



# Constellation Nuclear

## Calvert Cliffs Nuclear Power Plant

*A Member of the  
Constellation Energy Group*

June 11, 2002

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  
License Amendment Request: Revision to the Administrative Controls Section  
of the Technical Specifications

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Pursuant to 10 CFR 50.90, Calvert Cliffs Nuclear Power Plant, Inc. (CCNPP) hereby requests an amendment to Renewed Operating License Nos. DPR-53 and DPR-69 to incorporate the changes described below into the Technical Specifications for Calvert Cliffs Unit Nos. 1 and 2.

### DESCRIPTION

The proposed amendment revises the Unit Nos. 1 and 2 Technical Specification Administrative Controls Section to incorporate seven changes previously approved for the Improved Standard Technical Specifications (ISTS). These changes are reflected in Revision 2 of NUREG-1432 (Reference a). In addition, a change is also being requested to correct an inconsistency introduced in a prior Technical Specification amendment. Each proposed change is described below. Marked up Technical Specification pages are contained in Attachment (1).

### Change 1 - Administrative Controls Program 5.5.2 Test Interval and Exception

Technical Specification 5.5.2, Primary Coolant Sources Outside Containment, requires that the program addressing this issue contain requirements for an integrated leak test for each system at refueling cycle intervals or less. In accordance with Technical Specification Task Force (TSTF)-299 (Reference b), CCNPP is proposing to change the timing of those tests to "24 months or less." Technical Specification 5.5.2 is essentially a surveillance requirement. Since normal refueling cycle intervals are 24 months, presenting the requirement in this manner achieves consistency with other similar requirements in the Technical Specifications. As a result of explicitly stating the interval for the test, it will not be possible to account for shutdowns or power reductions that may occur during the cycle and cause the cycle length to be increased. Also to achieve consistency with other surveillance intervals, the provisions of Surveillance Requirement (SR) 3.0.2 will be applicable for this surveillance. That statement is also added to Technical Specification 5.5.2 in conformance with TSTF-299. The applicability of SR 3.0.2 must be explicitly stated in Technical Specification 5.5.2, since SR 3.0.2 only applies to Technical Specification Sections 3.1 through 3.9.

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### **Change 2 - Change to Section 5.0 Administrative Controls**

There are five changes approved in TSTF-258 (Reference c). This request proposes to adopt parts of two of those changes.

<u>Technical Specification Change</u>	<u>Disposition</u>
Technical Specification 5.2.2, Working hour limits	Previously adopted
Technical Specification 5.3.1, Unit staff qualifications	Not necessary, CCNPP staff qualifications were part of current licensing basis at the time of conversion
ISTS 5.7, High radiation area	Does not exist in CCNPP Technical Specifications, changes do not apply
Technical Specification 5.5.4, Radioactive effluent controls program	In this submittal, see below
Technical Specification 5.5.6, Remove pressurizer and safety relief valve report	In this submittal, see below

The change requested makes some minor editorial clarifications in Technical Specification 5.5.4, Radioactive Effluent Controls Program, and allows the provisions of SR 3.0.2 and SR 3.0.3 to be applied to Technical Specification 5.5.4.e. The first part of this change is to add the provisions of SR 3.0.2 and SR 3.0.3 to Technical Specification 5.5.4. This provision permits a 25% extension in the frequency of the interval specified in Technical Specification 5.5.4.e (31 days). Allowing a 25% extension in the frequency of performing the monthly cumulative dose and projected dose calculation for the current quarter will have no effect on the outcome of the calculation. In addition, it also requires that, if the surveillance is missed, it will be performed in accordance with the requirements of SR 3.0.3. Again, this timing has no effect on the dose calculation. The last part of this change is to make minor editorial clarifications in Technical Specifications 5.5.4.i and 5.5.4.l. These changes clarify that the effluents are being released from the site and go beyond the site boundary.

The second proposed change is to eliminate the requirement for reporting pressurizer safety and relief valve failures. This requirement is contained in Technical Specification 5.6.6. The reporting of pressurizer safety and relief valve failures is based on the guidance in a letter from the Nuclear Regulatory Commission (NRC), dated May 8, 1980, to all operating reactors. It established a requirement to provide an annual report of all pressurizer safety and relief valve challenges and failures. This requirement was added to CCNPP Technical Specifications on March 9, 1982. NUREG-0694, "TMI-Related Requirements for New Operating Licenses," June 1980, also provides guidance for the reporting of challenges and failures of the pressurizer safety and relief valves. The guidance of NUREG-0694 states, "Assure that any failure of a PORV or safety valve to close will be reported to the NRC promptly. All challenges to the PORVs or safety relief valves should be documented in the annual report." This information was originally included in the monthly operating report requirement of the ISTS. No separate Technical Specification requirement was included in the ISTS. When Calvert Cliffs converted to the ISTS, we dropped the recommended wording for a monthly report of pressurizer safety and relief valves challenges and failures. We maintained our previously approved annual reporting requirement, moving it to Technical Specification 5.6.6. When the reduction in monthly operating report data was established (Generic Letter 97-02), no mention was made of reporting the information about the pressurizer safety and relief valve challenges and failures. The industry TSTF committee contacted the

