

Stephen A. Byrne
Senior Vice President, Nuclear Operations
803 345 4622



March 28, 2003
RC-03-0073

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

Gentlemen:

Subject: VIRGIL C. SUMMER NUCLEAR STATION
DOCKET NO. 50/395
OPERATING LICENSE NO. NPF-12
REPORT OF STATUS OF DECOMMISSIONING FUNDING (RR-1950)

South Carolina Electric and Gas Company (SCE&G) and the South Carolina Public Service Authority (Santee Cooper) have ownership interests of two-thirds and one-third respectively in the V. C. Summer Nuclear Station (VCSNS). As provided in 10 CFR 50.75(f)(1), SCE&G is required to report to the Nuclear Regulatory Commission (NRC), by March 31, 1999, and every two years thereafter, on the status of its decommissioning funding for its share of ownership of VCSNS. Santee Cooper discloses the required information relative to its one-third ownership share in a separate submittal.

The following information is submitted pursuant to the requirement of 10 CFR 50.75(f)(1):

The amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75 (b) and (c);

The amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75 (b) and (c) for SCE&G's two-thirds ownership of VCSNS is \$224,829,733 (2002 dollars). Please see Attachment I for the calculation of this amount.

The amount accumulated at the end of the calendar year preceding the date of the report;

The trust fund balance as of December 31, 2002 was \$61,953,118. The trust fund balance includes cash and cash surrender values of life insurance policies held by the Trust. The face amount of life insurance policies in force as of December 31, 2002 was \$251,382,365. Please refer to Attachment II for more information. Please note that approximately \$7 million of the \$61,953,118 is for items not included in 10 CFR 50.75(b) and (c).

Add Michael A. Duszynski
1 Paper Copy
A001

A schedule of the annual amounts remaining to be collected;

Please see Attachment II for a schedule of the annual amounts remaining to be collected. Please note that approximately 11.3% of the collection amounts shown in this schedule are for items not included in 10 CFR 50.75 (b) and (c) determined as follows:

Site specific study (1991) estimate of decommissioning costs pursuant to NRC definition (two-thirds portion)	\$118,256,667
Customer collection basis (two-thirds portion)	133,333,333
Percent related to items not included in NRC definition	11.31%

The assumptions used regarding escalation in decommissioning cost, rates of earnings on decommissioning funds, and rates of other factors used in funding projections;

Please see Attachment II for the assumptions used regarding escalation in decommissioning costs, rates of earnings on decommissioning funds, and other assumptions used in funding projections.

Any contracts upon which the licensee is relying pursuant to paragraph (e)(1)(v) of this section;

None

Any modifications occurring to a licensee's current method of providing financial assurance since the last submitted report;

None

Any material changes to trust agreements.

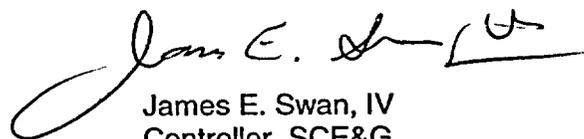
None - - It should be noted that the Trustee is now Wachovia Bank, N.A., successor to First Union National Bank effective upon their recent merger.

If you have any questions, please call

Very truly yours,



Stephen A. Byrne
Senior Vice President
Nuclear Operations, SCE&G



James E. Swan, IV
Controller, SCE&G

Document Control Desk
RR 1950
RC-03-0073
Page 3 of 3

c: N. O. Lorick
N. S. Carns
T. G. Eppink
R. J. White
L. A. Reyes
K. R. Cotton
NRC Resident Inspector

K. Sutton
Deloitte & Touche LLP
INPO Records Center
NSRC
RTS (RR 1950)
File (810.34)
DMS (RC-03-0073)

**ATTACHMENT I
CALCULATION OF AMOUNT OF DECOMMISSIONING
FUNDS ESTIMATED TO BE REQUIRED
PURSUANT TO 10 CFR 50.75 (B) AND (C);**

