Charles R. Pierce Regulatory Affairs Director Southern Nuclear Operating Company, Inc. 40 Inverness Center Parkway Post Office Box 1295 Birmingham, Alabama 35201

Tel 205.992.7872 Fax 205.992.7601

March 29, 2013

SOUTHERN A COMPANY

Docket Nos.: 50-348

50-364

NL-13-0675

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 Unit 1 and Unit 2, respectively, 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 contact Ken McElroy at (205) 992-7369.

Sincerely,

C. R. Pierce

Regulatory Affairs Director

CRP/TWS/lac

Enclosure: Alabama Power Company Response

U. S. Nuclear Regulatory Commission NL-13-0675 Page 2

#### cc: Alabama Power Company

Ms. A. Allcorn-Walker, Vice President, Comptroller

Mr. C. Blake, Assistant Treasurer

#### Southern Nuclear Operating Company

Mr. S. E. Kuczynski, Chairman, President & CEO

Mr. D. G. Bost, Executive Vice President & Chief Nuclear Officer

Mr. T. A. Lynch, Vice President - Farley

Mr. B. L. Ivey, Vice President – Regulatory Affairs

Mr. B. J. Adams, Vice President - Fleet Operations

RTYPE: CFA04.054

### U. S. Nuclear Regulatory Commission

Mr. V. M. McCree, Regional Administrator

Ms. E. A. Brown, NRR Project Manager - Farley

Mr. P. K. Niebaum, Senior Resident - Farley

Mr. J. R. Sowa, Senior Resident - 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** 

Chris Blake, CPA, CMA Assistant Treasurer Treasury Services 600 North 18th Street Post Office Box 2641 Birmingham, Alabama 35291-0040

Tel 205.257.3618 Fax 205.257.1023



March 6, 2013

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 10CFR 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.

Christopher R. Blake

CRB:kph

Enclosure

# Enclosure Alabama Power Company Ownership Percentage – 100%

	10 CFR 50.75(f)(1) Requirement	Unit 1	Unit 2	
1	The NRC minimum decommissioning estimate, pursuant to 10 CFR 50.75(b) and (c). 1	\$ 485,342,000 <sup>2</sup>	\$ 485,342,000 <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).	\$309,217,383	\$296,156,008	
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 1	
4	The assumptions used regarding:	-		
	(a) rates of escalation in decommissioning costs;	4.5%	4.5%	
	(b) rates of earnings on decommissioning funds;	7.0%	7.0%	
	(c) real rate of return; and	2.5% <sup>3</sup>	2.5% <sup>3</sup>	
	(d) rates of other factors used in funding projections.	N/A	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:

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.

This number is based on NUREG-1307, Rev. 15, for the burial factor (Option 2) and the June 30, 2012, BLS data for labor and energy. Use of June 30, 2012, BLS data best correlates with the July 1, 2012, burial costs used for determination of the burial escalation factor described in NUREG-1307, Rev. 15.

<sup>&</sup>lt;sup>3</sup> The real rate of return of 2.5% was established by the Alabama Public Service Commission's Order pertaining to Informal Docket U-3295 and subsequent submittals pursuant to that Order, most recently on October 28, 2008.

