

Attachment 3 to AEP:NRC:1143

Proposed Revised Technical Specification Pages

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## PLANT SYSTEMS

### 3/4.7.8 SNUBBERS

#### LIMITING CONDITION FOR OPERATION

3.7.8.1 All safety-related snubbers shall be OPERABLE.

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 snubbers inoperable, within 72 hours replace or restore the inoperable snubber(s) to OPERABLE status and perform an engineering evaluation per Specification 4.7.8.1.c on the supported component or declare the supported system inoperable and follow the appropriate ACTION statement for that system.

#### SURVEILLANCE REQUIREMENTS

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

##### a. Visual Inspections

Snubbers are categorized as inaccessible or accessible during reactor operation. Each of these categories (inaccessible and accessible) may be inspected independently according to the schedule determined by Table 3.7-4. The visual inspection interval for each type of snubber shall be determined based upon the criteria provided in Table 3.7-4 and the first inspection interval determined using this criteria shall be based upon the previous inspection interval as established by the requirements in effect before Amendment No. \_\_\_\_.

##### b. 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 structure are secure, and (3) 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 up. Snubbers which appear inoperable as a result of visual inspections shall be classified as unacceptable and may be reclassified as acceptable 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; and (2) the affected snubber is

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## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

functionally tested in the as found condition and determined OPERABLE per Specification 4.7.8.1.d. All snubbers found connected to an inoperable common hydraulic fluid reservoir shall be counted as unacceptable for determining the next inspection interval. A review and evaluation shall be performed and documented to justify continued operation with an unacceptable snubber. If continued operation cannot be justified, the snubber shall be declared inoperable and the ACTION requirements shall be met.

#### c. Functional Tests

At least once per 24 months during shutdown, a representative sample (14%) 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 4.7.8.1.d an additional 10% of that type of Snubber shall be functionally tested.

The representative sample selected for functional testing shall include the various configurations, operating environments and the range of size and capacity 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

Snubbers that are identified as "Especially Difficult to Remove" or in "High Radiation Zones During Shutdown" shall also be included in the representative sample.\*

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 re-sampling.

\* Permanent or other exemptions from functional testing for individual snubbers in these categories 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.





## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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 the snubbers not meeting the functional test acceptance criteria.

For the snubber(s) found inoperable, an engineering evaluation shall be performed on the components which are supported by the snubber(s). The purpose of this engineering evaluation shall be to determine if the components supported by the snubber(s) were adversely affected by the inoperability of the snubber(s) in order to ensure that the supported component remains capable of meeting the designed service.

#### d. 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. For snubbers specifically required to not displace under continuous load, the ability of the snubber to withstand load without displacement shall be verified.

#### e. Snubber Service Life Monitoring

A record of the service life of each snubber, 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 6.10.2.

Concurrent with the first inservice visual inspection and at least once per 18 months thereafter, the installation and maintenance records for all safety-related snubbers 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.

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TABLE 3.7-4  
SNUBBER VISUAL INSPECTION INTERVAL

Population or Category (Notes 1 and 2)	NUMBER OF UNACCEPTABLE SNUBBERS		
	Column A Extend Interval (Notes 3 and 6)	Column B Repeat Interval (Notes 4 and 6)	Column C Reduce Interval (Notes 5 and 6)
1	0	0	1
80	0	0	2
100	0	1	4
150	0	3	8
200	2	5	13
300	5	12	25
400	8	18	36
500	12	24	48
750	20	40	78
1000 or greater	29	56	109

Note 1: The next visual inspection interval for a snubber population or category size shall be determined based upon the previous inspection interval and the number of unacceptable snubbers found during that interval. Snubbers may be categorized, based upon their accessibility during power operation, as accessible or inaccessible. These categories may be examined separately or jointly. However, the licensee must make and document that decision before any inspection and shall use that decision as the basis upon which to determine the next inspection interval for that category.

Note 2: Interpolation between population or category sizes and the number of unacceptable snubbers is permissible. Use next lower integer for the value of the limit for Columns A, B, or C if that integer includes a fractional value of unacceptable snubbers as determined by interpolation.

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TABLE 3.7-4 (Continued)

- Note 3: If the number of unacceptable snubbers is equal to or less than the number in Column A, the next inspection interval may be twice the previous interval but not greater than 48 months.
- Note 4: If the number of unacceptable snubbers is equal to or less than the number in Column B but greater than the number in Column A, the next inspection interval shall be the same as the previous interval.
- Note 5: If the number of unacceptable snubbers is equal to or greater than the number in Column C, the next inspection interval shall be two-thirds of the previous interval. However, if the number of unacceptable snubbers is less than the number in Column C but greater than the number in Column B, the next interval shall be reduced proportionally by interpolation, that is, the previous interval shall be reduced by a factor that is one-third of the ratio of the difference between the number of unacceptable snubbers found during the previous interval and the number in Column B to the difference in the numbers in Columns B and C.
- Note 6: The provisions of Specifications 4.0.2 are applicable for all inspection intervals up to and including 48 months.



