

March 30, 2009 RC-09-0032

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

Dear Sir / Madam:

Subject: VIRGIL C. SUMMER NUCLEAR STATION

DOCKET NO. 50/395

OPERATING LICENSE NO. NPF-12

REPORT OF STATUS OF DECOMMISSIONING FUNDING

South Carolina Electric & Gas Company (SCE&G) and the South Carolina Public Service Authority (Santee Cooper) have undivided 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 two-thirds 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 \$263,161,360 (2008 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; Note: The Company does not maintain separate trusts for funds designated to cover the cost of radiological decommissioning and funds to cover other costs. For purposes of estimating the amount of funds related to items included in the NRC's definition of decommissioning, approximately 88.69% of the accumulated funds are considered to be related to funding costs estimated to be required pursuant to 10 CFR 50.75(b) and (c). This estimate is equal to the ratio of the total radiological decommissioning costs estimated in 1991 site specific cost study prepared for VCSNS to the total cost that served as the basis for establishing the amount collected through electric rates in an electric rate order issued by the Public Service Commission of South Carolina (SCPSC) in 1993. The calculation is as follows:



Document Control Desk RR 1950 RC-09-0032 Page 2 of 4

Site-specific study (1991) estimate of decommissioning costs pursuant to NRC definition (two-thirds portion)
Customer collection basis (two-thirds portion)
Percent of costs/collections related to items included in NRC definition of decommissioning

\$118,256,667 133,333,333

88.69%

As such, 88.69% of the decommissioning fund balance, after-tax collections, program costs and loan balances are presented in the Financial Assurance Model in Attachment II (The Financial Assurance Model).

The total trust fund balance at December 31, 2008 was \$81,708,049. This balance includes cash and cash surrender values of life insurance policies. The \$81,708,049 amount is net of a loan made to the trust by Bank of America in the amount of \$27,500,000. However, \$27,390,000 of advances from SCE&G to fund premium payments have not been deducted in arriving at the amount accumulated in the trust fund.

The portion of the above accumulated trust fund balance considered to be related to radiological decommissioning requirements addressed in the NRC's financial assurance formula was \$72,466,869 at December 31, 2008. This balance includes cash and cash surrender values of life insurance policies. The \$72,466,869 amount is net of \$24,389,750, the portion of the Bank of America Loan considered to be applicable to this portion of the fund. However, \$24,292,191 of advances from SCE&G to fund premium payments that are considered to be applicable to this portion of the fund have not been deducted in arriving at the balance. These amounts reflect 88.69% of total balances, as described above.

The portion of the accumulated trust fund balance considered to be related to non-radiological decommissioning costs was \$9,241,180 at December 31, 2008. This balance includes cash and cash surrender values of life insurance policies. The \$9,241,180 amount is net of \$3,110,250, the portion of the Bank of America Loan considered to be applicable to this portion of the fund balance. However, \$3,097,809 of the advances from SCE&G to fund premium payments that are considered to be applicable to this portion of the fund have not been deducted in arriving at this balance. These amounts reflect 11.31% of total balances, as described above.

Document Control Desk RR 1950 RC-09-0032 Page 3 of 4

SCE&G is informed and believes that the Company's use of decommissioning funds does not require prior approval from the SCPSC. Moreover, SCE&G is unaware of any SCPSC requirement prohibiting the Company from using any portion of its decommissioning funds for radiological decommissioning costs.

A schedule of the annual amounts remaining to be collected:

Please see Attachment II. The after-tax annual collection amount is currently \$1,991,388, which collection amount was based on a 1991 site specific study. Annual amounts collected through rates have not changed since 1993. The after-tax collection amounts shown in the Financial Assurance Model in Attachment II represent 88.69% of the \$1,991,388, or \$1,766,162.

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.

