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UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

AILS 20 19.82

NOTE TO:

Ed Tourigny, Operating Reactors Branch #3 Division of Licensing

FROM:

Rick Kendall, Instrumentation & Control Systems Branch Division of Systems Integration

SUBJECT :

ASCO SOLENOID VALVES USED IN THE FT. CALHOUN AUXILIARY FEEDWATER SYSTEM

The purpose of this note is to document two apparent inconsistencies in the documentation provided by OPPD relating to ASCO solenoid valves used in the air supply lines to AFWS discharge valves HCV-1107A & B and HCV 1108A & B. These inconsistencies were identified during the II.E.1.2 review (AFWS automatic initiation) conducted by ICSB.

Valves 1107A and 1108A are located inside containment. The air supply to each of these valves is controlled by an ASCO solenoid valve, model #NP 8320A175E (solenoid valve #1). The air supply to valves 1107B and 1108B (located outside containment) is controlled by ASCO solenoid valves, model #NP 8314C29E (solenoid valve #2).

TheSCEW sheets (System Component Evaluation Work Sheets) for the AFWS discharge valves indicate that these valves are locked open and do not operate during an event. These SCEW sheets were provided to NRC by OPPD letter LIC-82-143 dated April 2, 1982. In actuality, these valves are normally closed during operation, and must open to permit AFWS flow to the steam generators. The fact that these valves are not locked open, but are normally closed and are required to function during accident conditions, may have an impact on the standards or levels to which these valves must be qualified as reviewed by the EQB. It should also be noted that page 6-119 of the April 2, 1982 letter is mislabeled and pertains to valves HCV-1107A and 1108A; not 1107B and 1108B.

Contact: R. Kendall, ICSB X29451

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In addition, during the II.E.1.2 review, OPPD was asked to submit design information concerning solenoid valves #1 and #2. Although sufficient information regarding temperature limitations for solenoid valve #1 was not provided, information received on similar valves in the past indicate that these valves are qualified to 180°C. This corresponds to the 346°F qualification rating listed on the SCEW sheet for solenoid valve #1 (with some margin in the conservative direction). A 346°F qualification rating is also listed on the SCEW sheet for solenoid valve #2. Information provided by OPPD, however, indicates that solenoid valve #2 has an ambient temperature limitation of only 77°F. Although these solenoid valves are located outside of containment, an ambient temperature rating of 77°F may not be sufficient. This temperature rating was taken from ASCO "Installation and Maintenance Instructions" Bulletin 8314 (Form No. V-6006) for a solenoid valve of D-C construction with a class A, F, or H coil.

If you have any questions, please contact me on X29451. No further ICSB action is planned on this subject.

Richard A Kendul

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cc: F. Rosa C. Rossi P. Shemanski

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