What is EUEC & TE-EXPO?

EUEC 2019: The 22nd Annual Energy, Utility & Environment Conference, is the USA’s largest professional networking and educational event of its kind, held February 25-26, 2019 at the Convention Center, San Diego, CA, with 1,500 attendees, 400 speakers and 200 exhibits.

The TE-EXPO is held across the hall from EUEC concurrently, in the 100,000 sq.ft. Sails Pavilion of the San Diego Convention Center. The TE-EXPO is free and open to public. TE-EXPO registrants can upgrade to attend all the TE and EUEC sessions and exhibits at a discounted rate.

TE-EXPO provides speaking and exhibit opportunities for suppliers of EV charging stations and infrastructure, batteries & storage, utility fleet, as well as ZEV & AFV, to showcase advanced technologies and strategies for compliance and implementation of SB-350 and for the transition of the transportation sector nationally. SB-350 directs California regulators (CPUC, ARB, CEC, AQMD) to electrify buses, trucks, fleet and off-road equipment, with $1 billion funded by investor owned utilities SDG&E, SCE and PG&E.

Schedule

The conference starts with the Keynote Session held in EUEC meeting room 1, from 8 am to 11:30 am on Monday, February 25, 2019.

There are a total of eleven breakout technical tracks (A to K) held in EUEC meeting rooms 1 to 11.

EUEC has nine technical tracks (A to I) held in meeting rooms 1 to 9. TE-EXPO has two technical tracks (J & K) held in meeting rooms 10 &11.

Exhibits & Receptions

Lunches (12 to 1 pm) and Receptions (5 to 7 pm) are held in the EUEC exhibit hall on both days.

Tables and chairs are set up in the exhibit aisles to facilitate networking during the breaks. Beverage, Coffee and Snack Counters are open from 7 am to 6 pm on both days in the EUEC exhibit hall. No food is allowed in the meeting rooms.

Exhibitors tear down is at 7 pm after the show ends on Tuesday Feb 26th at 7 pm.
2019 Keynote Speakers

**Monday, February 25th, 2019**

**Meeting Room 1**

**ELECTRIC SECTOR HELPING LEAD THE ENERGY TRANSFORMATION**
Robert C. Rowe — 8:00AM - 8:30AM
President and CEO, Northwestern Energy

**THE FUTURE FOR CARBON FREE FOSSIL ENERGY**
Lou Hrkman — 8:30AM - 9:00AM
Deputy Assistant Secretary, Clean Coal & Carbon Management, U.S. Department of Energy

**EPA AIR PROGRAM PRIORITIES MOVING FORWARD**
Reid Harvey — 9:00AM - 9:30AM
Director Clean Air Markets Division, U.S. Environmental Protection Agency

**TRANSPORTATION ELECTRIFICATION**

**SDG&E PROGRAMS FOR TRANSPORTATION ELECTRIFICATION & EVS**
Michael M. Schneider — 9:30AM - 10:00AM
Vice President, Clean Transportation and Asset Management, San Diego Gas & Electric (SDG&E)

**DRIVING TOWARDS CLEANER AIR IN SOUTHERN CALIFORNIA**
Laura Renger — 10:30AM - 11:00AM
Principal Manager of Air Quality & Climate, Southern California Edison

**STRATEGIES FOR ACCELERATING ELECTRIC TRANSPORTATION NATIONALLY**
John BoeSEL — 11:00AM - 11:30AM
President & CEO, CALSTART

**HIGHLIGHTS OF EUEC2019 & TE-EXPO**
Prabhu Dayal — 11:30AM - 11:45AM
Chairman, Energy, Utility, Environment Conference

**MISSION STATEMENT**

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

EUEC INTRO ........................................................................................................ 1
TABLE OF CONTENTS .......................................................................................... 2
SCHEDULE ............................................................................................................. 3
KEYNOTE ............................................................................................................... 4
SPEAKING TRACKS ............................................................................................... 4
UTILITIES ATTENDING ....................................................................................... 5
PROGRAM AT-A-GLANCE ................................................................................... 7

TRACKS
A: REGULATORY UPDATE .............................................................................. 9
B: CEMS & AIR QUALITY ............................................................................... 12
C: SO2, NOX, Hg, SCR, CONTROL & OPTIMIZATION ................................ 15
D: POWER GEN & ENERGY SERVICES ...................................................... 17
E: SOLID WASTE, LANDFILL GAS, BIOFUELS .......................................... 20
F: RENEWABLE ENERGY ............................................................................ 22
G: O&M, DDD & EHS ................................................................................... 25
H: ELG, CCR, CCS & FGD ......................................................................... 28
I: WATER & 316(B) COOLING TOWER .................................................... 31
J: UTILITY FLEET & TRANSPORTATION ELECTRIFICATION ...................... 34
K: BATTERY, STORAGE & CHARGING ....................................................... 37

EXHIBITS
EUEC FLOOR PLAN .......................................................................................... 41
EUEC EXHIBITING COMPANIES ................................................................... 43
REGISTRATION FORM ...................................................................................... 44
TE-EXPO .......................................................................................................... 45
TE-EXPO EXHIBITING COMPANIES ............................................................. 46
TE-EXPO FLOOR PLAN ................................................................................... 47
SPONSORSHIP OPPORTUNITIES .................................................................... 49
HOTELS ............................................................................................................ 50

ELECTRIC UTILITIES ATTENDING EUEC
Alabama Power Company
Alliant Energy Corporation
Ameren Corporation
American Electric Power
American Municipal Power, Inc.
Arizona Electric Power Cooperative
Arizona Public Service Company
Associated Electric Cooperative, Inc.
Big Rivers Electric
Calpine Corporation
Catawba County Government Utilities
Central Iowa Power Cooperative
Central Minnesota Municipal Power Agency
Clarke Public Utilities
Commonwealth Edison
Con Edison
Con Edison Clean Energy
Connecticut Natural Gas
Constellation Energy
Consumers Energy
CPS Energy
Deseret Power
Dominion Generation
DTE Energy
Duke Energy
Dynegy
East Kentucky Power Cooperative
EDF Inc
Edison Electric Institute
Empire District Electric Company
Encina Power Station
ENGIE North America
Entergy
Eversource Energy
Exelon Nuclear
Exelon Power
Florida Power & Light Company
Georgia Power
Grand Bahama Power Company
Great River Energy
Guam Power Authority
Guam Public Utilities Commission
Hawaiian Electric
Hooiser 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
Lhoist North America
Los Angeles Department of Water and Power
Louisville Gas & Electric
Luminant
Madison Gas & Electric
Michigan South Central Power Agency
Minnesota Power
Minnkota Power Cooperative, Inc.
Montana-Dakota Utilities Company
Muscatine Power and Water
Nebraska Public Power District
NextEra Energy
NiSource
Northern Indiana Public Service Co.
Northern Star Generation
NorthWestern Energy
NRECA
NRG Energy
NV Energy
OGE Energy Corp
Oklahoma Gas & Electric Company
Old Dominion Electric Cooperative
Omaha Public Power District
Oncon Electric Delivery
Oneta Power, LLC
Pacific Gas & Electric
PCPS Energy
PECO Energy
Piedmont River Power
Portland General Electric
PPL EnergyPlus LLC
PPL Montana Power Company
Prairie State Generating Co.
Puget Sound Energy - PSE
Rodan Energy Solutions Inc.
Rural Electric Cooperative
Sacramento Municipal Utility District
Salt River Project
San Diego Gas & Electric
Santee Cooper
SCANA
Seattle City Light
Segara Utilities
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
Vestren Corp.
WEC Energy Group
Westar Energy
Xcel Energy
Aloa Inc
Associated Electric Cooperative, Inc.
Bear Valley Electric Service
Brazos Electric Power Cooperative
Buckeye Power
Central Maine Power Company
Clay Electric Cooperative, Inc.
Colorado Springs Utilities
Corix Utilities
Dairyland Power Cooperative
Duquesne Light Company
Ethiopian Electric power
Liberty Utilities
Massachusetts Water Resources Authority
Matanuska-Susitna Borough
Nashville Electric Service
Nicor Gas
Northline Utilities LLC
Ohio Valley Electric Corp
Sudanese Hydro Generation and Renewable Energy Company.

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<table>
<thead>
<tr>
<th>Track</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Room #</strong></td>
<td>Room 1</td>
<td>Room 2</td>
<td>Room 3</td>
<td>Room 4</td>
<td>Room 5A</td>
<td>Room 5B</td>
<td>Room 7B</td>
<td>Room 8</td>
<td>Room 9</td>
<td>Room 10</td>
<td>Room 11</td>
</tr>
<tr>
<td><strong>SESSIONS</strong></td>
<td>REGULATORY UPDATE</td>
<td>CEMS &amp; EMISSION TESTING</td>
<td>SO₂, NOₓ, Hg &amp; SCR</td>
<td>POWER GEN &amp; ENERGY SERVICES</td>
<td>SOLID WASTE, LANDFILL GAS, BIOFUELS</td>
<td>RENEWABLE ENERGY</td>
<td>O&amp;M, DDD &amp; EHS</td>
<td>ELG, CCR, CCS &amp; FGD</td>
<td>WATER &amp; 316(b) COOLING TOWER</td>
<td>UTILITY FLEET &amp; TRANSPORTATION ELECTRIFICATION</td>
<td>BATTERY, STORAGE &amp; CHARGING</td>
</tr>
<tr>
<td>**Monday</td>
<td>February 25th**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1:00PM to 3:00PM</td>
<td>REGULATORY UPDATE - AIR</td>
<td>CEMS &amp; PEMS</td>
<td>SO₂, NOₓ, Hg, COMPLIANCE</td>
<td>ENERGY POLICY &amp; POWER PLANTS</td>
<td>WASTE TO ENERGY - CASE STUDIES</td>
<td>RENEWABLE ENERGY</td>
<td>DECOMMIS-SIONING OF POWER PLANTS</td>
<td>CCR &amp; ELG COMPLIANCE MGMNT.</td>
<td>WASTEWATER, GROUND WATER, REMEDIATION, ELG, FGD</td>
<td>TE, ELECTRIC UTILITIES &amp; EV CHARGING</td>
</tr>
<tr>
<td>2</td>
<td>3:30PM to 5:30PM</td>
<td>PERMITS REGS &amp; COMPLIANCE</td>
<td>MONITORING, TESTING &amp; INSTRUMENTATION</td>
<td>EMISSION CONTROL TECH. &amp; STRATEGIES</td>
<td>PLANT PERFORMANCE &amp; MATERIAL HANDLING</td>
<td>BIOGAS, BIOFUELS, BIODIESEL, ALGAE</td>
<td>RENEWABLE ENERGY PROJECT DEVELOPMENT</td>
<td>POWER PLANT O&amp;M</td>
<td>COAL ASH, CCR &amp; FGD</td>
<td>316(B), ELG, FGD, WASTEWATER</td>
<td>ADVANCE CLEAN TRUCKS - AFV &amp; ZEV FLEETS</td>
</tr>
<tr>
<td>**Tuesday</td>
<td>February 26th**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>7:30AM to 9:30AM</td>
<td>CAA, BACT, NESHAP, NEPA</td>
<td>MONITORING, TESTING &amp; INSTRUMENTATION</td>
<td>SO₂, NOₓ, Hg CONTROL TECH.</td>
<td>ENERGY &amp; CYBERSECURITY</td>
<td>LMOP - LANDFILLS &amp; LANDFILL GAS</td>
<td>RE SMARTGRID &amp; MICROGRID</td>
<td>O&amp;M, PLANT MANAGEMENT</td>
<td>CCR RULE</td>
<td>316(B), ELG &amp; WASTEWATER</td>
<td>EV, PHEV, HYBRID, FLEET SUSTAINABILITY</td>
</tr>
<tr>
<td>4</td>
<td>10:00AM to 12:00PM</td>
<td>NSR</td>
<td>MONITORING, TESTING &amp; SPECTROMETRY</td>
<td>DSI, ACI, ACTIVATED CARBON, SCR &amp; SNCR</td>
<td>T&amp;D, POWER PLANT TECHNOLOGIES</td>
<td>RNG &amp; BIOFUEL PROJECT STRATEGIES</td>
<td>GHG &amp; GREEN PROJECTS</td>
<td>EHS, EMIS &amp; SAFETY</td>
<td>COAL ASH, CCR</td>
<td>316(B), COOLING TOWER</td>
<td>ULTRA CLEAN LD/MD/HD</td>
</tr>
<tr>
<td>5</td>
<td>1:00PM to 3:00PM</td>
<td>REGIONAL HAZE &amp; SUSTAINABILITY</td>
<td>MODELING &amp; SATELLITE DATA</td>
<td>CONTROL &amp; OPTIMIZATION</td>
<td>ENERGY POLICY &amp; POWER PLANT STRATEGIES</td>
<td>LANDFILL MANAGEMENT &amp; COMPLIANCE</td>
<td>MICROGRID &amp; ENERGY STORAGE</td>
<td>OPERATIONS &amp; OPTIMIZATION</td>
<td>CCS &amp; RARE EARTH ELEMENTS</td>
<td>WATER SUPPLY &amp; SECURITY</td>
<td>UTILITY FLEET</td>
</tr>
<tr>
<td>6</td>
<td>3:30PM to 5:30PM</td>
<td>ENVIRONMENTAL SUSTAINABILITY &amp; UTILITIES</td>
<td>DRONES, DATA MGMNT &amp; MONITORING</td>
<td>PROJECT FINANCE &amp; RISK MANAGEMENT</td>
<td>PV, SOLAR &amp; SUSTAINABLE RE</td>
<td>EHS, RISK &amp; ENERGY MGMT</td>
<td>FGD, ELG, CCR &amp; CCS</td>
<td>WASTEWATER &amp; WATER TREATMENT</td>
<td>CARB REGS, EV CHARGING PROJECTS</td>
<td>EV BATTERY, SUPPLY &amp; CHARGING</td>
<td></td>
</tr>
</tbody>
</table>

