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Georgia Power

THE LOW-COST ELECTRIC SYSTEM

HL-2103  
003095

March 10, 1992

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

PLANT HATCH - UNITS 1, 2  
NRC DOCKETS 50-321, 50-366  
OPERATING LICENSE, DPR-57, NPF-5  
SECOND 10-YEAR INSPECTION INTERVAL  
IST PROGRAM SAFETY EVALUATION

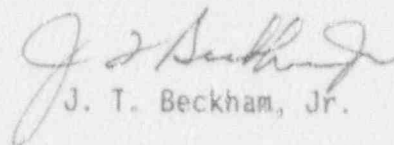
Gentlemen:

By letter dated December 10, 1991, the NRC forwarded a Safety Evaluation (SE) on Georgia Power Company's (GPC) Second 10-year Inspection Interval IST Program. As requested by the SE, GPC has reviewed the ASME Code, Section XI, IWV-2100 categorization of the ECCS Torus Suction Valves and has concluded the present categorization and testing program is appropriate as currently specified. Justification for this assessment is provided in Enclosure 1.

The SE also contains the NRC staff's findings with respect to granting or not granting relief requests as part of GPC's IST program. In the near future, GPC will be requesting a mid-April meeting with appropriate NRC personnel to address items contained in Appendix A of the Safety Evaluation Report.

If you have any questions in this regard, please call this office.

Sincerely,

  
J. T. Beckham, Jr.

JKB/DGA/cr

Enclosures

cc: (See next page.)

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cc: Georgia Power Company  
Mr. H. L. Sumner, General Manager - Nuclear Plant  
NORMS

U.S. Nuclear Regulatory Commission, Washington, D.C.  
Mr. K. Jabbour, Licensing Project Manager - Hatch

U.S. Nuclear Regulatory Commission, Region II  
Mr. S. D. Ebnetter, Regional Administrator  
Mr. L. D. Wert, Senior Resident Inspector - Hatch

ENCLOSURE

PLANT HATCH - UNITS 1, 2  
NRC DOCKETS 50-321, 50-366  
OPERATING LICENSES DPR-57, NPF-5  
ASSESSMENT OF ECCS TORUS SECTION VALVE  
CATEGORIZATION AND TESTING

*Question*

NRC REQUEST

Review the ASME Code, Section IX, IWV-2100, categorization of the torus suction valves in the lines leading to the residual heat removal, core spray, high pressure coolant injection, and reactor core isolation cooling pumps and ensure the present categorization and testing is appropriate. A passive failure in torus suction piping could cause significant depletion of the torus inventory.

APPLICABLE VALVES

<u>Valve MPL</u>	<u>Description</u>	<u>Comments</u>
o 1/2 E21-F001A,B	Core Spray Pump Suction	Normally Open
o 1/2 E41-F042, 51	HPCI Pump Suction	Normally Closed, Alternate Suction Source
o 1/2 E11-F004A,B,C,D	RHR Pump Suction	Normally Open
o 1/2 E51-F031, 29	RCIC Pump Suction	Normally Closed, Alternate Suction Source

BACKGROUND

o The valves in question were previously deleted from Appendix J Type C Testing because the associated lines terminate below torus water level, which is postulated to maintain a water seal post accident. The NRC has noted their concurrence with this position.

o ASME Section XI, Subsection IWV defines a Category A valve as:

"A valve for which seat leakage is limited to a specific maximum amount in the closed position for fulfillment of their function".

The question is then - "do the subject valves have a design function to limit leakage from the torus post accident?"

ENCLOSURE (Continued)

ASSESSMENT OF ECCS TORUS SECTION VALVE  
CATEGORIZATION AND TESTING

GPC RESPONSE

- o It has been established that the subject valves remain sealed by torus water during all design basis events and therefore do not require leakage testing per 10CFR50 Appendix J. Their function is to open during an accident to provide a flow path from the torus to the ECCS pumps.
- o The pump suction piping is low pressure, low temperature, Seismic Class 1, Nuclear Safety Class 2 piping resulting in a low probability of failure.
- o The HPCI and RCIC suction lines utilize two valves in series for containment isolation. Failure of both valves is not postulated during any design basis event.
- o The RHR, HPCI, and RCIC valves are closed during performance of the ILRT. Total containment leakage including the path isolated by these valves exceeding approximately 12 gpm will result in an unacceptable ILRT.
- o The RHR and CS suction lines utilize one isolation valve and a closed system for containment isolation. Failure of both isolation barriers is not postulated during any design basis event.
- o The CS valves are open during performance of the ILRT in order to provide a low pressure system for emergency makeup capability. Total containment leakage, including leakage from the CS piping exceeding approximately 12 gpm, will result in an unacceptable ILRT.
- o The subject valves are categorized as ASME Section XI Category B valves and are periodically tested to verify operability.
- o The subject valves are included in the GL 89-10 MOV Testing Program to provide additional assurance of valve reliability and positive closure capability under design basis conditions.

CONCLUSION

The Torus ECCS Suction Valves for HPCI, RCIC, RHR and Core Spray have been appropriately classified as ASME Section XI Category B valves since closure for leak-tight isolation is not a design basis function. Leakage testing per 10CFR Appendix J or ASME Section XI is not required.

ENCLOSURE (Continued)

ASSESSMENT OF ECCS TORUS SECTION VALVE  
CATEGORIZATION AND TESTING

However, suction piping design provides assurance that a leak in the subject systems is highly unlikely. Plant programs exist to provide assurance that the subject valves will close and the overall leakage is not more than the ILRT test criteria for all leakage paths.