



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

August 16, 2011

Mr. Adam J. Dobson  
Mr. John J. Sipos  
Assistant Attorneys General  
State of New York  
Office of the Attorney General  
The Capitol  
Albany, NY 12224-0341

Dear Messrs. Dobson and Sipos:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter dated July 11, 2011, about a petition filed by Riverkeeper, Inc., with the NRC under the provisions of Title 10 of the *Code of Federal Regulations* (10 CFR) Section 2.206, "Requests for Action Under This Subpart," to lower the licensing basis peak cladding temperatures (LBPCTs) at Indian Point Nuclear Generating Unit Nos. 2 and 3 (IP2 and IP3). The purpose of the petition was to ensure necessary margins of safety are present to help prevent meltdowns in the event of loss-of-coolant accidents (LOCAs).

Your letter expressed support for the Riverkeeper petition and referenced experimental evidence and also observations from the recent events at the Fukushima Dai-ichi nuclear power plant in Japan that demonstrated the phenomenon of zirconium alloy tubes at high temperatures reacting with water molecules, generating heat and releasing hydrogen, which can be explosive when oxygen is present. All U.S. power reactors use zirconium alloy tubes, referred to as the fuel cladding, to contain uranium fuel pellets in the reactor core. You suggested that NRC regulations designed to limit reactions between the zirconium and the water may be inadequate to prevent excessive fuel damage such as a meltdown.

The NRC regulations are based on experimental data and many years of scientific research. The emergency core cooling systems (ECCS) at U.S. power reactors are designed to limit the temperature rise during a LOCA. After careful consideration of the information submitted in the Riverkeeper petition, the NRC Petition Review Board (PRB) concluded that the petition did not meet the criteria for review under 10 CFR 2.206 because there is another NRC proceeding (rulemaking) in which the petitioners could be a party and through which the petitioner's concerns could be addressed. The PRB informed the petitioner of this in a letter dated August 15, 2011, available from the NRC's Agencywide Documents Access and Management System under Accession No. ML111990531. The safety concerns that were raised are generic and, if determined to have merit, would apply to all power reactors and would require revisions to existing NRC rules. Revisions to NRC rules are properly handled through a petition for rulemaking. The NRC is already considering two petitions for rulemaking, PRM-50-93 and PRM-50-95, about the adequacy of NRC's ECCS requirements. The PRB has forwarded the information in the Riverkeeper 10 CFR 2.206 petition to the rulemaking branch responsible for the petitions for rulemaking. The NRC will consider the information contained in the petition relating to the adequacy of the NRC's ECCS requirements in 10 CFR 50.46, "Acceptance Criteria for Emergency Core Cooling Systems for Light-Water Nuclear Power Reactors," during the review of those petitions for rulemaking.

A. Dobson and J. Sipos

- 2 -

The NRC staff has previously reviewed and accepted the licensing-basis accident analyses for IP2 and IP3. These analyses show that the ECCS are capable of maintaining the LBPCT below the regulatory limit of 2,200 degrees Fahrenheit, as required by 10 CFR 50.46. The PRB found no evidence that IP2 and IP3 were in violation of 10 CFR 50.46 and concluded that there is adequate protection of public health and safety.

Thank you for your interest in these matters.

Sincerely,

A handwritten signature in black ink, appearing to read "E. Leeds", followed by the word "for" in a smaller, cursive script.

Eric J. Leeds, Director  
Office of Nuclear Reactor Regulation

cc: Listserv

The NRC staff has previously reviewed and accepted the licensing-basis accident analyses for IP2 and IP3. These analyses show that the ECCS are capable of maintaining the LBPCT below the regulatory limit of 2,200 degrees Fahrenheit, as required by 10 CFR 50.46. The PRB found no evidence that IP2 and IP3 were in violation of 10 CFR 50.46 and concluded that there is adequate protection of public health and safety.

Thank you for your interest in these matters.

Sincerely,

*/ra/ (BBoger for)*

Eric J. Leeds, Director  
Office of Nuclear Reactor Regulation

cc: Listserv

**DISTRIBUTION:** G20110528/EDATS: OEDO-2011-0512

PUBLIC	RidsNrrDorLPL1-1 R/F	
RidsNrrPMNMorgan	RidsRgn1MailCenter	RidsNrrOd
RidsNrrPMIndianPoint	RidsNrrLASLittle	RidsAcrs_AcnwMailCenter
RidsNrrMailCenter	RidsOgcRp	RidsOgcMailCenter
RidsOpaMail	RidsEdoMailCenter	RidsNrrDorLpl1-1

ADAMS Accession Nos:

Package: ML112212273; Incoming: ML11200A153; Response Ltr: ML112200001 \*via email

OFFICE	LPL1-1/PM	LPL1-1/LA	LPL1-1/PM	Tech Editor*
NAME	NMorgan	SLittle	JBoska	JDougherty
DATE	08/10/11	08/10/11	08/11/11	08/12/11
OFFICE	LPL1-1/BC	DORL/D	NRR/OD	
NAME	NSalgado	JGitter (AHowe for)	ELeeds (BBoger for)	
DATE	08/15/11	08/15/11	08/16/11	

**OFFICIAL RECORD COPY**