**REGULATORY UPDATE**

- AIR NSR
- REGIONAL HAZE & SUSTAINABILITY
- ENERGY POLICY & POWER PLANTS
- WASTE TO ENERGY - CASE STUDIES
- RENEWABLE ENERGY
- DECOMMIS-SIONING OF POWER PLANTS
- CCR & ELG COMPLIANCE MGMNT.
- WASTEWATER, GROUND WATER, REMEDIATION, ELG, FGD
- TE, ELECTRIC UTILITIES & EV CHARGING
- BATTERY & ENERGY STORAGE SYSTEMS

**PERMITS REGS & COMPLIANCE**

- EMISSION CONTROL TECH. & STRATEGIES
- PLANT PERFORMANCE & MATERIAL HANDLING
- BIOGAS, BIOFUELS, BIODIESEL, ALGAE
- RENEWABLE ENERGY PROJECT DEVELOPMENT
- POWER PLANT O&M
- COAL ASH, CCR & FGD
- 316(B), ELG, FGD, WASTEWATER
- ADVANCE CLEAN TRUCKS - AFV & ZEV FLEETS
- EV CHARGING

**CAA, BACT, NESHAP, NEPA**

- MONITORING, TESTING & INSTRUMENTATION
- SO₂, NOₓ, Hg CONTROL TECH.
- ENERGY & CYBERSECURITY
- LMOP - LANDFILLS & LANDFILL GAS
- RE SMARTGRID & MICROGRID
- O&M, PLANT MANAGEMENT
- CCR RULE
- 316(B), ELG & WASTEWATER
- EV, PHEV, HYBRID, FLEET SUSTAINABILITY
- RESIDENTIAL & COMMERCIAL CHARGING

**NSR**

- MONITORING, TESTING & SPECTROMETRY
- DSI, ACI, ACTIVATED CARBON, SCR & SNCR
- T&D, POWER PLANT TECHNOLOGIES
- RNG & BIOFUEL PROJECT STRATEGIES
- GHG & GREEN PROJECTS
- EHS, EMIS & SAFETY
- COAL ASH, CCR
- 316(B), COOLING TOWER
- ULTRA CLEAN LD/MD/HD
- BATTERY, STORAGE & CHARGING SYSTEMS

**REGIONAL HAZE & SUSTAINABILITY**

- MODELING & SATELLITE DATA
- CONTROL & OPTIMIZATION
- ENERGY POLICY & POWER PLANT STRATEGIES
- LANDFILL MANAGEMENT & COMPLIANCE
- MICROGRID & ENERGY STORAGE
- OPERATIONS & OPTIMIZATION
- CCS & RARE EARTH ELEMENTS
- WATER SUPPLY & SECURITY
- UTILITY FLEET
- FUEL CELLS, LI-ION, H2, BATTERIES

**ENVIRONMENTAL SUSTAINABILITY & UTILITIES**

- DRONES, DATA MGMNT & MONITORING
- PROJECT FINANCE & RISK MANAGEMENT
- PV, SOLAR & SUSTAINABLE RE
- EHS, RISK & ENERGY MGMT
- FGD, ELG, CCR & CCS
- WASTEWATER & WATER TREATMENT
- CARB REGS, EV CHARGING PROJECTS
- EV BATTERY, SUPPLY & CHARGING
# Regulatory Update

## A1. REGULATORY UPDATE - AIR

**A1.1 ENERGY INDUSTRY REGULATIONS, 2019 - 2020**
Co-Chair - John Kinsman, Sr. Director - Environment, Edison Electric Institute

**A1.2 ACE RULE: ISSUES THAT EPA MUST ADDRESS**
Session Sponsor - Co-Chair - Jay Halloway, Partner, Williams Mullen

**A1.3 EPA CONSOLIDATES ITS MODELING POSITIONS**
Gale Hoffnagle, Senior Vice President, TRC

**A1.4 THE AFFORDABLE CLEAN ENERGY RULE: EVERYTHING YOU NEED TO KNOW**
Allison Wood, Partner, Hunton Andrews Kurth LLP

**A1.5 AFFORDABLE CLEAN ENERGY RULE: CHANGES IN EPA’S BENEFIT-COST ANALYSIS**
Kate Shouse, Analyst in Environmental Policy, Congressional Research Service

**A1.6 MOVING INTO THE 21ST CENTURY**
Bill Smalling, Attorney, The Law Office of C. William Smalling, PC

## A2. PERMITS REGS & COMPLIANCE

**A2.1 AIR REGULATORY CHALLENGES FACING THE NATION’S ELECTRIC COOPERATIVES**
Session Sponsor - Co-Chair - Daniel Chartier, Regulatory Director, Environ. Policy, Nat’l Rural Electric Coop. Assoc.

**A2.2 CALIFORNIA CAP AND TRADE MARKET AND POST 2020 UPDATE**
Mike Taylor, President, Emission Advisors, Inc.

**A2.3 UTILITY LEVEL ADAPTATION IN A POST-MITIGATION ENVIRONMENT**
Co-Chair - Jesse Frederick, Vice President, WZI, Inc.

**A2.4 WHAT DOES CALIFORNIA’S AB 617 MEAN FOR REGULATED SOURCES?**
Chris Easter, Director, ESA; Heidi Rous, Anitra Rice

**A2.5 AIR QUALITY COMPLIANCE LESSONS DURING A UNIVERSITY CHP COMMISSIONING**
Brian Petermann, Senior Project Manager, POWER Engineers, Inc.

**A2.6 NEW FOSSIL FUEL-FIRED GENERATION UNITS - FEASIBILITY CONSIDERATIONS**
Thomas Pritcher, Vice President/National Air Quality Service Line Director, ECT

## A3. CAA, BACT, NESHAP, NEPA

**A3.1 CLIMATE CHANGE AND TORT LITIGATION: THE PLAINTIFF’S BAR IS CIRCLING**
Co-Chair - Aaron Flynn, Partner, Hunton Andrews Kurth LLP

**A3.2 BATTERY STORAGE AS BACT - ANALYSIS OF EAB PSD PERMIT CHALLENGES**
Matthew Dobbins, Senior Associate, Vinson & Elkins

**A3.3 EMERGING ISSUES IN BACT DETERMINATIONS FOR GHG EMISSIONS**
Andrew Knudsen, Associate, Hunton Andrews Kurth LLP

**A3.4 STATIONARY COMBUSTION TURBINE NESHAP - RISK AND TECHNOLOGY REVIEW**
Co-Chair - Leslie Witherspoon, Manager, Environmental Programs, Solar Turbines Incorporated

**A3.5 ENERGY AND UTILITY SECTOR IMPLICATIONS OF NEPA REFORM**
Stacey VanBelleghem, Partner, Latham & Watkins LLP

**A3.6 A MODIFIED NEPA PRE-PLANNING APPROACH TO SHORTEN EIS TIMEFRAMES**
Brian Buck, Vice President, Stantec Consulting

## A5. REGIONAL HAZE & SUSTAINABILITY

**A5.1 LATEST DEVELOPMENTS IN 2ND DEcadal REVIEW FOR THE REGIONAL HAZE RULE**
Co-Chair - Robert Paine, Associate Vice President, AECOM; Jeff Connors

**A5.2 PLANNING FOR REGIONAL HAZE ROUND 2**
Ryan Templeton, Environmental Engineer Specialist, Arizona DEQ

**A5.3 STRATEGY FOR THE REGIONAL HAZE RULE 2ND PLANNING PERIOD**
Jeremy Jewell, Principal Consultant, Trinity Consultants; Christine Chambers, Neelesh Sule

**A5.4 REASONABLY DEFINING REASONABLE PROGRESS**
Megan Berge, Partner, Baker Botts, LLP

**A5.5 “ENVISION” IMPROVEMENTS IN SUSTAINABILITY**
Dusty Miller, Environmental Scientist, Black & Veatch

## A6. ENVIRONMENTAL SUSTAINABILITY & UTILITIES

**A6.1 IMPROVED REGULATORY RESULTS THROUGH ENVIRONMENTAL SUSTAINABILITY**
Co-Chair - Nicholas Morgan, Project Manager, Kleinschmidt Associates; Kimberly Long

**A6.2 A STRATEGIC APPROACH TO CONSERVATION STEWARDSHIP**
Kimberly Long, Environmental Performance Improvement Manager, Exelon Corp.

**A6.3 UTILIZING PUBLIC-PRIVATE CONSERVATION PARTNERSHIPS TO RECOVER SPECIES AND MAINTAIN OPERATIONAL FLEXIBILITY**
Joe Drumm, Natural Resources and Stewardship Manager, Southern Company

**A6.4 SUSTAINABLE PERFORMANCE AT TVA: CUSTOMER IMPACT AND ECONOMIC DEVELOPMENT**
Monte Matthews, Sr. Mgr & Deputy Chief Sustainability Officer, Tennessee Valley Authority

**A6.5 LADWP… ADDRESSING ENERGY-WATER NEXUS AND SUSTAINABLE WATER SUPPLIES**
Delon Kwan, Manager of Resources Development, L.A. Department of Water & Power

**A6.6 PRAIRIES TO POLLINATORS: DAIRYLAND POWER COOPERATIVE’S SEEDS OF CHANGE**
Brad Foss, Senior Environmental Biologist, Dairyland Power Cooperative
## B1. CEMS & PEMS

### B1.1 SMART SAMPLE HANDLING SYSTEMS FOR CEMS AND PMS
**Session Sponsor - Co-Chair** - Philipp Zimmel, Area Sales Manager, JCT Analysetechnik GmbH

**Co-Chair** - Kevin Crosby, VP Technical, Monitrose Environmental, Inc.

**B1.2 ENHANCED MEASUREMENT OF LOW-CONCENTRATION FORMALDEHYDE EMISSIONS**
Frank DeThomas, Vice President Process & Environmental, HORIBA Instruments, Inc.

**B1.3 STACK GAS ANALYSIS BY TUNABLE DIODE LASER (TDL) ANALYSIS**
Frank DeThomas, Project Director, TRC Environmental Corporation; Anthony Sakellariou

**B1.4 IMPLEMENTING A SUCCESSFUL START-UP PERFORMANCE TESTING PROGRAM**
Dan Grabowski, Project Director, TRC Environmental Corporation; Anthony Sakellariou

**B1.5 DEVELOPMENT, CERTIFICATION AND OPERATION OF A PEMS**
Richard Hovan, Director-ES Business Development; Wunderlich-Malec; Jennifer Fantich

**B1.6 SIMULTANEOUS MEASUREMENT OF NO & NOX FOR ACCURATE NO2 DETERMINATION**
Tom McKarns, Principal, ECO PHYSICS, Inc.

### B2. MONITORING, TESTING & INSTRUMENTATION

**B2.1 INTRODUCTION OF THE PTR-TOF-MS INTO COMPLIANCE TESTING**
Peter Zemek, SVP Emerging Technologies, Monitrose Environmental, Inc.

