



Boiler Blast News



Representing the Interests of America's Industrial Energy Users Since 1978

NOVEMBER 2017

Annual Meeting Highlights

CIBO's 39th Annual Meeting was filled with great information, activities, plenty of discussion and valuable takeaways for all. As we enter 2018, our understandings from the presentations and discussions will be invaluable in helping move our issues forward. All things considered, CIBO is doing very well, and we will be looking to do even more next year.

For those of you that could not attend, we set out to address "Leveraging Today's Opportunities to Meet Tomorrow's Challenges." We believe everyone was struck by the realization that the opportunities were directly linked to radical changes that are happening simultaneously across the energy, environmental, financial / economic and societal drivers. These are the drivers underpinning the reality of technology and policy understandings and actions across all aspects of industrial, institutional and public life. The old ways of reacting to change are gone. Trying to understand it, keep up with it and do something to drive or direct it in a new world of big data and instant communications is virtually impossible when you try to do it alone. Based on the responses to our survey of attendees, this was one of our best meeting ever.

During the business portion of the meeting, **Amber LeClair, The Babcock & Wilcox Company and Steve Gossett, Eastman Chemical Company**, were re-elected to the Board of Directors. The Board elected **Ann McIver, Citizens Thermal**, as Chairman; **Mark Calmes, Archer Daniels Midland Company** Vice Chairman; **John (Jay) Hofmann, Trinity Consultants, Inc.**, Secretary/Treasurer; and **Robert (Bob) Bessette**, President. At the Thursday evening awards banquet, **Amy Marshall, AECOM** was awarded the 22nd Annual Bill Marx Thorn-In-The-Side Award. As part of our annual Jerry Debban Golf Tournament with proceeds from Mulligans, String and donations going to Washington, D.C.'s Children's hospital, we raised over \$800.00.

Check out the Meeting Minutes and presentations posted on the "Members Only" website.

Next year's 40th Annual Meeting will be held October 24-26, 2018 at Lowe's Ventana Canyon in Tucson, Arizona.

Energy - Maybe Combined Heat and Power's (CHP) time has come when renewable energy and energy storage are included within the discussion. CHP when

renewable energy and energy storage are included within the discussion, begins to hit upon all the aspects of the radical change happening across the energy, environmental, economic/financial and societal arenas embodied within the "Sustainability" mantra of today. The problem with that is, there is both good and bad aspect of CHP within each of the arenas and across multiple arenas. If you did not get a copy of the presentation Bob Bessette gave at the CHP Association a few weeks ago, you might want to get one. It talks about the changes and the good and bad that complicate any resolution of today's issues. As a result, we have been asked by both DOE and EPA to come over and think about how we might begin to really solve the problems; and, not as in the past just detail the roadblocks to GHG reductions. We will be able to talk about this more during the December Committee Meetings. The Natural Gas, Renewable Energy and CHP presentations at the Annual Meeting were great. They are on the members' only website along with Carl Bozzuto's Summary. We are beginning to see increasing activity at FERC regarding fuel choice and PURPA with some legislation that might limit PURPA or make Non-Electric Utility Generators (non EGUs) Electric Utility Generators (EGUs) subject to all the rights, responsibilities and regulations of the FERC and utility generators. One thing for sure, the issues

and activities associated with energy and its production and use within the industrial and institutional sectors is growing in importance and intensity. Big Data, Industrial Internet of Things (IoT), Microgrids, electrification, water, staff and knowledge retirements, grid resilience and reliability, renewable energy, battery storage, NSR and a new social awareness are things we have been and will be continuing to address from CIBO's unique perspective of working to figure out how we can do it at the plant floor, meet environmental regs and stay competitive in the global economy. This should be visible when you look at the agendas for the upcoming committee meetings.

