROFESSIONAL Carbonx



Co-Chair - Priscilla Kissinger, Special Projects Manager, Carbonxt C6.2 INTEGRATING YOUNG PROFESSIONALS & NEW EMPLOYEES: A UTILITY'S PERSPECTIVE



C6.3 YOUNG PROFESSIONAL PROGRAMS IN ACTION UNITED CONVEYOR Conner Cox, Strategic Project Manager, United Conveyor Corporation



C6.4 A UTILITY SUCCESSFULLY ENSURES NEW HIRES & YOUNG PROFESSIONALS THRIVE Philip Imber, Manager Air Section, Environmental Affairs, LG&E



C6.5 MENTORSHIP & PROFESSIONAL GROWTH: HELPING EMPLOYEES STEADILY PROGRESS Todd Svoboda, Environmental Compliance, East Kentucky Power Cooperative



C6.6 LEVERAGING INDUSTRY RELATIONSHIPS TO INCREASE CUSTOMER SUCCESS Ann Arney, Utility Services, ICS Consulting; Michael Piper



TRACK | D | ENERGY POLICY & SECURITY ROOM 4

Wednesday | February 8 | 1PM - 3PM

	D1. ENERGY POLICY & SECURITY D1.1 ELECTRIC ENERGY TRANSFORMATION RELIABILITY CONSIDERATIONS Co-Chair - Michael Cashin, Env. Policy Advisor, Minnesota Power (ALLETE); Christian Winter
	D1.2 RENEWABLE PORTFOLIO STANDARDS: COSTS, BENEFITS, AND IMPACTS Trieu Mai, Senior Energy Analyst, NREL; Jenny Heeter, Lori Bird & Venkat Krishnan, NREL; Galen Barbose & Ryan Wiser, Lawrence Berkeley National Laboratory
Epsilon	D1.3 GOLDILOCKS EFFECT – FINDING THE POWER PLANT SITE THAT IS JUST RIGHT Joseph Sabato, Senior Scientist, Epsilon Associates; Stephen H. Slocomb
SERA	D1.4 NON-ENERGY BENEFITS: WINNING AT COST-EFFECTIVENESS DOMINOS:TRMS Lisa Skumatz, Principal, SERA- Skumatz Economic Research Associates, Inc
🚺 Stantec	D1.5 A HISTORY OF SITING GENERATION WITH EMPHASIS ON RECENT TRENDS Co-Chair - Jack Halpern, Power Sector Leader- Environmental Services, Stantec
VENABLE	D1.6 NIMBYS GO (AFTER) GREEN: TRENDS IN COMMUNITY OPPOSITION TO RENEWABLES Will DuBois, Partner, Venable LLP
	Wednesday February 8 3:30PM - 5:30PM
SIA	Wednesday February 8 3:30PM - 5:30PM D2. INFRASTRUCTURE & PLANT CONVERSION D2.1 TECHNOLOGIES AND TRENDS IN THE PROTECTION OF CRITICAL INFRASTRUCTURE Ronald Hawkins, Director of Industry Relations, Security Industry Association
sia, ØP	D2. INFRASTRUCTURE & PLANT CONVERSION D2.1 TECHNOLOGIES AND TRENDS IN THE PROTECTION OF CRITICAL INFRASTRUCTURE
CastleLight Energy	D2. INFRASTRUCTURE & PLANT CONVERSION D2.1 TECHNOLOGIES AND TRENDS IN THE PROTECTION OF CRITICAL INFRASTRUCTURE Ronald Hawkins, Director of Industry Relations, Security Industry Association D2.2 BINATIONAL ENERGY SECTOR REVIEW
	D2. INFRASTRUCTURE & PLANT CONVERSION D2.1 TECHNOLOGIES AND TRENDS IN THE PROTECTION OF CRITICAL INFRASTRUCTURE Ronald Hawkins, Director of Industry Relations, Security Industry Association D2.2 BINATIONAL ENERGY SECTOR REVIEW Co-Chair -Patrick Schaefer, Executive Director, The University of Texas at El Paso D2.3 INITIATIVE TO SAVE AMERICA'S JOBS - COAL-FIRED ELECTRIC GENERATING FLEET

TRACK | D | ENERGY POLICY & SECURITY ROOM 4

Thursday | February 9 | 10AM - 12PM

ERM	D4. DISTRIBUTED GENERATION, T&D D4.1 TRANSMISSION LINE SITING/CONSTRUCTION AND RISK MANAGEMENT Doni (Donell) Murphy, Managing Partner, ERM
RLACK & VEATCH	D4.2 ENVIRONMENTAL PERMITTING FOR DISTRIBUTED GENERATION Session Sponsor & Co-Chair - Brian O'Neal, Manager - Air Permitting, Black & Veatch
CBI	D4.3 ELECTRIC POWER PLANT LOAD FOLLOWING – IMPACTS OF EMISSION REGULATIONS Chris Wedig, Senior Technology Specialist, CB&I
HARRIS	D4.4 MANAGE VEGETATION ENCROACHMENT AND UTILITY ASSETS EFFICIENTLY Session Sponsor & Co-Chair - Randy Rhoads, Manager - Utilities, Harris Corp.; Tony Palizzi
	D4.5 THE CASE FOR ELIMINATING ANIMAL-CAUSED OUTAGES IN ELECTRIC SUBSTATIONS Colin Hassett, Director, FTI Consulting; Ellen Smith
â	D4.6 OPTIMIZATION OF MULTI-EFFECT DISTILLATION WITH BRINE TREATMENT Dr. Hisham Bamufleh, Faculty, King Abdulaziz University; Faissal Abdelhady, King Abdulaziz University; Hassan M. Baaqeel & Mahmoud M. El-Halwagi, Texas A&M University
	Thursday February 9 1PM - 3PM
CADMUS	Thursday February 9 1PM - 3PM D5. GHG POLICY & FORESTRY D5.1 DISCLOSING GREENHOUSE GAS EMISSIONS TO CUSTOMERS Justin Brant, Associate, The Cadmus Group
	D5. GHG POLICY & FORESTRY D5.1 DISCLOSING GREENHOUSE GAS EMISSIONS TO CUSTOMERS
	D5. GHG POLICY & FORESTRY D5.1 DISCLOSING GREENHOUSE GAS EMISSIONS TO CUSTOMERS Justin Brant, Associate, The Cadmus Group D5.2 IMPACT OF REGIONAL GREENHOUSE GAS INITIATIVE (RGGI) ON PUBLIC HEALTH
Abt	D5. GHG POLICY & FORESTRY D5.1 DISCLOSING GREENHOUSE GAS EMISSIONS TO CUSTOMERS Justin Brant, Associate, The Cadmus Group D5.2 IMPACT OF REGIONAL GREENHOUSE GAS INITIATIVE (RGGI) ON PUBLIC HEALTH Michelle Manion, Senior Associate, Abt Associates D5.3 LOW CARBON TECHNOLOGY FOR COAL CO-FIRING
	D5. GHG POLICY & FORESTRY D5.1 DISCLOSING GREENHOUSE GAS EMISSIONS TO CUSTOMERS Justin Brant, Associate, The Cadmus Group D5.2 IMPACT OF REGIONAL GREENHOUSE GAS INITIATIVE (RGGI) ON PUBLIC HEALTH Michelle Manion, Senior Associate, Abt Associates D5.3 LOW CARBON TECHNOLOGY FOR COAL CO-FIRING Session Sponsor & Co-Chair - Paula Calabrese, SVP & CSO, Accordant Energy D5.4 CONSERVATION IS CURRENCY WITH TREES + TECHNOLOGY

Thursday | February 9 | 7:30AM - 9:50AM



D3. DEMAND & RATES D3.1 NEW DEVELOPMENTS IN ENERGY DATA

Co-Chair - John Finnigan, Lead Counsel, Environmental Defense Fund D3.2 ELECTRIC UTILITY RATE CHALLENGES OF GOING GREEN

D3.3 CLIMATE CHANGE AND THE ROLE OF AMERICA'S ELECTRIC UTILITIES

BURNS MEDONNELL Ted Kelly, Principal & Senior Project Manager, Burns & McDonnell

NERA

Jeff Makholm, Senior Vice President, National Economic Research Associates, Inc (NERA) -TEA-**D3.4 UTILITIES AT A CROSSROADS Energy**Authority

Forcite LLC



D3.6 EVALUATING DSM OPPORTUNITIES REAL TIME ENERGY END USE MEASUREMENT Karen Sutherland, Research Analyst, Florida Solar Energy Cntr.; Danny Parker & Eric Martin

Alex Wong, Sr. Structure and Pricing Analyst, The Energy Authority; Enes Hosgor, EEme



D3.7 CONNECTING TO THE UTILITY CUSTOMER OF 2017 Peter DiSalvo, CTO & Co-Founder, DataCapable, Inc.

