



June 24, 2010
NND-10-0235

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

ATTN: Document Control Desk

Subject: Virgil C. Summer Nuclear Station (VCSNS) Units 2 and 3 Combined
License Application (COLA) - Docket Numbers 52-027 and 52-028
SCE&G Endorsement of Bellefonte Standard Content Request for
Additional Information Items 06.01.02-02, 06.04-07, 06.04-08

- References:
1. Tennessee Valley Authority (TVA) response to the Nuclear Regulatory Commission's (NRC) Request for Additional Information (RAI) Letter No. 168, dated January 5, 2010 (ML100280941).
 2. Tennessee Valley Authority (TVA) response to the Nuclear Regulatory Commission's (NRC) Request for Additional Information (RAI) Letter No. 169, dated March 15, 2010 (ML100770082).
 3. Tennessee Valley Authority (TVA) response to the Nuclear Regulatory Commission's (NRC) Request for Additional Information (RAI) Letter No. 170, dated March 4, 2010 (ML100640639).

SCE&G considers the standard responses to RAI 06.01.02-02, RAI 06.04-07, and RAI 06.04-08 contained in References 1 through 3 to be applicable to the VCSNS Units 2 and 3 COLA. TVA's response to RAI 06.04-08 contains both standard and site specific content. In order to address the site specific portions of RAI 06.04-08, Draft Revision 3 of VCSNS FSAR Table 6.4-201 is being provided as an attachment to this letter. The COLA changes identified in these responses will be incorporated in a future COLA update.

Should you have any questions, please contact Mr. Alfred M. Paglia by telephone at (803) 345-4191, or by email at apaglia@scana.com.

DOB3
NRD

I declare under penalty of perjury that the foregoing is true and correct.

Executed on this 24th day of June, 2010.

Sincerely,



Ronald B. Clary
Vice President
New Nuclear Deployment

JEF/RBC/jf

c: Luis A. Reyes
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Attachment

VCSNS FSAR Table 6.4-201

Draft Revision 3

(Attached table is 4 pages in length)

Table 6.4-201

Main Control Room Habitability Evaluations of Onsite Toxic Chemicals⁽¹⁾

STD COL 6.4-1

A – Standard Onsite Toxic Chemicals

<u>Evaluated Material</u>	<u>Evaluated State</u>	<u>Evaluated Maximum Quantity</u>	<u>Evaluated Minimum Distance to MCR intake</u>	<u>Evaluated Location</u>	<u>MCR Habitability Impact Evaluation</u>
Hydrogen	Gas	500 scf	126.3 ft	Corner of Auxiliary and Turbine Buildings	IH
Hydrogen	Liquid	2000 gal	814 ft	Gas storage	IH
Nitrogen	Liquid	3000 gal	814 ft	Gas storage	IH
Carbon Dioxide (CO ₂)	Liquid	6 tons	814 ft	Gas storage	IH
Oxygen Scavenger [Hydrazine]	Liquid	1600 gal	203 ft	Turbine building	IH
pH Addition [Morpholine]	Liquid	1600 gal	203 ft	Turbine building	IH
Sulfuric Acid	Liquid	800 gal	203 ft	Turbine building	IH
Sulfuric Acid	Liquid	20,000 gal	436 ft	CWS area	IH
Sodium Hydroxide	Liquid	800 gal	203 ft	Turbine building	S
Sodium Hydroxide	Liquid	20,000 gal	436 ft	CWS area	S
Fuel Oil	Liquid	60,000 gal	197 ft	DG fuel oil storage tank, DG building, Annex building	IH

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STD COL 6.4-1

A – Standard Onsite Toxic Chemicals

<u>Evaluated Material</u>	<u>Evaluated State</u>	<u>Evaluated Maximum Quantity</u>	<u>Evaluated Minimum Distance to MCR intake</u>	<u>Evaluated Location</u>	<u>MCR Habitability Impact Evaluation</u>
Corrosion Inhibitor [Sodium Molybdate]	Liquid	800 gal	203 ft	Turbine building	S
Corrosion Inhibitor [Sodium Molybdate]	Liquid	10,000 gal	436 ft	CWS area	S
Scale Inhibitor [Sodium Hexametaphosphate]	Liquid	800 gal	203 ft	Turbine building	S
Scale Inhibitor [Sodium Hexametaphosphate]	Liquid	10,000 gal	436 ft	CWS area	S
Biocide/Disinfectant [Sodium hypochlorite]	Liquid	800 gal	203 ft	Turbine building	S
Biocide/Disinfectant [Sodium hypochlorite]	Liquid	10,000 gal	436 ft	CWS area	S
Algaecide [Ammonium comp. polyethoxylate]	Liquid	800 gal	203 ft	Turbine building	S
Algaecide [Ammonium comp. polyethoxylate]	Liquid	10,000 gal	436 ft	CWS area	S

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Main Control Room Habitability Evaluations of Onsite Toxic Chemicals⁽¹⁾

VCS COL 6.4-1

B – Site Specific Onsite Toxic Chemicals

<u>Evaluated Material</u>	<u>Evaluated State</u>	<u>Evaluated Maximum Quantity</u>	<u>Evaluated Minimum Distance to MCR intake</u>	<u>Evaluated Location</u>	<u>MCR Habitability Impact Evaluation</u>
pH Addition [Sulfuric Acid]	Liquid	10,000 gal	903 ft	CWS area	Bounded by STANDARD evaluation
Sodium Hydroxide	Not used	Not used	Not used	CWS area	Not used
Dispersant [Polymeric silt dispersant]	Liquid	800 gal	258 ft	Turbine building	S
Dispersant [Polymeric silt dispersant]	Liquid	10,000 gal	903 ft	CWS area	S
Corrosion inhibitor [Ortho polyphosphate]	Liquid	10,000 gal	903 ft	CWS area	S
Scale inhibitor [Phosphonate]	Liquid	10,000 gal	903 ft	CWS area	S
Biocide / Disinfectant [Sodium hypochlorite]	Liquid	10,000 gal	903 ft	CWS area	Bounded by STANDARD evaluation
Algaecide [Quaternary amine]	Liquid	3,500 gal	903 ft	CWS area	NA

Table 6.4-201

Main Control Room Habitability Evaluations of Onsite Toxic Chemicals⁽¹⁾

Notes:

STD COL 6.4-1	<p>(1) This table supplements DCD Table 6.4-1. Quantities are by largest evaluated container content for the evaluated location per unit. Quantities and distances are bounding evaluation values and may not be actual amounts and distances. Smaller quantities of a chemical at further distances from the MCR air intake are not shown on this table. Actual site locations are confirmed to be at or beyond the evaluated distance.</p> <p>S – Chemicals with an Impact Evaluation designation of “S” for the MCR Habitability Impact Evaluation were evaluated and screened out based on the chemical properties, distance, and quantities.</p> <p>IH – Chemicals with an Impact Evaluation designation of “IH” indicates the evaluation of this chemical considered the design detail of the main control room intake height.</p> <hr/>
VCS COL 6.4-1	<p>NA – Not applicable. Chemicals with an Impact Evaluation designation of “NA” have been evaluated without consideration of main control room intake height or any additional design details of the main control room.</p>