Upgrade DPD Flame Detectors on Tangential Coal-fired

Huaibei Guoan Power Generation Corporation (China)
2 x 320MW tangential coal-fired boiler
Boilers supplied by Dongfang Boiler Works
20 coal burners, 8 oil burners and 4tiny oil guns on each boiler

Before
- OEM flame detectors were frequent damaged by high temperatures at the installation
- Flame detection system had difficulties adapting to varying coal conditions
- The flame amplifiers were susceptible to RFI/EMI interferences

After
- DPD flame detectors were replaced with Safe-Fire’s SA-3000 flame detection system
- Flame detector’s maximum temp rating is up to 100°C
- All tuning adjustments are completed at the amplifier. No programming needed at the detector head

Results
- Improved overall flame detection system performance & stability
- Decreased damage rate of detectors
- Improved performance in varying load conditions
- Decreased maintenance
- Improved protection from RFI/EMI interferences at the amplifiers