Thermal Oxidizer Optimization

- New temperature control algorithms for the thermal oxidizer maintain better firebox temperature control.
- New methods vary temperature with conditions rather than using one setpoint.
- Lower excess oxygen levels reduce fuel consumption.
- New heat exchange systems preheat feed streams and recover waste heat.
- Dual economizers convert stack heat losses into increased steam generation.

Benefits

- Saves over $1.6 million annually in fuel costs.
- Improves thermal efficiency of heat recovery system from 78% to 84%.
- Reduces stack heat losses by 9 MMBtu per hour.
- Reduces vibration levels due to better flue gas flow arrangement.
- Dual economizers produce additional steam valued at $470,000 a year.