**B2.2 RICE & CT UNITS PERFORMANCE TESTING CONSIDERATIONS**
Holly Hills, Senior Environmental Engineer, Sargent & Lundy, Emily Kunkel

**B2.3 CEMS: DESIGN, BUILD AND INSTALLATION CONSIDERATIONS**
Phaneendra Uppalapati, Air Quality Engineer, AECOM, Frank Tringale, Lary La France

**B2.4 SOURCES OF SO2 ANALYSIS INACCURACY IN LOW-SO2, HIGH-HUMIDITY SAMPLING**
Craig Sunada, Vice President, Product Development, Perma Pure, LLC.

**B2.5 EPA’S ELECTRONIC REPORTING TOOL (ERT)**
Kathleen (Katie) Shonk, Quality Manager, Air Quality Services, LLC.

**B2.6 ALTERNATIVE PORTABLE SOLUTION FOR REFERENCE METHOD TESTING**
Dr. Dietmar Doll, Head of Research and Development, MRU Instruments, Inc.

**B2.7 LASER UPDATE FOR CROSS DUCT AND OPEN PATH MEASUREMENT**
Co-Chair - Bernadette Shahin, National Applications Manager, M&C TechGroup North America

**B2.8 INTRODUCTION TO PART 75 CEMS DATA VERIFICATION AND DATA USE**
Travis Johnson, Clean Air Markets Division, U.S. EPA

### B3. MONITORING, TESTING & INSTRUMENTATION

**B3.1 FLOW MONITOR K-FACTOR CALCULATIONS**
Cindy Whitaker, Manager, Air Monitoring & Testing, Environmental Affairs, Louisville Gas & Electric - Kentucky Utilities; Matt Gentry, Airflow Sciences

**B3.2 ADVANCES IN CONDENSABLE PARTICULATE MATTER MEASUREMENT**
Co-Chair - David Elam, Vice President & Project Director, TRC

**B3.3 TUNABLE DIODE LASER (TDL) FOR STACK GAS ANALYSIS**
Frank DeThomas, VP Process and Environmental, Horiba Instruments, Inc.

**B3.4 A STATE’S DILEMMA - REGULATING NHE CEMS SYSTEM**
Barbara Marshik, Global Power & Emissions Market Segment Manager, Servomex

**B3.5 IMPACTS OF EPA REGION 6 GUIDANCE ON CMS DOWNTIME & DATA CALCULATION**
Co-Chair - JP Kleineke, Project Manager, ALL4

**B3.6 FACTORS AFFECTING PERFORMANCE OF NAFION DRYERS WITH SO2 AND NOX**
Gene Bohensky, Director, Application/Partner Learning, Perma Pure, LLC; Craig Sunada

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## B4. MONITORING, TESTING & SPECTROMETRY

**B4.1 NEW DEVELOPMENTS IN PROTON TRANSFER REACTION MASS SPECTROMETRY (PTR-MS)**
Steve LaZar, Business Development Consultant, The RJ Lee Group

**B4.2 UTILIZING TUNABLE LASER SPECTROSCOPY (TLS) FOR NH3 COMPLIANCE**
Gary Cacciatore, Midwest Regional Sales Manager, Centmek KV8-EnerTech

**B4.3 LOW LEVEL NOX MONITORING ON FAST START TURBINES AND 7E PERFORMANCES**
Chris Hall, Manufacturing Planning Manager, Thermo Fisher Scientific; Joe Vaglio

**B4.4 STRATEGIES TO MINIMIZE CEMS DOWNTIME**
Eric Wiley, Managing Consultant, Trinity Consultant

**B4.5 SPECIATED HG EMISSION AS A FUNCTION OF FUEL TYPE AND CONTROL DEVICE**
Co-Chair - Jeremy Wharton, Business Development Manager, Thermo Fisher Scientific; Jeff Socha

**B4.6 TIPS FOR MANAGING A CEMS AND DAHS WITH LIMITED RESOURCES**
Co-Chair - Matt Swanson, District Manager, West, VIM Technologies, Inc.; Brad Blase

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## B5. MODELING AND SATELLITE DATA

**B5.1 DISPERSION MODELING FOR STRATEGIC ANALYSIS OF SO2 COMPLIANCE**
Co-Chair - George Schewe, Principal Meteorologist/Consultant, Trinity Consultants

**B5.2 BUOYANT LINE SOURCE IMPLEMENTATION ISSUES IN AERMOD**
Richard Hamel, Air Quality Meteorologist, ERIM; Milena Borissova, Carlos Szemek

**B5.3 ANALYSIS OF UPDATES TO AERMOD’S PRIME AND BPID DOWNWASH ALGORITHMS**
Jeff Connors, Manager, Air Quality Engineering and Studies, AECOM; Mary Kaplan, Robert Paibe, Olga Samani

**B5.4 ADVANCED SATELLITE ATMOSPHERIC MONITORING IS NO LONGER PIE IN THE SKY**
Philip Father, CEO, Scepter, Inc.

**B5.5 MONITORING METHANE EMISSIONS AT THE SOURCE FROM SPACE**
Jean-Francois Gauthier, Director, Business Development, GHGSat; Stephane German

**B5.6 PRIME2 BUILDING DOWNWASH ENHANCEMENTS**
Co-Chair - Sergio Guerra, Senior Environmental Engineer, GHD; Ron Petersen, Petersen Research and Consulting, LLC

## B6. DRONES, DATA MGMT & MONITORING

**B6.1 DRONES, SENSORS USE IN DENIED ENVIRONMENTS AND UTILITIES**
Bruce Arvizu, Sr. Partner, Airworks Productions; Eric Pacheco

**B6.2 NEW FLEXIBLE CROSS PLATFORM SOLUTION FOR DAHS & OPERATOR WORKPLACE**
Nadezhda Semeniaka, CEO, LLC LOGOSGRUP

**B6.3 THE EVOLUTION OF PART 75 - DATA MANAGEMENT AND REPORTING**
Co-Chair - Katie Lindblom, Business Development, Trace Environmental Services; David B. Martin

**B6.4 APPLICATION OF CEMS: AUTOMATED EMISSIONS REDUCTION**
Grace Mitchell, Data Analyst, WattTime

**B6.5 AIR QUALITY MONITORING SYSTEM FOR CHALLENGING LOCATIONS**
Roland Zepeck, Sales Director, JCT Analysetechnik GmbH

**B6.6 DATA MANAGEMENT FOR EMISSIONS, FENCELINE AND COMMUNITY MONITORING**
Andrew Montz, Owner, DR DAS Ltd.

**B6.7 ADVANCES AND NEW DIRECTION IN AMMONIA SLIP MONITORING IN CALIFORNIA**
Bhaskar Chandan, Supervising Air Quality Engineer, South Coast Air Quality Management District; Dipankar Sarkar
C1. SO2, NOx, HG, COMPLIANCE

C1.1 NOx CONTROL, AND A LOT MORE, WITH CATALYTIC CERAMIC FILTERS
Kayla Olson, Senior Process Engineer, Tri-Mer Corporation

C1.2 USE OF HALOGEN ADDITIVES TO INCREASE FUEL FLEXIBILITY
Co-Chair - J. Duncan Kish, Sales Account Manager, ADA-ES, Inc.; Alyssa Fuller

C1.3 DITCHING YOUR MAJOR SOURCE MACT REQUIREMENTS
Kim Alfonsi, Senior Environmental Consultant, Barr Engineering Co.; Tony Widboom

C1.4 REACT® SYSTEM CHEMISTRY FOR MULTI-POLLUTANT CONTROL OF SOX, NOX, HG AND PM
Co-Chair - Domenic Contrino, Solutions Developer, Carbonxt; Regina Rodriguez, David Mazyck, Christine Valcarce

C1.5 ATLAS CARBON AND THE PNEUMATIC FLASH CALCINER
Michael Jones, CTO, Atlas Carbon, LLC

C2. EMISSION CONTROL TECH. & STRATEGIES

C2.1 A CASE STUDY: ENHANCED SO3 TOLERANT PAC WITHOUT THE USE OF HALOGENS
Co-Chair - Curt Larson, Vice President - Sales, Carbonxt; Regina Rodriguez, David Mazyck, Lindsey Costin

C2.2 NEW TECHNOLOGY IMPROVEMENTS FOR RETROITS AND SYSTEM UPGRADES
Co-Chair - Sean Dooley, Environmental Solutions, Nol-Tec Systems, Inc.

C2.3 SIMULATIONS OF TRAFFIC EMISSION REDUCTION STRATEGIES: MADRID EPISODE
Roberto San Jose, Professor, Technical University of Madrid (UPM); Rosa Gonzalez, UCM; Juan Perez, Libia P’erez, UPM

C2.4 MERCURY ADSORPTION TESTS USING ACTIVATED CARBONS
Sang-Sup Lee, Associate Professor, Chungbuk National University; Tanveer Ahmad, Sinang Choi, Jeong Min Park

C3. SO2, NOx, HG CONTROL TECH.

C3.1 NEW FINDINGS IN HG CONTROL THROUGH FGD & HYDROCLONE IMPROVEMENTS
Mark Pastore, VP Technology, EES, Inc.

C3.2 NOVEL TREATMENT SYSTEM FOR MERCURY AND SELENITE REMOVAL
Co-Chair - Vladimir Dozortsev, Development Manager Trace Metals, Aqua Metrology Systems, Ltd.

C3.3 TREATING TAIL GASES IN THE ENERGY SECTOR
Co-Chair - Scott Bayon, Director of Sales, Anguil Environmental Systems, Inc.

C3.4 APPROACH TO APPLY BATTS TO CONTROL MERCURY EMISSION FOR ENERGY UTILIZATION
Eun-Song Lee, Student, Yonsei University; Hana Jang, Yong-Chil Seo, Jin-Ho Sung

C3.5 NOx REDUCING CONTROL IN 870MW PC BOILER WHICH HAS OPPOSITE BURNERS
Youngjun Ham, Supervisor, Korea South-East Power Co.; Inchan Park, Sooseok Kim
D2. PLANT PERFORMANCE & MATERIAL HANDLING
D2.1 COST AND PERFORMANCE BASELINE FOR FOSSIL ENERGY PLANTS: BT. COAL/NG
Co-Chair - Alexander Zaebel, Senior Chemical Engineer, Leidos; Mark Woods, KeyLogic; R.J. James, Travis Shultz, Timothy Fout, USDOE/NETL; Marc Turner, Leidos

D2.2 MANAGING LOGISTICS FOR SCHEDULED OUTAGES IN POWER AND ENERGY
Angela Elacostas, President and Founder, AGT Global Logistics

D2.3 GENERATOR MODEL VALIDATION USING NONTRADITIONAL GENERATOR MSRMNTS
Tarig Rahman, Principal Engineer, SDG&E; Isaac West, Kamal Garg, Schwitzer Engineering Laboratories; Hassan Ghoudjehbaklou, SDG&E

D2.4 ADVANTAGES OF ANNUAL CRITICAL PUMP FIELD TESTING
Kurt Schumann, President, ProPump Services, LLC; Bob Morgenstern

D2.5 DEVELOPING BEST PRACTICES FOR LONG-TERM RELIABILITY
Co-Chair - Johnny Howze, Plant Manager, Georgia Power

D2.6 INTERNET OF THINGS - DEPLOYMENT FOR EXISTING POWER PLANTS
Gary Sim, CEO, Cypress EnviroSystems

D2.7 HARDWARE UPGRADES FOR OPTIMIZING GT MAINTENANCE
Michael Dolan, Chief Engineer, HYTORC Corporation

D3. ENERGY AND CYBERSECURITY
D3.1 THE NATION’S FIRST CYBER-SECURE UTILITY MICROGRID AT AMEREN
Emily LeJeune, Microgrid Applications Manager, S&C Electric Company

D3.2 IDENTIFYING AND MITIGATING CYBER RISK
Timothy Carbett, Founder and President, Cyber Security Service

D3.3 IGNORANCE IS NO EXCUSE: COMBUSTION SYSTEMS STANDARDS AND CODES 101
Dave Baxter, Senior Managing Director - Western US, Relevant Solutions

D3.4 BRIDGING THE DIVIDE BETWEEN OT & IT SECURITY IN THE UTILITIES INDUSTRY
Co-Chair - Amy Williams, Vice Pres. of Cyber Services, Unlimited Technology, Inc.