NRC and they indicated that this information was not required for the performance indicator program and, therefore, would not need to be reported. Additionally, the performance indicator program has been eliminated as discussed in Regulatory Issue Summary 99-04. Therefore, reporting of this information is not needed, as it is not used within the NRC. Based on this information, it is acceptable to delete the requirement to provide documentation of all challenges and failures of the pressurizer safety and relief valves in conformance with TSTF-258. The marked up pages show that this Technical Specification was removed, however, the Technical Specification number is retained and marked "not used." This prevents the need for renumbering the subsequent Technical Specifications with all of the document changes that it entails.

### **Change 3 - Determination of Cumulative and Projected Dose Contributions in RECP**

Technical Specification 5.5.4 provides guidance for the Radioactive Effluent Control Program. As part of that program, licensees are required to determine both cumulative and projected dose contributions from radioactive effluents. These requirements were derived from previous Technical Specifications and combined into one requirement in the ISTS. However, when the two requirements were combined, the wording resulted in some potential confusion concerning the timing of the determinations. The current wording is, "Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year, in accordance with the methodology and parameters in the ODCM, at least every 31 days." This proposed change would revise the wording of Technical Specification 5.5.4.e to describe the actual intent of the required dose projections consistent with TSTF-308 (Reference d). The existing wording combines the requirement to determine the cumulative and projected dose into one requirement. This results from guidance provided in Generic Letter 89-01, which appears to have combined two previously unrelated dose projection requirements. Technical Specification 5.5.4.e could be interpreted to require determining projected dose contributions for the current calendar quarter and current calendar year every 31 days. This change will clarify the requirement to determine the cumulative dose for the current calendar quarter and the current calendar year, while separating out the requirement to determine the projected dose.

### **Change 4 - Remove Applicable Supports from Inservice Testing Program**

The Inservice Testing Program provides controls for testing Code Class 1, 2, and 3 components. The requirements are contained in Technical Specification 5.5.8. This Technical Specification currently says, "This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components including applicable supports." This change proposes to remove the reference to "applicable supports" from the description of the Inservice Testing Program consistent with TSTF-279 (Reference e). Pipe supports are addressed under the Inservice Inspection Program, not the Inservice Testing Program, therefore, the pipe supports should not be included in the Inservice Testing Program section. The Inservice Inspection Program is not described in the Technical Specifications. Thus, the reference to "applicable supports" was deleted from the ISTS.

### **Change 5 - Cancellation of NRC Environmental Monitoring Program with the States**

In Technical Specification 5.6.2 there is a requirement to provide data associated with the thermoluminescent dosimeters (TLDs) that CCNPP has collocated with NRC TLDs. These TLDs are part of the NRC TLD Program, which provided separate radiological monitoring around certain nuclear sites. In Press Release 98-08, dated January 13, 1998, the NRC announced that it had ended its TLD Program, which was part of its contract with 34 states to perform monitoring around certain facilities. Technical Specification 5.6.2 states, "The report shall identify the thermoluminescent dosimeter results that represent collocated dosimeters in relation to the NRC thermoluminescent dosimeter program, and the exposure period associated with each result." This TLD program is the same one that the NRC cancelled

at the end of 1997 and reported in Press Release 98-08. Therefore, there is no longer a need to report these results or reference this program. This proposed change is consistent with TSTF-348 (Reference f).

#### **Change 6 - Revise Topical Report References in ITS 5.6.5 COLR**

The requirement in Technical Specification 5.6.5, Core Operating Limits Report, to identify the Topical Reports by number, title, date, or NRC Staff approval document is proposed to be revised to allow the Topical Reports to be identified by title and number, only. This request conforms to TSTF-363 (Reference g). However, the complete citation for each Topical Report is contained in the Core Operating Limits Report (COLR), including the report title, number, revision, date, and any supplements. This method of referencing Topical Reports allows CCNPP to use current topical reports to support the limits in the COLR without having to submit a license amendment every time the topical report is revised. The COLR would provide specific information identifying the particular approved Topical Reports used to determine the core limits for the particular cycle. This would eliminate unnecessary expenditure of NRC and CCNPP resources and would ease the burden of Technical Specification submittals needed to license reload fuel.

