

The cover features a collage of images: an industrial plant with a large white dome, a group of people in a meeting, and a dining table with people eating. A central shield contains the letters 'RE'.

APC Round Table & Expo

RE

*Presented by
Reinhold
Environmental*

2007
Show Guide

Upcoming RE Round Tables and Expos

2008 NOx Round Table and Expo

followed by the

NOx PCUG Meeting

Hosted by Dominion Energy

February 4-7

Omni Richmond Hotel,
Richmond, VA

2008 NOx Round Table includes 2 days of O&M panels and technical workshops given by coal-fired generation industry experts with a 37-booth exhibition. The 2008 NOx PCUG Meeting is an O&M meeting open only to equipment users.

2008 APC Round Table and Expo

followed by the

APC PCUG Meeting

Hosted by Georgia Power

July 13-18

Hyatt Regency Savannah
Savannah, GA

2008 APC Round Table includes 3 days of O&M panels and technical workshops given by coal-fired power generation industry experts with a 68-booth exhibition. The 2008 APC PCUG Meeting is an O&M meeting open only to equipment users.

2007 PCUG Steering Committee



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Welcome to *the 14th Annual* **APC** **Round Table and Expo**



July 8-10, 2007
 Chattanooga Convention Center
 Chattanooga, TN



Sponsored by
TVA and the Pollution Control Users Group



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Workshops and Panels

Monday, July 9

8:00–9:00 am

Welcome and Keynote Speaker: Marcia Cooper, Senior Vice President of TVA, will address “TVA - Improving Life in the Tennessee Valley” (Room 4/5/6)

Ms. Cooper will begin with a brief history of the creation of the Tennessee Valley Authority in 1933, the evolution of the power program from its inception until today, and move on to the efforts made to date and underway in emissions improvement, and a discussion of the recently released Strategic Plan for the path forward.

9:00–10:00 am

Workshop I: “Design Considerations for FF” by Jim Parsons, Neundorfer (Room 7/8)

This workshop will explore the typical mistakes made when purchasing, operating or maintaining a fabric filter.

Panel I: (until 10:30am) “Hg and SO₃ Emissions Control: Balance-of-Plant Impacts” (Rooms 4/5/6)

Chairman: Connie Senior, REI Panelists: Ralph Altman, EPRI; Mark Berry, Southern Co.; Brian Higgins, Mobotec; Tom Campbell, ADA-ES; Sterling Gray, URS; Ed Stephens, TVA; Brian Rupp, AEP.

Recently, injection of powdered sorbents has been evaluated for reduction of mercury or SO₃ emissions from coal-fired power plants. Powdered activated carbon has been used for mercury control and a variety of alkaline sorbents for SO₃ control. As operational data from long-term operation becomes available, balance-of-plant impacts come to light. This panel will focus on balance-of-plant impacts for sorbent injection such as deposition/fouling, ESP performance, fabric filter performance, and fly ash disposition; in addition the impact of SO₃ sorbents on the effectiveness of mercury sorbents will be addressed.

Workshop II: “Effects of Poor Air Heater Performance on the Backend” by John Guffre, Paragon Airheater Technologies (Room 9/10)

The performance of backend APC equipment (ESP, baghouses, scrubbers) is directly impacted by the temperature and the volume of the gases entering the device. Mechanical issues associated with the air preheater can cause up to a 20% increase in flow volume to the backend APC equipment, as well as additional gas temperature variations of + or – 20 degrees Fahrenheit. Examples will be given where inexpensive airheater repairs can substantially increase APC performance, including a 100 SCA increase in relative precipitator size.

Workshop III: “Corrosion Issues in Scrubbers” by Gordon Maller, URS Corp. (Room 2)

This workshop will discuss mechanisms for corrosion of scrubber components with respect to chloride, fluoride, pH and temperature levels, and will address the history and improvements that have occurred over the last 30 years in dealing with corrosion issues. The application of high performance materials in various components of scrubbers will be presented and recommendations for cost-effective selection of corrosion-resistant materials for these components will be given.

11:00–Noon

Workshop IV: “Study into the Effects of Impulse Cleaning on PRB Ash” by Terry Farmer, GE Energy (Room 7/8)

This workshop will deliver results from the testing of an alternative cleaning method used for cleaning heat transfer surfaces in the back passes and furnace of coal-fired plants. This system has been installed at a location burning PRB coal; the cleaning of this unit was further complicated because of finned tubes on the economizer tubes.

