



March 27, 2001

C0301-02
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

Pursuant to the requirements of 10 CFR 50.75(f)(1), Indiana Michigan Power Company, the licensee for Donald C. Cook Nuclear Plant, Units 1 and 2, hereby submits the attached report on the status of decommissioning funding. The attached report includes the decommissioning funds estimated to be required pursuant to 10 CFR 50.75(b) and (c); the funds accumulated at the end of 2000; a schedule of the annual funds remaining to be collected; the assumptions used regarding rates of escalation in decommissioning costs and rates of earnings on decommissioning funds; and a summary of significant changes to the trust agreements for the funds.

If you have any questions on the report or decommissioning funding, please contact Mr. Ronald W. Gaston, Manager of Regulatory Affairs, at (616) 697-5020.

Sincerely,

A handwritten signature in black ink, appearing to read 'Scot A. Greenlee', followed by the word 'for'.

Scot A. Greenlee
Director of Design Engineering and Regulatory Affairs

/dmb

Attachment

A0001

c: J. E. Dyer
MDEQ - DW & RPD, w/o attachment
NRC Resident Inspector
R. Whale

ATTACHMENT TO C0301-02

Financial Assurance Requirements Report for Decommissioning Nuclear Power Reactors 2001 Report U.S. Nuclear Regulatory Commission For Indiana Michigan Power Company Donald C. Cook Nuclear Plant Units No. 1 and No. 2

This report is being submitted pursuant to the final rule in 10 CFR Parts 30 and 50. The report is comprised of the following schedules and the general comments set forth herein:

Schedule

- A Decommissioning Cost Estimates - Minimum Value Under Section 10 CFR 50.75(c)
- B Summary of Decommissioning Trust Fund Balances at December 31, 2000
- C Projected Future Funds to be Collected For Decommissioning
- D Cost Escalation Rate - Section 50.75(c) Decommissioning Costs
- E After Tax Rate of Return Assumed to be Earned on Amounts Collected for Decommissioning
- F Nuclear Decommissioning Trust Fund Agreements Summary of Significant Changes

General Comments

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

The Company for the past several years periodically has presented to its utility regulatory commissions site specific studies containing a more all-inclusive definition of nuclear decommissioning requirements. These studies include the Section 50.75 costs, Section 50.54(bb) costs, and "greenfield" costs. The state utility commissions of Indiana and Michigan have acted on these studies. They have authorized recoveries for nuclear decommissioning based on their determinations, considering the evidence presented, of appropriate recoveries for nuclear decommissioning using this more comprehensive definition. The most current annual provisions authorized for decommissioning are reported on Schedule C.

**Indiana Michigan Power Company
Donald C. Cook Nuclear Plant**

**Decommissioning Cost Estimates
Minimum Value Under Section 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. Section 10 CFR 50.75(c) established a table of minimum values for the decommissioning funds 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 method outlined in NRC Report Number NUREG-1307, Revision 9 to determine the minimum amounts.

<u>Estimated Decommissioning Cost – Section 50.75(c)</u>		
<u>Unit 1</u>	<u>Unit 2</u>	<u>Total</u>
\$319,277,630	\$315,020,595	\$634,298,224*

* Calculation shown on pages 2 and 3.

Calculation

The first part is to determine the 1986 base cost. Cook Plant's two units are rated at 3411 MWt and 3250 MWt¹. From 10 CFR 50(c)(1)(i), the cost is then based on the MWt output of each unit. For reactor power greater than 3400 the cost is \$105 million. For reactor power from 1200 to 3400 MWt the cost is calculated using this formula:

$$\text{Cost} = \$ (75 + 0.0088P) \text{ million}$$

Given P is the power level. So, for 3250MWt the cost is:

$$\begin{aligned} \text{Cost} &= \$ (75 + 0.0088 \times 3250) \\ &= 103.6 \text{ million.} \end{aligned}$$

So the total 1986 base decommissioning cost for Cook is \$105 + \$103.6 million or \$208.6 million.

The next portion of the analysis is to adjust the 1986 cost to a 2001 cost.

