

Activity: Fire Barrier Control

1.0 Purpose: This guideline provides a method to evaluate fire barriers and penetrations and surveillance testing and inspections thereof.

2.0 Scope: This guideline has been developed for use in the review of:

 E Fire Barriers

 E Fire Barrier Penetrations

 E Fire Doors

3.0 References:

3.1 Site Specific FSAR (Fire Protection Plan)

3.2 Site Specific Technical Specifications

3.3 10CFR50, Appendix R, "Fire Protection Program for Nuclear Power Facilities Operating Prior to January 1, 1979"

3.4 NRC Inspection and Enforcement Manual, Chapter 64704, "Fire Protection/Prevention Program"

4.0 Guidelines:

4.1 In preparation for and during the conduct of this surveillance:

 E Obtain and review implementing procedures, instructions and drawings governing this activity.

- E Prepare a guide or checklist using the selected items from this guideline.
- E Review past surveys, audits, surveillances and other evaluations/ assessments.
- E Ensure that checklists include, where applicable, actual observations of performance, general plant conditions, radiological work practices, housekeeping, work document controls and use, and safety practices.

NOTE: Refer to Guideline A.1, "General Quality Surveillance Guidance," for specific details on the attributes listed above.

- 4.2 Obtain and review the procedures which implement the Fire Barrier Control Program.
- 4.3 Identify the relevant requirements to be examined to evaluate program implementation using controlled plant procedures. As a minimum, the requirements should take into account:
 - A. Fire Barriers
 - 1) Observe if fire barriers are identified as such.
 - 2) Verify that appropriate actions are taken if fire barriers are breached, i.e., posting of fire watches and/or verification of operable fire suppression systems.
 - B. Fire Barrier Penetrations
 - 1) Verify that work packages contain adequate instructions for sealing or resealing penetrations if a fire barrier is to be breached for pre-planned work. Verify the sealant is approved for that specific application.

- 2) Verify that the fire penetration log contains the following information (if required):
 - a. Penetration Number
 - b. Penetration Location
 - c. Penetration Type
 - d. Sealant Used
- 3) Verify during fire barrier penetration surveillance tests that all fire barriers are inspected. Verify for those barriers that are found to be breached that appropriate corrective actions have been taken, such as, posting of fire watches and/or verification of operable fire suppression equipment.
- 4) Verify that breached fire barriers are reviewed for NRC and/or ANI reportability.
- 5) Verify that breached fire barriers are resealed with an approved sealant.
- 6) Verify that fire dampers are tested as required.
- 7) Verify that appropriate corrective actions have been taken for inoperable fire dampers, such as, posting of fire watches and/or verification of operable fire suppression equipment.
- 8) Verify that inoperable fire dampers are reviewed for NRC and/or ANI reportability.

C. Fire Doors

- 1) Observe if fire doors are identified as such.

- 2) Verify fire doors are inspected on a specified frequency for operability. The inspection should include, as a minimum, the following:
 - a. Automatic hold-open mechanisms
 - b. Release mechanisms
 - c. Closing mechanisms
 - d. Latches
 - e. Gaps within required tolerances
- 3) Verify that any holes in fire doors such as drill or screw holes are patched as required.
- 4) Verify that appropriate corrective actions have been taken for discrepancies discovered during fire door inspections, such as posting of fire watches and/or verification of operable fire suppression equipment.
- 5) Verify that discrepancies discovered are reviewed for NRC/ANI reportability.
- 6) Verify that fire watches are posted on those fire doors that are required to be open for an extended period.

5.0 Other Guidelines for Consideration:

5.1 A.1, "General Quality Surveillance Guidance"