

Leaking Spraywater Valves and Cavitation Issues Inspired This Customer to Upgrade to Fisher™ Control Valves Saving \$3.5M Annually in Energy Costs

This refinery embraces a holistic energy strategy—utilizing the BTU content (from the plant's off-gas byproduct from various chemical processes) to boil water into steam. The high-pressure steam is then converted into mechanical energy to drive turbines, which in turn generate power for the site and surrounding areas.

While this customer uses steam for numerous applications, any unutilized steam is recycled into their Steam Turbine Generators (STGs) which creates power for plant use (or to sell excess power back to the grid). The more self-sufficient they can be, the less power they have to buy from the grid, saving money and energy.

This customer's spraywater control valve problems were discovered during a walkdown of the customer's facility, which included an investigation and documentation of hundreds of valves. The main objective was to determine any bad actors and enable them to prepare for upcoming outages by proactively addressing any problems.

Two older spraywater control valves were identified as problems. Leaking and cavitation issues caused this customer headaches because they were needlessly cooling downstream steam, contributing to energy loss/inefficiencies, thereby losing steam that could have been effectively utilized in their STGs. Furthermore, temperature degradation caused by the leakages forced them to use more 'purchased' gas in the fuel mix in order to meet their energy requirements. There were also other maintenance complications, difficulty in obtaining parts (or replacements), and an odd piping scheme that was not sustainable.

Highly Reliable Fisher Control Valves Provide an Improved Shutoff Solution

With their best-in-class Fisher Control Valves, maintenance is now hassle-free. Through team Emerson and Scallon, the customer can get parts or an entirely new valve, if needed, in days or weeks. Furthermore, these valves are specifically designed to accurately control the water flow—putting the correct amount into the steam system and alleviating the need to bring other boilers online or purchase fuel—just to create steam!

BEFORE



AFTER



Impressive Results ...and Savings



Improved
Energy
Reliability



No Future Piping
Modifications
Needed



Alleviated
Maintenance
Headaches



Saved Significant
Dollars—Estimated
Annually at \$3.5M

Looking for More Efficiencies and Maintenance Savings?
Contact Us

scalloncontrols.com