#### **Change 7 – Renumber Pages**

The pages of Section 5.0 will be renumbered to reflect the appropriate sections of 5.0 (i.e., 5.1-1, 5.2-1, etc.) in accordance with Reference (a). These renumbered pages are not provided as part of the mark-up.

#### **Change 8 – Correct 10 CFR Part 20 Reference**

Technical Specifications 5.5.1.c.1.ii and 5.5.4.c address methods of radioactive effluent control, referencing 10 CFR 20.1302 as the standard of compliance. This reference reflects the new version of 10 CFR Part 20. When the new version was issued in 1991, we did not convert our radioactive effluent controls program to conform to the latest version. We maintained compliance to the old, more conservative version of 10 CFR Part 20. Note the reference to Appendix B, Table II, Column 2 in Technical Specification 5.5.4.b. This is a reference to the old 10 CFR Part 20 table for concentrations of radionuclides in offsite releases.

We inappropriately requested a change from 10 CFR 20.106 to 10 CFR 20.1302 in Reference (h). The NRC granted this administrative change in Reference (i). We wish to reverse this change. Note that we currently comply with both 10 CFR 20.106 and 10 CFR 20.1302. We would like to provide consistency within the radioactive effluent controls program as reflected in the Technical Specifications.

#### **DETERMINATION OF SIGNIFICANT HAZARDS**

The proposed amendment revises the Unit Nos. 1 and 2 Technical Specification Administrative Controls Section to incorporate seven changes previously approved for the Improved Standard Technical Specifications (ISTS). These changes are reflected in NUREG-1432, Revision 2. These changes generally clarify existing requirements, however, three current requirements are removed from Section 5.0. They are the pressurizer safety and relief valve challenges and failures report, removal of the pipe supports from the Inservice Testing Program, and recognition of the cancellation of Nuclear Regulatory Commission's environmental monitoring program with the state. In addition, a change to the references to 10 CFR Part 20 is requested to correct an inconsistency in the version of 10 CFR Part 20 referenced.

These proposed changes have been evaluated against the standards in 10 CFR 50.92 and have been determined to not involve a significant hazards consideration, in that operation of the facility in accordance with the proposed amendments:

1. *Would not involve a significant increase in the probability or consequences of an accident previously evaluated.*

The majority of changes proposed are editorial in nature, that is, they do not change the fundamental requirement of the Technical Specification. They generally clarify the existing requirement. The remaining changes are changes to the Technical Specification requirements. The deletion of the pressurizer safety and relief valve challenges and failures report does not impact the operation of the pressurizer safety and relief valves and still permits reporting of significant failures under the provisions of 10 CFR 50.72 and 50.73. Removal of pipe supports from the Inservice Testing Program description corrects the description of the program. It does not change the manner or timing of any evaluations of pipe supports or snubbers. Removal of the discussion of the Nuclear Regulatory Commission environmental monitoring program with the state reflects the cancellation of that program with the state. It does not alter any other environmental monitoring requirements.

As described above, these proposed changes are generally editorial in nature or have no impact on plant operation. None of the proposed changes impact the operation of any equipment needed for the mitigation of an accident or any known accident initiators.

Therefore, the probability or consequences of an accident previously evaluated have not significantly increased.

2. *Would not create the possibility of a new or different type of accident from any accident previously evaluated.*

As noted above, these changes are generally editorial in nature. That is, they do not change the fundamental requirement of the Technical Specification. They generally clarify the existing requirement. The remaining changes do not impact plant operation. None of the proposed changes would result in new or different plant operation or the addition of new equipment.

Therefore, the possibility of a new or different type of accident from any previously evaluated is not created.

3. *Would not involve a significant reduction in a margin of safety.*

Since the majority of the proposed changes are editorial in nature, they do not change the fundamental Technical Specification requirement. Therefore, they do not impact the margin of safety represented by these Technical Specifications. The remaining changes do not impact plant operation and generally align these Technical Specification requirements with the criteria given in 10 CFR 50.36(c)(2)(ii). The deletion of the pressurizer safety and relief valve challenges and failures report does not impact the operation of the pressurizer safety and relief valves and still permits reporting of significant failures under the provisions of 10 CFR 50.72 and 50.73. Removal of pipe supports from the Inservice Testing Program description corrects the description of the program. It does not change the manner or timing of any evaluations of pipe supports or snubbers. Removal of the discussion of the Nuclear Regulatory Commission environmental monitoring program with the state reflects the cancellation of that program with the state. It does not alter any other environmental monitoring requirements. These changes do not impact the margin of safety.