Using the formula:

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

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 B_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 1986.²

The labor escalation factor was obtained by using the U. S. Bureau of Labor Statistics (BLS) data. This data was taken from the World Wide Web following the directions given in NUREG-1307, Rev. 9, Appendix C. Data for the Midwest region was used from the Employment Cost Index. The data from the Qtr 1 were used except for 2001, 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). And E_x is determined from the following equation for PWRs:³

¹ Donald C. Cook Nuclear Plant Operating Licenses

² NUREG-1307, Rev. 9

³ Ibid.

$$E = 0.58P + 0.42F$$

The values of P and F are taken from the BLS as described in NUREG-1307. The data from January were used, and is shown in Table 1. Also, shown are the results of the calculations to determine E. The energy data for 2001 is BLS preliminary data.

Cost Index Values				
Table 1				
Year	Labor Data (L)	Electric Power (P)	Light Fuel Oil (F)	Energy Data (E)
2001	153.3	136.9	96.2	119.81
2000	148.9	126.8	75.3	105.17
1999	141.7	126.1	40.9	90.32
1998	138.3	127.4	54.3	96.70
1997	133.3	128.3	73.7	105.37
1996	129.5	127.9	62.6	100.47
1995	125.8	127.6	54.7	96.98
1994	122.8	126.2	51.5	94.83
1993	117.9	127.1	59.0	98.50
1992	113.8	125.9	54.4	95.87
1991	108.5	124.2	82.9	106.85
1990	103.5	114.9	85.3	102.47
1989	98.9	112.0	54.9	88.02
1988	95.4	108.8	54.8	86.12
1987	91.6	110.3	51.4	85.56
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 each year's cost index value by the cost index value for 1986. (i.e. $L_{1998} = 138.3/89.4$) The values for B_x are taken directly from NUREG-1307, Rev. 9 using the data for South Carolina using waste vendors for disposition as a non-Atlantic Compact State.⁴ 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 2 and the L_x , E_x , and B_x values. The estimated cost is given in Table 2.

Escalation Factors				Estimated
				Decommissioning Cost
Table 2				
Year	L_x	E_x	B_x	
2001	1.715	1.190	8.052	\$634,298,224.20

⁴ Ibid. Table 2.1

Indiana Michigan Power Company
Nuclear Decommissioning Trust Fund
Summary of Decommissioning Trust Fund Balances
December 31, 2000

	<u>Total</u>	<u>Unit 1</u>	<u>Unit 2</u>
Book Value	\$471,478,203	\$247,509,366	\$223,968,837
Unrealized Appreciation	73,802,131	43,199,531	30,602,600
Market Value	<u>\$545,280,334</u>	<u>\$290,708,897</u>	<u>\$254,571,437</u>
Accrued Interest	8,228,974	4,271,100	3,957,875
Accrued Contributions	2,751,961	1,552,278	1,199,682
Sub-total	<u>\$556,261,269</u>	<u>\$296,532,275</u>	<u>\$259,728,994</u>
Less: Taxes on Unrealized Appreciation	15,973,619	9,494,213	6,479,406
Total	<u>\$540,287,650</u>	<u>\$287,038,062</u>	<u>\$253,249,588</u>

**Indiana Michigan Power Company
Donald C. Cook Nuclear Plant
Total Company**

Projected Future Funds To Be Collected For Decommissioning(a)

Year	<u>Unit 1</u>	<u>Unit 2</u>	<u>Total Company</u>
2001	\$ 13,949,938	\$ 12,913,407	\$ 26,863,345
2002	13,949,938	12,913,407	26,863,345
2003	13,949,938	12,913,407	26,863,345
2004	13,949,938	12,913,407	26,863,345
2005	13,949,938	12,913,407	26,863,345
2006	13,949,938	12,913,407	26,863,345
2007	13,949,938	12,913,407	26,863,345
2008	13,949,938	12,913,407	26,863,345
2009	13,949,938	12,913,407	26,863,345
2010	13,949,938	12,913,407	26,863,345
2011	13,949,938	12,913,407	26,863,345
2012	13,949,938	12,913,407	26,863,345
2013	13,949,938	12,913,407	26,863,345
2014	11,617,508	12,913,407	24,530,915
2015		12,913,407	12,913,407
2016		12,913,407	12,913,407
2017		12,913,407	12,913,407

(a) See Notes on pages 2 and 3.

