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50-366 50-425

NL-11-1313

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

Edwin I. Hatch Nuclear Plant – Units 1 & 2
Vogtle Electric Generating Plant – Units 1 & 2
Response to Request for Additional Information -
Decommission Funding Status Report

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 DPR-57 and NPF-5 for the Edwin I. Hatch Nuclear Plant (Hatch) and NPF-68 and NPF-81 for the Vogtle Electric Generating Plant (Vogtle). On behalf of the licensed owners (Georgia Power Company, Oglethorpe Power Corporation, the Municipal Electric Authority of Georgia, and the City of Dalton, Georgia), Southern Nuclear provided the required information by letters NL-11-0451 and NL-11-0449, dated March 29, 2011, for Hatch and Vogtle, respectively.

By letter dated June 2, 2011, the NRC requested additional information associated with the above referenced letters. Southern Nuclear's response to the request for additional information is enclosed and is provided on behalf of the licensed owners of Hatch and Vogtle. The enclosed response provides further assurance that adequate funding for decommissioning of Hatch and Vogtle will be available as required by 10 CFR 50.75 upon permanent termination of operation for each unit.

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NRR

This letter contains no NRC commitments. If you have any questions, please contact Jack Stringfellow at (205) 992-7037.

Respectfully submitted,



M. J. Ajluni
Nuclear Licensing Director

MJA/TWS/

Enclosure: Response to Request for Additional Information - Hatch and Vogtle
Decommissioning Funding Status Report

cc: Southern Nuclear Operating Company
Mr. J. T. Gasser, Executive Vice President
Mr. D. R. Madison, Vice President – Hatch
Mr. T. E. Tynan, Vice President – Vogtle
Ms. P. M. Marino, Vice President – Engineering
RType: CHA02.004; CVC7000

U. S. Nuclear Regulatory Commission
Mr. V. M. McCree, Regional Administrator
Mr. P. G. Boyle, NRR Project Manager – Hatch and Vogtle
Mr. E. D. Morris, Senior Resident Inspector – Hatch
Mr. L. M. Cain, Senior Resident Inspector – Vogtle

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RAI #1: Minimum DFA calculation

Provide the basis for the use of the December 2009 values for the labor and energy factors used in calculating the minimum requirement for decommissioning financial assurance. If necessary, provide the values in 2010 dollars or provide a corrected submittal for that part of the DFS report.

On March 29, 2011, the Hatch 1 and 2, and Vogtle 1 and 2, DFS reports submitted by Southern Nuclear contained the amounts of decommissioning funds estimated to be required under 10 CFR 50.75.(b) and (c) less than the amount calculated by the NRC staff.

According to 10 CFR 50.75(f)(1), the amount provided in the DFS report should be "the amount of decommissioning funds estimated to be required under 10 CFR 50.75(b) and (c)."

The formulas for the factors used by the NRC staff can be found using NUREG-1307, Rev. 14, "Report on Waste Burial Charges: Changes in Decommissioning Waste Disposal Costs at Low-Level Waste Burial Facilities." For example, the calculations for the Labor and Energy Adjustment Factors can be found on pages 7 and 8 of NUREG-1307, Rev. 14.

RAI #1: Southern Nuclear Response

Operators of power reactors under the provisions of 10 CFR Part 50 are required by §50.75(b)(1) to provide certification that financial assurance for decommissioning will be provided in an amount not less than the amount stated in §50.75(c)(1). Licensees are also required by §50.75(b)(2) to adjust the certified amount annually using a rate at least equal to that stated in §50.75(c)(2). Specifically, §50.75(c)(2) states:

An adjustment factor at least equal to $0.65 L + 0.13 E + 0.22 B$ is to be used where L and E are escalation factors for labor and energy, respectively, and are to be taken from regional data of U.S. Department of Labor Bureau of Labor Statistics and B is an escalation factor for waste burial and is to be taken from NRC report NUREG-1307, "Report on Waste Burial Charges."

At least once every two years, licensees are required by §50.75(f) to report the status of its decommissioning funding for each reactor including the amounts estimated to be required by §50.75(b) and (c), the amount accumulated to the end of the calendar year preceding the date of the report, and a schedule of annual amounts remaining to be collected.

