

Indiana Michigan Power
Cook Nuclear Plant
Cook Place

One Cook Place Bridgman, MI 49106 AFPcom

March 23, 2005

AEP:NRC:5075 10 CFR 50.75(f)(1)

Docket Nos:

50-315

50-316

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Mail Stop O-P1-17 Washington, DC 20555-0001

Donald C. Cook Nuclear Plant Units 1 and 2 DECOMMISSIONING FUNDING STATUS REPORT

In accordance with the requirements of 10 CFR 50.75(f)(1), Indiana Michigan Power Company, the licensee for Donald C. Cook Nuclear Plant (CNP), Units 1 and 2, hereby submits the attached report on the status of decommissioning funding. The recovery of decommissioning funds for the eventual decommissioning of CNP Units 1 and 2 is fully assured through cost of service regulation and the resulting contribution of funds into an external trust.

When projected to the current license expiration date for each unit, the Nuclear Decommissioning Trust balance is greater than the escalated Nuclear Regulatory Commission minimum cost of decommissioning, confirming compliance with the financial assurance requirements of 10 CFR 50.75.

This letter contains no new commitments. If you have any questions on the report or decommissioning funding, please contact Mr. John A. Zwolinski, Safety Assurance Director, at (269) 466-2428.

Sincerely,

J. N. Jensen

Site Vice President

DMB/rdw

Attachment/Enclosures

Apol

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c: J. L. Caldwell - NRC Region III

K. D. Curry - AEP Ft. Wayne, w/o attachment/enclosures

J. E. Dyer, NRC Region III

J. T. King, MPSC, w/o attachment/enclosures

C. F. Lyon – NRC Washington DC

MDEQ - WHMD/HWRPS, w/o attachment/enclosures

NRC Resident Inspector

ATTACHMENT TO AEP:NRC:5075

Indiana Michigan Power Company Donald C. Cook Nuclear Plant Units 1 and 2 2005 Nuclear Regulatory Commission Financial Assurance Requirements Report for Decommissioning Nuclear Power Reactors

This report is being submitted in accordance with 10 CFR 50.75(f)(1). The report is comprised of the following schedules and the general comments set forth herein:

Schedule	Title	Page
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General Comments

While the Minimum Value Decommissioning Cost Estimate under 10 CFR 50.75(c) reported on Schedule A is the information the Nuclear Regulatory Commission (NRC) has specified as appropriate for its purposes, the Indiana Michigan Power Company (I&M) believes a broader and more comprehensive definition of and provision for nuclear decommissioning expenses is needed for its purposes.

For the past several years I&M has periodically provided the Indiana and Michigan utility regulatory commissions site specific studies containing a broader definition of nuclear decommissioning requirements. These studies include the 10 CFR 50.75 (b) and (c) costs, 10 CFR 50.54(bb) costs, and "greenfield" costs, versus only the required 10 CFR 50.75 costs. These costs have been commingled in the decommissioning trust funds. For 2003 and 2004, a separate trust fund was established for the disposal of Unit 1 steam generators. This has been presented in reports to the utility regulatory commissions in addition to the site specific decommissioning studies. The commissions have accepted these studies and have authorized recoveries for nuclear decommissioning based on their determinations, considering the reports presented, of appropriate recoveries for nuclear decommissioning using the more comprehensive definition. The currently estimated annual fund collections authorized for decommissioning are reported on Schedule C.

Decommissioning Cost Estimates Minimum Value Per 10 CFR 50.75(c)

10 CFR 50.75(a) requires that each utility assure that there will be adequate funding for the decommissioning of the plant. 10 CFR 50.75(c) established a table of minimum values for the decommissioning funds, in January 1986 dollars, and it also set forth a method to adjust those values. Periodically, the NRC publishes NUREG-1307, "Report on Waste Burial Charges," and in that document, the data and more specific guidance is given regarding the method to be used to adjust the minimum amount to equivalent current amounts. The calculation in this report uses the burial cost escalation values and the method outlined in NRC NUREG-1307, Revision 10 to determine the minimum values.

