PROPOSED CHANGE RTS 161 TO THE
DUANE ARNOLD ENERGY CENTER
TECHNICAL SPECIFICATION

The holders of license DPR-49 for the Duane Arnold Energy Center propose to amend Appendix A (Technical Specifications) to said license by deleting current pages and replacing them with attached, new pages.

The following list of proposed changes is in the order that the changes appear in the Technical Specifications. The List of Affected Pages is presented following this list of changes.

(1) In section 3.6.H.1. and 3.6.H.3., the reference to tables 4.6.3, 4.6.4 and 4.6.5 is deleted since those tables are being removed from the Technical Specifications by this same amendment.

(2) In section 4.6.H., the term "safety-related" is added to clarify which snubbers will be inspected.

(3) On page 3.6-10 of section 4.6.H., the two references to tables 4.6-3, 4.6-4 and 4.6-5 are deleted.

(4) On page 3.6-10 of section 4.6.H., the word "augmented" is deleted so as not to describe the inservice inspection program.

(5) In section 4.6.H.2., administrative changes are made to correct typographical errors and reword the paragraph to read smoothly.

(6) In section 4.6.H.3., the term "safety-related" is added to clarify the description of "a representative sample".

(7) In section 4.6.H.3., the percentage of additional snubbers required to be functionally tested is changed from 10% to 5%. This will reduce the amount of testing required to an adequate percentage in an area which has not been a significant problem.

(8) On page 3.6-12 of section 4.6.H.3., the paragraph referring to Table 4.6-5 has been deleted since that table has been removed.

(9) On pages 3.6-12 and 3.6-13 on section 4.6.H.3., administrative changes are made to correct punctuation errors and reword pages to read smoothly.

(10) On page 3.6-13 of section 4.6.H.3., the note at the bottom of the page is deleted. The interim time period described in the paragraph has passed and functional tests will be implemented as described in the rest of that section.

(11) In section 4.6.H.4.2., the term "where required" is deleted since it is required that all hydraulic snubbers have release rates within the specified range.

(12) In section 4.6.H.5.1., the description of the snubber drag force is changed to accurately describe that force.

(13) In section 4.6.H.5.2., the paragraph outlining functional testing of snubbers with an increased drag force is deleted because its requirements are in excess of what has been determined necessary to assure snubber reliability.

(14) On page 3.6-15 of section 4.6.H.6., the reference to Tables 4.6-3 and 4.6-4 is deleted.

(15) On page 3.6-15 of section 4.6.H.6., the word "or" is replaced by the word "and" in the third paragraph in order to make both conditions requirements in the review of snubber records.

(16) On pages 3.6-37, 3.6-38, 3.6-39 and 3.6-40 of BASES 3.6.H. and 4.6.H. administrative changes, such as word substitutions and punctuation changes, are made to clarify the explanations in these paragraphs and facilitate readability.

(17) On page 3.6-39 of BASES 3.6.H. and 4.6.H., the two paragraphs are switched to improve the logic of this discussion of the snubber inspection and testing.

(18) Tables 4.6-3, 4.6-4 and 4.6-5 on pages 3.6-42 through 3.6-48 are deleted from the Technical Specifications. The requirement to change the Technical Specification when a snubber is removed results in unnecessary paperwork an expense. These tables will be put in our Surveillance Test Procedures (STPs) where they will retain their effectiveness, but can be maintained with less effort. This is being done in accordance with the guidelines of Generic Letter 84-13. Pages 3.6-42 through 3.6-48 are removed from the Technical Specifications.

(19) The paragraph on page 3.6-41 is moved to 3.6-40 and page 3.6-49 is changed to 3.6-41.

(20) In section 6.10.2.13, the reference to Tables 4.6-3, 4.6-4 and 4.6-5 is deleted and the term "safety-related" is added to clarify the recordkeeping requirements for snubbers.

LIST OF AFFECTED PAGES

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3.6-40
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3.6-44 (deleted)
3.6-45 (deleted)
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6.10-3

*Figure 3.6-1 was formerly on page 3.6-49.

