

PROPOSED TECHNICAL SPECIFICATION CHANGE

LICENSE AMENDMENT REQUEST

IN THE MATTER OF AMENDING

LICENSE NO. NPF-6

ENTERGY OPERATIONS, INC.

ARKANSAS NUCLEAR ONE, UNIT 2

DOCKET NO. 50-368

## DESCRIPTION OF PROPOSED CHANGE

The proposed change to the ANO-2 Technical Specification 3/4.7.8 Hydraulic Shock Suppressors (Snubbers) will add a note to allow extension of the currently required inspection period thru the 1991 Refueling Outage, in no case later than May 7, 1991.

## BACKGROUND

The Technical Specifications for ANO-2 require visual inspections of snubbers according to a schedule based on the number of inoperable snubbers identified per inspection interval. The snubbers may be categorized into groups based on type and accessibility such that each group may be inspected independently. The schedule is as follows:

<u>Number of Inoperable Snubbers per Inspection Period</u>	<u>Subsequent Visual Inspection Period</u>
0	18 months ±25%
1	12 months ±25%
2	6 months ±25%
3, 4	124 days ±25%
5, 6, 7	62 days ±25%
8 or more	31 days ±25%

At the present time, ANO-2 is in a 12-month interval based on the inspection performed on November 7, 1989 for inaccessible snubbers. This allows for inspection from August 8, 1990 to February 6, 1991. The current 12-month interval for inspection is based on one snubber out of a group of 103 inaccessible snubbers failing the visual inspection during the last refueling outage. In fact, this was the only failure in 403 snubbers inspected during the last ANO-2 refueling outage.

The snubber that failed the visual inspection was a mechanical Anchor-Darling snubber. The snubber was found fully extended with the corner of the shroud bent inward allowing a total movement of only approximately 1/8". In its fully extended position the shroud travels beyond the indicator tube approximately 1/8". When travel occurred in the compression direction, the corner of the shroud of the failed snubber caught on the guide tube bending it inward. This could only occur with the snubber fully extended.

When the problem was identified, all snubbers of this type were reviewed to ensure no other snubber would reach full extension in either the hot or cold condition. If the snubbers installed in ANO-2 traveled to within 3/8" of full extension, they were identified and an additional inspection was performed specifically to look for damaged shrouds, loose or bent shrouds, loose or broken dust cover rivets, and snubbers with excessive installed lateral swing angles. No other snubbers were identified using the above criteria and ANO does not expect other failures of this type during service. ANO determined the condition was an installation error not a service-induced failure and does not indicate a generic problem. Therefore, an extension of the interval until the 2R8 refueling outage will not increase the probability of snubber visual failures.

## DISCUSSION

There are no planned outages during the August 8, 1990 to February 6, 1991 window of time which would allow inspection of these snubbers (which are not accessible at power due to ALARA concerns). However, ANO-2 is scheduled for a refueling outage of sufficient duration beginning in February 1991 at which time the inspections could be performed. Due to the fact that the snubber failure was an installation error and all other snubbers of this type were inspected for similar installation error and found operable we do not expect other failures of this type. Therefore, based on the fact that this was the only inaccessible snubber failure on ANO-2 during the previous inspection interval until 2R8 will not significantly increase the probability of snubber failures. A time limit of May 7, 1991 is placed on this relief. This time limit is based on the normal inspection period of 18 months for no snubber failures.

## DETERMINATION OF NO SIGNIFICANT HAZARDS

An evaluation of the proposed change has been performed in accordance with 10CFR50.91(a)(1) regarding no significant hazards consideration using the standards in 10CFR50.92(c). A discussion of those standards as they relate to this amendment request follows:

Criterion 1 - Does Not Involve a Significant Increase in the Probability or Consequences of an Accident Previously Evaluated.

The proposed one-time change to the inaccessible snubber visual inspection will not significantly alter the level of snubber protection at ANO as the failure was due to an installation error not a service induced failure. Inspections were performed to verify that this is not a generic problem. IN fact this failure occurred in only one of 403 snubbers. Therefore these changes will not involve a significant increase in the probability or consequences of an accident previously evaluated.

Criterion 2 - Does Not Create the Possibility of a New or Different Kind of Accident from any Previously Evaluated.

Accidents which might be caused by the possible failure of one or more snubbers during the extended inspection interval are the same as those previously evaluated. Therefore the possibility of a new or different kind of accident from any previously evaluated is not created.

Criterion 3 - Does Not Involve a Significant Reduction in the Margin of Safety.

The proposed change would not involve a significant reduction in the margin of safety since the one time change in the inspection interval will have no significant effect on the overall level of snubber protection for ANO-2.

