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

March 12, 2019

LICENSEE: INDIANA MICHIGAN POWER COMPANY

FACILITY: DONALD C. COOK NUCLEAR PLANT, UNIT 1

SUBJECT: SUMMARY OF FEBRUARY 27, 2019, PUBLIC TELECONFERENCE WITH INDIANA MICHIGAN POWER COMPANY (I&M) REGARDING REVIEW OF LICENSE AMENDMENT REQUEST FOR APPROVAL OF LEAK-BEFORE-BREAK METHODOLOGY FOR REACTOR COOLANT SYSTEM SMALL DIAMETER PIPING (EPID-2019-LLA-0054)

On February 27, 2019, a Category 1 public teleconference was held between the U.S. Nuclear Regulatory Commission (NRC) staff and representatives of Indiana Michigan Power Company (I&M, the licensee). The teleconference was held at the NRC Headquarters located in Rockville, Maryland. The purpose of the teleconference was to discuss the licensee's proposed license amendment request (LAR) to apply leak-before-break (LBB) methods to certain reactor coolant system (RCS) small diameter branch lines at the Donald C. Cook Nuclear Plant (CNP), Unit 1. Specifically, the NRC staff requested the licensee to clarify its proposed LBB approach under NUREG-0800, Standard Review Plan (SRP), Section 3.6.3[1], by means of Westinghouse LBB methods. The LAR under review, dated March 7, 2018, is available in the NRC's Agencywide Documents Access and Management System (ADAMS) (Accession No. ML18072A012).

SRP 3.6.3 states, in part, that specific areas of review for the NRC staff to consider during performance of an LBB evaluation include, (1) deterministic fracture mechanics, and (2) leak rate evaluation. Regarding the fracture mechanics analysis, the NRC staff informed the licensee that the LAR provided sufficient information for the staff to make a safety determination. Regarding the leak rate evaluation, the NRC staff informed the licensee that additional information was needed. Specifically, the LAR requests NRC approval for LBB on all accumulator, safety injection (SI), and residual heat removal (RHR), piping segments. Since portions of these piping segments are downstream of check valves, the staff stated it has questions related to RCS leakage detection guidance (i.e., SRP 3.6.3 and Regulatory Guide 1.45[2]). The NRC staff and the licensee discussed the following regulatory guidance:

SRP 3.6.3, Section II, "Acceptance Criteria," states, in part:

> LBB should only be applied to high energy, ASME Code Class 1 or 2 piping or the equivalent. Applications to other high energy piping will be considered based on an evaluation of the proposed design and in-service inspection requirements as compared to ASME Code Class 1 and 2 requirements.

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[1] NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition," SRP 3.6.3, Revision 1, "Leak-Before-Break Evaluation Procedures," ADAMS Accession No. ML063600396, dated March 2007.

[2] Regulatory Guide 1.45, Revision 1, "Guidance on Monitoring and Responding to Reactor Coolant System Leakage," ADAMS Accession No. ML0732002701, dated June 2007.

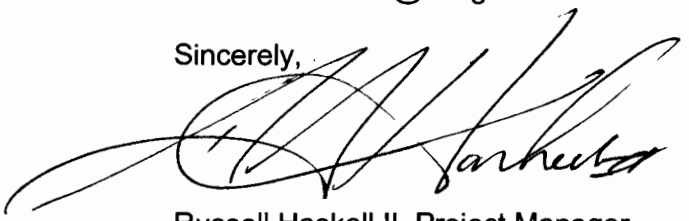
In response, the licensee stated that portions the proposed accumulator, SI, and RHR piping segments (under review) are considered to be moderate energy piping systems (vs. high energy), and therefore an LBB analysis is not required, for those segments. Furthermore, the licensee stated that the portions of the moderate energy piping segments were not necessary for the evaluation of LBB to proceed. The NRC staff acknowledged this new information from the licensee and suggested for the LAR to be revised. The licensee concurred, and proposed a revision to the LAR which will reflect excluding portions of the accumulator, SI, and RHR piping segments, not meeting the LBB acceptance criteria, as stated above.

The staff informed the licensee that previously distributed RAI-8 and RAI-9 requests[3] would be altered to reflect the new information that had developed during the teleconference. The staff's revised RAIs will request information to support the RCS leakage detection portion of the evaluation (i.e., sensitivity analysis, detector calculations, proximity of detector, detector redundancy, etc.). The revised RAIs will also request the licensee to verify that the CNP, Unit 1 LBB analysis includes RCS activity related to current nuclear fuel performance.

All feedback or comments expressed by the NRC staff during the meeting does not establish a regulatory position or constitute the acceptability of methodologies or changes discussed. One member of the public was identified on the teleconference. No public meeting feedback forms or comments have been received by the NRC staff.

Please direct any inquiries to me at 301-415-1129 or Russell.Haskell@nrc.gov.

Sincerely,



Russell Haskell II, Project Manager
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-315

Enclosure:
List of Attendees

cc: Listserv

[3] ADAMS Accession No. ML19011A351, dated January 11, 2019.

LIST OF ATTENDEES

FEBRUARY 27, 2019, PUBLIC TELECONFERENCE

WITH INDIANA MICHIGAN POWER CO.

Name	Affiliation
Shaun Anderson	U. S. Nuclear Regulatory Commission (NRC)
David Wrona	NRC
Russell Haskell	NRC
David Nold	NRC
John Tsao	NRC
Steve Jones	NRC
Garry Steven	NRC
Seung Min	NRC
Ravinder Grover	NRC
Khadijah West	NRC
Gerard Purciarello	NRC
Raymond Ng	NRC
John Ellegood	NRC
Eric Duncan	NRC
Jeffrey Poehler	NRC
Jay Wallace	NRC
Robert Tregoning	NRC
Patrick Raynaud	NRC
Dan Widrevitz	NRC
Jud Winkler	Indian Michigan Power Company (I&M)
Jeff Hudson	I&M
Ben Horner	I&M
Greg Hill	I&M
Michael Scarpello	I&M
Helen Levendosky	I&M
Joe Tanko	I&M
Doug Badgero	I&M
Eric Johnson	I&M
Dave Dolby	I&M
Sara Weindorf	Westinghouse
Todd Trygier	State of Michigan (Dept. of Environmental Quality)

Enclosure

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J. Poehler, NRR
S. Garry, NRR
K. West, NRR
R. Grover, NRR

ADAMS Accession No. ML19067A048

OFFICE	NRR/DORL/LPL3/PM	NRR/DORL/LPL3/LA	NRR/DORL/LPL3/BC	NRR/DORL/LPL3/PM
NAME	RHaskell	SRohrer	DWrona	RHaskell
DATE	3/7/19	3/7/19	3/12/19	3/12/19

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