ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
INSTALLED DIESEL GENERATOR RELIEF AND DRAIN VALVES
ARE TVA CLASS G INSTEAD OF TVA CLASS C

NCR SWP 79-W-3
FINAL REPORT

Description of Condition

During final review of the Sequoyah Nuclear Plant design drawings by Power Production employees, an error was found on classification of the drain valves on the ERCW side (tube side) of the diesel generator cooling water heat exchangers. The valves were TVA Class G instead of TVA Class C as required by the ERCW design criteria. Design employees then reviewed the Watts Bar Nuclear Plant design for a similar problem.

The Watts Bar Nuclear Plant design does not have drain valves on the ERCW side (tube side) of the diesel generator cooling water heat exchanger as does Sequoyah design. However, the diesel generator cooling water heat exchangers for Watts Bar were procured to the Class III requirements. This means all valves for these heat exchangers must be Class C valves. The safety relief and drain valves which have been installed are TVA Class G. The error was apparently due to oversight by the design organization.

Safety Implications

The valves originally installed were TVA Class G and, therefore, not seismically qualified. If failure of these valves is postulated as a result of a seismic event, the loss of diesel generator cooling water could be sufficient to result in damage and/or loss of the diesel generator(s). This could render onsite electrical power unavailable, thereby adversely affecting the safe operation of the plant.

Corrective Action

The defined TVA Class G valves are to be replaced with TVA Class C valves. Design drawings have been corrected to show proper valve classification. The valve replacement will be done before receipt of the operating license.

Engineers and designers have been instructed to thoroughly review the design criteria and all other applicable documents before the design of systems.