

EFFECT OF A NON-FUNCTIONAL ACTUATOR TRAIN ON MSIV OPERABILITY

CALLAWAY PLANT, UNIT 1

In the existing Callaway Technical Specification (TS) 3.7.3 on the Main Steam Isolation Valve (MSIV), the operability of the MSIVs is addressed.

However, there have been discussions between Region IV and NRC Headquarters on the question about whether the loss of one actuator made the MSIV inoperable, and the licensee submitted a license amendment request (LAR) by letter dated May 26, 2005, to include the loss of one of two actuator trains in the TSs, to resolve the issue.

In the licensee LAR, it is clearly stated that (1) the two actuator trains on each MSIV are dual and redundant trains and (2) each actuator train is designed so that a single train can close the MSIV by itself as required by the appropriate safety analyses. Each MSIV Actuator has two redundant and independent actuator trains. The Callaway design basis calculation of record (COR) concludes that peak post accident containment pressure is bounded with one non-functional actuator.

The line drawings sent to NRC from the licensee to support a conference call with Region IV on MSIV operability also support these statements. There are check valves to prevent one actuator train discharging fluid into the other train so that the trains are isolated from each other.

To address the question of whether the MSIVs are operable under the current TS, the definition of operability in the Standard Technical Specifications is:

"A system, subsystem, train, component, or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified safety functions, and when all necessary attendant instrumentation, controls, normal or emergency electrical power, cooling and seal water, lubrication and other auxiliary equipment that are required for the system, subsystem, train, component, or device to perform its function(s) are also capable of performing their related support function(s)."