



May 29, 2007  
RC-07-0082

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  
ASSESSMENT OF FEASIBILITY FOR LEAK DETECTION ENHANCEMENT  
(CR-07-00439)

- Reference:
1. Jeffrey B. Archie (SCE&G) Letter to Document Control Desk (NRC), Inspection and Mitigation of Alloy 82/182 Pressurizer Butt Welds, January 31, 2007
  2. Jeffrey B. Archie (SCE&G) Letter to Document Control Desk (NRC), Inspection and Mitigation of Alloy 82/182 Pressurizer Butt Welds (C-04-1719) - Supplement, February 19, 2007

In Reference 1, South Carolina Electric & Gas Company (SCE&G) noted that an assessment would be performed on the feasibility of on-line monitoring equipment for the VCSNS pressurizer to provide diverse leakage detection capabilities. The conclusions of these actions are to be provided to the NRC by May 31, 2007.

SCE&G participated in the NEI commissioned Advanced Leak Detection Tiger Team that investigated various leakage monitoring systems. Additionally SCE&G performed an assessment of an enhanced leakage monitoring system described in MRP-187 "Review of On-Line PWR Primary Coolant Leak Detection Technologies" for VCSNS.

Based on this assessment, SCE&G believes the current RCS leak detection, monitoring, trending and response requirements are sufficient to provide timely leakage detection and protection.

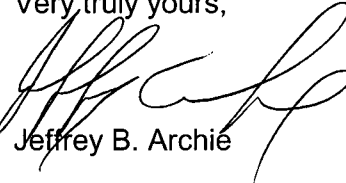
The on-line monitoring equipment would have essentially been used after an increase in RCS unidentified leakage was identified by station procedures, to assess whether the leakage was coming from the pressurizer welds. Current VCSNS procedures which initiates action to identify the source of the leakage, provides for timely assessment of leak location. The criteria for initiating these actions are below the unidentified leakage threshold established in the February 19, 2007 letter (Reference 2). The cost (both monetarily and in dose) associated with the installation of the on-line monitoring equipment was not outweighed by the limited benefit for an earlier determination of whether the leak was in the vicinity of the pressurizer.

Therefore SCE&G has determined that installation of additional plant equipment is not required.

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SCE&G staff is available to meet with the NRC to discuss any of the information contained in this letter.

Should you have questions, please call Mr. Bruce Thompson at (803) 931-5042.

Very truly yours,  
  
Jeffrey B. Archie

JWT/JBA/dr

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- NSRC
- RTS (CR-07-00439)
- File (815.02, IEB 2004-01)
- DMS (RC-07-0082)