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

$$\begin{aligned} \text{1986 Base Cost} &= \$(75 + 0.0088p) \text{ million} \\ &= \$(75 + 0.0088 \times 2900) \text{ million} \\ &= \$100,520,000 \end{aligned}$$

$$\begin{aligned} \text{Estimated Cost (Year X)} &= (\text{1986 \$ Base Cost}) (A_{L_x} + B_{E_x} + C_{B_x}) \\ &= (\$100,520,000) \{ (.65 \times 1.794) + (.13 \times 1.143) + (.22 \times 9.273) \} \\ &= \$337,244,600 \end{aligned}$$

SCE&G's two-thirds ownership share of 2002 Estimated Cost = **\$224,829,733**

Where:

$$\begin{aligned} p &= 2,900 \text{ MWt} \\ A &= .65 \text{ (NUREG 1307 Rev. 10)} \\ B &= .13 \text{ (NUREG 1307 Rev. 10)} \\ C &= .22 \text{ (NUREG 1307 Rev. 10)} \\ L_x &= 1.794 \text{ (Computed Below)} \\ E_x &= 1.143 \text{ (Computed Below)} \\ P_x &= 1.222 \text{ (Computed Below)} \\ F_x &= 1.033 \text{ (Computed Below)} \\ B_x &= 9.273 \text{ (NUREG 1307 Rev. 10)} \\ \\ L_x &= (159.0)_{\text{Base 1989}} \times (1.441)_{\text{Scaling Factor}} / (127.7)_{\text{Base 1981}} \\ &= 1.794 \\ \\ P_x &= 12/02 \text{ Value} / \text{January 1986 Value} \\ &= 139.6 / 114.2 \\ &= 1.222 \\ \\ F_x &= 12/02 \text{ Value} / \text{January 1986 Value} \\ &= 84.7 / 82.0 \\ &= 1.033 \\ \\ E_x &= \{ (.58P_x) + (.42F_x) \} \\ &= \{ (.58 \times 1.222) + (.42 \times 1.033) \} \\ &= 1.143 \end{aligned}$$

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

ATTACHMENT II
EXPLANATION OF FINANCIAL ASSURANCE
MECHANISM AND AMOUNTS
REMAINING TO BE COLLECTED

Financial Assurance Mechanism

SCE&G is the operator of VCSNS and shares the operating costs and energy output of the plant with Santee Cooper in the proportions of two-thirds and one-third, respectively. SCE&G utilizes a program referred to as the Cost of Money Reduction Plan (COMReP) for funding its share of the costs of decommissioning VCSNS. Under this plan, funds collected through rates are used to purchase life insurance policies on key company personnel who, in return for being a qualified participant in the plan, receive a two-year salary continuation benefit from SCE&G. SCE&G has established a decommissioning trust fund (trust fund) with Wachovia Bank, N.A. (successor to First Union National Bank) as Trustee. SCE&G and the trust fund are beneficiaries of the life insurance policies. COMReP, Inc. of Omaha, Nebraska, is the servicing agent for the life insurance policies. Through the purchase of life insurance contracts, SCE&G and the trust fund are able to take advantage of income tax provisions that allow SCE&G to accrue earnings on the life insurance contracts on a tax deferred basis. In a letter dated July 13, 1989, the NRC indicated that the COMReP program satisfies the investment criteria of its financial assurance regulations. Further, this funding methodology has been approved by the South Carolina Public Service Commission (PSC).

Amounts collected through electric rates for decommissioning are transferred by SCE&G to the trust fund. The value of the policies compounds on a tax deferred basis. Upon the death of insured personnel, the policy proceeds are remitted tax-free. The trust fund receives the cash surrender value and SCE&G receives the death benefit component in order to recover its term premium and salary continuation payments, if applicable.

