FAST TURN-AROUND FOR VALVE AND ACTUATOR REBUILD AT LG & E

The maintenance manager at Louisville Gas & Electric Trimble County Generating Station was having a problem with his fuel gas valves. One call to Millennium Power Services (MPS) started the ball rolling.

"Tomas Menendez said the Moog actuators at LG & E weren't performing," said Roger Marois, Sales Representative at MPS. "He wanted to know how fast MPS could rebuild the valves and actuators if he was to take an outage. I listened to the specifics, then told him we'd need about six days in our shop."

The newest of LG & E's power plants, the Trimble County Station is one of the most environmentally and technologically advanced coal-fired generating plants in America. Situated on 2,200 acres—114 of which are dedicated to a wildlife preserve that includes wetlands and forest areas—it has a total net output capacity of 2,234 megawatts. But the rural setting is not easily accessible. There is no rail delivery; coal and limestone are trucked from barges on the Ohio River; a six-mile long natural gas pipeline transports more than two billion cubic feet of natural gas consumed by the plant's six combustion turbines annually. Other raw materials, parts, and equipment are brought in by truck.

Menendez decided to take the outage. His team removed the valves and actuators first thing on Friday the 13th. A dedicated driver picked them up at 1:55pm and drove them north to Massachusetts; he arrived at the MPS shop at 10:00am Saturday the 14th, and the MPS team took over.

After close inspection and analysis, it was determined that the cylinder and bushings from both valves were damaged. In addition, one piston rod needed to be replaced, along with the soft goods for both valves and actuators. The deadline was firm: the valves and actuators needed to be back at the plant by the end of day Monday the 23rd.

Long hours followed. The MPS team manufactured new parts, reassembled, inspected, tested, and painted the finished products. Refurbished and ready to go, the valves and actuators were loaded onto a truck that left the shop at 11:22am on Saturday the 21^{st} . Delivery was made at LG & E at 9:30am on Sunday the 22^{nd} . Plant personnel immediately got to work on the reinstallation, and the plant started up on Monday the 23^{rd} . . . on time, and without a hitch.

"This was a very impressive effort by everyone at Millennium," Menendez said. "Thank you to the whole team that was involved in turning this around in nine days, including shipping time."

Marois credited the MPS mission for the success of the project. "While most parts from OEMs can take 6-8weeks, Millennium has a one week turn-around, at half the cost. We stand by that goal and are pleased to prove it to our customers."