



## Increase the Efficiency of Your Boiler Combustion Process

### Application

Keep pace with power demands, emissions regulations, and reduce power generation costs by improving combustion efficiency. The Ovation Combustion Optimization solution increases boiler efficiency while reducing emissions, decreasing loss on ignition, and balancing the needs of the process. The Combustion Optimization solution is a quick, inexpensive way to properly distribute the fuel and air supply for control of NOx and manage the fine line between staged combustion and efficient operation.

### Strategy

#### Heat Rate Improvements

The Combustion Optimization solution enhances boiler operations for heat rate improvements of up to 0.5% to 1.5%.

#### NOx Control

The Combustion Optimization solution improves NOx control levels, with or without low NOx burners, up to 35% while maintaining or improving boiler efficiency.

#### Regulatory Compliance

The Combustion Optimization solution yields optimal plant performance while maintaining regulatory compliance.

#### Closed-loop Integration

The Combustion Optimization solution directly integrates optimal control setpoints and biases into the existing DCS control strategy for closed-loop integration.

### Results

- Improves heat rate up to 1.5%
- Reduces NOx and CO emissions levels
- Reduces plant maintenance costs
- Analyzes and manages combustion variables
- Maximizes staged combustion efficiency
- Controls and reduces measured opacity levels
- Manages loss on ignition and fly ash carbon levels

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