In our June 1993 rate case, the PSC approved gross annual collections for decommissioning in the amount of \$3,224,920, based upon costs estimates contained in a 1991 site-specific study. The amount approved was supported by a COMReP model which incorporated the proposed annual collections and projected cash flows generated by the COMReP program based upon plan assumptions including specific rates of return. In a rate order issued in January 2003, the PSC did not address any changes to the amount included in rates for decommissioning. As such, the \$3,224,920 established in 1993 is unchanged. SCE&G will reassess the adequacy of annual collections when a decision is reached by the NRC regarding SCE&G's application for a twenty-year life extension for VCSNS and on a continuing basis as future decommissioning cost studies are completed.

The schedule (Financial Assurance Model) on page 3 of 6 incorporates within the above referenced COMReP model the annual amounts remaining to be collected and the amounts of decommissioning funds estimated to be expended pursuant to 10 CFR 50.75 (b) and (c). The \$224,829,733 (calculated in Attachment I) is spread by year based upon the spread of costs (labor, equipment, etc.) in our 2000 site-specific study (DECON estimate). These payments (in 2002 dollars) are then escalated as described below along with the other assumptions underlying the schedule.

Other Relevant Assumptions in the Financial Assurance Model

- The assumed escalation rates applied to decommissioning cost estimates are based on a forecast provided by Global Insight's DriQuest, a forecasting service to which SCE&G subscribes. The forecast simulation (dataset) used is the T250802, August 25-year trendlong forecast which is produced twice a year. The variables used for the decommissioning cost categories are as follows: Employment Cost Index-Total Private Compensation for Labor; Producer Price Index-Machinery and Equipment for Equipment and Materials; Producer Price Index-Fuels, Related Products & Power for Energy; and Consumer Price Index for Commodities other than Food & Energy for Burial and Other. These forecasts extend only to 2027. Therefore, a compound growth rate based on the last five years of the available forecast is used to escalate costs beyond 2027. A compound growth rate based upon the forecasts for the years 2002-2027 is used to escalate costs through 2027. The escalation rates used are as follows:

	<u>CPGR 2027-2022</u>
Employment cost index – total private compensation (ECIWSSP)	4.13%
Producer price index- fuels, related products & power (WP105)	2.69%
Producer price index- machinery & equipment (WP11)	0.46%
Core consumer price index (excludes food & energy) (CPI@FAE)	3.66%

	<u>CPGR 2027-2002</u>
Employment cost index – total private compensation (ECIWSSP)	3.97%
Producer price index- fuels, related products & power (WP105)	2.13%
Producer price index- machinery & equipment (WP11)	0.25%
Core consumer price index (excludes food & energy) (CPI@FAE)	3.13%

- Earnings are derived based upon the external trust's beginning balance, collection amounts, decommissioning payments and the external trust's ending balance derived from the COMReP model.
- Earnings are credited to the fund at the end of each year.
- Within the COMReP Model, the projected insurance values are based upon a current average portfolio earnings rate. The assumed weighted average earnings rate on all investments is approximately 7.21%.

