Background

The MEGA Symposium returns in 2018 with a focus on industry responses to new operational and environmental challenges for power plants as well as policy and regulatory perspectives affecting future operations. Building on the 20-year history as the power plant industry’s leading technical conference for \( \text{SO}_x \), \( \text{NO}_x \), particulate and mercury control, the 2018 conference will include policy discussions, sessions on emission challenges for gas-fired plants, and content designed for international power plant owners facing new regulations. The 2018 MEGA Symposium is brought to you through the combined efforts of four key industry players – the Air & Waste Management Association (A&WMA), the Institute of Clean Air Companies (ICAC), the U.S. Environmental Protection Agency (US EPA), and the US Department of Energy (DOE).

The twelfth MEGA Symposium has been restructured to provide added value to seasoned professionals in the US and internationally and to provide an excellent learning experience for early career engineers. Attendees will benefit from insights into policy trends and receive the latest developments and operational experience to reliably manage compliance with air quality, solid waste, and discharge water quality requirements for fossil-fired power plants while adapting to increasingly variable operational demands. Recognizing the maturity of control technologies for criteria pollutants and the advanced development status of mercury and air toxics (MATS)-specific controls, the 2018 MEGA will emphasize approaches and technologies to support cycling operations while balancing emission constraints at the stack and effluent discharges, and byproduct quality. The 2018 MEGA Symposium will provide a forum for sharing approaches, successes, and challenges complying with current and pending environmental regulations with today’s energy dispatch demands. Attendees can receive Professional Development Hour credits.

Conference Technical Topics

Air Pollution for Coal-Fired Generation: Mercury, Acid Gas, \( \text{SO}_x \), \( \text{NO}_x \), Particulate Controls
- User experience with commercial installations
- Application experience with new technologies to reduce costs or minimize ancillary impacts
- Reliability and performance improvements, including new materials of construction
- Impacts of fuel systems and coal quality on control performance
- Economical upgrades in response to fuel switching, tightening emission limits, and multi-pollutant issues
- Low-cost, trim technologies
- Improved I&C, including integration into boiler control system, system monitoring, and troubleshooting

Air Pollution for Gas-Fired Generation
- Startup/shutdown emissions controls
- Managing HRSG SCR catalyst operation due to cycling
- Emissions management with variable load operations
- Advances in emission control technology

Effluent and Byproduct Management
- User experience with commercial wastewater treatment installations
- User experience with pilot-scale wastewater treatment evaluations
• Application experience with technologies and approaches to limit selenium discharge
• Scrubber operations to manage fate of SO\(_x\), mercury and selenium
• Selenium measurement developments and challenges
• Water balance experience and challenges
• Integration of air pollution controls, wastewater management, and byproduct quality
• Management of solid by-products

Managing Variable Load
• Impact of transient operations on regulatory compliance
• Operability and maintenance of pollutant controls with load-following
• Pushing the boundaries of minimum operating temperatures (MOT) for power plant systems
• Operating challenges to wastewater treatment systems with load-following

Carbon Management and CO\(_2\) Control for Fossil Plants
• Lower cost/energy penalty CO\(_2\) capture technologies – lab, pilot, field results
• Interactions between carbon management technologies and traditional air pollution controls
• Heat rate/energy efficiency measures and novel thermal integration approaches
• Fuel-based strategies – biomass, coal blending, natural gas co-firing, gas-fired generation
• Utilization technologies that convert CO\(_2\) emissions into marketable products

Who Should Attend
• Power producer managers, engineers, and plant operators in the US and global locations
• Environmental researchers, managers, and engineers
• Early career industry professionals
• Control equipment, chemical, measurements, and technology suppliers
• Consulting engineers
• Government agency managers and staff

Abstracts    Deadline is March 9, 2018
In 150 words or less, provide a summary of the case study or results to be presented for evaluation of its contribution to this symposium. Priority will be given to papers that present end user experiences implementing technologies required for MATS compliance; maintaining reliable, compliant operation of pollutant controls in load-following dispatch; modifying scrubber operations to manage SO\(_x\), mercury, and selenium; successfully incorporating byproduct management in compliance plans; and emissions control advances for gas-fired generation. The abstract should demonstrate the technical depth of the proposed presentation.

The review of abstracts and selection of presentations will be conducted jointly by the three host sponsors. Papers must be co-authored, and preferably presented, by a power plant end user. Presentations by equipment suppliers that describe general capabilities of their technologies or dated results will be considered commercial in nature and will not be accepted. Presentations that are primarily a summary of regulations or compliance planning strategies will not be accepted in the technical sessions, but may be considered for a policy panel. Additionally, the three host sponsors will solicit presentations covering issues of specific and timely interest.

Presentations will be limited to 25 minutes, which includes a short question-and-answer period. Author notification is expected by May 4, 2018. Speakers will be required to submit an extended abstract or paper by June 22, 2018 to facilitate the production of symposium proceedings. Late papers will not be accepted after this date; failure to meet this deadline will result in the cancellation of your presentation.

Abstracts must be submitted via e-mail to MEGA@awma.org by March 9, 2018.