



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, ILLINOIS 60532-4352

September 07, 2011

Mr. Larry Weber  
Senior Vice President and  
Chief Nuclear Officer  
Indiana Michigan Power Company  
Nuclear Generation Group  
One Cook Place  
Bridgman, MI 49106

SUBJECT: INFORMATION REQUEST TO SUPPORT UPCOMING INSPECTION OF  
PREOPERATIONAL TESTING OF AN INDEPENDENT SPENT FUEL  
STORAGE INSTALLATION AT THE D.C. COOK NUCLEAR POWER PLANT,  
UNITS 1 AND 2

Dear Mr. Weber:

This letter is to request information to support our inspection of the Pre-Operational Testing of an Independent Spent Fuel Storage Installation (ISFSI) beginning October 10, 2011, at the D.C. Cook Nuclear Power Plant. This inspection will be performed in accordance with U.S. Nuclear Regulatory Commission (NRC) Inspection Procedures 60854.1 and 60856.1.

The inspection will take place in four parts: (1) an offsite review of your calculations used to support heavy loads movements throughout the site with onsite inspection of the structures; (2) an onsite review of your Title 10 of the Code of Federal Regulations (CFR) 72.212 Report; (3) an offsite review of procedures, evaluations, and programs to demonstrate site readiness to load spent fuel; and (4) onsite observations of dry run operations.

Experience has shown that these inspections are resource intensive both for the NRC inspectors and the utility staff. In order to minimize the impact that the inspection has on the site and to ensure a productive inspection, we have enclosed a list of documents required for the inspection.

The document request is split into two sections. Section A requests documents associated with calculations used to support heavy loads movements throughout the site. Unless otherwise discussed, please provide this information to the NRC Region III office no later than October 10, 2011. Section B requests documents covering the balance of the inspection. Please provide this information to the NRC Region III office no later than the first NRC dry run demonstration. The documents requested are necessary to ensure the inspection team is adequately prepared for the inspection. The information may be provided either electronically or in hard copy.

If there are any questions about the material requested, or the inspection in general, please do not hesitate to call or e-mail Mr. Rhex Edwards at 630-829-9722 or [Rhex.Edwards@nrc.gov](mailto:Rhex.Edwards@nrc.gov).

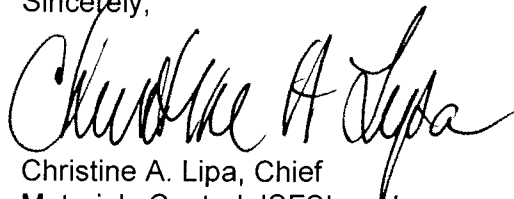
In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the

NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

This letter does not contain new or amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing information collection requirements were approved by the Office of Management and Budget, Control Number 3150-0011.

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid Office of Management and Budget Control Number.

Sincerely,

A handwritten signature in black ink, appearing to read "Christine A. Lipa". The signature is fluid and cursive, with the first name being the most prominent.

Christine A. Lipa, Chief  
Materials Control, ISFSI, and  
Decommissioning Branch  
Division of Nuclear Materials Safety

Docket Nos. 50-315; 50-316; 72-072  
License Nos. DPR-58; DPR-74

Enclosures:

1. Requested Information for NRC Inspection of  
Pre-Operational Testing of an Independent Spent  
Fuel Storage Installation (ISFSI) – Section A
2. Requested Information for NRC Inspection of  
Pre-Operational Testing of an Independent Spent  
Fuel Storage Installation (ISFSI) – Section B

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**Requested Information for NRC Inspection of Pre-Operational Testing of an Independent  
Spent Fuel Storage Installation (ISFSI) – Section A**

1. Design documentation, design calculations, safety evaluations (72.48 and 50.59), and resultant structural modifications that demonstrated the fuel cask could be safely placed into the spent fuel pool and loaded with spent fuel, lifted from the spent fuel pool and placed on the designated laydown areas, transferred to the transport vehicle, and transported to the ISFSI.
2. Current spent fuel cask drop analysis or single failure proof crane evaluation including the trolley, the bridge, and the support structure.
3. Other supporting documents that demonstrate equipment to maintain safe shutdown will be unaffected (i.e., calculations associated with the spent fuel cask drop analysis) and that potential offsite releases at the exclusion boundary will be within 10 CFR Part 100 limits after a postulated spent fuel cask drop (if applicable).
4. Calculations for rigging and special lifting devices associated with lifting the spent fuel storage and transfer casks.
5. Documents that establish the total lift weights for loaded spent fuel storage and transfer casks.
6. Site procedures associated with "Control of Heavy Loads," transport of loaded spent fuel storage and transfer casks during plant operations, and any contingency actions taken to mitigate the consequences of a spent fuel storage or transfer cask drop.
7. An electronic copy of the D.C. Cook UFSAR.

**Requested Information for NRC Inspection of Pre-Operational Testing of an Independent  
Spent Fuel Storage Installation (ISFSI) – Section B**

1. A copy of the 10 CFR 72.212 report.
2. A copy of all 72.48 Screenings performed to date.
3. A copy of the ISFSI ALARA plan.
4. A copy of calculations and / or drawings described below:
  - a. Tornado missile analysis;
  - b. Offsite ISFSI dose analysis;
  - c. Cask spacing analysis;
  - d. Pad cask layout; and
  - e. Fire hazards analysis.
5. A list of condition reports since January 2009 related to:
  - a. Dry cask storage program;
  - b. Dry cask storage pad; and
  - c. Fuel handling building crane.
6. A compliance matrix for fuel selected for this campaign indicating that it meets Technical Specifications.
7. A copy of the site's emergency plan that incorporates the ISFSI.
8. A copy of fuel handling building crane:
  - a. Trolley factory acceptance test;
  - b. Trolley site acceptance test;
  - c. Last periodic inspection;
  - d. Last frequent inspection;
  - e. Single failure proof compliance matrix; and
  - f. Vendor recommendations, site procedures, and documentation of the crane preventive maintenance.
9. A copy of helium quality certificates used for helium backfilling of dry cask storage canisters.
10. A copy of the internal QA review associated with the ISFSI program if one has been performed.
11. A copy of ISFSI related training records for personnel.
12. A copy of an ISFSI organizational chart that identify roles and responsibilities of site and corporate personnel.

13. A copy of procedures used for ISFSI operations including:
  - a. HI-TRAC, HI-STORM and MPC receipt inspection;
  - b. HI-TRAC, HI-STORM, and MPC preparation;
  - c. MPC loading;
  - d. MPC processing;
  - e. MPC welding;
  - f. MPC non-destructive testing;
  - g. MPC unloading;
  - h. HI-TRAC movement;
  - i. HI-STORM movement;
  - j. HI-STORM processing;
  - k. HI-STORM radiation surveys;
  - l. HI-STORM technical specification monitoring;
  - m. Fuel selection;
  - n. 72.48 screening and evaluation process;
  - o. Manual movement of the fuel handling building crane;
  - p. Rigging and lifting;
  - q. Daily inspection of slings, yoke, and HI-TRAC trunnions; and
  - r. ISFSI contingencies.
14. A copy of your QA program guidance document.
15. A copy of your readiness document including infrequent evolution briefings, if you have prepared one, based on lessons learned from audits at other sites.
16. A copy of the latest HI-TRAC trunnion annual testing report.

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Sincerely,

/RA/

Christine A. Lipa, Chief  
Materials Control, ISFSI, and  
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Pre-Operational Testing of an Independent Spent  
Fuel Storage Installation (ISFSI) – Section B

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