Workshop V: “Mercury Regulations” by Carl Weilert, Burns & McDonnell (Room 4/5/6)

This workshop will include a discussion of mercury regulations affecting electric utilities. The key features of the EPA's Clean Air Mercury Rule (CAMR) will be explained. State mercury regulations will be compared and contrasted with regard to the extent of participation in the national mercury allowance trading program. States with regulations more stringent than CAMR will be identified.

Workshop VI: “Retrofitting FFs into ESPs” by Tom Lugar, Buell Division of Fisher-Klosterman, Inc. (Room 9/10)

This workshop will present guidelines/criteria for ESP to pulse-jet fabric filter conversion candidates as well as present details of recent conversions.

Workshop VII: “Draft System Impacts with Emission Control System Retrofits” by George H. Johnston, Howden Buffalo (Room 2)

This workshop will address options for fan modification to meet additional pressure drop requirements of existing boiler units as they are retrofitted with pollution control systems. The options will cover comparisons of fans controlled by various drives as they relate to centrifugal fan speed of operation. Variable inlet vane controls, the use of inlet / outlet dampers, and variable pitch axial options will also be discussed, including options to boost existing fan performance.

1:30–2:30 pm

Workshop VIII: “RATA of Mercury Monitors: Methods Available” by Dennis Laudal, EERC (Room 7/8)

As part of the Clean Air Mercury Rule (CAMR), all coal-fired power plants will be required to do continuous mercury measurements. This can be done by installing continuous mercury monitors (CMMs) or using mercury sorbent traps. Both of these methods will require relative accuracy test audits (RATAs). The only reference method currently allowed is the OH mercury speciation method. A simpler and less labor intensive alternative method is needed. This workshop will provide information as to the status of these methods and discuss EERC's experience using them.

Workshops and Panels

Monday, July 9 continued

Panel II: (until 3:00pm) “ESP/Rebuilds, Retrofit, or Replace” (Room 4/5/6)

Chairman: Bob Tisone, DOVCO/BSE Panelists: Scott Williams, Duke Energy; Jason Horn, AEP; Greg Betenson, Pacificorp; Brandon Looney, Southern Co.; John Walker, Duke Energy; Doug Hartman, FirstEnergy; Mike Elliott, TVA

This panel will address balance of plant issues and future APC concerns for replacing or rebuilding an ESP on an existing site. Issues to be addressed will be: Rebuild in kind versus replace with newer ESP technology; Rebuild in kind versus replace with new Fabric Filter technology; Influence of other new APC equipment (SCR, Dry scrubbers, Wet Scrubber); Mercury issues; ID Fans and ductwork; Other plant issues. The last 20 minutes will be a question and answer session from the audience.

Workshop IX: “Designing Pulse Jet Fabric Filter Baghouses for High Sulfur Fuel:” by Matt Usher, AEP (Room 9/10)

This workshop will review the considerations for the design, operation, and maintenance of baghouses treating flue gas from high sulfur coal combustion; including materials of construction and recommended procedures for startup, shutdown, and malfunction.

Workshop X: “DFGD and Mercury” by Bryan J. Jankura, The Babcock & Wilcox Company (Room 2)

This workshop will provide an overview of mercury control options for dry flue gas desulfurization utilizing spray dry absorption. Several options for mercury control will be presented along with their impact on DFGD and balance of plant operations. Data will also be presented from commercial plant operations.

3:30–4:30 pm

Workshop XI: “Mercury CEMs” by Sharon Sjoström, ADA-ES, Inc (Room 7/8)

According to the Clean Air Mercury Rule (CAMR), utilities must begin monitoring mercury emissions by January 1, 2009. Utilities must install, check-out, and certify their mercury CEMs before this date. During this workshop, we will share experiences installing, integrating, operating, and certifying mercury CEMs.

Panel III: (until 5:00pm) “How to Reduce Scrubber Operating Cost and Improve Performance” (Room 4/5/6)

Chairman: Ron Richard, RE Consulting Panelists: Mike Walsh, Marsulex; Tony Licata, Babcock Power; Melissa Allen, TVA; Gordon Maller, URS; Bob Candelaria, SRP; Jerry Baresich, EKATO

Based on their combined years of FGD design and operating experience, the panelists will share the ways utilities have been able to reduce their scrubber operating costs while improving operating performance.

Workshop XII: “Impact of Combustion on Particulate Collection” by Bob Taylor, GE Energy (Room 9/10)

This session describes the correlation between combustion and the ability to effectively remove particulate from the flue gas. The objective is to provide practical explanation for changes in particulate removal device efficiency and changes in process conditions.