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PLANT SYSTEMS

3/4.7.9 FIRE SUPPRESSION SYSTEMS  
FIRE SUPPRESSION WATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.9.1 The fire suppression water system shall be OPERABLE with:

- a. Two\* high demand 2000 GPM pumps, one of which shall be a diesel driven pump, with their discharge aligned to the fire suppression header.
- b. An OPERABLE open flow path capable of taking suction from Lake Michigan and transferring the water through distribution piping (with OPERABLE sectionalizing valves) up to the yard hydrant curb control valves and up to the hose station valve(s) or water suppression system controlling valve(s) required to be OPERABLE per Specifications 3.7.9.5 and 3.7.9.2, respectively.

APPLICABILITY: At all times.

ACTION:

- a. With only one pump OPERABLE, restore an inoperable pump (diesel, if required), and equipment to OPERABLE status within 7 days or establish a backup fire suppression water system within the next 7 days. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.
- b. With the fire suppression water system otherwise inoperable:
  1. Restore the fire suppression water distribution system to OPERABLE status within 24 hours, or
  2. Establish a backup fire suppression water system within 24 hours.

\* Four High Demand Fire Pumps (two per Unit) are shared between Units 1 and 2.

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## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS

4.7.9.1.1 The fire suppression water system shall be demonstrated OPERABLE:

- a. At least once per 31 days on a STAGGERED TEST BASIS by starting each pump and operating it for at least 15 minutes on recirculation flow.
- b. At least once per 31 days by verifying that each valve (manual, power operated, or automatic) in flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
- c. At least once per 6 months by performance of a system flush of above ground internal distribution headers and fire hydrants.
- d. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
- e. At least once per 18 months by performing a system functional test which includes simulated automatic actuation of the system throughout its operating sequence, and:
  1. Verifying that each automatic valve in the flow path actuates to its correct position,
  2. Verifying that each pump develops a flow of at least 2000 gpm at a system head of at least 300 feet of water by observing three points (minimum, rated, and peak) on the pump's performance curve.
  3. Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel, and
  4. Verifying that each high pressure pump starts in its preplanned sequence to maintain the fire suppression water system pressure greater than or equal to 100 psig
- f. At least once per 3 years by performing a series of flow tests so that every fire main segment (excluding individual system supplies) has been verified to be clear of obstructions by a full flow test.

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PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4.7.9.1.2 The fire pump diesel engine shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying:
  1. The fuel storage tank contains at least 160 gallons of fuel, and
  2. The diesel starts from ambient conditions and operates for at least 30 minutes.
- b. At least once per 92 days by verifying that a sample of diesel fuel from the fuel storage tank obtained in accordance with ASTM-D4057-81 is within the acceptable limits specified in Table 1 of ASTM-D975-81 when checked for viscosity, water and sediment.
- c. At least once per 18 months by subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service.

4.7.9.1.3 The fire pump diesel starting battery bank and charger shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying that:
  1. The electrolyte level of each battery is above the plates, and
  2. The output battery voltage of each bank is greater than 24 volts.
- b. At least once per 92 days by verifying that the specific gravity is appropriate for continued service of each battery.
- c. At least once per 18 months by verifying that:
  1. The batteries, cell plates and battery packs show no visual indication of physical damage or abnormal deterioration, and
  2. The battery-to-battery and terminal connections are clean, tight, free of corrosion, and coated with anti-corrosion material.

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## PLANT SYSTEMS

### SPRAY AND/OR SPRINKLER SYSTEMS

#### LIMITING CONDITION FOR OPERATION

3.7.9.2 The spray and/or sprinkler systems located in the areas shown in Tables 3.7-5A and 3.7-5B shall be OPERABLE:

APPLICABILITY: Whenever equipment in the spray/sprinkler protected area is required to be OPERABLE.

#### ACTION:

- a. With one or more of the water spray systems as listed in Table 3.7-5A inoperable, within 1 hour: 1) verify that the detection system for the affected filtration unit is OPERABLE per Specification 4.3.3.7, or 2) establish a continuous fire watch patrol.\*
- b. With one or more of the sprinkler systems as listed in Table 3.7-5B inoperable, within 1 hour: 1) verify that at least one of the detection systems, where provided (electric per Specification 4.3.3.7 or pneumatic per Table 3.7-5B), for the affected area is OPERABLE and establish an hourly fire watch patrol, or 2) establish a continuous fire watch patrol.\*
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

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\* For high radiation areas, periodic monitoring (and hourly logging) of the closed circuit television coverage is an acceptable substitute for a continuous fire watch. For high radiation areas where closed circuit television coverage does not exist, an hourly fire watch patrol will be instituted.

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## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

4.7.9.2 Each of the above required water spray and/or sprinkler systems shall be demonstrated to be OPERABLE:

- a. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel as provided by Technical Specification 4.7.9.1.1.d.
- b. At least once per 18 months:
  1. By performing a system functional test which includes simulated automatic actuation of the system, and:
    - a) Verifying that the automatic valves in the flow path actuate to their correct positions on a test signal, and
    - b) Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel.
  2. By visual inspection of deluge and preaction system piping (this is not required for systems supervised by air) to verify their integrity.
  3. By visual inspection of each open head deluge nozzle to verify that there is no blockage.
- c. At least once per 3 years by performing an air flow test through the piping of each open head deluge system and verifying each open head deluge nozzle is unobstructed.