D3.5 UTILITY BUSINESS MODELS ARE NOT ONE-SIZE-FITS-ALL

Session Sponsor & Co-Chair - Scott Steiner, President, Forcite LLC

Thursday | February 9 | 3:30PM - 5:30PM

D6. BUILDING TECHNOLOGIES

D6.1 PERFORMANCE CONTRACTING AS A MEANS OF ACHIEVING RESILIENCY Constellation Co-Chair - Pam Maines, Executive Director, Constellation D6.2 AIR FILTRATION AS AN ENERGY CONSERVATION MEASURE **Synamic** Ray Markey, Western Regional Manager, Dynamic Air Quality Solutions D6.3 BACK TO THE FUTURE: CUTTING EDGE TECHNOLOGY, EE & HEALTHY HOMES ICF Mark Pignatelli, Manager, ICF International; Will D'Arrigo D6.4 SUPER INSULATED GREEN BUILDING TECHNOLOGIES Roderick Robinson, Director of Operations, SIGBT; Paul Curtis, T3 Energy Ltd (Aust.) D6.5 THE POWER OF THE INTERNET OF THINGS: IOT FOR ENERGY EFFICIENCY senseware Julien Stamatakis, Ph.D.; CTO & Co-Founder, Senseware CYPRESS **D6.6 SMART PNEUMATICS - MAKING DUMB BUILDINGS SMART** Co-Chair - Harry Sim, CEO, Cypress Envirosystems







TRACK | D | ENERGY POLICY & SECURITY ROOM 4

Friday | February 10 | 7:30AM - 9:30AM



D7. CHP

D7.1 CHP MINOR SOURCE PERMITTING - THE FUTURE IS SMALL Co-Chair - Brian Petermann, Manager - Air Quality Compliance, Sega Inc.

D7.2 BENEFIT OF UTILITY OWNERSHIP OF CHP AS A BASE LOAD RESOURCE × Co-Chair - Ken Duvall, Managing Partner, Sterling Energy; Uwe Schmiemann & Dang Le

SIEMENS

RBAC Inc.

Louis Berger

D7.4 COMBINED HEAT & POWER PLANTS OFFERING RELIABLE SOLUTIONS-CASE STUDIES Dalia El Tawy, Sr. Marketing Manager, Siemens Energy

Meegan Kelly, Sr. Research Analyst, ACEEE; A. Chittum, ACEEE; L. Hoiriis, Sterling Energy

D7.3 ENVIRONMENTAL BENEFITS OF UTILITY-OWNED COMBINED HEAT AND POWER

D7.5 COMBINED HEAT & POWER PLANT AT ARGONNE NATIONAL LABORATORY Argonne Dejan Ristic, Pressure/Energy Systems, Group Leader, Argonne National Laboratory

D8. NATURAL GAS & GRID TECHNOLOGY

D8.3 INTEGRATED ENERGY RESILIENCE FOR COMMUNITIES AND FACILITIES

D8.1 KNOW EVERYTHING ABOUT CONVERTING TO NATURAL GAS? SURE ABOUT THAT?

Co-Chair - Robert Brooks, Founder and President, RBAC, Inc.; Rahul Dhal, EPIS, Inc.

Theresa Pugh, Owner/President, Theresa Pugh Consulting, LLC; Katie Elder, Aspen Enviro.

Friday | February 10 | 10AM - 12PM

D8.2 ADVANCES IN INTEGRATED GAS-POWER MARKET MODELING

TRACK | E | SO2, NOX & SCR CONTROL ROOM 5A

Wednesday | February 8 | 1PM - 3PM



E1.1 REACT® SYSTEM CHEMISTRY: MULTI-POLLUTANT CONTROL OF SOX, NOX, HG & PM Co-Chair - Erica Gonzaga, Applications Engineer, Carbonxt; Valcarce, Mazyck & Rodriguez



E1.2 ALTERNATIVE APPROACHES SO2 REDUCTION IN WET AND UN-SCRUBBED SYSTEMS Jeff Kolde, Product Specialist, W.L. Gore; J. Knotts, M. McClusky & M. de Garbolewski



E1.3 ADVANTAGES & APPLICATION OF AMMONIA-BASED DESULFURIZATION TECHNOLOGY Don Hamilton, Global VP of Sales & Marketing, Jiangnan Environmental; Carlos Siso

Steve Feeney Consulting

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(C)
Gulf Coard Environ
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E1.5 HOW TO ACHIEVE IMPROVED POLLUTION CONTROL THROUGH RETROFITTING Chad Clark, Technical Director, Gulf Coast Environmental Systems

E1.4 WFGD PROCESS OPERATIONS - IMPACTS ON WASTEWATER TREATMENT

Co-Chair - Steven Feeney, Founding Principal, Steve Feeney Consulting

Wednesday | February 8 | 3:30PM - 5:30PM



E2.1 IMPACT OF SNCR AMMONIA SLIP ON YOUR PLANT'S WATER BALANCE Co-Chair - Danielle Flagg, Project Associate, Sargent & Lundy; Mike Rosen







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E2.5 HIGH NOX REMOVAL, 400F TO 750F Kavla Olson, Process Engineer, Tri-Mer Corporation

Thursday | February 9 | 7:30AM - 9:30AM

E3. DSI & SORBENTS

CUNITED CONVEYOR E3.1 DSI AND ACI SYSTEM RETROFITS FOR IMPROVED RELIABILITY AND PERFORMANCE Jon Norman, Manager - Sales and Technology, United Conveyor Corporation SOLV/\ir E3.2 EXPERIENCE WITH SODIUM SORBENT INJECTION FOR SO2 CONTROL Session Sponsor & Co-Chair - Michael Atwell, Mgr., Solvay Chemicals; Wood, Riccio & Cretiu E3.3 INTEGRATING ADAIR-MIXER™ TECH TO OPTIMIZE SORBENT INJECTION SYSTEM Connie Senior, VP Technology, ADA-ES; Mark Pavol & Dave Dorste, Blender Products E3.4 DRY SORBENT INJECTION FOR SO2 MITIGATION WITH SORBACAL® SPS Lhoist



Session Sponsor & Co-Chair - Martin Dillon, Flue Gas Treatment Specialist, Lhoist North America, Gerald Hunt & Melissa Sewell



E3.5 ICAC REVIEW OF DRY SORBENT INJECTION FOR ACID GAS CONTROL Michael D. Schantz, Co-Chair Domestic Conventional Pollutants Division, ICAC



E3.6 HCLEARTM TECHNOLOGY: A SOLUTION-BASED APPROACH TO HCL ABATEMENT

Ian Saratovsky, Sr. Technology Development Manager, Fuel Tech, Inc.; Chris Smyrniotis



D8.6 PREVENTIVE LEAK DETECTION FOR HIGH PRESSURE GAS TRANSMISSION NETWORK Rui Zhang, Research Staff, IBM, T.J. Watson Research Center; Kumar & Huang



TRACK | E | SO2, NOX & SCR CONTROL

ROOM 5A

Thursday | February 9 | 10AM - 12PM

E4. SCR & NOX CONTROL

	E4.1 REDUCED LOAD SCR OPERATION Richard Himes, Technical Executive, EPRI
Schneider	E4.2 NEW TRENDS IN REAL-TIME COMBUSTION OPTIMIZATION Co-Chair - Bill Poe, Sr. Principal Technical Consultant, Schneider Electric Software
MITSUBISHI HITACHI POWER SYSTEMS	E4.3 GAS TURBINES & INDUSTRIAL SCR SYSTEMS Co-Chair - Robert McGinty, Sr. Product Manager, Mitsubishi Hitachi Power Systems
INERCO 윊	E4.4 COMBUSTION OPTIMIZATION SYSTEM FOR BATTLE RIVER GENERATING STATION Enrique Bosch, Managing Director, INERCO ETECH USA; Francisco Rodríguez & Enrique Tova, INERCO; Brent Stenson & Vincent Cheng, ATCO POWER
SERVOMEX %	E4.5 BENEFITS OF CONTROLLING AMMONIA (NH3) SLIP IN COMBUSTION PROCESSES Barbara Marshik, Power Market Segment Manager, Servomex; Rhys Jenkins
0	E4.6 CHEMILUMINESCENCE NOX & NH3 MEASUREMENTS, CHALLENGES & ADVANTAGES

Ahmad Nabiyar, Technical Sales Specialist, ECO PHYSICS INC.; Tom McKarns

Thursday | February 9 | 1PM - 3PM



LCO PRYSICS

E5. REMEDIATION & CEMENT **E5.1 COAL TAR REMEDIATION USING ELECTRICAL RESISTANCE HEATING**

Co-Chair - David Fleming, VP, TRS Group; Chad Crownover, Daniel Oberle & John Lille

Schiff Hardin Ы

LafargeHolcin

C CellTechus

E5.2 RE-THINKING RESPONSES TO SEDIMENT SITE CLEANUP DEMANDS Russell Selman, Partner, Schiff Hardin LLP; Michael Showalter

E5.3 CEMENT STABILIZATION OF CONTAMINATED SOIL Co-Chair - Paul Ruehl, Solidification/Stabilization Specialist, LafargeHolcim Cement Co.

