



**ALLIANT ENERGY**

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March 31, 2001  
NG-01-0370

Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Mail Station 0-P1-17  
Washington, D.C. 20555-0001

Subject: Duane Arnold Energy Center  
Docket No: 50-331  
Op. License No: DPR-49  
Decommissioning Funding Report

Reference: 1) John F. Franz (IES) to NRC of March 31, 1999  
(NG-99-0281)

File: A-7, A-108

Dear Sirs:

This Decommissioning Funding Report is being submitted pursuant to 10 CFR 50.75(f)(1) by the joint owners of the Duane Arnold Energy Center (DAEC); IES Utilities Inc. (IES), Central Iowa Power Cooperative (CIPCO), and Corn Belt Cooperative (Corn Belt), representing ownership shares of 70%, 20%, and 10%, respectively. The attached reports for each DAEC partner have been supplied by each partner and are submitted by IES on each partner's behalf.

There are no new commitments made in this letter.

Please inform us if you have any questions or comments concerning this submittal.

Sincerely,

Eliot G. Protsch

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- Attachments:
- 1) Calculation of Minimum Financial Requirements (100% Ownership Values) (2000 Dollars) Using NUREG-1307, Revision 9 (August 2000)
  - 2) IES Utilities Inc. Decommissioning Funding Report and Exhibit
    - A) Schedule of Amounts to be Funded
  - 3) CIPCO Decommissioning Funding Report and Exhibit
    - A) Schedule of Amounts to be Funded
  - 4) Corn Belt Decommissioning Funding Report and Exhibit
    - A) Schedule of Amounts to be Funded

cc: B. Lacy  
B. Mozafari (NRC-NRR)  
Robert Wood (NRC-NRR)  
J. Dyer (Region III)  
P. Baig (State of Iowa)  
NRC Resident Office  
Docu

**Calculation of Minimum Financial Requirements  
(100% Ownership Values) (2000 Dollars)  
Using NUREG-1307, Revision 9 (August 2000)**

<b><u>LABOR:</u></b>	152.2		3 <sup>rd</sup> Quarter 2000 (1989 base)	Bureau of Labor Statistics
		x		Employment Cost Index
	1.409		$\frac{140.9 \text{ June 1989 factor (1981 base)}}{100.0 \text{ June 1989 factor (1989 base)}}$	Midwest Region
	214.4498		3 <sup>rd</sup> Quarter 2000 (1981 base)	
	<b>1.71559</b>		$\frac{214.4498 \text{ 3}^{\text{rd}} \text{ Quarter 2000 (1981 base)}}{125.0 \text{ Jan. 1986 (1981 base)}}$	

**ENERGY:**

	1.20315	P	$\frac{137.4 \text{ Industrial electric power (August 2000)}}{114.2 \text{ Industrial electric power (Jan. 1986)}}$	Bureau of Labor Statistics- Producer Price Index- Commodities
	1.11707	F	$\frac{91.6 \text{ Light fuel oils (August 2000)}}{82.0 \text{ Light fuel oils (Jan. 1986)}}$	Bureau of Labor Statistics- Producer Price Index- Commodities
	<b>1.16355</b>		E = (0.54P + 0.46F) E = (0.54 x 1.20315) + (0.46 x 1.11707)	

**BURIAL:**

<b>16.244</b>	2000 South Carolina BWR burial value	Report on Waste Disposal Charges (NUREG-1307, Rev. 9, August 2000)
<b>8.189</b>	2000 South Carolina BWR waste vendor burial value	

**BWR Escalation Factor = 0.65(L) + 0.13(E) + 0.22(B)**

**Waste Burial = 0.65(1.71559) + 0.13(1.16355) + 0.22(16.244) = 4.840075**

**Waste Vendor Burial = 0.65(1.71559) + 0.13(1.16355) + 0.22(8.189) = 3.067975**

Base amount for BWR between 1200 Mwt and 3400 Mwt =  
(\$104 + 0.009P) million; (P=power level of unit in megawatts thermal =  
1,658 per Schedule of Ruling Amounts).

