

March 29, 2011

**Phil Pierce, P.E.**

Vice President

Generation

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

Subject: Virgil C. Summer Nuclear Station  
Docket No. 50/395  
Operating License No. NPF-12  
Report of Status of Decommissioning Funding

Dear Sir/Madam:

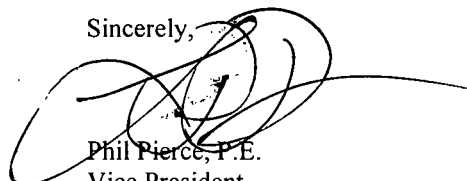
The South Carolina Public Service Authority (Authority) and South Carolina Electric & Gas Company (SCE&G) have ownership interests of one-third and two-thirds, respectively, in the Virgil C. Summer Nuclear Station (VCSNS). As provided in 10 CFR § 50.75 (f)(1), each power reactor licensee is required to report to the Nuclear Regulatory Commission (NRC) on a calendar year basis, beginning March 31, 1999, and every two years thereafter, the status of its decommissioning funding for each reactor or share of reactor it owns. SCE&G has advised the Authority that it will disclose the required information relative to its two-thirds ownership share in a separate submittal.

The Authority's one-third share of the NRC formula minimum funding requirement is approximately \$149 million as of December 31, 2010. This liability is funded by payments to an external sinking fund as provided for in 10 CFR § 50.75. The escalated liability for these costs is expected to total \$522 million, stated in dollars of the year of expenditure. The market value of the external fund was approximately \$96 million as of December 31, 2010.

A site-specific decommissioning study completed in 2006 identified the Authority's share of decommissioning costs which are in excess of NRC formula minimum funding requirements. This additional liability is estimated by the Authority to be approximately \$64 million as of December 31, 2010. The escalated liability for excess costs is expected to total approximately \$285 million, stated in dollars of the year of expenditure. The market value of the internal fund was approximately \$71 million as of December 31, 2010 and the book value was approximately \$65 million.

If there are any questions concerning this report, please contact me at (843) 761-4096.

Sincerely,



Phil Pierce, P.E.  
Vice President  
Generation

LPP:trw

Attachment

cc: Victor M. McCree  
R. E. Martin  
NRC Resident Inspector

A001  
xrr

1(a). The minimum decommissioning fund estimate,  
pursuant to 10 CFR § 50.75 (b) and (c).

\$149,020,987

**Base Amount for PWR between 1,200 MWt and 3,400 MWt**

$$\begin{aligned}\text{Estimated Cost (Year X)} &= (1986 \$ \text{ Base Cost}) (A_L + B_E + C_B) \\ &= (\$100,520,000) \{(.65 \times 2.233) + (.13 \times 2.263) + (.22 \times 12.280)\} \\ &= \$447,062,962\end{aligned}$$

Authority's one-third share of 2010 Estimated Cost = \$149,020,987

Where:

|                   |   |                                                        |                      |
|-------------------|---|--------------------------------------------------------|----------------------|
| A                 | = | .65                                                    | (NUREG 1307 Rev. 14) |
| B                 | = | .13                                                    | (NUREG 1307 Rev. 14) |
| C                 | = | .22                                                    | (NUREG 1307 Rev. 14) |
| L <sub>x</sub>    | = | 2.233                                                  | (Computed Below)     |
| E <sub>x</sub>    | = | 2.263                                                  | (Computed Below)     |
| P <sub>x</sub>    | = | 1.675                                                  | (Computed Below)     |
| F <sub>x</sub>    | = | 3.074                                                  | (Computed Below)     |
| B <sub>x</sub>    | = | 12.280                                                 | (NUREG 1307 Rev. 14) |
|                   |   |                                                        |                      |
| 1986 \$ Base Cost | = | (\$75,000,000 + .0088Pmillion)                         |                      |
|                   | = | (\$75,000,000 + 25,520,000)                            |                      |
|                   | = | \$100,520,000                                          |                      |
|                   |   |                                                        |                      |
| P                 | = | 2,900 MWt                                              |                      |
|                   |   |                                                        |                      |
| L <sub>x</sub>    | = | Base L <sub>x</sub> (Dec 2005) x ECI(Qtr 4 2010) / 100 |                      |
|                   | = | 1.98 x 112.8 / 100                                     |                      |
|                   | = | 2.233                                                  |                      |
|                   |   |                                                        |                      |
| P <sub>x</sub>    | = | December 2010 Value / January 1986 Value               |                      |
|                   | = | 191.3 / 114.2                                          |                      |
|                   | = | 1.675                                                  |                      |
|                   |   |                                                        |                      |
| F <sub>x</sub>    | = | December 2010 Value / January 1986 Value               |                      |
|                   | = | 252.1 / 82.0                                           |                      |
|                   | = | 3.074                                                  |                      |
|                   |   |                                                        |                      |
| E <sub>x</sub>    | = | {(.58P <sub>x</sub> ) + (.42F <sub>x</sub> )}          |                      |
|                   | = | {(.58 x 1.675) + (.42 x 3.074)}                        |                      |
|                   | = | 2.263                                                  |                      |

Fourth Quarter 2010 / December 2010 values in the following Bureau of Labor Statistics indices were used to compute NRC minimum requirements:

Employment Cost Index – Total compensation, private industry, South region  
Series ID: CIU201000000220I

Producer Price Index – Commodities (Industrial electric power)  
Series ID: wpu0543

Producer Price Index – Commodities (Light fuel oils)  
Series ID: wpu0573

- 1(b). Escalation of the Authority's one-third share of the minimum funding requirement through the end of decommissioning.

