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CALVERT CLIFFS
NUCLEAR POWER PLANT

October 11, 2010

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
Submittal of Snubber Program Relief Request (RR-SNUB-1)

REFERENCES:

- (a) Nuclear Regulatory Commission Regulatory Issue Summary 2010-06, Inservice Inspection and Testing Requirements of Dynamic Restraints (Snubbers), June 1, 2010
- (b) Nuclear Regulatory Commission Enforcement Guidance Memorandum EGM-10-001, Dispositioning Violations of Inservice Examination and Testing Requirements for Dynamic Restraints (Snubbers), June 1, 2010

In References (a) and (b), the Nuclear Regulatory Commission recently issued guidance that emphasized that 10 CFR 50.55a requires inservice inspection and testing of snubbers. They also stated that use of alternative snubber inservice inspections and testing methodologies that do not meet the applicable American Society of Mechanical Engineers (ASME) Code of Record and have not been approved by the Nuclear Regulatory Commission (NRC), do not meet the requirements of 10 CFR 50.55a.

A review of Calvert Cliffs Nuclear Power Plant, LLC (Calvert Cliffs) snubber inservice inspection and testing program, the basis for which is documented in Calvert Cliffs Technical Requirements Manual, Section 15.7.2, Snubbers, indicated that while the methodologies currently employed had been previously approved by the NRC in safety evaluations associated with license amendment requests, they do not completely conform to ASME Code of Record requirements. However, no Relief Request was submitted for a methodology that is an alternative to the ASME Code of Record. As a result, Calvert Cliffs is not in compliance with 10 CFR 50.55a requirements. This noncompliance with 10 CFR 50.55a requirements has been entered into Calvert Cliffs' corrective action program.

To correct this noncompliance, Calvert Cliffs submits a relief request for an alternative to the ASME Code requirements for snubber inspection and testing. Attachment (1) addresses alternative requirements

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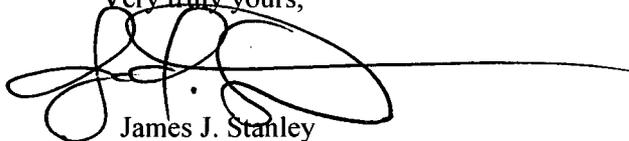
for determining the interval for snubber visual inspections based on the number of inoperable snubbers and also considers Calvert Cliffs 24-month refueling cycle.

This relief request is submitted under the provision of 10 CFR 50.55a(a)(3)(i) as an alternative that provides an acceptable level of quality and safety.

Calvert Cliffs has a refueling outage on Unit 2 that is scheduled to begin in mid February 2011. If this relief request has not been approved by the start of the 2011 refueling outage, Calvert Cliffs will conduct snubber inservice inspection and testing in accordance with our current Technical Requirements Manual methodologies and schedule. Calvert Cliffs further understands the NRC will exercise enforcement discretion and not cite the licensee for not having the snubber inservice inspection and testing program in compliance with ASME Code of Record requirements as Calvert Cliffs meets the requirements contained in Reference (b).

Should you have questions regarding this matter, please contact Mr. Douglas E. Lauver at (410) 495-5219.

Very truly yours,

A handwritten signature in black ink, appearing to read 'James J. Stanley', with a long horizontal line extending to the right.

James J. Stanley
Manager – Engineering

JJS/KLG/bjd

Attachment: (1) Relief Request SNUB-1, Snubber Visual Inspections

cc: D. V. Pickett, NRC
W. M. Dean, NRC

Resident Inspector, NRC
S. Gray, DNR

ATTACHMENT (1)

RELIEF REQUEST SNUB-1, SNUBBER VISUAL INSPECTIONS

ATTACHMENT (1)

RELIEF REQUEST SNUB-1, SNUBBER VISUAL INSPECTIONS

Calvert Cliffs Nuclear Power Plant, Units 1 & 2
RR-SNUB-1

Relief Requested

In Accordance with 10 CFR 50.55a(a)(3)(i)

Alternative Provides Acceptable Level of Quality and Safety

1. **ASME Code Components Affected**

Dynamic Restraints (Snubbers) installed on American Society of Mechanical Engineers (ASME) Code Class 1, 2 & 3 piping systems.

