

J. Bernie Beasley, Jr., P.E.
Vice President
Vogtle Project

**Southern Nuclear
Operating Company, Inc.**
40 Inverness Center Parkway
P.O. Box 1295
Birmingham, Alabama 35201

Tel 205.992.7110
Fax 205.992.0403



August 28, 2000

LCV 1456

Docket Nos. 50-424
50-425

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

Ladies and Gentlemen:

**VOGTLE ELECTRIC GENERATING PLANT
REQUEST TO REVISE TECHNICAL SPECIFICATIONS
PRIMARY COOLANT SOURCES OUTSIDE CONTAINMENT**

In accordance with the requirements of 10 CFR 50.90, Southern Nuclear Operating Company (SNC) proposes to revise the Vogtle Electric Generating Plant (VEGP) Unit 1 and Unit 2 Technical Specifications (TS). Section 5.5.2, Primary Coolant Sources Outside Containment, of the VEGP TS contains program requirements to minimize leakage from those portions of systems that could contain highly radioactive fluids during a serious transient or accident. Item b. under section 5.5.2 (hereafter referred to as 5.5.2.b) specifies that the program shall include leak test requirements for each system listed under 5.5.2 at refueling cycle intervals or less. SNC proposes to revise VEGP TS 5.5.2.b to specify leak test requirements at least once per 18 months and to allow the provisions of SR 3.0.2 to apply.

TS 5.5.2.b is essentially a surveillance requirement, but the provisions of section 3.0 of the TS do not apply to section 5.0. The Bases for SR 3.0.2 state that the 25 % extension facilitates surveillance scheduling and considers plant operating conditions that may not be suitable for conducting the surveillance. For most of the systems that are subject to TS 5.5.2.b, it is necessary to schedule the surveillance when the system is operating so that a proper leakage assessment can be performed. However, a complete leakage assessment requires removal of block walls and/or floor plugs which imposes additional scheduling constraints. Therefore, the flexibility afforded by SR 3.0.2 is needed and is appropriate.

The proposed change is consistent with Industry/Technical Specification Task Force (TSTF) Technical Specification Change Traveler TSTF-299, which was submitted to the NRC on November 13, 1998. The basis for the proposed change is provided in Enclosure 1, a significant hazard consideration evaluation pursuant to 10 CFR 50.92 is provided in

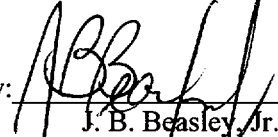
A001

Enclosure 2, and the marked-up and clean-typed TS pages are provided in Enclosures 3 and 4, respectively.

SNC requests approval of the proposed change by May 2001.

Mr. J. B. Beasley, Jr. states that he is a Vice President of Southern Nuclear Operating Company and is authorized to execute this oath on behalf of Southern Nuclear Operating Company and that, to the best of his knowledge and belief, the facts set forth in this letter are true.

SOUTHERN NUCLEAR OPERATING COMPANY

By: 
J. B. Beasley, Jr.

Sworn to and subscribed before me this 25th day of August, 2000.


Notary Public

My commission expires: 11/10/02

JBB/NJS

Enclosure 1: Basis for Proposed Change
Enclosure 2: Significant Hazard Consideration Evaluation
Enclosure 3: Marked-up TS Page
Enclosure 4: Clean-typed TS Page

cc: Southern Nuclear Operating Company
Mr. J. T. Gasser
Mr. M. Sheibani
SNC Document Management

U. S. Nuclear Regulatory Commission
Mr. L. A. Reyes, Regional Administrator
Mr. R. R. Assa, Project Manager, NRR
Mr. John Zeiler, Senior Resident Inspector, Vogtle

State of Georgia
Mr. L. C. Barrett, Commissioner, Department of Natural Resources

Enclosure 1
Vogtle Electric Generating Plant
Request to Revise Technical Specifications
Primary Coolant Sources Outside Containment

Basis for Proposed Change

Proposed Change

Section 5.5.2 of the Vogtle Electric Generating Plant (VEGP) Technical Specifications (TS) contains programmatic requirements intended to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. Among other requirements, item 5.5.2.b states that the program shall include leak test requirements at refueling cycle intervals or less. The proposed change will revise item 5.5.2.b to specify leak test requirements at least once per 18 months and add the statement that the provisions of Surveillance Requirement (SR) 3.0.2 are applicable. The proposed change is consistent with Industry/Technical Specification Task Force (TSTF) Change Traveler TSTF-299, submitted to the NRC on November 13, 1998.

