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Indiana Michigan Power

Cook Nuclear Plant
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Bridgman, MI 49106
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February 29, 2008

AEP:NRC:8054-02
10 CFR 50.54(f)

Docket Nos.: 50-315
50-316

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
11555 Rockville Pike
Rockville, Maryland 20852

Donald C. Cook Nuclear Plant Units 1 and 2
SUPPLEMENTAL RESPONSE TO
NUCLEAR REGULATORY COMMISSION GENERIC LETTER 2004-02:
POTENTIAL IMPACT OF DEBRIS BLOCKAGE ON EMERGENCY RECIRCULATION DURING
DESIGN BASIS ACCIDENTS AT PRESSURIZED WATER REACTORS

This letter provides I&M's supplemental response to GL 2004-02. The documents referenced in this letter and its attachments are identified in Attachment 1. The abbreviations, acronyms, and symbols are defined in Attachment 2.

By GL 2004-02 (Reference 1), the NRC identified concerns regarding the potential for post-accident debris to impede or prevent the recirculation functions of emergency core cooling and containment spray systems at PWRs. The NRC requested that PWR licensees mechanistically evaluate this potential for their plants and identify corrective measures that would be taken.

By Reference 2, I&M provided initial information regarding the methodology and containment walkdowns that would be used for the requested mechanistic evaluations at CNP, and the planned completion date for these activities. By Reference 3, I&M provided a comprehensive description of the in-progress and planned actions to address the concerns identified in GL 2004-02, including plant modifications, implementation schedule, mechanistic evaluation methodology, emergency core cooling system head margin, sump strainer areas, postulated head loss, potential flow path choke points, downstream effects, sump strainer structural considerations, licensing basis changes, and programmatic controls. By Reference 4, I&M provided revised commitments and updated a portion of the information previously provided by Reference 3.

By Reference 5, the NRC requested additional information regarding the responses provided in References 2, 3, and 4. By Reference 6, the NRC authorized an alternative approach that permitted an extended due date for the requested additional information. By Reference 7, I&M updated the information provided in References 2, 3, and 4, and provided a portion of the additional information requested by Reference 5.

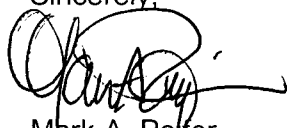
A116
NRC

By Reference 8, I&M committed to provide the remainder of the requested additional information in an update to the GL 2004-02 response no later than December 31, 2007. This commitment was consistent with the NRC expectation, stated in Reference 150, that PWR licensees submit supplemental responses by December 31, 2007. By Reference 151, the NRC authorized an extension to February 29, 2008, for submittal of supplemental responses.

Attachment 3 to this letter provides the supplemental response to GL 2004-02 for CNP. The information in this supplement supersedes that provided in References 2, 3, 4, 7, and 8. Attachment 4 provides general figures. Attachment 5 provides jet impingement testing photographs. Attachment 6 lists each RAI question from Reference 5 and provides a reference to the section of Attachment 3 in which the requested information is provided, and/or provides other information to address the question. Attachment 7 provides the new regulatory commitments made in this letter in tabular form.

Should you have any questions, please contact Mr. James M. Petro, Jr., Regulatory Affairs Manager, at (269) 466-2491.

Sincerely,



Mark A. Peller
Site Vice President

JRW/rdw

Attachments:

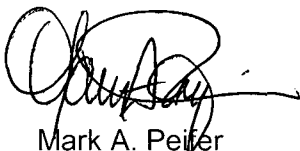
1. References
2. Abbreviations and Acronyms
3. Supplemental Response to GL 2004-02 and Request for Additional Information
4. General Figures
5. Jet Impingement Testing Photographs
6. Response to NRC Request for Additional Information
7. Regulatory Commitments

- c:
- J. L. Caldwell – NRC Region III
 - K. D. Curry – AEP Ft. Wayne (w/o attachments)
 - J. T. King – MPSC (w/o attachments)
 - MDEQ – WHMD/RPMWS (w/o attachments)
 - NRC Resident Inspector
 - P. S. Tam – NRC Washington, DC

AFFIRMATION

I, Mark A. Peifer, being duly sworn, state that I am Site Vice President of Indiana Michigan Power Company (I&M), that I am authorized to sign and file this request with the Nuclear Regulatory Commission on behalf of I&M, and that the statements made and the matters set forth herein pertaining to I&M are true and correct to the best of my knowledge, information, and belief.

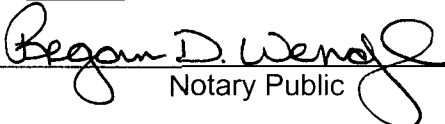
Indiana Michigan Power Company



Mark A. Peifer
Site Vice President

SWORN TO AND SUBSCRIBED BEFORE ME

THIS 29th DAY OF February, 2008



Notary Public

My Commission Expires REGAN D. WENZEL
Notary Public, Berrien County, MI
My Commission Expires Jan. 21, 2009