Estimated Decommissioning Cost – 10 CFR 50.75(c)

<u>Unit 1</u> \$369,902,533

<u>Unit 2</u> \$373,189,443

<u>Total</u> \$743,091,976

Decommissioning Cost Estimate Calculation

The first step of the decommissioning cost estimate calculation is to determine the 1986 base cost. Donald C. Cook Nuclear Plant's (CNP) Units 1 and 2 are rated at 3304 megawatt-thermal (MW_t) and 3468 MW_t, respectively. From 10 CFR 50(c)(1)(i), the cost is then based on the MW_t output of each unit. For reactor power greater than 3400 MW_t, the cost is \$105 million. For reactor power from 1200 to 3400 MW_t the cost is calculated using this formula:

Cost =
$$(75 + 0.0088P)$$
 million.

Given P is the power level. So, for Unit 1 at 3304 MW, the cost is:

$$Cost = \$(75 + 0.0088 \times 3304)$$
 million

= \$104.1 million.

For Unit 2, since the power level is greater than 3400 MW_t, the cost is \$105 million which is taken directly from the NRC's model.

So, the total 1986 base decommissioning cost for Cook is \$104.1 + \$105 million or \$209.1 million.

The next portion of the analysis is to adjust the 1986 cost to the current year cost.

Using the formula:

Estimated Cost (Year X) =
$$[1986 \ Cost][A L_x + B E_x + C B_x]$$

Where A, B, and C are the fractions of the total 1986 \$ costs that are attributable to labor (0.65), energy (0.13), and burial (0.22), respectively, and sum to 1.0. The factors L_x , E_x , and E_x are defined by:

 L_x = labor cost escalation, January of 1986 to January of Year X

 E_x = energy cost escalation, January of 1986 to January of Year X

B_x = burial cost escalation, January of 1986 to January of Year X, i.e., burial cost in January of Year X / burial cost in January of 1986.

The labor escalation factor was obtained by using the U. S. Bureau of Labor Statistics data. This data was taken from the World Wide Web following the directions given in NUREG-1307, Revision 10, Appendix C. Data for the Midwest region was used from the Employment Cost Index. The data from the first quarter was used, except for 2005, which uses fourth quarter 2004, and is shown in Table 1.

The energy cost escalation is determined by BLS data by using "Producer Price Indexes." The energy term in the adjustment equation is made up of two components; industrial electric power (P), and light fuel oil (F). E_x is determined from the following equation for Pressurized Water Reactors:

E = 0.58P + 0.42F.

The values of P and F are taken from the BLS as described in NUREG-1307. The data from January was used, and is shown in Table 1. Also shown are the results of the calculations to determine E. The energy data for 2005 is BLS preliminary data.

Table 1 Cost Index Values				
Year	Labor Data (L)	Electric Power (P)	Light Fuel Oil (F)	Energy Data (E)
2005	177.9	147.5	124.5	137.84
2004	174.7	143.1	106.8	127.85
1986	89.4	114.2	82.0	100.68

The next step is to convert the cost index values into the adjustment factors, L_x and E_x . These are determined by dividing the year's cost index value by the cost index value for 1986 (e.g. $L_{2005} = 177.9/89.4$). The values for B_x are taken directly from NUREG-1307, Revision 10 using the data for the South Carolina site using direct disposal with waste vendors for disposition as a non-Atlantic Compact State. The results are shown in Table 2.

The final step is to calculate the Estimated Cost for Year X using the equation given above on Page 3 and the L_x , E_x , and B_x values. The estimated cost is given in Table 2.