Environment - You may have noticed NSR in the above list of energy issues. NSR was at the top of the concerns or regulations that had to be fixed in the responses to both the Department of Commerce and EPA as a result of President Trump's Executive Order on regulatory reform. When broken down to individual parts that need work, it is understandable why it comes in at the top of the list. The major areas of concern are: Project Netting, Project Aggregation, Actual to Projected Actual (ATPA) Test for Netting, Routine Maintenance, Repair and Replacement (RMRR), Pre-Permit Activities, PAL Implementation, Ambient Air Definition, ATPA Guidance, GHG SER, Modeling Reform, and Top Down BACT. There are more. If your favorite was not listed let us know. An email was sent to all principal representatives regarding the activities of an informal coordinating group of associations of which CIBO is a participant. If you are interested in participating let us know.

With **Bill Wehrum** approved as Assistant Administrator for Air, we may now begin to see action and the reciprocal ENGO responses. While we are not expecting any home runs, singles and doubles may be possible if changes can be made through interpretative changes, executive orders, or guidance. While rulemaking is not out of the question, anything that should be done must be completed within the three remaining years of this administration, including the litigation that will surely happen. It might be nice if this was all that was happening. As more information becomes public, more of those issues affecting our members could be called into question from the outside ENGO and other activists. We are beginning to see citizen suits from citizen's activists and activists groups. Water, Coal Ash, land use, fence line boundaries, and social

responsibility are all on the table when a company or the administration tries to do anything. The Friday morning session summary for the Annual Meeting on the web site can give a bit more detail. The December Quarterly Committee Meetings should be great.

Technical - As retirements continue, the demand for emissions data and reporting increase and the threat of citizens' suit increases, the need to know everything that comes into and goes out of a facility becomes more important. Continuous as in "Continuous Compliance" is now taken literally. An annual compliance test will not be enough. What you do not know, between tests and data points, could very well be the rock you stumble over. Energy and environmental management systems, ISO 50001, and the integration of data collection, management and retrieval are the subject of the next Focus Group session at the December Committee Meetings.

As of the Annual Meeting, The Higher Logic Communications platform is up and running. All CIBO Members have been added. If you have not logged in created a new password for the site and elected your personnel privacy settings, please do so. This will become the primary communications and networking activity for technical issues on Operations Maintenance and Performance. Depending on participation groups like Stokers, FBC, Package Boilers, Fuels and more will be possible including an associated library of information that is easily retrievable. We will be posting information from request we have had in the past. If you would like to find something let us know. To get into the system, you must have CIBO Members' Only login credentials. If you do not, contact us. We expect this will allow a greater number of member company engineers, operators and maintenance staff to network with their peers across industry and diverse operations.

The CIBO 2018 Conferences are set for next year:

The Boiler Operations, Maintenance, and Performance Conference will be held May 14-16 in Hershey, Pennsylvania. This conference will solely focus on operations, performance and maintenance issues for the powerhouse as we look at what it will be and where we have to be in the new energy era. The conference will continue to provide time for FBC, Stoker, Gas and Oil fired boiler owners to address their unique concerns. An

optional tour will be offered Thursday AM at a local power plant. We have begun planning for the conference. A draft discussion agenda should be available the week before the December Committee Meetings. If you would like to make a presentation or would like a specific topic address, we need to know by Friday December 1st. If you would like to participate in the planning process, contact Gail now at < Gail@cibo.org >. As with all CIBO conferences, CIBO members have priority. This year that priority will extend until January 15, next year. After that time, available openings will be filled as needed. Case studies always have priority. If you are thinking about contributing, check out the Technical Interests and Concerns from the Annual Survey results online from the annual meeting.

The Industrial Emissions Control Technology XVI Conference will be held in Durham, North Carolina, July 30-August 2.

Planning for the IECT this year will begin the first week in January. We will be focusing much of our attention toward case study compliance presentations and look at the latest emission control technologies coming on line, as well as, addressing the implications of other rules and issues, like the Ozone NAAQS, RICE, Turbine MACT, PSD, modeling, monitoring and data collection along with the whole host of issues that must be complied with to keep the energy assets of your facility operating. . If you would like to participate in the planning process, contact Gail now at < Gail@cibo.org >.

Annual Membership Survey

Results - The Annual Survey Results, included in the Membership Report given at the Annual Meeting, are posted on the "Members Only" website. We would like to thank all who provided valuable feedback in the guidance of CIBO's strategy development and allocation of resources for maximum benefit to members.

