

CEMS Operation, Maintenance, and Best Practices



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Ameren Overview

Fully rate-regulated electric and gas utility



Ameren Corporation

Ameren Missouri

- Electric generation, transmission and delivery and gas delivery business
- Serves 1.2 million electric and 0.1 million gas customers
- 10,200 MW of total generation capability
- Regulated by MoPSC

Ameren Illinois

- Electric and gas delivery business regulated by ICC
- Serves 1.2 million electric and 0.8 million gas customers
- Electric transmission business regulated by FERC

Electric Transmission

- ATXI invests in regional multi-value projects
- Ameren Illinois invests in local reliability projects
- Regulated by FERC

Puerto Rico



 **Ameren**
FOCUSED ENERGY. *For life.*

Puerto Rico



Puerto Rico



First Priority - Safety

- Make safety a priority
- Communicate and follow plant safety policies and procedures
- Don't be complacent
 - Safety training is a continuous process
- Everyone wants every one to complete the job safely and return home safely



CEMS DAS Software

- Communication with software vendor
- Service agreements
- Custom Reports
- Does the CEMS DAS Software meet your needs
 - Find a vendor that will meet your needs



Analyzer Vendors

- Know your analyzer vendor contacts
- Ask questions
- Use technical support when needed
 - Don't hesitate to call when you have an issue that you are unable to resolve
 - Learning opportunity for the technicians
 - Remember to keep good notes in case the issue happens again



CEMS Calibration Gas

- Vendor selection
- Communication
- Does the vendor meet your needs?
- Are there points of difficulty?



Communication with Plant Directors and Managers

- Keep up to date on Environmental regulations, requirements and status
- Compliance status updates
- Operational support
- Provide guidance
- Attend daily plant operations meetings
- Be Proactive
- Great communication is KEY!



CEMS Training

- Training Focus Areas
 - CEMS DAS Software Training
 - CEMS Analyzer Training
 - Part 60, Part 75, and MATS Regulations
- Recommended people that need training
 - Environmental Personnel
 - Instrument Technicians
 - Instrument & Electrical Supervisors
 - Shift Supervisors
 - Control Operators
 - Anyone involved with CEMS



CEMS Technicians

- Cornerstone to a successful emissions monitoring and testing program.
- Training, Training and more Training
- Use internal and external training resources
- Many options are available to fit your needs
 - Use what is best fit for your group.
 - Onsite Training
 - Offsite Training



Research & Development

- Be involved in Research & Development
- Continuously look for opportunities to improve the process
 - Monitoring
 - Sample collection
 - Reporting
 - Stack testing



Emissions Stack Testing Schedule & Notifications

- Plan ahead and work with stack testers to schedule well in advance.
- Know your outage schedules
- Communicate often with Plant Directors and Managers
 - Schedule
 - Operation Requirements
 - Fuel samples
- Have a system for scheduling, tracking and providing notifications to the agencies.



Emissions Stack Testing Companies

- Reliable
- Flexible
- Trained properly
 - QSTI
- Great Communication
- Reports
 - Accurate
 - Neat
 - Complete



Quarterly, Semiannual, & Annual Emissions Reporting

- Start early
 - Being proactive is an important step in completing reports thoroughly, accurately, and on time.
- Have a checklist or commitment tracking program
 - It is easy to lose track of tasks, especially when there are numerous reports due at various times.
 - Verify completion.
- Always review reports before submitting
 - Whether it is first hand or second hand review. Make time to circle back or ask for feedback before submitting reports.



Useful Websites, References and Guides

- EPA & State Agency Websites
- EPRI CEMS Guidelines
 - Review and become familiar with the EPRI CEMS Guidelines.
 - Excellent Reference
- Part 75 Plain English Guide
- Part 75 Policy Manual
- CEMS QA Manual
- CAMD Website
- ECMPS Website
- Federal Register



Questions?



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