CAPCELL. **E5.4 UTILIZATION OF CO2 IN CONCRETE** Charles Welker, CEO, CellTech LLC; Doug Sprague

Thursday | February 9 | 3:30PM - 5:30PM

TRACK | F | RENEWABLE ENERGY ROOM 5B

Wednesday | February 8 | 1PM - 3PM

R BLACK & VEATCH	F1. BIOGAS, BIOMASS, BIODIESEL F1.1 EVALUATION OF RENEWABLE NATURAL GAS PRODUCTION FROM BIOMASS Session Sponsor & Co-Chair - Jonathan Cristiani, Engineer, Black & Veatch; Fry, Easterly, Olson & Kerschen
BIOGAS	F1.2 ACCELERATING THE BIOGAS INDUSTRY THROUGH COMMUNICATION TECHNOGIES Maxime Lemonde, CEO, BiogasWorld
PACIFIC BIODIESEL	F1.3 UTILITY SCALE BIODIESEL POWER GENERATION Robert King, President, Pacific Biodiesel Technologies, LLC; Cecily Barnes
BIODICO	F1.4 ZERO NET ENERGY FARMS Co-Chair - Russell Teall, President, Biodico
SIEMENS	F1.5 COGENERATION SOLUTIONS USING BIOMASS FUELS - CASE STUDIES Dalia El Tawy, Sr. Marketing Manager, Siemens Energy

Wednesday | February 8 | 3:30PM - 5:30PM

ENGINEERING, LLC	F2. WASTE TO ENERGY F2.1 AIR PERMITTING & EQUIPMENT ISSUE Co-Chair - Sara Head, Principal Scientist
	F2.2 THE NEXT GENERATION OF WASTE T Co-Chair - Richard Fish, President, Alter 1

RMITTING & EQUIPMENT ISSUES FOR ADVANCED BIOGAS SYSTEMS Sara Head, Principal Scientist, Yorke Engineering, LLC

F2.2 THE NEXT GENERATION OF WASTE TO ENERGY SOLUTION Co-Chair - Richard Fish, President, Alter NRG Corp.

F2.3 FASTOX GASIFICATION:COST-EFFECTIVE NET CARBON NEGATIVE FUEL FROM WASTE Mike G. Hart, Chief Executive Officer, Sierra Energy; P. Vergnani, M. Roberts & L. Razzano



F2.4 SINGLE-STEP BIO/NATURAL GAS UPGRADE FOR SILOXANES, H2S, HEAVIES & CO2 Kevin Weatherford, Process Engineer, Guild Associates; Dave Church & Paul Baker



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F2.5 CREATING RENEWABLE ENERGY FROM WASTE: A GLOBAL PERSPECTIVE Bruce Howie, Practice Lead for Energy from Waste Services, HDR



F2.6 WASTE TO PROFITS: OPTIMIZING RESOURCES FOR ALTERNATIVE ENERGY David Blume, Founder/CEO, Blume Distillation, LLC

Thursday | February 9 | 7:30AM - 9:30AM



E6. COMPLIANCE TECHNOLOGIES & STRATEGIES E6.1 SEPARATION AND QUANTIFICATION OF APIGENIN FROM SCUTELLARIA BARBATA D.

Co-Chair - Ming-Chi Wei, Professor, Chia Nan University of Pharmacy and Science; Yu-Chiao Yan & Show-Jen Hong, Kaohsiung Medical University; Pei-Hui Lin, Ohio State University; Jin-Ming Chen & Yu-Tuan Chou, Chia Nan University



E6.2 PRODUCTION OF EUGENYL ACETATE-ENRICHED OIL FROM CLOVE USING ULTRASOUND

Co-Chair - Yu-Chiao Yang, Associate Professor, Kaohsiung Medical University; Ming-Chi Wei, Chia Nan University; Pei-Hui Lin, Ohio State University; Show-Jen Hong, Kaohsiung Medical University



E6.3 COMBUSTION PROPERTIES OF COUNTERFLOW NONPREMIXED CH4-NH3/AIR FLAMES Oh Chae Kwon, Professor, Sungkyunkwan University; J. W. Ku, H. K. Kim, & S. Choi, Sungkyunkwan University; S. Lee, Chonbuk National University



E6.4 SOLIDTRON® DPC FOR EFFICIENT NOX REDUCTION USING PULSED ELECTRON BEAM POWER Howard Sanders, Manager, Silicon Power; H. Mehta, S. Glidden & D. Syracuse





F3.1 MANAGING SOLID DRILLING WASTE THROUGH ENGINEERED SOLUTIONS Blake Scott, President, Scott Environmental Services, Inc.



F3.2 5 MOST COMMON HAZARDOUS WASTE VIOLATIONS & BEST PRACTICES TO PREVENT THEM Co-Chair - Sean Grady, Vice President/Principal, GHD Services Inc.



F3.3 SAUDI ARAMCO WASTE MANAGEMENT Co-Chair - Ensan El-Ayoubi, Facilities Planning Consultant, Saudi Aramco



F3.4 (110) FACET OF RUTILE GEO 2 ENERGETICS: A DISPERSION-CORRECTED DFT Ali Abbaspourtamijani, Graduate Teaching Assistant, Wake Forest University



F3.5 THE ZERO WASTE HIERARCHY

Mike Ewall, Esq., Founder & Director, Energy Justice Network



TRACK | F | RENEWABLE ENERGY

Thursday | February 9 | 10AM - 12PM

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ERM

F4. RENEWABLE PROJECTS & DEVELOPMENT F4.1 LESSONS LEARNED OVER THE RENEWABLE ENERGY LIFECYCLE - AND BEYOND Co-Chair - Chris Rutledge, Partner, ERM; Sean Casto

L5 Society F4.2 POWER SATELLITES AS AN ECONOMIC SOLUTION TO CARBON AND ENERGY Keith Henson, Founder, L5 Society



F4.3 FUTURE "ENERGY" UTILITY: THE INT'L HYDROGEN TRANSMISSION DEMO PIPELINE Bill Leighty, Director, The Leighty Foundation

F4.4 ELECTRICITY GENERATOR COST & PERFORMANCE: PROJECTIONS & IMPLICATIONS



Wesley Cole, Engineer, NREL; Parthiv Kurup, Maureen Hand, Trieu Mai & Gian Porro
 F4.5 INTEGRATING RENEWABLES: GLOBAL LESSON'S LEARNED

Group Ltd. Sean McCarry, Managing Partner, Sage Planning Group, Ltd.; Elad Rosenberg



F4.6 RISKS & REWARDS: SOLAR PV DEVELOPMENT ON LANDFILLS & BROWNFIELDS Session Sponsor & Co-Chair - Cynthia Christensen, Commercial/Utility Scale Director, Namasté Solar

Thursday | February 9 | 1PM - 3PM



Thursday | February 9 | 3:30PM - 5:30PM

F6. SOLAR & PV



F6.1 SOLAR PV FINANCIAL FEASIBILITY FOR HIGHER EDUCATION INSTITUTIONS Jin Ho Jo, Associate Professor, Illinois State University



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F6.2 MEETING RE PROCUREMENT & ENVIRONMENTAL TARGETS VIA COMMUNITY SOLAR Eric Steinhofer, VP of Business Development, Clean Energy Collective; Tim Braun



F6.4 DELIVERING SOLAR ENERGY GENERATION THROUGH THE BUILDING SKIN Diego Cuevas, VP Business Development, Onyx Solar Group

 Schletter
 F6.5 BUILDING CODE COMPLIANCE AND RISK MANAGEMENT IN PV MOUNTING SYSTEM

 Co-Chair - Wolfgang Fritz, Vice President of Engineering, Schletter Inc.