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TABLE 3.7-5 A

OPEN HEAD DELUGE WATER SPRAY SYSTEMS

<u>LOCATION</u>	<u>ACTUATION</u>
1-HV-AES-1 Charcoal Filters	Manual - Electric - Heat
1-HV-AES-2 Charcoal Filters	Manual - Electric - Heat
1-HV-ACRF-1 Charcoal Filters	Manual - Electric - Heat
1-HV-CPR-1 Charcoal Filters	Manual - Electric - Heat
12-HV-AFX Charcoal Filters*	Manual - Electric - Heat
1-HV-CIPX Charcoal Filters	Manual - Electric - Heat

\*Shared system with Unit 2.

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TABLE 3.7-5 B

CLOSED HEAD SPRINKLER SYSTEMS

<u>LOCATION</u>	<u>TYPE SYSTEM</u>	<u>ACTUATION</u>
Auxiliary building El. 587 ft.*/*** (Normally accessible areas, charging and Safety Injection Pump Rooms, stairways to El. 573 and 609)	Preaction Sprinkler	Dry Pilot**
Auxiliary building El. 609 ft.*/*** (Normally accessible areas, CCW Pump area, stairways to El. 633 and 620 above Chem. Lab)	Preaction Sprinkler	Dry Pilot**
Auxiliary building El. 633 ft.*/*** (Normally accessible areas, excluding HVAC Vestibule Areas and stairways to El. 650)	Preaction Sprinkler	Dry Pilot**
Auxiliary Feedwater Pump Corridor*/***	Wet Pipe	Automatic
Turbine Building El. 591 Generator End (Extended to Diesel Generator Corridor***)	Wet Pipe	Automatic
Auxiliary Building Cask Handling Area (El. 609)*/***	Preaction Sprinkler	Dry Pilot**
Auxiliary Building Drumming Room (El. 587)*/***	Preaction Sprinkler	Dry Pilot**
Reactor Coolant Pumps (4)***	Preaction Sprinkler	Manual
Contractors Access Control Building (El. 612)	Wet Pipe	Automatic

\*System protects area common to both Units 1 and 2.

\*\*Dry Pilot Actuation is considered to be a heat actuated pneumatic type detection system.

\*\*\*Located in areas which also have an automatic detection system.

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第 八 節 概 論

第 九 節 概 論

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## PLANT SYSTEMS

### LOW PRESSURE CO<sub>2</sub> SYSTEMS

#### LIMITING CONDITION FOR OPERATION

3.7.9.3 The low pressure CO<sub>2</sub> systems located in the areas shown in Table 3.7-6 shall be OPERABLE.

APPLICABILITY: Whenever equipment in the low pressure CO<sub>2</sub> protected areas is required to be OPERABLE.

#### ACTION:

- a. With one or more of the above required low pressure CO<sub>2</sub> systems isolated from automatic operation for personnel protection, verify that at least one zone of fire detection for the affected area is OPERABLE per Specification 4.3.3.7 in order to permit entry for routine tours, maintenance, construction, or surveillance testing,
- b. With one or more of the required CO<sub>2</sub> systems shown in Table 3.7-6 inoperable, within 1 hour: 1) verify at least one zone of fire detection for the affected area is OPERABLE per Specification 4.3.3.7, and establish a fire watch patrol to inspect the affected fire area once per hour, or 2) Establish a continuous fire watch to patrol the affected area.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.9.3 Each of the above required low pressure CO<sub>2</sub> systems shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying the CO<sub>2</sub> storage tank level to be greater than or equal to 50% and pressure to be greater than or equal to 285 psig, and
- b. At least once per 31 days by verifying that each manual valve in the flow path is in the correct position.
- c. At least once per 18 months by verifying:
  1. The system valves, associated ventilation dampers and fans, and self-closing fire doors operate automatically upon receipt of a simulated actuation signal, and
  2. System actuation methods (automatic from detection system, manual pushbutton station, manual pneumatic release) are tested to verify proper actuation of the system.
  3. Flow from each nozzle during performance of an airflow or CO<sub>2</sub> "Puff Test".

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TABLE 3.7-6

LOW PRESSURE CARBON DIOXIDE SYSTEMS17-TON CAPACITY

<u>LOCATION</u>	<u>ACTUATION PERIOD</u>
Diesel Generator 1AB Room	Cross-zoned Heat
Diesel Generator 1CD Room	Cross-zoned Heat
Diesel Generator Fuel Oil Pump Room	Heat
4 KV Switchgear Rooms	Manual
Control Rod Drive, Transf. Switchgear Rooms	Manual
Engineered Safety Switchgear Room	Manual
Switchgear Room Cable Vault	Cross-zoned Ionization and Infrared
Auxiliary Cable Vault	Ionization
Control Room Cable Vault (Backup)*	Manual
Penetration Cable Tunnel Quadrant 1	Manual
Penetration Cable Tunnel Quadrant 2	Manual
Penetration Cable Tunnel Quadrant 3N	Manual
Penetration Cable Tunnel Quadrant 3M	Manual
Penetration Cable Tunnel Quadrant 3S	Manual
Penetration Cable Tunnel Quadrant 4	Manual

\*Control Room Cable Vault CO<sub>2</sub> System is only required to be operable when the Cable Vault Halon System is operable.