D3.5 EFFECTIVE SECURITY AWARENESS TO PROTECT THE POWER GRID
Jeffrey Struik, Principal Cyber Security Engineer / Owner, Cyber Strike Solutions, LLC

D3.6 INFORMATION VS INTELLIGENCE-THE HUMAN FACTOR THAT MAKES IT ALL WORK
Co-Chair - John Bryk, Cyber and Physical Threat Intelligence Analyst, DNG-ISAC

D4. T&D, POWER PLANT TECHNOLOGIES
D4.1 SUBSURFACE INVESTIGATION METHODOLOGY
Co-Chair - Josh Dotson, Energy Division Manager, GPRS

D4.2 LEAK DETECTION 101: THE HISTORY OF NATURAL GAS LEAK DETECTION
Bryan Chambers, International Sales Manager, Heath Consultants Incorporated

D4.3 CHALLENGES IN ENVIRONMENTAL PERMITTING
Benjamin Becker, Environmental Compliance Specialist, Black & Veatch

D4.4 MITIGATING IMPACTS TO BIRDS FROM TRANSMISSION LINES
Tom Hamer, Senior Wildlife Ecologist, Hamer Environmental

D4.5 ADAPTING TO A NEW WORLD: THE CHANGE FROM BASELOAD TO CYCLING OPS
Co-Chair - Una Nowling, Technology Leader, Fuels and Reliability, Black & Veatch

D4.6 REDUCE OR ELIMINATE DRY-ICE CLEANING WITH INFRASOUND TECHNOLOGY
Michael Ware, President, SCR Solutions, LLC

D5. ENERGY POLICY & POWER PLANT STRATEGIES
D5.1 INCLUDING CUSTOMER NEEDS IN RATE DESIGN
Co-Chair - Ted Kelly, Principal & Senior Project Manager, Burns & McDonnell

D5.2 IS GREEN THE NEW BLACK… THE RISE AND FALL OF NATURAL GAS?
Anthony Cirillo, Senior Project Director, AECOM

D5.3 THE EFFECT OF ARCTIC BLASTS & GLOBAL WARMING SOLUTIONS ACT ON ISO-NE
Stephen Slacomb, Principal, Epsilon Associates

D5.4 CLIMATE ACTION AND ADAPTATION FOR THE CITY OF SAN ANTONIO
Angela Rodriguez, Director, Climate & Sustainability, CPS Energy; Doug Melnick, City of San Antonio; Danielle Vitalo, Navigant Consulting, Inc.

D5.5 THE BENEFITS OF GAS TURBINES AND ORC FOR DISTRIBUTED POWER GENERATION
Michael Welch, Industry Mktg Mgr, Siemens Industrial; Jeremy Zamzow, Opero Energy

D5.6 REAL TIME MONITORING OF NATURAL GAS COMPOSITION FOR POWER GENERATION
Sylvie Bosch-Chapenay, Senior Applications Scientist, MKS Instruments, Inc.; Roberto Bosco
E1. WASTE TO ENERGY - CASE STUDIES

E1.1 GASIFICATION FOR WASTE WATER FACILITIES - PART 1: PROCESS BENEFITS
Jeffrey Snyder, Sr VP Business Development, Aries Clean Energy; Sara Head, Yorke Eng.

E1.2 GASIFICATION FOR WASTE WATER FACILITIES - PART 2: PERMITTING CASE STUDY
Co-Chair - Sara Head, Principal Scientist, Yorke Engineering, LLC; Jeffrey Snyder, Aries Clean Energy

E1.3 PLASMA GASIFICATION OF WASTE IN THE U.S.: A CASE STUDY ON LARGE-SCALE
Richard Fish, President and CEO, AlterNRG Corp.

E1.4 FOOD WASTE TO RENEWABLE NATURAL GAS: TECHNICAL AND ECONOMIC OPTIONS
Co-Chair - Mark McDannel, Mgr, Energy Recovery Section, Los Angeles County Sanitation Districts

E1.5 RENEWABLE DIESEL - RISK FREE CARBON FOOTPRINT REDUCTION
Matt Leuck, Technical Manager, North America, Neste

E2. BIOGAS, BIOFUELS, BIODIESEL, ALGAE

E2.1 CATAWBA COUNTY ECOCOMPLEX, A STUDY OF INDUSTRIAL SYMBIOSIS EMPLOYING
Barry Edwards, Director of Utilities & Engineering, Catawba County

E2.2 BIOMASS TO DIESEL, A NEW WAVE IN RENEWABLE FUELS
Co-Chair - Roberta (Bobbie) Hurley, Associate Vice President, AECOM

E2.3 OXYGEN REFORMING OF TAR AND METHANE IN BIOMASS-DERIVED SYNAGAS
Co-Chair - Dr. Bradley Damstedt, Development Specialist, Praxair; Larry Bool

E2.4 CFD STUDY ON GASIFICATION CHARACTERISTICS OF BIO-OIL
Hang Seok Choi, Professor, Yonsei University; MyungKyu Choi, Jae Gyu Hwang, HoonChae Park

E3. LMOP - LANDFILLS & LANDFILL GAS

E3.1 CONVERSION OF BIOGAS RENEWABLE TO POWER TO RNG - A VALUE PROPOSITION
Jeffrey Pierce, Senior Project Director, SCS Energy / SCS Engineers

E3.2 BANKING 101: FINANCING INNOVATIVE BIOENERGY
Rob Ricciardi, Loan Officer, Live Oak Bank; Max Vernier

E3.3 COVAP: COGENERATION FOR INDUSTRIAL WASTE WATER EVAPORATION
Co-Chair - Ben Laurent, Senior Process Engineer, Heartland Water Technology, Inc.

E3.4 ENCAPSULATOR TECHNOLOGY USEFUL FOR ODOR MITIGATION IN LANDFILLS
Ron Lowrey, Regional Manager, Hazard Control Technologies, Inc.; Jeffrey Bonkoski

E3.5 SIoux FALLS PIPELINE PROJECT - DELIVERING SUCCESS
Dustin Hansen, Landfill Manager, City of Sioux Fall

E3.6 SIoux FALLS LANDFILL GAS TO POET ETHANOL
Rachel Kloos, Plant Manager, Poet; Dustin Hansen, Landfill Superintendent, City of Sioux Falls, SD

E4. RNG & BIOFUEL PROJECT STRATEGIES

E4.1 HOW TO MEET RULE 30 AND RULE 21 REQUIREMENTS FOR RENEWABLE NATURAL GAS
Dave Church, VP Operations, Guild Associates, Inc.

E4.2 RENEWABLE GAS PIPELINES: WHAT REGULATIONS APPLY AND HOW TO OPERATE
Co-Chair - Ryan Estabrook, President, Douglas Pipeline Company

E4.3 BIFURCATING A CENTRAL PLANT FOR REDUNDANCY AND RELIABILITY
Co-Chair - Jay Ehrfurth, Director - Power / Industrial, The Boldt Company

E4.4 SELF-PERPETUATING ENVIRONMENTAL CLEANUP SYSTEM
Peter Schubert, Director, Indiana University - Purdue University Indianapolis (IUPUI)

E4.5 ENGINEERED BIOMASS PROJECTS: FINALLY TIME FOR THEIR DAY IN THE SUN?
Una Nowling, Technology Leader, Black & Veatch
F1. RENEWABLE ENERGY
- Monday | 1PM - 3PM
  - F1.1 ECONOMIC AND SOCIAL ASPECTS OF OPERATING A COMMERCIAL WIND FARM
    Hal Fells, Commercial Manager, Miaoli Wind Company
  - F1.2 LIFECYCLE OF A RENEWABLE ENERGY PROJECTS DEVELOPMENT
    Rob Bates, Senior Project Scientist, NTH Consultants, Ltd.
  - F1.3 MAXIMUM GEOTHERMAL HEAT HARVESTING VIA DOWNHOLE LOOP CIRCULATION
    Co-Chair - Robert Pilkko, Director, Blade Energy Partners
  - F1.4 THE END OF BIG IRON: HOW WIND AND SOLAR BECAME CHEAPER THAN HYDRO
    Robert McCullough, Principal, McCullough Research; Zachary Campbell, Louis Bengston, Eric Sheiman
  - F1.5 THE RENEWABLE ENERGY BUSINESS CASE FOR NERC COMPLIANCE
    Mark Rabuano, Dir. of Regulatory Compliance, Grid Subject Matter Experts (GridSME)
  - F1.6 NEAR-TOTAL DECARBONIZATION: GLOBAL CLIMATE CHANGE INCLUDE H2, NH3 FUEL
    Co-Chair - Bill Leighty, Director, The Leighty Foundation

F2. RENEWABLE ENERGY PROJECT DEVELOPMENT
- Monday | 3:30PM - 6:00PM
  - F2.1 PREPARING FOR OFFSHORE WIND DEVELOPMENT IN THE U.S.
    Co-Chair - William Stark, Vice President - Environmental Services, leidos
  - F2.2 DIRECT RENEWABLES OFFERINGS - COMMUNITY AND SOLAR
    Drew Robinson, Manager, Renewables, Evergy (KCP&L / Westar Energy)
  - F2.3 FIELD TEST OF A POISON RESISTANT SOUR WATER GAS SHIFT CATALYST
    Girish Srinivas, Vice President, TDA Research, Inc.; S. Schwab, S. Gebhard, B. Gebhard
  - F2.4 RAMPING PERFORMANCE OF A GIGAWATT HYDRO COMPLEX
    Roger Clarke-Johnson, Western Region Manager, American Governor Company
  - F2.5 ARTILITY: AN ARTISTIC ILLUSTRATION OF RENEWABLE ENERGY AND UTILITY
    Nick Hartrich, Outreach Manager, Puget Sound Energy
  - F2.6 KEY CONSIDERATIONS FOR VOLUNTARY RENEWABLE ENERGY PURCHASING IN THE U.S.
    Michelle McGinty, Manager, Program Outreach, Center for Resource Solutions / Green-e
  - F2.7 RENEWABLE ENERGY IN THE UTILITY AND TRANSPORT SPACE
    Rob Threlkeld, Global Manager-Renewable Energy, GM

F3. RE SMARTGRID & MICROGRID
- Tuesday | 7:30AM - 9:30AM
  - F3.1 MICROGRIDS USING ONSITE RENEWABLES - RESILIENT SUSTAINABILITY
    Co-Chair - Alden Hathaway, SVP Business Development, Sterling Energy Assets
  - F3.2 UTILITY-SCALE MICRO-GRID
    Darr Hashempour, President / CEO, DH Green Energy, Inc.
  - F3.3 FLOW BATTERY TECHNOLOGY REVIEW
    Jason Barmann, Electrical Engineer, Burns & McDonnell
  - F3.4 BEST PRACTICES AT UC SAN DIEGO’S MICROGRID W/ 150 ADVANCED EVCHARGERS
    Byron Washom, Director, Strategic Energy Initiatives, UC San Diego
  - F3.5 REGULATIONS SUPPORTING FUEL CELL DEPLOYMENT IN CALIFORNIA
    Clark Crawford, Director, Business Development, FuelCell Energy
  - F3.6 STAYING 100% OPERATIONAL DURING MULTI-DAY GRID OUTAGES WITH RESILIENT AND HIGHLY-EFFICIENT CHP
    Gene Kogan, Director, DOE Western CHP TAP