**Indiana Michigan Power Company
Donald C. Cook Nuclear Plant
Unit No. 1**

Projected Future Funds To Be Collected For Decommissioning (a) (b)

Year (b)	Indiana <u>Jurisdiction(c)</u>	Michigan <u>Jurisdiction(d)</u>	FERC <u>Jurisdiction(e)</u>	Total <u>Company</u>
2001	\$ 9,732,400	\$ 3,643,788	\$ 573,750	\$ 13,949,938
2002	9,732,400	3,643,788	573,750	13,949,938
2003	9,732,400	3,643,788	573,750	13,949,938
2004	9,732,400	3,643,788	573,750	13,949,938
2005	9,732,400	3,643,788	573,750	13,949,938
2006	9,732,400	3,643,788	573,750	13,949,938
2007	9,732,400	3,643,788	573,750	13,949,938
2008	9,732,400	3,643,788	573,750	13,949,938
2009	9,732,400	3,643,788	573,750	13,949,938
2010	9,732,400	3,643,788	573,750	13,949,938
2011	9,732,400	3,643,788	573,750	13,949,938
2012	9,732,400	3,643,788	573,750	13,949,938
2013	9,732,400	3,643,788	573,750	13,949,938
2014*	8,105,142	3,034,547	477,819	11,617,508

* To end of month in which license expires (83.28%).

(a) Based on regulatory commission orders in effect on December 31, 2000.

(b) Assumes the unit operates over its current licensed life and that authorized collections are not changed.

(c) Additional annual amounts up to \$1,500,000 per unit may be deposited under flexible funding procedure dependent on continual Commission authorization. Other additional amounts up to \$4,000,000 may be deposited for the years 2001, 2002 and 2003 under Commission orders.

(d) Amount depends on precise level of Kwh sales. Estimate assumes continuation of mid 2000 level. Base amount before Kwh adjustment is \$3,086,600 per Commission Order. Additional annual amounts up to \$317,124 per unit may be deposited under flexible funding procedure dependent on continued Commission authorization.

(e) Assumes all current FERC jurisdictional customers continue to receive service or are replaced by other equivalent customers.

**Indiana Michigan Power Company
Donald C. Cook Nuclear Plant
Unit No. 2**

Projected Future Funds To Be Collected For Decommissioning (a) (b)

Year (b)	<u>Indiana Jurisdiction(c)</u>	<u>Michigan Jurisdiction(d)</u>	<u>FERC Jurisdiction(e)</u>	<u>Total Company</u>
2001	\$ 8,999,900	\$ 3,477,807	\$ 435,700	\$ 12,913,407
2002	8,999,900	3,477,807	435,700	12,913,407
2003	8,999,900	3,477,807	435,700	12,913,407
2004	8,999,900	3,477,807	435,700	12,913,407
2005	8,999,900	3,477,807	435,700	12,913,407
2006	8,999,900	3,477,807	435,700	12,913,407
2007	8,999,900	3,477,807	435,700	12,913,407
2008	8,999,900	3,477,807	435,700	12,913,407
2009	8,999,900	3,477,807	435,700	12,913,407
2010	8,999,900	3,477,807	435,700	12,913,407
2011	8,999,900	3,477,807	435,700	12,913,407
2012	8,999,900	3,477,807	435,700	12,913,407
2013	8,999,900	3,477,807	435,700	12,913,407
2014	8,999,900	3,477,807	435,700	12,913,407
2015	8,999,900	3,477,807	435,700	12,913,407
2016	8,999,900	3,477,807	435,700	12,913,407
2017*	8,999,900	3,477,807	435,700	12,913,407

* To end of month in which license expires.

(a) Based on regulatory commission orders in effect on December 31, 2000

(b) Assumes the unit operates over its current licensed life and that authorized collections are not changed.

(c) Additional annual amounts up to \$1,500,000 per unit may be deposited under flexible funding procedure dependent on continual Commission authorization. Other additional amounts up to \$4,000,000 may be deposited for the years 2001, 2002 and 2003 under Commission orders.

(d) Amount depends on precisely level of Kwh sales. Estimate assumes continuation of mid 2000 level. Base amount before Kwh adjustment is \$2,946,000 per Commission Order. Additional annual amounts up to \$317,124 per unit may be deposited under flexible funding procedure dependent on continued Commission authorization.

(e) Assumes all current FERC jurisdictional customers continue to receive service or are replaced by other equivalent customers.

