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SOUTHERN COMPANY
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June 14, 2002

Docket Nos. 50-424
50-425

LCV-1625

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

VOGTLE ELECTRIC GENERATING PLANT
Second Ten-Year Interval Inservice Testing Program
Submittal of Relief Requests RR-V-1 and RR-G-3

Ladies and Gentleman:

Vogtle Electric Generating Plant (VEGP) Units 1 and 2 are presently in their second ten-year inservice testing (IST) interval. The IST Program was developed to meet, to the extent practical, the requirements of the ASME OM Code-1990 Edition for all valve testing with the exception of relief valves which will be tested to the requirements of Appendix I of the ASME OM Code-1995 Edition. Appendix I, Section 8 of the ASME OM Code contains the test methods for steam service and liquid service safety/relief valves. Paragraphs I 8.1.1(h) and I 8.1.3(g) provide the requirement associated with the time between valve openings. The requirement from these paragraphs states "A minimum of 10 min shall elapse between successive openings." The ASME OMb Code-1997 Addenda, paragraphs I 8.1.1(h) and I 8.1.3(g) state "A minimum of 5 min shall elapse between successive openings."

Therefore, pursuant to 50.55a(a)(3)(i), Southern Nuclear Operating Company (SNC) submits relief request RR-V-1 to change the test method from the ten-minute elapse time between successive openings as contained in the ASME OM Code-1995 Edition to a proposed alternative test method that requires a five-minute elapse time between successive openings as contained in the ASME OMb Code-1997 Addenda. The alternative test method provides an acceptable level of quality and safety.

The ASME OM Code-1990 Edition, subsection ISTA 2.1 provides the requirements for an independent inspection (Authorized Nuclear Inservice Inspector-ANII) applicable for the IST Program at VEGP. The requirement for independent inspection has been deleted in the ASME OM Code-1998 Edition. Additionally, the ASME Section XI code deleted reference to the independent inspection for IST pumps and valves from subsection IWA-2110 in the 2000 Addenda.

Therefore, pursuant to 50.55a(a)(3)(i), SNC submits relief request RR-G-3 to eliminate the previous Code specified requirement for ANII involvement in IST at VEGP.

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Southern Nuclear Operating Company requests NRC approval of the enclosed relief requests by August 30, 2002, in support of the Unit 2 ninth refueling outage scheduled to begin in the fall of 2002.

Respectfully submitted,

J. B. Beasley, Jr.

JBB/HPW

Enclosures: 1. Relief Request RR-V-1
2. Relief Request RR-G-3

cc: Southern Nuclear Operating Company
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Mr. J. Zeiler, Senior Resident Inspector, Vogtle (w/enclosures)

RELIEF REQUEST
RR-V-1

SYSTEMS: Systems with pressure relief valves.

ASME CLASS: ASME Class 1, 2, and 3

TEST REQUIREMENT:

Appendix I, Section 8 of ASME OM Code -1995 contains test methods for steam service and liquid service safety/relief valves. Paragraphs I 8.1.1 (h) and I 8.1.3 (g) provide the requirement associated with the time between valve openings. The requirement from these paragraphs states:

> *A minimum of 10 min shall elapse between successive openings.*

CODE REQUIREMENT FROM WHICH RELIEF IS REQUESTED:

Relief is requested from the 10-minute time between successive openings as contained in ASME OM Code –1995 Appendix I, Section 8, Paragraphs I 8.1.1 (h), and I 8.1.3 (g).

BASIS FOR RELIEF:

At Vogtle Electric Generating Plant (VEGP), pressure relief valves from various plant systems are tested in accordance with the provisions of ASME OM Code -1995. A minimum of two consecutive valve actuations are measured to determine the set pressure of the valve. Under the provisions of ASME OM Code -1995, the minimum elapsed time between valve openings is 10 minutes. Any reduction in the 10-minute hold time between valve actuations would minimize test performance and system outage times. A reduction in system outage time enhances plant safety by the timely return of plant systems to service.

VEGP's main steam safety valves are tested during operation (on-line testing) at rated pressure and temperature. This test method exposes test personnel to a high humidity and high temperature environment. VEGP's proposed alternative test method would minimize the time between valve actuations and reduce the risk associated with personnel exposure to these test environmental conditions.

JUSTIFICATION FOR GRANTING RELIEF:

At VEGP, pressure relief valves in ASME Class 2 and 3 water systems are bench tested at ambient conditions using water as the test medium. Testing of these valves is conducted at ambient conditions in a shop environment. The test medium and the valve in this environment are in thermal equilibrium. The valve is placed on a stand, and pressurized air/nitrogen is used to achieve test pressure of the test medium. There is no thermal source introduced during the test that would result in a thermal imbalance or skew the accuracy of the test. Repeated valve actuations are conducted in a controlled environment under steady-state conditions. Consequently, accurate and repeatable test results are achieved when measuring the set pressure of the water system pressure relief valves.

RELIEF REQUEST
RR-V-1

JUSTIFICATION FOR GRANTING RELIEF: (continued)

VEGP's main steam system safety valves are ASME Class 2 valves and are tested in place with an assist device during power operation just prior to removing a unit from service for a refueling outage. A hydraulic assist device measures the force required to lift the valve disc to the relief setpoint. At the point at which the valve lifts, the hydraulic force is removed, allowing the valve to close. This evolution occurs in less than one second, which minimizes the steam flow through the valve as it actuates. This also minimizes any change in temperature that is experienced by the valve and the test medium (steam) during testing. Typically, there is some amount of time that elapses between actuations due to data recording, inspection, and verification of test conditions. These test conditions provide thermal stability of the valve and the test medium. Consequently, accurate and repeatable test results are achieved when measuring the set pressure of the main steam relief valves.