Workshop XIII: “Filtration Materials for PJFFs” by Florin Popovici, Inspec Fibres (Room 2)

The workshop will focus on filter material properties in relation to process conditions associated with coal fired boiler bag houses. The filtration mechanism for needle-felts based on round and tri-lobal fibres will also be analyzed. In addition, the workshop will describe specific filter materials and laboratory assessment methodology, and will include case studies and references.

Tuesday, July 10

8:00–9:00 am

Workshop XIV: “Oscilloscopes and ESPs” by Russ Ridgeway, AEP (Room 7/8)

The purpose of this workshop will be to learn how to troubleshoot your ESP controls using an oscilloscope. It is a tool you should never leave your office without.

Panel IV: “Continuous Particulate Mass Monitors for Wet Stacks” (Room 4/5/6)

Moderator: Craig Clappsaddle, MSI Mechanical Systems Panelists: Peter Struckmann, E.ON Engineering; Phillip Zyskowski, Sick Mahak; Steve Noland, Western Kentucky Energy; David Nuckols, Dominion Generation

This panel will present an excellent breadth of experience in the field of monitoring particulate emissions from wet scrubber stacks.

Workshop XV: “Using Delta Wings for Flue Gas Conditioning and Air Preheater Temperature Gradient Mitigation” by Scott Thomas, Duke Energy (Room 9/10)

Included in the 2002 Belews Creek Steam Station Duke Energy SCR addition / ESP rebuild specifications was a requirement to reduce the vertical and horizontal temperature gradient at the ESP inlet. Also included was a requirement to improve the SO₃ mixing beyond the capability of the existing multi port injection probes. The Delta Wing technology was used for this application. This presentation will share the contract requirements and the performance results.

Workshops and Panels

Tuesday, July 10 continued

Workshop XVI: “An Alternative Innovative Method for SO_x/NO_x Reduction” by Steve Torbov, Aptech (Room 2)

This workshop will address an alternative innovative method for SO_x/NO_x reduction for utility steam boilers and a method to avoid slagging in the upper furnace of coal fired steam boilers.

9:00 am-10:00 am

Workshop XVII: “High Frequency Power Supplies on Utility ESPs: A Look Back; A Look at Today; A Look to the Future” by Royce Warnick, Stock Equipment Co. (Room 7/8)

This workshop will include a brief history on HF and SMPS power supplies plus a current day look at tracking the growth of their use and the pros and cons of the technology as it has matured. Finally, the next generation offerings from the vendors and how they will be utilized by the end-users in their rebuild and performance enhancement strategies will be discussed.

Workshop XVIII: “Science of Fuel” by Tony Widenman, DTE (Room 4/5/6)

Coal provides the energy for 52% of America's electric generation. Despite political rhetoric and environmental issues, coal will remain the primary source of electricity for at least the next 25 years. The methods of combustion will improve and undesirable emissions will decrease. This tutorial will discuss where coal comes from, what it is, what are the emissions and how they can be minimized.

Workshop XIX: “PM 2.5 Measurement & Control” by John McKenna, ETSI (Room 9/10)

This workshop provides an overview of fine particle emissions, including the relevant legislative background, industries, and applications most affected. In addition, emission measurement methods, including the pros and cons of methods for measuring the condensable portion, will be discussed. The workshop will close with a discussion of the performance risks associated with the application of these control techniques and the value of ETV regarding fine particle/high-performance fabrics and vendor performance guarantees.

Workshop XX: “Fly Ash Removal Systems Treating PRB and Dry Scrubber Waste” by Matt Usher, AEP (Room 2)

This workshop will discuss the design and operating challenges posed by PRB ash and dry scrubber waste, and provide recommendations for making sure Fly Ash Removal Systems can handle this somewhat unique waste product.

11:00 am-Noon

Workshop XXI: “Maintenance of Electrostatic Precipitators' Transformer Rectifiers” by Marty Watson, CE Power Solutions (Room 7/8)

This presentation will cover the following in detail: 1. Basic TR inspection and maintenance; 2. Basic TR troubleshooting techniques; 3. Oil results: “what you need to know”; 4. Components overview; 5. Installation procedures; 6. General precautions; 7. Start up procedures; 8. General testing guidelines.

Workshop XXII: “ESP Modeling” by Jack R. McDonald, President/Consultant, Jack R. McDonald, Inc. (Room 4/5/6)

This workshop will present an overview of ESP mathematical computer modeling. Aspects of successful modeling such as proper preparation, understanding of the fundamental physical mechanisms and capabilities inherent in the model, and importance of data analysis and determination of baseline conditions will be discussed. The various applications of a model will be presented along with representative results from utility projects.

