UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

November 3, 2005

Docket No. 072-00008 License No. SNM-2505

Mr. George Vanderheyden
Vice President - Calvert Cliffs Nuclear Power Plant
Constellation Generation Group, LLC
1650 Calvert Cliffs Parkway
Lusby, MD 20657

SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT - NRC INSPECTION REPORT NO. 072-00008/2005-001 AND NOTICE OF VIOLATION

Dear Mr. Vanderheyden:

This refers to the inspection conducted on August 22-26, 2005, at the Calvert Cliffs Nuclear Power Plant (CCNPP) facility in Lusby, MD. The purpose of the inspection was to assess the effectiveness of CCNPP's performance of 10 CFR 72.48 evaluations for use of the NUHOMS-32P Dry Shielded Canister, and to ensure any required license amendments had been requested. We discussed our findings with Messrs. Pollack, Bauder and Montgomery and other members of your staff during a preliminary onsite exit meeting on August 26, 2005, and with Mr. Montgomery and others during a telephone exit meeting conducted on September 23, 2005. On September 27, 2005, and October 11, 2005, we had further discussions of the findings with members of your staff and contractor representatives to clarify the technical issues related to the structural and thermal evaluations for the NUHOMS-32 P canister. The enclosed report presents the results of this inspection.

Based on the results of this inspection, the NRC has determined that two Severity Level IV violations of NRC requirements occurred. The NRC has determined that the violations are associated with 10 CFR 72.48(d)(1), which requires a written evaluation which provides the basis for the determination that a proposed change did not require a license amendment, and 10 CFR 72.48(c)(2)(viii), which requires that a specific licensee shall obtain a license amendment pursuant to 10 CFR 72.56 prior to implementing a proposed change if the change would result in a departure from a method of evaluation described in the FSAR. These violations were evaluated in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's Web site at www.nrc.gov; select **What We Do**, **Enforcement**, then **Enforcement Policy**." The violations are cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding them are described in detail in the subject inspection report. The violations are being cited in the Notice because they were identified by the NRC after completion of your 10 CFR 72.48 evaluation, which was completed to support your next spent fuel loading campaign later this year. Further, while you had entered these findings into your corrective action program, you had not completed your corrective actions to allow NRC to evaluate the completed written evaluations.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Sincerely,

/RA/

Marie Miller, Chief
Decommissioning Branch
Division of Nuclear Materials Safety

Enclosures:
1. NRC Inspection Report No. 072-00008/2005-001
2. Notice of Violation

cc w/encl:
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President, Calvert County Board of Commissioners
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NOTICE OF VIOLATION

Calvert Cliffs Nuclear Power Plant
Lusby, MD 20657

Docket No. 072-00008
License No. SNM-2505

During an NRC inspection conducted on August 22-26, 2005, violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violations are listed below:

A. 10 CFR 72.48(d)(1) requires, in part, that a licensee shall maintain records of a change in the spent fuel storage cask design, including a written evaluation which provides the basis for the determination that the change does not require a license amendment.

Contrary to the above, the licensee provided insufficient evaluations to support the determinations in the licensee's 10 CFR 50.59/10 CFR 72.48 Evaluation Form, 72.48 Log No. SE00163, "Use of NUHOMS-32P Dry Shielded Canister," that the change did not require a license amendment when the licensee:

(1) performed structural evaluations of the NUHOMS-32P DSC system using the same methodology as that of the NUHOMS-24P DSC system,

(2) used insufficient methodologies for thermal evaluations of the NUHOMS-32P DSC system; and

(3) failed to bound the consequences of a fire accident with a NUHOMS-32P DSC installed in the HSM by the consequences of a fire accident with a NUHOMS-24P DSC installed in the HSM.

This is a Severity Level IV violation (Supplement VI).

B. 10 CFR 72.48(c)(2)(viii) requires, in part, that a specific licensee shall obtain a license amendment pursuant to 10 CFR 72.56, prior to implementing a proposed change if the change would result in a departure from a method of evaluation described in the Final Safety Analysis Report (FSAR) used in establishing the design basis or in the safety analyses.

Contrary to the above, the licensee performed structural evaluations for the NUHOMS-32P DSC system using a method of evaluation different from the method described in the Updated Safety Analysis Report for the Calvert Cliffs Independent Spent Fuel Storage Installation and did not request a license amendment.

