SCE&G
A SCANA COMPANY

August 31, 1999
RC-99-0173

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

Attention: Ms. K. R. Cotton

Gentlemen:

Gary J. Taylor
Vice President
Nuclear Operations

Subject: VIRGIL C. SUMMER NUCLEAR STATION (VCSNS)
DOCKET NO. 50/395
OPERATING LICENSE NO. NPF-12
RE: CLOSURE OF THE REVIEW OF THE RESPONSE TO THE GENERIC LETTER 92-01, REVISION 1, SUPPLEMENT 1, "REACTOR VESSEL STRUCTURAL INTEGRITY"; - CORRECTIONS TO REACTOR VESSEL INTEGRITY DATABASE (RVID), VERSION 2

Reference:
1) Karen Cotton, NRC, to SCE&G, dated July 22, 1999
2) Gary J. Taylor, SCE&G, to NRC, RC-98-0185, dated October 9, 1998
3) Gary J. Taylor, SCE&G, to NRC, RC-95-0266, dated November 7, 1995

South Carolina Electric & Gas Co
Virgil C. Summer Nuclear Station
P. O. Box 88
Jenkinsville, South Carolina
29065

803.345.4344
803.345.5209
www.scana.com

South Carolina Electric and Gas Company (SCE&G) has reviewed RVID, Version 2, in accordance with the recommendation of Reference 1 and hereby requests that the information listed in the RVID, Version 2, be amended to reflect the data for VCSNS as marked in the attachment to this letter.

This information was provided previously within the report provided for the VCSNS Reactor Vessel Radiation Surveillance Program (Reference 2). The report identified changes due to recent surveillance capsule testing which revised the information provided by Reference 3 for the RVID. RVID, Version 2, needs to be amended to accurately reflect the current VCSNS reactor vessel information.

This information also supports a proposed Technical Specification Change Request to update the heat-up and cooldown curves submitted by SCE&G.

A028

These statements and matters set forth herein are true and correct to the best of my knowledge, information, and belief.

Should you have questions, please call Mr. Jim Turkett at (803) 345-4047.

Very truly yours,

Gary J. Taylor

JT/GJT
Attachment

c: J. L. Skolds
W. F. Conway
R. R. Mahan (w/o Attachment)
R. J. White
L. A. Reyes
NRC Resident Inspector
J. B. Knotts, Jr.
RTS (LTR 920001, AVA 1001)
File (815.14)
DMS (RC-99-0173)

STATE OF SOUTH CAROLINA :
: **TO WIT** :
COUNTY OF FAIRFIELD :

I hereby certify that on the 31ST day of August 1999, before me, the subscriber, a Notary Public of the State of South Carolina personally appeared Gary J. Taylor, being duly sworn, and states that he is Vice President, Nuclear Operations of the South Carolina Electric & Gas Company, a corporation of the State of South Carolina, that he provides the foregoing response for the purposes therein set forth, that the statements made are true and correct to the best of his knowledge, information, and belief, and that he was authorized to provide the response on behalf of said Corporation.