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## PLANT SYSTEMS

### HALON SYSTEMS

#### LIMITING CONDITION FOR OPERATION

3.7.9.4 The Halon system located in the Control Room Cable Vault shall be OPERABLE.

APPLICABILITY: Whenever equipment in the Halon protected area is required to be OPERABLE.

#### ACTION:

- a. With the Halon System isolated from automatic operation for personnel protection, verify that at least one zone of fire detection for the affected area is OPERABLE in order to permit entry into the cable vault.
- b. With the above required Halon system inoperable, within 1 hour:  
1) verify that at least one zone of the fire detection system and the backup CO<sub>2</sub> fire suppression system for the affected area are OPERABLE per Specifications 4.3.3.7 and 4.7.9.3 respectively, or 2) establish a continuous fire watch patrol.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.9.4 The above required Halon system shall be demonstrated OPERABLE:

- a. At least once per 6 months by verifying each Halon storage tank to be greater than or equal to 95% of full charge weight or appropriate liquid level, and to be greater than or equal to 90% of full charge pressure corrected for ambient temperature.
- b. At least once per 18 months by:
  1. Verifying the system (including associated ventilation dampers and fans, and doors) is tested for proper operation by a simulated actuation signal.
  2. System actuation methods (automatic from detection system, manual pushbutton station, and manual cylinder actuator) are to be tested to verify proper actuation of the system.
  3. Performance of an air flow test or CO<sub>2</sub> puff test through headers and nozzles to assure that there is no blockage.



## PLANT SYSTEMS

### FIRE HOSE STATIONS

#### LIMITING CONDITION FOR OPERATION

3.7.9.5 The fire hose stations shown in Table 3.7-7 shall be OPERABLE:

APPLICABILITY: Whenever equipment in the areas protected by the fire hose stations is required to be OPERABLE.

#### ACTION:

- a. With one or more of the fire hose stations shown in Table 3.7-7 inoperable: 1) For those areas where the inoperable fire hose station is the primary means of fire suppression (areas where no fixed systems are provided or areas where the fixed systems are inoperable), within 1 hour, route an additional equivalent capacity fire hose to the affected area(s), from an OPERABLE hose station(s) per Specification 4.7.9.5, or 2) within 1 hour, verify that the fixed fire suppression system(s) that also protects the affected area(s) serviced by the fire hose station(s) is OPERABLE.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.9.5 Each of the fire hose stations shown in Table 3.7-7 shall be demonstrated OPERABLE:

- a. At least once per 31 days by a visual inspection of the fire hose stations to assure all required equipment is at the station.
- b. At least once per 18 months by:
  1. Removing the hose for visual inspection and re-racking, and
  2. Replacement of all degraded gaskets in couplings.
- c. At least once per 3 years by:
  1. Partially opening each hose station valve to verify OPERABILITY and no flow blockage.
  2. Conducting a hose hydrostatic test at a pressure of 150 psig or at least 50 psi greater than the maximum pressure available at that hose station, whichever is greater.

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TABLE 3.7-7

FIRE HOSE STATIONS

Auxiliary Building**	Minimum 12*
Access to Diesel Generator Rooms	Hose Station No. 32
Access to Switchgear Rooms	Hose Station No. 58 or No. 211
Access to Control Room	Hose Station No. 82 or No. 81
Access to Pressurizer Heater Transformer Room	Hose Station No. 31
Access to ESW Pump Rooms, MCC Room, and ESW Basement Area	Hose Station No. 23
Access to Auxiliary Feed Pump Rooms	Hose Station No. 35

\*Shared with Unit 2

\*\*Within the Controlled Area



## PLANT SYSTEMS

### 3/4.7.10 FIRE RATED ASSEMBLIES

#### LIMITING CONDITION FOR OPERATION

3.7.10 Fire rated assemblies shall be OPERABLE as follows:

- a. All fire rated assemblies (walls, floor/ceilings, and cable tray and conduit enclosures), separating safe shutdown fire areas or separating portions of redundant systems important to safe shutdown within a fire area shall be OPERABLE.
- b. All penetration sealing devices (fire door assemblies, fire dampers, and penetration seals for cable, around conduit, cable tray, piping and ventilation duct work) in the above fire rated assemblies shall be OPERABLE.

APPLICABILITY: At all times.

#### ACTION:

- a. With any of the above fire rated assemblies and/or sealing devices inoperable, within 1 hour: 1) verify that the fire detectors and/or fire suppression system on at least one side of the inoperable assembly are OPERABLE and establish an hourly fire watch patrol, or 2) establish a continuous fire watch patrol on one side of the penetration, or 3) secure the inoperable sealing device\* in the closed position, and establish an hourly fire watch patrol, or 4) for fire dampers and normally locked fire doors, secure the inoperable sealing device in the closed position.\*\*\*
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.10.1 At least once per 18 months the above required fire rated assemblies and penetration sealing devices shall be verified OPERABLE by:

- a. Performing a visual inspection of all accessible surfaces, of each fire rated assembly, for open penetrations.
- b. Performing a visual inspection of each fire damper and its associated hardware.
- c. Performing a Functional Test, requiring closure testing on 10% of the fire dampers.\*\*

\* Except fire doors on Turbine Driven Auxiliary Feedwater Pump and Hallway enclosures which must remain open due to HELB considerations.