This is a Severity Level IV violation (Supplement VI).

Pursuant to the provisions of 10 CFR 2.201, Calvert Cliffs Nuclear Power Plant, is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555, with a copy to the Regional Administrator, Region I, within 30 days of the date of the letter transmitting this Notice of Violation. This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or if contested, the basis for disputing the violation or severity level, (2) the corrective steps that have been taken and the

results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html, to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the basis for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post the Notice within two working days.

Dated this 3rd day of November 2005.

U.S. NUCLEAR REGULATORY COMMISSION
Division of Nuclear Materials Safety
Decommissioning Branch

Inspection Report

Docket No.:	072-00008
License No.:	SNM-2505
Report:	072-00008/2005-001
Certificate Holder:	Calvert Cliffs Nuclear Power Plant 1650 Calvert Cliffs Parkway Lusby, MD 20657
Date:	August 22-26, 2005
Inspection Team:	Suresh Chaudhary, Team Leader, Decommission Branch (DB), Division of Nuclear Materials Safety (DNMS) Frank Jacobs, Technical Team Leader, Spent Fuel Program Office (SFPO) Bhasker Tripathi, Technical Reviewer, SFPO Andrew Barto, Technical Reviewer, SFPO Antonio Dias, Technical Reviewer, SFPO
Approved by:	Marie Miller, Chief, DB, DNMS

Enclosure

EXECUTIVE SUMMARY

Calvert Cliffs Nuclear Power Plant
NRC Inspection Report 072-00008/2005-001

From August 22 through 26, 2005, the U.S. Nuclear Regulatory Commission (NRC) conducted an announced inspection at the Calvert Cliffs Nuclear Power Plant (CCNPP) facility in Lusby, Maryland. Additional discussions were held with the licensee on September 27 and October 11, 2005, to clarify and promote a better understanding of the technical issues. The purpose of the inspection was to assess the effectiveness of CCNPP's performance of 10 CFR 72.48 evaluations for use of the NUHOMS-32P Dry Shielded Canister, and to ensure any required license amendments have been requested.

The licensee had completed the 72.48 evaluations for the NUHOMS-32P Dry Shielded Canister, however, the written evaluations for structural integrity, heat transfer, and fire accident were not completed in accordance with 10 CFR 72.48. The NRC determined that the inadequate 72.48 evaluation resulted in two Severity Level IV violations of NRC requirements. The first violation, involving three examples, was a failure to complete a written evaluation in accordance with 10 CFR 72.48(d)(1), which requires a written evaluation that provides the basis for the determination that a proposed change did not require an amendment. The second violation was associated with 10 CFR 72.48(c)(2)(viii), which requires that a specific licensee shall obtain a license amendment pursuant to 10 CFR 72.56 prior to implementing a proposed change if the change would result in a departure from a method of evaluation described in the FSAR. In addition, the NRC identified some technical issues, referencing errors, and computational errors that needed further review by the licensee to ensure an adequate written evaluation.

REPORT DETAILS

1. Background

CCNPP currently stores spent fuel at its Independent Spent Fuel Storage Installation (ISFSI) under Materials License SNM-2505 using the NUHOMS-24P Dry Shielded Canister (DSC) design. CCNPP plans to use a new design of DSC, NUHOMS-32P, for storing spent fuel at the ISFSI. The NUHOMS-32P DSC can store 32 fuel assemblies whereas the NUHOMS-24P can store only 24 fuel assemblies. Use of the NUHOMS-32P DSC will increase the ISFSI storage capacity and reduce the minimum number of canister loadings each year from four to three. CCNPP performed analyses to verify that confinement, shielding, criticality control, structural stresses, and passive heat removal were acceptable with the use of NUHOMS-32P DSCs at the CCNPP ISFSI. The results of the CCNPP analyses indicated that use of the NUHOMS-32P DSC with the existing Transfer Cask and Horizontal Storage Module met all the design criteria, and would provide for safe storage of the spent fuel assemblies under normal, off-normal, and postulated accident conditions. CCNPP submitted a license amendment request on December 12, 2003, to revise the ISFSI Technical Specifications for the NUHOMS-32P DSC. The NRC issued Materials License SNM-2505, Amendment No. 6, on June 10, 2005.

