Jim McKnight 05F22

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION
WASHINGTON, D.C. 20555-0001

September 22, 1995

NRC INFORMATION NOTICE 95-42: COMMISSION DECISION ON THE RESOLUTION OF GENERIC ISSUE 23, "REACTOR COOLANT PUMP SEAL FAILURE"

Addressees

All holders of operating licenses or construction permits for nuclear power reactors.

Purpose

The U.S. Nuclear Regulatory Commission (NRC) is issuing this information notice to notify addressees of the Commission's decision on Generic Issue (GI) 23, "Reactor Coolant Pump Seal Failure." This decision was documented in a staff requirements memorandum (SRM) from John C. Hoyle to James M. Taylor, dated March 31, 1995 (Accession Number 9504140300), written in response to SECY-94-225, "Issuance of Proposed Rulemaking Package on GI-23, 'Reactor Coolant Pump Seal Failure'." No specific action or written response is required as a result of this information notice.

Background

On April 19, 1991, the NRC published a *Federal Register* notice (56 FR 16130) requesting comments on the then-current understandings, findings, and potential recommendations regarding GI-23, together with a draft Regulatory Guide, DG-1008, "Reactor Coolant Pump Seals." On May 2, 1991, NRC issued Generic Letter (GL) 91-07, "GI-23, 'Reactor Coolant Pump Seal Failures' and Its Possible Effect on Station Blackout," which stated that preliminary results of NRC studies suggested that reactor coolant pump (RCP) seal leak rates could be substantially higher than those assumed in the coping analyses for implementation of the station blackout (SBO) issue. The generic letter reminded licensees that higher seal leak rates could affect licensee analyses and actions addressing conformance to the SBO rule.

Staff studies and analyses concerning RCP seal leakage are documented in Appendices A and B to NUREG/CR-5167, "Cost/Benefit Analysis for Generic Issue 23: Reactor Coolant Pump Seal Failure," April 1991, which contains the NRC model for RCP seal failure. The report identifies several modes of RCP seal leakage which may be in excess of that assumed in licensee coping analyses for implementing the requirements of 10 CFR 50.63, the SBO rule. GI-23 is related to a number of other generic issues: GI-65, "Component Cooling Water System Failure"; GI-130, "Essential Service Water (ESW) System Failure at Multiplant Sites"; GI-153, "Loss of Essential Service Water in LWRs"; GI-106, "Piping and the Use of Highly Combustible Gases in Vital Areas"; and Three Mile Island (TMI) Actions II.K.2.16 and II.K.3.25. In addition, the Individual Plant Evaluation (IPE) Program, as described in

9509200232 updated on 9/29/95
PDR IE Notice 95-042 95092 DF01

GL 88-20, requests evaluation of plant vulnerabilities with respect to certain generic issues, including GI-23.

Discussion

The Commission considered the proposed rulemaking as a method to resolve GI-23. In SECY-94-225, dated August 26, 1994, a draft rule was proposed for public comment that would resolve GI-23.

On March 31, 1995, the Commission voted against the publication of the proposed rule on the resolution of GI-23, "Reactor Coolant Pump Seal Failure." The Commission concluded that the proposed rule did not provide sufficient gain in safety to justify its issuance. The Commission was also concerned that inaccuracies in the NRC seal leakage evaluation model may exist. Further, the wide range of plant-specific considerations with regard to pressurized-water reactor (PWR) RCP seals would result in the spending of excessive resources by some licensees without commensurate safety benefits; also some licensees are addressing the issue by using the IPE program and accident management strategies. Therefore, the NRC will not proceed with the rulemaking effort described in SECY-94-225. The staff is currently exploring options to determine what, if any, further action will be taken regarding the final disposition of GI-23.

This information notice requires no specific action or written response. If you have any questions about the information in this notice, please contact one of the technical contacts listed below or the appropriate Office of Nuclear Reactor Regulation (NRR) project manager.

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Office of Nuclear Reactor Regulation

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Christopher Jackson, NRR
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Lead project manager: Linh N. Tran, NRR
(301) 415-1361

Attachment filed in Jacket

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Information Notice No.	Subject	Date of Issuance	Issued to
95-41	Degradation of Ventilation System Charcoal Resulting from Chemical Cleaning of Steam Generators	09/22/95	All holders of OLs or CPs for nuclear power reactors.
95-40	Supplemental Information to Generic Letter 95-03, "Circumferential Cracking of Steam Generator Tubes"	09/20/95	All holders of OLs or CPs for nuclear power reactors.
95-39	Brachytherapy Incidents Involving Treatment Planning Errors	09/19/95	All U.S. Nuclear Regulatory Commission Medical Licensees.
95-38	Degradation of Boraflex Neutron Absorber in Spent Fuel Storage Racks	09/08/95	All holders of OLs or CPs for nuclear power reactors.
95-37	Inadequate Offsite Power System Voltages during Design-Basis Events	09/07/95	All holders of OLs or CPs for nuclear power reactors.
95-36	Potential Problems with Post-Fire Emergency Lighting	08/29/95	All holders of OLs or CPs for nuclear power reactors.
95-35	Degraded Ability of Steam Generators to Remove Decay Heat by Natural Circulation	08/28/95	All holders of OLs or CPs for pressurized water reactors (PWRs).
95-34	Air Actuator and Supply Air Regulator Problems in Copes-Vulcan Pressurizer Power-Operated Relief Valves	08/25/95	All holders of OLs or CPs for nuclear power reactors.
93-83, Supp. 1	Potential Loss of Spent Fuel Pool Cooling After a Loss-of-Coolant Accident or a Loss of Offsite Power	08/24/95	All holders of OLs or CPs for nuclear power reactors.

OL = Operating License
CP = Construction Permit

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9/19/95 taken w/JHConran - he is aware of IN and has no objections to issuance. RJKiessel

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