GO Global Environmental **F6.6 UTILITIES ARE WAGING WAR ON ROOFTOP SOLAR Co-Chair -** Greg Odegard, Principal, GO Global Environmental

Friday | February 10 | 7:30AM - 9:30AM



F7. COMMUNITY & SOLAR PROJECTS F7.1 HOW UTILITIES ARE REDUCING CARBON EMISSIONS VIA UPSTREAM PROGRAMS



Co-Chair - Jennifer Parsons, Residential Program Administrator, The United Illuminating Company, Southern Connecticut Gas & Connecticut Natural Gas



F7.2 HOW (HOUSES OF WORSHIP) GREEN IS CONNECTICUT
 Amy Thompson, President, Paguridae; Linda Darveau, EPA; S. Borrelli, United Illuminating



F7.3 TRANSFORMING TOWNS AND CITIES INTO SUSTAINABLE-ENERGY COMMUNITIES Sheri Borrelli, Business Development, The United Illuminating Co.; Diana McCarthy-Bercury, Eversource; Linda Darveau, EPA



F7.4 FOUR WAYS TO MAKE COMMUNITY SOLAR WORK FOR YOUR UTILITY Jill Cliburn, Principal, Cliburn and Associates, LLC

F7.5 BRIGHT IDEA: SOLAR ON BROWNFIELDS

Co-Chair - Doug Kilmer, Client Service Mgr., TRC Environmental; Tim Gehring & Beth Baxter

Friday | February 10 | 10AM - 12PM

F8. RENEWABLE ENERGY F8.1 HOW CAN GEOEXCHANGE PROVIDE REAL RESULTS FOR TODAY'S UTILITY MARKETS F8.1 HOW CAN GEOEXCHANGE PROVIDE REAL RESULTS FOR TODAY'S UTILITY MARKETS

3Degrees.

Co-Chair - Trey Austin, President/CEO, Geo-Energy Services, LLC F8.2 TRENDS IN VOLUNTARY RENEWABLE ENERGY PRODUCTS

Amanda Mortlock, Vice President, Utility Partnerships, 3Degrees



F8.3 BIGGER RENEWABLE MARKET THAN ELECTRICITY GRID: HYDROGEN TRANSPORT FUEL Co-Chair - Bill Leighty, Director, The Leighty Foundation



F8.4 RESIDENTIAL ENERGY CHOICE & THE RENEWABLE ENERGY CUSTOMER EXPERIENCE ¹⁶ Andrew Hammen, Director of O&M and Asset Management, Baker Electric Solar

POSTER

DISTILLATION AND PURIFICATION STEP, ANHYDROUS ETHANOL FROM SWEET SORGHUM Elham Ebrahimiaqda, Phd Student, University of Arizona; Dr.Kimberly Ogden



DESIGN AND CONTROL OF AN INTERLEAVED POWER CONVERTER
 Woonki Na, Assistant Professor, Cal St Univ-Fresno

TRACK | G | O&M, DDD, EHS



TRACK | G | O&M, DDD, EHS ROOM 7B

Thursday | February 9 | 10AM - 12PM

⊗sphera [.]	G4. EHS & EMIS G4.1 REDUCING ENVIRO. COMPLIANCE RISK: LESSONS LEARNED & GOALS ACHIEVED Co-Chair - Carrie Young, Managing Director, Sphera Solutions; Jeffrey West, Xcel Energy
	G4.2 SO2 & NOX ALLOWANCE POSITION & PORTFOLIO MGMT AT A LARGE UTILITY Co-Chair - David Gloski, CEO, xOverTime
Trinity▲	G4.3 ISO 14001:2015 ENVIRONMENTAL MANAGEMENT SYSTEMS FOR UTILITIES Emily McKeon, Senior Consultant, Trinity Consultants
HE INGINE ROOM	G4.4 MOVING BEYOND THE SAFETY PERFORMANCE PLATEAU Duncan Kerr, Management Consultant, The Engine Room; Milan Trpin
Bulwark	G4.5 SELECTION, USE, CARE AND MAINTENANCE OF ARC RATED CLOTHING Derek Sang, Technical Training Manager, Bulwark Protective Apparel



G3.2 CCS REHEAT SYSTEM- FLUE GAS HEAT RECOVERY Co-Chair - Mike Mengel, Lead Process Engineer, Marsulex Environmental Technologies(MET); Mark Ness, Great River Energy (GRE); Rodney Hendricksen, MET



G3.3 OPTIMIZING POWER PLANT PERFORMANCE THROUGH COAL BENEFICIATION Mark Ness, Principal Engineer, Great River Energy; Nenad Sarunac, UNC Charlotte; Una Nowling, Black & Veatch Corp.; Sandra Broekema, Great River Energy



G3.4 ENGINEERING SOLUTIONS TO ENVIRO. NOISE PROBLEMS ON POWER PROJECTS Jeff Szymanski, Acoustical Consulting Services Manager, Black & Veatch

Thursday | February 9 | 1PM - 3PM



G6.6 A RISK-BASED APPROACH TO PRIORITIZING UTILITY SYSTEM INVESTMENTS Session Sponsor & Co-Chair - Aaron Fishman, Consultant, Propeller PROPELLER

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TRACK | G | O&M, DDD, EHS

ROOM 7B

Friday | February 10 | 7:30AM - 9:30AM



G7. HEALTH & SAFETY G7.1 CHANGES IN 1910.269 AND THE SELECTION OF ARC RATED CLOTHING Session Sponsor & Co-Chair - Derek Sang, Technical Training Manager, Bulwark



G7.2 ENVIRONMENTAL HEALTH AFFECTING HUMAN HEALTH: CAREGIVER'S PROSPECTIVE Bapaniah Penugonda, Associate Professor, NYU Dentistry; Katie Baron



G7.3 JOURNEY TO SAFETY EXCELLENCE: CULTIVATING SAFETY LEADERSHIP CULTURE Dr. Wes Scott, Director - Consulting Services/Safety Mgmt., National Safety Council



G7.4 HOW TO MANAGE & DEPLOY AN AUTOMATED EXTERNAL DEFIBRILLATOR PROGRAM Co-Chair - Brian Leonard, President, Cardio Partner Resources

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G7.5 RADIATION POLLUTION & THE IMPACTS ON HUMAN HEALTH & THE ENVIRONMENT Katie Baron, Dental Student, NYU Dentistry; Dr. Bapaniah Penugonda



G7.6 SAFETY LEADERSHIP: BE THE CHANGE THAT YOU WANT TO SEE Cassandra Dillon, Principal Consultant, Compliance Solutions

Friday | February 10 | 10AM - 12PM

northhighland BR. OPERATIONS & MANAGEMENT G8.1 UNLOCKING THE POWER OF YOUR INFORMATION ASSETS Co-Chair - Sloane Whiteley, Expert Practitioner, North Highland

G8.2 TRANSFORMER COOLING SYSTEMS MAINTENANCE Kevin Riley, Product Development Manager, Trantech Radiator Products

G8.3 IMPROVING TECHNICAL COMPETENCY IN POWER PLANTS Co-Chair - Matthew Zuehls, Power Section Manager, HDR; Robert Moss, Synterprise, LLC

G8.4 INTERPRETING RESULTS FROM INFRARED TECHNOLOGY Steven Driver Ph.D., Global Energy Program Manager, Sanofi Genzyme



INTERPRETING RESULTS FROM INFRARED TECHNOLOGY Steven Driver Ph.D., Global Energy Program Manager, Sanofi Genzyme

We chose the name **PROPELLER**

because we are a firm that is always moving toward the future and helping clients do the same.

This new era of continuous disruption needs a new brand of management consulting that is laser-focused on helping large organizations nimbly negotiate an increasingly volatile business landscape.