Subsequent to the license amendment request, CCNPP completed a written evaluation required by 10 CFR 72.48(d)(1) to provide the basis for the determination that changes in the spent fuel cask design did not require a license amendment. The 10 CFR 72.48 evaluation identified two changes which required a license amendment. One of the changes involved a new evaluation methodology to use boron credit in lieu of burnup credit for the criticality analysis. That change was submitted as part of the license amendment request for the Technical Specifications revision in December 2003. The second change altered a design basis limit for a fission product barrier as described in the Updated Safety Analysis Report (USAR). The design basis limit that was altered to accommodate the NUHOMS-32P DSC was internal pressure, which was increased from 50 psig to 100 psig. For that change to the USAR, CCNPP requested a license amendment on May 16, 2005. The request is currently under review by the NRC. The licensee's written evaluation concluded that no other changes would require a license amendment.

2.0 10 CFR 74.48 Evaluation for NUHOMS-32P DSC

a. Inspection Scope (IP 60857)

The purpose of the inspection was to assess the effectiveness of CCNPP's performance of 10 CFR 72.48 evaluations for use of the NUHOMS-32P Dry Shielded Canister, and to ensure that any required license amendments have been requested. The inspection consisted of an examination of CCNPP's 10 CFR 50.59/10 CFR 72.48 Evaluation Form, 72.48 Log No. SE00163, "Use of NUHOMS-32P Dry Shielded Canister;" reviews of selected documentation supporting the evaluations; and interviews with CCNPP and contractor personnel involved in preparing the evaluations. The team interviewed CCNPP and

contractor personnel to determine the basis and methods used for the 10 CFR 72.48 evaluations. The inspection team reviewed selected supporting documentation and calculation files to clarify or confirm the basis and methods for certain evaluations. The inspection team reviewed selected calculation files supporting the evaluations only as necessary to clarify or confirm the methods and basis for certain evaluations. The accuracy of the calculations was not evaluated by the team.

b. Observations and Findings

CCNPP used NEI 96-07, Appendix B, "Guidelines for 10 CFR 72.48 Implementation," dated March 5, 2001, for guidance in implementing the provisions of 10 CFR 72.48. Appendix B was endorsed by the NRC in "Regulatory Guide 3.72 - Guidance for Implementation of 10 CFR 72.48, Changes, Tests, and Experiments," dated March 2001, and provided methods that were acceptable to the NRC staff for complying with the provisions of 10 CFR 72.48. Regulatory Guide 3.72 states that the examples in Appendix B may not be applicable for all licensees, and that the licensee should ensure that an example is applicable to its particular circumstances before implementing the guidance as described in an example.

Structural Evaluation

Criterion 8 of CCNPP's 10 CFR 72.48 evaluation addressed: Does the proposed activity result in a departure from a method of evaluation described in the USAR used in establishing the design basis or in the safety analyses?

The 10 CFR 72.48 evaluation stated simply that structural evaluations of the NUHOMS-32P DSC system had been performed using the same methodology as that of the NUHOMS-24P DSC system. The 10 CFR 72.48 evaluation did not identify the methodology or provide any discussion of the structural analysis. Regarding documentation of 10 CFR 72.48 evaluations, NEI 96-07, Appendix B, states, "...there must be an accompanying explanation providing adequate basis for the conclusion." It continues, "Consistent with the intent of 10 CFR 72.48, these explanations should be complete in the sense that another knowledgeable reviewer could draw the same conclusion. ...making simple statements of conclusion is not sufficient..."

10 CFR 72.48(d)(1) requires, in part, that a licensee shall maintain records of a change in the spent fuel storage cask design, including a written evaluation which provides the basis for the determination that the change does not require a license amendment. Contrary to the above, the licensee failed to provide sufficient documentation of an evaluation which supports the determination that structural evaluations of the NUHOMS-32P DSC system had been performed using the same methodology as that of the NUHOMS-24P DSC system and that a license amendment is not required, is considered a violation of 10 CFR 72.48(d)(1). **(NOV 072-00008/2005-001-01)**

The inspection team's review of structural analysis calculations, and interviews of licensee and Transnuclear personnel revealed that a plastic analysis of the NUHOMS-32P DSC shell was performed using version 6.0 of the ANSYS computer code. The NUHOMS-24P DSC shell was evaluated using an elastic analysis with an older version of ANSYS. The licensee stated that the use of plastic analysis for the NUHOMS-32P shell analysis was not a change to an element of the methodology because the use of plastic analysis for the structural evaluation of the NUHOMS-24P basket is already a part of the current licensing basis.

