

NRR-DMPSPeM Resource

From: Dietrich, Allison
Sent: Friday, September 14, 2018 2:43 PM
To: Helen L Levendosky
Cc: Joe Tanko (jmtanko@aep.com)
Subject: D.C. Cook Unit No. 1 - RAI for Leak-Before-Break LAR (EPID L-2018-LLA-0054)
Attachments: DC Cook Unit 1 RAI for LBB LAR.pdf

By letter dated March 7, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18072A012), Indiana Michigan Power Company (I&M) submitted a license amendment request (LAR) for the Donald C. Cook Nuclear Plant (CNP), Unit No. 1. The proposed amendment would allow for the application of leak-before-break methodology to piping for the accumulator, residual heat removal, and safety injection systems at CNP, Unit No. 1.

The U.S. Nuclear Regulatory Commission staff has reviewed your submittal. The staff has determined that additional information is needed in order to complete the review, as described in the attached request for additional information (RAI). The draft RAI was sent to I&M via electronic mail on August 29, 2018. A clarification telephone conference was held on September 11, 2018. Please respond to this RAI by October 15, 2018.

Please feel free to contact me if you have any questions or concerns.

Sincerely,

Allison W. Dietrich, Project Manager
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation
301-415-2846

Hearing Identifier: NRR_DMPS
Email Number: 570

Mail Envelope Properties (Allison.Dietrich@nrc.gov20180914144300)

Subject: D.C. Cook Unit No. 1 - RAI for Leak-Before-Break LAR (EPID L-2018-LLA-0054)
Sent Date: 9/14/2018 2:43:20 PM
Received Date: 9/14/2018 2:43:00 PM
From: Dietrich, Allison

Created By: Allison.Dietrich@nrc.gov

Recipients:

"Joe Tanko (jmtanko@aep.com)" <jmtanko@aep.com>
Tracking Status: None
"Helen L Levendosky" <hllevendosky@aep.com>
Tracking Status: None

Post Office:

Files	Size	Date & Time
MESSAGE	1135	9/14/2018 2:43:00 PM
DC Cook Unit 1 RAI for LBB LAR.pdf		56015

Options

Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

REQUEST FOR ADDITIONAL INFORMATION REGARDING
LICENSE AMENDMENT REQUEST FOR APPLICATION OF
LEAK-BEFORE-BREAK EVALUATIONS FOR
ACCUMULATOR, SAFETY INJECTION, AND RESIDUAL HEAT REMOVAL PIPING
DONALD C. COOK NUCLEAR PLANT, UNIT NO. 1
DOCKET NO. 50-315

By letter dated March 7, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18072A012), Indiana Michigan Power Company (I&M, the licensee) submitted a license amendment request (LAR) that would allow for the application of leak-before-break (LBB) evaluations for accumulator piping, safety injection (SI) piping, and residual heat removal (RHR) piping at the Donald C. Cook Nuclear Plant (CNP), Unit No. 1. The NRC staff has determined that additional information is necessary in order to complete its review.

Requests for Additional Information (RAIs) 1 through 6 were sent to the licensee on July 19, 2018 (ADAMS Accession No. ML18204A372). RAI 7 is provided below.

RAI 7

The regulatory guidelines in Regulatory Guide 1.45, "Guidance on Monitoring and Responding to Reactor Coolant System Leakage" (ADAMS Accession No. ML073200271) state that "all monitoring systems referenced in the technical specifications should respond to a leakage increase of 1 [gallon per minute (gpm)] (3.8 [liters per minute]) in 1 hour or less."

In its application, the licensee stated, "A CNP leakage detection capability calculation demonstrates the 0.8 gpm leak detection capability is valid for leaks in the Accumulator, RHR, and SI piping. As such, the 0.8 gpm leak detection capability is the basis for LBB evaluation of the Accumulator, RHR, and SI lines with no response time assumed."

The NRC staff considers response time to include both transport response time and detector response time. The application is not clear what is meant by "no response time assumed."

Clarify the assumption of "no response time assumed" in the calculation described above, and its effect on the calculation results and acceptability.