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

Document Control Desk RR 1950 RC-09-0032 Page 4 of 4

Site specific cost estimates for License termination, spent fuel Management and site restoration The most recent site specific decommissioning cost study for VCSNS was completed in 2006. The cost estimates taken from that study (in 2006 dollars) were \$284,103,870 for license termination, \$44,941,756 for spent fuel management and \$28,709,826 for site restoration. These estimates represent SCE&G's two-thirds ownership share of costs estimated for the DECON decommissioning alternative. The comparable amounts estimated for the SAFSTOR decommissioning alternative are \$362,009,320 for license termination, \$58,609,608 for spent fuel management, and \$30,362,014 for site restoration.

If you have any questions, please call Mr. Bruce Thompson at (803) 931-5042.

Very truly yours,

Jeffrey B. Archie Vice President

Nuclear Operations, SCE&G

James E. Swan, IV Controller, SCE&G

SBR/JBA/JES/dr

c: K. B. Marsh

S. A. Byrne

N. S. Carns

R. J. White

K. J. Browne

J. H. Hamilton

L. A. Reyes

R. E. Martin

NRC Resident Inspector

K. M. Sutton

RTS (LTD 282, RR 1950)

File (810.34-2)

DMS (RC-09-0032)

Document Control Desk Attachment I RC-09-0032 Page 1 of 1

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

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1986 Base Cost = \$(75 + 0.0088p) million

= \$(75 + 0.0088 \times 2900) million

= \$100,520,000

Estimated Cost (Year X) = (1986 \$ Base Cost) (A L_X + B E_X + C B_X)

Estimated Cost 2006 = (\$100,520,000) ((.65 \times 2.150) + (.13 \times 2.746) + (.22 \times 9.872))

= (\$100,520,000) (1.398 + 0.357 + 2.172)

= \$394,742,040
```

SCE&G's two-thirds ownership share of 2008 Estimated Cost = \$263,161,360

Where:

```
2,900 MWt
p
                     (NUREG 1307 Rev. 13)
Α
             .65
В
                     (NUREG 1307 Rev. 13)
             .13
C
                     (NUREG 1307 Rev. 13)
             .22
             2.150 (Computed Below)
L_{x}
             2.746 (Computed Below)
E_{X}
         =
\mathbf{P}_{\mathbf{X}}
             1.622 (Computed Below)
F_{X}
         = 4.299 (Computed Below)
\mathbf{B}_{\mathbf{x}}
             9.872 (NUREG 1307 Rev. 13)
             (1.98)_{Base\ 2005}\ X\ 108.5(ECI)/(100)
L_{X}
             2.150
             12/08Value / January 1986 Value
P_{X}
              185.2/114.2
              1.622
            12/08 Value / January 1986 Value
F_{X}
              352.5/82.0
         =
              4.299
E_{x}
             ((.58P_X) + (.42F_X))
             ((.58 \times 1.622) + (.42 \times 4.299))
             2.746
```

The values for the labor adjustment factor (south region), the energy adjustment factor, and the waste burial adjustment factor (Atlantic Compact, direct disposal with vendors) were taken from NUREG 1307, Revision 13.

Document Control Desk Attachment II RC-09-0032 Page 1 of 3

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

Financial Assurance Model

SCE&G and Santee Cooper are joint owners of undivided interests in VCSNS. Under the joint ownership arrangement, SCE&G is the operator of VCSNS and shares the ownership, operating costs and energy output of the plant with Santee Cooper in the proportions of two-thirds and one-third, respectively. Under the plan used by SCE&G to fund its share of the costs of decommissioning VCSNS, funds collected through rates are invested in life insurance policies on key company personnel who, in return for participating in the plan, may receive a two-year salary continuation benefit from SCE&G. SCE&G has established a decommissioning trust fund (trust fund) with U.S. Bank, N.A. as Trustee. SCE&G and the trust fund are beneficiaries of the life insurance policies. Lynch & Associates 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 program satisfies the investment criteria of its financial assurance regulations. Further, this funding methodology has been approved by the SCPSC.

Gains and losses related to policy cash surrender values are tax-deferred. Upon the death of the insured, the policy proceeds are remitted tax-free. With regard to general account policies, the trust fund receives the cash surrender value (CSV) and SCE&G receives the death benefit component (minus any CSV paid; plus any interest due from the date of death) n order to recover its term premium and salary continuation payments, if applicable. With regard to separate account policies, SCE&G is currently reinvesting death benefits back into those policies. Designated amounts collected through electric rates, insurance proceeds, and interest on proceeds, less after-tax expenses of the program, are transferred by SCE&G to the trust fund.

As noted earlier in this report, SCE&G does not maintain separate trusts for radiological and non-radiological segments of the decommissioning process. However, based upon rate treatment received in our 1993 electric rate order, 88.69% of after-tax collections (and also 88.69% of the trust fund balances) are considered to relate to items included in the NRC's definition of radiological decommissioning.

In SCE&G's June 1993 electric rate case, the PSC approved gross annual collections for decommissioning in the amount of \$3,224,920, based upon cost estimates contained in a 1991 site-specific study. In subsequent rate orders, including a rate order issued in December 2007, the PSC has not changed this amount. SCE&G reassesses the adequacy of annual collections on a continuing basis as periodic site-specific decommissioning cost studies are completed. As noted earlier, \$2,860,181 (88.69% of \$3,224,920), or \$1,766,162 after-tax, is considered to be related solely to items addressed in the NRC's financial assurance formula.

The Financial Assurance Model on the following page incorporates the 2009 beginning trust fund balance (gross of loans) and projections of annual amounts (after-tax) collected through electric rates, program costs (net-of-tax), investment earnings, payments of amounts of decommissioning funds estimated to be required pursuant to 10 CFR 50.75 (b) and (c), and repayments of loans and advances. The estimated timing of expenditure of the \$263,161,360 (calculated in Attachment I) is based on our 2006 site-specific study (DECON estimate). Relevant assumptions used in the Financial Assurance Model are discussed on page 3 of 3.