Workshop XXIII: “Plant Tour: Discussion of Technology” by John Caine, SEI, and Dennis Shanahan, Indigo Technologies (Room 9/10)

Part I: The first commercial-size, Membrane WESP unit has been operating continuously for over two years at Stevenson, Alabama, collecting soot, fine particulate and sulfuric acid mist after two boilers firing No. 6 oil with 4% sulfur and high vanadium content. The operation and performance of this two-module, upflow, single-field unit will be detailed in this workshop and some of the problems encountered and overcome in the start-up will be described. **Part II:** This workshop will describe the trial installation of an Indigo Fine Particulate Agglomerator with the objective of reducing opacity on 1 of 4 scrubber inlet ducts at TVA-Widows Creek 500 MW Unit #8. The unit fires eastern bituminous medium sulphur coals and has no electrostatic precipitator. The scope of the project, schedule, installation and preliminary results will be reviewed.

Workshop XXIV: “Investigations of FGD Wastewater Treatment Options and Selective Separation of Mercury and Other Heavy Metals in FGD Wastewater Treatment” by Philip Elliot, STEAG LLC (Room 2)

In Germany, a conventional one-stage FGD wastewater treatment process results in external residue disposal and high disposal costs. A two-stage process was developed using selective Hg and heavy metal removal while maximizing internal sludge recycling reduced residue amount and disposal costs. Steag will review its experience in operating these systems as well as the systems applications for U.S. plants.

2007 APC/PCUG Conference Agenda

July 8 - Sunday at Chattanooga Convention Center, Chattanooga, TN

12:00 - 4:00	Registration (Ballroom Foyer - 1st floor)	
1:00 - 5:00	Scrabber O&M Pre-Conference Workshop (all attendees must be pre-registered) - presented by WPCA (Room 3)	
1:00-5:00	ES/FF Fundamentals Pre-Conference Workshop (all attendees must be pre-registered) - presented by WPCA (Room 4)	
7:30 - 10:30	Reception in Tennessee Aquarium for all attendees and their families - entire aquarium open	

July 9 - Monday: APC Round Table & Expo

7:00-8:00	Registration & Continental Breakfast (Ballroom Foyer) / Expo opens at 9:00	
8:00-9:00	Welcome and Keynote Speaker: Marcia Cooper, Senior Vice President of TVA (Room 4/5/6)	
9:00-10:00	<p>Workshop I (Room 7/8)</p> <p>Design Considerations for FF by Jim Parsons, Neundorfer, Inc.</p>	<p>Workshop II (Room 9/10)</p> <p>Effects of Poor Air Preheater Performance on the Backend by John Guiffre, Paragon</p>
10:00-10:30	Break (in Expo)	
10:30-11:00	<p>Workshop IV (Room 7/8)</p> <p>Study into the Effects of Impulse Cleaning on PRB Ash by Terry Farmer, GE Energy</p>	<p>Workshop VI (Room 9/10)</p> <p>Retrofitting FFs into ESPs by Tom Lugar, Fisher-Klosterman/Buell Division</p>
11:00-12:00	<p>Workshop V (Room 4/5/6)</p> <p>Mercury Regulations by Carl Weibert, Burns & McDonnell</p>	<p>Workshop VII (Room 2)</p> <p>Draft System Impacts With Emission Control System Retrofits by George Johnston, Howden Buffalo</p>
12:00-1:30	Lunch in Exhibition Hall	
1:30-2:30	<p>Panel II (Room 4/5/6)</p> <p>ESPs / Rebuild, Retrofit or Replace / Chairman: Bob Tison, DOVCO/BSE / Panelists: Scott Williams, Duke Energy; Jason Horn, AEP; Greg Betenson, PacifiCorp; Brandon Looney, Southern Company; John Walker, Duke Energy; Doug Hartman, FirstEnergy; Mike Elliott, TVA</p>	<p>Workshop IX (Room 9/10)</p> <p>Designing PJFF Baghouses for High Sulfur Fuel by Matt Usher, AEP</p>
2:30-3:00	Break (in Expo)	
3:00-3:30	<p>Panel III (Room 4/5/6)</p> <p>How to Reduce Scrubber Operating Cost and Improve Performance / Chairman: Ron Richard, RE Consulting / Panelists: Mike Walsh, Marsulex; Tony Licata, Babcock Power; Melissa Allen, TVA; Gordon Maller, URS; Bob Candelaria, SRP; Jerry Baresich, EK-ITO</p>	<p>Workshop XII (Room 9/10)</p> <p>Impact of Combustion of Particulate Collection by Bob Taylor, GE Energy</p>
3:30-4:30	<p>Workshop XI (Room 7/8)</p> <p>Mercury CEMS by Sharon Sjostrom, ADA-ES</p>	<p>Workshop XIII (Room 2)</p> <p>Filtration Materials for PJFFs by Florin Popovici, Inspec Fibres GmbH</p>
4:30-5:00	Reception (in Exhibition Hall for all attendees and their families)	
5:00-6:30	Registration & Continental Breakfast (in Expo)	

