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Indiana Michigan Power
Cook Nuclear Plant
One Cook Place
Bridgman, MI 49106
AEP.com

September 2, 2011

AEP-NRC-2011-62
10 CFR 50.90

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

SUBJECT: Donald C. Cook Nuclear Plant Unit 1 and Unit 2
Docket Nos. 50-315 and 50-316
Supplement to Request for License Amendment to Adopt National Fire Protection Association (NFPA) 805 Performance-Based Standard for Fire Protection for Light Water Reactor Generating Plants (2001 Edition)

- References:**
- 1) Letter from M. H. Carlson, Indiana Michigan Power Company (I&M), to U. S. Nuclear Regulatory Commission (NRC) Document Control Desk, "Request for License Amendment to Adopt National Fire Protection Association (NFPA) 805 Performance-Based Standard for Fire Protection for Light Water Reactor Generating Plants (2001 Edition)," AEP-NRC-2011-1, dated July 1, 2011 (ADAMS Accession Number ML11188A145).
 - 2) NRC Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," Revision 1, dated November 2002 (ADAMS Accession Number ML023240437).

Dear Sir or Madam:

This letter supplements Indiana Michigan Power Company's (I&M's) request for a license amendment to adopt National Fire Protection Association (NFPA) 805, "Performance-Based Standard for Fire Protection for Light Water Reactor Generating Plants," for the Donald C. Cook Nuclear Plant (CNP).

By Reference 1, I&M proposed to amend Facility Operating Licenses DPR 58 and DPR-74 for CNP Unit 1 and Unit 2. I&M proposed to adopt a new fire protection licensing basis that complies with NFPA 805 in accordance with the requirements of 10 CFR 50.48(a) and (c). In Attachment W of Enclosure 2 of Reference 1, I&M stated that the total plant risk for CNP is not higher than 1E-4/year for Core Damage Frequency or 1E-5/year for Large Early Release Frequency. These values correspond to the baseline risk criteria specified in Regulatory Guide 1.174 (Reference 2) for small changes in risk resulting from plant specific changes to the licensing basis. In a telephone discussion on August 23, 2011, the NRC staff requested that I&M provide additional detail regarding total plant risk values for CNP. This letter provides the requested additional detail.

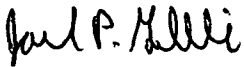
A006
NRC

Enclosure 1 to this letter provides an affirmation statement. Enclosure 2 provides the additional detail requested by the NRC staff. The additional detail provided in Enclosure 2 continues to support the conclusion that the change in risk associated with the proposed amendment is in accordance with the acceptance guidelines as stated in Regulatory Guide 1.174.

Copies of this letter and its enclosures are being transmitted to the Michigan Public Service Commission and Michigan Department of Environmental Quality, in accordance with the requirements of 10 CFR 50.91.

This letter contains no new or modified regulatory commitments. Should you have any questions regarding this proposed amendment, please contact Mr. Michael K. Scarpello, Regulatory Affairs Manager, at (269) 466-2649.

Sincerely,



Joel P. Gebbie
Site Vice President

JRW/jen

Enclosures:

1. Affirmation
2. Additional Detail Regarding Total Risk

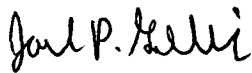
c: J. T. King, MPSC
S. M. Krawec, AEP Ft. Wayne, w/o enclosures
MDEQ – WHMD/RPS
NRC Resident Inspector
M. A. Satorius, NRC Region III
P. S. Tam – NRC Washington DC

Enclosure 1 to AEP-NRC-2011-62

AFFIRMATION

I, Joel P. Gebbie, 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.

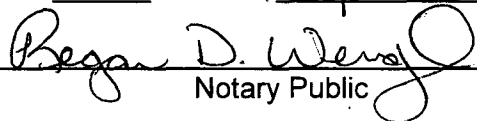
Indiana Michigan Power Company



Joel P. Gebbie
Site Vice President

SWORN TO AND SUBSCRIBED BEFORE ME

THIS 2nd DAY OF September, 2011



Notary Public

My Commission Expires January 21, 2018

Enclosure 2 to AEP-NRC-2011-62

ADDITIONAL DETAIL REGARDING TOTAL RISK

- References:
- 1) Letter from M. H. Carlson, Indiana Michigan Power Company (I&M), to U. S. Nuclear Regulatory Commission (NRC) Document Control Desk, "Request for License Amendment to Adopt National Fire Protection Association (NFPA) 805 'Performance-Based Standard for Fire Protection for Light Water Reactor Generating Plants (2001 Edition),' dated July 1, 2011 (ADAMS Accession Number ML11188A145).
 - 2) NRC Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," Revision 1, dated November 2002 (ADAMS Accession Number ML023240437).

Background

By Reference 1, I&M proposed to amend Facility Operating Licenses DPR 58 and DPR-74 for Donald C. Cook Nuclear Plant (CNP) Unit 1 and Unit 2. I&M proposed to adopt a new fire protection licensing basis that complies with NFPA 805 in accordance with the requirements of 10 CFR 50.48(a) and (c). In Attachment W of Enclosure 2 of Reference 1, I&M stated that the total plant risk for CNP is not higher than 1E-4/year for Core Damage Frequency or 1E-5/year for Large Early Release Frequency. These values correspond to the baseline risk criteria specified in Regulatory Guide 1.174 (Reference 2) for small changes in risk resulting from plant specific changes to the licensing basis. In a telephone discussion on August 23, 2011, the NRC staff requested that I&M provide additional detail regarding total plant risk values for CNP. The requested detail consists of the CNP-specific values for total CDF and LERF, along with the values for the significant risk contributors (e.g., internal, fire, and seismic risks) to these totals. The requested information is provided below. CDF and LERF values for high wind and tornados are not included as their values are negligible.

Requested Information

	<u>Unit 1</u>	<u>Unit 2</u>
Internal Events CDF	1.322E-05/yr	1.323E-05/yr
Fire CDF	3.55E-05/yr	2.86E-05/yr
Seismic CDF	3.17E-06/yr	3.17E-06/yr
Total CDF	5.2E-05/yr	4.5E-05/yr
Internal Events LERF	2.701E-06/yr	2.700E-06/yr
Fire LERF	3.43E-06/yr	2.23E-06/yr
Seismic LERF	9.82E-07/yr	9.82E-07/yr
Total LERF	7.1E-06/yr	5.9E-06/yr