

## SummerRAIsPEm Resource

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**From:** Sujata Goetz  
**Sent:** Friday, February 06, 2009 11:37 AM  
**To:** SummerRAIsPEm Resource  
**Subject:** FW: REQUEST FOR ADDITIONAL INFORMATION LTR NO. 029, RELATED TO SRP SECTION 10.04.05 SUMMER COLA  
**Attachments:** Sum-RAI-LTR-029.doc

**Hearing Identifier:** Summer\_COL\_eRAIs  
**Email Number:** 30

**Mail Envelope Properties** (83F82891AF9D774FBBB39974B6CB134F7EC0CBFE70)

**Subject:** FW: REQUEST FOR ADDITIONAL INFORMATION LTR NO. 029, RELATED TO SRP SECTION 10.04.05 SUMMER COLA  
**Sent Date:** 2/6/2009 11:37:10 AM  
**Received Date:** 2/6/2009 11:37:11 AM  
**From:** Sujata Goetz

**Created By:** Sujata.Goetz@nrc.gov

**Recipients:**  
"SummerRAIsPEm Resource" <SummerRAIsPEm.Resource@nrc.gov>  
Tracking Status: None

**Post Office:** HQCLSTR01.nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	13	2/6/2009 11:37:11 AM
Sum-RAI-LTR-029.doc	51706	

**Options**  
**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**

February 6, 2009

Alfred M. Paglia  
Manager, Nuclear Licensing  
MC P40  
South Carolina Electric & Gas Company  
PO Box 88  
Jenkinsville, SC 29065

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 029, RELATED TO  
SRP SECTION 10.04.05 OF THE VIRGIL C. SUMMER NUCLEAR STATION  
UNITS 2 AND 3 COMBINED LICENSE APPLICATION

Dear Mr. Paglia:

By letter dated March 27, 2008, South Carolina Electric & Gas Company submitted its application to the U. S. Nuclear Regulatory Commission (NRC) for a combined license (COL) for two AP1000 advance passive pressurized water reactors pursuant to 10 CFR Part 52. The NRC staff is performing a detailed review of this application to enable the staff to reach a conclusion on the safety of the proposed application.

The NRC staff has identified that additional information is needed to continue portions of the review. The staff's request for additional information (RAI) is contained in the enclosure to this letter.

To support the review schedule, you are requested to respond within 30 days of the date of this letter. If changes are needed to the final safety analysis report, the staff requests that the RAI response include the proposed wording changes.

If you have any questions or comments concerning this matter, you may contact me at 301-415-8004 or you may contact Ravindra Joshi, the lead project manager for the Summer combined license at 301-415-6191.

Sincerely,

**/RA/**

Sujata Goetz, Project Manager  
AP1000 Projects Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

Docket Nos. 52-027  
52-028

Enclosure:  
Request for Additional Information

CC: see next page

If you have any questions or comments concerning this matter, you may contact me at 301-415-8004 or you may contact Ravindra Joshi, the lead project manager for the Summer combined license at 301-415-6191.

Sincerely,

**/RA/**

Sujata Goetz, Project Manager  
AP1000 Projects Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

Docket Nos. 52-027  
52-028

eRAI No. 1851

Enclosure:  
Request for Additional Information

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NRO-002

OFFICE	ESBWR/ABWR /BC	NWE1/PM	OGC	NWE1/L-PM
NAME	SCampbell *	SGoetz	MSpencer*	RJoshi*
DATE	12/18/2008	12/29/2008	1/13/2008	1/13/2009

\*Approval captured electronically in the electronic RAI system.

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## Request for Additional Information

Virgil C. Summer Nuclear Station, Units 2 and 3  
South Carolina Electric and Gas Company  
Docket No. 52-027 and 52-028  
SRP Section: 10.04.05 - Circulating Water System  
Application Section: 10.4.5

### QUESTIONS for Balance of Plant Branch 2 (ESBWR/ABWR) (SBPB)

#### 10.04.05-1

In the Summer combined license (COL) application, Final Safety Analysis Report (FSAR) Section 10.4.5.2.3, "System Operation" the applicant provided conceptual design information regarding its circulating water system (CWS) major components, including its cooling towers. With respect to the location of the cooling tower, the applicant stated that the cooling towers are located to prevent adverse interactions with structures, systems, and components (SSCs) required for safe shutdown of the plant in case of collapse of the towers or failure of their basins and flumes. However, the staff could not find further details on how the cooling tower failure will have no effect on the nearby safety related, system, equipment and/or structure of the plant. As described in the Standard Review Plan (SRP), Section 10.4.5, "Circulating Water System," SRP Acceptance Criteria, the requirements of General Design Criteria 4 (GDC 4) are met when the CWS design includes provisions to accommodate the effects of discharging water that may result from a failure of a component or piping in the CWS. Therefore, in order to meet this GDC 4 criteria and for the NRC staff to complete its evaluation of the Summer CWS, the staff requests the applicant to provide additional information in the FSAR to ensure that failure of the tower will not affect the safety-related systems or equipment that are located in the proximity of the cooling tower.