F4. GHG & GREEN PROJECTS
- Tuesday | 10AM - 12PM
  - F4.1 GAS TURBINE/SOLAR ENERGY HYBRIDS FOR REDUCED CO2 ENERGY PRODUCTION
    Michael Welch, Industry Marketing Manager, Siemens Industrial Turbo machinery Ltd.
  - F4.2 RENEWABLE NATURAL GAS COMMODITY TRACKING
    Benjnin Gerber, Executive Director, Midwest Renewable Energy Tracking System (M-RETS)
  - F4.3 LOW-COST FINANCING & TECHNOLOGY MATCHMAKING FOR GHG REDUCTIONS
    Derrick Tang, Manager, Bay Area Air Quality Management District
  - F4.4 GHG AND ENVIRONMENTAL JUSTICE
    Co-Chair - Mark Hauenstein, Partner, UC Won
  - F4.5 GROW MARKET SHARE WITH A PROVEN SUSTAINABILITY MESSAGING STRATEGY
    Carolyn Parns, CEO, Mind Over Markets
  - F4.6 ZERO WASTE WEEK AND REDUCING CARBON FOOTPRINT AT NYU
    Dr. Bappanah Penaganda, Associate Professor / Group Practice Director, New York University, College of Dentistry; Megha Rao, Yunah Caroline Chun

F5. MICROGRID & ENERGY STORAGE
- Tuesday | 1PM - 3PM
  - F5.1 CON EDISON CASE STUDY: HOW FUEL CELLS SOLVE DEMAND GROWTH CHALLENGES
    Asim Hussain, Vice President, Marketing, Bloom Energy
  - F5.2 ENERGY STORAGE AS PART OF DER GROWTH: REGULATORY SNAPSHOT
    Walker Wright, VP of Policy, ENGIe Storage
  - F5.3 PERC: POWERED EMERGENCY RESPONSE CENTERS
    Ted Flanigan, President, EcoMotion
  - F5.4 GAS TURBINES DRIVING FLEXIBLE MICROGRIDS
    Session Sponsor - Co-Chair - Vivek Khanna, Manager Product Engineering, Solar Turbines
  - F5.5 THE ELECTRIC GRID AND THE BENEFITS OF MODULAR AND MICROGRID SYSTEMS
    Nathan Goodman, Chief Executive Officer, Hamer Environmental
  - F5.6 FUEL CELL MICROGRID CASE STUDY: HOW THE CITY OF HARTFORD CREATED AN ELECTRIC POWER SAFE HAVEN
    Asim Hussain, Vice President, Marketing, Bloom Energy

F6. PV, SOLAR & SUSTAINABLE RE
- Tuesday | 3:30PM - 6:00PM
  - F6.1 SITING SOLAR - ZONING AND ORDINANCE CONSIDERATIONS
    Nikki Payne, Principal Consultant - Impact Assessment & Planning, ERM
  - F6.2 SOLAR PV FEASIBILITY STUDY COMP: CLOSED ASH POND VS GREENFIELD SITE
    Neal Kochis, Senior Project Manager, Haley & Aldrich; Steven Putrich, Lee Saunders
  - F6.3 SOLAR ENERGY ASSESSMENT OF PENN STATE CAMPUSES USING ARCGIS AND ATSV
    Mesude Bayrakci-Boz, Assistant Teaching Professor of Engineering, Penn State Hazleton; Paulo Henrique Soares, Simon Miller
  - F6.4 PROMOTING SUSTAINABLE ENERGY INFRASTRUCTURE ON AN ACADEMIC INST.
    Co-Chair - Jin Jo, Associate Professor, Illinois State University; Matt Alderman
  - F6.5 FROM DATA TO INSIGHTS TO STORIES TO REACH YOUR AUDIENCE
    Stephen Groner, President, S. Groner Associates, Inc
  - F6.6 ELECTRICAL ENERGY MANAGEMENT IN HOUSEHOLD REFRIGERATORS AND FREEZERS
    Co-Chair - Seyed Mojtaba Sadrameli, Professor, Tarbiat Modares University; L. Abdolkaleki, A. Pirvaram
  - F6.7 RENEWABLE ENERGY IS RENEWABLE EFFICIENCY
    Shrespl Dalong, President, Grace Business Solution
  - F6.8 GROUND MOUNT RACK: GREEN IN/GREEN OUT WITH LIFT & SHIFT CAPABILITIES
    Gregg Klaw, Vice President of Business Development & Strategy, Nuance Energy Group
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<th>TRACK</th>
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<tbody>
<tr>
<td><strong>G1. DECOMMISSIONING OF POWER PLANTS</strong></td>
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<td><strong>G1.1 HOW TO TRANSFER ENVIRONMENTAL LIABILITIES DURING POWER PLANT CLOSURES</strong></td>
<td>Randall Jostes, CEO, Environmental Liability Transfer, Inc.</td>
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<td><strong>G1.2 PLANNING DEMCOM &amp; DEMOLITION &amp; IN-PLACE RETIREMENT OF POWER PLANTS</strong></td>
<td>Jeffrey Pope, Manager, Facility Decommissioning &amp; Demolition Svcs, Burns &amp; McDonnell</td>
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<td><strong>G1.3 SOLVING NON-LIQUID PCB IMPEDIMENTS TO DECOMMISSIONING</strong></td>
<td>Stephen Mitchell, Senior V.P., Weston Solutions, Inc.; Robert Appelt, J.D. Groesbeck</td>
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<td><strong>G1.4 FUNDAMENTALS OF DEMOLITION PROJECT MANAGEMENT OF POWER PLANTS</strong></td>
<td>Co-Chair - Tim Barker, D4 Program Director, AECOM</td>
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<td><strong>G1.5 DECOMMISSIONING AND THE CHALLENGES WITH SYSTEM AND UTILITY RETENTION</strong></td>
<td>Andrew Schaaf, Project Manager, APTIM, Inc.; Gene Scott</td>
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<td><strong>G1.6 ESTIMATING YOUR D&amp;D PROJECT</strong></td>
<td>Joe Vendetti, VP of D&amp;D, Remedial Construction Services LP (RECON)</td>
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<td><strong>G2. O&amp;M, CHP, ENERGY MANAGEMENT</strong></td>
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<td><strong>G2.1 OWNER’S ENGINEER, A VALUE ADDED PROPOSITION</strong></td>
<td>Co-Chair - Jeff Fassett, IEM Energy Consultants, LLC; Jeff Fassett</td>
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<td><strong>G2.2 MAXIMIZING SITE VALUE AND ULTIMATE FUTURE USE FOR POWER PLANT D&amp;D SITE</strong></td>
<td>Jeffrey Pope, Manager, Facility Decommissioning &amp; Demolition Svcs, Burns &amp; McDonnell</td>
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<td><strong>G2.3 REGAINING LOST MW THROUGH HIGH PRESSURE TURBINE FOAM CLEANING</strong></td>
<td>Robert Betz, Career Engineer, Ameren; Chris Taylor</td>
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<td><strong>G2.4 ENERGY RESILIENCE IN THE BROADER BUSINESS ENVIRONMENT</strong></td>
<td>Bill Kenworthy, Head of Product Strategy, Centrica Business Solutions</td>
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<td><strong>G2.5 ESTIMATING BUILDING ENERGY USE</strong></td>
<td>Steven French, Professor, Georgia Institute of Technology; William Drummond</td>
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<td><strong>G2.6 OPTIMIZE ENGINE CHP WITH WASTE HEAT</strong></td>
<td>Rob Emrich, Director, ElectraTherm</td>
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<td><strong>G2.7 IMPACT OF CYCLING BETWEEN FULL &amp; PART LOAD IN 2 300MW S/C STEAM UNITS</strong></td>
<td>Co-Chair - Dr. Majed Toqan, CEO, Creative Power Solutions; Dr. Prabhat Neradi, Omar Shami, Salim Masharqa</td>
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<td><strong>G3. O&amp;M, PLANT MANAGEMENT</strong></td>
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<td><strong>G3.1 INTEGRATED WATER MANAGEMENT - RETHINKING YOUR PLANT WATER STRATEGY</strong></td>
<td>Colleen Scholl, Professional Services Director Engineering, HDR; Christine Harris</td>
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<td><strong>G3.2 IMPROVING LOW LOAD OPERATION AND FLEXIBILITY WITH IGNITION STABILITY</strong></td>
<td>Dennis Barlow, Senior Product Manager, General Electric</td>
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<td><strong>G3.3 BEST PRACTICES IN OUTAGE MANAGEMENT</strong></td>
<td>Co-Chair - Rob Shepard, Vice President, IEM Energy Consultants, LLC; Jeff Fassett</td>
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<td><strong>G3.4 EVALUATION OF AN ALTERNATE TREATMENT FOR BOILER CHEMICAL CLEANING WASTE</strong></td>
<td>Todd Whiting, VP Operations, Purestream Services; Brad Burns, EPRI</td>
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**G4. EHS, EMIS & SAFETY**

**G4.1 THE NEXT GENERATION OF STANDARDIZED CLOUD-BASED EHS SOLUTIONS**
Co-Chair - Kyra Sharp, Director of Services, Perillon Software, Inc.; John Niemoller

**G4.2 A TECHNOLOGY-DRIVEN, SYSTEMS APPROACH TO MANAGING EHS PROGRAMS**
Joseph Tell, Owner, Tellecylate, LLC

**G4.3 KEY COMPONENTS FOR A ROBUST REFRIGERANT MANAGEMENT PROGRAM**
Mark Harbin, Senior Consultant, Sphera

**G4.4 APPLICATION OF SAFETY INTEGRITY LEVEL (SIL) ANALYSIS IN POWER PLANTS**
Daniel Azukas, Project Associate, Sargent & Lundy; Ryan Krone, Jason Gerol

**G4.5 ENABLING DISTRIBUTED ENVIRONMENTAL COMPLIANCE MANAGEMENT**
Brent Allred, Program Manager, Northrop Grumman Technology Services

**G4.6 INDUSTRY 4.0 & EHS: HOW IT AFFECTS UTILITIES & HOW TO PREPARE**
James Jensen, Director of Customer Success, Enablon

**G5. OPERATIONS & OPTIMIZATION**

**G5.1 ENERGY SAVINGS AND POWER FACTOR IMPROVEMENT WITH MEDIUM VOLTAGE VFD’S**
Session Sponsor - Co-Chair - Manish Verma, Senior Sales Application Engineer, TMEIC

**G5.2 IMPROVING MAINTENANCE, SAFETY AND ROI USING FUEL ADDITIVES**
Joe Spahn, Business Development Manager, Imerys Performance Minerals; Dr. Adam Campen
Co-Presenter - Joseph Harris, Business Development Eng., Imerys Performance Materials

**G5.3 CREATING VALUE: MANAGED CORPORATE ENVIRONMENTAL COMPLIANCE SERVICES**
Co-Chair - David Shotts, Partner, ERM

**G5.4 ADVANTAGES OF CONTRACTOR PARTNERSHIPS IN TODAY’S MARKET**
Edwin David Bittner, Executive Director, Allied Power Services, LLC

**G5.5 AFFORDABLE CLEAN ENERGY RULE: USEFUL LIFE AND HEAT RATE IMPROVEMENTS**
Kyle Kropf, Engineering Manager, Black & Veatch

**G6. EHS & RISK & ENERGY MANAGEMENT**

**G6.1 MANAGING CHANGE - FROM VISION TO REALITY**
Co-Chair - Angela Johnson, Manager, DTE Energy

**G6.2 PFAS 101: WHAT ARE THEY? HOW DID THEY GET HERE? WHAT ELSE IS COMING?**
Ward Swanson, Vice President, Senior Environmental Scientist, Barr Engineering Co.

