CASE STUDY



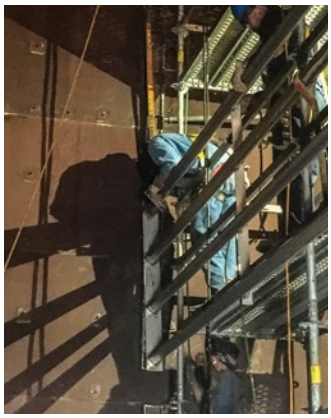
1250 MW Combined Cycle Power Plant EDGE® AIG Retrofit

CECO ENVIRONMENTAL

LOCATION: Southeastern United States

EXECUTED: 2018

THE CHALLENGE: A 1250 MW combined cycle power plant with nine 400 MW units was concerned about an upward trend in ammonia usage over recent years. Their aging ammonia injection grid (AIG) had been procured through their HRSG OEM, and they had identified cracking issues in the older lances as one potential root cause.



THE SOLUTION: During the site assessment, the CECO Peerless® SCR team saw aging AIG lances cracked to the point of falling out, as well as ammonia vaporizer heat transfer problems due to plugging. We recommended a turnkey solution including an EDGE® AIG retrofit and a vaporizer overhaul.

To minimize downtime, we scheduled EDGE® AIG retrofit work over three consecutive 36-day outages, with three units per outage. Together with our construction partner, we completed work on each unit within 12 days.

We addressed vaporizer plugging issues by cutting a hole in the side and rebuilding the relevant parts. This was quickly handled on site in a few days.

THE RESULTS: Through complete implementation of CECO Peerless' EDGE® AIG technology, **which greatly improves Ammonia distribution**, and a turnkey solution minimizing downtime, our customer saw a **30%–40% reduction in ammonia usage**. Additionally, they saw better NOx control and longer SCR catalyst life.

TURNKEY EDGE® AIG RETROFIT DECREASES POWER PLANT AMMONIA USAGE BY 30–40% WHILE EXTENDING SCR CATALYST LIFECYCLE