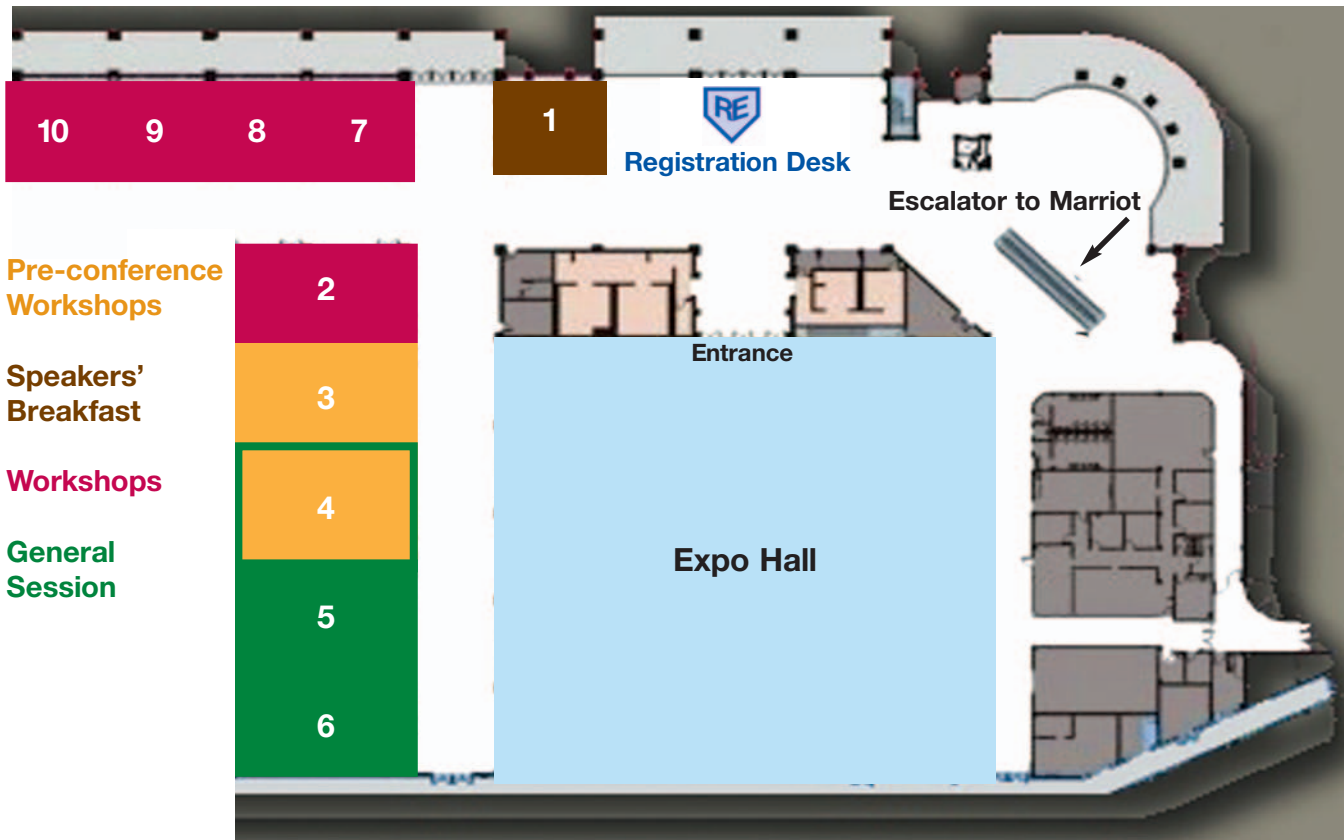
July 10 - Tuesday: APC Round Table & Expo

