

Co-ops ensure air quality

Associated Electric Cooperative Inc.

A Touchstone Energy® Cooperative 



Power supply facts

Associated works 24/7 on environmental compliance

How does Associated Electric Cooperative know its sulfur dioxide emissions are well below permitted levels at its coal-based power plants? How does it measure nitrogen oxides, carbon dioxide and carbon monoxide emissions? How does it determine environmental controls are working efficiently?

Those data come from continuous emissions monitoring (CEM) equipment at its power plants, and the teams at the Thomas Hill Energy Center and New Madrid Power Plant recently completed an internal audit modeled after the Environmental Protection Agency's field test. The audit reviews Associated's operation and maintenance of its CEM system.

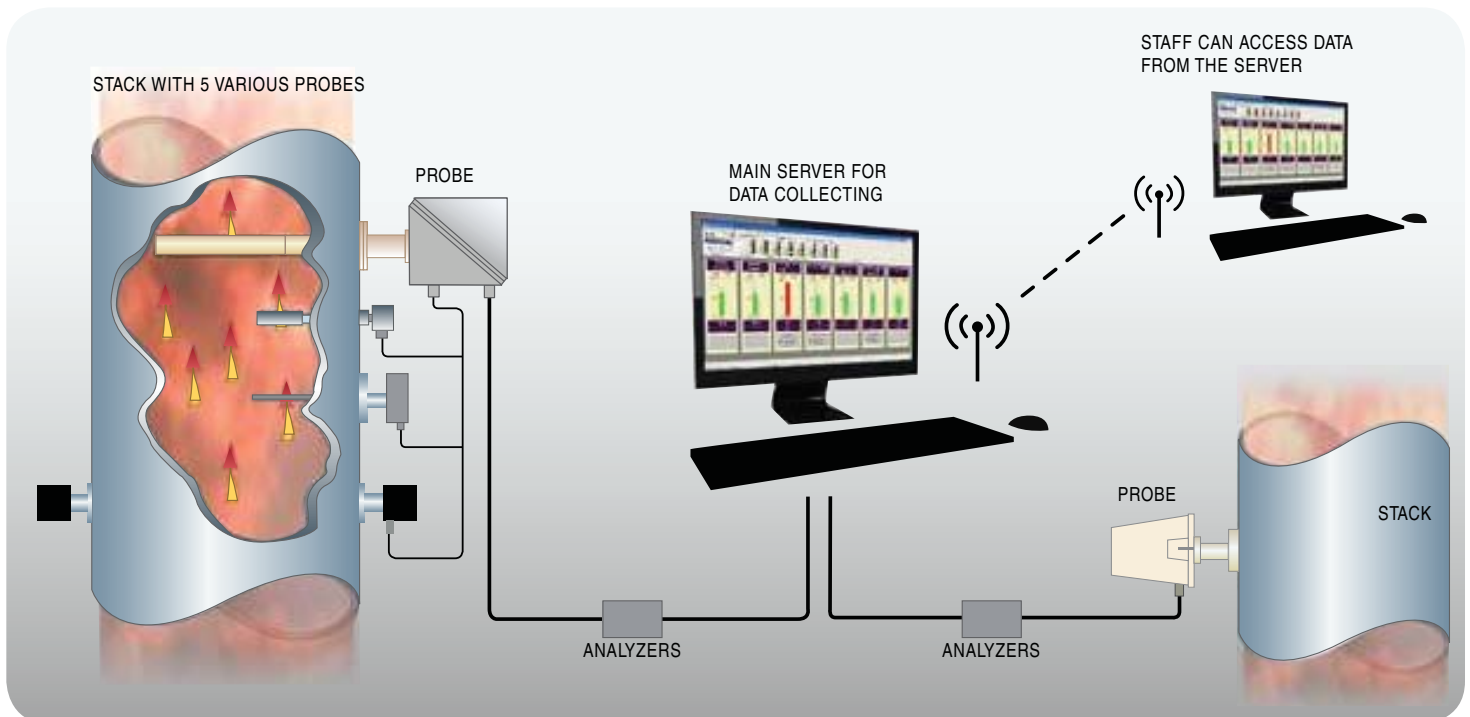
Staff in the environmental health and safety departments annually audit CEM systems at the power plants. Internal audits include quality assurance tests, monitoring downtime periods,

instrument checks and record-keeping of valid calibrations.

The monitoring equipment is vital to meeting Associated's requirements to report emissions every hour of every day. Staff conducts a thorough internal audit to ensure Associated is in full compliance with EPA regulations.

At both power plants, the instrumentation departments maintain the CEM equipment, but that isn't all they do. The departments' overall responsibilities include operating electronics and controls for all boiler and turbine systems.

At Thomas Hill, 12 technicians perform development testing, maintenance, calibration and modification for daily, weekly and monthly records on the analyzers. CEM analyzers run 24/7 and are required to be available, even if a unit is offline.



Sensors on continuous emissions monitoring system probes in each power plant stack continuously record percentages of gas levels emitted. Emissions data from the analyzers are transmitted for calculation into tonnage for an accurate daily, weekly and monthly compliance report sent to state and federal agencies to ensure compliance with Associated's permitted air emissions limits.