The inspection team discussed with the licensee that plate structures are analyzed using the plate theory methods, and that shell structures are analyzed using the shell theory. A plate structure and a shell structure are entirely different types of structures and behave very differently under load. The NUHOMS-24P basket was analyzed using plate theory methods combined with plastic theory methods. The NUHOMS-32P shell was analyzed using shell theory methods combined with plastic theory methods. Thus, the NUHOMS-24P basket was analyzed using a plate theory/plastic theory methodology while the NUHOMS-32P shell was analyzed using a shell theory/plastic theory methodology. These two methodologies are not the same.

10 CFR 72.48 (c)(2)(viii) requires, in part, that a specific licensee shall obtain a license amendment pursuant to 10 CFR 72.56, prior to implementing a proposed change if the change would result in a departure from a method of evaluation described in the FSAR used in establishing the design basis or in the safety analyses. Contrary to this requirement, based on a review of calculations and interview of the licensee, the licensee performed structural evaluations using a different method of evaluation and did not request a license amendment. This is considered a violation of 10 CFR 72.48(c)(2)(viii).
(NOV 072-00008/2005-001-02)

Thermal Evaluations

Also under Criterion 8 of the 10 CFR 72.48 evaluation regarding a departure from a method of evaluation described in the USAR, the evaluation identified five thermal evaluations that had been performed: (1) thermal analysis of the HSM, (2) thermal analysis of the DSC in the HSM, (3) thermal analysis of the DSC in the Transfer Cask, (4) operating pressures in the DSC, and (5) HSM exit air temperature. Similar to the structural evaluation, the documentation was not complete in providing the basis for the engineering judgment and the rationale used in the determinations.

The licensee's 10 CFR 72.48 evaluation stated that the methodology in "several" of the thermal calculations for the NUHOMS-32P was the same as that for the NUHOMS-24P, but noted modeling differences, such as that ANSYS was used to perform the NUHOMS-32P analysis whereas HEATING6 was used for the

NUHOMS-24P. The evaluation stated that the use of ANSYS models had been accepted by the NRC for other dry cask storage systems, and was therefore considered acceptable for use with the NUHOMS-32P. The licensee considered this a change only in modeling tool, and not a methodology change.

The inspection team found that the 10 CFR 72.48 evaluation did not identify and justify which of the five thermal evaluations were performed with the same methodology as for the NUHOMS-24P. The inspection team found no basis to agree with the licensee's assertion that replacing HEATING6 by ANSYS did not constitute a change in method of evaluation. These two codes are far different in technology. For example, HEATING6 is a finite difference code while ANSYS uses finite elements. This difference alone grants the need for different meshing schemes, which would have to be developed and verified for convergence unless the new ANSYS models were based on previous experiences modeling similar structures. Neither a validation procedure nor the adoption of accepted ANSYS models was documented in the 10 CFR 72.48 evaluation.

The licensee's 10 CFR 72.48 evaluation stated certain analyses for the NUHOMS-32P represented departures from the methodology used for the NUHOMS-24P. Those analyses were for the fuel radial conductivity, convection within the DSC basket, and the correlations used for the convection coefficients. The evaluation stated the new methodologies were more conservative and represent current accepted practice in similar industry applications.

The inspection team found no basis to agree that the new methodologies were more conservative. The NUHOMS-32P basket design is heavily packed with fuel assemblies and not prone to developing internal convection forces. The use of more recent convection correlations to model the exchange of the heat with the environment indicates a best-estimate approach. It is likely the NUHOMS-24P convection correlations were actually less conservative than what is now being used for the NUHOMS-32P. In the 10 CFR 72.48 evaluation, the new methodology for deriving fuel radial conductivities was only identified as current accepted practice in similar industry applications, and the specific methodology was not identified. During interviews with the licensee, the team learned that the licensee used the NUHOMS-32PT methodology to support the NUHOMS-32P calculations. The inspection team noted that in October 2002, an inspection was conducted at Transnuclear which included a discussion of the nonconservatism in the effective radial fuel conductivity calculations for the NUHOMS-32PT. Also, an SER issued on January 9, 2003, for the Standardized Advanced NUHOMS Horizontal Modular Storage System, indicated concerns with the nonconservative radial fuel conductivity methodology. The NUHOMS-32PT SER, issued January 14, 2004, indicated problems with the applicant's prediction that fuel cladding temperatures were well below the NRC's independent evaluation results. NEI 96-07, Appendix B, states that it is incumbent upon the user of a new methodology to ensure they have a thorough understanding of the methodology, the terms of its application, and conditions/limitations on its use.