Therefore, the proposed changes do not involve a significant reduction in the margin of safety.

### **ENVIRONMENTAL ASSESSMENT**

We have determined that operation with the proposed amendments will not result in a significant change in the types or significant increases in the amounts of any effluents that may be released offsite, and no significant increases in individual or cumulative occupational radiation exposure. Therefore, the proposed amendments are eligible for categorical exclusion as set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact assessment is needed in connection with the approval of the proposed amendments.

### **SAFETY COMMITTEE REVIEW**

The Plant Operations and Safety Review Committee and the Offsite Safety Review Committee have reviewed these proposed amendments and concur that operation with the proposed amendments will not result in an undue risk to the health and safety of the public.

### **SCHEDULE**

One of these proposed changes will result in a reduction of reporting requirements and the resultant savings to both CCNPP and the NRC from a reduction in paperwork. Another proposed change could result in fewer license amendment requests to change the list of approved topical reports. Therefore, we request that you review and approve this request by February 28, 2003.

### **PRECEDENT**

Most of these changes have been approved by the NRC for incorporation in the ISTS and are incorporated in NUREG-1432, Revision 2. Plants converting to the ISTS under Revision 2 of the NUREG could adopt these changes. In addition, numerous plants have submitted and/or received approval for these changes as individual items.

- TSTF – 279  
Grand Gulf – Approved June 30, 2000  
Susquehanna – Submitted October 16, 2001  
Monticello – Approved August 1, 2001  
Perry – Approved May 15, 2001
- TSTF – 308  
Susquehanna – Submitted October 16, 2001
- TSTF – 348  
Susquehanna – Submitted October 16, 2001
- TSTF – 258  
Duane Arnold – Submitted February 8, 2002  
St. Lucie – Submitted January 18, 2002  
Peach Bottom – Approved August 30, 2001  
Perry – Approved May 15, 2001  
Palisades – Approved May 3, 2001  
Browns Ferry – Approved November 21, 2000



**REFERENCES:**

- (a) NUREG-1432, Revision 2, Combustion Engineering Improved Standard Technical Specifications, April 2001
- (b) Industry/TSTF Standard Technical Specification Change Traveler TSTF-299, Administrative Controls Program 5.5.2 Test Interval and Exception, Revision 0
- (c) Industry/TSTF Standard Technical Specification Change Traveler TSTF-258, Change to Section 5.0 Administrative Controls, Revision 4
- (d) Industry/TSTF Standard Technical Specification Change Traveler TSTF-308, Determination of Cumulative and Projected Dose Contributions in RECP, Revision 1
- (e) Industry/TSTF Standard Technical Specification Change Traveler TSTF-279, Remove Applicable Supports from Inservice Testing Program, Revision 0
- (f) Industry/TSTF Standard Technical Specification Change Traveler TSTF-348, Cancellation of NRC Environmental Monitoring Program with the States, Revision 0
- (g) Industry/TSTF Standard Technical Specification Change Traveler TSTF-363, Revise Topical Report References in ITS 5.6.5 COLR, Revision 0
- (h) Letter from R. E. Denton (BGE) to Document Control Desk (NRC), dated June 9, 1995, License Amendment Request; Implementation of Changes to the Radiological Technical Specifications as Proposed by Generic Letter 89-01
- (i) Letter from A W Dromerick (NRC) to C. H. Cruse (BGE), dated October 18, 1996, Issuance of Amendments for Calvert Cliffs Nuclear Power Plant, Unit 1 (TAC No. M92549) and Unit 2 (TAC M92550)

Attachment: (1) Technical Specification Marked Up Pages

cc: R. S. Fleishman, Esquire  
J. E. Silberg, Esquire  
Director, Project Directorate I-1, NRC  
D. M. Skay, NRC

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

**ATTACHMENT (1)**

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**TECHNICAL SPECIFICATION**

**MARKED UP PAGES**

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**5.0-8**

**5.0-9**

**5.0-10**

**5.0-11**

**5.0-12**

**5.0-13**

**5.0-33**

**5.0-34**

**5.0-35**

**5.0-36**

**5.0-37**

**5.0-38**

**5.0-39**

**5.0-40**

**Insert 1– TSTF 308**

**Determination of projected dose contributions from radioactive effluents in accordance with the methodology in the ODCM at least every 31 days.**

**Insert 2 – TSTF 258**

**The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Radioactive Effluent Controls Program surveillance frequency.**

## 5.0 ADMINISTRATIVE CONTROLS

5.5 Programs and Manuals

The following programs shall be established, implemented, and maintained.

