



TESTIMONIAL

“The Groome / ExPro team performed site walkdowns, drew up reviews, and put together a detailed plan to perform the work. They worked with plant personnel to explain how the work would commence. All of our questions were addressed by Groome.

The Groome of professionals worked with our plant personnel on each step of the cleaning process – and of highest importance was maintaining a safe work environment throughout the process.

Groome completed the work without any issues and both removed a significant amount of material from the HRSG, while dropping our backpressure by two to three inches. Overall, it was a very positive experience.”

CASE STUDY FOCUS

KineticClean

CLIENT



Gulf Coast Cogen

BACKGROUND



This power plant, commissioned in 1995 and located in Texas, is composed of two GE 7EA.02 combustion turbines and 2 Deltak HRSGs that support the neighboring refinery with process steam. The combustion turbine capacity for each unit is 75 MW, and the two HRSG units are not equipped with selective catalyst reduction (SCR) systems or CO catalyst systems. Unit 1 was experiencing high levels of back pressure at the combustion turbine exhaust, as well as higher stack temperature. This unit had never been cleaned, and the plant suspected that issues were due to fouling in the fin tubes.

OBJECTIVE



The goal was to increase the volume and quality of process steam needed for the neighboring refinery, leaving the plant in danger of not fulfilling its contractual agreements due to an upcoming outage on Unit 2. Issues faced were significant enough to cause the unit to be derated and operate at only 75% of maximum base load.

SOLUTION



Groome utilized its patented KineticClean technology on Unit 1 to avoid further derating of the unit, as well as to gain performance and achieve the plant process steam production requirements through the Unit 2 outage. The team moved forward cleaning one HRSG unit, which took six, twelve-hour shifts to complete.

RESULTS



Total time spent on the job was 3 days, which met the estimated timeline. After cleaning, the unit's backpressure was reduced enough to achieve a 12% MW (6MW) improvement, which enabled the unit to operate closer to maximum base load and fulfill the plant's steam host requirements.

Additionally, a stack temperature decrease of 12°F was achieved. Between the two units, 10 tons of debris was removed. There was NO recorded damage to either HRSG or the fin tubes.