				Table 2		······································
	Escalation Factors Estimated Decommissioning Cost					
Year	L_{x}	E _x	B_{x}	Unit 1	Unit 2	Total
2005	1.98993	1.36914	9.46700	\$369,902,533	\$373,189,443	\$743,091,976
2004	1.95414	1.26996	9.46700	\$366,139,085	\$369,392,554	\$735,531,639

Summary of Decommissioning Trust Fund Balances December 31, 2004

	<u>Total</u>	<u>Unit 1</u>	Unit 2
Book Value	674,390,897	343,618,753	330,772,144
Unrealized Appreciation	133,702,256	72,337,328	61,364,928
Market Value	808,093,153	415,956,081	392,137,072
Accrued Interest	4,895	4,895	0
Accrued Contributions	2,830,796	1,480,093	1,350,703
Subtotal	810,928,844	417,441,069	393,487,775
Less: Taxes on Unrealized Appreciation	26,888,908	14,551,143	12,337,765
Total	784,039,936	402,889,926	381,150,010

Indiana Michigan Power Company Nuclear Decommissioning Trust Fund

Projected Future Funds To Be Collected For Decommissioning (a)

]	Unit 1				Unit 2]		
	Indiana Jurisdiction	Michigan Jurisdiction (b)	FERC Jurisdiction	Unit 1 Total	Indiana Jurisdiction	Michigan Jurisdiction (b)	FERC Jurisdiction	Unit 2 Total	Decommis- sioning Total	
2005	9,732,396	3,737,448	602,532	14,072,376	8,991,504	3,631,726	458,262	13,081,492	27,153,868	
2006	9,732,396	3,737,448	602,532	14,072,376	8,991,504	3,631,726	458,262	13,081,492	27,153,868	
2007	9,732,396	3,737,448	602,532	14,072,376	8,991,504	3,631,726	458,262	13,081,492	27,153,868	
2008	9,732,396	3,737,448	602,532	14,072,376	8,991,504	3,631,726	458,262	13,081,492	27,153,868	
2009	9,732,396	3,737,448	602,532	14,072,376	8,991,504	3,631,726	458,262	13,081,492	27,153,868	
2010	9,732,396	3,737,448	602,532	14,072,376	8,991,504	3,631,726	458,262	13,081,492	27,153,868	
2011	9,732,396	3,737,448	602,532	14,072,376	8,991,504	3,631,726	458,262	13,081,492	27,153,868	
2012	9,732,396	3,737,448	602,532	14,072,376	8,991,504	3,631,726	458,262	13,081,492	27,153,868	
2013	9,732,396	3,737,448	602,532	14,072,376	8,991,504	3,631,726	458,262	13,081,492	27,153,868	
*2014	8,105,142	3,034,547	477,819	11,617,508	8,991,504	3,631,726	458,262	13,081,492	24,699,000	
2015				•	8,991,504	3,631,726	458,262	13,081,492	13,081,492	
2016				-	8,991,504	3,631,726	458,262	13,081,492	13,081,492	
2017				•	8,991,504	3,631,726	458,262	13,081,492	13,081,492	
Total	95,696,706	36,671,579	5,900,607	138,268,892	116,889,552	47,212,438	5,957,406	170,059,396	308,328,288	

Notes:

⁽a) Based on regulatory commission orders that remain in effect since prior to December 31, 2002. Assumes each unit operates over its current licensed life and that authorized collections are not changed.

⁽b) Amount dependent on Kwh sales. Base amount is \$3,086,600 per year for Unit 1 and \$2,946,000 for Unit 2.

^{*} License for Unit 1 expires in October 2014. License for Unit 2 expires in December 2017.

Cost Escalation Rate for 10 CFR 50.75(c) Decommissioning Costs

Jurisdiction	Jurisdictional Allocation (a)	Projected Escalation	Weighted Escalation
Indiana (b)	73.1291%	6.50%	4.75%
Michigan (c)	14.5031%	6.50%	0.94%
FERC (d)	12.3678%	6.00%	0.74%
Total			6.44%

Notes:

- (a) Reported to Indiana Utility Regulatory Commission in most recent decommissioning study.
- (b) Indiana Utility Regulatory Commission Order in Case No. 39314.
- (c) Michigan Public commission Order in Case No. U-10347.
- (d) Federal Energy Regulatory Commission Order in Case ER90-269-000.