	TRACK H GHG, ELG, CCR & CCS
	Wednesday February 8 1PM - 3PM
S	H1. CCR & ELG COMPLIANCE MGMT. H1.1 CHARTING A PATH TO ELG COMPLIANCE Colleen Layman, Vice President, HDR
•	H1.2 INTEGRATED SOLUTIONS FOR CCR AND ELG COMPLIANCE Dennis Johnson, Staff Consultant, Amec Foster Wheeler, Elmer Mitchell

H1.3 FUTURE REGULATORY COMPLIANCE IS MORE COMPLEX THAN JUST CCR/ELG BURNS CMSDONNELL. Co-Chair - Jason Eichenberger, Associate Civil Engineer/CCR Business Unit Manager, Burns & McDonnell; Jim Palmer, Principal Engineer, Kansas City Power & Light

H1.4 ASH HANDLING & PLANT WASTEWATER TREATMENT FOR CCR & ELG COMPLIANCE Session Sponsor & Co-Chair - Mike Preston, Chemical Engineering, Black & Veatch BLACK & VEATCH

H1.5 CASE STUDY ELECTRIC UTILITY COMPLIANCE – NEW EPA EFFLUENT LIMITATIONS Jay Weist, Sr. Consultant, WorleyParsons; Nadeau, WorleyParsons; Jackson, Santee Cooper

H1.6 GEOSYNTHETIC REINFORCEMENT IN SURFACE IMPOUNDMENT CLOSURES **TENCATE** Richard Sack, PE, Senior Engineer, TenCate Geosynthetics; John Herrmann



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Wednesday | February 8 | 3:30PM - 5:50PM H2. GHG & GREEN PROGRAMS

H2.1 GHG EMISSIONS FROM UPSTREAM HYDRAULIC FRACTURING ACTIVITIES Peter LaPuma, Associate Professor, George Washington University; Chris Sibrizzi

H2.2 GREENING FOSSIL FUELS

Co-Chair - Eric Bettelheim, Executive Chairman, Floresta Singapore Pte Ltd

H2.3 STUDY ON THE MODELING COMPARISON FOR GHG REDUCTION SCENARIO WRITING Taeuk Byun, Hoseo University; JinDo Chung & Tae-Woo Kim

H2.4 CCO INVALIDATION RISK MITIGATION Co-Chair - Ben Apple, Principal, ECC

H2.5 IMPACTS ON BUILDING ENERGY DEMAND OF TWO URBAN MICROCLIMATE SCENARIOS

Roberto San Jose, Head Professor, Technical University of Madrid (UPM) H2.6 ACCELERATING CORPORATE LEADERSHIP THROUGH SCIENCE-BASED TARGETS

CDP Dorothy Li, Senior Project Officer, CDP

> H2.7 SF6 MANAGEMENT CHALLENGES Lukas Rothlisberger, CEO, DILO Company, Inc.

Thursday | February 9 | 7:30AM - 9:30AM

H3. CCR RULE



H3.1 EPA'S FINAL CCR RULE IS YOUR SITE ON TRACK WITH COMPLIANCE REQUIREMENTS Douglas Dahlberg, Project Associate, Sargent & Lundy LLC; Mohammad Karim H3.2 MANAGING CCR RULE COMPLIANCE: HOW TO MANAGE IN PUBLIC ENFORCEMENT ERM Stephanie Nicholson, Partner, ERM; Dave Wasiela H3.3 CCR RULE & ELGS – USING SCIENCE TO ACHIEVE COMPLIANCE TE TETRA TECH Co-Chair - Jonathan Shimko, Director, Power & Water Solutions, Tetra Tech, Inc. H3.4 CCRS AND THE CCR RULE - LEGISLATION AND LITIGATION SIDLEY Co-Chair - Sam Boxerman, Partner, Sidley Austin H3.5 CCR UNITS: MAXIMIZE CAPACITY BY MANAGING THE BIG PICTURE W/ CASE STUDY Jason Pokorny, Senior Project Manager, Haley & Aldrich, Inc.; Steve Putrich G GDS Associates, Inc. H3.6 PROGRESS AND BEST PRACTICES ON CCR RULE Dan Wittliff, Managing Director, Environmental Services, GDS Associates, Inc.

TRACK | H | GHG, ELG, CCR & CCS

ROOM

H4. CCR & ELG

Thursday | February 9 | 10AM - 12PM

2	H4.1 RECLAIMING & RECYCLING COAL FLY ASH FOR BENEFICIAL REUSE Session Sponsor & Co-Chair - Bill Fedorka, Director - Engineering, The SEFA Group
ZNAES	H4.2 DENSE SLURRY SEQUESTRATION OF CONCENTRATED FGD WASTEWATER Dale Timmons, Program Manager, NAES Corporation
AECOM	H4.3 TURNING THE CORNER - CCR MANAGEMENT AFTER OCTOBER 17 Mark Rokoff, Vice President, AECOM
BURNS	H4.4 CCR CORRECTIVE ACTION & YOUR WATER BALANCE: WHAT YOU NEED TO KNOW Katie Bland, Process Section Manager, Burns & McDonnell; Sarah Gilstrap
LIME	H4.5 TOXIC TRACE METAL LEACHING EVALUATION OF HYDRATED LIME DSI BASED FLY ASH Richard Zhang, Senior Research Engineer, Mississippi Lime Company; Honglan Shi & Jianmin Wang, Missouri University of Science and Technology
BARR mounds entrolly	H4.6 IN DEFENSE OF THE PROFESSIONAL ENGINEER: CCR CITIZEN LAWSUITS Session Sponsor & Co-Chair - James Aiken, P.G., Vice President, Barr Engineering Co.
	Thursday February 9 1PM - 3PM
	H5. COAL ASH, CCR & FGD H5.1 DEVELOPING A STRATEGY FOR FGD WASTEWATER BYPRODUCT ENCAPSULATION Co-Chair - Keith Ambrose; Chemical Engineer; Duke Energy
BURNS	H5.2 IMPORTANCE OF COMPREHENSIVE CONCEPTUAL SITE MODEL FOR CCR COMPLIANCE Wayne Weber, Section Manager/Senior Environmental Engineer, Burns & McDonnell
Golder	H5.3 OPPORTUNITIES FOR ELIMINATING WASTEWATER DISCHARGES THROUGH SOLIDS FIX Sue Longo, Principal, Golder Associates
BLACK&VEATCH	H5.4 IMPACTS OF WET FGD WASTEWATER FOR ELG COMPLIANCE Mark Bleckinger, Air Quality Control Section Manager, Black & Veatch
WESTER	H5.5 ASTM STANDARDS-BENEFICIAL USE OF CCP STORED IN LANDFILLS OR IMPOUNDMENTS Gwen Eklund, Director, Electric Utilities Services, Western Region, Weston Solutions, Inc
ALDRICH	H5.6 CCR RULE TIMING SUGGESTS PRE-EMPTIVE CM/CA STRATEGIES IS PRUDENT Co-Chair - Steven Putrich, VP, CCR & Industrial Waste Program Director, Haley & Aldrich; David Hage
	Thursday February 9 3:30PM - 5:30PM
BURNS	H6. FGD, ELG, CCR & CCS H6.1 BOTTOM ASH SYSTEM WATER CHEMISTRY ISSUES Co-Chair - Kristin Glikbarg, Associate Process Engineer, Burns & McDonnell; Heun, LG&E Roush & Tewell, Burns & McDonnell
UNITED CONVEYOR	H6.2 WET-TO-DRY BOTTOM CONVERSIONS Kevin McDonough, Vice President of Sales and Marketing, United Conveyor Corporation
	H6.3 U.S. EPA'S FINAL CCR RULE; A CLEAN CLOSURE SUCCESS Jason Fifarek, Sr. Associate, Sargent & Lundy; Dahlberg, Sgt. & Lundy; Skalitzky, Alliant Energy
BARR mounded establish	H6.4 CCR GW MONITORING: WHY "TOTAL METALS" APPROACH "MUDDIES" THE WATER Co-Chair - Scott Korom, Senior Environmental Engineer, Barr Engineering Company
BURNS	H6.5 EMERGING TECHNOLOGIES FOR ELG COMPLIANCE Patricia Scroggin, Sr. Water/Wastewater Treatment Consultant, Burns & McDonnell
GeoEngineers 💋	H6.6 CCR RULE: GEOPHYSICAL TECHNIQUES TO CERTIFY UWL STABILITY & KARST GWM Gary Pendergrass, Principal, GeoEngineers, Inc.

