

**Southern Nuclear
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September 20, 2007

Docket Nos.: 50-424
50-425

NL-07-1789

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555-0001

Vogtle Electric Generating Plant
Response to NRC Request for Additional Information
Regarding the Third 10-Year Interval Inservice Testing Program

Ladies and Gentlemen:

On August 17, 2007, Southern Nuclear Operating Company received a facsimile containing two questions from the NRC regarding the April 16, 2007, Vogtle Electric Generating Plant Third 10-Year Interval Inservice Testing Program submittal. Enclosure 1 contains the SNC response to the NRC questions. Enclosure 2 contains version 1.0 of proposed alternative RR-V-1 that incorporates the SNC response to the NRC questions and supersedes the proposed alternative contained in the April 16, 2007 submittal.

If you have any questions, please advise.

Sincerely,

A handwritten signature in black ink, appearing to read "B. J. George", with a long horizontal stroke extending to the right.

B. J. George
Manager, Nuclear Licensing

BJG/DRG/daj

Enclosures: 1. Request for Additional Information Response
2. Proposed Alternative RR-V-1, Version 1

cc: Southern Nuclear Operating Company
Mr. J. T. Gasser, Executive Vice President
Mr. T. E. Tynan, Vice President – Vogtle
Mr. D. H. Jones, Vice President – Engineering
RType: CVC7000

U. S. Nuclear Regulatory Commission
Dr. W. D. Travers, Regional Administrator
Mr. S. P. Lingam, NRR Project Manager – Vogtle
Mr. G. J. McCoy, Senior Resident Inspector – Vogtle

**Vogtle Electric Generating Plant
Response to NRC Request for Additional Information
Regarding the Third 10-Year Interval Inservice Testing Program**

Enclosure 1

Request for Additional Information Response

**Vogtle Electric Generating Plant
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Request for Additional Information – Item RR-V-1-01

Please provide your method and measured values that determine steady-state conditions for compressible fluid tests.

SNC Response:

Further review concluded that RR-V-1 should be revised to delete all safety/relief valves that are in compressible fluid systems. Safety/Relief valves in compressible fluid systems will be tested in accordance with Appendix I of the ASME OM Code 2001 Edition through 2003 Addenda.

Request for Additional Information – Item RR-V-1-02

Safety Valves are known to have difficulty reseating properly. In the ASME code, several options exist for determining valve reseating for compressible fluid tests. Please provide your method and procedure to determine proper valve reseating prior to repeated tests.

SNC Response:

See response to RR-V-1-01.

**Vogtle Electric Generating Plant
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Enclosure 2

Proposed Alternative RR-V-1, Version 1

**SOUTHERN NUCLEAR OPERATING COMPANY
IST PROGRAM – RELIEF REQUEST
PROPOSED ALTERNATIVE IN ACCORDANCE WITH 10 CFR 50.55a(a)(3)(i)
RR-V-1, Version 1.0**

PLANT/UNIT: Vogtle Electric Generating Plant/Unit 1 and 2

INTERVAL: 3rd Interval beginning June 1, 2007 and ending May 31, 2017

COMPONENTS

AFFECTED: Class 2 and 3 Safety and Relief Valves located on Water Systems

CODE EDITION

AND ADDENDA: ASME OM Code-2001 Edition with Addenda through OMB-2003

REQUIREMENTS: ASME OM Code, Appendix I, Section I-8130 contains methods for set pressure testing of liquid service safety/relief valves. Paragraph I-8130(g) provides the requirement associated with the time between valve openings. The requirement from this paragraph states:

A minimum of 5 min shall elapse between successive openings.

**REASON FOR
REQUEST:**

At Vogtle Electric Generating Plant (VEGP), pressure relief valves in ASME Class 2 and 3 liquid service systems are tested in accordance with the provisions of ASME OM Code, Appendix I. A minimum of two consecutive valve actuations are used to determine the set pressure of the valve. Under the provisions of Appendix I, the minimum elapsed time between valve openings is 5 minutes.

**PROPOSED
ALTERNATIVE
AND BASIS:**

At VEGP, pressure relief valves in ASME Class 2 and 3 liquid service systems are set pressure tested at ambient conditions in a shop environment using water as the test medium. The test medium and the valve are brought to thermal equilibrium prior to the set pressure test. Therefore, there are no thermal differentials that could introduce 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 liquid service system pressure relief valves with no time limit required between tests.

The omission of this hold time between valve actuations would minimize test performance and system outage times. A reduction in system outage time enhances plant safety by providing timely return of plant systems to service.

SOUTHERN NUCLEAR OPERATING COMPANY
IST PROGRAM – RELIEF REQUEST
PROPOSED ALTERNATIVE IN ACCORDANCE WITH 10 CFR 50.55a(a)(3)(i)
RR-V-1, Version 1.0

VEGP's proposed request for relief from the provisions of ASME OM Code provides an alternative methodology for testing ASME Class 2 and 3 pressure relief valves. Alternative testing would shorten the time between valve openings from five minutes to no hold time for all liquid service system relief valves. VEGP's proposed alternative would demonstrate satisfactory repeatability and accuracy for determining set pressures of relief valves and would provide a commensurate level of quality and safety. Therefore, this proposed alternative is warranted pursuant to 10 CFR 50.55a(a)(3)(i).

DURATION: 3rd IST Interval, June 1, 2007 through May 31, 2017.

PRECEDENTS: An equivalent Relief Request was approved as RR-V-1 for the Second 10 Year IST Interval.

REFERENCES: NRC Safety Evaluation dated September 16, 2002– TAC Nos. MB5518 and MB5519.

STATUS: Submitted for NRC review.