

East Hampton Water Commission
East Hampton, Connecticut

Case Study

WATER UTILITY—PUMP STATION

AT A GLANCE

CUSTOMER

East Hampton Water
Commission

LOCATION

East Hampton, Connecticut

CHALLENGE

Prevent sewer system failures
leading to backups during an
outage

SOLUTIONS

- KOHLER® 80REOZJF generator
- KOHLER® KSS-ACTD-0400S ATS
- KOHLER KSS-BCTD-0400S MTS
- KOHLER APM402 Controller

PRIMARY CHOICE FACTORS

Customer confidence in
KOHLER-brand solutions based
on prior experience with its
trailer-based generators



The KOHLER 80REOZJF at a municipal pumping station in East Hampton, Conn.

BACKGROUND

East Hampton is located in Middlesex County, Connecticut. Historically, it was an industrial town. It was known for ship building and bell manufacturing in the 18th and 19th centuries. It is now essentially a bedroom community, with a population of approximately 13,000. Of note, it is home to the only remaining covered bridge in eastern Connecticut.

East Hampton has a number of sewage pumping stations which are powered by the main grid. A power outage can be problematic because it can lead to sewage backups which, in turn, can affect residential sewer lines.

To prevent sewage backups during an outage, East Hampton has relied on trailerized generators to provide emergency power to its pumping stations. Connecting the generators to the pumps, however, can be extremely difficult because the controls and connecting points are contained in underground vaults. The process is especially perilous during a serious weather event. Therefore, the city elected to upgrade to stationary generators located directly adjacent to the pumping stations.

Various codes and ordinances in Connecticut apply to emergency standby systems, including installation. One of



The solution for the East Hampton Water Commission includes the 80REOZJF diesel-powered generator with a sound-attenuated enclosure. It also includes an open-transition KSS-ACTD-0400A ATS and KSS-BCTD-0400A MTS. The transfer switches feature KOHLER MPAC 1200 controls and NEMA watertight and weatherproof enclosures. Kohler Power Systems has delivered energy solutions for markets worldwide since 1920. For more information, visit KohlerPower.com.

these, in particular, requires that there be a fail-safe mechanism in the form of a manual transfer switch (MTS), should the generator or automatic transfer switch (ATS) fail. Should the latter occur, the MTS facilitates the use of a portable generator to supply pump station power.

CHALLENGE

The challenge for the East Hampton Water Commission was to find an emergency standby system solution that was fully integrated, and proven reliable. Ideally, it would also feature a small footprint and produce little noise given the proximity of the pump stations to residential neighborhoods.

SOLUTION

The solution was provided by Rich Cupillo, Senior Sales Engineer at Kinsley Power, working in close consultation with the consulting engineer and the contractor. The team designed a reliable system that was quiet and that met the fail-safe requirement of the East Hampton Water Commission. It includes a KOHLER 80REOZJF generator set with a corresponding open-transition KOHLER KSS-ACTD-0400A ATS. A KOHLER KSS-BCTD-0400A manual transfer switch, required by Connecticut code, serves as an extra fail-safe component in the system.

The generators features a permanent-magnet alternator that provides excellent

voltage response and short-circuit capability. It also features a KOHLER APM402 controller with integral voltage regulation.

Given proximity of the pump stations to a residential neighborhood, the generators includes a UL-2200-listed, sound-attenuated enclosure. The enclosure carries a 150 mph wind load rating and features fade-, scratch-, and corrosion-resistant KOHLER Power Armor™ automotive-grade textured finish to resist inclement weather. A block heater ensures reliable operation during cold winter months. The latter also meets UL 94 HF1 flammability classification and repels moisture absorption. Easily accessible doors and panels facilitate service and local operation. The transfer switches feature KOHLER MPAC 1200 controls, surge protection, preferred source alarms, and NEMA 4 watertight and weatherproof enclosures.

RESULTS

The most recently installed integrated emergency standby power solution for East Hampton's sewage system has been in place for almost a year and is working fine, according to East Hampton Superintendent, Scott Clayton. "We have been using KOHLER generators for years," said Clayton. "I own a KOHLER portable for my own personal use. It's why I know I can count on their reliability." ■