5.5.1 Offsite Dose Calculation Manual

- a. The Offsite Dose Calculation Manual (ODCM) shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the radiological environmental monitoring program; and
- b. The ODCM shall also contain the radioactive effluent controls and radiological environmental monitoring activities and descriptions of the information that should be included in the Annual Radiological Environmental Operating and Radioactive Effluent Release Reports required by Specification 5.6.2 and Specification 5.6.3.
- c. Licensee initiated changes to the ODCM:
  1. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:
    - i. Sufficient information to support the change(s) together with the appropriate analyses or evaluations justifying the change(s), and
    - ii. A determination that the change(s) maintain the levels of radioactive effluent control required by 10 CFR 20.1302, 40 CFR Part 190, 10 CFR 50.36a, and 10 CFR Part 50, Appendix I, and does not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations;
  2. Shall become effective after the approval of the plant manager; and

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3. Shall be submitted to the Nuclear Regulatory Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Release Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include Containment Spray, Safety Injection, and Chemical and Volume Control. The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at ~~refueling cycle intervals or less.~~ *Least once per 24 months.*

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*The provisions of SR 3.0.2 are applicable.*

5.5.3 Post-Accident Sampling

This program provides controls that ensure the capability to obtain and analyze reactor coolant, radioactive gases, and particulates in plant gaseous effluents and containment atmosphere samples under accident conditions. The program shall include the following:

- a. Training of personnel;
- b. Procedures for sampling and analysis; and

5.5 Programs and Manuals

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- c. Provisions for maintenance of sampling and analysis equipment.

5.5.4 Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation, including surveillance tests and setpoint determination, in accordance with the methodology in the ODCM;
- b. Limitations on the concentrations of radioactive material released in liquid effluents to unrestricted areas, conforming to 10 CFR Part 20, Appendix B, Table II, Column 2;
- c. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.1302 and with the methodology and parameters in the ODCM;
- d. Limitations on the annual and quarterly doses or dose commitment to a member of the public from radioactive materials in liquid effluents released from each unit to unrestricted areas to be limited:
  - 1. During any calendar quarter: Less than or equal to 3 mrem to the total body, and to less than or equal to 10 mrem to any organ; and
  - 2. During any calendar year: Less than or equal to 6 mrem to the total body, and to less than or equal to 20 mrem to any organ;

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- e. Determination of cumulative ~~and projected~~ dose contributions from radioactive effluents for the current calendar quarter and current calendar year, in accordance with the methodology and parameters in the ODCM, at least every 31 days; *Insert!*
- f. Limitations on the functional capability and use of the Liquid Radwaste Treatment System to ensure that appropriate portions of this system are used to reduce releases of radioactivity when the projected doses to unrestricted areas exceeds 0.36 mrem to the total body, or 1.20 mrem to any organ in a 92-day period;
- g. Limitations on the functional capability and use of the Gaseous Radwaste Treatment System and the Ventilation Exhaust Treatment System to ensure that appropriate portions of these systems are used to reduce releases of radioactivity when the calculated doses to unrestricted areas exceeds 1.20 mrad for gamma radiation, and 2.40 mrad for beta radiation in a 92-day period;
- h. Limitations on the functional capability and use of the Ventilation Exhaust Treatment System to ensure that appropriate portions of this system are used to reduce releases of radioactivity when the calculated doses due to gaseous releases to unrestricted areas exceeds 1.8 mrem to any organ in a 92-day period;
- i. Limitations on the dose rate resulting *from the site* from radioactive material released in gaseous effluents *at or* to areas beyond the site boundary, to be limited:

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1. For noble gases: Less than or equal to 500 mrems/yr to the total body, and less than or equal to 3000 mrems/yr to the skin; and
2. For Iodine-131 and for all radionuclides in particulate form with half lives greater than 8 days: Less than or equal to 1500 mrems/yr to any organ;

5.5 Programs and Manuals

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- j. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents to areas beyond the site boundary, to be limited to:
  - 1. During any calendar quarter: Less than or equal to 10 mrad for gamma radiation, and less than or equal to 20 mrad for beta radiation; and
  - 2. During any calendar year: Less than or equal to 20 mrad for gamma radiation, and less than or equal to 40 mrad for beta radiation;
  
- k. Limitations on the annual and quarterly doses to a member of the public from Iodine-131 and all radionuclides in particulate form with half-lives greater than 8 days, in gaseous effluents released from each unit to areas beyond the site boundary, to be limited:
  - 1. During any calendar quarter: Less than or equal to 15 mrem to any organ;
  - 2. During any calendar year: Less than or equal to 30 mrem to any organ; and
  - 3. Less than 0.1% of the limits of 5.5.4.k(1) and (2) as a result of burning-contaminated oil; and
  