**Indiana Michigan Power Company
Donald C. Cook Nuclear Plant**

Cost Escalation Rate
Section 50.75(c)
Decommissioning Costs

<u>Jurisdictional Allocation</u> *		<u>Projected Escalation</u> **	<u>Weighted Escalation</u>
73.12908 %	Indiana Jurisdiction (a)	6.50 %	4.75 %
14.50314	Michigan Jurisdiction (b)	6.50	.94
12.36778	FERC Jurisdiction (c)	6.00	.74
<hr/> 100.00000 % Total Company			6.43 (d)

* Reported to Michigan Public Service Commission in most recent decommissioning study and percentages at that date applicable to other jurisdiction.

** Escalation of Section 50.75(c) costs within range presented by Company representing amount approved by Commission as a basis of allowed decommissioning provisions. The Indiana and the Michigan Commissions' nuclear decommissioning provisions regarding Section 50.75(c) costs, to be included in the cost of service reflected 4.50% during the first four years to correlate with how site specific cost estimates were prepared. The FERC also had lower cost escalation factors for the first four years for the same general reason.

- (a) Indiana Utility Regulatory Commission Order in Case No. 39314.
- (b) Michigan Public Commission Order in Case No. U-10347.
- (c) Federal Energy Regulatory Commission Order in Case ER90-269-000.
- (d) Company claims 6.43% as an apportionate Section 50.75(c) cost escalation factor on this 2001 report to the Nuclear Regulatory Commission.

**Indiana Michigan Power Company
Donald C. Cook Nuclear Plant**

After Tax Rate of Return
Assumed to be Earned on
Amounts Collected for Decommissioning

<u>Jurisdictional Allocation</u> *		<u>Projected Earnings</u> **	<u>Weighted Earnings</u>
73.12908 %	Indiana Jurisdiction (a)	7.00 %	5.12 %
14.50314	Michigan Jurisdiction (b)	7.00	1.02
12.36778	FERC Jurisdiction (c)	7.27	.90
<hr/>			
100.00000 %	Total Company		7.04 (d)

* Reported to Michigan Public Service Commission in most recent decommissioning study and percentages at that date applicable to other jurisdictions.

** Earnings within range presented by Company representing amount approved by commissions as basis of allowed decommissioning provisions.

(a) Indiana Utility Regulatory Commission Order in Case No. 39314.

(b) Michigan Public Commission Order in Case No. U-10347.

(c) Federal Energy Regulatory Commission Order in Case ER90-269-000.

(d) Company claims 7.04 % as an apportionate earnings factor in this 2001 report to the Nuclear Regulatory Commission. Company reserves the right to calculate earnings using a 2% real rate of return as authorized by NRC.

**Indiana Michigan Power Company
Donald C. Cook Nuclear Plant
Unit No. 1 and Unit No. 2**

**Nuclear Decommissioning Trust Fund Agreements
Summary of Significant Changes**

One or more nuclear decommissioning trust fund agreements for the units at the Donald C. Cook nuclear plant exist with the following trustees:

National City Bank of Indiana
Fort Wayne, Indiana

Wells Fargo Bank Indiana, N.A.
Fort Wayne, Indiana

First Source Bank
South Bend, Indiana

The Bank of New York
New York, New York

Since the report dated March 15, 1999, filed with the Nuclear Energy Regulatory Commission on Funding for Donald C. Cook Units 1 and 2, the following substantive changes have been made in the trust agreements or affect the trust arrangements.

1. Changes in Trustee or Name of Trustee

On November 2, 1998, a merger involving Norwest Corporation and Wells Fargo & Company (the Merger) was completed. Norwest Corporation changed its name to "Wells Fargo & Company" and the former Wells Fargo & Company (the former Wells Fargo) became a wholly-owned subsidiary of Norwest Corporation. Norwest Corporation as it was before the Merger is referred to as the former Norwest. On July 8, 2000, the Office of the Controller of the Currency recorded the title change of Norwest Bank Indiana, National Association, Fort Wayne, Indiana, (Charter Nr. 13987), to Wells Fargo Bank Indiana, National Association.

2. Change in Permitted Investments

No change since prior report.

3. Changes in Permitted Decommissioning Disbursements

No change since prior report.