

ENCLOSURE

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2
LOOSE KEY IN BETTIS ROBOT-ARM VALVE ACTUATORS

NCR 19P

10 CFR 50.55(e)

FINAL REPORT

Description of Condition

A containment isolation valve on Unit 1 became inoperable when the key which locks the actuator valve shaft fell out of place. This problem could occur with Bettis Robot-Arm valve actuators (model numbers 732C-SR80, 721C-SR60, 521C-SR60, CB525-SR60) when installed upside down or sideways. With the valve shaft mounted below horizontal there is a potential for the key to work itself loose.

Safety Implications

If the valve actuator key were to fall out, it could result in a loss of valve control. Since these valve actuators are on safety-related valves, this condition could have adversely affected or reduced the redundancy of safety-related systems.

Corrective Action

TVA has identified 51 suspect operators in the Purge Air System, Emergency Gas Treatment System and the Chilled Water System. Those operators that are installed so that the key can work loose will have spacer bushings installed in the actuator as recommended by the vendor. Installation of the spacer bushings will be completed before fuel loading. All TVA design project managers are being asked to ensure that this problem does not occur at other TVA nuclear plants.

90028029

8001230 128