



July 2, 2009  
NND-09-0162

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

Attention: Document Control Desk

Subject: Virgil C. Summer Nuclear Station Units 2 and 3  
Docket Numbers 52-027 and 52-028  
Loss of Large Areas of the Plant due to Explosions or Fire - Mitigative  
Strategies Description and Plans

Reference: V. C. Summer Nuclear Station Letter NND-08-004 from Stephen A.  
Byrne to the Document Control Desk dated March 27, 2008, which  
submitted a Combined License Application for V. C. Summer Nuclear  
Station Units 2 and 3

This letter identifies changes that will be made to a future revision of the V. C. Summer Nuclear Station Units 2 and 3 combined license application (COLA) to address Nuclear Regulatory Commission (NRC) requirements in 10 CFR 52.80(d). This Section requires a description and plans for implementation of the guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities under the circumstances associated with the loss of large areas of the plant due to explosions or fire.

**The enclosures to this letter provide additions to the V. C. Summer Nuclear Station Units 2 and 3 COLA required by 10 CFR 52.80(d), including the Mitigative Strategies Description and Plans, which contains Security-Related Information, and accordingly is requested to be withheld from public disclosure under 10 CFR 2.390(d).**

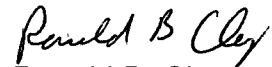
Should you have any questions, please contact Mr. Al Paglia by telephone at (803) 345-4191, or by email [apaglia@scana.com](mailto:apaglia@scana.com).

D083  
NRS

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

Executed on this 2nd day of July, 2009.

Sincerely,

  
Ronald B. Clary  
General Manager  
New Nuclear Deployment

JH/RC/jh

Enclosures

- c. (Without enclosures unless noted)
  - Luis A. Reyes
  - Brian Anderson
  - Chandu Patel (with enclosures)
  - John Zeiler
  - Stephen A. Byrne
  - Ronald B. Clary
  - George (Gregg) Douglass
  - Jan Renfro
  - Courtney Smyth (with enclosures)
  - Bill McCall (with enclosures)
  - Kenneth J. Browne (with enclosures)
  - Randolph R. Mahan (with enclosures)
  - Kathryn M. Sutton (with enclosures)
  - DCRM EDMS (with enclosures)

**DISCUSSION OF VCSNS UNITS 2 and 3 COL APPLICATION CHANGES TO ADDRESS REGULATIONS IN 10 CFR 52.80(d) RELATED TO LOSS OF LARGE AREAS OF THE PLANT DUE TO EXPLOSIONS OR FIRE:**

On March 27, 2009, the NRC published the Final Rule related to Power Reactor Security Requirements (RIN 3150-AG63) in the Federal Register (73 FR 13926). Section 10 CFR 52.80(d) of the Final Rule requires a combined license (COL) application to include a description and plans for implementation of the guidance and strategies intended to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities under the circumstances associated with the loss of large areas of the plant due to explosions or fire as required by 10 CFR 50.54(hh)(2). Enclosures 2 and 3 provide changes to the V. C. Summer Nuclear Station Units 2 and 3 (VCSNS UNITS 2 and 3) combined license application (COLA) related to the loss of large areas of the plant due to explosions or fire, in response to the new requirements discussed above. This information will be included in a future revision to the VCSNS UNITS 2 and 3 COLA.

The Nuclear Energy Institute (NEI) has been working with the industry to adapt NEI 06-12, the guidance document used by the operating reactor fleet for addressing provision B.5.b of the NRC's February 25, 2002, Interim Compensatory Measures Order, to facilitate its use in developing mitigating strategies for new reactors. By letter dated May 1, 2009 (Reference 1 below), NEI provided NEI 06-12, proposed Revision 3, Draft A, to the staff for review. In addition to providing guidance on the development and assessment of mitigative strategies as required by 10 CFR 50.54(hh)(2), the draft NEI document also includes a template that may be used for the development of a Mitigative Strategies Description and Plans to address the requirements of § 52.80(d).

The South Carolina Electric and Gas Company (SCE&G) developed the enclosed site-specific Mitigative Strategies Description and Plans based on the template that was provided as Attachment 2 to NEI's May 1, 2009, letter. During the development of this site-specific document, minor changes were identified that would enhance the content of the common text in the template. These enhancements, which are expected to be provided to the staff as Draft B of the plan template, have been incorporated into this site-specific document.

