

Southern Nuclear  
Operating Company, Inc.  
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*Energy to Serve Your World*

March 30, 2009

Docket Nos.: 50-348  
50-364

NL-09-0428

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

Joseph M. Farley Nuclear Plant  
Financial Assurance Requirements for Decommissioning  
Nuclear Power Reactors (10 CFR 50.75(f)(1))

Ladies and Gentlemen:

Pursuant to 10 CFR 50.75(f)(1), each power reactor licensee is required to report to the NRC the status of its decommissioning funding for each reactor or part of each reactor it owns on a calendar year basis, beginning on March 31, 1999, and every two years thereafter. Southern Nuclear Operating Company (Southern Nuclear) holds operating licenses NPF-2 and NPF-8 for the Joseph M. Farley Nuclear Plant owned by Alabama Power Company. Accordingly, Southern Nuclear provides the enclosed Alabama Power Company submittal in accordance with the requirements of 10 CFR 50.75(f)(1).

This letter contains no NRC commitments. If you have any questions, please advise.

Sincerely,

A handwritten signature in black ink that reads "Mark J. Ajluni". The signature is written in a cursive style.

M. J. Ajluni  
Manager, Nuclear Licensing

MJA/TWS/daj

Enclosure: Alabama Power Company Letter Response

cc: Alabama Power Company

Mr. A. P. Beattie, Executive Vice President, Chief Financial Officer and Treasurer  
Mr. J. R. DeRieux, Assistant Treasurer and Manager – Treasury/Finance

Southern Nuclear Operating Company

Mr. J. T. Gasser, Executive Vice President  
Mr. J. R. Johnson, Vice President – Farley  
Ms. P. M. Marino, Vice President – Engineering  
RTYPE: CFA04.054

U. S. Nuclear Regulatory Commission

Mr. L. A. Reyes, Regional Administrator  
Mr. R. E. Martin, NRR Project Manager – Farley  
Mr. E. L. Crowe, Senior Resident Inspector – Farley

**Joseph M. Farley Nuclear Plant  
Financial Assurance Requirements for Decommissioning  
Nuclear Power Reactors (10 CFR 50.75(f)(1))**

**Enclosure**

**Alabama Power Company Response**

**J. Randy DeRieux**  
Assistant Treasurer  
Treasury/Finance

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Post Office Box 2641  
Birmingham, Alabama 35291-0040

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March 3, 2009

Docket Nos.: 50-348  
50-364

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

Joseph M. Farley Nuclear Plant  
Financial Assurance Requirements for Decommissioning  
Nuclear Power Reactors (10 CFR 50.75(f)(1))

Dear Ladies and Gentlemen:

Pursuant to 10 CFR 50.75(f)(1), each power reactor licensee is required to report to the NRC the status of its decommissioning funding for each reactor or part of each reactor it owns on a calendar year basis, beginning on March 31, 1999, and every two years thereafter. Alabama Power Company (APC) hereby submits the enclosed information in accordance with 10 CFR 50.75(f)(1) for operating licenses NPF-2 and NPF-8 issued for Joseph M. Farley Nuclear Plant Unit 1 and 2, respectively. Southern Nuclear Operating Company, as the operating licensee and as an agent for the owner of Farley Nuclear Plant, is providing this information to the NRC on behalf of APC.

Based on the information presented herein, there is reasonable assurance that the funding necessary for decommissioning the Farley Nuclear Plant, consistent with the NRC prescribed minimum set forth in 10 CFR 50.75(c), will be available on the expiration date of the operating licenses NPF-2 and NPF-8.

Please advise if you have any questions or comments regarding the information provided herein.

Respectfully submitted,

ALABAMA POWER COMPANY, by,

A handwritten signature in black ink, appearing to read "J. Randy DeRieux". The signature is fluid and cursive, written over a white background.

J. Randy DeRieux

JRD/TWS

Enclosure

**Enclosure**  
**Alabama Power Company**  
**Ownership Percentage – 100%**

	<b>10 CFR 50.75(f)(1) Requirement</b>	<b>Unit 1</b>	<b>Unit 2</b>
1	The NRC minimum decommissioning estimate, pursuant to 10 CFR 50.75(b) and (c). <sup>1</sup>	\$ 381,665,000 <sup>2</sup>	\$ 381,665,000 <sup>2</sup>
2	The amount accumulated at the end of the calendar year preceding the date of the report for items included in 10 CFR 50.75(b) and (c).	\$206,091,114	\$197,874,442
3	A schedule of the annual amounts remaining to be collected; for items in 10 CFR 50.75(b) and (c).	See Schedule in Attachment 1	See Schedule in Attachment 2
4	The assumptions used regarding: (a) rates of escalation in decommissioning costs; (b) rates of earnings on decommissioning funds; (c) real rate of return; and (d) rates of other factors used in funding projections.	4.5%  7.0%  2.5%  N/A	4.5%  7.0%  2.5%  N/A
5	Any contracts upon which the licensee is relying pursuant to 10 CFR 50.75(e)(1)(v).	N/A	N/A
6	Any modifications to a licensee's current method of providing financial assurance occurring since the last submitted report.	No modifications External Sinking Fund "Cost of Service" Rate Making	
7	Any material changes to trust agreements.	See Attachment 3	