\*\* This testing is in addition to the testing required by Specifications 4.7.9.3.c.1 and 4.7.9.4.b.1.

\*\*\* Option (4) should be used for fire dampers only after the appropriate HVAC and radiological reviews have been performed.

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## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Con't)

- d. Performing a visual inspection of at least 10 percent of each type of penetration seal (cable, around conduit, cable tray, piping, and ventilation duct work penetration seals; and cable tray and conduit enclosures required for Appendix R compliance). If apparent changes in appearance or abnormal degradations are found that could indicate a plant wide trend, a visual inspection of an additional 10 percent of each type of penetration seal shall be made. This inspection process shall continue until a 10 percent sample with no apparent changes in appearance or abnormal degradation is found.

4.7.10.2 Each of the required fire doors shall be verified OPERABLE by:

- a. Inspecting the hold-open, release, and closing mechanism and latches at least once per 6 months.
- b. Verifying the position of each closed fire door at least once per 24 hours.
- c. Verifying that doors with hold-open and release mechanisms are free of obstructions at least once per 24 hours.
- d. Verifying the position of each locked closed fire door at least once per 7 days.

4.7.10.3 Following repairs or maintenance on an above required fire rated assembly or sealing device, the fire rated assembly or sealing device shall be verified to be operable before exiting the applicable action statement.

The figure consists of 12 small, vertically aligned illustrations of a plant's development. From top to bottom: 1. A small seedling with two leaves. 2. A seedling with two leaves and a small stem. 3. A seedling with two leaves and a small stem. 4. A seedling with two leaves and a small stem. 5. A seedling with two leaves and a small stem. 6. A seedling with two leaves and a small stem. 7. A seedling with two leaves and a small stem. 8. A seedling with two leaves and a small stem. 9. A seedling with two leaves and a small stem. 10. A seedling with two leaves and a small stem. 11. A seedling with two leaves and a small stem. 12. A seedling with two leaves and a small stem.

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## BASES (Continued)

The visual inspection frequency is based upon maintaining a constant level of snubber protection to systems. The method for determining the next interval for the visual inspection of snubbers is provided based upon the number of unacceptable snubbers found during the previous inspection, the category size for each snubber type, and the previous inspection interval per NRC Generic Letter 90-09. A snubber is considered unacceptable if it fails to satisfy the acceptance criteria of the visual inspection. Any inspection whose results required a shorter inspection interval will override the previous schedule.

When the cause of the rejection of a snubber is clearly established and remedied for that snubber and for any other snubbers that may be generically susceptible, and verified by inservice functional testing, that snubber may be exempted from being counted as inoperable. Generically susceptible snubbers are those which are of a specific make or model and have the same design features directly related to rejection of the snubber by visual inspection, or are similarly located or exposed to the same environmental conditions such as temperature, radiation, and vibration.

When a snubber is found inoperable, an engineering evaluation is performed, in addition to the determination of the snubber mode of failure, in order to determine if any safety-related component or system has been adversely affected by the inoperability of the snubber. The engineering evaluation shall determine whether or not the snubber mode of failure has imparted a significant effect or degradation on the supported component or system.

To provide assurance of snubber functional reliability, a representative sample of the installed snubbers will be functionally tested during plant shutdowns at 24 month intervals. Observed failures of these sample snubbers shall require functional testing of additional units.

The service life of a snubber is evaluated via manufacturer's input and information through consideration of the snubber service conditions and associated installation and maintenance records (newly installed snubber, seal replaced, spring replaced, in high radiation area, in high temperature area, etc...). The requirement to monitor the snubber service life is included to ensure that the snubbers periodically undergo a performance - evaluation in view of their age and operating conditions. These records will provide statistical bases for future consideration of snubber service life. The requirements for the maintenance of records and the snubber service life review are not intended to affect plant operation.

The number of snubbers to be functionally tested during each surveillance is based on calculations performed to allow extension of the surveillance interval from 18 months to 24 months, and therefore, the number of snubbers functionally tested deviates from the number required by the Westinghouse Standard Technical Specifications (NUREG-0452, Revision 4).

A list of individual snubbers with detailed information of snubber location and size and of system affected shall be available at the plant in accordance with Section 50.71(c) of 10 CFR Part 50. The accessibility of each snubber shall be determined and approved by the Plant Nuclear Safety Review Committee. The determination shall be based upon the existing

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## BASES (Continued)

radiation levels and the expected time to perform a visual inspection in each snubber location as well as other factors associated with accessibility during plant operations (e.g., temperature, atmosphere, location, etc.), and recommendations of Regulatory Guides 8.8 and 8.10. The addition or deletion of any snubber shall be made in accordance with Section 50.59 of 10 CFR Part 50.

### 3/4.7.9 FIRE SUPPRESSION SYSTEMS

The OPERABILITY of the fire suppression systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety related equipment is located. The fire suppression system consists of the water system, spray and/or sprinklers, CO<sub>2</sub>, Halon and fire hose stations. The collective capability of the fire suppression systems is adequate to minimize potential damage to safety-related equipment and is a major element in the facility fire protection program.

