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Vice President, Nuclear Operations
803.345.4214



March 7, 2005
RC-05-0037

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Dear Sir/Madam:

Subject: VIRGIL C. SUMMER NUCLEAR STATION (VCSNS)
DOCKET NO. 50/395
OPERATING LICENSE NO. NPF-12
90-DAY RESPONSE TO NRC GENERIC LETTER 2004-02:
POTENTIAL IMPACT OF DEBRIS BLOCKAGE ON EMERGENCY
RECIRCULATION DURING DESIGN BASIS ACCIDENTS AT
PRESSURIZED-WATER REACTORS

This letter provides South Carolina Electric & Gas Company's (SCE&G) 90-day response to the subject generic letter for V.C. Summer Nuclear Station (VCSNS). In response to the request for information in Part 1 of Generic Letter 2004-02, SCE&G has established a contract with Enercon Services, Inc. Details associated with the work scheduled to address the analysis requirements are as follows:

- The work with Enercon will provide plant specific evaluations of debris generation using material specific Zone of Influence, the development of a computational fluid dynamics model of the containment to determine sump fluid velocity profiles, debris transport to the Residual Heat Removal (RHR) and Containment Spray recirculation sump screens, debris accumulation and the associated head loss on the current strainer configuration.
- The methodology used will conform to the intent of NEI 04-07, "Pressurized Water Reactor Sump Performance Evaluation Methodology", as amended by the NRC's Safety Evaluation Report on these guidelines. However, SCE&G may substitute simplifying assumptions, alternate methodologies or inputs, and/or plant specific information as appropriate.
- Structural analysis will follow commonly used analytical techniques and widely accepted engineering practices.
- Three specific walk downs are being planned for the VCSNS spring 2005 refueling outage. The walk downs will be consistent with the guidance of NEI 02-01.
 - SCE&G will have a GSI-191 containment coatings walk down performed by an industry expert.
 - A detailed walk down of the sump area will be completed to verify as-built measurements of the sump area to support potential future modifications.

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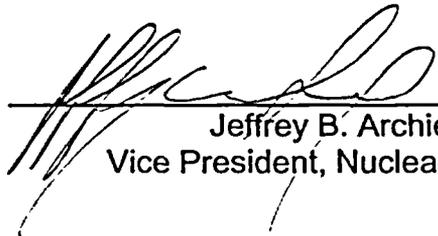
- A walk down to look for potential holdup volumes and flow restrictions which may reduce the volume of water in the containment sump.
- Latent debris sampling of the floor at various accessible locations throughout the containment was completed during the fall 2003 outage. SCE&G will use guidance in the SER for latent debris characterization (i.e., 15% fiber, 85% particulate, etc.).
- SCE&G will not complete detailed walk downs for insulation used in the containment. This data is well documented throughout the life of the plant with updates from the steam generator replacement and recent changes to the reactor vessel head insulation.

The analysis will be completed by September 1, 2005. Several industry efforts are under way to evaluate coating failures, the effects of chemical reactions in containment during a LOCA and the downstream effects of debris laden fluid. To the extent that information from these efforts becomes available, SCE&G will utilize it as part of the analysis. However, if the information from these activities is not available, SCE&G will address these issues using appropriate assumptions and methodologies.

Should you have questions, please call Mr. Ron Clary at (803) 345-4757.

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

7/3/07/05
Executed on


Jeffrey B. Archie
Vice President, Nuclear Operations

AMM/JBA/mb
Attachment

c: N. O. Lorick
S. A. Byrne
N. S. Carns
T. G. Eppink (w/o Attachment)
R. J. White
W. D. Travers
K. R. Cotton

Winston & Strawn
NRC Resident Inspector
NSRC
CER (0-C-04-2911)
File (815.14)
DMS (RC-05-0037)