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L. T. Gucwa
Manager Nuclear Safety
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SL-2109
0141m

March 9, 1987

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

NRC DOCKET NUMBER 50-424
NRC OPERATING LICENSE NPF-61
VOGTLE ELECTRIC GENERATING PLANT UNIT 1
RESULTS OF EXAMINATION FOR POTENTIAL LEAKAGE OUTSIDE CONTAINMENT

Gentlemen:

Georgia Power Company hereby submits a report regarding the results of an examination for potential leakage outside containment pursuant to item III.D.1.1 of NUREG 0737 and confirmatory item 43 of the Plant Vogtle "Safety Evaluation Report".

Should you have questions regarding this submittal, please contact this office.

Sincerely,

J. A. Bailey
for L. T. Gucwa

WEB/lm

Enclosure

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Georgia Power

c: Georgia Power Company
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In accordance with requirements set forth in Facility Operating License NPF-61 and Technical Specifications, Vogtle Electric Generating Plant, Unit No. 1, the following data is presented to document leakage from primary coolant sources outside containment. This requirement is delineated in paragraph 6.7.4.a of the Technical Specifications as modified by paragraph 2.C.8.a of the license.

For those systems listed below, leakage was quantitatively measured for each component identified as leaking, in accordance with VEGP procedures 55010-1 through 55016-1. For the liquid systems, the leakage survey was performed at or as near as practical to operating temperatures and pressures. All leakage paths were identified visually. Gaseous system leakage was measured using a leak rate monitor and a soap bubble solution used to identify leakage paths. All identifiable gaseous leaks were eliminated.

The following systems were tested, with total system leakage noted:

A. Residual Heat Removal System - 0.00202 gpm.

B. Containment Spray System (excluding Na OH Subsystem) - 0.000326 gpm.

C. Safety Injection System (excluding Boron Injection and Accumulators) - 0 gpm.

D. Chemical and Volume Control System (Letdown, Boron Recycle and Charging Pumps) 0.00557 - gpm. (See below)

E. Post Accident Sampling System -
Liquid Leakage - 0.001 gpm
Gaseous Leakage - 22 SCCM (no leakage identified external to the system.)

F. Gaseous Waste Processing System -
Liquid Leakage - 0.001 gpm
Gaseous Leakage - 0 SCCM (external to the system.)

G. Nuclear Sampling System (Pressurizer Steam and Liquid Sample lines, Reactor Coolant Sample lines, RHR Sample lines, CVCS Demineralizer and Letdown Heat Exchanger Sample lines only.)
Liquid Leakage - 0.001 gpm
Gaseous Leakage (steam) - 0 gpm

During the leakage assessment for the Post Accident Sampling System, it was noted that air operated valve 1-HV-3258 had an undersized actuator which prevented the valve from closing. This valve is a drain line isolation valve on the Reactor Coolant Sample line. This valve has been isolated using an upstream manual isolation valve and the system tested with this configuration.

Following resolution of this discrepancy, packing and seat leakage from this valve will be minimized and the leakage, if any, added to the total for the Post Accident Sampling System.

Because the Positive Displacement pump could not be placed into service, leakage for this pump and a minimum of associated components has not been determined. The value shown for CVCS leakage is the system total excluding those items. When the pump becomes available, the leakage assessment will be completed and a supplemental report issued to document the completion of this program.

This report satisfies reporting requirements delineated in OL-NPF-61 and the VEGP Unit 1 Technical Specifications. The above leakage is considered acceptable although further efforts will be taken to reduce all known leakage to a level as low as practical.

In accordance with requirements set forth in Facility Operating License NPF-61 and Technical Specifications, Vogtle Electric Generating Plant, Unit No. 1, the following data is presented to document leakage from primary coolant sources outside containment. This requirement is delineated in paragraph 6.7.4.a of the Technical Specifications as modified by paragraph 2.C.8.a of the license.

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The following systems were tested, with total system leakage noted:

A. Residual Heat Removal System - 0.00202 gpm.

B. Containment Spray System (excluding Na OH Subsystem) - 0.000326 gpm.

C. Safety Injection System (excluding Boron Injection and Accumulators) - 0 gpm.

D. Chemical and Volume Control System (Letdown, Boron Recycle and Charging Pumps) 0.00557 - gpm. (See below)

E. Post Accident Sampling System -
Liquid Leakage - 0.001 gpm
Gaseous Leakage - 22 SCCM (no leakage identified external to the system.)

F. Gaseous Waste Processing System -
Liquid Leakage - 0.001 gpm
Gaseous Leakage - 0 SCCM (external to the system.)

G. Nuclear Sampling System (Pressurizer Steam and Liquid Sample lines, Reactor Coolant Sample lines, RHR Sample lines, CVCS Demineralizer and Letdown Heat Exchanger Sample lines only.)
Liquid Leakage - 0.001 gpm
Gaseous Leakage (steam) - 0 gpm

During the leakage assessment for the Post Accident Sampling System, it was noted that air operated valve 1-HV-3258 had an undersized actuator which prevented the valve from closing. This valve is a drain line isolation valve on the Reactor Coolant Sample line. This valve has been isolated using an upstream manual isolation valve and the system tested with this configuration.

Following resolution of this discrepancy, packing and seat leakage from this valve will be minimized and the leakage, if any, added to the total for the Post Accident Sampling System.

Because the Positive Displacement pump could not be placed into service, leakage for this pump and a minimum of associated components has not been determined. The value shown for CVCS leakage is the system total excluding those items. When the pump becomes available, the leakage assessment will be completed.

This report satisfies reporting requirements delineated in OL-NPF-61 and the VEGP Unit 1 Technical Specifications. The above leakage is considered acceptable although further efforts will be taken to reduce all known leakage to a level as low as practical. Following completion of leakage assessment testing on the Positive Displacement Pump and valve 1-HV-3258 of the Post Accident Sampling System, a supplemental report will be issued by April 15, 1987.