

Lanier Filter Plant High Service Pumps

Gwinnett County - Lawrenceville, GA

\$92,320

SAVED ANNUALLY

8 Month

PAYBACK PERIOD

*Based on 2019 pricing.

"Our real-time pump performance monitoring system is already paying dividends that translate to over \$90,000 per year in reduced power costs. We also now have pump performance data to guide our pump rotation scheme." - Steven Seachrist P.E., Engineer V, Gwinnett County Dept. of Water Resources

THE CUSTOMER

Gwinnett County Department of Water Resources delivers drinking water sourced from Lake Lanier to nearly one million residents in Gwinnett County near Atlanta, Georgia.

THE CHALLENGE

Gwinnett County's Lanier High Service Pump Station contains four 1,500 HP pumps equipped with variable frequency drives. These large pumps used in excess of \$500K in energy costs annually. Gwinnett was searching for a way to run this station more efficiently and to gain insight into where their pumps are operating on their curves to run them within their preferred operating ranges.

THE SOLUTION

Specific Energy's DPO gave the insight needed to reduce energy consumption at the Lanier HSPS by 15%. Gwinnett County now has the information needed to select the optimal combination of pumps and speeds to minimize energy costs and to extend the life of their pumps by operating them within their preferred operating ranges. By tracking pump health, Gwinnett can now accurately schedule pump maintenance based on financial metrics.

15%

Energy Reduction

Public Water Supply Well

Aqua Water Supply Corp. - Central Texas

\$10,411

SAVED ANNUALLY

\$72,329

SAVED TO DATE

<1.5 Year

PAYBACK PERIOD

*Based on 2019 pricing.

“Specific Energy really delivered on improving energy efficiency. And the ability to track pump health is a nice bonus.” - David Fleming, Manager of Engineering, Aqua WSC System Manager

THE CUSTOMER

Aqua Water Supply Corporation, the second largest water supply corporation in Texas, delivers retail water to customers in the greater Austin area. Aqua's service area covers 953 square miles and their water is supplied from twenty-nine production wells.

THE CHALLENGE

Aqua's S8 well produces up to 1,800 gpm from the Carrizo Wilcox aquifer. The well is powered by a 250 HP submersible motor with a variable frequency drive. Aqua was looking for technology that would continually adjust well pump speeds to minimize energy consumption while meeting volume demands.

THE SOLUTION

Specific Energy's DPO reduced energy consumption at Aqua's S8 well by 25%. Because the DPO runs the pump at this well exclusively within its preferred operating range, the pump now has over 10,000 hours of runtime and still tests near factory efficiency. By actively tracking the Pump Health Index for pumps across its system, Aqua now has the information needed to accurately schedule pump maintenance, preventing pump failure, and increasing their system efficiency.

25%

Energy Reduction

SH 195 PUMP STATION

Kempner Water Supply Corp. - Central Texas

\$39,869

SAVED ANNUALLY

\$230,532

SAVED TO DATE

<8 Month

PAYBACK PERIOD

*Based on 2019 pricing.

“The DPO has made it much easier to run our pump station and allowed us to get the full benefit out of our VFDs.”

- Rodney Seaver, Distribution System Manager

THE CUSTOMER

Kempner Water Supply Corporation is a non-profit water supply corporation. They currently serve over 20,000 citizens and businesses.

THE SOLUTION

After operating their station with the DPO's digital transient control, Kempner saw a dramatic reduction in peak pressure transients within their pipes. The DPO reduced the likelihood of pipe failures while maximizing pump station efficiency. This station has saved an average of 23% on energy costs.

THE CHALLENGE

Kempner was noticing high pressure spikes that were putting strain on their pipe network. After installing VFDs at their SH195 station, Kempner wanted to get the most out of their new hardware.

77%

Peak Transient Reduction

23%

Energy Reduction