7:30-8:00	Registration & Continental Breakfast (in Expo)	
8:00-9:00	<p>Panel IV (Room 4/5/6)</p> <p>Continuous Particulate Mass Monitors for Wet Stacks / Moderator: Craig Clapsaddle, MSI / Panelists: Peter Struckmann, E.ON Engineering; Phil Zyskowski, Stek Mahak; Steve Noland, E.ON; David Nickols, Dominion Generation</p>	<p>Workshop XV (Room 9/10)</p> <p>Using Delta Wings for Flue Gas Conditioning by Scott Thomas, Duke Energy</p>
9:00-10:00	<p>Workshop XVII (Room 7/8)</p> <p>High Frequency Power Supplies by Royce Warnick, Stock Equipment</p>	<p>Workshop XIX (Room 9/10)</p> <p>PM2.5 Measurement & Control by John McKenna, ETSI</p>
10:00-11:00	<p>Workshop XXI (Room 7/8)</p> <p>Maintenance of ESP TRs by Marty Watson, CE Power Solutions</p>	<p>Workshop XX (Room 2)</p> <p>Flyash Removal Systems Treating PRB and Dry Scrubber Waste by Matt Usher, AEP</p>
11:00-12:00	<p>Workshop XXII (Room 4/5/6)</p> <p>Science of Fuel by Tony Widenman, DTE</p>	<p>Workshop XXIII (Room 9/10)</p> <p>Plant Tour: Discussion of Technology by John Carne, SEI, and Dennis Shanahan, Indigo</p>
12:30	<p>Workshop XXIV (Room 2)</p> <p>FGD Wastewater Treatment and Hg Separation in FGD Wastewater by Philip Elliott, STEAG LLC</p>	

July 11-12 - Wednesday & Thursday: PCUG (Pollution Control Users Group) Meeting at Chattanooga Convention Center

7:30-5:00	Crommelin Memorial Scholarship Golf Tournament	
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2007 Chattanooga Convention Center Layout



2007 Exhibitor List with Booth Numbers

ADA-ES6	Duct Balloons18	Nol-Tec Systems9
Advatech10	E.ON Engineering Corp.14	O'Brien & Gere8
Air Advantage44	ECO PHYSICS37	Pratt & Whitney33
Airflow Sciences Corp.29	EKATO Corp.49	Precipitator Services Group . . .61
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Alstom Power3 & 4	F.L. Smidth Airtech11	RE Expo Management39
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CoorsTek55	MSI / Mechanical Systems15	

Treasure Map!

The treasure map grid consists of several sections:

- Top Left:** A vertical column of numbers 6, 8, 7, 9. An orange box labeled "Bar" is above it.
- Top Middle:** A grid of numbers 32, 22, 12, 10, 11, 12, 62. An orange box labeled "Food" is above it.
- Top Right:** A grid of numbers 15, 36, 37, 38, 39, 05, 67, 60, 87, 40, 41, 42, 43, 44, 57, 59. An orange box labeled "Bar" is above it.
- Middle Left:** A vertical column of numbers 5, 4, 3, 2, 1. An orange box labeled "Food" is to its right.
- Middle Middle:** A grid of numbers 02, 61, 14, 20, 61, 14, 21, 28. An orange box labeled "Food" is above it.
- Middle Right:** A vertical column of numbers 52, 53, 54, 55, 56, 57, 58, 59. An orange box labeled "Food" is to its left.
- Bottom Center:** An orange box labeled "Entrance".



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ADA-ES, a clean coal technology firm, is the leader in mercury emissions control and provides measurement services, compliance planning, and turnkey mercury control systems with performance guarantees. We also provide proprietary flue gas conditioners and combustion additives for improved ash handling, ESP performance, and slag fluxing in cyclone boilers. Additionally, the Company is implementing plans to produce and supply activated carbon to its utility customers.

Advatech10 Double

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Advatech combines the strength of two world-class organizations—URS Corporation, a global engineering firm, and Mitsubishi Heavy Industries America (MHIA)—to bring the best FGD systems to the United States. With Advatech, you get not only the Double Contact Flow Scrubber (DCFS) technology from MHIA and the comprehensive engineering, procurement, and project implementation services of URS, but also the R&D, engineering experience, and corporate commitment from both companies.

Air Advantage, Inc.44

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Air Advantage, Inc. is a consulting engineering company specializing in aiding customers, manufacturers and consulting services with the engineering required to support an ever widening array of environmental options and issues.