**G6.3 A NEW SEASON - COPING WITH SMOKE FROM WILD FIRE IMPACTS ON OPERATIONS**
Brian Beemel, Environmental Health and Safety Manager, Calpine

**G6.4 SAFETY CONSIDERATIONS WHEN PLANNING FOR PLANT DECOMMISSIONING & DEM**
Jeffrey Pope, Manager, Facility Decommissioning & Demolition Svcs, Burns & McDonnell

**G6.5 INSULATED BUILDING TECHNOLOGY FOR RE-BUILDING FIRE-RAVAGED HOUSING**
Co-Chair - Roderick Robinson, Director of Operations, Super Insulated Green Building Technologies, LLC

**G6.6 DIGITAL SOLUTIONS FOR MUNICIPAL SERVICES, VIA AUGMENTED REALITY**
Dimitris Agouridis, CEO, INTUS Group

**G6.7 MAKING DUMB BUILDINGS SMART**
David Roberts, VP of Marketing, Cypress Envirosystems; Harry Sim
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>H1.6</td>
<td>RECLAIMING AND RECYCLING COAL FLY ASH FOR BENEFICIAL USE</td>
<td>Monday</td>
<td>3:30PM - 5:30PM</td>
<td>Bill Fedorka, VP Operations, Bowen Engineering</td>
</tr>
<tr>
<td>H1.5</td>
<td>ASSESSING CCR DATA QUALITY FROM PLANNING THROUGH USE</td>
<td>Monday</td>
<td>3:30PM - 5:30PM</td>
<td>Rock Vitale, Technical Dir. - Chemistry/Principal, Environmental Standards; Jennifer Gable</td>
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<tr>
<td>H1.4</td>
<td>CREATING SOLUTION FOR PROCESS AND CONTACT WATER STORAGE</td>
<td>Monday</td>
<td>3:30PM - 5:30PM</td>
<td>Steve Kiser, Vice President, Wood Environment &amp; Infrastructure Solutions, Inc.</td>
</tr>
<tr>
<td>H1.3</td>
<td>CASE STUDY FOR CCR AND ELG COMPLIANCE AT A 4 UNIT 1370 MW STATION</td>
<td>Monday</td>
<td>3:30PM - 5:30PM</td>
<td>Kelly Alta, Sales Engineer, United Conveyor Corporation; Gerald Long</td>
</tr>
<tr>
<td>H1.2</td>
<td>FROM ASH TO GRASS: DECOMMISSIONING TWO CCR SURFACE IMPOUNDMENTS</td>
<td>Monday</td>
<td>3:30PM - 5:30PM</td>
<td>Cedric Ruhl, Associate Engineer, Wood</td>
</tr>
<tr>
<td>H1.1</td>
<td>LIGHT AT THE END OF THE TUNNEL - SOUND STRATEGIES FOR CM/CA</td>
<td>Monday</td>
<td>3:30PM - 5:30PM</td>
<td>Steven Puritch, VP - CCR &amp; Industrial Waste Segment Lead, Haley &amp; Aldrich</td>
</tr>
<tr>
<td>H1.0</td>
<td>“LIGHT AT THE END OF THE TUNNEL” - SOUND STRATEGIES FOR CM/CA</td>
<td>Monday</td>
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<td>Steven Puritch, VP - CCR &amp; Industrial Waste Segment Lead, Haley &amp; Aldrich</td>
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**Tuesday, 7:30AM - 9:30AM**

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<tr>
<td>H3.4</td>
<td>CASE STUDY - CCR RULE UNSTABLE AREA DEMONSTRATIONS</td>
<td>Tuesday</td>
<td>7:30AM - 9:30AM</td>
<td>Gary Pendergrass, Principal, GeoEngineers, Inc.</td>
</tr>
<tr>
<td>H3.3</td>
<td>DEWATERING AND CONTAINMENT OF COAL ASH USING GEOTEXTILE TUBES</td>
<td>Tuesday</td>
<td>7:30AM - 9:30AM</td>
<td>Gary Pendergrass, Principal, GeoEngineers, Inc.</td>
</tr>
<tr>
<td>H3.2</td>
<td>CONCEPTUAL SITE MODEL AND ITS BENEFITS FOR CLOSURE OF CCR UNITS</td>
<td>Tuesday</td>
<td>7:30AM - 9:30AM</td>
<td>Martin Reif, Waste Facility Containment Practice Leader, Jacobs</td>
</tr>
<tr>
<td>H3.1</td>
<td>COAL COMBUSTIONS RESIDUALS RULE - WHERE DOES A FACILITY GO FROM HERE?</td>
<td>Tuesday</td>
<td>7:30AM - 9:30AM</td>
<td>Christine Harris, Power Generation Regulatory Compliance Practice Leader, HDR</td>
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**Tuesday, 3:30PM - 5:30PM**

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<tr>
<td>H6.6</td>
<td>HOW TO MINIMIZE CCR LANDFILL LEACHATE AND CONTACT WATER MANAGEMENT</td>
<td>Tuesday</td>
<td>3:30PM - 5:30PM</td>
<td>Katie McIntyre, Chemical Engineer, EES</td>
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<tr>
<td>H6.5</td>
<td>MEETING ZERO LIQUID DISCHARGE THROUGH REUSE AND CONCENTRATE MANAGEMENT</td>
<td>Tuesday</td>
<td>3:30PM - 5:30PM</td>
<td>Katie McIntyre, Chemical Engineer, EES</td>
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<tr>
<td>H6.4</td>
<td>THE ROLE OF WORK AREA QUANTIFICATION FOR CCR CONSTRUCTION PROGRAMS</td>
<td>Tuesday</td>
<td>3:30PM - 5:30PM</td>
<td>Dale Evans, Senior Director of Technology &amp; Strategy, Remedial Construction Services</td>
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<tr>
<td>H6.3</td>
<td>CONSIDERATIONS FOR CCR MANAGEMENT USING GEOTEXTILE CONTAINERS</td>
<td>Tuesday</td>
<td>3:30PM - 5:30PM</td>
<td>Randy Wilcox, Technical Sales and Engineering Manager, WaterSolve, LLC; Gregg Lebster, WaterSolve; Bryan Hamilton, Tom Stephens, TenCate Geosynthetics Americas</td>
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<tr>
<td>H6.2</td>
<td>REGULATIONS AND WATER USE: NAVIGATING THE BALANCING ACT</td>
<td>Tuesday</td>
<td>3:30PM - 5:30PM</td>
<td>Kathe Bland, Process Section Manager, Burns and McDonnell; Dan Elliott</td>
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<tr>
<td>H6.1</td>
<td>NEW MEMBRANE CONFIGURATION SAVES COSTS IN FGD TREATMENT FOR ELG/ ZLD</td>
<td>Tuesday</td>
<td>3:30PM - 5:30PM</td>
<td>Jon Liberzon, Vice President, BKT; Jonathan Chen</td>
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<tr>
<td>H6.0</td>
<td>USING AGRICULTURAL WASTES TO RECOVER REE FROM URBAN WASTES</td>
<td>Tuesday</td>
<td>3:30PM - 5:30PM</td>
<td>David Reed, Senior Scientist, Idaho National Laboratory; Vicki Thompson, Yoshiko Fujita, INL; Yongqin Jiao, Lawrence Livermore National Laboratory; Jacob Fisher, BYU; Michael Crain-Zamora, University of Iowa, Katherine Scalzone, Montana State University</td>
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<tr>
<td>H5.6</td>
<td>CASE HISTORY - CCR LANDFILL COVER SYSTEM WATER DESIGN AND MANAGEMENT</td>
<td>Tuesday</td>
<td>3:30PM - 5:30PM</td>
<td>Ken Daly, Principal Engineer, Wood</td>
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<tr>
<td>H5.5</td>
<td>DETERMINATION AND RECOVERY OF RARE EARTHS FROM COAL</td>
<td>Tuesday</td>
<td>3:30PM - 5:30PM</td>
<td>Evan Granite, Research Chemical Engineer, Task Leader, USDOE; Ken Ladwig, Elliot Roth</td>
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<tr>
<td>H5.4</td>
<td>REGIONAL ECONOMIC IMPACTS OF CCUS</td>
<td>Tuesday</td>
<td>3:30PM - 5:30PM</td>
<td>Jim Cornish, Sales &amp; Support Manager, Gasmet Technologies</td>
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<tr>
<td>H5.3</td>
<td>POLICY PARITY FOR CARBON CAPTURE</td>
<td>Tuesday</td>
<td>3:30PM - 5:30PM</td>
<td>Will Poleri, Senior Director, USEA</td>
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<tr>
<td>H5.2</td>
<td>UTILIZE FTIR MEASUREMENT TECHNOLOGY TO CONTROL THE PROCESSES</td>
<td>Tuesday</td>
<td>3:30PM - 5:30PM</td>
<td>Jim Cornish, Sales &amp; Support Manager, Gasmet Technologies</td>
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<tr>
<td>H5.1</td>
<td>DESIGN CONSIDERATIONS FOR COAL ASH BASIN WATER TREATMENT</td>
<td>Tuesday</td>
<td>3:30PM - 5:30PM</td>
<td>Charles McCloskey, Market Manager-Power Industry, Evoqua Water Technologies</td>
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<td>H5.0</td>
<td>ENVIRONMENTALLY FRIENDLY ASH BENEFICIATION TECHNOLOGY</td>
<td>Tuesday</td>
<td>3:30PM - 5:30PM</td>
<td>Michael Varner, Director - Business Development, SCB International; Chris Poling</td>
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<tr>
<td>H4.4</td>
<td>THE ROLE OF WORK AREA QUANTIFICATION FOR CCR CONSTRUCTION PROGRAMS</td>
<td>Tuesday</td>
<td>3:30PM - 5:30PM</td>
<td>Dale Evans, Senior Director of Technology &amp; Strategy, Remedial Construction Services</td>
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<tr>
<td>H4.3</td>
<td>GROWING GEOSTRUCTURAL AND STABILIZATION NEEDS FOR ASH POND CLOSURE</td>
<td>Tuesday</td>
<td>3:30PM - 5:30PM</td>
<td>Ryan Smith, Project Executive, Hayward Baker; Anita Perry, Southern Company; Anthony Sak, Hayward Baker</td>
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<td>H3.</td>
<td>COAL RULE</td>
<td>Tuesday</td>
<td>10AM - 12PM</td>
<td>Ken Daly, Principal Engineer, Wood</td>
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<tr>
<td>H2.</td>
<td>COAL ASH, CCR &amp; FGD</td>
<td>Tuesday</td>
<td>10AM - 12PM</td>
<td>Bill Fedorka, VP Operations, Bowen Engineering</td>
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<tr>
<td>H1.</td>
<td>CCR &amp; ELG COMPLIANCE MGMT.</td>
<td>Tuesday</td>
<td>10AM - 12PM</td>
<td>Steve Kiser, Vice President, Wood Environment &amp; Infrastructure Solutions, Inc.</td>
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<td>Rock Vitale, Technical Dir. - Chemistry/Principal, Environmental Standards; Jennifer Gable</td>
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I1. WASTEWATER, GROUND WATER, REMEDIATION, ELG, FGD

I1.1 ULTRAFILTRATION OF FGD WASTEWATER FOR ELG COMPLIANCE  
Co-Chair - Keith Ambrose, Chemical Engineer, Duke Energy

I1.2 COMPLIANCE UNDER THE NEW(ER) ELG RULE  
Patricia Scroggin, Regional Practice Manager - Energy, Burns & McDonnell

I1.3 GROUNDWATER MANAGEMENT AND REMEDIATION USING SLURRY WALL SYSTEMS  
Dale Evans, Senior Director of Technology & Strategy, Remedial Construction Services; Karin Stewart Harmon

I1.4 MONITORING, PREDICTING, PREVENTING AND CONTROLLING ALGAL BLOOMS  
Session Sponsor - Co-Chair - Lisa Brand, CTO, LG Sonic

I1.5 PROGRESSES AND PERFORMANCES IN DISTILLERY STILLAGE TREATMENT  
Getachew Gebreeyessus, Lecturer, Kotebe Metropolitan University

I2. 316(b), ELG, FGD, WASTEWATER

I2.1 THE WATER-ENERGY NEXUS: PARTNERING WITH DOE/NETL  
Thomas Feeley, Strategic Partnership Manager, National Energy Technology Laboratory

I2.2 316(B) COMPLIANCE: PLANNING AND IMPLEMENTING ENGINEERING SOLUTIONS  
Dallen Kroger, Engineer, Burns & McDonnell; Christopher Wiggins

I2.3 FGD WASTE WATER TREATMENT - PRETREATMENT + BRINE CONCENTRATION  
Lanny Weimer, Product Management, Suez Water Technologies and Solutions

I2.4 LESSONS LEARNED IN EXECUTION OF POWER PLANT WASTEWATER TREATMENT PROJECTS  
Co-Chair - Dennis Fink, Water for Power Lead, Jacobs (formerly CH2M); Thomas Higgins, Laura Reid

I2.5 HG, AS AND SE DETERMINATION BY PHOTOCHEMICAL VAPOUR GENERATION - AFS  
Dr. Warren Coms, Research and Technical Support Manager, PS Analytical, Shaun Lancaster, Eva Krupp, Joerg Feldmann

I3. 316(b), COOLING TOWER

I3.1 COOLING TOWER RETROFIT FOR 316(B): CHALLENGES THAT AFFECT COST  
Andrew Cerra, Mechanical Engineer, Burns & McDonnell; Christopher Wiggins

I3.2 A STUDY OF 316(B) IMPLEMENTATION AT ALABAMA POWER PLANT BARRY  
Mark Hussey, National Account Manager, Intralox

I3.3 EPA 316(B) IMPACT ON CIRCULATING WATER PUMPS AND MOTORS  
Kurt Schumann, President, ProPump Services, LLC.

