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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

Gentlemen:

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, on 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 \$112 million in 2002 dollars. 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 \$341 million, stated in dollars of the year of expenditure. Funding is made on a levelized basis over the plant's remaining operating license. The market value of the external fund was approximately \$52 million as of December 31, 2002.

A site-specific decommissioning study completed in 2000 identified the Authority's share of decommissioning costs in excess of NRC formula minimum funding requirements in the approximate amount of \$45 million in 2002 dollars. The escalated liability for excess costs is expected to total approximately \$213 million, stated in dollars of the year of expenditure. The market value of the internal fund was approximately \$49 million as of December 31, 2002 and the book value was approximately \$39 million.

If there are any questions concerning this report, please contact me at (843) 761-4093.

Sincerely,

Maxie C. Chaplin  
Senior Vice President  
Generation

MCC:ssf

Attachment

cc: L. A. Reyes  
L. M. Padovan  
K. R. Cotton  
NRC Resident Inspector

A 501

Add: Michael  
Dusanowski's

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

\$112,414,867

**Base Amount for PWR between 1200 MWt and 3400 MWt**

$$\begin{aligned} \text{Estimated Cost (Year X)} &= (1986 \text{ \$ Base Cost}) (A L_X + B E_X + C B_X) \\ &= (\$100,520,000) \{(.65 \times 1.794) + (.13 \times 1.143) + (.22 \times 9.273)\} \\ &= \$337,244,600 \end{aligned}$$

Authority's one-third ownership share of 2000 Estimated Cost = \$112,414,867

Where:

$$\begin{aligned} P &= 2,900 \text{ MWt} \\ A &= .65 \text{ (NUREG 1307 Rev. 9)} \\ B &= .13 \text{ (NUREG 1307 Rev. 9)} \\ C &= .22 \text{ (NUREG 1307 Rev. 9)} \\ L_X &= 1.794 \text{ (Computed Below)} \\ E_X &= 1.143 \text{ (Computed Below)} \\ P_X &= 1.222 \text{ (Computed Below)} \\ F_X &= 1.033 \text{ (Computed Below)} \\ B_X &= 9.273 \text{ (NUREG 1307 Rev. 10)} \end{aligned}$$

$$\begin{aligned} 1986 \text{ \$ Base Cost} &= (\$75,000,000 + .0088 \text{ pmillion}) \\ &= (\$75,000,000 + 25,520,000) \\ &= \$100,520,000 \end{aligned}$$

$$\begin{aligned} L_X &= (159.0)_{\text{Base 1989}} X (1.441)_{\text{Scaling Factor}} / (127.7)_{\text{Base 1981}} \\ &= 1.794 \end{aligned}$$

$$\begin{aligned} P_X &= 12/02 \text{ Value} / \text{January 1986 Value} \\ &= 139.6 / 114.2 \\ &= 1.222 \end{aligned}$$

$$\begin{aligned} F_X &= 12/02 \text{ Value} / \text{January 1986 Value} \\ &= 84.7 / 82 \\ &= 1.033 \end{aligned}$$

$$\begin{aligned} E_X &= \{(.58 P_X) + (.42 F_X)\} \\ &= \{(.58 \times 1.222) + (.42 \times 1.033)\} \\ &= 1.143 \end{aligned}$$

December 31, 2002 values in the following Bureau of Labor Statistics indices were used to compute NRC minimum requirements:

Employment Cost Index – South Region  
Series ID: ecu13202i

Producer Price Index – Commodities  
Series ID: wpu0543

Producer Price Index – Commodities  
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, Materials & Equipment, 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 \$341,232,140 in escalated dollars.

2. Market value of the external trust fund at December 31, 2002 for items included in 10 CFR § 50.75. \$ 52,085,186
3. Schedule of annual amounts remaining to be collected for items in 10 CFR § 50.75.

Year	Beginning Balance - Book Value	Annual Deposits	Earnings	Ending Balance
2003	44,721,209	4,899,000	2,468,611	52,088,820
2004	52,088,820	4,899,000	2,943,018	59,930,838
2005	59,930,838	4,899,000	3,535,919	68,365,757
2005	68,365,757	4,899,000	4,016,488	77,281,246
2007	77,281,246	4,899,000	4,540,273	86,720,519
2008	86,720,519	4,899,000	5,079,221	96,698,740
2009	96,698,740	4,899,000	5,618,197	107,215,937
2010	107,215,937	4,899,000	6,229,246	118,344,182
2011	118,344,182	4,899,000	6,863,963	130,107,145
2012	130,107,145	4,899,000	7,546,214	142,552,359
2013	142,552,359	4,899,000	8,225,271	155,676,631
2014	155,676,631	4,899,000	8,982,542	169,558,172
2015	169,558,172	4,899,000	9,715,683	184,172,855
2016	184,172,855	4,899,000	10,479,435	199,551,291
2017	199,551,291	4,899,000	11,374,424	215,824,714
2018	215,824,714	4,899,000	12,302,009	233,025,723
2019	233,025,723	4,899,000	13,282,466	251,207,189
2020	251,207,189	4,899,000	14,318,810	270,424,999
2021	270,424,999	4,899,000	15,414,225	290,738,224
2022	290,738,224	(18,403,234)	15,523,094	287,858,085
2023	287,858,085	(51,850,829)	13,452,414	249,459,669
2024	249,459,669	(64,163,366)	10,561,889	195,858,192
2025	195,858,192	(67,919,500)	7,292,505	135,231,198
2026	135,231,198	(70,634,723)	3,681,999	68,278,475
2027	68,278,475	(68,260,488)	1,025	19,011

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 predicted behavior of applicable indices for labor (4%), material and equipment (approximately 2%), waste burial (8.4%) and other (approximately 3.3%).
- Waste vendors will be utilized.
- The trust fund will accrue earnings in accordance with predicted effective yield (approximately 5.5%).
- 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.

Bcc: John Tiencken (M603)  
Bill McCall (M-602)  
Lonnie Carter (M-301)  
Sylleste Davis (M-301)  
Glenda Gillette (M-202)  
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