2. **Applicable Code Edition and Addenda**

ASME, Boiler and Pressure Vessel Code, Section XI, 2004 Edition, no Addenda.

3. **Applicable Code Requirement**

ASME Code, Section XI, Sub-article IWF-5300 states in part, "Inservice examinations shall be performed in accordance with ASME/ANSI [American National Standards Institute] OM, Part 4." Per IWA-1600, Table IWA-1600-1, the applicable OM version is ASME/ANSI OM (Part 4), 1987 with ASME/ANSI OMa-1988 Addenda (Reference 1).

Reference 1 states in part, the following:

2.3.2 Inservice Examination Frequency

2.3.2.1 Initial Examination. The initial inservice examination of all snubbers shall be initiated at least 2 months after attaining 5% power operation and shall be completed prior to 12 calendar months after attaining 5% power operation.

2.3.2.2 Examination Intervals. Examinations shall be conducted at 18 month intervals [Note (1)].

When evaluations in accordance with paragraph 2.3.4 reveal the existence of unacceptable snubber(s), the following change in the schedule for subsequent examinations shall be required.

<u>Number of Inoperable Units in Group Being Examined</u>	<u>Months to Subsequent Examination for That Group</u>
0	18
1	12
2	6
3, 4	4
5-7	2
> 8	1

Notes: (1) This examination period may vary in time by $\pm 25\%$ to coincide with planned outages, and the new interval shall be based on the new examination results. Examinations may be performed at an interval less than 75% of the stated interval; however, those examination results shall not be used to permit a longer interval than that which applied before the examination was performed.

(2) The examination interval applies to both examination group and examination failure mode groups.

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2.3.2.3 Subsequent Examination Schedule Adjustment. The time to subsequent examination for any given failure mode group shall not be lengthened more than one increment at a time, i.e., 2 months to 4 months, etc.

The above mentioned sections of Reference 1, along with other areas of discussion in Reference 1 were originally based on an expected refueling cycle frequency of 18 months.

4. Reason for Request

Calvert Cliffs through application of Technical Requirements Manual, Section 15.7.2, Snubbers, conducts inservice inspection of snubbers in accordance with alternative methods for determining appropriate inspection intervals that are discussed in Reference 2. In addition, the inservice inspection frequency discussed in Reference 1 was originally based on an expected refueling outage frequency of 18 months. Calvert Cliffs Units 1 and 2 currently operate on a 24-month fuel cycle.

5. Proposed Alternative and Basis for Use

Calvert Cliffs requests relief to implement the following methodology for inservice (visual) inspection frequency and the effect of discovery of inoperable snubbers on inspection frequency:

Inservice inspections shall be performed in accordance with the schedule determined by Table 1. Snubbers are categorized as inaccessible or accessible during reactor operation. Each of these categories (inaccessible and accessible) may be inspected independently or jointly according to the schedule determined by Table 1. The visual inspection interval for each population or category of snubbers shall be determined based upon the criteria provided in Table 1.

TABLE 1
SNUBBER VISUAL INSPECTION INTERVAL

Population or Category (Notes 1 and 2)	NUMBER OF INOPERABLE SNUBBERS		
	Column A Extend Interval (Notes 3 and 6)	Column B Repeat Interval (Notes 4 and 6)	Column C Reduce Interval (Notes 5 and 6)
1	0	0	1
80	0	0	2
100	0	1	4
150	0	3	8
200	2	5	13
300	5	12	25
400	8	18	36
500	12	24	48
750	20	40	78
1000 or greater	29	56	109

Note 1: The next visual inspection interval for a snubber population or category size shall be determined based upon the previous inspection interval and the number of inoperable snubbers found during that interval. Snubbers may be categorized, based upon their accessibility during power operation, as accessible or inaccessible. These categories may be examined separately or jointly. However, the licensee must make and document that

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decision before any inspection and shall use that decision as the basis upon which to determine the next inspection interval for that category.