	TRACK H GHG, ELG, CCR & CCS		TRACK I WATER & 316(b)
	Friday February 10 7:30AM - 9:30AM		Wednesday February 8 1PM - 3PM
	H7. CCS: CARBON CAPTURE & STORAGE H7.1 STATUS OF TECH DEVELOPMENT AT THE NATIONAL CARBON CAPTURE CENTER Roxann Laird, Director - National Carbon Capture Center, Southern Co.; Frank Morton		 WASTEWATER MANAGEMENT II.1 A UTILITY COMPLIANCE PERSPECTIVE TO WASTEWATER MANAGEMENT Bill Skalitzky, Manager Environmental Generation Compliance, Alliant Energy Corp.
Gasmet	H7.2 OPTIMIZING CCS PROCESSES USING FTIR MEASUREMENT TECHNOLOGY Co-Chair - Jim Comish, Sales & Support Manager, Gasmet Technologies	avivo	11.2 WASTEWATER FOR POWER PLANT COOLING & BOILER FEED MAKEUP WATER Kuang Lee, Global Product Manager - Energy Waste Water, Ovivo USA
Barryan Manada	H7.3 CCS APPLICATION & CONSIDERATIONS ON EXISTING COAL-FIRED POWER PLANTS Emily Kunkel, Sr. Enviro. Associate, Sargent & Lundy; Danielle Flagg & Rajendra Gaikwad	BURNS	11.3 A PUSH FOR NON-POINT SOURCE NUTRIENT REDUCTION IN THE U.S. Co-Chair - Sarah Gilstrap, Senior Environmental Scientist, Burns & McDonnell Engineering
	H7.4 UPDATE ON KM CDR PROCESS PROJECTS FOR COAL-FIRED POWER PLANTS Takahito Yonekawa, Engineering Manager, MHIA; Miyamoto, Tsujiuchi & Thomas	Gelaria Chean Water Agency Agence Unitationan Dec Exce	11.4 ENERGY CONSERVATION IN WATER & WASTEWATER FACILITIES & ROLE OF M&V Indra Maharjan, Program Manager, Ontario Clean Water Agency
USEA	H7.5 POLICY PARITY OF CCS/CCUS: THE CONTINUED CASE FOR CCS Session Sponsor & Co-Chair - Barry Worthington, Executive Director, United States Energy Association: Amishi Kumar & Will Polen	VACOM	11.5 SPECIALIZED EVAPORATION TECHNOLOGY TO MANAGE FGD WASTEWATER Lance Edling, VP of Engineering, Vacom Systems
EERC	H7.6 SUPERCRITICAL CO2 CYCLES FOR POWER PRODUCTION Jason Laumb, Principal Engineer, Energy & Environmental Research Center	C Invitacionalitati STANDARDS	11.6 PROTECTING YOURSELF FROM PROBLEMS WITH ANALYTICAL LABORATORY DATA Co-Chair - David Thal, Principal Chemist, Environmental Standards, Inc.
	Friday February 10 10AM - 12PM		Wednesday February 8 3:30PM - 5:30PM
FLORESTA ENCLOSE	H8. CCS II H8.1 PHOTOSYNTHETIC SEQUESTRATION Co-Chair - Eric Bettelheim, Executive Chairman, Floresta Singapore Pte Ltd	MAKAI	12. WATER REMEDIATION & 316(b) 12.1 PLANT UPGRADES COOLING WATER INTAKES TO MEET EPA'S 316(B) REQUIREMENTS Greg Rocheleau, Mgr., Makai Ocean Eng.; D. Hayes, Intake Screens; D. Jensen, Makai
	H8.2 EVALUATION OF CCS ECONOMICS FOR A GENERATION FACILITY IN NORTH DAKOTA Co-Chair - Joshua Stanislowski, Principal Process Engineer, Energy & Environmental Research Center	Hunton& WILLIAMS	12.2 NAVIGATING ENDANGERED SPECIES ACT REQUIREMENTS OF THE 316(B) RULE Kerry McGrath, Associate, Hunton & Williams LLP
CanmetENERGY	H8.3 ILMENITE AS OXYGEN CARRIER IN PRESSURIZED CHEMICAL LOOPING COMBUSTION Yewen Tan, Research Scientist, Natural Resources Canada, CanmetENERGY; Dennis Lu &	BURNS	12.3 ROLE OF THE ENTRAINMENT STUDIES IN THE DIRECTOR'S BTA DETERMINATION Co-Chair - Christopher Wiggins, Sr. Aquatic Ecologist, Burns & McDonnell
	Robin Hughes	NORTHERN ARIZONA UNIVERSITY	12.4 USING ALGAE TO REMOVE SILICA FROM FLY ASH POND WATER Terry Baxter, Associate Professor, Northern Arizona University
NCKU National Ching, Kang University	H8.4 PHOTOCATALYTIC REDUCTION OF CO2 BY (CU/ZNO)@TIO2 NANOREACTORS Hong Paul Wang, Professor, National Cheng Kung University; J. Wang, University of California; WK. Lin, National Tsing-Hua University; YL. Wei, Tunghai University; CJ. Jou,	()) HEACKHAWK	12.5 SURPRISING EFFICACY OF "SIPPING" HEAVY DNAPL WITH PISTON PUMPS Mark Bertane, President, Blackhawk Technology Company



Mark Bertane, President, Blackhawk Technology Company 12.6 USE OF NANOTECHNOLOGY FOR REMEDIATION OF UTILITY VAULT WASTEWATER Co-Chair - Allan Pronovost, Chief Scientific Officer, Red Lion Chem Tech, LLC

Thursday | February 9 | 7:30AM - 9:30AM

I3. 316(b)



I3.1 COLLABORÁTIVE 316(B) STUDY OF SEVEN OHIO RIVER POWER PLANTS Greg Seegert, Chief Ichthyologist, EA Eng.; J. Rager & J. Vondruska, EA; D. Dixon, EPRI



I3.2 PROTECTING THE FISH CAN BE THAT SIMPLE Co-Chair - Trent Gathright, Regional Business Development, Ovivo USA



13.3 LESSONS LEARNED FROM RECENT 316(B) INSTALLATIONS Co-Chair - Brett DeRousse, National Account Manager, Hydrolox

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BURNS MEDONNELL

I3.4 THERMAL PLUME MAPPING FOR MIXING ZONE AND 316(A) STUDIES Gregory Howick, Senior Aquatic Ecologist, Burns & McDonnell Engineering

National Kaohsiung First University of Science and Technology; H. Paul Wang & L.-C.

Cheng, National Cheng Kung University

TRACK | I | WATER & 316(b)

