



CASE STUDY FOCUS

HRSG Maintenance Services

TESTIMONIAL

“The Groome team worked hand-in-hand with our onsite team and looked for not only a short-term fix to address issues in multiple units and to meet the outage timeline, but also figure out a long-term solution for our plant. This was the type of thinking that was critical for us.”



CLIENT

West Coast HRSG



BACKGROUND

A client had insulation failure over a weekend that caused bypass, even though it had been recently repacked (by another vendor). Groome went out to the client that same weekend and inspected the situation. The team discovered that the modules had shifted due to poor/incorrect installation. During inspection of the shifted SCR blocks, Groome observed that there was a second layer of catalyst that the plant was not aware of. The 7" gap between the SCR layers resulted in additional backpressure due to another SCR face being masked. Additionally, significant blockage of AIG ports was observed. The plant went into emergency shut down.



OBJECTIVE

The primary objective was to help the plant become operational as soon as possible. The client wanted to identify the full scope of issues and recognized the importance of inspecting all onsite units.



SOLUTION

Groome brought an engineer partner to the plant, who tested the catalyst and provided support in the build of a plan on how to best approach and fix the problem. At this time, it was discovered that other units had similar issues, and options beyond simply replacing the catalyst were reviewed. Two additional crews were deployed to the plant overnight in order to complete the work on a night-day schedule and meet the tight time line.



RESULTS

Groome worked within the client's needed deadlines and delivered on time. Groome's efforts in SCR cleaning allowed for 1/2" of pressure drop (dP), which greatly improved the gas turbine efficiency. The plant was able to realize \$14,000 annually in fuel savings and \$48,000 annually in additional revenue as a result of .2 MWh increased power generation. A significant savings was also noticed in ammonia consumption. Utilizing data points leading up to the outage and after start-up, the plant reduced ammonia consumption by 50lbs/hr and saw \$24,000 in annual savings.