

ARKANSAS NUCLEAR ONE - UNIT 1  
PROPOSED TECHNICAL SPECIFICATION CHANGE REQUEST

8602030183 860124  
PDR ADDCK 05000313  
P PDR

### 3.16 Shock Suppressors (Snubbers)

#### Applicability

This technical specification applies to all shock suppressors (snubbers). 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.

#### Objective

To assure adequate shock suppression protection for primary coolant system piping and any other safety related system or component under dynamic loads as might occur during an earthquake or severe transient, while allowing normal thermal motion during startup and shutdown. This is done by assuring the operability of those shock suppressors installed for that purpose.

#### Specification

- 3.16.1 The reactor shall not be heated above 200F if any applicable shock suppressor is known to be inoperable.
- 3.16.2 If any applicable shock suppressor is determined to be inoperable during power operation, that shock suppressor shall be made operable or replaced within 72 hours or the reactor shall be placed in the cold shutdown condition within an additional 36 hours.

#### Bases

Shock suppressors are designed to prevent unrestrained pipe motion under dynamic loads as might occur during an earthquake or severe transient, while allowing normal thermal motion during startup and shutdown. The consequence of an inoperable shock suppressor is an increase in the probability of structural damage to piping as a result of a seismic or other event initiating dynamic loads. It is therefore required that all shock suppressors required to protect the primary coolant system or any other safety system or component be operable during reactor operation.

Because the shock suppressor protection is required only during low probability events, a period of 72 hours is allowed for repairs or replacements. In case a shutdown is required, the allowance of 36 hours to reach a cold shutdown condition will permit an orderly shutdown consistent with standard operating procedures. Since plant startup should not commence with knowingly defective safety related equipment, Specification 3.16.1 prohibits startup with inoperable shock suppressors.

TABLE 3.16-1

SAFETY RELATED HYDRAULIC SHOCK SUPPRESSORS (SNUBBERS)  
(DELETED)

TABLE 3.16-2

SAFETY RELATED MECHANICAL SHOCK SUPPRESSORS (SNUBBERS)  
(DELETED)

## 4.16 SHOCK SUPPRESSORS (Snubbers)

### Applicability

This technical specification applies to all shock suppressors (snubbers). 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.

### Objective

Verify an acceptable level of operability of the shock suppressors protecting the primary system and any other safety related system or component.

### Specification

4.16.1 The following surveillance requirements apply to all applicable shock suppressors.

#### 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:

No. Inoperable Snubbers per Inspection Period	Subsequent Visual Inspection Period
0	18 months $\pm$ 25%
1	12 months $\pm$ 25%
2	6 months $\pm$ 25%
3, 4	124 days $\pm$ 25%
5, 6, 7	62 days $\pm$ 25%
8 or more	31 days $\pm$ 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.

The inspection interval for each type of snubber shall not be lengthened more than one step at a time unless a generic problem has been identified and corrected; in that event the inspection interval may be lengthened one step the first time and two steps thereafter if no inoperable snubbers of that type are found.

The provisions of Specification 4 regarding surveillance intervals are not applicable.

- h. Records of in-service inspections performed pursuant to these Technical Specifications.
- i. Records of Quality Assurance activities required by Section 17 of the Quality Assurance Manual for Operations.
- j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10CFR50.59.
- k. Records of meetings of the PSC and the SRC.
- l. Records for Environmental Qualification which are covered under the provisions of paragraph 6.13.
- m. Records of the service lives of the seals of all hydraulic snubbers applicable to Specification 3.16 including the date at which the service life commences and associated installation and maintenance records.
- n. Records of the analyses required by the Radiological Environmental Monitoring Program.

#### 6.10 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

#### 6.11 HIGH RADIATION AREA

6.11.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10CFR20, each high radiation area (as defined in 20.202(b)(3) of 10CFR20) in which the intensity of radiation is 1000 mrem/hr or less shall be barricaded and conspicuously posted as a high radiation area and shall be controlled by requiring the issuance of a radiation work permit. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a pre-set integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of them.
- c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified in the radiation work permit.