In the event that one or more CO<sub>2</sub> Suppression System requiring automatic actuation must be isolated for personal protection to permit entry for routine tours, maintenance, construction, or surveillance testing in the protected area, the fire detection system(s) required to be OPERABLE by Specification 3.3.3.7 shall be verified to be OPERABLE. Isolation of an automatic CO<sub>2</sub> suppression system temporarily puts this system in a manual actuation mode.

Reliance on the fire detection system, in conjunction with the ability to manually discharge the CO<sub>2</sub> suppression system will provide adequate fire protection for periods when personnel are required to work in these areas.

In the event that portions of the fire suppression systems are inoperable, alternate backup fire fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service. When the inoperable fire fighting equipment is intended for use as a backup means of fire suppression, a longer period of time is allowed to provide an alternate means of fire fighting than if the inoperable equipment is the primary means of fire suppression. Backup fire protection equipment will normally take the form of permanently mounted fire extinguishers and/or fire hose stations in or near the area, or fire hoses routed to the affected area. However, it is not our intent to rely on backup systems or other compensatory measures for an extended period of time and action will be taken to restore the inoperable portions of the fire suppression system to OPERABLE status within a reasonable period.

The surveillance requirements provide assurance that the minimum OPERABILITY requirements of the fire suppression systems are met. An allowance is made for ensuring a sufficient volume of Halon and CO<sub>2</sub> in the storage tanks by verifying either the weight, level, or pressure of the tanks.

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## ADMINISTRATIVE CONTROLS

6.10.2 The following records shall be retained for the duration of the Facility Operating License:

- a. Records and drawing changes reflecting unit design modifications made to systems and equipment described in the Final Safety Analysis Report.
- b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.
- c. Records of radiation exposure for all individuals entering radiation control areas.
- d. Records of gaseous and liquid radioactive material released to the environs.
- e. Records of transient or operational cycles for those facility components identified in Table 5.9-1.
- f. Records of reactor tests and experiments.
- g. Records of training and qualification for current members of the Plant Staff.
- h. Records of in-service inspections performed pursuant to these Technical Specifications.
- i. Records of Quality Assurance activities required by the QA Manual.
- j. Records of reviews performed for changes made to procedures or equipment or review of tests and experiments pursuant to 10 CFR 50.59.
- k. Records of meetings of the PNSRC and the NSDRG.
- l. Records of radioactive shipments.
- m. Records of the service lives of hydraulic snubbers including the date at which service life commences and associated installation and maintenance records.

## 6.11 RADIATION PROTECTION PROGRAM

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

## 6.12 HIGH RADIATION AREA

6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR 20, each high radiation area in which the intensity of radiation is 1000 mrem/hr or less shall be barricaded and





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## PLANT SYSTEMS

### 3/4.7.7 SNUBBERS

#### LIMITING CONDITION FOR OPERATION

3.7.7.1 All safety-related snubbers shall be OPERABLE.

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 snubbers inoperable, within 72 hours replace or restore the inoperable snubber(s) to OPERABLE status and perform an engineering evaluation per Specification 4.7.7.1.c on the supported component or declare the supported system inoperable and follow the appropriate ACTION statement for that system.

#### SURVEILLANCE REQUIREMENTS

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

a. Visual Inspection

Snubbers are categorized as inaccessible or accessible during reactor operation. Each of these categories (inaccessible and accessible) may be inspected independently according to the schedule determined by Table 3.7-9. The visual inspection interval for each type of snubber shall be determined based upon the criteria provided in Table 3.7-9 and the first inspection interval determined using this criteria shall be based upon the previous inspection interval as established by the requirements in effect before Amendment No. \_\_\_\_.

b. 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 structure are secure, and (3) 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 up. Snubbers which appear inoperable as a result of visual inspections shall be classified as unacceptable and may be reclassified as acceptable 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



## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

particular snubber and for other snubbers that may be generically susceptible; and (2) the affected snubber is functionally tested in the as-found condition and determined OPERABLE per Specifications 4.7.7.1.d. All snubbers found connected to an inoperable common hydraulic fluid reservoir shall be counted as unacceptable for determining the next inspection interval. A review and evaluation shall be performed and documented to justify continued operation with an unacceptable snubber. If continued operation cannot be justified, the snubber shall be declared inoperable and the ACTION requirements shall be met.

#### c. Functional Tests

At least once per 24 months during shutdown, a representative sample (14%) 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 4.7.7.1.d an additional 10% of that type of snubber shall be functionally tested.

The representative sample selected for functional testing shall include the various configurations, operating environments and the range of size and capacity 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

Snubbers that are identified as "Especially Difficult to Remove" or in "High Radiation Zones During Shutdown" shall also be included in the representative sample.

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

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\* Permanent or other exemptions from functional testing for individual snubbers in these categories 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.

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## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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 the snubber(s) found inoperable, an engineering evaluation shall be performed on the components which are supported by the snubber(s). The purpose of this engineering evaluation shall be to determine if the components supported by the snubber(s) were adversely affected by the inoperability of the snubber(s) in order to ensure that the supported component remains capable of meeting the designed service.

