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

May 11, 2007

AEP:NRC:7170
10 CFR 170.11

Docket Nos.: 50-315
50-316

U. S. Nuclear Regulatory Commission
ATTN: Jesse L. Funches, Chief Financial Officer
11555 Rockville Pike
Rockville, Maryland 20852

Donald C. Cook Nuclear Plant Units 1 and 2
WITHDRAWAL OF DONALD C. COOK NUCLEAR PLANT AS PILOT PLANT FOR
IMPLEMENTATION OF CONTAINMENT SPRAY MODIFICATIONS FOR POST-LOCA
WATER MANAGEMENT

- References: 1. Letter from J. N. Jensen, Indiana Michigan Power Company (I&M), to J. L. Funches, U. S. Nuclear Regulatory Commission (NRC), "Request For Exemption from Fee Requirements Associated with Implementation of Containment Spray Modifications for Post-LOCA Water Management," AEP:NRC:6170, dated September 15, 2006 (ML062620317).
2. Letter from J. L. Funches, NRC, to J. N. Jensen, I&M, dated October 13, 2006 (ML062860402).
3. NRC Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors," dated September 13, 2004 (ML042360586).

By Reference 1, I&M requested that Donald C. Cook Nuclear Plant (CNP) be considered a pilot plant for elimination of automatic containment spray actuation, and requested a waiver of associated NRC fees. By Reference 2, the NRC granted I&M a fee waiver under the provisions of 10 CFR 170.11(b)(1). For the reasons described below, I&M has elected to withdraw CNP as a pilot plant for elimination of automatic containment spray actuation.

The elimination of automatic containment spray actuation has been identified by industry representatives and the NRC staff as a potentially successful strategy for optimizing long term cooling availability following a loss-of-coolant accident. Elimination of automatic containment spray actuation would reduce debris generation and transport, and extend the time available to establish a reliable recirculation path and/or implement other remedial or compensatory actions.

At the time I&M volunteered CNP as a pilot plant, I&M anticipated that elimination of automatic containment spray actuation could justify a reduction in the scope of the CNP recirculation sump modifications performed to address concerns identified in NRC Generic Letter 2004-02 (Reference 3). However, as described below, I&M's continued assessment of the analytical work, the potential benefits, the scope of plant modifications, and the associated schedular considerations associated with the strategy indicate that CNP should be withdrawn as a pilot plant.

I&M initially believed that, with some revisions, the affected major analyses would support elimination of automatic containment spray actuation at CNP. As work has progressed on this project and after further review of these analyses, including consultation with several vendors used to support revisions to these analyses, it is evident that the necessary analytical and licensing activities are significantly more complex than originally envisioned. For example, some of these analyses would likely have to be integrated, a new source term would likely be needed, and use of new computer codes would likely be necessary. It is unlikely that the identified analytical changes and the associated licensing actions could be completed within a timeframe appropriate for CNP to participate as a pilot plant, or in time to reduce the scope of planned CNP containment recirculation sump modifications.

Based on the considerations identified above, I&M hereby withdraws CNP as the pilot plant for elimination of automatic containment spray as a water management strategy. Withdrawal of CNP as a pilot plant will allow the NRC to select another plant to pilot this industry initiative. I&M intends to pursue elimination of automatic containment spray at a later date, although not as a pilot plant.

These matters were discussed with members of the NRC staff in an informal meeting on April 17, 2007. This letter contains no new regulatory commitments. Should you have any questions, please contact Ms. Susan D. Simpson, Regulatory Affairs Manager, at (269) 466-2428.

Sincerely,



Mark A. Peifer
Site Support Services Vice President

JRW/jen

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