

Valve Isolations

A recent incident occurred causing a dangerous release of natural gas at a pressure of 55bar whilst maintenance technicians were attempting to remove an orifice plate.

The release occurred when the remotely operable valve being used for the isolation, unexpectedly opened.

The investigation is ongoing however it is appropriate to remind everyone on the safe method of valve isolation.

Where available, always use a **manual valve** to isolate the section of pipework. The seal must then be proved and the valve locked in the closed position. If a manual valve is not available then the following procedure shall be adopted.

Where a stream is to be isolated by a remotely operable valve, always close the valve in local control at the valve and not remotely even when the control building is on the site.

Remotely operable valves or valves with stream selection shall be further disabled by the following method:

1. Electrically-powered:

The power to the actuator system is turned off (electrically isolated) and locked shut, e.g. **stop-locked** in the off position (see photo below)

2. Gas-powered

The gas supply to the valve actuator shall be isolated and vented.

The power gas isolation valve shall be closed and where possible locked and a section of pipe work removed to ensure the actuator is physically isolated from the gas supply.

The system shall be vented downstream of any pressure vessel, the vessel may also be vented however the operator shall check to ensure there is no residual gas within the actuator or the vessel.

Reference should be made to Management Procedure T/PM/Maint/2 Part 3, T/PM/TR/17 and Work Procedure T/PR/Maint/2317

Rotork Electric Actuator