Thursday | February 9 | 10AM - 12PM

	I4. FGD WASTEWATER & ZLD I4.1 CHEMICAL SOFTENING FOR FLUE GAS DESULFURIZATION WASTEWATER TREATMENT Chet Acharya, Research Engineer, Southern Company, Jeffery Preece, EPRI
COMPANY St New Water Lifecom Technologen	 II.2 DEVELOPMENT OF FGD WASTE WATER COMPLIANCE OPTIONS FOR AEP COAL FLEET William Heins, Global Market Development Leader, GE Water & Process Technologies; Thomas L. Hart, American Electric Power (AEP)
OASYS W A T E R	14.3 FORWARD OSMOSIS BASED TREATMENT OF FGD WASTEWATER Co-Chair - Mary Theresa Pendergast, Director, Oasys Water; Nowosielski, Carter & Tracy
ch2m :	14.4 DESIGN OF FGD ZLD SYSTEMS - INNOVATION, SIZING TOOLS & WASTE DISPOSAL Dennis Fink, Water-for-Power Technology Leader, CH2M; Perez, Higgins & Davis
& ees	I4.5 KLEENWATER FGD ZLD, 5GPM PILOT STUDY RESULTS Mark Pastore, VP Technology, EES, Inc.; David Martin, ProChem, Inc.
Aquatech	14.6 THE TRUE COST OF ZERO LIQUID DISCHARGE Co-Chair - Michael Marlett, Engineering Mgr., Aquatech Intl./AquaChem ICD
	Thursday February 9 1PM - 3PM
🚱 Sé Rosef Water E Plocess Technologien	I5. FGD WASTEWATER & ELG I5.1 CASE STUDIES OF FGD/ELG COMPLIANCE SOLUTIONS AT THREE POWER PLANTS Co-Chair - Nelson Fonseca, Senior Manager, GE Water & Process Tech.; Lanny Weimer
CE Mari Water & Hoccess Technologen Carolino Carolino Approxide Approxide <td>15.1 CASE STUDIES OF FGD/ELG COMPLIANCE SOLUTIONS AT THREE POWER PLANTS</td>	15.1 CASE STUDIES OF FGD/ELG COMPLIANCE SOLUTIONS AT THREE POWER PLANTS
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Carollo Carollo Cultory Nydro	I5.1 CASE STUDIES OF FGD/ELG COMPLIANCE SOLUTIONS AT THREE POWER PLANTS Co-Chair - Nelson Fonseca, Senior Manager, GE Water & Process Tech.; Lanny Weimer I5.2 FGD COMPLIANCE : APPLYING WATER BALANCE TOOL FOR POWER PLANTS Charlie He, Associate VP, Carollo Engineers; Jessica Dresang & Peter Bokor I5.3 TWIN FLUID SDA (SPRAY DRYER ABSORBER) DESIGN A VIABLE CHOICE
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And Constant of the second secon	I5.1 CASE STUDIES OF FGD/ELG COMPLIANCE SOLUTIONS AT THREE POWER PLANTS Co-Chair - Nelson Fonseca, Senior Manager, GE Water & Process Tech.; Lanny WeimerI5.2 FGD COMPLIANCE : APPLYING WATER BALANCE TOOL FOR POWER PLANTS Charlie He, Associate VP, Carollo Engineers; Jessica Dresang & Peter BokorI5.3 TWIN FLUID SDA (SPRAY DRYER ABSORBER) DESIGN A VIABLE CHOICE Co-Chair - Robert Van Durme, P.E., Regional Sales Manager, Lechler; Gabriel PachecoI5.4 COMBINING TECHNOLOGIES IN THE TREATMENT TRAIN FOR ASH AND FGD WATERS Mark Kropilak, CEO, Liberty Hydro, Inc.I5.5 LESSONS IN GOING TO CLOSED LOOP BOTTOM ASH FOR ELG RULE COMPLIANCE

Thursday | February 9 | 3:30PM - 5:50PM



16. 316(b), ELG, WASTEWATER

16.1 DEMONSTRATION OF FRONTIER SEHAWK AT THE WATER RESEARCH CENTER Tyler Cromey, Research Engineer, Southern Company



16.2 ASTM D6041- CUSTOM FIBERGLASS REINFORCED PLASTIC (FRP) PROOF OF DESIGN Co-Chair - Tony Zacharewych, Mechanical Engineer, RPS Composites



16.3 ONLINE MONITOR PROVIDES LOW LEVEL SE ANALYSIS TO AID ELG COMPLIANCE Vladimir Dozortsev P.h.D., Development Manager, AMS; Rex Sistek



16.4 ONLINE MEASUREMENTS OF HG, AS AND SE IN FGD WASTEWATER STREAMS Co-Chair - Warren Corns, Research and Development Manager, P S Analytical Ltd



ISF

16.5 WE'RE IN HOT WATER: ALTERNATE THERMAL EFFLUENT LIMITS UNDER THE CWA Amy Antoniolli, Counsel, Schiff Hardin

16.6 ISOTOPE SEPARATION BY SELECTIVE MIGRATION

Charles Bleistein, CEO, CBT Holding, LLC; Dr. Venkat Bhethanabotla, PhD, & Hunter Johnson, University of South Florida

TRACK | I | WATER & 316(b) ROOM

Friday | February 10 | 7:30AM - 9:30AM



17. WASTEWATER SELENIUM 17.1 WASTEWATER SELENIUM CHEMISTRY IN BIOREACTOR TREATMENT SYSTEMS Co-Chair - James Fox, Technical Sales Mar., Brooks Applied Labs; Michelle Briscoe &

		Russell Gerads
LEET es;	SBC CapTec	17.2 SELENIUM REMEDIATION USING ALGAE Co-Chair - Samuel Shepherd, Director of Technology, SBC CapTec, LLC
racy	DOOSAN	17.3 SELENIUM REMOVAL FROM COAL IMPACTED WATER USING A NOVEL LENA UF SYSTEM Jaeho Ho, Process Engineer, Doosan Hydro Technology; Rob Broglio
-	CRIEPI Central Preservation for California	17.4 SELENIUM CONTROL BY OPERATING CONDITIONS OF WET-FGD Hiroyuki Akiho, Research Scientist, CRIEPI; Naoki Noda & Shigeo Ito
	ch2m:	17.5 PASSIVE TREATMENT OF SELENIUM FOR COST-EFFECTIVE SELENIUM REMOVAL James Bays, Technology Fellow, CH2M; B.T. Thomas & Jeffrey Tudini
	Headworks	17.6 SELENIUM AND NITROGEN CONTROL IN FGD WASTEWATER Somnath Basu, Vice President Global Process Engineering, Headworks International

Friday | February 10 | 10AM - 12PM

18. WATER SUPPLY & SECURITY 6

18.1 BIO-RECHARGE : THE SCIENCE OF WATER CYCLE MANAGEMENT Session Sponsor & Co-Chair - Gare Henderson, Director, INDRA Institute



18.2 POINT OF USE WATER RECYCLING IN ELECTRIC UTILITY PLANTS

Azita Yazdani, P.E., Founder and CEO, Exergy Systems, Inc.

EISC

18.3 REDUCING DISCHARGE FINES AND NEGATIVE PR THROUGH AUTOMATION OF DMRS Co-Chair - Paul Banfer, Vice President/Chief Technology Officer, EISC

0 THE ORIO SIAN UNIVERSITY **18.4 A FORWARD OSMOSIS–MEMBRANE DISTILLATION PROCESS FOR FGD WASTEWATER** Vinny Anderson, Graduate Research Assistant, The Ohio State University; Chin-Min Cheng, Tarunjit Butalia & Linda K. Weavers

POSTER

IDENTIFICATION OF ABRUPT CHANGE USING BAYESIN APPROACH

Sang Ug Kim, Associated Professor, Department of Civil Engineering, Kangwon National University; Kyong Oh Baek



KNU

강양대학교

A MULTI-FUNCTION CONSTRUCTED WETLAND FOR STREAM PURIFICATION Chih-Ming Kao, Professor, National Sun Yat-Sen University, Taiwan; Y.T. Tu, W.H. Chen, R.Y. Surampalli

	TRACK J BATTERY & STORAGE		TRACK J BATTERY & STORAGE
	Wednesday February 8 1PM - 3PM		Thursday February 9 10AM - 12PM
ÎCF	J1. CHARGING & TRANSPORTATION J1.1 DEPARTMENT OF ENERGY'S WORKPLACE CHARGING CHALLENGE Co-Chair - Carrie Giles, Manager, ICF International		J4. BATTERY & STORAGE J4.1 RISK ASSESSMENTS FOR BATTERY STORAGE SITES Co-Chair - Jane Besch, Principal, Geosyntec; Dr. Eric Peterson, MMI Engineering
SIERRA CLUB	J1.2 CLIMATE-STABILIZING, CALIFORNIA LIGHT-DUTY VEHICLE REQS & ARB GOALS Co-Chair - Mike Bullock, Transportation Committee Chair, Sierra Club	GIRTZ	J4.2 OPTIMIZING THE DESIGN OF TURNKEY SOLUTIONS Mike Tripodi, Principal Engineer, Girtz Industries; Brent Beissler
HL	J1.3 SAFETY AS A SERVICE: INNOVATIONS IN CLOUD-BASED VIDEO Blake Gasca, CEO, MuHu	Intertek	J4.3 ASSURANCE IN ENERGY STORAGE SYSTEMS: IDENTIFYING AND MINIMIZING RISK Haiwen (Howard) Liu, Sr. Staff Engineer/Engineering Team Lead, Intertek Testing Services NA, Inc.; Brad Affeldt
RPS	J1.4 HYBRIDIZATION OF INTERCITY PASSENGER RAIL Dave Cook, CTI, Rail Propulsion Systems		
-chargepoin+	J1.5 A NEW FUELING NETWORK - CHALLENGES, OPPORTUNITIES AND APPLICATIONS Michael Jones, Vice President Sales, NA West, ChargePoint	LS	J4.5 FREQUENCY REGULATION ENERGY STORAGE SYSTEM IN KOREA David Nickerson, Director of Business Development, LSIS Co., Ltd.; Joowon Yoon