- Note 2: Interpolation between population or category sizes and the number of inoperable snubbers is permissible. Use next lower integer for the value of the limit for Columns A, B, or C if that integer includes a fractional value of inoperable snubbers as determined by interpolation.
- Note 3: If the number of inoperable snubbers is equal to or less than the number in Column A, the next inspection interval may be twice the previous interval but not greater than 48 months.
- Note 4: If the number of inoperable snubbers is equal to or less than the number in Column B but greater than the number in Column A, the next inspection interval shall be the same as the previous interval.
- Note 5: If the number of inoperable snubbers is equal to or greater than the number in Column C, the next inspection interval shall be two-thirds of the previous interval. However, if the number of inoperable snubbers is less than the number in Column C but greater than the number in Column B, the next interval shall be reduced proportionally by interpolation, that is, the previous interval shall be reduced by a factor that is one-third of the ratio of the difference between the number of inoperable snubbers found during the previous interval and the number in Column B to the difference in the numbers in Columns B and C.
- Note 6: An extension of 1.25 times the inspection interval is applicable for all inspection intervals up to and including 48 months.

Calvert Cliffs initially requested the above visual inspection schedule in a license amendment request in Reference 3. This amendment request to revise Unit 1 and 2 Snubber Technical Specifications was based on Generic Letter 90-09 (Reference 2). Generic Letter 90-09 presented a snubber visual inspection interval that was based on the number of inoperable snubbers found during the previous inspection in proportion to the size of the various snubber populations. It also addressed extending inspection intervals up to 24 months to coincide with fuel cycles of similar duration. The NRC approved Calvert Cliffs' amendment request in Reference 4. At a later time the snubber visual inspection and testing requirements were moved from Technical Specifications to the Calvert Cliffs Technical Requirements Manual, Section 15.7.2, Snubbers.

All other snubber examination and testing activities, implemented in accordance with Technical Requirements Manual, Section 15.7.2, with the exception of the performance driven visual inspection schedule based on a 24-month fuel cycle, meet ASME, Section XI, Article IWF-5000 requirements, through application of ASME/ANSI OM (Part 4), 1987 with ASME/ANSI OMa-1988 Addenda. The activities required by Technical Requirements Manual, Section 15.7.2 are implemented at Calvert Cliffs through surveillance test procedures and preventive maintenance activities under Calvert Cliffs' Snubber Program.

With this alternative visual inspection schedule Calvert Cliffs has continued to demonstrate a history of low snubber failure rates while maintaining an effective snubber maintenance program. As a result there is reasonable assurance of continued satisfactory snubber performance given the continuation of this alternative visual inspection schedule.

While not specifically discussed in Calvert Cliffs' Technical Requirements Manual, other requirements of Reference 1 are addressed in surveillance test procedures and preventive maintenance procedures. This includes the conduct of preservice and inservice operability testing along with examination and testing documentation retention.

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Preservice examinations required as a result of snubber installation on new or greatly modified piping systems would be performed in accordance with Reference 1 and as directed by Calvert Cliffs configuration control and work control processes.

6. Duration of Proposed Alternative

Relief is requested for the Fourth Ten-year Interval of the Inservice Inspection Program for Calvert Cliffs Units 1 and 2, which is effective from July 1, 2009 and scheduled to end June 30, 2019.

7. References

1. American Society of Mechanical Engineers/American National Standards Institute OM (Part 4), 1987 with ASME/ANSI OMa-1988 Addenda
2. Generic Letter 90-09, Alternative Requirements for Snubber Visual Inspection Intervals and Corrective Actions (Generic Letter 90-09), dated December 11, 1990
3. Letter from Mr. G. C. Creel (BGE) to Document Control Desk (NRC), dated May 24, 1991, Request for Amendment: Snubber Visual Inspection Intervals
4. Letter from Mr. D. G. McDonald (NRC) to Mr. G. C. Creel (BGE), dated September 4, 1991, Issuance of Amendments for Calvert Cliffs Nuclear Power Plant, Unit 1 (TAC No. 80490) and Unit 2 (TAC No. 80491)