**(\$104 + (0.009 x 1,658)) million = \$118,922,000**

**Estimated Decommissioning Costs (2000 Dollars)**

Direct Waste Burial      \$118,922,000 x 4.840075 = \$575,591,399

Utility Name	Percent Ownership	Each Utility's NRC Minimum Decommissioning Amount
IES	70%	\$402,913,979
CIPCO	20%	115,118,280
Corn Belt	10%	57,559,140
Total	100.00%	\$575,591,399

Waste Processing Vendor      \$118,922,000 x 3.067975 = \$364,849,723

Utility Name	Percent Ownership	Each Utility's NRC Minimum Decommissioning Amount
IES	70%	\$255,394,806
CIPCO	20%	72,969,945
Corn Belt	10%	36,484,972
Total	100.00%	\$364,849,723

1998 Site Specific Study

Partner	Ownership %	NRC License Termination	Site Restoration	Spent Fuel Management	Total Site Specific
IES	70%	287,774,000	46,433,000	79,231,000	413,438,000
CIPCO	20%	82,221,000	13,266,000	22,638,000	118,125,000
Corn Belt	10%	41,110,000	6,633,000	11,319,000	59,062,000
TOTAL	100%	411,105,000	66,332,000	113,188,000	590,625,000

**IES Utilities Inc. Decommissioning Funding Report**  
March 31, 2001

**1.) Amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75(b) and (c).**

In a report dated November, 1998 ABZ, Inc. prepared a site-specific Decommissioning Cost Study for DAEC. This study includes cost estimates for basic NRC radiological decommissioning within the meaning of 10 CFR 50.75(b) & (c) (hereafter, Basic Radiological Decommissioning), as well as for spent fuel management and for non-radiological decommissioning activities. In addition, IES has calculated the NRC minimum formula amount in accordance with 10 CFR 50.75(c), NUREG-1307, Rev. 9, and Regulatory Guide 1.159. The 2000 total site-specific costs, the Basic Radiological Decommissioning costs and the NRC minimum (Waste Processing) for IES's 70% share of DAEC can be broken down as follows:

Total Site Specific	Basic Radiological	NRC Minimum (Waste Processing)
\$413,438,000	\$287,774,000	\$255,394,806

**2.) Amount accumulated to the end of the calendar year preceding the date of the report.**

As of December 31, 2000, IES had accumulated:

External Trust Funds	\$117,789,895
Internal Fund Reserve*	<u>\$ 21,709,000</u>
Total	\$139,498,895

\* This is an internal decommissioning reserve recorded as accumulated depreciation. IES is not relying upon this Internal Fund Reserve for purposes of meeting NRC's decommissioning funding assurance requirements.

**3.) Schedule of the annual amount remaining to be collected.**

Within the meaning of 10 CFR 50.75(e)(1)(i)(A), IES collects the estimated total cost of decommissioning through rates established by "cost of service" or similar rate making regulation. The Iowa Utilities Board has currently approved the collection of \$6,008,000 per year in decommissioning funds, in Docket Nos. RPU-94-2 and ARU-99-1. However, this amount is to be readjusted from time to time based upon inflation, decommissioning fund earnings performance, and updates to the site specific decommissioning cost estimate. Based upon the currently approved collection of decommissioning costs, the attached schedule of amounts to be funded provided in Exhibit A is limited to \$6,008,000 per year.

**4.) Assumptions used regarding rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections.**

IES has reviewed its current level of annual funding as approved by the Iowa Utilities Board (IUB) taken together with the current fair market value of IES' nuclear decommissioning trust funds and credit for a two percent annual real rate of return. This assessment is provided as Exhibit A. Based upon this assessment, IES has concluded that it will need to seek IUB approval for increases in the annual funding levels in order to assure that IES meets NRC minimum requirements for providing financial assurance for decommissioning funding.

**5.) Any contracts upon which the licensee is relying pursuant to 10 CFR 50.75(e)(1)(v).**

IES is not relying upon any long-term contract for purposes of providing decommissioning funding within the meaning of 10 CFR 50.75(e)(1)(v).

**6.) Any modifications occurring to a licensee's current method of providing financial assurance since the last submitted report.**

IES continues to use the external sinking fund method of providing decommissioning funding assurance.

**7.) Any Material Changes to trust agreements.**

The IES Decommissioning Trust Fund agreement has not been revised since the reference 1 submittal. The following are IES's current Trustee and Investment Managers:

Trustee	Investment Managers
Mellon Bank, N.A.	Mellon Capital Management Corporation
	Phoenix Duff & Phelps Investment Advisors

**Exhibit A**

External Decommissioning Trust Fund  
Funding and Earnings Summary  
IES Utilities Inc.

Assumes 2% real rate of return, and monthly compounding

<b>Year</b>	<b>Contributions</b>	<b>Year end balance</b>
2000		117,789,895
2001	6,008,000	126,230,842
2002	6,008,000	134,842,167
2003	6,008,000	143,627,310
2004	6,008,000	152,589,779
2005	6,008,000	161,733,153
2006	6,008,000	171,061,084
2007	6,008,000	180,577,297
2008	6,008,000	190,285,592
2009	6,008,000	200,189,847
2010	6,008,000	210,294,018
2011	6,008,000	220,602,138
2012	6,008,000	231,118,326
2013	6,008,000	241,846,780
2014	6,008,000	252,791,785