**NOTES:**

<sup>1</sup> The NRC formulas in section 10 CFR 50.75(c) include only those decommissioning costs incurred by licensees to remove a facility or site safely from service and reduce residual radioactivity to levels that permit: (1) release of the property for unrestricted use and termination of the license; or (2) release of the property under restricted conditions and termination of the license. The cost of dismantling or demolishing non-radiological systems and structures is not included in the NRC decommissioning cost estimates. The costs of managing and storing spent fuel on-site until transfer to DOE are not included in the cost formulas.

<sup>2</sup> This number is based on NUREG-1307, Rev. 13, for the burial factor (Option 2) and the December 2007 values for labor and energy factors.

**Attachment 1  
Schedule of the Annual Amounts Remaining to be Collected**

**Alabama Power Company  
Farley Nuclear Plant Unit 1**

Year	Beginning Fund Balance	Fund Earnings	Fund Contributions	Ending Fund Balance	Minimum Decommissioning Fund Estimate
2007					381,665,000
2008				206,091,114	398,839,925
2009	206,091,114	14,426,378	464,149	220,981,641	416,787,722
2010	220,981,641	15,468,715	464,149	236,914,505	435,543,169
2011	236,914,505	16,584,015	464,149	253,962,669	455,142,612
2012	253,962,669	17,777,387	464,149	272,204,205	475,624,029
2013	272,204,205	19,054,294	464,149	291,722,648	497,027,111
2014	291,722,648	20,420,585	464,149	312,607,383	519,393,331
2015	312,607,383	21,882,517	464,149	334,954,049	542,766,030
2016	334,954,049	23,446,783	464,149	358,864,981	567,190,502
2017	358,864,981	25,120,549	464,149	384,449,679	592,714,074
2018	384,449,679	26,911,478	464,149	411,825,305	619,386,208
2019	411,825,305	28,827,771	464,149	441,117,225	647,258,587
2020	441,117,225	30,878,206	464,149	472,459,580	676,385,223
2021	472,459,580	33,072,171	464,149	505,995,900	706,822,559
2022	505,995,900	35,419,713	464,149	541,879,762	738,629,574
2023	541,879,762	37,931,583	464,149	580,275,494	771,867,904
2024	580,275,494	40,619,285	464,149	621,358,928	806,601,960
2025	621,358,928	43,495,125	464,149	665,318,202	842,899,048
2026	665,318,202	46,572,274	464,149	712,354,625	880,829,506
2027	712,354,625	49,864,824	464,149	762,683,598	920,466,833
2028	762,683,598	53,387,852	464,149	816,535,598	961,887,841
2029	816,535,598	57,157,492	464,149	874,157,239	1,005,172,794
2030	874,157,239	61,191,007	464,149	935,812,395	1,050,405,569
2031	935,812,395	65,506,868	464,149	1,001,783,412	1,097,673,820
2032	1,001,783,412	70,124,839	464,149	1,072,372,400	1,147,069,142
2033	1,072,372,400	75,066,068	464,149	1,147,902,617	1,198,687,253
2034	1,147,902,617	80,353,183	464,149	1,228,719,949	1,252,628,180
2035	1,228,719,949	86,010,396	464,149	1,315,194,494	1,308,996,448
2036	1,315,194,494	92,063,615	464,149	1,407,722,258	1,367,901,288
2037	1,407,722,258	98,540,558	464,149	1,506,726,965	1,429,456,846

