

High Performance Actuator Package Boosts Bypass Valve Performance and Alleviates Tuning Challenges

POWER

Challenge

A combined cycle power plant's existing actuators with 'derivative boosters' were difficult to tune. Our competitor was somewhat unresponsive to the customer's requests, and parts for the booster were expensive. The customer also had to pay \$15,000 per trip for a technician to come to the plant site specifically to tune the boosters, and scheduling was usually difficult to coordinate. This customer was spending around \$50,000 per year for maintenance.

Solution

Our team installed Fisher® High Performance Actuator packages on 8 of our competitor's high pressure and hot reheat turbine bypass valves, with ODV (optimized digital valve) tier digital valve controllers and SS263 super boosters. The packages were designed specifically for these valves by Fisher engineers who spent several days onsite gathering detailed engineering information and measurements to complete the design. Installation was completed with the help of Fisher Lifecycle Services.

Results

This custom solution resulted in improved bypass valve performance and operation, in addition to ease of tuning, since we eliminated the customer's need to fly in a special technician and the associated \$15,000 expense each time. No maintenance or repairs have been performed at this point and the actuators have been in service for more than 2 years. Fisher Lifecycle Services performs the control valve maintenance at this plant, and plant personnel are very comfortable having the technicians perform work on these valves and actuators.