In accordance with the requirements of §50.75(b)(2), Southern Nuclear adjusts the required amount for decommissioning funding based on regional data of the U. S. Department of Labor Bureau of Labor Statistics (BLS) for labor and energy,

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and an escalation factor for waste burial taken from the latest revision of NRC report NUREG-1307, Report on Waste Burial Charges, on an annual basis. Each revision to NUREG-1307 provided guidance regarding the calculation for adjusting the NRC minimum decommissioning funding requirement for each reactor. The initial issuance of NUREG-1307 instructed licensees to use the January BLS Producer Price Index (PPI) data when calculating the adjusted NRC minimum funding requirement. Subsequent revisions to NUREG-1307 instructed licensees to use PPI data from various months with the December PPI data from the previous year being the predominate guidance (Revisions 2 through 10). The owners of Hatch and Vogtle include electric utilities that are subject to cost of service regulation by the applicable state public service commission (PSC). As such, these owners are subject to periodic rate cases that require cost of service to be based on calendar year periods ending in December for the applicable test years. Use of PPI data from various months could appear as an attempt to manipulate the decommissioning funding requirement for the purpose of affecting rates established by the PSC. For this reason alone, it important that Southern Nuclear use consistent data when determining the annual NRC minimum decommissioning funding requirement. Accordingly, Southern Nuclear has elected to base adjustments to the NRC minimum decommissioning funding requirement on the December PPI data from the previous year, consistent with previous Southern Nuclear submittals made pursuant to §50.75(f)(1).

In summary, Southern Nuclear calculation of the adjusted NRC minimum decommissioning funding requirement fully complies with the requirements of §50.75(c)(2). That is, applicable escalation factors for labor and energy are based on the BLS PPI data and the escalation factor for waste burial based on NUREG-1307, Revision 14, are used, in conjunction with the corresponding formula provided in §50.75(c)(2), to determine the adjusted NRC minimum funding requirement.

RAI #2: Citations for real rate of return

Provide the citations (e.g., an Order by the rate-regulatory authority) by the regulatory entity that allows for the assumptions used regarding rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors assumed within the DFS reports for Hatch and Vogtle.

Georgia Power Company (GPC):

On March 29, 2011, GPC reported the following:

2.42 percent rate of escalation in decommissioning costs, and
4.42 percent rates of earnings on decommissioning funds.

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Oglethorpe Power Corporation (OPC):

On March 29, 2011, OPC reported the following:

2.42 percent rate of escalation in decommissioning costs, and
6.00 percent rates of earnings on decommissioning funds.

Municipal Electric Authority of Georgia (MEAG):

On March 29, 2011, MEAG reported the following:

3.60 percent rate of escalation in decommissioning costs, and
5.60 percent rates of earnings on decommissioning funds.

City of Dalton (Dalton):

On March 29, 2011, Dalton reported the following:

2.42 percent rate of escalation in decommissioning costs, and
6.41 percent rates of earnings on decommissioning funds.

As stated in 10 CFR 50.75(f)(1):

the information in [the DFS] report must include [...] the
assumptions used regarding rates of escalation in
decommissioning costs, rates of earnings on
decommissioning funds, and rates of other factors used in
funding projections...

RAI #2: Southern Nuclear Response

Each licensed owner of plants operated by Southern Nuclear determines the applicable real rate of return assumed with regard to financial assurance of decommissioning funding. Accordingly, Southern Nuclear provides the following information on behalf of the licensed owners.

Georgia Power Company (GPC):

In accordance with the provisions of §50.75(e)(1)(ii), GPC utilizes the external sinking fund method for certification of financial assurance that funds will be available for the decommissioning process. The provisions of §50.75(e)(1)(ii) applicable to the external sinking fund method states:

A licensee that has collected funds based on the formulas in § 50.75(c) of this section may take credit for collected earnings on the decommissioning funds using up to a 2 percent annual real rate of return up to the time of permanent termination of operations. A licensee may use a credit of greater than 2 percent if the licensee's rate-setting authority has specifically authorized a higher rate.

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Accordingly, the GPC assumption of a 2% real rate of return is consistent with the requirements of §50.75(e)(1)(ii).

The above notwithstanding, the basis for the GPC assumption of 2% real rate of return is Georgia Public Service Commission (GPSC) Docket 31958, as stated in Southern Nuclear letters NL-11-0451 and NL-11-0449, dated March 29, 2011, for Hatch and Vogtle, respectively.

Oglethorpe Power Corporation (OPC):

In accordance with the provisions of §50.75(e)(1)(ii), OPC utilizes the external sinking fund method for certification of financial assurance that funds will be available for the decommissioning process. The provisions of §50.75(e)(1)(ii) applicable to the external sinking fund method states:

A licensee that has collected funds based on the formulas in § 50.75(c) of this section may take credit for collected earnings on the decommissioning funds using up to a 2 percent annual real rate of return up to the time of permanent termination of operations. A licensee may use a credit of greater than 2 percent if the licensee's rate-setting authority has specifically authorized a higher rate.

In addition, §50.75(e)(1)(ii)(A) provides additional clarification regarding applicability of the above provision as follows:

By a licensee that recovers, either directly or indirectly, the estimated total cost of decommissioning through rates established by "cost of service" or similar ratemaking regulation. Public utility districts, municipalities, rural electric cooperatives, and State and Federal agencies, including associations of any of the foregoing, that establish their own rates and are able to recover their cost of service allocable to decommissioning, are assumed to meet this condition.