VEGP's pressurizer safety valves are ASME Class 1 valves that are removed from service during a unit refueling outage and are shipped to an independent test laboratory for testing. The laboratory tests limit valve disc movement and lift time, which limits flow through the valve. This minimizes temperature transients that occur during the disc lift. The valves are tested at simulated operating conditions. Thermal stabilization is achieved prior to the start of testing as required by ASME OM Code -1995. Typically, there is some amount of time that elapses between actuations due to data recording, inspection, and verification of test conditions. Consequently, these conditions provide thermal stability of the valve and the test medium and provide accurate and repeatable results for measuring the set pressure of the pressurizer relief valves.

The 1997 ASME OMb Code contains a relaxation of the hold time requirement to decrease the elapsed time between actuations from ten minutes to five minutes. This relaxation is applicable to the proposed relief request for VEGP's main steam and pressurizer relief valves. Accordingly, the proposed relief request is consistent with later ASME Code requirements.

VEGP's proposed request for relief from the provisions of ASME OM Code -1995 provides an alternative methodology for testing VEGP's ASME Class 1, 2 and 3 pressure relief valves. Alternative testing would shorten the time between valve openings from ten minutes to five minutes for VEGP's pressurizer and main steam relief valves and from ten minutes to no hold time for all water system relief valves. VEGP's proposed alternative method would demonstrate satisfactory repeatability and accuracy for determining set pressures of relief valves and would provide a commensurate level of quality and safety.

ALTERNATE TESTING:

The main steam safety valves and the pressurizer safety valves will require a minimum elapsed time of five minutes between actuations. For all other water system relief valves, no minimum elapsed time between actuations will be required.

IMPLEMENTATION SCHEDULE:

Implementation of the proposed alternative test method is requested for the VEGP Second Ten-Year Interval Valve Inservice Testing Program.

RELIEF REQUEST
RR-G-3

SYSTEMS: All in Scope of IST Program

VALVES: All in Scope of IST Program

PUMPS: All in Scope of IST Program

ASME CLASS: 1, 2 and 3

TEST REQUIREMENT:

ASME OM Code-1990 Edition, subsection ISTA 2.1 and ASME OM Code-1990 Edition, subsection ISTA 2.1 provides the requirements for independent inspection (Authorized Nuclear Inservice Inspector - ANII) applicable for IST at Plant Vogtle.

REQUIREMENT FOR WHICH RELIEF IS REQUESTED:

Relief is requested from the Code requirement to maintain independent inspection (ANII) oversight for the implementation of IST at Plant Vogtle.

BASIS FOR RELIEF:

The requirements for independent inspection have been deleted in the ASME OM Code-1998 Edition. Additionally, the ASME Section XI Code deleted reference to independent inspection for IST on pumps and valves from subsection IWA-2110 in the 2000 Addenda.

The ANII review of the IST Program required by the ASME OM Code, 1990 and 1995 Editions, is less comprehensive than the review required by the ASME Section XI Code for Inservice Inspection (ISI) activities. The 1998 Edition, and subsequent editions, of the ASME OM Code have eliminated reference for ANII duties entirely. Section IWA-2110 of the ASME XI Code (2000 Addenda) specifies the duties of the ANII related to the IST performed for pumps and valves and component supports as simply verifying that inservice tests have been performed and the results recorded. In general, ANIIs do not have the training or background experience to make determinations about pump and valve safety functions in order to verify program scope, or to assess the operational readiness of pumps and valves based on test results. Consequently, the ANII review provides little, if any, benefit.

SNC, at Plant Vogtle, maintains a multi-layered review process that accomplishes the same results as expected by the earlier versions of the ASME XI and OM Codes. IST is typically performed by Operations, Maintenance, or Engineering department personnel with extensive experience in Code requirements applicable for IST of pumps and valves. Test procedures contain detailed instructions for performance of tests, and all data is reviewed by a minimum of two independent personnel (typically an Operations Shift Supervisor (SRO) and the IST Engineer). The IST Program scope is reviewed by regulatory authorities against Code and regulatory guidance to ensure that components required to be tested are included. The IST program documents, surveillance procedures, and test data are also subject to the SNC quality assurance program which provides an equivalent or greater level of quality and safety than those required by ANII involvement specified in the Code. Therefore, there is no quality or safety-related benefit in the ANII duplication of review and oversight of IST implementation at Plant Vogtle.

Therefore, the proposed alternative, in conjunction with continued review and oversight by knowledgeable and experienced SNC personnel, will provide an acceptable level of quality and safety. Thus, this request for relief is justified pursuant to 10 CFR 50.55a(a)(3)(i).

ALTERNATE TESTING:

The ASME OM Code requirements specifying the duties of the ANII described in subsection ISTA 2.1 will be eliminated from the IST Program.

IMPLEMENTATION SCHEDULE:

Implementation of the proposed alternative test method is requested for the VEGP Second 10-Year Interval Valve Inservice Testing Program.