Document Control Desk Attachment II RC-09-0032 Page 2 of 3

Financial Assurance Model

Year	External Trust, Beginning Balance	Schedule of Annual Collection Amounts	Program Costs, Net of Tax	Decommissioning Payments/Loan Repayments	Investment Earnings	External Trust, Ending Balance	Balance, Net
2008					•	96,856,619	72,466,869
2009	96,856,619	1,766,162	1,363,557		1,945,184	99,204,408	74,814,658
2010	99,204,408	1,766,162	1,377,272		1,991,866	101,585,164	77,195,414
2011	101,585,164	1,766,162	1,426,831		2,038,490	103,962,985	79,573,235
2012	103,962,985	1,766,162	1,385,532	·	2,086,872	106,430,487	82,040,737
2013	106,430,487	1,766,162	1,380,079		2,136,331	108,952,901	84,563,151
2014	108,952,901	1,766,162	1,393,793		2,186,505	111,511,775	87,122,025
2015	111,511,775	1,766,162	1,388,340		2,237,792	114,127,389	89,737,639
2016	114,127,389	1,766,162	1,457,067		2,288,730	116,725,214	92,335,464
2017	116,725,214	1,766,162	1,396,601		2,341,896	119,436,671	95,046,921
2018	119,436,671	1,766,162	1,410,315		2,395,850	122,188,368	97,798,618
2019	122,188,368	1,766,162	1,404,862		2,450,993	125,000,661	100,610,911
2020	125,000,661	1,766,162	1,418,576		2,506,965	127,855,212	103,465,462
2021	127,855,212	1,766,162	1,468,135		2,563,065	130,716,304	106,326,554
2022	130,716,304	1,766,162	1,426,837		2,621,113	133,676,742	109,286,992
2023	133,676,742	1,766,162	1,421,383		2,680,430	136,701,951	112,312,201
2024	136,701,951	1,766,162	1,435,098		2,740,660	139,773,675	115,383,925
2025	139,773,675	1,766,162	1,429,644		2,802,204	142,912,397	118,522,647
2026	142,912,397	1,766,162	1,498,371		2,863,604	146,043,792	121,654,042
2027	146,043,792	1,766,162	1,437,905		2,927,441	149,299,490	124,909,740
2028	149,299,490	1,766,162	1,451,619		2,992,281	152,606,314	128,216,564
2029	152,606,314	1,766,162	1,446,166		3,058,526	155,984,836	131,595,086
2030	155,984,836	1,766,162	1,459,880		3,125,822	159,416,940	135,027,190
2031	159,416,940	1,766,162	1,509,440		3,193,473	162,867,135	138,477,385
2032	162,867,135	1,766,162	1,468,141		3,263,303	166,428,459	142,038,709
2033	166,428,459	1,766,162	1,462,688		3,334,639	170,066,572	145,676,822
2034	170,066,572	1,766,162	1,476,402		3,407,127	173,763,459	149,373,709
2035	173,763,459	1,766,162	1,470,949		3,481,173	177,539,845	153,150,095
2036	177,539,845	1,766,162	1,539,676		3,555,327	181,321,658	156,931,908
2037	181,321,658	1,766,162	1,479,210		3,632,172	185,240,782	160,851,032
2038	185,240,782	1,766,162	1,492,924		3,710,280	189,224,300	164,834,550
2039	189,224,300	1,766,162	1,487,470		3,790,060	193,293,052	168,903,302
2040	193,293,052	1,766,162	1,501,185		3,871,161	197,429,190	173,039,440
2041	197,429,190	1,766,162	166,885	24,389,750	3,492,774	178,131,491	178,131,491
2042	178,131,491	1,766,162	137,886	10,658,035	3,382,035	172,483,767	172,483,767
2043	172,483,767		128,303	37,211,016	2,702,889	137,847,337	137,847,337
2044	137,847,337		128,303	64,737,694	1,459,627	74,440,967	74,440,967
2045	74,440,967		128,303	45,237,438	581,505	29,656,731	29,656,731
2046	29,656,731		128,303	29,158,279	7,403	377,552	377,552
2047	377,552		128,303	29,158,279		-28,909,030	-28,909,030
2048	-28,909,030	,	128,303	24,289,794		-53,327,127	-53,327,127
2049	-53,327,127		128,303	47,003,016		-100,458,446	-100,458,446

Document Control Desk Attachment II RC-09-0032 Page 3 of 3

Relevant assumptions used in the model to project decommissioning funds through 2049 are as follows:

- Annual payments include the repayment of the Bank of America loan in the amount of \$24,389,750 (88.69% of actual loan balance) in 2041, repayment of SCE&G advances in the amount of \$24,292,191 (88.69% of total advances) in 2049, as well as payments for decommissioning totaling \$263,161,360 over the period 2042 - 2049.
- Estimated program costs (net of tax benefits) that are paid by SCE&G or the trust include salary continuation payments to beneficiaries of the insured, loan interest payments, and legal and administrative costs. These costs are shown in the model at 88.69% of total estimated program costs.
- The assumed real rate of return on invested funds is 2%.
- This 2% earnings credit is taken through the presumed dismantlement period, as allowed for licensees that use the NRC formula to derive decommissioning cost estimates.
- Amounts estimated to be required pursuant to 10 CFR 50.75 (b) and (c) in 2008 dollars are expended over the dismantlement period based upon the cost estimates in our 2006 site-specific study (DECON estimate).