NRC minimum decommissioning funding amount: 255,394,806



# CIPCO Decommissioning Funding Report

March 31, 2001

**1.) Amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75(b) and (c).**

In a report dated November, 1998 ABZ, Inc. prepared a site-specific Decommissioning Cost Study for DAEC. This study includes cost estimates for basic NRC radiological decommissioning within the meaning of 10 CFR 50.75(b) & (c) (hereafter, Basic Radiological Decommissioning), as well as for spent fuel management and for non-radiological decommissioning activities. In addition, IES has calculated the NRC minimum formula amount in accordance with 10 CFR 50.75(c), NUREG-1307, Rev. 8, and Regulatory Guide 1.159. The 1998 total decommissioning costs, the Basic Radiological Decommissioning costs and the 2000 NRC minimum for CIPCO's 20% share of DAEC can be broken down as follows:

Total Site Specific	Basic Radiological	NRC Minimum
118,125,000	82,221,000	72,969,945

**2.) Amount accumulated to the end of the calendar year preceding the date of the report.**

As of December 31, 2000, CIPCO had accumulated:

External Trust Funds	19,270,961
Internal Funds*	<u>10,174,294</u>
Total	\$29,445,255

\* This is an internal fund in which funds have been set aside and invested for purposes of funding decommissioning. CIPCO is not relying upon this Internal Fund for purposes of meeting NRC's decommissioning funding assurance requirements.

**3.) Schedule of the annual amount remaining to be collected.**

Within the meaning of 10 CFR 50.75(e)(1)(i)(A), CIPCO establishes its own rates and is able to recover its cost of service allocable to decommissioning. A schedule of amounts to be funded is provided as Exhibit A. This schedule of amounts is based upon the 2001 planned contribution, the inflation rate assumption, and the earnings rate assumption approved by the CIPCO Board of Directors in connection with CIPCO's 2001 Annual Operating Budget. Actual annual contributions to the external sinking fund will vary based upon annual reassessments of CIPCO's decommissioning funding obligations in light of NRC requirements, actual inflation, actual fund earnings and other factors.

**4.) Assumptions used regarding rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections.**

The following assumptions were reviewed and approved by the CIPCO Board of Directors in connection with CIPCO's 2001 Annual Operating Budget:

Decommissioning Cost Escalation Rate	5%
Decommissioning Fund Earnings Rate	12%

**5.) Any contracts upon which the licensee is relying pursuant to 10 CFR 50.75(e)(1)(v).**

CIPCO is not relying upon any long-term contract for purposes of providing decommissioning funding within the meaning of 10 CFR 50.75(e)(1)(v).

**6.) Any modifications occurring to a licensee's current method of providing financial assurance since the last submitted report.**

CIPCO continues to use the external sinking fund method of providing decommissioning funding assurance.

**7.) Any Material Changes to trust agreements.**

There have been no material changes in the CIPCO trust agreements, trustee or investment manager. CIPCO's trustee, Norwest Bank, Iowa, N.A. has become Wells Fargo Bank Iowa, N.A. CIPCO's investment manager remains American Express Asset Management Group.

## Exhibit A

### CIPCO DAEC Decommissioning Funding Report Schedule of the annual amounts remaining to be collected

Years	Collected*	Earnings**	Accumulated Balance***
			\$19,270,961
2001	1,303,700	2,371,180	22,945,841
2002	1,368,890	2,815,100	27,129,831
2003	1,437,330	3,320,260	31,887,421
2004	1,509,200	3,894,400	37,291,021
2005	1,584,660	4,546,230	43,421,911
2006	1,663,890	5,285,500	50,371,301
2007	1,747,080	6,123,170	58,241,551
2008	1,834,430	7,071,540	67,147,521
2009	1,926,150	8,144,380	77,218,051
2010	2,022,460	9,357,180	88,597,691
2011	2,123,580	10,727,280	101,448,551
2012	2,229,760	12,274,170	115,952,481
2013	2,341,250	14,019,650	132,313,381
2014	2,458,310	15,988,230	150,759,921
	<u>\$25,550,690</u>		

- \* Collections are escalated 5% annually from 2001 dollars.
- \*\* Earnings are estimated at a 12% annual rate, compounded quarterly.  
The Decommissioning Trust Fund annual earnings since inception – 13.6%
- \*\*\* The future value of the NRC minimum of \$73 million is \$144.5 million at 2014 assuming a 5% escalation rate.

Schedule assumes no income tax on earnings.