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AirTek.43

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Since 1988, AirTek has been a leading provider of precipitator services. These services include field service engineering, consulting services, construction management, maintenance, new construction, major rebuilds, and the supply of spare parts. AirTek offers this full range of services, in addition to our own line of ESP's, to all users of air pollution control equipment.

Alstom Power.3 & 4

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Alstom is a world leader in supplying clean power solutions. The Alstom portfolio includes complete air quality control systems, equipment upgrades, component rebuilds, replacement parts, construction, commissioning and technical services for SCR systems, wet and dry FGD systems, wet and dry ESP's, high and low ratio fabric filter systems and integrated solutions for mercury control.

A.V.C. Specialists, Inc.42

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A.V.C. Specialists designs and manufactures voltage control and rapping control systems featuring Modbus communication links with plant DCS. A.V.C. also supplies replacement and upgrade components for all precipitators. In addition to providing inspection and maintenance service, A.V.C. solves difficult rapping problems for hoppers, bins and SCR screen systems.

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www.BlueSkiesEnvironmental.com

info@dovcofab.com
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For over 30 years Blue Skies Environmental & DOVCO Industrial Fabricators, Inc. have been Engineering, Designing, Supplying, Manufacturing, Fabricating Parts and guaranteeing Electrostatic Precipitators (Dry & Wet), Fabric Filters, SCR's, Scrubbers (Dry & Wet), Silo's, Injection Systems, Structural Steel, Ductwork, Tanks, Access and many other Specialty Products for the Air Pollution Control markets.

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Breen Energy Solutions (BES) is a provider of technology and services to the utility industry with a focus on reducing harmful emissions from power plants while managing the adverse impact of such technology on equipment and operations. BES provides NOx reduction, low cost Hg oxidation and capture technologies as well as innovative measurement and control technologies for real-time measurement and control of the negative effects of emissions control technology.

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Clyde Bergemann EEC is a worldwide supplier and designer of electrostatic precipitators, fabric filters, dry scrubbing systems, mercury control systems and dry injection systems, in addition to pneumatic and bottom ash material handling systems. CBEEC offers a full line of associated OEM and aftermarket parts and services for these systems to the power generation, pulp and paper, waste-to-energy, rock products, metals and petrochemical industries. CBEEC has companies in the Americas, Europe, Asia and Africa.

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www.eon-engineering.com



E.ON Engineering Corp. provides services in the field of analytics and clean air technologies. Among others, these are SCR catalyst management, field-testing (for all gaseous components, aerosols and particles), FGD and SCR performance / acceptance tests, AIG tuning and combustion optimization. The development of all of our services is driven by the needs of our own fleet of >65,000MW.

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EPSCO International, Inc. is a consulting firm specializing in economically solving air pollution control problems for coal-fired utilities, cement plants, and pulp & paper. They promote a 3-Phase approach to defining a problem before trying to solve it: Online Assessment, Offline Assessment, Analyses & Recommendations. EPSCO's staff of 20 consultants and associates have 20+ years of consulting experience on ESPs, FFs, FGD O & M, flue gas conditioning, Mercury control, and SCR Maintenance & Structural Rehab on 300+ successful projects.

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Institute of Clean Air Companies (ICAC)54

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The Institute of Clean Air Companies (ICAC) is the national association of companies that supply air pollution control and monitoring systems, equipment, and services for stationary sources. ICAC has promoted the air pollution control industry and encouraged improvement of engineering and technical standards since 1960. Our members are leading manufacturers of equipment to control and monitor emissions of PM, SO₂, NO_x, CO₂, VOC, Hg and other air toxics.

Inspec Fibres GmbH12

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www.marsulex.com



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Metso Minerals Industries50

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RE Consulting has become the focal point of all training conducted by Reinhold Environmental, including training manuals and a wide variety of supplemental training with both established and cutting edge training formats. The mission of RE Consulting is to provide all forms of training in the selection, use and maintenance of APC equipment. To satisfy all requirements of equipment users, Manuals and Training Programs will be customized to fit the needs of the individual client and, where required, consulting studies will be undertaken to examine future options.

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SOUTHERN RESEARCH INSTITUTE

Southern Research Institute's Environment and Energy Department provides air pollution control research, testing, and laboratory services for utility, industry, and government clients in the U.S., Europe, and Asia. Our areas of expertise include semi-continuous mercury monitoring, carbon trap mercury measurements, SCR catalyst activity testing, coal combustion research, flue gas analysis for SO₂, SO₃, Cl, Hg, in-situ and laboratory ash resistivity testing, and laboratory chemical analyses on coals and fly ashes, including Hg concentrations.