I3.4 IMPINGEMENT TECHNOLOGY PERFORMANCE OPTIMIZATION STUDY UNDER BTA  
Kurtis Schlicht, Technical Director, ERM; Bill Stephens

I3.5 THERMAL VARIANCE DEMONSTRATION STUDY ON THE MISSISSIPPI RIVER  
Co-Chair - Brian O’Neill, Senior Aquatic Ecologist, Burns & McDonnell

I4. WATER SUPPLY & SECURITY

I4.1 HOW TO ENSURE WATER SUPPLY SECURITY  
Co-Chair - Aaron Morrison, President and CEO, Chaoticwaters, Inc.

I4.2 A SUSTAINABLE APPROACH TO IMPLEMENTING DESALINATION FACILITIES  
Ted Schilling, West Region Design & Engineering Manager, Arcadis

I4.3 SUSTAINABLE ALTERNATIVES TO POWER PLANT MAKE-UP WATER: USING TREATED MUNICIPAL WATER  
Bridget Finnegan, Process Specialist, Veolia

I4.4 WATER RISK MANAGEMENT – FROM RISK TO OPPORTUNITY  
Co-Chair - Kristal Perez, Global Technology Lead - Water for Power, Jacobs; Joe Roza, Jameson Morrell, Dennis Fink

I4.5 ABQAQP PLANTS WATER CONSERVATION JOURNEY  
Mohammed Almugahwi, Process Engineer, Saudi Aramco

I5. WASTEWATER & WATER TREATMENT

I5.1 PLANT BOWEN LONG-TERM MEMBRANE PERFORMANCE USING UV FOR DECHLORINATION  
Co-Chair - Dennis Fink, Sales Director, Atlantium Technologies

I5.2 ESTIMATED BIOLOGICAL EFFICACY OF SCREENING TECHNOLOGIES AND SURVIVAL  
John Chapman, Nuclear Engineering Director, Continuous Engineering Solutions

I5.3 NEW PINCH VALVE TECHNOLOGY  
Emie Sline, Scientist V, APTiM; Vikas Tandon, James Teo

I5.4 REDUCING CORRECTIVE ACTIONS THROUGH MODELING  
Mark Galimberti, Sales Engineer Representative, Flowrox

I5.5 WATER FILTRATION WITH FLOWROX  
Mark Galimberti, Sales Engineer Representative, Flowrox

I6. 316(b), ELG & WASTEWATER

I6.1 UPDATE OF WATER-RELATED ANALYSIS WORK AT NETL  
Co-Chair - Eric Groth, Energy Analyst, USDOE/NETL; Marc Turner, Leidos; Eric Lewis, Deloitte

I6.2 316(B) DO’S AND DON’T’S  
Greg Seegert, Chief Ichthyologist, EA Engineering, Science & Technology

I6.3 PARTNERING WITH BIG INDUSTRY TO REDUCE NUTRIENT POLLUTION  
Sarah Gistrap, Senior Environmental Scientist, Burns and McDonnell

I6.4 DETERMINATION OF SELENIUM IN FGD WASTEWATER BY TRIPLE QUAD ICP-MS  
Chaoyang Huang, Senior Chemist, Southern Research Institute; Young Chul Choi
## TRACK | J | UTILITY FLEET & TRANSPORTATION ELECTRIFICATION

### Monday | 1PM - 3PM

**J1. TE, ELECTRIC UTILITIES & EV CHARGING**
- **J1.1 CLEAN ENERGY PATHWAY EFFORTS IN THE PORT OF LONG BEACH**
  - Damon Hannaman, Sr. Advisor, Key Accounts, Southern California Edison
- **J1.2 ELECTRIC COMPANIES ACCELERATING TRANSPORTATION ELECTRIFICATION**
  - Co-Chair - Kellen Scheftter, Sr. Manager, Sustainable Technology, Edison Electric Institute
- **J1.3 THE UTILITIES POSITIVE IMPACT ON THE EV MARKET**
  - Brittany Syz, Director of Clean Transportation, SDG&E
- **J1.4 REGULATOR CHALLENGES IN GUAM'S POWER GENERATION**
  - Co-Chair - Dr. Filomena Cantoria, Commissioner, Guam Public Utilities Commission
- **J1.5 DESIGNING SUCCESSFUL TRANSPORT ELECTRIFICATION PROGRAMS FOR UTILITIES**
  - Andrew Dillon, Senior Principal, EV & DER Solutions, West Monroe Partners
- **J1.6 FLEET CHARGING INFRASTRUCTURE TO OPTIMIZE TOTAL COST OF OPERATIONS**
  - Terry O'Day, Chief Strategy Officer, Executive Vice President, innogy eMobility US

### Monday | 3:30PM - 6:00PM

**J2. ADVANCE CLEAN TRUCKS - AFV & ZEV & FLEETS**
- **J2.1 THE ELECTRIFICATION OF COMMERCIAL TRANSPORTATION**
  - Co-Chair - Jim Castelaz, Founder and CEO, Motiv Power Systems
- **J2.2 VIABILITY OF ELECTRIC VEHICLES IN THE LOGISTIC/TRANSPORTATION INDUSTRY**
  - Heidi Rous, Director, USA: Jeff Caton
- **J2.3 IN-WHEEL ELECTRIFIED HUBS FOR TRAILERS AND TRUCKS**
  - Caleb Lander, Product Manager - Electrification, ConMet
- **J2.4 MANAGING WITH ELECTRICITY**
  - Co-Chair - Kenneth Williams, Fleet Asset Superintendent, City of Kansas City / Aviation Department
- **J2.5 BRIDGING THE GAP: A RADICAL NEW VISION FOR ELECTRIC TRUCKING**
  - Tom Bartley, Founder / VP Sales and Marketing, Proenxis LLC.
- **J2.6 FLEET ELECTRIFICATION-LIGHT, MEDIUM, AND HEAVY DUTY EVS IN FLEETS**
  - Raquel Soat, Research Analyst, Navigant Consulting Inc.
- **J2.7 TROPOS ABLE - HOW DOWNSIZING TO AN ECUV CAN SAVE THOUSANDS**

### Tuesday | 7:30AM - 9:30AM

**J3. EV, PHEV, HYBRID, FLEET SUSTAINABILITY**
- **J3.1 PRELIMINARY ROUTING FOR A NATIONAL LABORATORY COMMUTING PROGRAM**
  - Amy Moore, Transportation Planning Engineer, Oak Ridge National Laboratory
- **J3.2 LOCAL GOVERNMENT’S ROLE IN INCREASING EV ADOPTION IN SAN FRANCISCO BAY**
  - Co-Chair - Rebecca Fader, Staff Specialist, Bay Area Air Quality Management District
- **J3.3 THE ELECTRIC VEHICLE DISCOVERY CENTRE - EV MARKET TRANSFORMATION**
  - Cara Clairman, President and CEO, Plug ‘n Drive; Davorka Cvilkovic
- **J3.4 BIGGER MARKET THAN ELECTRIC: WIND + SOLAR HYDROGEN TRANSPORT + CHP FUEL**
  - Co-Chair - Bill Leighty, Director, The Leighty Foundation
- **J3.5 FUTURE OF ELECTRIC & HYBRID-DRIVE SYSTEMS IN COMMERCIAL & OFF ROAD EQUIP.**
  - Marilyn Tarbet, Director, New Business Development, Power Systems Research
- **J3.6 TOOLS AND TECHNIQUES TO SWITCH TO ELECTRIC VEHICLES RISK FREE**
  - Alex Baker, CEO, CleanCar

## TRACK | J | UTILITY FLEET & TRANSPORTATION ELECTRIFICATION

### Tuesday | 1PM - 3PM

**J4. ULTRA CLEAN LD/MD/HD**
- **J4.1 A MACROECONOMIC ASSESSMENT OF TRANSPORTATION ELECTRIFICATION**
  - Edward Carr, Senior Research Analyst, Energy and Environmental Research Associates; James Winebrake, Eltin Green
- **J4.2 DATA INSIGHTS: STAYING COMPETITIVE IN A CONNECTED VEHICLE WORLD**
  - Gary Schmidt, Vice President of Business Solutions, Zonar
- **J4.3 HIGH EFFICIENCY, LOW EMISSIONS DRIVE MARKET ADOPTION OF THE OP ENGINE**
  - Jerome Payne, Chief Operating Officer, Achates Power
- **J4.4 RETROFITTING CLASS 2 HYBRID VEHICLES WITH ELECTROCHEMICAL CAPACITOR**
  - Toshihiko Furukawa, Senior Manager / Global Engineering, United Chem-Con, Inc.
- **J4.5 UPCOMING CALIFORNIA ZEV REGULATIONS FOR HEAVY-DUTY VEHICLES**
  - Craig Dureing, Air Resources Supervisor, California Air Resources Board (CARB); Paul Ameja
- **J4.6 CNG HYBRID ELECTRIC SUPER TRUCK DESIGN**
  - Co-Chair - James Burns, CSO, Transportation Power, Inc.; Dr. Paul Scott

### Tuesday | 10AM - 12PM

**J5. UTILITY FLEET**
- **J5.1 FIVE LESSONS FROM A DECADE OF EV FLEET MANAGEMENT**
  - Co-Chair - Matt Stevens, VP, Electric Vehicles, Geotab
- **J5.2 CHARGE THE NORTH: CHARACTERIZING ELECTRIC VEHICLE CHARGING PROFILES**
  - Eric Matta, General Manager, ReeICarma
- **J5.3 ELECTRIC FLEETS: MOVING BEYOND PILOTS FOR THE REAL BENEFITS**
  - Co-Chair - Paul Slith, Director of Strategy & Innovation, Black & Veatch
- **J5.4 THE ELECTRIFICATION CHECKLIST: MAKING THE RIGHT XEV DECISIONS**
  - Jeremy Twomey, Regional Sales Manager, XL - The Fleet Electrification
- **J5.5 LARGE FLEET ADOPTION OF ELECTRIC PROPULSION**
  - Michael McDonald, Sr. Director of Sustainability & Gov't Affairs, United Parcel Service (UPS)
- **J5.6 THE COMMERCIALIZATION OF HEAVY DUTY CLASS 6-8 TRUCKS AND BUSES**
  - Joshua Goldman, VP Sales and Marketing, TransPower
- **J5.7 EV OPPORTUNITIES IN ROBUST, HIGH CAPACITY, PEOPLE MOVER APPLICATIONS**
  - Newton Montana, VP and GM, Trans International

### Tuesday | 3:30PM - 5:30PM

**J6. CARB REGS, EV CHARGING PROJECTS**
- **J6.1 VW FUNDING OPPORTUNITIES**
  - Eric Brown, Air Pollution Specialist, California Air Resources Board (CARB); Patrick Chen
- **J6.2 DIVIDEND - ACCOUNT PARKING: FEASIBLE & ENFORCEABLE MITIGATION**
  - Co-Chair - Michael Bullock, Transportation Committee Chair, Sierra Club, Evolved Wireless, Inc.
- **J6.3 HYBRID AND ZERO-EMISSION TRUCK AND BUS VOUCHER INCENTIVE PROJECT - HVIP**
  - Patrick Chen, Air Pollution Specialist, California Air Resources Board
- **J6.4 A CASE STUDY IN COLLABORATIVE VEHICLE ELECTRIFICATION**
  - James DeGrood, Deputy Director, Pima Association of Governments
- **J6.5 A CASE STUDY IN COLLABORATIVE VEHICLE ELECTRIFICATION**
  - James DeGrood, Deputy Director, Pima Association of Governments, Regional Transportation Authority RPC
### K1. BATTERY, ENERGY STORAGE SYSTEMS