# Corn Belt Decommissioning Funding Report

March 31, 2001

**1.) Amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75(b) and (c).**

In a report dated November, 1998 ABZ, Inc. prepared a site-specific Decommissioning Cost Study for DAEC. This study includes cost estimates for basic NRC radiological decommissioning within the meaning of 10 CFR 50.75(b) & (c) (hereafter, Basic Radiological Decommissioning), as well as for spent fuel management and for non-radiological decommissioning activities. In addition, IES has calculated the NRC minimum formula amount in accordance with 10 CFR 50.75(c), NUREG-1307, Rev. 8, and Regulatory Guide 1.159. The 1998 total decommissioning costs, the Basic Radiological Decommissioning costs and the 2000 NRC minimum for Corn Belt's 10% share of DAEC can be broken down as follows:

Total Site Specific	Basic Radiological	NRC Minimum
59,062,500	41,110,500	36,484,972

**2.) Amount accumulated to the end of the calendar year preceding the date of the report.**

As of December 31, 2000, Corn Belt had accumulated:

External Trust Funds	12,200,142
Internal Funds*	<u>6,910,422</u>
Total	\$ 19,110,564

\* This is an internal fund in which funds have been set aside and invested for purposes of funding decommissioning. Corn Belt is not relying upon this Internal Fund for purposes of meeting NRC's decommissioning funding assurance requirements.

**3.) Schedule of the annual amount remaining to be collected.**

Within the meaning of 10 CFR 50.75(e)(1)(i)(A), Corn Belt establishes its own rates and is able to recover its cost of service allocable to decommissioning. A schedule of amounts to be funded is provided as Exhibit A. The following schedule of amounts is based upon the 2001 planned contribution, the inflation rate assumption, and the earnings rate assumption approved by the Corn Belt Board of Directors. Actual annual contributions to the external sinking fund will vary based upon annual reassessments of Corn Belt's decommissioning funding obligations in light of NRC requirements, actual inflation, actual fund earnings and other factors.

**4.) Assumptions used regarding rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections.**

The following assumptions were reviewed and approved by the Corn Belt Board of Directors:

Decommissioning Cost Escalation Rate	5%
Decommissioning Fund Earnings Rate	10%

**5.) Any contracts upon which the licensee is relying pursuant to 10 CFR 50.75(e)(1)(v).**

Corn Belt is not relying upon any long-term contract for purposes of providing decommissioning funding within the meaning of 10 CFR 50.75(e)(1)(v).

**6.) Any modifications occurring to a licensee's current method of providing financial assurance since the last submitted report.**

Corn Belt continues to use the external sinking fund method of providing decommissioning funding assurance.

**7.) Any Material Changes to trust agreements.**

There have been no material changes in the Corn Belt trust agreements, trustee or investment manager. Corn Belt's trustee Norwest Bank, Iowa, N.A. has changed its name to Wells Fargo, Iowa, N.A. Corn Belt's investment manager, American Express Asset Management Group has transferred the responsibilities of managing the investments to Northwinds Marketing Group, LLC, a division of American Express.

## CORN BELT POWER COOPERATIVE

### DAEC - DECOMMISSIONING FUNDING REPORT

Schedule of the annual amounts remaining to be collected.

Date	Amount Funded *	Annual Earnings **	Yearly Total	Decommissioning Withdrawals	Accumulated Balance ***
2000					11,572,573
2001	870,083	1,275,373	2,145,456		13,718,029
2002	913,587	1,499,741	2,413,328		16,131,357
2003	959,267	1,751,789	2,711,056		18,842,413
2004	1,007,230	2,034,587	3,041,817		21,884,230
2005	1,057,591	2,351,536	3,409,127		25,293,357
2006	1,110,471	2,706,392	3,816,863		29,110,220
2007	1,165,994	3,103,312	4,269,306		33,379,526
2008	1,224,294	3,546,891	4,771,185		38,150,711
2009	1,285,509	4,042,213	5,327,722		43,478,433
2010	1,349,784	4,594,893	5,944,677		49,423,110
2011	1,417,274	5,211,140	6,628,414		56,051,524
2012	1,488,137	5,897,815	7,385,952		63,437,476
2013	1,562,544	6,662,502	8,225,046		71,662,522
2014	1,640,671	6,435,509	8,076,180	25,154,635	54,584,067
2015		3,843,121	3,843,121	35,293,340	23,133,848
2016		1,377,741	1,377,741	19,339,614	5,171,975
2017		494,189	494,189	1,074,498	4,591,666
2018		466,523	466,523	469,050	4,589,139
2019		226,645	226,645	4,650,852	164,932
2020		7,824	7,824	172,756	-
	<u>17,052,436</u>	<u>57,529,736</u>	<u>86,154,745</u>	<u>86,154,745</u>	

**Assumptions:**

The schedule assumes no income tax on earnings.

\* Collections are escalated 5% annually from 2001 dollars.

\*\* Earnings are estimated at 10% annual rate compounded monthly.

\*\*\* The future value of the site specific NRC minimum of \$41.1 million is \$86.2 million at 2014 assuming a 5% escalation rate.