

January 29, 2002

Mr. Guy G. Campbell
Vice President - Nuclear, Perry
FirstEnergy Nuclear Operating Company
P.O. Box 97, A200
Perry, OH 44081

SUBJECT: PERRY NUCLEAR POWER PLANT, UNIT 1 - COMPLETION OF LICENSING ACTIONS FOR NRC BULLETINS 95-02 AND 96-03 (TAC NOS. M93884 AND M96162)

Dear Mr. Campbell:

On October 17, 1995, the U.S. Nuclear Regulatory Commission (NRC) issued Bulletin (BL) 95-02, "Unexpected Clogging of a Residual Heat Removal (RHR) Pump Strainer While Operating in Suppression Pool Cooling Mode," to all holders of operating licenses or construction permits for boiling-water reactors. The NRC issued BL 95-02 to alert addressees of an event where a licensee initiated suppression pool cooling in response to a stuck-open safety relief valve and subsequently experienced clogging of an RHR pump suction strainer. In order to ensure that an unacceptable buildup of debris that could potentially clog suction strainers would not occur, addressees were requested to (1) perform an operability evaluation of all pumps which draw suction from the suppression pool based on an evaluation of suppression pool and suction strainer cleanliness conditions, (2) schedule a suppression pool cleaning, (3) review foreign material exclusion procedures of materials in the drywell, suppression pool, and systems that interface with the suppression pool, and (4) consider additional measures to detect clogging of emergency core cooling system (ECCS) suction strainers.

In BL 95-02, the NRC staff requested that licensees submit the following reports for each of their facilities:

1. A description of planned actions, inspections and corrective actions for confirming their operability evaluation.
2. A report confirming completion and summarizing actions taken.

In response to BL 95-02, you provided letters dated November 16, 1995, and April 25, 1996, for the Perry Nuclear Power Plant, Unit 1 (PNPP). Your letters indicated that you complied with the recommended actions of the BL and that based on testing, an evaluation of strainer and suppression pool conditions, and the cleanliness conditions of the containment and drywell, the suppression pool and the five ECCS pumps at PNPP were determined to be operable.

On May 6, 1996, the NRC issued BL 96-03, "Potential Plugging of Emergency Core Cooling Suction Strainers by Debris in Boiling-Water Reactors," to all holders of operating licenses or construction permits for boiling-water reactors. The NRC issued BL 96-03 to ensure that the ECCS in boiling-water reactors can perform their intended safety function to mitigate the effects

of a postulated loss-of-coolant accident. The BL provided three options for resolving this issue including (1) installation of large capacity passive strainers, (2) installation of self-cleaning strainers, or (3) installation of a backflush system.

In BL 96-03, the NRC staff requested that licensees submit the following reports for each of their facilities:

1. A description of planned actions and mitigative strategies to be used, the schedule for implementation and proposed technical specification, if appropriate.
2. A report confirming completion and summarizing actions taken.

In response to BL 96-03, you provided letters dated November 4, 1996, August 15, 1997, September 13, 1997, June 23, 1998, and October 3, 2001. You stated that you planned to install large capacity passive strainers which would be designed using the guidance in the Boiling Water Reactors Owners Group Utility Resolution Guidance (URG). The staff reviewed the URG and issued a safety evaluation on August 20, 1998. Your letter dated October 3, 2001, indicated that you had completed all actions requested by the bulletin. The staff concludes that PNPP has clearly taken a robust approach to the newly installed ECCS suction strainers. The strainers are designed to withstand significantly higher debris loadings than the staff-approved URG methodologies would have required for the strainer design criteria. PNPP has also implemented appropriate foreign material exclusion procedures to limit the potential for clogging the ECCS with materials brought into the drywell during outage operations.

The staff has reviewed your responses to both BL 95-02 and 96-03 and has determined that the actions taken should minimize the potential for clogging of ECCS suction strainers and ensure the capability of the ECCS to provide long-term cooling following a loss-of-coolant-accident as required by 10 CFR 50.46. The staff considers your actions responsive to the concerns raised in the bulletins. Therefore, BL 95-02 and 96-03 are closed for your facility.

Sincerely,

/RA/

Douglas V. Pickett, Sr. Project Manager, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-440

cc: See next page

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In BL 96-03, the NRC staff requested that licensees submit the following reports for each of their facilities:

1. A description of planned actions and mitigative strategies to be used, the schedule for implementation and proposed technical specification, if appropriate.
2. A report confirming completion and summarizing actions taken.

In response to BL 96-03, you provided letters dated November 4, 1996, August 15, 1997, September 13, 1997, June 23, 1998, and October 3, 2001. You stated that you planned to install large capacity passive strainers which would be designed using the guidance in the Boiling Water Reactors Owners Group Utility Resolution Guidance (URG). The staff reviewed the URG and issued a safety evaluation on August 20, 1998. Your letter dated October 3, 2001, indicated that you had completed all actions requested by the bulletin. The staff concludes that PNPP has clearly taken a robust approach to the newly installed ECCS suction strainers. The strainers are designed to withstand significantly higher debris loadings than the staff-approved URG methodologies would have required for the strainer design criteria. PNPP has also implemented appropriate foreign material exclusion procedures to limit the potential for clogging the ECCS with materials brought into the drywell during outage operations.

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Perry Nuclear Power Plant, Unit 1

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