

Revised Technical Specifications for
Snubbers (Generic Letter 84-13)

Revised Pages: 137a 137b 137c 137d
 137e 138-145 229
 (Deletion of Pages 137f through 137m)

Nebraska Public Power District requests a revision to the Technical Specifications to incorporate changes made possible under the provisions of Generic Letter 84-13.

Evaluation of this Revision with Respect to 10CFR50.92

A. The enclosed Technical Specification change is judged to involve no significant hazards based on the following:

1. Does the proposed license amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Evaluation:

No, because the recordkeeping requirements of the Technical Specifications are not altered by this request. Additionally, any changes to snubber quantities, types, or locations would be subject to 10CFR50.59 requirements.

2. Does the proposed license amendment create the possibility for a new or different kind of accident from any accident previously evaluated?

Evaluation:

It does not increase the possibility for a new or different kind of accident because this change only deletes the tabular listing of snubbers and does not change the intent of the Technical Specifications.

3. Does the proposed amendment involve a significant reduction in a margin of safety?

Evaluation:

Margin of safety will not be reduced because this change still imposes the recordkeeping requirements for snubbers and because any changes to snubber location, type, or quantity would still be reportable under 10CFR50.59.

B. Additional basis for proposed no significant hazards consideration determination:

The Commission has provided guidance in the form of Generic Letter 84-13 which specified the guidelines for deletion of the snubber listings in the Technical Specifications. This request is consistent with those guidelines.

LIMITING CONDITION FOR OPERATION

SURVEILLANCE REQUIREMENT

3.6.H Shock Suppressors (Snubbers)

1. All safety-related snubbers shall be operable in all modes of operation except Cold Shutdown and Refuel. The only snubbers excluded from this requirement are those installed on nonsafety-related systems and then only if their failure would have no adverse effect on any safety-related system.
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.4.d on the supported component or declare the supported system or subsystem inoperable and follow the appropriate ACTION statement for that system.
3. If a snubber is determined to be inoperable while the reactor is in the shutdown or refuel mode, the snubber shall be made operable or replaced prior to reactor startup.

4.6.H Shock Suppressors (Snubbers)

The following surveillance requirements apply to all snubbers as noted in 3.6.H.1.

1. All snubbers shall be visually inspected in accordance with the following schedule:

Number of Snubbers Found Inoperable During Inspection or During Inspection Interval	Next Required 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 or more	31 days + 25%

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

Snubbers may be categorized in groups, "accessible" or "inaccessible" based on their accessibility for inspection during reactor operation and by type, hydraulic or mechanical. These four groups may be inspected independently according to the above schedule.

2. Visual Inspection Acceptance Criteria

Visual inspections shall verify (1) that there are no visible indications of damage or impaired OPERABILITY, (2) attachments to the foundation or supporting

4.6.H Shock Suppressors (Snubbers)
(cont'd)

structure are secure. Snubbers which appear inoperable as a result of visual inspections may be determined 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 susceptible; or (2) the affected snubber is functionally tested in the as found condition and determined OPERABLE per Specifications 4.6.H.5 or 4.6.H.6 as applicable. However, when the fluid port of a hydraulic snubber is found to be uncovered, the snubber shall be determined inoperable and cannot be determined OPERABLE via functional testing for the purpose of establishing the next visual inspection interval. All snubbers connected to an inoperable common hydraulic fluid reservoir shall be counted as inoperable snubbers.

3. At least once per 18 months during shutdown, a representative sample, 10% of the total 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.5 or 4.6.H.6, an additional 10% of that type of snubber shall be functionally tested.
4. The representative sample selected for functional testing shall include various configuration, operating environments and the range of size and capacity of snubbers.

