# POWER

# Power Generation Company Reduces Expert Response Time with Virtual Repair Support

## RESULTS

- Eliminated health risk of travel during global pandemic
- Virtual inspection provided real-time repair action solutions
- Increased maintenance team's confidence to act
- Saved \$13,000 USD in travel costs

#### **APPLICATION**

Yarway<sup>™</sup> 7100 Series ARC<sup>®</sup> valve used for pump protection

## **CUSTOMER**

A large European power generator providing electricity for residential, commercial, and industrial customers.

#### CHALLENGE

To ensure successful, continuous operation, a power company intended to perform extensive repairs on a legacy valve that is critical to operations. The valve had been leaking and was also due for a routine replacement of all soft goods. The valve was a welded in-line design, so all repairs had to be performed on site.

The customer scheduled an outage to allow time for the repairs, but upon opening the valve, they had concern that they may have oversized the machining of the bonnet seal area in the body during the last repair. Complicating matters further, there are few people left in the workforce with experience in repairing this Yarway valve.

To confirm the assumption, they requested that an Emerson service technician travel to the site to perform an inspection in person. The organization contacted Emerson experts in Houston, Texas and requested that an expert travel to the plant in Europe to verify the repair. Unfortunately, due to a global virus outbreak occurring at the time, overseas travel presented health risks.



"Not only did the augmented reality tool considerably reduce the response time from valve experts, but it also saved the company \$13,000 in travel costs and increased the maintenance team's confidence to act on this repair in the future."



#### **SOLUTION**

The Emerson support team recommended expert technicians inspect the valve via live collaboration using Emerson's Remote Assistance program. Taking advantage of Remote Assistance, the customer shared video footage of the work with three Emerson experts simultaneously via a mobile phone. Through video and audio collaboration, the experts virtually inspected the bonnet seal area and verified the dimensions. They found that the dimensions of the seal area were out of tolerance.

The power company had confidence in the process, knowing that the Remote Assistance third-party provider tools are designed to ISO 27001 security standards. Any sensitive information was stored and transmitted securely. In addition, the process was simplified due to the bandwidth throttling technology built into the system. When the wireless signal weakened—such as when the phone was transmitting footage from inside the valve assembly the software could throttle bandwidth to avoid dropping the session. When noise in the facility got to be too excessive, the technician and experts could send pictures and text with annotations to continue working despite the inability to hear each other.

Not only did the Remote Assistance process considerably reduce the response time to inspect the valve, but also saved the company \$13,000 in travel cost and field service labor. Additionally, the customer's maintenance team has increased confidence to act on this repair in the future.

Knowing that bringing in an expert was neither safe nor realistic given the external circumstances, the power generating company took advantage of modern digital technologies to leverage Emerson's valve service expertise to solve a critical operations need. They have also requested a follow-up Remote Assistance call when they are ready to complete the assembly after all repairs are complete.



# **RELATED SOLUTIONS**

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AR for Plantweb Optics improves field worker productivity through augmented reality by enabling collaboration with remote subject-matter experts, easy asset location, and immediate access to IoT data and analytics.

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