



**CENTERIOR  
ENERGY**

**PERRY NUCLEAR POWER PLANT**

10 CENTER ROAD  
PERRY, OHIO 44081  
(216) 259-3737

Mail Address:  
P.O. BOX 97  
PERRY, OHIO 44081

**Robert A. Stratman**  
VICE PRESIDENT - NUCLEAR

September 19, 1994  
PY-CEI/NRR-1811L

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D. C. 20555

Perry Nuclear Power Plant  
Docket Number 50-440  
License Amendment Request:  
Revision of Snubber Visual  
Inspection Program Surveillance  
Intervals to Incorporate Generic  
Letter 90-09

Gentlemen:

Enclosed is a request for amendment of the Facility Operating License (NPF-58), Appendix A, Technical Specifications (TS) for the Perry Nuclear Power Plant (PNPP), Unit 1.

This License Amendment request proposes changes to PNPP TS 4.7.4 (Snubber Surveillance Requirements) and TS Bases 3/4.7.4 (Snubbers). The request proposes that TS 3/4.7.4 be revised in accordance with the guidance provided in Nuclear Regulatory Commission (NRC) Generic Letter (GL) 90-09, "Alternative Requirements for Snubber Visual Inspection Intervals and Corrective Actions", dated December 11, 1990. The snubber visual inspection interval of TS 4.7.4b would be replaced with the schedule recommended in NRC GL 90-09. Other changes to the TS and Bases have been proposed to provide consistency between the current PNPP TS and the revised visual inspection interval schedule. The initial inspection interval utilizing this criteria is proposed to be 18 months, starting from the conclusion of the visual inspection conducted during Refueling Outage 4 (RF04), recently completed. Though this interval represents a departure from the guidance of GL 90-09, it is justified based on the low number of failures found during the 100% inspection conducted during RF04 which is well within the criteria of GL90-09 to allow this interval duration. In addition, without the issuance of this amendment, the current PNPP Technical Specifications would require an unnecessary mid-cycle shutdown for reinspection with consequential unnecessary personnel exposure. Therefore, it is requested that this amendment be issued by the NRC by December 1, 1994.

230010

Operating Companies  
Cleveland Electric Illuminating  
Toledo Edison

9409260085 940919  
PDR ADCK 05000440  
PDR

ADD

USNRC

-2-

September 19, 1994  
PY-CEI/NRR-1811L

If you have questions or require additional information, please contact  
Mr. James D. Kloosterman, Manager - Regulatory Affairs at (216) 280-5833.

Very truly yours,



RAS:RMC:sc

Enclosure and Attachments

cc: NRC Project Manager  
NRC Resident Inspector  
NRC Region III  
State of Ohio

SUMMARY:

This License Amendment request proposes replacing the snubber visual inspection interval schedule of TS 4.7.4b (Snubber Visual Inspections) with the schedule recommended by NRC Generic Letter 90-09, "Alternative Requirements for Snubber Visual Inspection Intervals and Corrective Actions", dated December 11, 1990. The following changes are proposed (additions are underlined, deletions are redlined):

a) Revise TS 4.7.4b to read:

A visual inspection of all snubbers shall be performed according to the schedule determined by Table 4.7.4-1. Snubbers are categorized as inaccessible or accessible during reactor operation. Each of these groups categories (inaccessible and accessible) may be inspected independently, according to the schedule below. The first inservice visual inspection of each type of snubber shall be performed after 4 months but within 10 months of commencing POWER OPERATION and shall include all snubbers. If all snubbers of each type are found OPERABLE during the first inservice visual inspection, the second inservice inspection shall be performed at the first refueling outage. Otherwise, subsequent visual inspections shall be performed within the following schedule. The visual inspection interval for each type of snubber shall be determined based on the criteria provided in Table 4.7.4-1 and the initial inspection interval utilizing this criteria shall be 18-months, beginning from the conclusion of the last visual inspection conducted during RF04.