- l. Limitations on the annual dose or dose commitment to any member of the public due to releases of radioactivity, and to radiation from uranium fuel cycle sources to be limited to less than or equal to 25 mrem to the total body or any organ, except the thyroid, which shall be limited to less than or equal to 75 mrem.
  - 1. Limitations on the annual dose or dose commitment to any member of the public due to releases of radioactivity, and to radiation from uranium fuel cycle sources to be limited to less than or equal to 25 mrem to the total body or any organ, except the thyroid, which shall be limited to less than or equal to 75 mrem. *, beyond the site boundary,*

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Insert 2

5.5.5

Component Cyclic or Transient Limit

This program provides controls to track the UFSAR, Section 4.1 cyclic and transient occurrences to ensure that components are maintained within the design limits.

5.5 Programs and Manuals

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5.5.6 Concrete Containment Tendon Surveillance Program

This program provides controls for monitoring any tendon degradation in pre-stressed concrete containments, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. The program shall include baseline measurements prior to initial operation. The Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with Section XI, Subsection IWL of the ASME Boiler and Pressure Vessel Code and applicable addenda as required by 10 CFR 50.55a, as amended by relief granted in accordance with 10 CFR 50.55a(a)(3).

The provisions of SR 3.0.3 are applicable to the Tendon Surveillance Program inspection frequencies.

5.5.7 Reactor Coolant Pump Flywheel Inspection Program

This program shall provide for the inspection of each reactor coolant pump flywheel per the recommendations of regulatory position c.4.b of Regulatory Guide 1.14, Revision 1, August 1975.

5.5.8 Inservice Testing Program

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components ~~including applicable supports~~. The program shall include the following:

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Delete  
(TSTF-279)

5.6 Reporting Requirements

of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in the ODCM, and in 10 CFR Part 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

The Annual Radiological Environmental Operating Report shall include the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the ODCM, as well as summarized and tabulated results of these analyses and measurements in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979. ~~The report shall identify the thermoluminescent dosimeter results that represent collocated dosimeters in relation to the NRC thermoluminescent dosimeter program, and the exposure period associated with each result.~~ In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

Delete  
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5.6.3 Radioactive Effluent Release Report

-----NOTE-----  
A single submittal may be made for both units. The submittal should combine sections common to both units at the station.  
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The Radioactive Effluent Release Report covering the operation of the unit shall be submitted in accordance with 10 CFR 50.36a, as modified by approved exemptions. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the units. The material provided shall be consistent with the objectives outlined in the ODCM, Process Control Program, and in conformance with 10 CFR 50.36a and 10 CFR 50, Appendix I, Section IV.B.1.

5.6 Reporting Requirements

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5.6.4 Monthly Operating Reports

Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis no later than the 15th of each month following the calendar month covered by the report.

5.6.5 CORE OPERATING LIMITS REPORT (COLR)

a. Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, and shall be documented in the COLR for the following:

- 3.1.1 SHUTDOWN MARGIN
- 3.1.3 Moderator Temperature Coefficient
- 3.1.4 CEA Alignment
- 3.1.6 Regulating Control Element Assembly Insertion Limit
- 3.2.1 Linear Heat Rate
- 3.2.2 Total Planar Radial Peaking Factor
- 3.2.3 Total Integrated Radial Peaking Factor
- 3.2.5 AXIAL SHAPE INDEX
- 3.3.1 RPS Instrumentation - Operating
- 3.9.1 Boron Concentration

b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

1. CENPD-199-P, Latest Approved Revision, "C-E Setpoint Methodology: C-E Local Power Density and DNB LSSS and LCO Setpoint Methodology for Analog Protection Systems," January 1986
2. CEN-124(B)-P, "Statistical Combination of Uncertainties Methodology Part 1: C-E Calculated Local Power Density and Thermal Margin/Low Pressure LSSS for Calvert Cliffs Units I and II," December 1979

