



OUR PLANTS

ELWOOD ENERGY

The largest simple cycle plant in the US, Elwood consists of 9 GE Frame 7FA combustion turbines. The facility is a full merchant power as of Spring 2017 with 15 full-time employees covering 24/7.

NAES ENVIRONMENTAL SERVICES TACKLES SUCCESSFUL PERMITTING PROJECT

Elwood, Illinois: NAES Environmental Services was responsible for successfully permitting the addition of Blackstart engines and low load operating capability for combustion turbines while also resolving several incomplete permitting actions that remained open with an agency for almost 15-years.

The 1,350-MW natural gas simple cycle peaking facility was a victim of an unfavorable Supreme Court decisions removing the historical emission limit exemptions during startup, shutdown, and malfunction (SSM) events. The agency removed the automatic exemptions from the Title V Operating permit and required permit modifications be submitted to operate at higher emissions rate during startup and shutdown (SUSD). However, the agency never acted upon the

DETAILS

LOCATION Elwood, IL

OWNER J-Power

TYPE Simple Cycle

FACILITY SIZE 1350MW

NERC REGION RF



applications submitted in 2004 and 2005 to modify the three (3) Prevention of Significant Deterioration of Air Quality (PSD) Construction Permits for the nine (9) combustion turbines (CTs). Through several iterations of these important permits, the permits remained in draft and were never finalized. Ongoing negotiations have been evolving for some 15-years for the project.

Despite the lack of progress with the PSD permit modifications for SUSD low load operations, the NAES Environmental Services team was successful in adding the initial proposed limits from 2004 and obtained a new permit so the plant can implement flexible operations to achieve low load operations after an actual loss of power and during readiness testing for blackout events. The permitting effort by NAES was pivotal in obtaining the authorization by three (3) new 3.9 MW Black Start emergency diesel generators as well as low load operation of turbines. Additionally, during the 2019 renewal of the Title V operating permit, NAES negotiated enhanced language protection for the facility to mitigate the risk of non-compliance during SUSD and tuning events.

NAES Environmental Services provides practical, informed negotiation approaches to complex permitting situations, optimizing plant operations and supporting customer goals for the project. Please reach out to [NAES Environmental](#) for more information or support on your next permitting project.

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About Environmental Services: Our Environmental Services team is always willing to schedule a free assessment to build the most comprehensive compliance program possible to fit your site needs. Our portfolio includes consulting and support for: Wastewater and Stormwater Permits, Plans, Sampling and Reporting, Solid and Hazardous Waste, Chemical Management, Spill Prevention/SPCC/OPA, Emergency Planning, Right-to-Know/Tier II, Toxic Release Inventory, Accidental Release Prevention/Risk Management Program, DOT and Remediation as well as Air Programs that cover Permitting/Title V, Continuous Emissions Monitoring, ECMP Reporting, Acid Rain/Cross-State Air Pollution Rules, New Source Performance Standards, MACT Standards, Federal and California Greenhouse Gas Reporting, Stack Testing, RATAs and a variety of other Air Reporting and Compliance Standards.