Technical Focus Group, Environmental, Energy Committee Meetings

–Dec. 5-6, 2017 Arlington, VA

Focus Group Topic is **Environmental Management Systems Options**.

Key topics of Committees to be addressed include: Combined Heat and Power, New DOE Energy Tools, Plant Water Profiler, EIA

Short Term Forecast, Electric Grid Report, Water the Next Air, Regulatory Reform, Risk Management and the CAA General Duty Clause, Litigation and Reconsideration for the BMACT Suite of Rules, and Cooperative Federalism, the New EPA Environmental Council for the States.

From the President's Desk – Bob Besette

From my perspective here at CIBO headquarters outside the Beltway for D.C., there is a lot of information that comes through or across the office. We try to keep tabs on many things to filter the things that might be important to you tomorrow. Last week was one heck of a week. As we had been thinking and saying, the ENGO's and the rest of the world who do not like fossil fuels, industry or someone else's profits are getting ready to act to protect their agendas from the Trump Administration's challenge. The elections in Virginia and New Jersey and the Senate's approval of **Bill Wehrum** as Assistant Administrator of Air at EPA could well have been the actions that begins the war dance – like Lexington and Concord, "The Shot Heard Round the World." I believe our days of peace are numbered. This is where CIBO can really help.

MEMBER NEWS

New Cleaver-Brooks CBEX Dryback Elite Boiler Offers Near-Perfect Combustion in a Small Footprint

THOMASVILLE, Ga. (Oct. 4, 2017) – Cleaver-Brooks announces the launch of CBEX Dryback Elite, the newest member of the Cleaver-Brooks "EX" family. Like its waterback cousin, the CBEX Dryback Elite achieves 3% O₂ across its 10:1 turndown range. The standard package offers 30 ppm NO_x with <10 ppm CO.

The CBEX Dryback Elite is generally 20% smaller than other firetube models and heats up 20% faster. Its dryback construction offers unencumbered access to all parts of the boiler for ease of maintenance.

"The CBEX Dryback Elite was designed with our exclusive EX technology," said David Brick, firetube product manager for Cleaver-Brooks. "The boiler offers superior combustion along with extended surface tubes that transfer 85% more heat than traditional tubes.

"Additionally, the boiler has a larger furnace and simplified design for reduced stresses within the vessel," added Brick.

Engineers at Cleaver-Brooks used advanced computational fluid dynamics (CFD) to optimize the integration of core competencies, including burner, controls and heat recovery, which led to dramatic improvements in efficiency and emission reductions. In addition, CFD modeling helps reduce thermal gradients and stresses in the system, ensuring a long pressure vessel life as well as a reduction in downtime and maintenance compared to traditional systems.

The CBEX Dryback Elite includes the Hawk control system for precise boiler/burner management and safety with logic-based ancillary devices and functions. The linkageless Hawk offers options for oxygen trim and variable speed drive control and can be customized and optimized for any system. It is compatible with building automation systems and is NFPA and UL compliant.

The CBEX Dryback Elite is specifically designed to fit inside a shipping container for a complete operable boiler room shippable worldwide up to 1000 HP. All components are supplied by Cleaver-Brooks for single-source responsibility.

Cleaver-Brooks has a dedicated alliance of factory-trained representatives who can be contacted for consultation, sales, maintenance and aftermarket support. To locate a representative, visit cleaverbrooks.com or call (800) 250-5883.

About Cleaver-Brooks

Cleaver-Brooks, a world-renowned provider of boiler room products and systems, is committed to providing efficient solutions that help its customers and the industry reduce energy usage, cost and environmental impact. As the pioneer of packaged firetube and watertube boilers, Cleaver-Brooks is the only manufacturer in the world to offer an entirely integrated boiler room solution for any size application. Its products are backed by a world-class representative network offering superior aftermarket service and solutions. Visit cleaverbrooks.com for more information.

2017 Events

Dec 5-6 - Technical Focus Group, Energy & Environmental Committee Meeting / Hilton Garden Inn, Arlington, Virginia