

Kevin J. Nietmann
Plant General Manager
Calvert Cliffs Nuclear Power Plant
Constellation Generation Group, LLC

1650 Calvert Cliffs Parkway
Lusby, Maryland 20657
410 495-4101
410 495-4787 Fax



July 24, 2003

U. S. Nuclear Regulatory Commission
Washington, DC 20555

ATTENTION: Document Control Desk

SUBJECT: Calvert Cliffs Nuclear Power Plant
Unit Nos. 1 & 2; Docket Nos. 50-317 & 50-318
Response to Request for Additional Information Concerning the License
Amendment Request to Revise the Refueling Operations Section of the Technical
Specifications

This letter provides the information we agreed to provide you during Reference (a). This information supports and/or clarifies the information provided in Reference (b). This information does not affect the No Significant Hazards Consideration Determination or the Environmental Impact Review of Reference (b).

Requested Information:

1. *Constellation Energy should address the proposed amendment request in terms of the requirements of Draft General Design Criterion (GDC) 66, 67, 69, and 70 and explain how the proposed changes assure that the requirements of these Draft GDCs are met.*

CCNPP Response:

Draft Criterion 66 – Prevention of Fuel Storage Criticality (Category B) states that criticality in new and spent fuel storage shall be prevented by physical systems or processes. Such means as geometrically safe configurations shall be emphasized over procedure controls.

The proposed changes requested in Reference (b) would add a note under Limiting Condition for Operations (LCO) 3.9.3 allowing containment penetration flow path(s) that have direct access from the containment atmosphere to the outside atmosphere to be unisolated under administrative control. In addition, changes would be made to the Required Action for Technical Specifications 3.9.4 and 3.9.5 to clarify containment closure requirements when shutdown cooling requirements are not met. The proposed changes do not make any changes to the fuel storage requirements or the design of either the new or the spent fuel storage rack. Therefore, the proposed changes have no impact on how the requirements of Draft Criterion 66 are met.

A001

Draft Criterion 67 – Fuel and Waste Storage Decay Heat (Category B) states that reliable decay heat removal systems shall be designed to prevent damage to the fuel in storage facilities that could result in radioactivity release to plant operating areas or the public.

The decay heat removal systems were designed to prevent damage to the fuel in storage facilities and prevent undue risks to the plant operating areas or the public. The proposed changes do not make any changes to the decay heat removal systems. These systems will continue to operate in the same manner as before. Therefore, the proposed changes have no impact on how the requirements of Draft Criterion 67 are met.

Draft Criterion 69 – Protection Against Radioactivity Release from Spent Fuel and Waste Storage (Category B) states that containment of fuel and waste storage shall be provided if accidents could lead to release of undue amounts of radioactivity to the public environs.

The current analysis for the fuel handling incident presented in the Calvert Cliffs Updated Final Safety Analysis Report Section 14.18, "Fuel Handling Incident," assumes that the personnel air lock and the containment outage door are open for the duration of the incident and one volume of unfiltered containment atmosphere containing activity is released from the Containment every two hours. Since the analysis assumes the radioactive release is unfiltered, the analysis will also apply to the containment penetration flow paths that are opened under administrative control. Actual offsite doses in the event of a fuel handling incident will be less because containment closure will be established. Administrative controls are used during lower-mode operations to ensure that containment closure can be established when needed. The controls used for containment penetrations were described in Reference (c). The Nuclear Regulatory Commission staff reviewed and approved our request to allow the equipment hatch to remain open during fuel movement inside Containment provided the containment outage door was operable (Reference d). As stated in the Safety Evaluation Report for that amendment, our administrative controls are adequate to ensure that we monitor the containment atmosphere and will be able to establish containment closure to prevent a release of radioactivity should a fuel handling incident occur. Therefore, the proposed changes assure that the requirements of Draft Criterion 69 are met.

Draft Criterion 70 – Control of Releases of Radioactivity to the Environment (Category B) states that the facility design shall include those means necessary to maintain control over the plant radioactive effluents, whether gaseous, liquid or solid. Appropriate holdup capacity shall be provided for retention of gaseous, liquid, or solid effluents, particularly where unfavorable environmental conditions can be expected to require operational limitations upon the release of radioactive effluents to the environment.

The proposed changes do not make any changes to the radioactive waste processing systems or how they will operate. Therefore, the proposed changes have no impact on how the requirements of Draft Criterion 70 are met.

- 2. A radiological dose analysis should be provided that details the offsite consequences and the consequences to the Control Room operators in the event of an accident while in the operating mode associated with the proposed Technical Specifications change.*

CCNPP Response:

A new fuel handling accident analysis was performed to support our License Amendment Request, dated November 5, 1993 (Reference e). That analysis showed that it is not necessary to have containment closure in order to show acceptable site boundary dose following a fuel handling accident. This request was approved in Reference (f). The dose consequences to the control room operators in the event of an accident were discussed in References (g) and (h). This analysis also assumed no containment closure. This License Amendment Request was approved in Reference (d).

Revised Schedule

The proposed changes described in Reference (b) make the requirements for containment penetrations during refueling operations consistent throughout the Technical Specifications. The 2004 Unit 1 refueling outage is currently scheduled to begin April 2004. Therefore, we request approval of the proposed changes by December 1, 2003.

REFERENCES:

- (a) Telephone Conference between Ms. D. J. Mitchell, et.al. (CCNPP) and Mr. G. Vissing, et.al. (NRC), dated February 12, 2003, same subject
- (b) Letter from Mr. P. E. Katz (CCNPP) to Document Control Desk (NRC), dated August 6, 2002, "License Amendment Request: Revisions to the Refueling Operations Section of the Technical Specifications"
- (c) Letter from Mr. P. E. Katz (CCNPP) to Document Control Desk (NRC), dated December 12, 2002, "Response to Request for Additional Information Concerning the License Amendment Request to Revise the Refueling Operations Section of the Technical Specifications"
- (d) Letter from Ms. D. Skay (NRC) to Mr. C. H. Cruse (CCNPP), dated March 12, 2001, "Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2 – Amendment RE: Containment Closure (TAC Nos. MA8063 and MA8064)"
- (e) Letter from Mr. R. E. Denton (BG&E) to NRC Document Control Desk, dated November 5, 1993, "License Amendment Request: Personnel Airlock Open During Core Alterations"
- (f) Letter from Mr. D. G. McDonald (NRC) to Mr. R. E. Denton (BG&E), dated August 31, 1994, "Issuance of Amendments for Calvert Cliffs Nuclear Power Plant, Unit No. 1 (TAC No. M88193) and Unit No. 2 (TAC No. M88194)"
- (g) Letter from Mr. C. H. Cruse (BGE) to NRC Document Control Desk, dated January 27, 2000, "License Amendment Request: Modification of Containment Closure During Core Alternations/Fuel Handling and Loss of Shutdown Cooling"
- (h) Letter from Mr. C. H. Cruse (BGE) to NRC Document Control Desk, dated June 15, 2000, "Response to Request for Additional Information Concerning the License Amendment Request to Modify Containment Closure During Core Alternations/Fuel Handling and Loss of Shutdown Cooling"

cc: J. Petro, Esquire
J. E. Silberg, Esquire
Director, Project Directorate I-1, NRC
G. S. Vissing, NRC

H. J. Miller, NRC
Resident Inspector, NRC
R. I. McLean, DNR