

Combined-Cycle Power Plant Life Assessments

20 years into your
combined-cycle's design life?
What next?

ASSESSMENT EXPERTISE

Plant Condition Assessment
Underground Issues
Corrosion Recommendations
Facility Improvements
Performance Testing
Equipment Enhancements
Life Extension Programs
Electrical Degradation Review
Aging DCS and I&C Issues
Upgrade Recommendations
Redundancy Evaluation
Heat/Water Balance Mods
Environmental Concerns
O&M Best Practice Reviews
NERC/GADS® Benchmarking
Cyber Security Evaluations
Alternate / Dual Fuel Designs
Generator Condition Reviews
Inventory Analysis
Root-Cause Investigations
Water Chemistry Analysis

Most combined-cycle power plants, regardless of scheduled gas turbine, steam turbine, and other major equipment O&M practices, display signs of age and fatigue anywhere from 10 to 20 years after the initial commercial operation date—often more quickly in harsh ambient conditions. Depending on the original power plant design selections, construction methods, and the suitability of the installed equipment for the plant's actual operating regimes, your combined-cycle power plant may be approaching the end of its original design life much sooner than expected.

25 years is a typical overall design life for a combined-cycle power plant. Extensive maintenance work, component replacements, or failures in the plant's first 10 years of operation can often be tied to the original engineering, procurement, or construction phase of the project installation. Failures after the mid-point could be the result of maintenance practices, harsh environmental conditions, or new generating regimes. The facility's interface conditions can also pose problems to successful operations.

Sargent & Lundy can dispatch a team of independent specialists to identify and analyze your plant's stress points – uncovering potential risks to continued successful operations.

If the end of your combined-cycle plant's design life is approaching, extension programs or other alternatives may offer a potential means to establish an end-of-life timeline better suited to your current needs. Or you can use our areas of expertise to tackle specific operating issues. Call us to find out how we can help.

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Combined-Cycle Plant Life Assessment
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