WITNESS my Hand and Notarial Seal

Notary Public

My Commission Expires

My Commission Expires July 13, 2005

Date

NRC – Reactor Vessel Integrity Database

Excerpted Pages

For

V. C. Summer Nuclear Station

PTS Summary Report

Surveillance Data Summary

Upper Shelf Energy Summary Report

NRC - Reactor Vessel Integrity Database

PTS Summary Report

SUMMER

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Page 1

Docket No: 50-395
EOL Date: 08/06/2022

Beltline Identification		RTpts @EOL	Neutron Fluence @ EOL	RTndt(u)	RTndt(u) METHOD	ΔRTndt(u) @ EOL	Fluence Factor @ EOL	Chem Factor	Chemistry Factor Method	Margin	Margin Method	Cu %	Ni %	P %	S %
Type	Heat ID														
INTERMEDIATE SHELL		92.2	~~0.870~~ 1.340	-20.0	PLANT SPECIFIC	~~78.2~~ 78.1	~~1.348~~ 1.347	58.00	TABLE	34.0	POSITION 1.1 (NO S DATA)	0.090	0.450	0.006	0.016
PLATE	A9153-2														
INTERMEDIATE SHELL		~~88.9~~ 95	~~0.870~~ 3.840	30.0	PLANT SPECIFIC	~~41.0~~ 47.7	~~1.348~~ 1.347	~~31.50~~ 35.4	SURVEILLANCE NON-RATIO	17.0	POSITION 2.1 (S DATA)	0.100	0.510	0.009	0.015
PLATE	A9154-1														
LOWER SHELL		112.8	~~0.870~~ 3.840	10.0	PLANT SPECIFIC	~~68.8~~ 68.7	~~1.348~~ 1.347	51.00	TABLE	34.0	POSITION 1.1 (NO S DATA)	0.080	0.410	0.005	0.014
PLATE	C9923-1														
LOWER SHELL		112.8	~~0.870~~ 3.840	10.0	PLANT SPECIFIC	~~68.8~~ 68.7	~~1.348~~ 1.347	51.00	TABLE	34.0	POSITION 1.1 (NO S DATA)	0.080	0.410	0.005	0.015
PLATE	C9923-2														
WELDS		~~22.5~~ 33	~~0.870~~ 3.840	-44.0	PLANT SPECIFIC	~~36.3~~ 49.2	~~1.348~~ 1.347	~~28.31~~ 36.5	SURVEILLANCE NON-RATIO	28.0	POSITION 2.1 (S DATA)	0.050	0.910	0.013	0.012
WELD	4P4784														

Plant References and Beltline Material Notes

Fluence, chemical composition, and RTndt(u) are from the June 30, 1992, letter from J.F. Skolds (SCE&G) to the USNRC Document Control Desk, subject: Response to GL 92-01, Revision 1, Reactor Vessel Structural Integrity. Actual datapoints used for determining the best-estimate chemistry value for the only beltline weld were documented in the licensee's response to GL 92-01, Revision 1, Supplemment 1 dated November 7, 1995.

UUSE data are from Table A-1 of WCAP-10814.

There are six surveillance data points for the plate fabricated from heat number A9154-1. The staff considered the surveillance data credible because only one plate data point exceeded the credibility criterion by 1.6 degrees F.

The UUSE value for the beltline weld (heat number 4P4784) was revised from 93 ft-lb to 84 ft-lb according to the information in the licensee's response to GL 92-01, Revision 1, Supplement 1 dated November 7, 1995.

The response to GL 92-01, Revision 1, Supplement 1 dated November 7, 1995 indicates that the ratio procedure does not apply to the beltline weld because "the copper and nickel content of the surveillance weld does not differ from that of the vessel weld."