The licensee's 10 CFR 72.48 evaluation did not describe the new methodology, address any of the previous issues, or justify its use.

The licensee's 10 CFR 72.48 evaluation stated that some of the thermal analyses ANSYS models for the NUHOMS-32P were 3-dimensional whereas the corresponding NUHOMS-24P analysis was 2-dimensional, and this constituted a change in methodology. The licensee stated that the use of 3-dimensional models had been accepted by the NRC for other dry cask storage systems and therefore was considered acceptable for use with the NUHOMS-32P.

The inspection team found that the specific 3-dimensional methodology used by the licensee was not identified in the 10 CFR 72.48 evaluation. The fact that 3-dimensional models have been accepted by the NRC is not in itself an adequate basis for the licensee's determination that the change in methodology was acceptable. During interviews with the licensee, the team learned that the licensee used the NUHOMS-32PT methodology to support the NUHOMS-32P calculations. As noted above, the NRC indicated concerns with that methodology when it was used for the NUHOMS-32PT and Advanced NUHOMS safety analyses. As noted above, NEI 96-07 is very prescriptive on the need for the user to ensure a thorough understanding of the conditions and limitations on the use of a methodology. These details were not addressed in the 10 CFR 72.48 evaluation. Also, the team noted that 3-dimensional models are in general less conservative than 2-dimensional approaches.

10 CFR 72.48(d)(1) requires, in part, that a licensee shall maintain records of a change in the spent fuel storage cask design, including a written evaluation which provides the basis for the determination that the change does not require a license amendment. The licensee's failure to identify in its written evaluation for each of the thermal evaluations the methodology the licensee used, how the methodology was adopted for the specific application, and why it was acceptable, sufficient to justify the determination that a license amendment was not required, is considered a second example of a violation of 10 CFR 72.48(d)(1). **(NOV 072-00008/2005-001-01)**

Fire Accident

Criterion 3 of the 10 CFR 72.48 evaluation addressed: Does the proposed activity result in more than a minimal increase in the consequences of an accident previously evaluated in the USAR?

The 10 CFR 72.48 evaluation stated that concrete cracking and spallation of the HSM due to fire have potential radiological consequences. The USAR evaluation of this accident for the NUHOMS-24P showed a reduction in concrete thickness of 4.5", and provided estimates of corresponding dose increases. The 10 CFR 72.48 evaluation further stated that doses during the fire scenario with the NUHOMS-32P DSC installed in the HSM were bounded by the doses with the NUHOMS-24P DSC installed, because the dose rates on the surface of an

HSM with a NUHOMS-32P DSC installed are less than the dose rates with a NUHOMS-24P DSC installed. The inspection team noted that this determination did not appear to account for earlier statements in the 10 CFR 72.48 evaluation which indicated that although the NUHOMS-32P DSC had a higher total surface dose rate due to an increased neutron source term, the dose rates outside the HSM with the NUHOMS-32P installed were lower due to the neutron shielding provided by the concrete in the HSM.

10 CFR 72.48(d)(1) requires, in part, that a licensee shall maintain records of a change in the spent fuel storage cask design, including a written evaluation which provides the basis for the determination that the change does not require a license amendment. The failure of the licensee to provide sufficient documentation of an evaluation which supports the determination that the consequences of a fire accident with a NUHOMS-32P DSC installed in the HSM are bounded by the consequences with a NUHOMS-24P DSC installed in the HSM, is considered the third example of a violation of 10 CFR 72.48(d)(1). **(NOV 072-00008/2005-001-01)**

When questioned by the inspection team, the licensee acknowledged that no calculations for the NUHOMS-32P DSC had been performed prior to the issue being raised by the inspection team. The licensee stated that an evaluation had been initiated for HSM temperatures with the NUHOMS-32P DSC installed in the HSM, and that the draft evaluation indicated a spallation depth of 6.0" during the fire scenario, in contrast to 4.5" for the NUHOMS-24P. Evaluation of the corresponding dose estimates had not been completed at that time.

