

Utility Company Uses Thompson Pumps For Emergency Back-Up Lift Station Operation After Hurricanes

The recent hurricanes that hit Florida and the southeastern United States are a stark reminder of how much we rely on public utilities and services. When hurricanes hit land, thousands of homes and businesses lose vital power, communication, water and wastewater services. The loss of these services makes everyone understand the importance of public utility systems and the emergency back-up systems that keep them operating after a disaster.

Regional Utilities, Inc. is one company that proactively established lift station back-up systems for the Florida communities they service. Located in Santa Rosa Beach in the Florida panhandle, Regional Utilities is a regional provider of water and sewer services to Walton County, Florida. The utility company operates 125 lift stations, serving several hundred thousand residents within the gulf coast area.

Regional Utilities began researching power alternatives about four years ago after Hurricane Opal struck the Florida panhandle. The powerful hurricane caused power outages and heavy damage to several of the company's lift stations. Lightning strikes and damage to generator control panels prevented back-up generators from operating.

Dewey Wilson, General Manager for Regional Utilities, decided he needed a better system. "We needed a better emergency back-up system as soon as possible", Wilson said. "And, we needed it not just to continue to provide uninterrupted service to our customers, but to keep the pumping fluid from polluting the environment. In addition, we needed a way to perform periodic maintenance on our master lift stations. Permanent back-ups would allow us to do just that."

Wilson, who has worked for Regional Utilities for over sixteen years, began looking into the possibility of permanent, hard-piped, diesel engine-driven pumps as emergency back-ups for the lift stations. He contacted Thompson Pump in Pensacola, Florida, knowing that Thompson had the expertise to offer solutions. Wilson's hope was that he could secure pumps that would automatically start after a shutdown or failure at any of the company's master lift stations.

Rick Waters, Thompson Pump sales representative, knew that only pumps with a proven history of reliability, fast priming and easy maintenance would accomplish what Regional Utilities needed. The pumps would have to be able to prime fast enough to prevent lift station overflows and handle the estimated capacities for each of the lift stations. In addition, the automatic start system would have to be simple enough to lie in wait for a long period, but reliable enough to guarantee starting the pumps.

Waters recalls, "We'd had several utilities purchase pumps from us for portable lift station back-ups, but this was the first time that we had a permanent application." Waters recommended self-priming, solids-handling pumps with dry-priming systems and automatic start/stop



One of ten permanent Thompson Pump emergency back-up pumps used by Regional Utilities in Walton County, Florida. The pumps are equipped with automatic start/stop systems.

capability. The automatic start/stop systems would operate with floats that turned the pumps on when fluid levels rose and turned them off when fluid levels fell. The Thompson pumps would be permanently installed at the ten master lift station locations, with piping installed to provide suction and discharge.

After installing the Thompson pumps, Regional Utilities performed periodic maintenance to keep the pumps in top condition. Wilson said, "All we ever did was start them occasionally and check on the batteries. We used solar battery chargers to keep the batteries fully charged." They also used the pumps to perform occasional lift station repairs.

The big test for this permanent backup system using Thompson pumps came in August and September of 2004. One hurricane after another blasted through Florida and the Panhandle area, and each took out local power in the areas they hit. However, Regional Utilities' back-up pumps kicked into gear and maintained the utility's service through each siege.

"They were life savers," according to Wilson. "All ten Thompson pumps automatically started and kept sewage levels from rising high enough to escape the lift stations. I really can't say enough good things about them." Regional Utilities also used four Thompson portable pumps at other lift stations.



More of the permanent Thompson Pump emergency back-up pumps used by Regional Utilities in Walton County, Florida. The pumps automatically started when power was lost during the 2004 Florida hurricane season.

While other municipalities along the Florida coast lost lift station operation, Regional Utilities was pumping away. Other utility companies lost service when their back-up systems failed or did not operate as planned. Regional Utilities had the foresight and Thompson Pump had the expertise to develop a lift station back-up system that provides guaranteed performance when it is needed most.

Thompson Pump is a national leader in public works and contractor dewatering, including sewer bypasses. Since 1970, Thompson Pump has been a full-service provider of high quality pumps, pumping equipment and engineering expertise for the toughest dewatering, bypass and standby pumping applications. Based in Port Orange, Florida, Thompson Pump has local presence across the country to rent, sell, design, install and operate pumps and pumping systems according to end user needs.

Thompson pumps meet the requirements for certification as defined by the Contractors Pump Bureau. The company is a Blue Chip Enterprise Award winner and is in the process of achieving ISO 9001 - 2000 certification.