After Tax Rate of Return Assumption on Amounts Collected for Decommissioning

Jurisdiction	Jurisdictional Allocation (a)	Projected Earnings	Weighted Earnings
Indiana (b)	73.1291%	7.00%	5.12%
Michigan (c)	14.5031%	7.00%	1.02%
FERC (d)	12.3678%	7.27%	0.90%
Total			7.03%

Notes:

- (a) Reported to Indiana Utility Regulatory Commission in most recent decommissioning study.
- (b) Indiana Utility Regulatory Commission Order in Case No. 39314.
- (c) Michigan Public commission Order in Case No. U-10347.
- (d) Federal Energy Regulatory Commission Order in Case ER90-269-000.

Nuclear Decommissioning Trust Fund Agreements Summary of Significant Changes

A nuclear decommissioning trust fund agreement for the units at the Donald C. Cook Nuclear Plant (CNP) exists with the following trustee:

Mellon Bank Pittsburgh, Pennsylvania.

Since the report dated March 27, 2003, filed with the NRC on Funding for CNP, Units 1 and 2, the following substantive changes have been made in the trust agreements:

1. Changes in Trustee or Name of Trustee

The decommissioning trust was amended (Amendment No. 1) in February 2003 to add separate accounts to the trust to accumulate funds for the disposal of the Steam Generators for Unit 1.

The decommissioning trust was amended (Amendment No. 2) in December 2003 to comply with changes in NRC rules.

Copies of the two amendments are attached for reference as Enclosure 1 and Enclosure 2, respectively.

2. Change in Permitted Investments

No change since prior report.

3. Changes in Permitted Decommissioning Disbursements

The Unit 1 Steam Generators were disposed in 2004. Funds accumulated in a separate account were used for this disposal. The NRC had previously been notified of the disbursement in AEP:NRC:4075, dated January 24, 2004.

ENCLOSURE 1 TO AEP:NRC:5075

AMENDMENT NO. 1 TO NUCLEAR DECOMMISSIOINING MASTER TRUST AGREEMENT

AMENDMENT NO. 1 TO NUCLEAR DECOMMISSIONING MASTER TRUST AGREEMENT

AMENDMENT NO. 1 made this 19th day of February, 2003 to the NUCLEAR DECOMMISSIONING MASTER TRUST AGREEMENT, dated as of June 27, 2001 (the "Master Trust") between INDIANA MICHIGAN POWER COMPANY, a corporation duly organized and existing under the laws of the State of Indiana having its principal office at One Riverside Plaza, Columbus, Ohio 43215 (the "Company"), and MELLON BANK, N.A., as Trustee, having its principal office at One Mellon Center, Pittsburgh, Pennsylvania 15258 (the "Trustee");

WITNESSETH:

WHEREAS, the Company owns the D.C. Cook Nuclear Generating Plant consisting of the D.C. Cook Unit 1 and D.C. Cook Unit 2 (the "Units"); and

WHEREAS, the Company has, pursuant to orders of public utility commissions having jurisdiction of the Company's rates, established various trust fund(s) each of which either qualifies as a Nuclear Decommissioning Reserve Fund under section 468A of the Internal Revenue Code of 1986, as amended, or any corresponding section or sections of any future United States internal revenue statute (the "Code") and the regulations thereunder (the "Qualified Funds"), or which does not so qualify (the "Nonqualified Funds"; collectively, the "Funds"); and

WHEREAS, the Company has heretofore appointed Mellon Bank, N.A. successor trustee of the trusts ("the Trustee") and the Trustee has agreed to serve as successor trustee; and

WHEREAS, the Company has heretofore established the Master Trust to hold the assets of each Fund, wherein each Fund shall continue as a separate trust subject to the terms of the Master Trust; and

WHEREAS, the Company desires to establish additional Nonqualified Funds within the Master Trust to provide for the funding by the Company of the costs of removal and disposal of the D.C. Cook Unit 1 Steam Generator;

NOW, THEREFORE, the Company and the Trustee hereby agree as

1. That Section 1.01 of the Master Trust be amended and restated as follows:

follows:

"Section 1.01. <u>Establishment of the Funds</u>. The Master Trust shall be divided by the Trustee into Funds to be identified as follows:

