



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

June 16, 2016

MEMORANDUM TO: William M. Dean, Director
Office of Nuclear Reactor Regulation

FROM: Michael F. Weber */RA/*
Director of Nuclear Regulatory Research

SUBJECT: CLOSURE OF GENERIC ISSUE 193, POTENTIAL EFFECTS ON
EMERGENCY CORE COOLING SYSTEM LOW PRESSURE
PUMPS FOLLOWING BLOWDOWN OF CONTAINMENT GAS
INTO TORUS

The purpose of this memorandum is to close out Generic Issue (GI)-193 without the need for any further regulatory action, based upon the recommendation from the Generic Issues Review Panel (GIRP). I would like to express my gratitude to the GIRP members from the Office of Nuclear Reactor Regulation (NRR) with the support of the staff of the Office of Nuclear Regulatory Research.

Originally, staff from Region III submitted this GI on May 10, 2002, to evaluate the potential effects on the low-pressure emergency core cooling system (ECCS) pumps from the influx of noncondensable gas into the torus immediately following a large break loss-of-coolant accident (LOCA). A GIRP evaluated the proposed GI and issued its findings on October 16, 2003, concluding that the issue met the screening criteria described in Management Directive 6.4, "Generic Issues Program," and recommended the GI continue into the assessment stage. However, due to the complexity of the issue, the assessment was deferred pending completion of extensive research, modeling, and laboratory testing to assess the extent of the problem. Upon completion of the research, documented in NUREG-2196, "BWR ECCS Pump Suction Concerns following a LOCA," a new GIRP was formed in September 2015. The new GIRP used the results of the research to perform the assessment. On April 19, 2016 the new GIRP issued the results of its assessment, reporting it could not identify any credible combination of physical and operational conditions that would jeopardize the ECCS core cooling safety function due to air entrainment following a large break LOCA. Therefore, the panel concluded no further regulatory actions were required and recommended closure of GI-193.

I would like to thank the NRR staff for their participation and assessment, which they completed in a high quality and expeditious manner. If there are questions regarding this issue, please feel free to contact the GI Program Manager, Thomas Boyce, or Project Manager, Stanley Gardocki.

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ADAMS Accession No.: ML16154A001

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