Thursday | February 9 | 1PM - 3PM



J5. BACK-UP POWER & ENERGY STORAGE J5.1 ENERGY STORAGE APPLICATIONS IN COGENERATION POWER PLANTS



Co-Chair - Joel Wilson, Senior Engineering Manager, MMR Power Solutions



J5.2 MEDIUM VOLTAGE HEATING SYSTEMS ENABLE THERMAL ENERGY STORAGE SOLUTIONS David Taylor, Energy Market Sales Manager - Americas, Chromalox



J5.3 MODULAR LNG: ALTERNATIVE BACK-UP ENERGY SUPPLY FOR POWER GENERATORS Co-Chair - Michael Nicoloro, Senior VP, Sanborn, Head & Associates; Joan Fontaine



J5.4 DESIGN AND CONTROL OF AN INTERLEAVED POWER CONVERTER Woonki Na, Assistant Professor, Cal St Univ-Fresno; Min-Keuk Kim, KDSYSTEK; Joonghoon Kim, Chungnam National University



J5.5 RAIL WAYSIDE ENERGY STORAGE FOR GRID STABILITY AND BACKUP POWER Brian Yanity, CTI, Rail Propulsion Systems

Thursday | February 9 | 3:30PM - 5:30PM

J6. ENERGY STORAGE TECHNOLOGY



J6.1 JCESR - A NEW PARADIGM FOR ENERGY STORAGE RESEARCH Devin Hodge, Deputy Director for Operations, Argonne National Laboratory

J6.2 GWH ENERGY STORAGE AT < \$ 1.00/KWH CAPEX: HYDROGEN & AMMONIA FUELS



Co-Chair - Bill Leighty, Director, The Leighty Foundation

J6.3 VANADIUM FLOW BATTERY - LONG TERM ENERGY STORAGE ASSET GILDEMEISTER energy solutions Matthew Maiers, Business Development - North America, Gildemeister Energy Storage

J6.4 EARLY STAGE CAPITAL FOR DISRUPTIVE ENERGY 😽 VillageCapital Co-Chair - Marilyn Waite, Senior Manager, Village Capital

J2.1 ELECTRIC VEHICLES: THE KEY TO ENERGY INDEPENDENCE AND SECURITY Co-Chair - Alex Wong, Sr. Structure & Pricing Analyst, The Energy Authority

J2. EV & PHEV

Wednesday | February 8 | 3:30PM - 5:30PM

J2.2 PLUG-IN HYBRID VEHICLE IMPROVEMENT WITH COMBINED OF BATTERY WITH DLCAP Toshihiko Furukawa, Senior Manger, United Chemi-Con; Naoki Akiba, Takahiro Kikuta &

Shin Watanabe Nippon Chemi-Con Corp JRP Charge J2.3 "EMPOWER THE PEOPLE" - EV CHARGING TOOLKIT FOR APARTMENTS AND CONDOS Consulting Joel Pointon, Principal, JRP Charge Consulting

- J2.4 ENERGY STORAGE & MGMT FOR TRANSPORTATION & STATIONARY ENERGY USE EFFICIENT DRIVETRAINS Andrew Frank, CTO, Efficient Drivetrains Inc.
- J2.5 EV TO GRID INTEGRATION HOW IT WORKS? WHY IT MATTERS? 쓷 eMotor<u>Werk</u>s Preston Roper, Chief Marketing & Operations Officer, eMotorWerks

J2.6 NAVIGATING THE CONNECTED LANDSCAPE IN ELECTRIC VEHICLES CLEAResult Session Sponsor & Co-Chair - Safiyyah Khan, Product Mkt Mgr., CLEAResult; Thor Hinckley

Thursday | February 9 | 7:30AM - 9:30AM





MISO

J3.2 GRID SCALE ENERGY STORAGE PROSPECTS AT ISO/RTO Co-Chair - Rao Konidena, Principal Advisor, Midcontinent ISO

Co-Chair - Barry Haaser, Managing Director, OpenADR Alliance

J3.3 FUELING THE ENERGY STORAGE REVOLUTION Andrew Miller, Analyst, Benchmark Mineral Intelligence

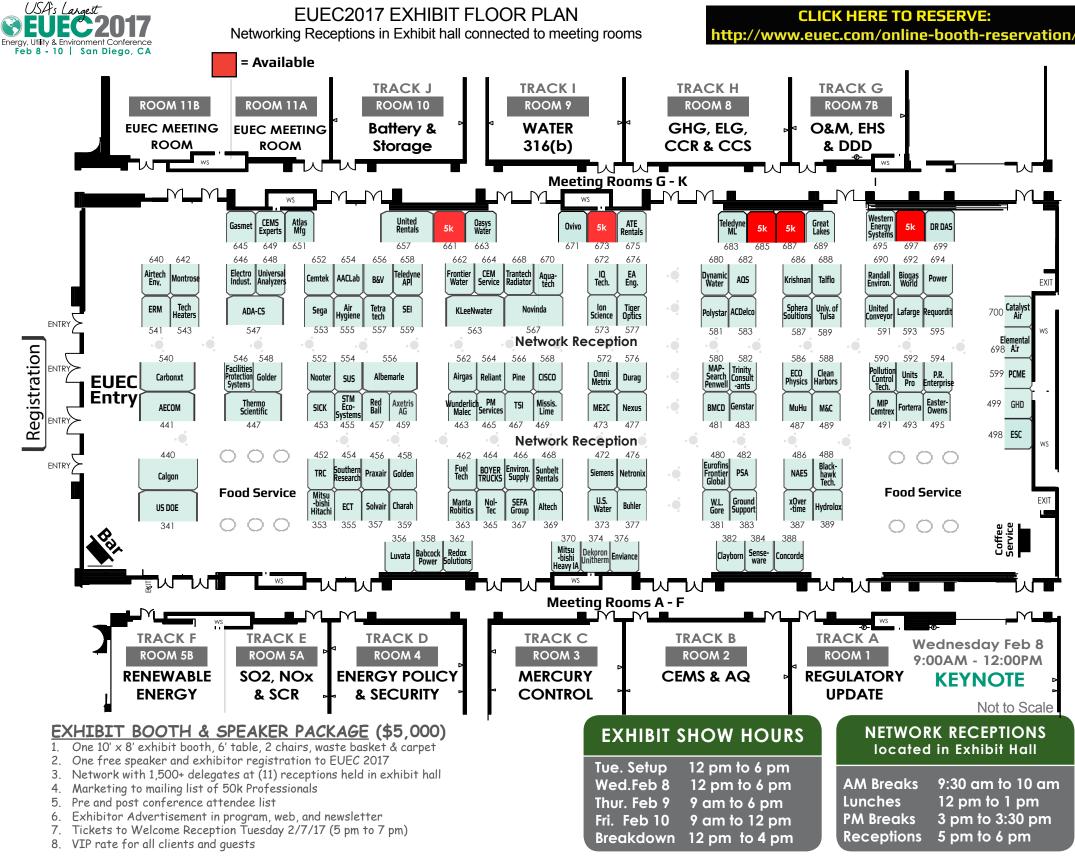
J3.4 IMPACT OF ELECTRIC VEHICLES ON COMMERCIAL DISTRIBUTION SYSTEMS Mariz Arias, Graduate Student, Yeungnam University; J. Kim, S. Jeon & Sungwoo Bae





-TEA-

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553	Sega, Inc.
384	Senseware
453	SICK
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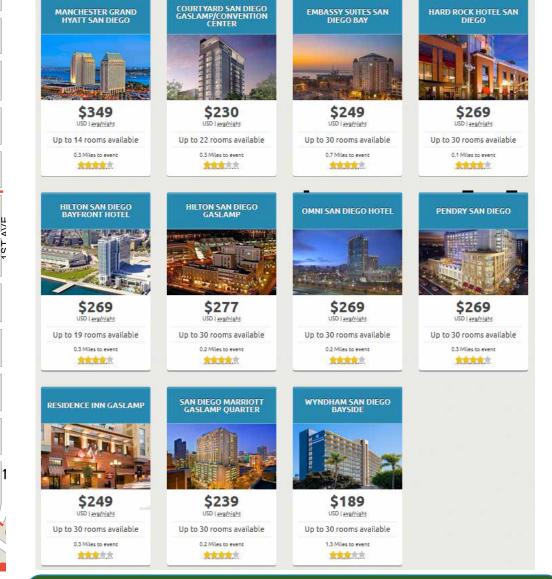


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