As a rural electric cooperative, OPC rates are established by its Board of Directors. The OPC Board of Directors approved the 2011 Long Range Financial Forecast on March 29, 2011. The Long Range Financial Forecast included a 6% rate of earnings for the Hatch and Vogtle Nuclear Decommissioning Trust Funds, less a 2.42% rate of escalation, for a real rate of return of 3.58%.

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Municipal Electric Authority of Georgia (MEAG):

In accordance with the provisions of §50.75(e)(1)(ii), MEAG utilizes the external sinking fund method for certification of financial assurance that funds will be available for the decommissioning process. The provisions of §50.75(e)(1)(ii) applicable to the external sinking fund method states:

A licensee that has collected funds based on the formulas in § 50.75(c) of this section may take credit for collected earnings on the decommissioning funds using up to a 2 percent annual real rate of return up to the time of permanent termination of operations. A licensee may use a credit of greater than 2 percent if the licensee's rate-setting authority has specifically authorized a higher rate.

Accordingly, MEAG credited earnings at a real rate of return of 2% as allowed by §50.75(e)(1)(ii) for the Hatch Unit 1, Hatch Unit 2, Vogtle Unit 1, and Vogtle Unit 2 Decommissioning Trust Funds.

Crediting earnings on the decommissioning trust fund balance at a real rate of return of 2% in accordance with the provisions of §50.75(e)(1)(ii) eliminates any significance regarding rates for escalation and projected earnings as these rates become moot. That is, the assumption of any given escalation rate that is 2% less than the assumed rate of return will result in the same conclusion regarding compliance with the requirements of §50.75.

City of Dalton (Dalton):

As shown in Enclosure 4 of Southern Nuclear letters NL-11-0451 and NL-11-0449, dated March 29, 2011, for Hatch and Vogtle, respectively, the balance contained in the Dalton Decommissioning Trust funds currently exceeds the minimum NRC funding requirement for its prorated ownership share of Hatch and Vogtle. As a result, Dalton does not rely on earnings to demonstrate compliance with the requirements of §50.75.

As stated above, the provisions of §50.75(e)(1)(ii) allow licensees that certify to the formula amount to credit a real rate of return up to 2% on projected earnings up to the time of permanent termination of operations. The underlying basis for assuming the 2% real rate of return is that earnings on the Decommissioning Trust fund are expected to exceed the cost escalation for decommissioning costs by a minimum rate of 2%. Accordingly, the provisions of §50.75(e)(1)(ii) provide adequate assurance that the Dalton Decommissioning Trust Fund balance for Hatch and Vogtle will continue to grow at a rate that exceeds the escalation rate for decommissioning the Hatch Unit 1, Hatch Unit 2, Vogtle Unit 1, and Vogtle Unit 2 facilities. Based on the existing fund balances, adequate assurance is provided that funding will be available for decommissioning Hatch Unit 1, Hatch

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Unit 2, Vogtle Unit 1, and Vogtle Unit 2, upon permanent termination of operation for each unit.

RAI #3: After-tax decommissioning funds as of December 31, 2010:

Indicate if the amounts of decommissioning funds identified within the DFS report are the after-tax amounts of funds accumulated through December 31, 2010. If not, provide the after-tax amounts of decommissioning funds accumulated through December 31, 2010, for Hatch 1 and 2, and Vogtle 1 and 2.

On March 29, 2011, Southern Nuclear provided for GPC, OPC, MEAG, and Dalton (collectively known as the licensees), the amounts of funds 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), but did not indicate if the amounts stated were the before or after-tax balances.

The provisions of 10 CFR 50.75(f)(1) and (2) require the licensee to report the amount of funds accumulated to the end of the calendar year preceding the report.

RAI #3: Southern Nuclear Response

Decommissioning trust fund balances for OPC, MEAG, and Dalton, provided by Southern Nuclear letters NL-11-0451 and NL-11-0449, dated March 29, 2011, for Hatch and Vogtle, respectively, are reported in after tax dollars.

For GPC, the balances provided in the above referenced Southern Nuclear letters reflect the market value of the Hatch Unit 1, Hatch Unit 2, Vogtle Unit 1, and Vogtle Unit 2 Decommissioning Trust Funds for the year ending December 31, 2010. The balance for each fund includes unrealized appreciation and losses that have potential tax implications upon liquidation of the investment. The scope of the tax implications is based on the capital gains and capital losses, as applicable, and cannot be determined until the investment is liquidated. For this reason, a portion of the balance is based on the market value for investments that may incur a tax liability upon liquidation. For those investments that have been liquidated with realized appreciation, taxes have been paid, based on the corresponding gain or loss associated with the investment, and are considered to be after tax values.

In summary, it is more accurate to provide the GPC balance for each Decommissioning Trust Fund and recognize that the balance includes investments with both unrealized appreciation for which taxes have not been paid, as well as investment with realized appreciation for which capital gains taxes have been paid.