

From: Paige, Jason
Sent: Friday, January 07, 2011 3:13 PM
To: Tomonto, Bob; Hanek, Olga
Subject: RAIs RE Generic Letter 2008-01, Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems

Bob,

Below are requests for additional information (RAIs) regarding GL 2008-01. On January 4, 2011, the NRC and FPL, Turkey Point discussed the RAIs to gain a common understanding of the questions. During the call, it was concluded that questions #2 and #7 would need revising by the NRC reviewer. Question # 2 would replace "core spray system" to "containment spray system" since Turkey Point does not have a core spray system and question #7 would be revised to specifically state the NRC reviewer concerns. The below RAIs reflect these changes as discussed during the January 4, 2010, call. All of the other questions, #1, #3, #4, #5, and #6 were clear to the licensee and no changes were made. FPL agreed upon providing its responses within 30 days of the date of this email. If you have any questions, feel free to contact me.

By letters dated May 9, 2008 (Agencywide Document Access and Management System Accession No. ML081430648), October 14, 2008 (ML082970255), August 6, 2009 (ML092300113), and March 2 2010 (ML100640031), Florida Power and Light (the licensee), submitted information in response to Generic Letter (GL)2008-01 "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," for Turkey Point Units 3 and 4.

On the basis of the provided information, the Nuclear Regulatory Commission (NRC) staff has concluded that additional information is required from the licensee for the NRC staff to determine that the licensee has acceptably demonstrated "that the subject systems are in compliance with the current licensing and design bases and applicable regulatory requirements, and that suitable design, operational, and testing control measures are in place for maintaining this compliance" as stated in Generic Letter (GL) 2008-01.

Guidance on the NRC staff expectations is provided by Reference 1 which is generally consistent with Nuclear Energy Institute (NEI) guidance provided to industry in Reference 2 as clarified in later NEI communications. The NRC staff recommends that the licensee consult Reference 1 when responding to the following RAIs:

1. Since the technical specifications do not address ECCS suction piping, how is gas intrusion managed in this suction piping?
2. Have changes been implemented in the containment spray system which require the monitoring and, if necessary, venting of the containment spray system?
3. Address any discrepancies between the systems evaluated in the PWROG report and those at Turkey Point and any discrepancies between the PWROG pump suction void criteria and NRC Inspection guidance, Rev. 9.
4. Were procedures changed to address suction piping venting of RHR, where necessary?

5. The licensee states that gas intrusion instances are entered into the CAP for evaluation if the void exceeds a certain criteria. How is the licensee aware of adverse trends at specific locations if all gas intrusion instances are not tracked and trended through the CAP?
6. The licensee states that due to previous gas intrusion, training was conducted for Operations personnel. Has training been updated or expanded beyond operations since evaluation of GL 2008-01?
7. The licensee referenced gas transport analyses conducted by Numerical Applications, Inc. (NAI). Many licensees have contracted with NAI to evaluate gas voids using the computer code GOTHIC, if this is the case, confirm and note that the NRC is pursuing additional evaluation of the applicability of GOTHIC to two-phase, two component flow. The NRC may need to conduct further evaluation at a later date of the licensee's use of GOTHIC. If the licensee used another method for detailed gas transport analysis, explain the method used.

REFERENCES

1. Ruland, William H., "Preliminary Assessment of Responses to Generic Letter 2008-01, 'Managing Gas Accumulation in emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems,' and Future NRC Staff Review Plans," NRC letter to James H. Riley, Nuclear Energy Institute, ML091390637, May 28, 2009.
2. Riley, James H., "Generic Letter (GL) 2008-01, 'Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Contain Spray Systems' Evaluation and 3 Month Response Template," Letter to Administrative Points of Contact from Director, Engineering, Nuclear Generation Division, Nuclear Energy Institute, Enclosure 2, "Generic Letter 2008-01 Response Guidance," March 20, 2008.

3. Case, Michael J., "NRC Generic Letter 2008-01: Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," Letter from Director, Division of Policy and Rulemaking, Office of Nuclear Regulation, NRC, ML072910759, January 11, 2008Lyon, Warren C., U.S. Nuclear Regulatory Commission, "Revision 2 to NRC Staff Criteria for Gas Movement in Suction Lines and Pump Response to Gas," ML090900136, March 26, 2009."Guidance To NRC/NRR/DSS/SRXB Reviewers for Writing TI Suggestions for the Region Inspections," ML102300053, August 18, 2010.
4. Jefferson, Jr., William, "Three-Month Response to NRC Generic Letter 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems,"" Letter to Document Control Desk, NRC, from Site Vice President, Turkey Point Nuclear Plant, ML081430648, May 9, 2008.
5. Jefferson, Jr., William, "Nine-Month Response to NRC Generic Letter 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems,"" Letter to Document Control Desk, NRC, from Site Vice President, Turkey Point Nuclear Plant, ML082970255, October 14, 2008.
6. Kiley, Michael W., "Turkey Point Unit 3: Nine-Month Supplemental (Post-Outage) Response to NRC Generic Letter 2008-01," Letter to Document Control Desk, NRC, from Site Vice President, Turkey Point Nuclear Plant, ML092300113, August 6, 2009.
7. Kiley, Michael W., "Turkey Point Unit 4: Nine-Month Supplemental (Post-Outage) Response to NRC Generic Letter 2008-01," Letter to Document Control Desk, NRC, from Site Vice President, Turkey Point Nuclear Plant, ML100640031, March 2, 1010.

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