4.6.H Shock Suppressors (Snubbers)
(cont'd)

- a. 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 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 resampling.
- b. Permanent or other exemptions from functional testing for individual snubbers, in high radiation zones or that are difficult to remove may be granted by the Commission only if a justifiable basis for exemption is presented and/or snubber life destructive testing was performed to qualify snubber operability for all design conditions at either the completion of their fabrication or at a subsequent date.
- c. 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 and subject to the same defect shall be tested or inspected to determine if the defect is present. This testing requirement shall be independent of the requirements stated above for snubbers not meeting the functional test acceptance criteria.
- d. For the snubber(s) found inoperable, an engineering evaluation shall be performed to determine the need for further action or testing on affected components.

4.6.H Shock Suppressors (Snubbers)
(cont'd)5. Hydraulic Snubbers Functional
Test Acceptance Criteria

The hydraulic snubber functional test shall verify that:

1. Activation (restraining action) is achieved within the specified range of velocity or acceleration in both tension and compression.
2. Snubber bleed, or release rate, where required, is within the specified range in compression or tension.

6. Mechanical Snubbers Functional
Test Acceptance Criteria

The mechanical snubber functional test shall verify that:

1. The force that initiates free movement of the snubber rod in either tension or 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.
3. Snubber release rate, where required, is within the specified range in compression or tension.

7. Snubber Service Life Monitoring

A record of the service life of each snubber as noted in 3.6.H.1, the date at which the designated service life commences, and the installation and maintenance records on which the designated service life is based shall be maintained as required by Specification 6.4.2.J.

4.6.H Shock Suppressors (Snubbers)
(cont'd)

Concurrent with the first in-service visual inspection and at least once per 18 months thereafter, the installation and maintenance records of each snubber noted in 3.6.H.1 shall be reviewed to verify that the indicated service life has not been exceeded or will not be exceeded prior to the next scheduled snubber service life review. If the indicated service life will be exceeded prior to the next scheduled snubber service life review, the snubber service life shall be reevaluated or the snubber shall be replaced or reconditioned so as to extend its service life beyond the date of the next scheduled service life review. This reevaluation, replacement or reconditioning shall be indicated in the records.

"INTENTIONALLY LEFT BLANK"

6.4.2.G (cont'd)

usage evaluation per the ASME Boiler and Pressure Vessel Code Section III was performed¹ for the conditions defined in the design specification. The locations to be monitored shall be:

- a. The feedwater nozzles
- b. The shell at or near the waterline
- c. The flange studs

2. Monitoring, Recording, Evaluating, and Reporting

- a. Operational transients that occur during plant operations will, at least annually, be reviewed and compared to the transient conditions defined in the component stress report for the locations listed in 1 above, and used as a basis for the existing fatigue analysis.
- b. The number of transients which are comparable to or more severe than the transients evaluated in the stress report Code fatigue usage calculations will be recorded in an operating log book. For those transients which are more severe, available data, such as the metal and fluid temperatures, pressures, flow rates, and other conditions will be recorded in the log book.
- c. The number of transient events that exceed the design specification quantity and the number of transient events with a severity greater than that included in the existing Code fatigue usage calculations shall be added. When this sum exceeds² the predicated number of design condition events by twenty-five², a fatigue usage evaluation of such events will be performed for the affected portion of the RCPB.

- H. Records of individual plant staff members showing qualifications, training and retraining.
- I. Records for Environmental Qualification which are covered under the provisions of Specification 6.3.
- J. Records of the service lives of all hydraulic and mechanical snubbers noted in 3.6.H.1, including the date at which the service life commences and associated installation and maintenance records.

6.4.3 2 Year Retention

Records and logs relating to the following items shall be kept for two years.

- A. The test results, in units of microcuries, for leak tests of sources performed pursuant to Specification 3.8.A.
- B. Records of annual physical inventories verifying accountability of the sources on record.

1. See paragraph N-415.2, ASME Section III, 1965 Edition.

2. The Code rules permit exclusion of twenty-five (25) stress cycles from secondary stress and fatigue usage evaluation. (See paragraphs N-412(t)(3) and N-417.10(f) of the Summer 1968 Addenda to ASME Section III, 1968 Edition.)

