



**INDIANA
MICHIGAN
POWER**

A unit of American Electric Power

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

December 17, 2012

AEP-NRC-2012-105
10 CFR 72.30(b)
10 CFR 50.4

Docket No.: 50-315
50-316
72-072

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

Donald C. Cook Nuclear Plant Units 1 and 2
INDEPENDENT SPENT FUEL STORAGE INSTALLATION (ISFSI)
DECOMMISSIONING FUNDING PLAN

In accordance with the requirements of 10 CFR 72.30(b), Indiana Michigan Power Company (I&M), the licensee for Donald C. Cook Nuclear Plant Units 1 and 2 (CNP), is submitting a Decommissioning Funding Plan for Nuclear Regulatory Commission (NRC) review and approval.

Enclosure 1 to this letter provides I&M's ISFSI Decommissioning Funding Plan for CNP. Enclosure 2 to this letter provides the current decommissioning study for CNP. There are no new or revised commitments in this letter. Should you have any questions, please contact Mr. Michael K. Scarpello, Regulatory Affairs Manager, at (269) 466-2649.

Sincerely,

Joel P. Gebbie
Site Vice President

JMT/kmh

- Enclosures: 1. Decommissioning Funding Plan for Donald C. Cook Nuclear Plant
2. Decommissioning Study of the D.C. Cook Nuclear Power Plant (Knight Cost Engineering Services, LLC, December, 2012)

- c: C. A. Casto, NRC Region III
J. T. King, MPSC
S. M. Krawec, AEP Ft. Wayne, w/o enclosures
MDEQ – RMD/RPS
NRC Resident Inspector
T. J. Wengert, NRC Project Manager

ADDI
NMSS26
NRC
NMSS

ENCLOSURE 1 TO AEP-NRC-2012-105

Decommissioning Funding Plan for Donald C. Cook Nuclear Plant

DECOMMISSIONING FUNDING PLAN FOR
INDEPENDENT SPENT FUEL STORAGE INSTALLATION
AT DONALD C. COOK NUCLEAR PLANT

As described in 10 CFR 72.13(c), 10 CFR 72.30(b) applies to licensees with a General License for an Independent Spent Fuel Storage Installation (ISFSI). Indiana Michigan Power Company (I&M), the licensee for Donald C. Cook Nuclear Power Plant (CNP) Units 1 and 2 has a General License for an ISFSI and therefore is obligated to meet the requirements of 10 CFR 72.30(b). This Decommission Funding Plan (DFP) provides the required information for Nuclear Regulatory Commission (NRC) review and approval as described in 10 CFR 72.30(b).

10 CFR 72.30(b)(1) requires information on how reasonable assurance will be provided that funds will be available to decommission the CNP ISFSI.

The projected costs of decommissioning the CNP are collected through jurisdictional rates and through earnings on prior collections which are held in external trust funds. The projected decommissioning costs are based on a site-specific study that is updated periodically. The most recent estimate was completed in December 2012, by Knight Cost Engineering Services (Knight CES). The site-specific study includes the estimates for the cost of decommissioning the CNP ISFSI. All funds collected for the eventual decommissioning of the CNP (including those for decommissioning the ISFSI) are deposited to a Nuclear Decommissioning Trust (NDT) fund that is external to the company.

10 CFR 72.30(b)(2) requires a detailed cost estimate (DCE) for decommissioning, in an amount that reflects the following:

- (i) The cost of an independent contractor to perform all decommissioning activities;*
- (ii) An adequate contingency factor; and*
- (iii) The cost of meeting the 10 CFR 20.1402 criteria for unrestricted use*

The report from Knight CES assumes that a decommissioning general contractor would be selected to perform the decommissioning activities. The report also includes contingency factors for the various aspects of the decommissioning process and it details and justifies the contingency factors used. The cost estimate also details separately the costs for radiological decommissioning and decontamination, as well as the costs for spent nuclear fuel storage and disposal and the costs to restore the plant site to a Greenfield condition.

Details of this information can be found in the Knight CES Decommissioning Study for D.C. Cook Nuclear Power Plant, December 2012, Pages 17-18, 43 and 53-58 (Enclosure 2).