Pursuant to the new requirements in 10 CFR 52.80(d), Enclosure 2 provides the VCSNS Units 2 and 3 Mitigative Strategies Description and Plans. **The site-specific document in Enclosure 3 contains Security-Related Information for Part 9, and accordingly should be withheld under 10 CFR 2.390 (d). Enclosure 2, for Part 14, consists of a title page and a single sheet referring the reader to Part 9.** Enclosure 6 contains a variance listing of the areas where the VCSNS Units 2 and 3 document varies from the NEI 06-12 template (proposed Revision 3, Draft B).

SCE&G will incorporate the full, non-redacted version of the Mitigative Strategies Description and Plans, including any applicable changes identified in response to NRC

requests for additional information or other change drivers, in a future revision of COLA Part 9, Withheld Information. The redacted version of this Mitigative Strategies Description and Plans will be incorporated into a future COLA revision as an enclosure. The Loss of Large Areas mitigative strategies, including implementation of operational and programmatic aspects of responding to loss of large area events, will be implemented prior to initial fuel load.

The enclosed Mitigative Strategies Description and Plans includes industry generic information, STANDARD technology-specific information, and SITE-SPECIFIC information, in accordance with the guidance provided in the draft NEI template. STANDARD text will generally be preceded with the phrase, "For the AP1000 ..." and SITE-SPECIFIC text will be preceded by, "For VCSNS UNITS 2 and 3 ..." to facilitate the staff's review of this document. Additionally, in the Mitigative Strategies Table, industry generic strategies are preceded by the phrase, "For new plants, ..." This approach conforms with the use of bracketed text in the Mitigative Strategies Description and Plans template that is attached to NEI 06-12, Revision 3.

Reference:

1. Letter from Douglas J. Walters, NEI, to Thomas A. Bergman, NRC, "Revision to NEI 06-12, *B.5.b Phase 2 and 3 Submittal Guideline*, Revision 2, December 2006," dated May 1, 2009.

**ASSOCIATED VCSNS UNITS 2 and 3 COL APPLICATION REVISIONS:**

1. Non-Public Revisions:
  - a. Change COLA Part 14, to include the title page of the new Mitigative Strategies Description and Plans (Non-Public Version) and single page referring the reader to Part 9 (both pages provided after the cover page in Enclosure 2.)
  - b. Change COLA Part 9, Withheld Information, to include the new Mitigative Strategies Description and Plans (as provided after the cover page in Enclosure 3), which contains security-related information, and therefore, should be withheld from public disclosure, in accordance with 10 CFR 2.390 (d).
2. Public Revisions:
  - a. Change COLA Part 14, to include the title page of the new Mitigative Strategies Description and Plans (Public Version) and single page referring the reader to Part 9 (both pages provided after the cover page in Enclosure 4).
  - b. Change COLA Part 9, Withheld information to include the new Mitigative

Strategies Description and Plans title page and single page stating that the Report is withheld from public disclosure (both pages provided after the cover page in Enclosure 5). Note: The actual plan should be withheld from disclosure in accordance with 10 CFR 2.390(d), because it contains security-related information.

**ASSOCIATED ENCLOSURES:**

- Enclosure 2 Cover page for Part 14 contents (Non-Public), title page and single page referring the reader to Part 9 for VCSNS Units 2 and 3 Loss of Large Areas of the Plant due to Explosions or Fire; Mitigative Strategies Description and Plans; [Required by 10 CFR 52.80 (d)].
- Enclosure 3 Cover page for Part 9 contents (Non-Public), VCSNS Units 2 and 3 Loss of Large Areas of the Plant due to Explosions or Fire; Mitigative Strategies Description and Plans; [Required by 10 CFR 52.80 (d)].
- Enclosure 4 Cover page for Part 14 contents (Public), title page and single page referring the reader to Part 9 for VCSNS Units 2 and 3 Loss of Large Areas of the Plant due to Explosions or Fire; Mitigative Strategies Description and Plans; [Required by 10 CFR 52.80 (d)]
- Enclosure 5 Cover page for Part 9 contents (Public), title page and single page referring the reader to Part 9 for VCSNS Units 2 and 3 Loss of Large Areas of the Plant due to Explosions or Fire; Mitigative Strategies Description and Plans; [Required by 10 CFR 52.80 (d)] (Public Version - Redacted)
- Enclosure 6 Variances from Draft B of NEI 06-12 Mitigative Strategies Description and Plans Template

**NOTE: Enclosure 2 contains Sensitive Unclassified Non-Safeguards Information (SUNSI) - Withhold Under 10 CFR 2.390(d).**