Financial Assurance Model

<i>Year</i>	<i>External Trust Beginning Balance</i>	<i>Annual Collection Amounts</i>	<i>Annual Payments For Decommissioning</i>	<i>Earnings</i>	<i>External Trust Ending Balance</i>
2003	61,953,118	1,991,388	0	4,541,208	68,485,714
2004	68,485,714	1,991,388	0	5,012,477	75,489,579
2005	75,489,579	1,991,388	0	5,517,745	82,998,712
2006	82,998,712	1,991,388	0	6,059,464	91,049,564
2007	91,049,564	1,991,388	0	6,640,262	99,681,214
2008	99,681,214	1,991,388	0	7,262,961	108,935,563
2009	108,935,563	1,991,388	0	7,930,581	118,857,532
2010	118,857,532	1,991,388	0	8,646,365	129,495,285
2011	129,495,285	1,991,388	0	9,413,786	140,900,459
2012	140,900,459	1,991,388	0	10,236,570	153,128,417
2013	153,128,417	1,991,388	0	11,118,710	166,238,515
2014	166,238,515	1,991,388	0	12,064,489	180,294,392
2015	180,294,392	1,991,388	0	13,078,498	195,364,278
2016	195,364,278	1,991,388	0	14,165,659	211,521,325
2017	211,521,325	1,991,388	0	15,331,249	228,843,962
2018	228,843,962	1,991,388	0	16,580,926	247,416,276
2019	247,416,276	1,991,388	0	17,920,757	267,328,421
2020	267,328,421	1,991,388	0	19,357,244	288,677,053
2021	288,677,053	1,991,388	0	20,897,362	311,565,803
2022	311,565,803	1,991,388	-23,601,290	21,697,272	311,653,173
2023	311,653,173	0	-66,872,833	20,070,912	264,851,252
2024	264,851,252	0	-60,749,458	16,915,436	221,017,230
2025	221,017,230	0	-60,252,981	13,771,102	174,535,351
2026	174,535,351	0	-60,361,887	10,413,911	124,587,375
2027	124,587,375	0	-62,425,374	6,736,169	68,898,170
2028	68,898,170	0	-52,017,369	3,094,102	19,974,903
2029	19,974,903	0	-23,470,748	594,410	-2,901,435
2030	-2,901,435	0	-28,918,967	-1,252,439	-33,072,841
2031	-33,072,841	0	-2,972,278	-2,493,129	-38,538,248
2032	-38,538,248	0	-3,102,854	-2,892,120	-44,533,222
2033	-44,533,222	0	-3,221,491	-3,328,885	-51,083,598
2034	-51,083,598	0	-3,353,832	-3,806,211	-58,243,641
2035	-58,243,641	0	-3,491,613	-4,327,715	-66,062,969
2036	-66,062,969	0	-3,645,018	-4,897,345	-74,605,332
2037	-74,605,332	0	-26,621,296	-6,342,371	-107,568,999

Notes

- The above analysis appropriately reflects contributions to the trust on an after-tax basis (i.e., taxes are accrued on the \$3,224,920 annual collections prior to their deposit). The rate of return incorporated in the analysis is derived from the COMReP model-supporting PSC approved collections for decommissioning discussed earlier. Further, while this rate of return appropriately reflects the tax-deferral aspects of the life insurance contracts, the analysis does **not** consider the effects of presumed tax deductibility of decommissioning payments in the years in which such payments are made. Were this tax deductibility considered in the above model, the funding would be more than adequate.

- In 2002, SCE&G filed an application with the NRC for a twenty-year license extension for VCSNS, which, if approved, would allow the plant to operate into 2042. The analysis (Supplemental Financial Assurance Model) on page 5 of 6 incorporates the same assumptions as the analysis on page 3 of 6, but also incorporates the assumptions that (i) the license renewal application is approved, (ii) decommissioning payments begin in 2042 versus 2022 and (iii) collections continue through 2042. The funding shortfall is greatly reduced under these assumptions. As in the other model, consideration of tax deductibility of decommissioning payments would eliminate the indicated shortfall.
- The above models are based on the NRC formula-based cost estimate and a DECON (immediate decommissioning) methodology. SCE&G has instead adopted a deferred decommissioning (SAFSTOR) methodology based on a site-specific study completed in 2000. Under the SAFSTOR methodology, the site will be maintained over a period of approximately 60 years in such a manner as to allow for subsequent decontamination that permits release for unrestricted use in 2084, or 2104 if the twenty-year life extension, discussed above, is approved. Under the SAFSTOR methodology, projected cash flows generated under the COMReP program are more than adequate to fund our decommissioning costs assuming a twenty-year life extension of VCSNS.
- Lastly, similar to that filed and accepted in connection with our 2001 report of status, we have enclosed a current certificate of insurance evidencing our coverage for decontamination and decommissioning liabilities.