Indiana Michigan Power Company D.C. Cook Nuclear Generating Plant Nonqualified Indiana Jurisdiction Decommissioning Fund Unit 1

Indiana Michigan Power Company D.C. Cook Nuclear Generating Plant Nonqualified Michigan Jurisdiction Decommissioning Fund Unit 1

Indiana Michigan Power Company D.C. Cook Nuclear Generating Plant Nonqualified Federal Energy Regulatory Commission Jurisdiction Decommissioning Fund Unit 1

Indiana Michigan Power Company D.C. Cook Nuclear Generating Plant Nonqualified Indiana Jurisdiction Decommissioning Fund Unit 2

Indiana Michigan Power Company D.C. Cook Nuclear Generating Plant Nonqualified Michigan Jurisdiction Decommissioning Fund Unit 2

Indiana Michigan Power Company D.C. Cook Nuclear Generating Plant Nonqualified Federal Energy Regulatory Commission Jurisdiction Decommissioning Fund Unit 2

Indiana Michigan Power Company D.C. Cook Nuclear Generating Plant Qualified Indiana Jurisdiction Decommissioning Fund Unit 1

Indiana Michigan Power Company D.C. Cook Nuclear Generating Plant Qualified Michigan Jurisdiction Decommissioning Fund Unit 1

Indiana Michigan Power Company D.C. Cook Nuclear Generating Plant Qualified Federal Energy Regulatory Commission Jurisdiction Decommissioning Fund Unit 1

Indiana Michigan Power Company D.C. Cook Nuclear Generating Plant Qualified Indiana Jurisdiction Decommissioning Fund Unit 2

Indiana Michigan Power Company D.C. Cook Nuclear Generating Plant Qualified Michigan Jurisdiction Decommissioning Fund Unit 2

Indiana Michigan Power Company D.C. Cook Nuclear Generating Plant Qualified Federal Energy Regulatory Commission Jurisdiction Decommissioning Fund Unit 2

Indiana Michigan Power Company D.C. Cook Nuclear Generating Plant Nonqualified Indiana Jurisdiction Steam Generator Decommissioning Fund Unit 1

Indiana Michigan Power Company D.C. Cook Nuclear Generating Plant Nonqualified Michigan Jurisdiction Steam Generator Decommissioning Fund Unit 1

Indiana Michigan Power Company D.C. Cook Nuclear Generating Plant Nonqualified Federal Energy Regulatory Commission Jurisdiction Steam Generator Decommissioning Fund Unit 1.

The Funds shall be maintained separately at all times in the United States as the Nonqualified Funds and the Qualified Funds pursuant to this Agreement and as separate trusts under this Master Trust Agreement in accordance with the laws of the Commonwealth of Pennsylvania. The Company intends that the Qualified Funds shall qualify as Nuclear Decommissioning Reserve Funds under section 468A of the Code. The assets of the Qualified Funds may be used only in a manner authorized by section 468A of the Code and the regulations thereunder and this Agreement cannot be amended to violate section 468A of the Code or the regulations thereunder. The Trustee shall maintain such records as are necessary to reflect each Fund separately on its books from each other Fund and shall create and maintain such subaccounts within each Fund as the Company shall direct.

2. Each of the parties represents and warrants to the other party that it has full authority to enter into this Amendment No. 1 upon the terms and conditions hereof and that the individual executing this Amendment No. 1 on its behalf has the requisite authority to bind such party to this Amendment No.1.

IN WITNESS WHEREOF, the parties hereto, each intending to be legally bound hereby, have hereunto set their hands and seals as of the day and year first above written.

Indiana Michigan Power Company

Title: Director, Trusts and Investments

Name: Paul R. Kraus, Vice President Title: Mellon Bank, N.A.