This TS change will incorporate the new snubber inspection interval table into the TS, will delete the previous inspection interval schedule, and will delete information related to the first snubber inspection, which is no longer applicable. The proposed change will allow the initial inspection interval using the new Table 4.7.4-1 criteria, as provided in GL 90-09, to be 18 months, beginning from the conclusion of the last inspection conducted during RF04.

b) Revise TS 4.7.4c to read:

Visual inspections shall verify that (1) ~~that~~ there are no visible indications of damage or impaired OPERABILITY, (2) attachments to the foundation or supporting structure are secure, and (3) fasteners for attachment of the snubber to the component and the snubber anchorage are secure. Snubbers which appear to be inoperable as a result of visual inspections ~~may be determined to be OPERABLE~~ shall be classified as unacceptable; however, they may be reclassified acceptable for the purpose of establishing the next visual inspection interval, provided that: (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers irrespective of type on that system that may be generically susceptible; and/or (2) the affected snubber

is functionally tested in the as-found condition and determined OPERABLE per Specification 4.7.4f. For those snubbers common to more than one system, the OPERABILITY of such snubbers shall be considered in assessing the surveillance schedule for each of the related systems.

The TS changes proposed above are in accordance with the recommendations of GL 90-09 or are editorial.

- c) Revise the fourth paragraph of Bases 3/4.7.4 to read:

The visual inspection frequency is based on maintaining a constant level of snubber protection to each safety-related system. Therefore, the required inspection interval ~~varies inversely with the observed snubber failures on a given system and is determined by the number of inoperable snubbers found during an inspection of each system, the total population or category size for each snubber type, and the previous inspection interval.~~ In order to establish the inspection frequency for each type of snubber on a safety-related system, it was assumed that the frequency of snubber failures and initiating events is constant with time and that the failure of any snubber on that system could cause the system to be unprotected and to result in failure during an assumed initiating event. Inspections performed before that interval has elapsed may be used as a new reference point to determine the next inspection. ~~However, the results of early inspections performed before the original required start time interval has elapsed (nominally less than 25%) may not be used to lengthen the required inspection interval.~~ Any inspection whose results required a shorter inspection interval will override the previous schedule.

These changes to the Bases align the Bases to the changes proposed for the snubber visual examination schedule.

#### SAFETY ASSESSMENT

Snubbers ensure that the structural integrity of the reactor coolant system and other safety-related systems is maintained during and following a dynamic event. Snubbers are used to restrain piping or equipment during dynamic events or transient loads, while allowing relatively unrestrained movement of the piping/component during normal heatup or cooldown operations.

Technical Specifications (TS) impose surveillance requirements for visual inspection and functional testing of safety-related snubbers. Verification that a snubber can operate within specific performance limits is assured through performance of the Functional Testing Program of TS 4.7.4e, f, and g. Functional testing provides a 95 percent confidence level that 90 percent to 100 percent of the snubbers will operate within the specified acceptance limits. The performance of visual examinations is a separate process that complements the functional testing program in ensuring snubber operability.

The current TS specify a schedule for snubber visual inspection that is based on the number of inoperable snubbers found during the previous visual inspection. The current schedule for snubber visual inspection in TS 4.7.4b is based only on the number of inoperable snubbers found during the previous visual inspection and is irrespective of the size of the snubber population or category. This visual inspection surveillance requirement can be excessively restrictive, requiring inspections as frequently as once every 31 days. Consequently, plant personnel may be subjected to unnecessary radiological exposure to comply with the overly restrictive visual examination requirements.

To alleviate this situation, the NRC Staff developed an alternate schedule for visual inspections. In GL 90-09, the NRC Staff provided this alternate visual inspection schedule to establish an acceptable confidence for snubber operability for nuclear power stations. Furthermore, this alternate schedule generally allows for the performance of visual inspections and corrective actions during plant outages, which should reduce associated potential radiological exposures.