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Manufacturer of Continuous Emission Monitoring Systems, Continuous Opacity Monitoring Systems, Data Acquisition and Reporting Systems which comply with Federal, State, and Local regulations, as well as Process Monitoring Systems for SCR, FGD, and Boiler Control. Also provides preventive and emergency service, troubleshooting, training, consulting, repairs, spare parts, and Certification and Compliance testing.

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STEAG LLC has provided environmental engineering and consulting services to the North American power industry since 1992. STEAG's services include SCR system design, review and startup; flow model testing; ammonia storage and supply systems; AIG tuning; and large particle ash screens. STEAG also provides catalyst management services including testing; test data interpretation; catalyst exchange strategies; and catalyst cleaning and regeneration services.

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Business: 440-543-6000 Fax: 440-543-5944
www.stockequipment.com



Stock Equipment Company, part of Schenck Process Group, is a global supplier of material handling solutions as well as a provider of precipitator control solutions with its Foryr AVC XM and ERC products.

Terra Environmental Technologies34

P.O. Box 1900, 161 Bickford Line
Courtright, Ontario, Canada, N0N 1H0
Barry W. Lonsdale, President
blonsdale@terraindustries.com
Business: 519-474-7446 Fax: 519-867-3128
www.terraindustries.com



Terra Environmental Technologies manufactures and delivers on-demand reagent solutions to help reduce nitrogen oxides (NOx) and other emissions from power plants, large industrial applications and diesel engines. TET also provides a compliment of support services including Technical, Maintenance and Environmental Health and Safety.

URS Corporation10 Double

P.O. Box 201088
Austin, TX 78720-1088
Gordon Maller, Manager of Air Pollution Control
gordon_maller@urscorp.com
Business: 512-419-5045 FAX: 512-454-8807
www.urscorp.com



URS is a full-service engineering company. For nearly 30 years, URS, operating as Radiant Corporation, has been recognized as a world leader in air pollution and FGD control technology. Today, we are applying our expertise and know-how to upgrade existing FGD systems, build new FGD systems, and design systems to control other pollutants such as mercury and particulate.

Wahlco, Inc.41

3600 W. Segerstrom Ave.
Santa Ana, CA 92704
Barry Southam,
Vice President of Sales & Marketing
bsoutham@wahlco.com
Voice: 714-979-7300 Fax: 714-979-0603
www.wahlco.com



WAHLCO serves the power industry through the manufacture and supply of SO₃ and NH₃ flue gas conditioning (FGC) systems, small NOx reduction (SCR and SNCR) systems, ammonia systems for SCR plus urea-to-ammonia "U₂A"™ systems for DeNox and industrial applications.

Wheelabrator Air Pollution Control48 Double

441 Smithfield Street
Pittsburgh, PA 15222-2292
Bill Kissick, Vice President, Sales
info@wapc.com
Business: 412-562-7300 Fax: 412-562-7254
www.wapc.com



Wheelabrator is a world leader in the design and supply of air pollution control systems and services for industrial and utility power generation facilities. Technologies include wet or dry FGD systems, fabric filters, wet or dry electrostatic precipitators, and mercury control technology. Aftermarket Services offer technical support, training, rebuild/upgrade services and replacement parts.

Charity Golf Sponsors

Wheelabrator Air Pollution Control, Inc.
A Siemens Company




SOUTHERN environmental



Pratt & Whitney
A United Technologies Company



Airflow Sciences Corporation



ASTELL INTERLOCKS INCORPORATED



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KIRK
SINCE 1932 KEY INTERLOCK

COORSTEK
Amazing Solutions.®



Manufacturer and Applicator



Product & Service Overview



Corrosion Protection

- Autoclave rubber
- Hard (Ebonite) rubber
- Extruded rubber
- Pre-cured rubber
- Self curing rubber
- Flake coatings
- Polyurea
- Fiberglass repair
- Polypropylene

Wear Protection

- Rubber lining
- Molded rubber
- Ceramic lining
- Polyethylene
- Teflon lining
- UHMW
- Wear plates/bars
- Polyurea



Conveyor Maintenance

- Belt install, repair and splicing (hot and cold)
- Repair kits
- Pulley lagging
- Slider bed bars
- Skirtboard & scraper rubber
- Belt scrapers/brushes

REMA Tip Top Service Centers:
Casa Grande, AZ; Covington, GA; Elko, NV; Detroit, MI

Tip Top Industrial Services Centers:
Charleston, WV; Cincinnati, OH; Lafferty, OH; Rockport, IN