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3. CEN-124(B)-P, "Statistical Combination of Uncertainties Methodology Part 2: Combination of System Parameter Uncertainties in Thermal Margin Analyses for Calvert Cliffs Units 1 and 2" ~~January 1980~~
4. CEN-124(B)-P, "Statistical Combination of Uncertainties Methodology Part 3: C-E Calculated Departure from Nucleate Boiling and Linear Heat Rate Limiting Conditions for Operation for Calvert Cliffs Units 1 and 2" ~~March 1980~~
5. CEN-191(B)-P, "CETOP-D Code Structure and Modeling Methods for Calvert Cliffs Units 1 and 2" ~~December 1981~~
6. Letter from Mr. D. H. Jaffe (NRC) to Mr. A. E. Lundvall, Jr. (BG&E), dated June 24, 1982, Unit 1 Cycle 6 License Approval (Amendment No. 71 to DPR-53 and SER)
7. CEN-348(B)-P, "Extended Statistical Combination of Uncertainties" ~~January 1987~~
8. Letter from Mr. S. A. McNeil, Jr. (NRC) to Mr. J. A. Tiernan (BG&E), dated October 21, 1987, Docket Nos. 50-317 and 50-318, "Safety Evaluation of Topical Report CEN-348(B)-P, Extended Statistical Combination of Uncertainties"
9. CENPD-161-P-A, "TORC Code, A Computer Code for Determining the Thermal Margin of a Reactor Core" ~~April 1986~~
10. CENPD-162-P-A, ~~Latest Approved Revision~~, "Critical Heat Flux Correlation of C-E Fuel Assemblies with Standard Spacer Grids Part 1, Uniform Axial Power Distribution"
11. CENPD-207-P-A, ~~Latest Approved Revision~~, "Critical Heat Flux Correlation of C-E Fuel Assemblies with Standard Spacer Grids Part 2, Non-Uniform Axial Power Distribution"

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12. CENPD-206-P-A, ~~Latest Approved Revision~~, "TORC Code, Verification and Simplified Modeling Methods"
13. CENPD-225-P-A, ~~Latest Approved Revision~~, "Fuel and Poison Rod Bowing"
14. CENPD-266-P-A, ~~Latest Approved Revision~~, "The ROCS and DIT Computer Code for Nuclear Design"
15. CENPD-275-P-A, ~~Latest Approved Revision~~, "C-E Methodology for Core Designs Containing Gadolinia - Urania Burnable Absorbers"
16. CENPD-382-P-A, ~~Latest Approved Revision~~, "C-E Methodology for Core Designs Containing Erbium Burnable Absorbers"
17. CENPD-139-P-A, ~~Latest Approved Revision~~, "C-E Fuel Evaluation Model Topical Report"
18. CEN-161-(B)-P-A, ~~Latest Approved Revision~~, "Improvements to Fuel Evaluation Model"
19. CEN-161-(B)-P, Supplement 1-P, "Improvements to Fuel Evaluation Model" ~~April 1989~~
20. Letter from Mr. S. A. McNeil, Jr. (NRC) to Mr. J. A. Tiernan (BG&E), dated February 4, 1987, Docket Nos. 50-317 and 50-318, "Safety Evaluation of Topical Report CEN-161-(B)-P, Supplement 1-P, Improvements to Fuel Evaluation Model"
21. CEN-372-P-A, ~~Latest Approved Revision~~, "Fuel Rod Maximum Allowable Gas Pressure"
22. Letter from Mr. A. E. Scherer (CE) to Mr. J. R. Miller (NRC), dated December 15, 1981, LD-81-095, Enclosure 1-P, "C-E ECCS Evaluation Model Flow Blockage Analysis"

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23. CENPD-132, Supplement 3-P-A, ~~Latest Approved Revision,~~  
"Calculative Methods for the C-E Large Break LOCA  
Evaluation Model for the Analysis of C-E and W Designed  
NSSS"
24. CENPD-133, Supplement 5, "CEFLASH-4A, a FORTRAN77  
Digital Computer Program for Reactor Blowdown Analysis,"  
~~June 1985~~
25. CENPD-134, Supplement 2, "COMPERC-II, a Program for  
Emergency Refill-Reflood of the Core," ~~June 1985~~
26. Letter from Mr. D. M. Crutchfield (NRC) to  
Mr. A. E. Scherer (CE), dated July 31, 1986, "Safety  
Evaluation of Combustion Engineering ECCS Large Break  
Evaluation Model and Acceptance for Referencing of  
Related Licensing Topical Reports"
27. CENPD-135, Supplement 5-P, "STRIKIN-II, A Cylindrical  
Geometry Fuel Rod Heat Transfer Program," ~~April 1977~~
28. Letter from Mr. R. L. Baer (NRC) to Mr. A. E. Scherer  
(CE), dated September 6, 1978, "Evaluation of Topical  
Report CENPD-135, Supplement 5"
29. CENPD-137, Supplement 1-P, "Calculative Methods for the  
C-E Small Break LOCA Evaluation Model," ~~January 1977~~
30. CENPD-133, Supplement 3-P, "CEFLASH-4AS, A Computer  
Program for the Reactor Blowdown Analysis of the Small  
Break Loss of Coolant Accident," ~~January 1977~~
31. Letter from Mr. K. Kniel (NRC) to Mr. A. E. Scherer  
(CE), dated September 27, 1977, "Evaluation of Topical  
Reports CENPD-133, Supplement 3-P and CENPD-137,  
Supplement 1-P"
32. CENPD-138, Supplement 2-P, "PARCH, A FORTRAN-IV Digital  
Program to Evaluate Pool Boiling, Axial Rod and Coolant  
Heating," ~~January 1977~~