Basis

Item 5.5.2.b is essentially a surveillance requirement. However, because it is contained within Section 5.0 of the TS, the provisions of SR 3.0.2 do not apply. The requirements of TS 5.5.2 apply to the residual heat removal system, containment spray system, safety injection (excluding boron injection and accumulators), chemical and volume control system (letdown and charging systems), post accident processing system, gaseous waste processing system, and nuclear sampling system (pressurizer steam and liquid sampling lines, reactor coolant sample lines, residual heat removal sample lines, chemical and volume control system demineralizer and letdown heat exchanger sample lines). During normal operation, several of these systems are in a standby mode, e.g., residual heat removal, containment spray, safety injection, post accident processing. Leak testing of the residual heat removal system is best performed when the system is in operation in its decay heat removal mode during shutdown. However, containment spray and safety injection are generally only operated for surveillance or maintenance purposes. Therefore, it is best to perform the required leak testing when these systems are operated for inservice testing. The post accident processing system is always in a standby mode, and special provision must be made to perform leak testing for this system. The gaseous waste processing system must be taken out of service to perform leak testing, and the nuclear sampling system is generally tested during power operation when the system can be pressurized. In order to perform a complete leakage assessment of many of these systems, block walls and floor plugs must be removed to provide physical access to portions of the systems. Consequently, different plant conditions as well as the appropriate personnel (specifically craft personnel for removal of block walls and floor plugs) are required for proper performance of the leak test requirements of TS 5.5.2.b.

In general, SR 3.0.2 allows the stated surveillance frequency to be extended by as much as 25 % as measured from the previous performance or as measured from the time a specified condition of the frequency is met. The Bases for SR 3.0.2 state that the 25 % extension facilitates surveillance scheduling and considers plant operating conditions that may not be suitable for conducting the surveillance (e.g., transient conditions or other ongoing surveillance or maintenance activities). Considering the different plant conditions required for leak testing of each of the systems covered by TS 5.5.2.b and the necessity to have specialized personnel available for the removal of block walls and floor plugs, it is appropriate to provide scheduling flexibility such as that afforded by SR 3.0.2.

The Bases for SR 3.0.2 also state that the 25 % extension does not seriously degrade the reliability that results from performing the surveillance at its specified frequency. This is based on the recognition that the most probable result of any particular surveillance being performed is the verification of conformance

Enclosure 1
Vogtle Electric Generating Plant
Request to Revise Technical Specifications
Primary Coolant Sources Outside Containment

Basis for Proposed Change

with the SR. This is true for the requirements of TS 5.5.2.b as well. The requirements of TS 5.5.2 meet the requirements of NUREG-0737, Clarification of TMI Action Plan Requirements, item III.D.1.1. Item III.D.1.1 of NUREG-0737 was, in turn, based on NUREG-0578, TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations, section 2.1.6. NUREG-0578 states that one of the lessons learned from TMI was that, at that time, operators had little knowledge of the leakage characteristics of systems external to the containment building that contained radioactive material. The intent of the leak test requirements of TS 5.5.2.b was to facilitate better management of radiation control activities in the event of an accident, thereby further minimizing dose to plant workers as well as to the public. Revising the VEGP TS to allow the scheduling flexibility provided by SR 3.0.2 will not reduce the effectiveness of the leak test requirements. Whereas the VEGP TS currently require leak rate testing at refueling cycle intervals, and the length of a refueling can vary due to unplanned outages, etc., the proposed change will specifically require leak rate testing at 18-month intervals. If scheduling considerations and plant operating conditions are such that an extension for a specific system, or portion thereof, becomes necessary, that extension will be available but will be limited to no more than four and one-half months. Leak rate testing will continue to be performed at regular intervals, and any required maintenance identified as a result of the testing will be accomplished. This was the intent of NUREG-0578 and NUREG-0737.

Enclosure 2
Vogtle Electric Generating Plant
Request to Revise Technical Specifications
Primary Coolant Sources Outside Containment

Significant Hazard Consideration Evaluation

The proposed changes have been evaluated against the criteria of 10 CFR 50.92 as follows:

1. Do the proposed changes involve a significant increase in the probability or consequences of an accident previously evaluated?