Doc #169873.v1 Date: 02/13/2003 3:36 PM

ENCLOSURE 2 TO AEP:NRC:5075

AMENDMENT NO. 2 TO NUCLEAR DECOMMISSIOINING MASTER TRUST AGREEMENT

AMENDMENT NO. 2 TO NUCLEAR DECOMMISSIONING MASTER TRUST AGREEMENT

AMENDMENT NO. 2 made this 18 day of 10 center, 2003 to the NUCLEAR DECOMMISSIONING MASTER TRUST AGREEMENT, dated as of June 27, 2001 (the "Master Trust") between INDIANA MICHIGAN POWER COMPANY, a corporation duly organized and existing under the laws of the State of Indiana having its principal office at One Riverside Plaza, Columbus, Ohio 43215 (the "Company"), and MELLON BANK, N.A., as Trustee, having its principal office at One Mellon Center, Pittsburgh, Pennsylvania 15258 (the "Trustee");

WITNESSETH:

WHEREAS, the Company owns the D.C. Cook Nuclear Generating Plant consisting of the D.C. Cook Unit 1 and D.C. Cook Unit 2 (the 'Units'); and

WHEREAS, the Company has, pursuant to orders of public utility commissions having jurisdiction of the Company's rates, established various trust funds(s) each of which either qualifies as a Nuclear Decommissioning Reserve Fund under section 468A of the Internal Revenue Code of 1986, as amended, or any corresponding section or sections of any future United States internal revenue statute (the "Code") and the regulations thereunder (the 'Qualified Funds"), or which does not so qualify (the "Nonqualified Funds"; collectively, the "Funds"); and

WHEREAS, the Company has heretofore appointed Mellon Bank, N.A. successor trustee of the trusts ("the Trustee") and the Trustee has agreed to serve as successor trustee; and

WHEREAS, the Company has heretofore established the Master Trust to hold the assets of each Fund, wherein each Fund shall continue as a separate trust subject to the terms of the Master Trust; and

WHEREAS, the Company and the Trustee also entered into that First Amendment dated as of February 19, 2003 to the Master Trust to establish additional Nonqualified Funds within the Master Trust to provide for the funding of the cost of removal and disposal of the D. C. Cook Unit 1 Steam Generator; and

WHEREAS, pursuant to Article IV of the Master Trust Agreement the Company and the Trustee wish to amend the Agreement in certain ways;

NOW, THEREFORE, the parties hereto, each intending to be legally bound, do hereby amend the Agreement as follows:

1. The following Section 2.05 shall be added:

Section 2.05 Notice Regarding Disbursements or Payments. Except for (i) payments of ordinary administrative costs (including taxes) and other incidental expenses of the fund (including legal, accounting, actuarial, and trustee expenses) in

connection with the operation of the fund, (ii) withdrawals being made under 10 CFR 50.82(a)(8), and (iii) adjustments for excess contributions being transferred to the Nonqualified Funds pursuant to Section 4 of the Special Terms, no disbursement or payment may be made from the trust until written notice of the intention to make a disbursement or payment has been given to the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as applicable, at least 30 working days before the date of the intended disbursement or payment. The disbursement or payment from the Master Trust may be made following the 30-working day notice period if no written notice of objection from the Director. Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as applicable, is received by the Trustee or the Company within the notice period. The required notice may be made by the Trustee or on the Trustee's behalf. No such notice is required for withdrawals being made pursuant to 10 CFR 50.82(a)(8)(ii), including withdrawals made during the operating life of the plant to be used for decommissioning planning. In addition, no such notice is required to be made to the NRC after decommissioning has begun and withdrawals are being made under 10 CFR 50.82(a)(8).

- 2. Except as set forth herein, the Agreement is hereby ratified and confirmed and remains in full force and effect.
- 3. Each of the parties represents and warrants to the other parties that it has full authority to enter into this Amendment upon the terms and conditions hereof and that the individual executing this Amendment on its behalf has the requisite authority to bind the respective parties to this Amendment.

IN WITNESS WHEREOF, the parties hereto, each intending to be legally bound hereby, have executed this Amendment as of the day and year first above written.

Authorized Signer of:

MELLON BANK, N.A.

Authorized Officer of:

INDIANA MICHIGAN POWER COMPANY

Name:

Title: Director, Trusts &

Date: