July 2, 2010

Mr. David A. Lochbaum
Union of Concerned Scientists
1825 K Street NW, Suite 800
Washington, D.C. 20006

SUBJECT: SUPPORT FOR RECONSIDERATION THAT GENERAL DESIGN CRITERION 4 BE APPLIED TO GENERIC SAFETY ISSUE 191

Dear Mr. Lochbaum:

I am responding to your letters dated April 14, 2010 and April 26, 2010, which provide perspective on Anthony R. Pietrangelo's letter, on behalf of the Nuclear Energy Institute (NEI), dated April 7, 2010 (Accession No. ML101050354). Mr. Pietrangelo's letter requests that the General Design Criterion (GDC) 4 be applied to the closeout of Generic Safety Issue (GSI) -191, which involves pressurized water reactor (PWR) sump performance.

As you are probably aware, the Commission has directed the U.S. Nuclear Regulatory Commission (NRC) staff via Staff Requirements Memorandum (SRM) M100415 (Accession No. ML101370261) to report to the Commission on a number of aspects of the sump performance issue. Among those aspects is the potential application of GDC 4 "Leak before Break (LBB)" to sump performance evaluations. The staff's response providing a discussion of the different options for resolving GSI-191 is due to the Commission by August 27, 2010. In its evaluation, the NRC staff will carefully consider the inputs you and NEI have provided.

As documented in 52 Federal Register 41288, "10 CFR Part 50 Modification of General Design Criterion 4 Requirements for Protection Against Dynamic Effects of Postulated Pipe Ruptures," dated October 27, 1987, the original intent of LBB was to allow removal of pipe whip restraints and barriers whose absence would potentially enhance piping inspection accessibility while maintaining safety. As requested by the Commission, the staff will reconsider the industry-proposed application of LBB to sump performance applications. Specifically the NRC will evaluate whether LBB can be used to exclude debris generation from breaks in certain LBB-qualified lines. This would potentially decrease amounts of debris assumed to be generated and transported to the sump. Key aspects to be addressed in this consideration include, but are not limited to: GDC 4 limitations, safety benefits, changes related either to GSI-191 or to implementation of LBB in other applications, and requirements for piping integrity.

The NRC staff had previously rejected an industry proposal for crediting LBB application for sump evaluations because the expansion of LBB would require a policy decision by the Commission, and because of the potential issues with pursuing such an expansion which, at the time, the staff determined would not provide any added safety benefit beyond that realized by the original scope of LBB. Nonetheless, the NRC staff will re-evaluate the impact of potential LBB applications for GSI-191 resolution in light of the information recently provided and the considerations above.

We appreciate and value your perspective on this issue. If you need additional information about this matter, please contact the responsible branch chief, Michael L. Scott, at 301-415-0565.

Sincerely,

/RA/

Eric J. Leeds, Director
Office of Nuclear Reactor Regulation

We appreciate and value your perspective on this issue. If you need additional information about this matter, please contact the responsible branch chief, Michael L. Scott, at 301-415-0565.

Sincerely,

/RA/

Eric J. Leeds, Director
Office of Nuclear Reactor Regulation

DISTRIBUTION: Y020100085
RidsNrrMailCenter RidsOgcMailCenter RidsNrrDra RidsNrrOd

ADAMS Accession No.: Pkg ML101410254 Letter ML101410220

OFFICE	NRR/DSS/SSIB	NRR/DSS/SSIB: BC	NRR/DCI/CPNB	NRR/DSS: D	NRR: D
NAME	RTorres	MScott	TLupold	WRuland	ELeeds
DATE	05/21/10	05/24/10	06/18/10	06/22/10	07/02/10

OFFICIAL RECORD COPY