#### d. 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. For snubbers specifically required to not displace under continuous load, the ability of the snubber to withstand load without displacement shall be verified.

#### e. Snubber Service Life Monitoring

A record of the service life of each snubber, 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 6.10.2.

Concurrent with the first inservice visual inspection and at least once per 18 months thereafter, the installation and maintenance records for all safety-related snubbers 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.

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TABLE 3.7-9

## SNUBBER VISUAL INSPECTION INTERVAL

## NUMBER OF UNACCEPTABLE SNUBBERS

| Population<br>or Category<br>(Notes 1 and 2) | Column A<br>Extend Interval<br>(Notes 3 and 6) | Column B<br>Repeat Interval<br>(Notes 4 and 6) | Column C<br>Reduce Interval<br>(Notes 5 and 6) |
|--|--|--|--|
| 1  | 0  | 0  | 1  |
| 80   | 0  | 0  | 2  |
| 100  | 0  | 1  | 4  |
| 150  | 0  | 3  | 8  |
| 200  | 2  | 5  | 13   |
| 300  | 5  | 12   | 25   |
| 400  | 8  | 18   | 36   |
| 500  | 12   | 24   | 48   |
| 750  | 20   | 40   | 78   |
| 1000 or greater                              | 29   | 56   | 109  |

Note 1: The next visual inspection interval for a snubber population or category size shall be determined based upon the previous inspection interval and the number of unacceptable snubbers found during that interval. Snubbers may be categorized, based upon their accessibility during power operation, as accessible or inaccessible. These categories may be examined separately or jointly. However, the licensee must make and document that decision before any inspection and shall use that decision as the basis upon which to determine the next inspection interval for that category.

Note 2: Interpolation between population or category sizes and the number of unacceptable snubbers is permissible. Use next lower integer for the value of the limit for Columns A, B, or C if that integer includes a fractional value of unacceptable snubbers as determined by interpolation.

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Table 3.7-9 (Continued)

- Note 3: If the number of unacceptable snubbers is equal to or less than the number in Column A, the next inspection interval may be twice the previous interval but not greater than 48 months.
- Note 4: If the number of unacceptable snubbers is equal to or less than the number in Column B but greater than the number in Column A, the next inspection interval shall be the same as the previous interval.
- Note 5: If the number of unacceptable snubbers is equal to or greater than the number in Column C, the next inspection shall be two-thirds of the previous interval. However, if the number of unacceptable snubbers is less than the number in Column C but greater than the number in Column B, the next interval shall be reduced proportionally by interpolation, that is, the previous interval shall be reduced by a factor that is one-third of the ratio of the difference between the number of unacceptable snubbers found during the previous interval and the number in Column B to the difference in the numbers in Columns B and C.
- Note 6: The provisions of Specification 4.0.2 are applicable for all inspection intervals up to and including 48 months.

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## PLANT SYSTEMS

### 3/4.7.8 SEALED SOURCE CONTAMINATION

#### LIMITING CONDITION FOR OPERATION

3.7.8.1 Each sealed source containing radioactive material either in excess of 100 microcuries of beta and/or gamma emitting material or 5 microcuries of alpha emitting material, shall be free of  $\geq 0.005$  microcuries of removable contamination.

APPLICABILITY: At all times.

#### ACTION:

- a. Each sealed source with removable contamination in excess of the above limits shall be immediately withdrawn from use and:
  - 1. Either decontaminated and repaired, or
  - 2. Disposed of in accordance with Commission Regulations.
- b. The provisions of Specification 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.8.1.1 Test Requirements - Each sealed source shall be tested for leakage and/or contamination by:

- a. The licensee, or
- b. Other persons specifically authorized by the Commission or an Agreement State.

The test method shall have a detection sensitivity of at least 0.005 microcuries per test sample.

4.7.8.1.2 Test Frequencies - Each category of sealed sources shall be tested at the frequency described below.

- a. Sources in use (excluding startup sources and fission detectors previously subjected to core flux) - At least once per six months for all sealed sources containing radioactive materials.

## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

1. With a half-life greater than 30 days (excluding Hydrogen 3),  
and
  2. In any form other than gas.
- b. Stored sources not in use - Each sealed source and fission detector shall be tested prior to use or transfer to another licensee unless tested within the previous six months. Sealed sources and fission detectors transferred without a certificate indicating the last test date shall be tested prior to being placed into use.
- c. Startup sources and fission detectors - Each sealed startup source and fission detector shall be tested within 31 days prior to being subjected to core flux or installed in the core and following repair or maintenance to the source.
- 4.7.8.1.3 Reports - A report shall be prepared and submitted to the Commission on an annual basis if sealed source or fission detector leakage tests reveal the presence of  $\geq 0.005$  microcuries of removable contamination.

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PLANT SYSTEMS

3/4.7.9 FIRE SUPPRESSION SYSTEMS  
FIRE SUPPRESSION WATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.9.1 The fire suppression water system shall be OPERABLE with:

- a. Two\* high demand 2000 GPM pumps, one of which shall be a diesel driven pump, with their discharge aligned to the fire suppression header.
- b. An OPERABLE open flow path capable of taking suction from Lake Michigan and transferring the water through distribution piping (with OPERABLE sectionalizing valves) up to the yard hydrant curb control valves and up to the hose station valve(s) or water suppression system controlling valve(s) required to be OPERABLE per Specifications 3.7.9.5 and 3.7.9.2, respectively.