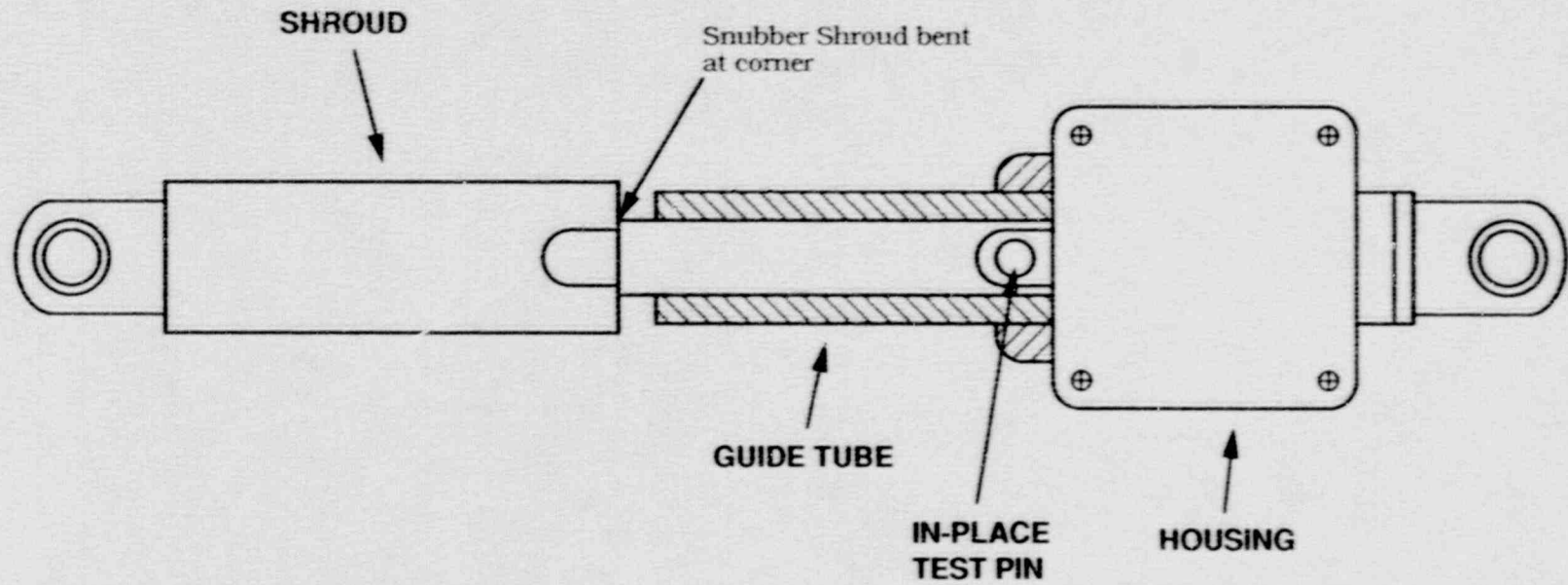
The failure mechanism was isolated to the failed snubber. Other inaccessible snubbers were examined for similar installation errors and found to be correctly installed. Therefore, the probability of a similar failure during the extension period is extremely remote.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists. The proposed amendment most closely matches example (vi)

"A change which either may result in some increase to the probability or consequences of a previously-analyzed accident or may reduce in some way a safety margin, but where the results of the change are clearly within all acceptable criteria with respect to the system or component specified in the Standard Review Plan, e.g., a change resulting from the application of a small refinement of a previously used calculational model or design method."

Based on the above evaluation it is concluded that the proposed Technical Specification change does not constitute a significant hazards concern.

### DEFORMED SNUBBER (Shown Fully Extended)



PROPOSED TECHNICAL SPECIFICATION CHANGES

PLANT SYSTEMS

3/4.7.8 HYDRAULIC SHOCK SUPPRESSORS (SNUBBERS)

LIMITING CONDITION FOR OPERATION

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3.7.8 All snubbers shall be OPERABLE. The only snubbers excluded from this requirement are those installed on nonsafety-related systems and then only if their failure or failure of the system on which they are installed, would have no adverse effect on any safety-related system.

APPLICABILITY: MODES 1, 2, 3 and 4. MODES 5 and 6 for snubbers located on systems required OPERABLE in those MODES.

ACTION: With one or more applicable snubbers inoperable, within 72 hours replace or restore the inoperable snubber(s) to OPERABLE status and perform an engineering evaluation per Specification 4.7.8.f on the attached component, or declare the attached system inoperable and follow the appropriate ACTION statement for that system.

SURVEILLANCE REQUIREMENTS

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4.7.8 Each applicable snubber shall be demonstrated OPERABLE by performance of the following augmented inservice inspection program and the requirements of Specification 4.0.5.

a. Inspection Types

As used in this specification, type of snubber shall mean snubbers of the same design and manufacturer, irrespective of capacity.

Snubbers are categorized as inaccessible or accessible during reactor operation.

b. Visual Inspections

Visual inspections shall be performed in accordance with the following schedule:

<u>No. Inoperable Snubbers per Inspection Period</u>	<u>Subsequent Visual Inspection Period</u>
0	18 months ± 25%
1	12 month ± 25%*
2	6 months ± 25%
3, 4	124 days ± 25%
5, 6, 7	62 days ± 25%
8 or more	31 days ± 25%

The snubbers may be categorized into groups based on type and accessibility. Each group may be inspected independently in accordance with the above schedule.

\*For inaccessible snubbers, the inspection due November 7, 1990 (12 month ±25% from November 7, 1989) may be extended thru the 1991 refueling outage, in no case later than May 7, 1991.