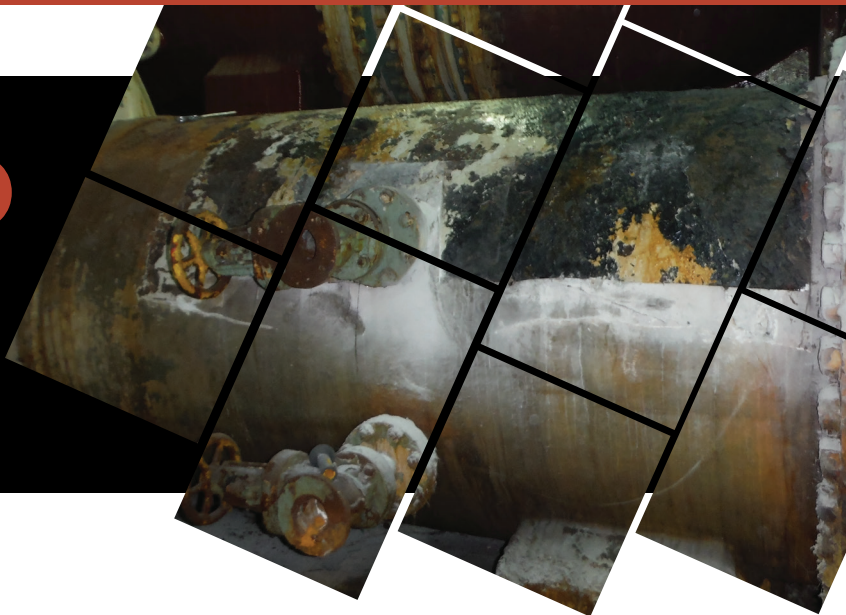


LEAKAGE TO LONGEVITY

Power Generation System Repair



OVERVIEW

A New York City power generation station's critical cooling water infrastructure, originally installed in the 1950s, had become outdated and posed significant risks. With five previous successful composite wrap solutions to systems with identical failures, A&G Industrial Services was well-equipped to address this challenge. The key concerns for this project include:

- Imminent system failure due to short run-cycle forecast
- Run-to-failure mentality
- City reliance on continuous power generation operation

PROBLEM

Located in the basement, this station was difficult to access and needed to be replaced to avoid plant failure. The 60-inch cooling water system supplied 225,000 GPM of water through its condenser to create steam and generate electricity. When these critical pipes fail, they typically run 125,000 GPM, potentially flooding the facility and forcing units offline. Due to the damp conditions, the station experienced extensive external corrosion resulting in through wall failures. Previously, the company had plugged leaks; however, they turned to A&G for expert advice and a new methodology to prevent system failure.

SOLUTION

To ensure uninterrupted and efficient operation of the power generation station, the repair process included:

- Thorough inspection of the piping system at risk
- Identification of critical areas most susceptible to failure via a MAP
- Creation of a carbon fiber wrap repair system to match pipe pressure, flow rate, and diameter



RESULTS

No longer having to plug leaks monthly, the client was satisfied with their repair. The project guaranteed longevity of the carbon fiber repair wrap, preventing future failures and outages.

20+

Years

Maintenance-free service life