# Joseph M. Farley Nuclear Plant—Units 1 & 2 Financial Assurance Requirements for Decommissioning Nuclear Power Reactors

## **Attachment 1**

Schedule of the Annual Amounts Remaining to be Collected

# 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
2012	0	0	0	309,217,383	485,342,000
2012	309,217,383	21,645,217	464,149	331,326,749	507,182,390
2014	331,326,749	23,192,872	464,149	354,983,770	530,005,598
2015	354,983,770	24,848,864	464,149	380,296,783	553,855,849
2016	380,296,783	26,620,775	464,149	407,381,707	578,779,363
2017	407,381,707	28,516,719	464,149	436,362,575	604,824,434
2018	436,362,575	30,545,380	464,149	467,372,105	632,041,534
2019	467,372,105	32,716,047	464,149	500,552,301	660,483,403
2020	500,552,301	35,038,661	464,149	536,055,111	690,205,156
2021	536,055,111	37,523,858	464,149	574,043,118	721,264,388
2022	574,043,118	40,183,018	464,149	614,690,285	753,721,285
2023	614,690,285	43,028,320	464,149	658,182,754	787,638,743
2024	658,182,754	46,072,793	464,149	704,719,696	823,082,486
2025	704,719,696	49,330,379	464,149	754,514,224	860,121,198
2026	754,514,224	52,815,996	464,149	807,794,368	898,826,652
2027	807,794,368	56,545,606	464,149	864,804,123	939,273,851
2028	864,804,123	60,536,289	464,149	925,804,561	981,541,175
2029	925,804,561	64,806,319	464,149	991,075,029	1,025,710,528
2030	991,075,029	69,375,252	464,149	1,060,914,430	1,071,867,501
2031	1,060,914,430	74,264,010	464,149	1,135,642,589	1,120,101,539
2032	1,135,642,589	79,494,981	464,149	1,215,601,719	1,170,506,108
2033	1,215,601,719	85,092,120	464,149	1,301,157,989	1,223,178,883
2034	1,301,157,989	91,081,059	464,149	1,392,703,197	1,278,221,933
2035	1,392,703,197	97,489,224	464,149	1,490,656,569	1,335,741,920
2036	1,490,656,569	104,345,960	464,149	1,595,466,678	1,395,850,306
2037	1,595,466,678	111,682,667	464,149	1,707,613,495	1,458,663,570

Over (Under) Funded 248,949,925

# 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
2012	0	0	0	296,156,008	485,342,000
2012	296,156,008	20,730,921	402,004	317,288,932	507,182,390
2013	317,288,932	22,210,225	402,004	339,901,162	530,005,598
2014	339,901,162	23,793,081	402,004	364,096,247	553,855,849
2013	364,096,247	25,486,737	402,004	389,984,988	578,779,363
2017	389,984,988	27,298,949	402,004	417,685,941	604,824,434
2017	417,685,941	29,238,016	402,004	447,325,961	632,041,534
2019	447,325,961	31,312,817	402,004	479,040,783	660,483,403
2020	479,040,783	33,532,855	402,004	512,975,641	690,205,156
2021	512,975,641	35,908,295	402,004	549,285,940	721,264,388
2022	549,285,940	38,450,016	402,004	588,137,960	753,721,285
2023	588,137,960	41,169,657	402,004	629,709,621	787,638,743
2023	629,709,621	44,079,673	402,004	674,191,299	823,082,486
2024	674,191,299	47,193,391	402,004	721,786,694	860,121,198
2026	721,786,694	50,525,069	402,004	772,713,766	898,826,652
2027	772,713,766	54,089,964	402,004	827,205,734	939,273,851
2028	827,205,734	57,904,401	402,004	885,512,139	981,541,175
2029	885,512,139	61,985,850	402,004	947,899,993	1,025,710,528
2030	947,899,993	66,353,000	402,004	1,014,654,997	1,071,867,501
2030	1,014,654,997	71,025,850	402,004	1,086,082,850	1,120,101,539
2032	1,086,082,850	76,025,800	402,004	1,162,510,654	1,170,506,108
2033	1,162,510,654	81,375,746	402,004	1,244,288,404	1,223,178,883
2034	1,244,288,404	87,100,188	402,004	1,331,790,596	1,278,221,933
2035	1,331,790,596	93,225,342	402,004	1,425,417,942	1,335,741,920
2036	1,425,417,942	99,779,256	402,004	1,525,599,202	1,395,850,306
2037	1,525,599,202	106,791,944	402,004	1,632,793,150	1,458,663,570
2038	1,632,793,150	114,295,520	402,004	1,747,490,674	1,524,303,431
2039	1,747,490,674	122,324,347	402,004	1,870,217,025	1,592,897,085
2040	1,870,217,025	130,915,192	402,004	2,001,534,221	1,664,577,454
2041	2,001,534,221	140,107,395	402,004	2,142,043,621	1,739,483,439

Over (Under) Funded 402,560,181

# Attachment 3 Material Changes to Trust Agreement

June 2011

Executed Investment Management Agreement with Invesco, The Boston Company, and EuroPacific in the International Asset Class for the Qualified Master Nuclear Decommissioning Trust.