10 CFR 72.30(b)(3) requires Identification of and justification for using the key assumptions contained in the DCE.

The Knight CES Decommissioning Study for D.C. Cook Nuclear Plant, December 2012, consists of five decommissioning scenarios, comprised of four DECON scenarios and one SAFSTOR scenario.

Two of the DECON scenarios involve decommissioning of the ISFSI (Scenarios 3 and 5). Scenario 3 assumes that all spent fuel is stored in the ISFSI and is decommissioned from that location. The current estimated total cost for Scenario 3 is \$4,611,447.00. Scenario 5 assumes that not all spent fuel is stored in the ISFSI (some spent fuel remains in the spent fuel pool). The current estimated total cost for Scenario 5 is \$2,921,990.00.

Section 4.0 of the Knight CES Decommissioning Study for D.C. Cook Nuclear Power Plant, December 2012, Pages 19-22 (Enclosure 2) describes specific key assumptions regarding the decommissioning cost estimates and contains the justification for the assumptions being made.

10 CFR 72.30(b)(4) requires a description of the method of assuring funds for decommissioning from 10 CFR 72.30(e), including means for adjusting cost estimates and associated funding levels periodically over the life of the facility.

As previously described, I&M collects the projected costs of decommissioning through jurisdictional rates and through earnings on prior collections held in external trust funds. I&M's jurisdictional State Commissions review the projected decommissioning costs and the current status of the decommissioning trust fund as part of regulatory proceedings, and can adjust the ongoing amount that will be recovered in rates for decommissioning funding. In addition, I&M periodically submits a Funding Adequacy Study to the state jurisdictional commissions that updates the cost projections and the funded status of the NDT. If the funded status of the NDT was inadequate as compared to the cost estimates, I&M could initiate a rate request to seek a revision in the amount collected from customers and contributed to the trust fund.

10 CFR 72.30(b)(5) requires the volume of onsite subsurface material containing residual radioactivity that will require remediation to meet the criteria for license termination.

CNP utilizes the HI-STORM 100 Cask System, which consists of a multi-purpose canister (MPC) enclosure vessel which is placed inside of a HI-STORM overpack for ISFSI pad storage. The MPC is loaded, dried, backfilled with helium gas, sealed (welded shut), and decontaminated inside the plant prior to being placed inside the concrete HI-STORM overpack. The Safety Analysis Report at Section 7.2, "Requirements For Normal and Off-Normal Conditions of Storage," states:

"The MPC uses multiple confinement barriers provided by the fuel cladding and the MPC enclosure vessel to assure that there is no release of radioactive material to the environment. Chapter 3 shows that all confinement boundary components are maintained within their Code-allowable stress limits during normal and off-normal storage conditions. Chapter 4 shows that the peak confinement boundary component temperatures and pressures are within the design basis limits for all normal and off-normal conditions of storage. Section 7.1 provides a discussion as to how the Holtec MPC design, welding, testing and inspection requirements meet the guidance of ISG-18 such that

leakage from the confinement boundary may be considered non-credible. Since the MPC confinement vessel remains intact, and the design bases temperatures and pressure are not exceeded, leakage from the MPC confinement boundary is not credible during normal and off-normal conditions of storage.”

As such there is no source of onsite subsurface material containing residual radioactivity that will require remediation as a result of ISFSI operations and no volume has been assumed in the decommissioning cost estimate for the ISFSI.

10 CFR 72.30(b)(6) requires a certification that financial assurance for decommissioning has been provided in the amount of the cost estimate for decommissioning.

Indiana Michigan Power Company, the licensee for Donald C. Cook Nuclear Power Plant Units 1 and 2 hereby certifies, as evidenced by “Donald C. Cook Nuclear Plant Units 1 and 2 DECOMMISSIONING FUNDING STATUS REPORT,” (AEP-NRC-2011-22), dated March 30, 2011, filed pursuant to 10 CFR 50.75(f)(1), that financial assurance for decommissioning CNP Unit 1 and Unit 2, as well as the ISFSI, has been provided. This amount meets or exceeds the requirements of 10 CFR 50.75(b), which pursuant to 10 CFR 72.30(e)(5) provides the requisite financial assurance of the ISFSI decommissioning cost.