Revised Technical Specifications for
Four-Inch Recirculation Bypass Lines

Revised Page: 116

Evaluation of this Revision with Respect to 10CFR50.92

A. The enclosed Technical Specification change is judged to involve no significant hazards based on the following:

1. Does the proposed license amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Evaluation:

No, because the recirculation pump discharge valve bypass lines and valves are not needed for recirculation system operation, as shown in the SAR, and are not specifically addressed in either the SRP or STS. Additionally, it has been shown in the past (RO Bulletin 74-10A and IEB 74-10B) that bypass line cracking was occurring in BWR's. As a result, when the District replaces the recirculation system piping (IGSCC replacement program) in the next outage, the new piping will not have bypass lines.

2. Does the proposed license amendment create the possibility for a new or different kind of accident from any accident previously evaluated?

Evaluation:

No it will not because the recirculation pump discharge valve bypass lines and valves are not needed for recirculation system operation, as shown in the SAR, and are not specifically addressed in either the SRP or STS. Additionally, it has been shown in the past (RO Bulletin 74-10A and IEB 74-10B) that bypass line cracking was occurring in BWR's. As a result, when the District replaces the recirculation system piping (IGSCC replacement program) in the next outage, the new piping will not have bypass lines.

3. Does the proposed amendment involve a significant reduction in a margin of safety?

Evaluation:

Removal of the four-inch bypass line around the recirculation pump discharge valve will not impact the margin of safety on which the Technical Specifications are based. The line was originally installed to allow the plant operator to control heat-up of the recirculation system discharge piping following a loop shutdown. The conditions under which the bypass line would be used have not occurred to date and are unlikely to be encountered in the future. Loop heat-up requirements can be met through alternative means which do not require the bypass line and do not compromise the margin of safety.

B. Additional basis for proposed no significant hazards consideration determination:

The Commission provided guidance concerning application of its standards set forth in 10CFR50.92 for no significant hazards consideration by providing certain examples published in the Federal Register on April 6, 1983 (48FR14870). In reviewing those examples for this request it was found that this request does not clearly fall into the scope of any of the examples provided.

LIMITING CONDITIONS FOR OPERATION

3.5.A (Cont'd.)

5. From and after the date that one LPCI subsystem is made or found to be inoperable for any reason, continued reactor operation is permissible only during the succeeding 7 days, unless it is sooner made operable, provided that during such 7 days all active components of both core spray subsystems, the containment cooling subsystems (including 2 LPCI pumps) and the diesel generators required for operation of such components shall be operable.
6. All recirculation pump discharge valves shall be operable prior to reactor startup (or closed if permitted elsewhere in these specifications).
7. The reactor shall not be started up with the RHR system supplying cooling to the fuel pool.
8. If the requirements of 3.5.A 1,2,3,4,5,6 or 7 cannot be met, an orderly shutdown of the reactor shall be initiated and the reactor shall be in the cold shutdown condition within 24 hours.

B. Containment Cooling Subsystem (RHR Service Water)

1. Except as specified in 3.5.B.2, 3.5.B.3, and 3.5.F.3 below both containment cooling subsystems loops shall be operable whenever irradiated fuel is in the reactor vessel and reactor coolant temperature is greater than 212°F, and prior to reactor startup from a Cold Condition.

SURVEILLANCE REQUIREMENTS

4.5.A. (Cont'd.)

5. When it is determined that the LPCI subsystem is inoperable, both core spray subsystems, the containment cooling subsystem and the diesel generators required for operation of such components if no external source of power were available shall be demonstrated to be operable immediately and daily thereafter.
6. All recirculation pump discharge valves shall be tested for operability during any period of Reactor cold shutdown exceeding 48 hours, if operability tests have not been performed during the preceding 31 days.

B. Containment Cooling Subsystem (RHR Service Water)

1. Containment Cooling Subsystem Testing shall be as follows:

<u>Item</u>	<u>Frequency</u>
a. Pump & Valve Operability	Once/3 months
b. Pump Capacity Test. After pump maintenance and every 3 months shall deliver 4000 gpm.	
c. Air test on drywell and torus headers and nozzles.	Once/5 years