It should be noted that the above does not consider the effects of presumed income tax deductibility of decommissioning payments in the years in which such payments are made. Additionally, the above Financial Assurance Model incorporates the NRC formula-based cost estimates and the DECON (immediate decommissioning) methodology. In contrast, SCE&G currently intends to utilize a deferred decommissioning (SAFSTOR) methodology. Under the SAFSTOR methodology, the site will be placed and maintained for an extended period in a condition that allows for subsequent decontamination to levels that permit release for unrestricted use in 2104.

As noted earlier, SCE&G will continue to assess the adequacy of annual collections and request rate relief as appropriate, based upon results of models incorporating site specific study cost estimates and a SAFSTOR method of decommissioning.

Lastly, similar to that filed and accepted in connection with our 2007 report of status, we have enclosed current certificates of insurance evidencing our coverage for premature decontamination and decommissioning liabilities.

Document Control Desk Attachment III RC-09-0032 Page 1 of 5

ATTACHMENT III

NEIL CERTIFICATE OF INSURANCE

<u>POLICY NO. X08-052</u> Decontamination Liability, Decommissioning Liability, and Excess Property Insurance

POLICY NO. P08-082 Primary Property and Decontamination Liability Insurance



Suite 1100 1201 N. Market Street Wilmington, DE 19801

Tel

302 888-3000

Fax

302 888-3007 Corporate 302 573-2213 Finance 302 888-3008 Insurance 302 888-3095 Loss Control

CERTIFICATE OF INSURANCE

ISSUED TO:

United States NRC

ADDRESS:

Washington, DC 20555

Attn: James Dyer

Director of Nuclear Reactor Regulation

THIS IS TO CERTIFY that insurance has been effected with NUCLEAR ELECTRIC INSURANCE LIMITED, 1201 N. Market Street, Suite 1100, Wilmington, Delaware 19801, under Policy No. X08-052 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

INSUREDS:

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, 2008 to 12:01 a.m. on April 1, 2009,

Standard time in Hamilton, Bermuda.

LOSS PAYEE CLAUSE:

A. Expenses covered under the Nuclear Liability Coverage (subsection I.A.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 (subsection I.1(b)), the losses covered under the Property Damage Coverage (subsection I.1(c)), and the losses covered under the Functional Total Loss Coverage (subsection I.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 II.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, 2008

CERTIFICATE EXPIRES: April 1, 2009, unless canceled sooner.

Signed by:

NUCLEAR ELECTRIC INSURANCE LIMITED

Charles Boley

Lead Underwriter



Suite 1100 1201 N. 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 302 888-3095 Loss Control

CERTIFICATE OF INSURANCE

ISSUED TO:

United States NRC

ADDRESS:

Washington, DC 20555

Attn: James Dyer

Director of Nuclear Reactor Regulation

THIS IS TO CERTIFY that insurance has been effected with NUCLEAR ELECTRIC INSURANCE LIMITED, 1201 N Market Street, Suite 1100, Wilmington, Delaware 19801, under Policy No. P08-082 as follows:

MEMBER INSURED:

SOUTH CAROLINA ELECTRIC AND GAS COMPANY

ADDRESS:

P.O. Box 764

Columbia, South Carolina 29218

PROPERTY INSURED:

Summer Nuclear Station

COVERAGE:

Primary Property and Decontamination Liability Insurance

AMOUNT OF

INSURANCE:

\$500,000,000

INSUREDS:

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, 2008 to 12:01 a.m. on April 1, 2009,

Standard time in Hamilton, Bermuda

LOSS PAYEE CLAUSE:

A. Expenses covered under Section I.A.2 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.

В. All other covered Losses shall be adjusted with the Member Insured and payable to:

Losses, if any under this policy except losses to Nuclear Fuel and except as otherwise provided shall be adjusted with South Carolina Electric and Gas Company. Losses aggregating at \$50,000 or more are to be payable jointly to South Carolina Electric and Gas Company and The Chase Manhattan Bank (formerly Chemical Bank) as successor Trustee as their interests may appear. Losses to Nuclear Fuel are to be adjusted with and payable to South Carolina Electric and Gas Company, PruLease, Inc., Bank of America National Trust and Savings Association; Credit Suisse (New York Branch); and Columbia Fuels Inc., as loss payees as their interests may appear. The receipt of the payee so designated shall constitute a release in full of all liability with respect to such loss.

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 LIMITED 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, 2008

CERTIFICATE EXPIRES: April 1, 2009, unless canceled sooner.

Signed by:

NUCLEAR ELECTRIC INSURANCE LIMITED

Charles Boley

Charles Boley

Lead Underwriter