



Portable Valve Actuation

Value Tracking Case Study



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Background

The large valve population on the transmission network is aging, causing increasing maintenance costs of actuator systems to ensure continued operability. National Gas Transmission (NGT) are therefore investigating the possibility of replacement of permanent valve actuators on non-critical locally operated valves with a portable actuation system. The project will investigate the whole life cost and operational benefit of implementing a portable solution in conjunction with replacement of existing gearboxes with higher efficiency gearboxes

What's new?

The project has identified installation of a high efficiency gearbox and portable actuator arrangement as a feasible arrangement to replace end of life actuators on non-critical valves across the network. This was completed working with key stakeholders across the business and comparing products from suppliers of actuators, gearboxes and portable equipment.

High efficiency gearboxes are available in the market and have been included as an investment option when considering actuator replacements on non-critical valves to enable sites to be ready for the portable actuation system. The application developed to test condition data has been implemented to support asset health investment decisions.

The benefits

This new design of high-efficiency gearboxes allow the operator to open/close the valve in a shorter

period of time. It provides lower OPEX cost for maintenance, is more reliable than previous equipment and cheaper than an actuated valve. It also leads to no COSHH or ATEX risks.

Financial savings

There have been 16 successful installs of this equipment with an estimated saving of £680,000 to date.

Implementation

The next step is to take the findings of the final report and develop and implement a coherent valve actuator strategy across the business. The results of this review have considerable synergy with the Renewable Kiosk (NGGT0059) programme and will assist with the next stages of the roll out. Further opportunities to be explored with the business as identified.