Supplemental Financial Assurance Model (Assuming Life Extension)

<i>Year</i>	<i>External Trust Beginning Balance</i>	<i>Annual Collection Amounts</i>	<i>Annual Payments For Decommissioning</i>	<i>Earnings</i>	<i>External Trust Ending Balance</i>
2003	61,953,118	1,991,388	0	3,471,845	67,416,351
2004	67,416,351	1,991,388	0	3,773,161	73,180,900
2005	73,180,900	1,991,388	0	4,091,096	79,263,384
2006	79,263,384	1,991,388	0	4,426,566	85,681,338
2007	85,681,338	1,991,388	0	4,780,539	92,453,265
2008	92,453,265	1,991,388	0	5,154,034	99,598,687
2009	99,598,687	1,991,388	0	5,548,129	107,138,204
2010	107,138,204	1,991,388	0	5,963,959	115,093,551
2011	115,093,551	1,991,388	0	6,402,724	123,487,663
2012	123,487,663	1,991,388	0	6,865,689	132,344,740
2013	132,344,740	1,991,388	0	7,354,187	141,690,315
2014	141,690,315	1,991,388	0	7,869,628	151,551,331
2015	151,551,331	1,991,388	0	8,413,497	161,956,216
2016	161,956,216	1,991,388	0	8,987,363	172,934,967
2017	172,934,967	1,991,388	0	9,592,879	184,519,234
2018	184,519,234	1,991,388	0	10,231,791	196,742,413
2019	196,742,413	1,991,388	0	10,905,942	209,639,743
2020	209,639,743	1,991,388	0	11,617,274	223,248,405
2021	223,248,405	1,991,388	0	12,367,839	237,607,632
2022	237,607,632	1,991,388	0	13,159,800	252,758,820
2023	252,758,820	1,991,388	0	13,995,441	268,745,649
2024	268,745,649	1,991,388	0	14,877,170	285,614,207
2025	285,614,207	1,991,388	0	15,807,529	303,413,124
2026	303,413,124	1,991,388	0	16,789,201	322,193,713
2027	322,193,713	1,991,388	0	17,825,016	342,010,117
2028	342,010,117	1,991,388	0	18,917,959	362,919,464
2029	362,919,464	1,991,388	0	20,071,182	384,982,034
2030	384,982,034	1,991,388	0	21,288,009	408,261,431
2031	408,261,431	1,991,388	0	22,571,949	432,824,768
2032	432,824,768	1,991,388	0	23,926,702	458,742,858
2033	458,742,858	1,991,388	0	25,356,174	486,090,420
2034	486,090,420	1,991,388	0	26,864,487	514,946,295
2035	514,946,295	1,991,388	0	28,455,989	545,393,672
2036	545,393,672	1,991,388	0	30,135,267	577,520,327
2037	577,520,327	1,991,388	0	31,907,163	611,418,878
2038	611,418,878	1,991,388	0	33,776,786	647,187,052
2039	647,187,052	1,991,388	0	35,749,525	684,927,965
2040	684,927,965	1,991,388	0	37,831,067	724,750,420

Supplemental Financial Assurance Model (Assuming Life Extension) (continued)

<i>Year</i>	<i>External Trust Beginning Balance</i>	<i>Annual Collection Amounts</i>	<i>Annual Payments For Decommissioning</i>	<i>Earnings</i>	<i>External Trust Ending Balance</i>
2041	724,750,420	1,991,388	0	40,027,413	766,769,221
2042	766,769,221	1,991,388	-46,559,729	41,060,930	763,261,810
2043	763,261,810	0	-134,345,638	38,391,720	667,307,892
2044	667,307,892	0	-125,124,710	33,353,812	575,536,994
2045	575,536,994	0	-124,709,198	28,303,787	479,131,583
2046	479,131,583	0	-125,202,961	22,973,079	376,901,701
2047	376,901,701	0	-129,985,358	17,202,863	264,119,206
2048	264,119,206	0	-109,872,174	11,537,174	165,784,206
2049	165,784,206	0	-49,141,092	7,788,423	124,431,537
2050	124,431,537	0	-59,255,234	5,228,765	70,405,068
2051	70,405,068	0	-6,650,198	3,699,693	67,454,563
2052	67,454,563	0	-6,942,473	3,528,902	64,040,992
2053	64,040,992	0	-7,208,044	3,333,308	60,166,256
2054	60,166,256	0	-7,504,286	3,111,434	55,773,404
2055	55,773,404	0	-7,812,709	2,860,648	50,821,343
2056	50,821,343	0	-8,156,104	2,578,054	45,243,293
2057	45,243,293	0	-54,904,523	981,237	-8,679,993