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
H. Shock Suppressors (Snubbers)	H. Shock Suppressors (Snubbers)
1. During all modes of operation, except Cold Shutdown and Refuel, all safety-related snubbers shall be operable, except as noted in 3.6.H.2.	Each safety-related snubber shall be demonstrated OPERABLE by performance of the following inservice inspection program.
2. With one or more snubbers inoperable, within 72 hours replace or restore the inoperable snubber(s) to OPERABLE status and perform an engineering evaluation per Specification 4.6.H.3 on the supported component or declare the supported system inoperable and follow the appropriate Limiting Conditions For Operation for that system.	1. Visual Inspections The inservice visual inspection of snubbers shall be performed in accordance with the following schedule:

Number of Snubbers Found Inoperable During Inspection or During Inspection Interval	Next Required Visual Inspection Interval
0	18 months ± 25%
1	12 months ± 25%
2	6 months ± 25%
3,4	124 days ± 25%
5,6,7	62 days ± 25%
≥,8	31 days ± 25%

The required inspection interval shall not be lengthened more than one step at a time.

LIMITING CONDITION FOR OPERATION

SURVEILLANCE REQUIREMENT

Snubbers are categorized in two groups, "accessible and inaccessible," based on their accessibility for inspection during reactor operation. These two groups will be inspected independently according to the above schedule.

2. Visual Inspection Acceptance Criteria

Visual inspection shall verify (1) that there are no visible indications of damage or impaired OPERABILITY, (2) (for hydraulic snubbers) inspection of the hydraulic fluid reservoir and fluid connections, (3) attachments to the foundation or supporting structure are secure, and (4) in those locations where snubber movement can be manually induced without disconnecting the snubber, that the snubber has freedom of movement and is not frozen. Snubbers which appear inoperable as a result of visual inspection, may be determined to be OPERABLE for the purpose of establishing the next visual inspection interval, providing that (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers that may be generically or operationally susceptible; and (2) the affected snubber is functionally tested in the as-found condition and determined to be OPERABLE per specifications 4.6.H.4 or 4.6.H.5, as applicable. However, when the fluid port of a hydraulic snubber is found to be uncovered, the snubber shall be determined to be inoperable and cannot be considered OPERABLE via functional testing for the purpose of establishing the next visual inspection interval.

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT

3. Functional Tests

At least once per 18 months a representative sample (10% of the total of safety-related of each type of snubber in use in the plant) shall be functionally tested either in place or in a bench test. For each snubber that does not meet the functional test acceptance criteria of specification 4.6.H.4 or 4.6.H.5, an additional 5% of that type of snubber shall be functionally tested.

The representative sample selected for functional testing shall represent the various configurations, operating environments and range of sizes of snubbers. At least 25% of the snubbers in the representative sample shall include snubbers from the following three categories:

1. The first snubber away from each reactor vessel nozzle

2. Snubbers within 5 feet of heavy equipment (valve, pump, turbine, motor, etc.)

3. Snubbers within 10 feet of the discharge from a safety relief valve

In addition to the regular sample, snubbers which failed the previous functional test shall be retested during the next test period. If a spare snubber has been installed in place of a failed snubber, then

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENT
	both the failed snubber (if it is repaired and installed in another position) and the spare snubber shall be retested. Test results of these snubbers may not be included for the re-sampling. If any snubber selected for functional testing either fails to lockup or fails to move, i.e., frozen in place, the cause will be evaluated and, if caused by manufacturer or design deficiency, all snubbers of the same design subject to the same defect shall be functionally tested. This testing requirement shall be independent of the requirements stated above for snubbers not meeting the functional test acceptance criteria. For any snubber(s) found inoperable, an engineering evaluation shall be performed on the components which are restrained by the snubber(s). The purpose of this engineering evaluation shall be to determine if the components restrained by the snubber(s) were adversely affected by the inoperability of the snubber(s) in order to ensure that the component remains capable of meeting the designed service requirement.

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
	2. Snubber bleed, or release rate is within the specified range in compression or tension. For snubbers specifically required to not displace under continuous load, the ability of the snubber to withstand load without displacement shall be verified.
	5. Mechanical Snubbers Functional Test Acceptance Criteria The mechanical snubber functional test shall verify that: 1. The drag force of any snubber in tension and compression is less than the specified maximum drag force. 2. Activation (restraining action) is achieved within the specified range of velocity or acceleration in both tension and compression.