NRC - Reactor Vessel Integrity Database

Surveillance Data Summary

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SUMMER

Docket No: 50-395

EOL Date: 08/06/2022

Type / Direction	Capsule ID / Lead Factor	Neutron Fluence	Fluence Factor	Group CF	Used in CF Calcs	Predicted ΔRTndt	Measured ΔRTndt	Predicted - Measured ΔRTndt	Credible RG1.99 Scatter	σ of Pred-Meas ΔRTndt	Unir USE	Meas USE	%Drop in USE	%Drop in USE Line Offset	Cu %	Ni %	P %	S %
PLATE	A9154-1	~~0.64~~	~~0.87~~	~~31.8~~	YES	~~27.1~~	36.0	~~-8.9~~	YES	~~11.1~~	132.0	131.0	0.76	-0.07458	0.100	0.510	0.009	0.015
LONGITUDINAL	U, 3.11	0.65	0.89	35.4		31.2		-4.8		12.5								
PLATE	A9154-1	~~0.64~~	~~0.87~~	~~31.8~~	YES	~~27.1~~	~~45.0~~	~~-12.4~~	YES	~~11.1~~	75.0	75.0	0.00	-3.95401	0.100	0.510	0.009	0.015
TRANSVERSE	U, 3.11	0.65	0.88	35.4		31.2	14.5	16.7		12.5								
PLATE	A9154-1	~~1.47~~	~~1.11~~	~~31.8~~	YES	~~34.4~~	~~60.8~~	~~-10.6~~	~~NO~~	~~11.1~~	132.0	122.0	7.58	0.83986	0.100	0.510	0.009	0.015
LONGITUDINAL	V, 3.11	1.54	1.12	35.4		39.6	52.6	-13.0	YES	12.5								
PLATE	A9154-1	~~1.47~~	~~1.11~~	~~31.8~~	YES	~~34.4~~	~~85.0~~	~~-4.4~~	YES	~~11.1~~	75.0	76.0	0.00	-4.03957	0.100	0.510	0.009	0.015
TRANSVERSE	V, 3.11	1.54	1.12	35.4		39.6	32.4	7.2		12.5								
PLATE	A9154-1	~~2.40~~	~~1.24~~	~~31.8~~	YES	~~38.8~~	~~38.8~~	~~-0.6~~	YES	~~11.1~~	132.0	125.0	5.30	0.63208	0.100	0.510	0.009	0.015
LONGITUDINAL	X, 3.72	2.54	1.25	36.4		44.3	37.7	6.6		12.5								
PLATE	A9154-1	~~2.40~~	~~1.24~~	~~31.8~~	YES	~~38.8~~	~~66.0~~	~~-12.8~~	~~YES~~	~~11.1~~	75.0	73.0	2.67	0.33352	0.100	0.510	0.009	0.015
TRANSVERSE	X, 3.72	2.54	1.25	35.4		44.3	25.9	18.4	NO	12.5								
WELD	4P4784	~~0.64~~	~~0.87~~	~~28.6~~	YES	~~24.0~~	~~23.0~~	~~1.0~~	YES	~~11.0~~	91.0	87.0	4.40	0.68901	0.050	0.910	0.013	0.012
N/A	U, 3.11	0.65	0.88	36.5		32.1	28.0	4.1		11.0								
WELD	4P4784	~~1.47~~	~~1.11~~	~~28.6~~	YES	~~31.6~~	~~47.0~~	~~-15.4~~	YES	~~11.0~~	91.0	85.0	6.59	0.77954	0.050	0.910	0.013	0.012
N/A	V, 3.11	1.54	1.12	36.5		40.9	58.6	-17.7		11.0								
WELD	4P4784	~~2.40~~	~~1.24~~	~~28.6~~	YES	~~35.4~~	~~29.0~~	~~12.4~~	YES	~~11.0~~	91.0	85.0	6.59	0.72666	0.050	0.910	0.013	0.012
N/A	X, 3.72	2.54	1.25	36.5		45.6	28.3	17.3		11.0								
PLATE LONGITUDINAL	A9154-1 W	4.66	1.39	35.4	YES	49.2	65.7	-16.5	YES	12.5	132.0	126	4.5		0.100	0.510	0.009	0.015
PLATE TRANSVERSE	A9154-1 W	4.66	1.39	35.4	YES	49.2	57.8	-8.6	YES	12.5	75.0	74.0	1.3		0.100	0.510	0.009	0.015
WELD N/A	4P4784 W	4.66	1.39	36.5	YES	50.7	54.4	-3.7	YES	11.0	91.0	87.0	4.4		0.050	0.910	0.013	0.012

NRC - Reactor Vessel Integrity Database
Upper Shelf Energy Summary Report
SUMMER

Docket No: 50-395
EOL Date: 08/06/2022

Beltline Identification		Material Type	USE @ EOL @ 1/4T	1/4 T NeutronFluence @ EOL	Unirradiated USE	Unirradiated USE Method	%Drop in USE @ EOL @ 1/4T	%Drop in USE Method	Cu %
Type	Heat ID								
INTERMEDIATE SHELL		A 533B	81.97	~~2.484~~ 2.41	107.00	DIRECT	23.39	POSITION 1.2 (NO S DATA)	0.090
PLATE	A9153-2								
INTERMEDIATE SHELL		A 533B	74.09	~~2.484~~ 2.41	81.00	DIRECT	~~8.53~~ 8.4	POSITION 2.2 (S DATA)	0.100
PLATE	A9154-1								
LOWER SHELL		A 533B	81.21	~~2.484~~ 2.41	106.00	DIRECT	23.39	POSITION 1.2 (NO S DATA)	0.080
PLATE	C9923-1								
LOWER SHELL		A 533B	70.48	~~2.431~~ 2.41	92.00	DIRECT	23.39	POSITION 1.2 (NO S DATA)	0.080
PLATE	C9923-2								
WELDS		LINDE 124	77.76	~~2.484~~ 2.41	84.00	DIRECT	~~7.48~~ 7.3	POSITION 2.2 (S DATA)	0.050
WELD	4P4784								

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