NEIL

Nuclear Electric Insurance Limited

Suite 1200
1201 Market Street
Wilmington, DE 19801
U.S.A

Tel
302 888 3000
Fax
302 888 3007 Corporate
302 573-2213 Finance
302 888-3008 Insurance
302 888-3035 Loss Control

CERTIFICATE OF INSURANCE

ISSUED TO: United States NRC
ADDRESS: Washington, DC 20555
Attn: Sam Collins
Director of Nuclear Reactor Regulation

THIS IS TO CERTIFY that insurance has been effected with NUCLEAR ELECTRIC INSURANCE LIMITED, 1201 Market Street, Suite 1200, Wilmington, Delaware 19801, under Policy No. X03-052 as follows:

MEMBER INSURED: SOUTH CAROLINA ELECTRIC AND GAS COMPANY
ADDRESS: P.O. Box 764
Columbia, SC 29218
PROPERTY INSURED: Summer Nuclear Station
COVERAGE: Decontamination Liability, Decommissioning Liability, and Excess Property Insurance
AMOUNT OF INSURANCE: \$1,500,000,000
INSURED: South Carolina Electric and Gas Company, South Carolina Public Service Authority, and Wachovia Bank as their interests may appear.
POLICY TERM: 12:01 a.m. on April 1, 2003 to 12:01 a.m. on April 1, 2004, Standard time in Hamilton, Bermuda.

LOSS PAYEE CLAUSE:

A. Expenses covered under the Nuclear Liability Coverage (paragraph V.1(a)) shall be adjusted with the Member Insured and payable to:

South Carolina Electric and Gas Company

The Member Insured may, by written notice to the Insurer, designate other payees.

B. The expenses covered under the Debris Removal and Decontamination Coverage (paragraph V.1(b)), the losses covered under the Property Damage Coverage (paragraph V.1(c)), and the losses covered under the Functional Total Loss Coverage (paragraph V.2(a)) shall be adjusted with the Member Insured and payable to:

South Carolina Electric and Gas Company

The Member Insured may, by written notice to the Insurer, designate other payees.

C. Expenses covered under the Decommissioning Liability Coverage (subsection VI.1) shall be adjusted with the Member Insured and payable to:

South Carolina Electric and Gas Nuclear Decommissioning Trust and South Carolina Public Service Authority Nuclear Decommissioning Internal Fund

The Member Insured may, by written notice to the Insurer, designate other payees.

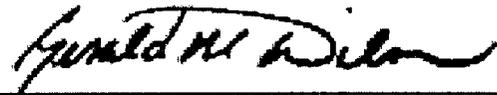
This Certificate is not transferable and may be canceled by NUCLEAR ELECTRIC INSURANCE COMPANY by giving 60 days written notice to the party to whom this Certificate is issued prior to cancellation of the insurance described herein, unless specifically provided for otherwise under the Terms, Conditions and Exceptions of the Policy.

THIS CERTIFICATE is for information only; it is not a contract of insurance but attests that a policy as numbered herein, and as it stands at the date of this Certificate, has been issued by the Company. Said policy is subject to change by endorsement and cancellation in accordance with its terms.

EFFECTIVE DATE OF THIS CERTIFICATE: April 1, 2003

CERTIFICATE EXPIRES: April 1, 2004, unless canceled sooner.

Signed by:
NUCLEAR ELECTRIC INSURANCE LIMITED



Gerald Wilson
Vice President - Insurance