Cost categories Labor, Equipment & Materials, Burial, and Other were estimated in a site-specific decommissioning study. These costs were escalated through the end of the decommissioning period based on various indices and estimates. Ultimate decommissioning costs to be funded from the external trust are estimated at \$522,183,564 in escalated dollars.

2. Market value of the external trust fund at December 31, 2010  
for items included in 10 CFR § 50.75. \$95,662,377
3. Schedule of annual amounts remaining to be collected for items  
in 10 CFR § 50.75.

| Year | Beginning Balance<br>- Book Value | Annual<br>Deposits | Earnings   | Ending<br>Balance |
|------|-----------------------------------|--------------------|------------|-------------------|
| 2011 | 85,858,490                        | 250,860            | 4,593,429  | 90,702,779        |
| 2012 | 90,702,779                        | 250,860            | 4,961,442  | 95,915,081        |
| 2013 | 95,915,081                        | 250,860            | 5,342,470  | 101,508,411       |
| 2014 | 101,508,411                       | 250,860            | 5,633,717  | 107,392,988       |
| 2015 | 107,392,988                       | 250,860            | 5,799,221  | 113,443,069       |
| 2016 | 113,443,069                       | 250,860            | 6,080,549  | 119,774,478       |
| 2017 | 119,774,478                       | 250,860            | 6,503,754  | 126,529,092       |
| 2018 | 126,529,092                       | 250,860            | 6,781,959  | 133,561,911       |
| 2019 | 133,561,911                       | 250,860            | 7,158,918  | 140,971,690       |
| 2020 | 140,971,690                       | 250,860            | 7,584,277  | 148,806,827       |
| 2021 | 148,806,827                       | 250,860            | 8,065,330  | 157,123,017       |
| 2022 | 157,123,017                       | 250,860            | 8,516,068  | 165,889,944       |
| 2023 | 165,889,944                       | 250,860            | 8,991,235  | 175,132,039       |
| 2024 | 175,132,039                       | 250,860            | 9,492,157  | 184,875,056       |
| 2025 | 184,875,056                       | 250,860            | 10,020,228 | 195,146,144       |
| 2026 | 195,146,144                       | 250,860            | 10,576,921 | 205,973,925       |
| 2027 | 205,973,925                       | 250,860            | 11,163,787 | 217,388,571       |
| 2028 | 217,388,571                       | 250,860            | 11,782,461 | 229,421,892       |
| 2029 | 229,421,892                       | 250,860            | 12,434,667 | 242,107,418       |
| 2030 | 242,107,418                       | 250,860            | 13,122,222 | 255,480,501       |
| 2031 | 255,480,501                       | 250,860            | 13,847,043 | 269,578,404       |
| 2032 | 269,578,404                       | 250,860            | 14,611,149 | 284,440,413       |
| 2033 | 284,440,413                       | 250,860            | 15,416,670 | 300,107,944       |
| 2034 | 300,107,944                       | 250,860            | 16,265,851 | 316,624,654       |
| 2035 | 316,624,654                       | 250,860            | 17,161,056 | 334,036,570       |
| 2036 | 334,036,570                       | 250,860            | 18,104,782 | 352,392,213       |
| 2037 | 352,392,213                       | 250,860            | 19,099,658 | 371,742,730       |
| 2038 | 371,742,730                       | 250,860            | 20,148,456 | 392,142,046       |
| 2039 | 392,142,046                       | 250,860            | 21,254,099 | 413,647,005       |
| 2040 | 413,647,005                       | 250,860            | 22,419,668 | 436,317,533       |
| 2041 | 436,317,533                       | 250,860            | 23,648,410 | 460,216,803       |
| 2042 | 460,216,803                       | (37,005,941)       | 22,938,029 | 446,148,891       |
| 2043 | 446,148,891                       | (108,240,957)      | 18,314,610 | 356,222,543       |
| 2044 | 356,222,543                       | (136,571,533)      | 11,905,085 | 231,556,095       |

|      |             |               |           |             |
|------|-------------|---------------|-----------|-------------|
| 2045 | 231,556,095 | (109,537,895) | 6,613,386 | 128,631,586 |
| 2046 | 128,631,586 | (88,014,364)  | 2,201,453 | 42,818,676  |
| 2047 | 42,818,676  | (42,812,874)  | 314       | 6,117       |

4. The assumptions used regarding escalation in decommissioning cost, rates of earnings on decommissioning funds, and rates of other factors used in funding projections follow:
- The plant will be decommissioned immediately upon license expiration (DECON alternative).
  - Costs will escalate in accordance with the estimated future behavior of applicable indices for labor (4.6%), equipment and materials (0.4%), waste burial (2.9%) and other (3.5 %).
  - Waste vendors will be utilized.
  - The trust fund will accrue earnings in accordance with estimated effective yield (approximately 5.4%).
  - All necessary funds will be on deposit at the time the plant is shut down.
5. Contracts upon which the licensee is relying pursuant to 10 CFR § 50.75 (e) (1) (v).
- None.
6. Modifications to the current funding assurance methods.
- None.
7. Material changes to Trust Agreements.
- None.