Additional Observations

During the review of Table 4 of the 10 CFR 72.48 evaluation, three items were discussed with Calvert Cliffs personnel. The team did not identify the items as violations of any requirements, but considered that the items warranted further review by the licensee to confirm that the results or action taken was appropriate. The licensee stated Issue Reports would be initiated to review and address the above additional observations.

c. Conclusions

The licensee had completed the 72.48 evaluations for the NUHOMS-32P Dry Shielded Canister, however, the written evaluations for structural integrity, heat transfer, and fire accident were not completed in accordance with 10 CFR 72.48. The NRC determined that the inadequate 72.48 evaluation resulted in two Severity Level IV violations of NRC requirements. The first violation was associated with 10 CFR 72.48 (c)(2), which requires that a specific licensee shall obtain a license amendment pursuant to 10 CFR 72.56 prior to implementing a proposed change if the change would result in a departure from a method of evaluation described in th FSAR. The second violation, involving three examples, was a failure to complete a written evaluation in accordance with

10 CFR 72.48(d)(1), which requires a written evaluation that provides the basis for the determination that a proposed change did not require an amendment. In addition, the NRC identified some technical issues, referencing errors, and computational errors that needed further review by the licensee to ensure an adequate written evaluation.

3. Exit Meeting

An exit meeting was conducted by the team with CCNPP personnel on August 26, 2005. The team's preliminary findings and assessments were presented at the meeting. CCNPP management personnel at the meeting acknowledged the team's findings and did not state any disagreement with the preliminary findings and their characterization. A conference call exit meeting was conducted on September 22, 2005, to provide a more detailed presentation of the team's findings and to confirm the team's initial assessment. No new issues were presented during the meeting, however, two NRC requirement citations were adjusted to more accurately reflect the nature of the findings. Additional clarification information was also discussed with the licensee and their contractor during telephone conferences held on September 27, 2005, and October 11, 2005.

PARTIAL LIST OF PERSONS CONTACTED

Licensee and Contractor Staff

*Joe Pollack, Plant General Manager
*Doug Bauder, Manager - Nuclear Operations
+Bruce Montgomery, Manager, Engineering Services
+Bob Beall, Nuclear Fuel Management
+Mark Flaherty, Manager, Fleet Licensing
+Jack McHale, Principal Engineer- Mechanical and Civil
* Penny File, Principal Engineer - Nuclear Fuel Management
+Lou Larragoite, Director - Licensing
+Jim Kilpatrick, Electric and Controls Design
+Lloyd Wenger, Mechanical and Civil Engineering
+Gerald Gryczkowski, Fuel Operations Support
+John Johnson, Licensing
+Getachew Tesfaye, Licensing
+Tara Neider, Vice President, Trans-nuclear (TN)
*Jeff Gagne, TN
#Bill Bracey, TN
+Glenn Guerra, TN

*denotes attendance at onsite exit on August 26, 2005
+denotes attendance at onsite exit and also telephone exit on September 22, 2005
#denotes attendance at only telephone exit interview on September 22, 2005

List of Acronyms Used

CCNPP	Calvert Cliffs Nuclear Power Plant
CFR	Code of Federal Regulations
CoC	Certificate of Compliance
DB	Decommissioning Branch
DNMS	Division of Nuclear Materials Safety
DSC	Dry Shielded Canister
FSAR	Final Safety Analysis Report
HSM	Horizontal Storage Module
ISFSI	Independent Spent Fuel Storage Installation
NOV	Notice of Violation
NRC	Nuclear Regulatory Commission
SFPO	Spent Fuel Pool Office
TN	Transnuclear, Inc.
USAR	Updated Safety Analysis Report

FINDINGS

Items Opened

072-00008/2005-001-01	NOV	Failure to document written evaluation per 72.48(d)(1)
072-00008/2005-001-02	NOV	Failure to properly evaluate design change per 72.48(c)(2)(viii)