- **K1.1 Battery Selection Based Upon Current Capacity Ratings Is Outdated**  
  Co-Chair - Jeremy Cordray, Director, Original Equipment, NorthStar Battery
- **K1.2 Methods to Measure and Improve Battery Storage Systems Performance**  
  Khalid Rahman, Electrical Engineer, Commonwealth Associates, Inc.
- **K1.3 Practical Benefits and Limitations of Energy Storage**  
  Carl Salas, Founding Principal, Salas O’Brien
- **K1.4 The Battery Puzzle - The Path to Electrification for Heavy-Duty**  
  Mike Terzo, CEO & CTO, Terzo Power Systems, LLC
- **K1.5 Encapsulator Technology for Battery and Storage System Protection**  
  Jeffrey Borkowski, Area Manager, Encapsulator Technology Specialist, Hazard Control Technologies; Ron Lowrey
- **K1.6 Getting Ahead of the EV Boom with Incentivized Smart-Charging**  
  Marc Monbouquette, Sr. Manager, Regulatory and Government Affairs, eMotorWerks

### K2. EV FAST CHARGING & INFRASTRUCTURE

- **K2.1 How Customer Experience Impacts Utility EV Charging Program Success**  
  Co-Chair - April Balduc, President, S Curve Strategies
- **K2.2 How to Streamline Your Utility EV Charging Installation Process**  
  Luis Alarcon, Co-Founder & Chief Strategy Officer, C2 Group
- **K2.3 Fast DC Charging with Minimum Grid Upgrade**  
  Heesoo Lee, General Manager, Energy Systems, AVM
- **K2.4 The Need for Speed**  
  Steve Bloch, Western Regional Vice President, ABB
- **K2.5 CCS as the Global Standard for Charging Battery Powered EVs**  
  Oleg Logvinov, Spokesperson, Charth e.V. NA
- **K2.6 EV Transportation Corridors - Assessing EV Fleet Infrastructure**  
  Andrew Dillon, Senior Principal, EV & DER Solutions, West Monroe Partners

### K3. RESIDENTIAL & COMMERCIAL CHARGING

- **K3.1 Electrifying Transportation: How Electric Utilities Are Leading Clean Mobility**  
  Co-Chair - Dean Siegrist, Associate Vice President, Black & Veatch; Ben Chung, PG&E. Mayline Daviaud Lewett, Black & Veatch
- **K3.2 Electric Fleets: Understanding Infrastructure Options**  
  Co-Chair - Kim Okafar, Trillium EV Business Line Leader, Trillium
- **K3.3 A Scalable Approach to Deployment of the EV Charging Infrastructure**  
  Oleg Logvinov, President and CEO, iOtecha
- **K3.4 Reducing Your Challenges for EV Infrastructure Investment**  
  Patty DiNapoli, Marketing Director, Cyber Switching
- **K3.5 Designing Incentive to Align EV Charging with Grid Reliability Object**  
  Matt Owens, Business Development Executive, West Monroe Partners
- **K3.6 Using Natural Gas and Propane for Charging EVs**  
  Arthur Sams, CEO, Polar Power

### K4. BATTERY, STORAGE & CHARGING SYSTEMS

- **K4.1 The Slow Fast Charge: What You Get Is All You Need**  
  Scott McCalmont, Principal Engineer, Paired Power, Inc.
- **K4.2 EV Charging and the Vehicle Purchase Process: Lessons Learned**  
  Co-Chair - Dr. Ryan Bodary, Senior Specialist for EV Program Transparency & Evaluation, Center for Sustainable Energy (CSE); Brett Williams
- **K4.3 Integrating Electric Vehicle Charging into Microgrid Operation**  
  Azhar Ul Haq, Assistant Professor, National University of Sciences & Technology; Saffullah Awan, Aqib Perwaiz
- **K4.4 EV Charging Incentives Using Low Carbon Fuel Credits and Blockchain**  
  Andrew Dillon, Senior Principal, West Monroe Partners; Kayvon Hosseini
- **K4.5 Battery Innovations, E-Mobility & Smart Cities**  
  Cameron Peebles, Scientist, Wildcat Discovery Technologies; Dee Strand

### K5. FUEL CELLS, LI-ION, H2, BATTERIES

- **K5.1 The California Fuel Cell Revolution**  
  Keith Malone, Public Affairs, California Fuel Cell Partnership; Bill Erick
- **K5.2 Fuel Cell & Hydrogen - A Compelling Value Proposition for Zero Emission**  
  Alan Mace, Product Development/Market Specialist, Ballard Power Systems, Inc.
- **K5.3 Carbon Neutral Liquid Fuels for Transportation / Energy Storage**  
  Madhav Acharya, T2M Advisor, ARPA-E
- **K5.4 Hydrogen Freight in California: Fuel Cell Trucks in San Pedro Ports**  
  Co-Chair - Cory Shumaker, Development Specialist, California Hydrogen Business Council
- **K5.5 A Fail-Safe Solution for the Safety of Batteries**  
  XiaoXiong Luo, Research Lead, Pyrophobic Systems, Ltd.
- **K5.6 Fuel Cell Electric Trucks/Vehicles Powered by Renewable Hydrogen Fuel**  
  Rob Dei Core, Managing Director, Hydrogenics USA, Inc.

### K6. EV, BATTERY, MANUFACTURER & SUPPLY CHAIN

- **K6.1 A Challenge of Reliable Circuit Protection in Automotive Applications**  
  Co-Chair - Liwu Wang, Director of Business Development, AEM Components (USA), Inc.
- **K6.2 Implementing Motor Circuit Analysis De-Energized Testing**  
  William Kruger, Technical & Training Manager, ALL-TEST Pro, LLC
- **K6.3 Safe Cable Management**  
  Phil Ramos, Jr., Founder and CEO, Philatron Wire and Cable
- **K6.4 Leveraging Local Support Within a Global Supply Chain**  
  Co-Chair - Wesley Brandon, President, CTEMS, Engineering and Manufacturing Services
- **K6.5 Rolling Energy Storage - Electric Vehicles * Charging**  
  Kevin Wood, Clean Transportation Specialist, Center for Sustainable Energy (CSE)
- **K6.6 Aligning Intellectual Property Strategies with R&D and Commercial Goal**  
  Daniel Abraham, Vice President, MPEG LA
**2-DAY EXHIBIT SCHEDULE**

**2-DAY EXHIBIT SHOW HOURS**
- Sun. Setup: 12 pm to 6 pm
- Mon. Feb 25: 12 pm to 7 pm
- Tues. Feb 26: 9 am to 7 pm
- Wed. Feb 27: 8 am Tear Down

**NETWORK RECEPTIONS**
- 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 7 pm
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**STEP 1. SELECT EUEC EXHIBIT BOOTH**

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**STEP 3. CONTACT INFORMATION:**

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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 the exhibitor’s installation, removal, maintenance, occupancy or use of the exhibit premises or a part thereof, excluding any such liability caused by the sole gross negligence of the Convention Center and its employees and agents. Exhibitor shall obtain and keep in force during the term of the installation and use of the exhibit premises, policies of Comprehensive General Liability Insurance and Contractual Liability Insurance, insuring and specifically referring to the contractual liability set forth in this Exhibit Agreement in an amount not less than $1,000,000 Combined Single Limit for personal injury and property damage. The group 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 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.

**CANCELLATION POLICY:** Please see www.euec.com for full cancellation and refund policy.
TE-EXPO HELD CONCURRENTLY WITH EUEC 2019

**TE-EXPO:** Provides Speaking and Exhibit opportunities for suppliers to utility fleets, electric & alternate fuel vehicle manufacturers, battery & charging companies to showcase advanced technologies and strategies for compliance and implementation of SB350.

TE-EXPO is held in the 100,000 sq.ft. Sails Pavilion of the San Diego Convention Center, San Diego, California on February 25 and 26, 2019.

**WHAT IS SB350: TRANSPORTATION ELECTRIFICATION**

- SB350: DIRECTS CALIFORNIA REGULATORS (CPUC, ARB, CEC, AQMD)
- TO ELECTRIFY BUSES, TRUCKS, FLEET AND OFF-ROAD EQUIPMENT
- $1B FUNDED BY INVESTOR OWNED UTILITIES SDG&E, SCE AND PG&E

**WHO SPEAK & EXHIBITS AT TE EXPO?**

- UTILITY FLEET SUPPLIERS
- LD/MD/HD FLEET
- FLEET DELIVERY SERVICES
- EV & AFV MANUFACTURERS
- AFV, CNG, H2 FUEL CELL
- ELECTRIC TRUCK & BUSES
- FAST CHARGING & INFRASTRUCTURE
- BATTERY, STORAGE & CHARGING
- SOLAR & RESIDENTIAL CHARGING
- TRANSPORTATION SOFTWARE
- METERING & DATALOGGERS
- OFF-ROAD EQUIPMENT, FORK-LIFT

**SAILS PAVILION, SAN DIEGO CONVENTION CENTER**

**TE-EXPO EXHIBITORS**

1321 Adams Campbell Co.
1616 Aebi Schmidt
1631 AEM
1204 Al Care
1533 Arnold Fastening
1413 Autoliv INC
1416 Azuga
1515 Ballard Power Systems
1720 Bender
1316 Black & Veatch
1622 Brake Parts Inc.
1701 BTC Power
1534 BYD
1633 C2 Group
1308 CALB USA, Inc.
1322 CA Fuel Cell Partnership
1609 Calstart
1421 CA Air Resources Board
1216 CA H2 Business Council
1522 Car-Connect NA, Inc.
1710 Cementex Products, Inc.
1434 Center for Sustainability
1432 Clean Cities
1307 CleanCar
1208 ClipperCreek Inc.
1821 CRC Industries
1807 C-TEMS
1519 Cyber Switching
1420 Elantas PDG, Inc.
1431 Electric Auto Association
1214 Energy Independence
1632 Enevate
1407 EV Connect
1734 EVi- EV Infrastructure
1731 Excell Battery
1602 FleetCarma
1332 FuelCell Energy
1107 GM
1719 Graphtec America
1815 Hazard Control Tech

1334 HeatTek
1502 Hula Motors
1304 Hydrogenics USA
1722 KUBT
1733 KULR Technology
1514 Momentive Performance
1607 Motiv
1802 Nissan
1314 Noodoe
1715 NorthStar Battery Co
1433 Nuuve
1414 Paired Power, Inc.
1931 Perk Solar
1634 Philatron
1302 Phoenix Motor
1532 Plug ‘n Drive
1619 Polar Power
1409 Proensis, LLC
1410 Qwik Charge
1331 San Diego AQD
1401 SDGE
1613 Seal Methods
1707 SemaConnect
1313 Solar Box
1222 Sundial Energy
1714 Terzo Power Systems, LLC
1102 Tesla Rental
1234 Torque Trends
1301 Trams International
1608 Trans Power
1508 Trillium CNG
1131 Tropos
1620 Verdek
1319 Wellness Consultants
1531 West Monroe Partners
1732 Wildcat Discovery
1831 Zettler
1833 Zero Truck
1507 Zonar Systems
1. One Page Advertisement of New Product or Company Announcement in Show Guide – $1,000
IA 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.

The Show Guide is the official, up-to-date information on the EUEC event. One-page color advertisement distributed to 2,000 delegates, is continuously referenced multiple times a day by all attendees. An excellent location for introducing new product or company announcements.

2. Session Sponsor/Cochair - Receive Full 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. Track Sponsor/Advisor - Receive Full Attendee list $1,000 per track
As a Track Sponsor you receive the full contact information of all attendees to track. You may also serve in the Advisory Board of the Track with your company logo prominently advertised among the leading experts in the industry.

4. Advertisement in ENERGYNews – $500 per issue
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!

5. Attendee Lanyard, with Company Logo and information – $3,000
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.

6. 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.

7. 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.

8. Your Company Ad in 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.

9. 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.

10. COFFEE Break Sponsorship – $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.

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