**Attachment 2**

**Schedule of the Annual Amounts Remaining to be Collected**

**Alabama Power Company  
Farley Nuclear Plant Unit 2**

Year	Beginning Fund Balance	Fund Earnings	Fund Contributions	Ending Fund Balance	Minimum Decommissioning Fund Estimate
2007					381,665,000
2008				197,874,442	398,839,925
2009	197,874,442	13,851,211	402,004	212,127,657	416,787,722
2010	212,127,657	14,848,936	402,004	227,378,597	435,543,169
2011	227,378,597	15,916,502	402,004	243,697,103	455,142,612
2012	243,697,103	17,058,797	402,004	261,157,904	475,624,029
2013	261,157,904	18,281,053	402,004	279,840,961	497,027,111
2014	279,840,961	19,588,867	402,004	299,831,832	519,393,331
2015	299,831,832	20,988,228	402,004	321,222,065	542,766,030
2016	321,222,065	22,485,545	402,004	344,109,613	567,190,502
2017	344,109,613	24,087,673	402,004	368,599,290	592,714,074
2018	368,599,290	25,801,950	402,004	394,803,244	619,386,208
2019	394,803,244	27,636,227	402,004	422,841,475	647,258,587
2020	422,841,475	29,598,903	402,004	452,842,383	676,385,223
2021	452,842,383	31,698,967	402,004	484,943,353	706,822,559
2022	484,943,353	33,946,035	402,004	519,291,392	738,629,574
2023	519,291,392	36,350,397	402,004	556,043,794	771,867,904
2024	556,043,794	38,923,066	402,004	595,368,863	806,601,960
2025	595,368,863	41,675,820	402,004	637,446,688	842,899,048
2026	637,446,688	44,621,268	402,004	682,469,960	880,829,506
2027	682,469,960	47,772,897	402,004	730,644,861	920,466,833
2028	730,644,861	51,145,140	402,004	782,192,005	961,887,841
2029	782,192,005	54,753,440	402,004	837,347,450	1,005,172,794
2030	837,347,450	58,614,321	402,004	896,363,775	1,050,405,569
2031	896,363,775	62,745,464	402,004	959,511,243	1,097,673,820
2032	959,511,243	67,165,787	402,004	1,027,079,034	1,147,069,142
2033	1,027,079,034	71,895,532	402,004	1,099,376,571	1,198,687,253
2034	1,099,376,571	76,956,360	402,004	1,176,734,935	1,252,628,180
2035	1,176,734,935	82,371,445	402,004	1,259,508,384	1,308,996,448
2036	1,259,508,384	88,165,587	402,004	1,348,075,975	1,367,901,288
2037	1,348,075,975	94,365,318	402,004	1,442,843,297	1,429,456,846
2038	1,442,843,297	100,999,031	402,004	1,544,244,332	1,493,782,404
2039	1,544,244,332	108,097,103	402,004	1,652,743,439	1,561,002,612
2040	1,652,743,439	115,692,041	402,004	1,768,837,484	1,631,247,730
2041	1,768,837,484	123,818,624	402,004	1,893,058,112	1,704,653,877

**Attachment 3**  
**Material Changes to Trust Agreement**

- |               |                                                                                                                                                                                          |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| June 1991     | Executed Nonqualified Master Nuclear Decommissioning Trust Agreement with First Alabama Bank, Mobile                                                                                     |
| February 1994 | Executed Investment Management Agreement with W.H. Reaves & Co. for the Nonqualified Master Nuclear Decommissioning Trust                                                                |
| February 1994 | Executed investment Management Agreement with ANB Investment Management and Trust Company for the Nonqualified Master Nuclear Decommissioning Trust                                      |
| February 1994 | Executed Investment Management Agreements with Loomis, Sayles & Company for the Nonqualified Master Nuclear Decommissioning Trust and the Qualified Master Nuclear Decommissioning Trust |
| December 1995 | Executed Investment Management Agreement with Flaherty & Crumrine, Inc. for the Nonqualified Master Nuclear Decommissioning Trust                                                        |
| November 1996 | Named Mellon Bank, N.A. successor trustee for the Nonqualified Master Nuclear Decommissioning Trust and the Qualified Master Nuclear Decommissioning Trust                               |
| March 1999    | Established Trust Owned Life Insurance with Allmerica Financial Life and Annuity Company indirectly through Vinings Management for the Nonqualified Master Nuclear Decommissioning Trust |
| July 1999     | Executed Investment Management Agreement with Northern Trust Company for the Qualified Master Nuclear Decommissioning Trust                                                              |
| July 1999     | Executed Investment Management Agreement with Rhumblin Advisers for the Qualified Master Nuclear Decommissioning Trust                                                                   |
| August 1999   | Executed Investment Management Agreement with Barrow, Hanley, Mewhinney & Strauss, Inc. for the Qualified Master Nuclear Decommissioning Trust                                           |
| July 2000     | Executed Investment Management Agreement with Castleark Management L.L.C. for the Qualified Master Nuclear Decommissioning Trust                                                         |

- September 2002** Executed Investment Management Agreement with AmSouth Bank for the Qualified and Nonqualified Master Nuclear Decommissioning Trust
- March 2003** Executed Trust Owned Life Insurance with Prudential for the Nonqualified Master Nuclear Decommissioning Trust replacing Allmerica
- October 2004** Executed Investment Management Agreement with Flaherty and Crumrine, Inc. for the Qualified Master Nuclear Decommissioning Trust
- January 2005** Suspended external semi-annual contributions to the Qualified Master Nuclear Decommissioning Trust and the Nonqualified Master Nuclear Decommissioning Trust as directed by the Alabama Public Service Commission
- May 2005** The NRC granted the Company a 20-year extension of the operating license for both units at Plant Farley
- February 2006** Executed Investment Management Agreement with AllianceBernstein for the Qualified Master Nuclear Decommissioning Trust replacing Northern Trust