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33. Letter from Mr. C. Aniel (NRC) to Mr. A. E. Scherer, dated April 10, 1978, "Evaluation of Topical Report CENPD-138, Supplement 2-P"
34. Letter from Mr. A. E. Lundvall, Jr. (BG&E) to Mr. J. R. Miller (NRC) dated February 22, 1985, "Calvert Cliffs Nuclear Power Plant Unit 1; Docket No. 50-317, Amendment to Operating License DPR-53, Eighth Cycle License Application"
35. Letter from Mr. D. H. Jaffe (NRC) to Mr. A. E. Lundvall, Jr. (BG&E), dated May 20, 1985, "Safety Evaluation Report Approving Unit 1 Cycle 8 License Application"
36. Letter from Mr. A. E. Lundvall, Jr. (BG&E) to Mr. R. A. Clark (NRC), dated September 22, 1980, "Amendment to Operating License No. 50-317, Fifth Cycle License Application"
37. Letter from Mr. R. A. Clark (NRC) to Mr. A. E. Lundvall, Jr. (BG&E), dated December 12, 1980, "Safety Evaluation Report Approving Unit 1, Cycle 5 License Application"
38. Letter from Mr. J. A. Tiernan (BG&E) to Mr. A. C. Thadani (NRC), dated October 1, 1986, "Calvert Cliffs Nuclear Power Plant Unit Nos. 1 & 2, Docket Nos. 50-317 & 50-318, Request for Amendment"
39. Letter from Mr. S. A. McNeil, Jr. (NRC) to Mr. J. A. Tiernan (BG&E), dated July 7, 1987, Docket Nos. 50-317 and 50-318, Approval of Amendments 127 (Unit 1) and 109 (Unit 2)
40. CENPD-188-A, Latest Approved Revision, "HERMITE: A Multi-Dimensional Space-Time Kinetics Code for PWR Transients"

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41. The power distribution monitoring system referenced in various specifications and the BASES, is described in the following documents:
- i. CENPD-153-P, ~~Latest Approved Revision~~, "Evaluation of Uncertainty in the Nuclear Power Peaking Measured by the Self-Powered, Fixed Incore Detector System"
  - ii. CEN-119(B)-P, "BASSS, Use of the Incore Detector System to Monitor the DNB-LCO on Calvert Cliffs Unit 1 and Unit 2" ~~November 1979~~
  - iii. Letter from Mr. G. C. Creel (BG&E) to NRC Document Control Desk, dated February 7, 1989, "Calvert Cliffs Nuclear Power Plant Unit No. 2; Docket 50-318, Request for Amendment, Unit 2 Ninth Cycle License Application"
  - iv. Letter from Mr. S. A. McNeil, Jr. (NRC) to Mr. G. C. Creel (BG&E), dated January 10, 1990, "Safety Evaluation Report Approving Unit 2 Cycle 9 License Application"
42. Letter from Mr. D. G. McDonald, Jr. (NRC) to Mr. R. E. Denton (BGE), dated May 11, 1995, "Approval to Use Convolution Technique in Main Steam Line Break Analysis - Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2 (TAC Nos. M90897 and M90898)"
43. CENPD-387-P-A, ~~Latest Approved Revision~~, "ABB Critical Heat Flux Correlations for PWR Fuel"
44. CENPD-199-P, Supplement 2-P-A, Appendix A, ~~Latest Approved Revision~~, "CE Setpoint Methodology" ~~June 1998~~
- c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, ECCS limits, nuclear limits such as

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SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.

- d. The COLR, including any mid cycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

Not Used

5.6.6 ~~Pressurizer Power-Operated Relief Valve and Safety Valve Report~~

~~A report shall be submitted prior to March 1 of each year documenting all failures of and challenges to the pressurizer power-operated relief valves, or safety valves.~~

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5.6.7 Post-Accident Monitoring Report

When a report is required by Condition B or G of LCO 3.3.10, "Post Accident Monitoring Instrumentation," a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.

5.6.8 Tendon Surveillance Report

Any abnormal degradation of the containment structure detected during the tests required by the Pre-Stressed Concrete Containment Tendon Surveillance Program shall be reported to the NRC within 30 days. The report shall include a description of the tendon condition, the condition of the concrete (especially at tendon anchorages), the inspection procedures, the tolerances on cracking, and the corrective action taken.