SummerRAIsPEm Resource

From: Tanya Simms
Sent: Thursday, January 22, 2009 4:05 PM
To: SummerRAIsPEm Resource
Subject: Request for Additional Information Letter No. 023 Related to SRP Section 09.05.02 for the Virgil C. Summer Nuclear Station Units 2 and 3 Combined License Application
Attachments: SUM-RAI-LTR-023.doc

Hearing Identifier: Summer_COL_eRAIs
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Subject: Request for Additional Information Letter No. 023 Related to SRP Section 09.05.02 for the Virgil C. Summer Nuclear Station Units 2 and 3 Combined License Application
Sent Date: 1/22/2009 4:05:21 PM
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Created By: Tanya.Simms@nrc.gov

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January 22, 2009

Mr. 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. 023 RELATED TO SRP SECTION 09.05.02 FOR 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 301-415-1387 or you may contact Ravindra Joshi the lead project manager for the Virgil C. Summer Nuclear Station combined license at 301-415-6191.

Sincerely,

/**RA**/

Tanya Simms, 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 301-415-1387 or you may contact Ravindra Joshi the lead project manager for the Virgil C. Summer Nuclear Station combined license at 301-415-6191.

Sincerely,

/**RA**/

Tanya Simms, Project Manager
AP1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-027
52-028
eRAI Tracking No. 1798

Enclosure:
Request for Additional Information

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DATE	12/11/08	12/12/08	1/07/09	1/22/09

*Approval captured electronically in the electronic RAI system.

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Request for Additional Information No. 1798 Revision 0
Virgil C. Summer Nuclear Station, Units 2 and 3
South Carolina Electric and Gas Company
Docket No. 52-027 and 52-028
SRP Section: 09.05.02 - Communications Systems
Application Section: 9.5.2

QUESTIONS from Instrumentation, Controls and Electrical Engineering 1 (ICE1)

09.05.02-1

For V.C. Summer FSAR Section 9.5.2, provide the specific locations within the Emergency Plan and the Physical Security Plan for which VCS COL Items 9.5-9, 9.5-10 and 9.5-11 information is located and update FSAR Section 9.5.2 accordingly.

Currently, V.C. Summer FSAR Sections 9.5.2.5.1, 9.5.2.5.2 and 9.5.2.5.3 only make general reference to the Emergency Plan and the Physical Security Plan without an exact subsection being mentioned. This lack of detail makes it difficult to determine whether all relevant information for the COL items has been addressed appropriately.

09.05.02-2

Identify the primary and backup power sources, and their transfer capability, for the offsite communication system and the Emergency Notification System (ENS). Include this information in the V.C. Summer FSAR.

COL Information Item 9.5-9, which is documented in AP1000 DC-FSAR Tier 2, Table 1.8-2, states:

"Combined License applicants referencing the AP1000 certified design will address interfaces to required offsite locations; this will include addressing the recommendations of BL-80-15 (Reference 21) regarding loss of the emergency notification system (ENS) due to a loss of offsite power."

V.C. Summer COL FSAR Section 9.5.2.5.1 states that COL Information Item 9.5-9 is addressed in the Emergency Plan, but does not provide the exact subsection. However, Section F of the V.C. Summer COL Emergency Plan states that there is a backup power source for the offsite communication systems and for ENS.

1. Identify the primary and backup power sources for the offsite communication systems and for ENS.

2. Describe the transfer to the backup power sources in the case of a Loss of Offsite Power event.

09.05.02-3

Describe the backup communication method provided for the offsite communication systems to meet COL Information Item 9.5-10. Specifically, describe in greater detail the design of the 800 MHz Radio system and the other backup communications methods for offsite communications.

COL Information Item 9.5-10 states:

“The emergency offsite communication system, including the crisis management radio system, will be addressed by the Combined License applicant."

10 CFR 73.55(f)(3) requires the capability of continuous communication, radio or microwave transmitted two-way voice communication, either directly or thorugh an intermediary, be established, in addition to conventional telephone service, between local law enforcement authorities and the facility and be terminated in each continuously manned alarm station. Demonstrate that the 800 MHz Radio system, as well as the other backup communications options, are capable of two-way continuous transmission. In addition, please specify which systems act as a backup to all the primary emergency communication systems and include this information in the V.C. Summer FSAR.

09.05.02-4

Describe the backup methods and the primary and backup power sources for the Emergency Response Data System (ERDS) system. Identify the backup method in the FSAR.

COL Information Item 9.5-9, which is documented in AP1000 DC-FSAR Tier 2, Table 1.8-2, states:

“Combined License applicants referencing the AP1000 certified design will address interfaces to required offsite locations; this will include addressing the recommendations of BL-80-15 (Reference 21) regarding loss of the emergency notification system (ENS) due to a loss of offsite power.”

V.C. Summer COL Emergency Plan Section F(1)(5) states, "The ERO has backup methods available to provide required information to the NRC in the event that ERDS is inoperable during the the declared emergency." There is no specific detail on the backup methods and the primary and backup power sources for ERDS.

09.05.02-5

Demonstrate how the station will utilize computer network connections to augment its emergency communications.

COL Information Item 9.5-9, which is documented in AP1000 DC-FSAR Tier 2, Table 1.8-2, states:

“Combined License applicants referencing the AP1000 certified design will address interfaces to required offsite locations; this will include addressing the recommendations of BL-80-15 (Reference 21) regarding loss of the emergency notification system (ENS) due to a loss of offsite power.”

V.C. Summer COL Emergency Plan Section F(1)(9) states, "The station may also use its public address system, video conferencing system, computer network connections, wireless telephones, station radios and pagers to augment its emergency communications." Provide more detail on the computer network connections and how they will be used to augment emergency communications and whether the station will credit this or the other technologies mentioned in V.C. Summer COL Emergency Plan Section F(1)(9) as actual backup to the emergency communications such that they will satisfy the requirements of Appendix E to 10 CFR Part 50, Part IV.E (9).

09.05.02-6

Provide clarification on transfer capability of the Emergency Communication System from primary dedicated telephone lines to the backup dedicated telephone lines.

COL Information Item 9.5-9, which is documented in AP1000 DC-FSAR Tier 2, Table 1.8-2, states:

“Combined License applicants referencing the AP1000 certified design will address interfaces to required offsite locations; this will include addressing the recommendations of BL-80-15 (Reference 21) regarding loss of the emergency notification system (ENS) due to a loss of offsite power.”

Section F(1) of the V.C. Summer COL Emergency Plan provides details on the Electric Switch System Exchange(ESSX), the Private Branch Exchange Telephone System (PBX) and the Local Commercial Telephone System. Does the local commercial telephone system serve as a backup to the the ESSX, PBX and all other dedicated links for offsite communications? Also, provide details on the transfer of communications from primary to backup telephones lines and how this issue addresses NRC Bulletin 80-15 in regards to a loss of power event at the station.