Real-time Monitoring of Unburned Carbon-in-Ash

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ABSTRACT

This paper discusses the application of on-line carbon-in-ash analyzers to utility boilers for the purpose of optimizing firing system and thermal performance while maximizing the revenue from fly ash sales. Fly ash value is strongly affected by the unburned carbon content. Fly ash sample collection philosophy and unburned carbon measurement technologies will be reviewed. Several installations from around the world will be described and improvements to plant operation quantified. Special emphasis will be placed on the first commercial installations and use of the technology in the United States.

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