

NEWS RELEASE

New boiler control systems represent an investment in steam production

(Detroit, MI) - Maintaining boiler efficiency means keeping the three Ts - time, temperature and turbulence - finely tuned. It's a job that has required an operator to move constantly from boiler to boiler, checking and adjusting a variety of crucial and often fluctuating factors such as fuel-to-air ratios, fan speeds and water pump activity.

That's changing.

As part of its multi-year, \$22 million capital improvement program, Detroit Thermal recently upgraded the controls on boilers Number 1 and 2. They now are equipped with electronic computerized burner management control systems that allow an operator in a control room to monitor and change many aspects of the steam generation system.

Boilers monitored constantly

"The computerized system allows one person to oversee the boiler operations and to keep those operations in synch so that each boiler operates at peak efficiency," said Roosevelt King, manager of steam generating plants of Detroit Thermal. "The computers monitor the boilers constantly and alert us to any factors that might need adjusting."

Each boiler has its own burner management control system, which feeds data to screens in the control room. The screens are monitored 24 hours a day, seven days a week, 365 days a year, by an experienced operator.

"There is always an operator present who has expertise in boiler operations and can switch from automatic to manual operations if necessary," King said.

Systems improve efficiency

One way in which the new burner management control systems contribute to efficiency is by automatically adjusting fuel-to-air ratios as boiler loads are increased or decreased.

"If there's not enough air in the mix, not all the hydrocarbons are burned, so you're not getting all the heat you could from the fuel," King explained. "On the other hand, if there's too much air, it leaves the boiler before it has enough time to absorb all the heat, and that too is wasteful."

The burner management control systems represent major investments in Detroit Thermal's steam generation system.

"In the long run they will help us control fuel costs by ensuring that the boilers run as efficiently as possible," King said. "They are a part of our long-range plan to keep steam a convenient, reliable, affordable energy source in the downtown Detroit area."

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