No. The proposed changes affect programmatic administrative controls of the Vogtle Electric Generating Plant (VEGP) Technical Specifications (TS) for leak testing systems or portions thereof that are outside containment and could contain highly radioactive fluids. Only the interval for leak testing is affected by the proposed change, and this interval has no impact on the likelihood of any of the initiating events assumed for any accident previously evaluated. Therefore, the proposed change will not result in a significant increase in the probability of any accident previously evaluated. Whereas the current TS require testing at refueling cycle intervals or less, the proposed change will specify testing at least once per 18 months, and the provisions of Surveillance Requirement (SR) 3.0.2 will be applicable. Refueling cycle intervals at VEGP are nominally 18 months in duration, but they can vary with unplanned outages, power reductions, etc. Under the proposed change, leak testing will be performed at 18-month intervals, regardless of actual refueling cycle length, and if an extension of that interval becomes necessary for systems or portions thereof due to scheduling considerations, the provisions of SR 3.0.2 will provide the necessary flexibility. However, the maximum extension that can be applied is 25 % of 18 months or four and one-half months. Leak testing will continue at regular intervals, and any necessary maintenance to minimize leakage will continue to be performed. Therefore, the proposed change will not result in a significant increase in the consequences of any accident previously evaluated.

2. Do the proposed changes create the possibility of a new or different kind of accident from any previously evaluated?

No. The proposed change affects only the interval at which leak test requirements are performed pursuant to TS 5.5.2.b. The proposed change does not alter the operation of the plant or any of its equipment, introduce any new equipment, or result in any new failure mechanisms or limiting single failures. Therefore, there is no potential for a new accident and no changes to the way that an analyzed accident will progress. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. Do the proposed changes result in a significant reduction in a margin of safety?

No. The proposed change affects only the interval at which leak test requirements are performed pursuant to TS 5.5.2.b. Under the proposed change, leak testing will be performed at 18-month intervals, regardless of actual refueling cycle length, and if an extension of that interval becomes necessary for systems or portions thereof due to scheduling considerations, the provisions of SR 3.0.2 will provide the necessary flexibility. However, the maximum extension that can be applied is 25 % of 18 months or four and one-half months. Leak testing will continue at regular intervals, and any necessary maintenance to minimize leakage will continue to be performed. The intent of the program is maintained while providing the same scheduling flexibility that is already provided for the surveillance requirements of section 3.0 of the TS. Therefore, the proposed change will not result in a significant reduction in a margin of safety.

Enclosure 2
Vogtle Electric Generating Plant
Request to Revise Technical Specifications
Primary Coolant Sources Outside Containment

Significant Hazard Consideration Evaluation

Based on the above evaluation, the proposed change does not involve a significant hazard as defined in 10 CFR 50.92.

Enclosure 3
Vogtle Electric Generating Plant
Request to Revise Technical Specifications
Primary Coolant Sources Outside Containment

Marked-up TS Pages

5.5 Programs and Manuals

5.5.1 Offsite Dose Calculation Manual (ODCM) (continued)

that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include:

- 1) Residual Heat Removal System;
- 2) Containment Spray System;
- 3) Safety Injection (excluding Boron Injection and Accumulators);
- 4) Chemical and Volume Control System (Letdown and Charging Systems);
- 5) Post Accident Processing System;
- 6) Gaseous Waste Processing System; and
- 7) Nuclear Sampling System (Pressurizer steam and liquid sampling lines, Reactor Coolant sample lines, RHR sample lines, CVCS Demineralizer and Letdown Heat Exchanger sample lines only).

The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Leak test requirements for each system at ~~refueling cycle intervals or less.~~
least once per 18 months. The provisions of SR 3.0.2 are applicable.

5.5.3 Post Accident Sampling

This program provides controls that ensure the capability to obtain and analyze reactor coolant, radioactive gases and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. The program shall include the following:

- a. Training of personnel;

(continued)

Enclosure 3
Vogtle Electric Generating Plant
Request to Revise Technical Specifications
Primary Coolant Sources Outside Containment

Clean-typed TS Pages

5.5 Programs and Manuals

5.5.1 Offsite Dose Calculation Manual (ODCM) (continued)

that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include:

- 1) Residual Heat Removal System;
- 2) Containment Spray System;
- 3) Safety Injection (excluding Boron Injection and Accumulators);
- 4) Chemical and Volume Control System (Letdown and Charging Systems);
- 5) Post Accident Processing System;
- 6) Gaseous Waste Processing System; and
- 7) Nuclear Sampling System (Pressurizer steam and liquid sampling lines, Reactor Coolant sample lines, RHR sample lines, CVCS Demineralizer and Letdown Heat Exchanger sample lines only).

The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Leak test requirements for each system at least once per 18 months. The provisions of SR 3.0.2 are applicable.

5.5.3 Post Accident Sampling

This program provides controls that ensure the capability to obtain and analyze reactor coolant, radioactive gases and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. The program shall include the following:

- a. Training of personnel;

(continued)