This alternate schedule, proposed as Table 4.7.4-1, for determining the next interval for the visual inspection of snubbers is based on the number of unacceptable numbers found during the previous inspection, the total population or category size for each snubber type, and the previous inspection interval. Snubbers may be categorized based on their accessibility during power operation (accessible or inaccessible). Categories may be inspected independently or jointly. However, whether to inspect categories independently or jointly must be determined and documented before any inspection, and that decision must be used as the basis upon which the next inspection interval is determined for that group. The requirements for functional testing snubbers under TS 4.7.4e, f, and g are not affected.

The proposed changes to the visual inspection schedule of the PNPP TS are based on the guidance developed by the NRC and presented in GL 90-09 as providing an acceptable confidence in snubber operability. Accordingly, the proposed changes do not adversely affect the identification of snubber damaged, degradation, or inoperability as caused by physical means, leakage, corrosion or environmental exposure.

#### DESCRIPTION OF THE PROPOSED TECHNICAL SPECIFICATION AND BASES CHANGES

Refer to Attachment 2 for a marked-up copy of the subject Technical Specification and Bases pages.

##### TS SR 4.7.4b (page 3/4 7-8)

The word "groups" has been changed to "categories" to be consistent with the GL. The reference to the first visual inspection has been deleted as this inspection has been performed and the discussion in the TS related to the inspection is no longer applicable.

Table 4.7.4-1 has been added to replace the existing requirements of TS 4.7.4b for determining the next inspection interval. Table 4.7.4-1

establishes limits for determining the next visual inspection interval based on the population or category size for a given type of snubber and the number of unacceptable snubbers found in the previous inspections. This interval depends on the number of unacceptable snubbers found in proportion to the size of the population or category for each type of snubber included in the previous inspection. For a population that differs from the representative size provided, the values for the inspection interval limits may be found by interpolation. Footnotes to Table 4.7.4-1 provide further guidance on interpolation, determining inspection intervals and the applicability of TS 4.0.2 (extending surveillance intervals) consistent with the guidance provided in GL 90-09.

The first inspection interval utilizing the criteria of Table 4.7.4-1 is proposed to be 18 months. This interval will begin from the completion of the snubber visual inspections performed during RF04, recently completed. This change will provide the necessary interval to reach the next scheduled refueling outage for PNPP. This clarification is necessary in that the current TS requires that PNPP perform visual inspections within 12 months ( $\pm 25\%$ ) of the previous inspection due to the inoperable snubbers (total 1 in the inaccessible category). In that this interval reduction would dictate a mid-cycle shutdown for PNPP, and the number of inoperable snubbers is a very small percentage of the total population (~1200), this change is in keeping with the intent of GL 90-09.

TS SR 4.7.4c (page 3/4 7-9)

Wording changes related to unacceptable snubbers and their reclassification to determine the next inspection interval has been revised consistent with the GL. Other changes are proposed which are editorial.

Bases 3/4.7.4 (Page B 3/4 7-2)

The Bases are proposed to be revised to delete the wording related to the previous method of determining the visual inspection interval and including wording which more clearly relates to the proposed inspection interval method. This change is consistent with the GL. In addition, the discussion of the early inspection results and their effect on the inspection interval has been deleted.

#### **SIGNIFICANT HAZARDS CONSIDERATION**

The discussion of whether the proposed change involves a significant hazards consideration is provided in Attachment 3.

#### **ENVIRONMENTAL CONSIDERATION**

The proposed Technical Specification change request was evaluated against the criteria of 10 CFR 51.22 for environmental considerations. As discussed above and in Attachment 3, the proposed change does not involve a significant hazards consideration, it does not increase the types and amounts of effluents that may be released offsite, and it does not

significantly increase individual or cumulative occupational radiation exposures. Based on the foregoing, it has been concluded that the proposed Technical Specification change meets the criteria given in 10 CFR 51.22(c)(9) for categorical exclusion from the requirement for an Environmental Impact Statement.