APPLICABILITY: At all times.

ACTION:

- a. With only one pump operable, restore an inoperable pump (diesel, if required), and equipment to OPERABLE status within 7 days or establish a backup fire suppression water system within the next 7 days. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.
- b. With the fire suppression water system otherwise inoperable:
  1. Restore the fire suppression water distribution system to OPERABLE status within 24 hours, or
  2. Establish a backup fire suppression water system within 24 hours.

\* Four High Demand Fire Pumps (two per unit) are shared between Units 1 and 2.



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## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS

4.7.9.1.1 The fire suppression water system shall be demonstrated OPERABLE:

- a. At least once per 31 days on a STAGGERED TEST BASIS by starting each pump and operating it for at least 15 minutes on recirculation flow.
- b. At least once per 31 days by verifying that each valve (manual, power operated, or automatic) in flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
- c. At least once per 6 months by performance of a system flush of above ground internal distribution headers and fire hydrants.
- d. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
- e. At least once per 18 months by performing a system functional test which includes simulated automatic actuation of the system throughout its operating sequence, and:
  1. Verifying that each automatic valve in the flow path actuates to its correct position,
  2. Verifying that each pump develops a flow of at least 2000 gpm at a system head of at least 300 feet of water by observing three points (minimum, rated and peak) on the pump's performance curve.
  3. Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel, and
  4. Verifying that each high pressure pump starts in its preplanned sequence to maintain the fire suppression water system pressure greater than 100 psig.
- f. At least once per 3 years by performing a series of flow tests so that every fire main segment (excluding individual system supplies) has been verified to be clear of obstructions by a full flow test.

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## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

4.7.9.1.2 The fire pump diesel engine shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying:
  1. The fuel storage tank contains at least 160 gallons of fuel, and
  2. The diesel starts from ambient conditions and operates for at least 30 minutes.
- b. At least once per 92 days by verifying that a sample of diesel fuel from the fuel storage tank obtained in accordance with ASTM-D4057-81 is within the acceptable limits specified in Table 1 of ASTM-D975-81 when checked for viscosity, water and sediment.
- c. At least once per 18 months by subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service.

4.7.9.1.3 The fire pump diesel starting battery bank and charger shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying that:
  1. The electrolyte level of each battery is above the plates, and
  2. The output battery voltage of each bank is greater than 24 volts.
- b. At least once per 92 days by verifying that the specific gravity is appropriate for continued service of each battery.
- c. At least once per 18 months by verifying that:
  1. The batteries, cell plates and battery packs show no visual indication of physical damage or abnormal deterioration, and
  2. The battery-to-battery and terminal connections are clean, tight, free of corrosion, and coated with anti-corrosion material.

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## PLANT SYSTEMS

### SPRAY AND/OR SPRINKLER SYSTEMS

#### LIMITING CONDITION FOR OPERATION

3.7.9.2 The spray and/or sprinkler systems located in the areas shown in Table 3.7-5A and 3.7-5B shall be OPERABLE:

APPLICABILITY: Whenever equipment in the spray/sprinkler-protected area is required to be OPERABLE:

#### ACTION:

- a. With one or more of the water spray systems as listed in Table 3.7-5A inoperable, within 1 hour: 1) verify that the detection system for the affected filtration unit is OPERABLE per Specification 4.3.3.8, or 2) establish a continuous fire watch patrol.
- b. With one or more of the sprinkler systems as listed in Table 3.7-5B inoperable, within 1 hour: 1) verify that at least one of the detection systems, where provided (electric per Specification 4.3.3.8 or pneumatic per Table 3.7-5B), for the affected area is OPERABLE and establish an hourly fire watch patrol, or 2) establish a continuous fire watch patrol.\*
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

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\* For high radiation areas, periodic monitoring (and hourly logging) of the closed circuit television coverage is an acceptable substitute for a continuous fire watch. For high radiation areas where closed circuit television coverage does not exist, an hourly fire watch patrol will be instituted.

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## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

4.7.9.2 Each of the above required water spray and/or sprinkler systems shall be demonstrated to be OPERABLE:

- a. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel as provided by Technical Specification 4.7.9.1.1.d.
- b. At least once per 18 months:
  1. By performing a system functional test which includes simulated automatic actuation of the system, and:
    - a) Verifying that the automatic valves in the flow path actuate to their correct positions on a test signal, and
    - b) Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel.
  2. By visual inspection of deluge and preaction system piping (this is not required for systems supervised by air) to verify their integrity.
  3. By visual inspection of each open head deluge nozzle to verify that there is no blockage.
- c. At least once per 3 years by performing an air flow test through the piping of each open head deluge system and verifying each open head deluge nozzle is unobstructed.



1. The first part of the document is a list of names and addresses of the members of the committee. The names are listed in alphabetical order, and the addresses are given in full. The list is as follows:

| Name         | Address                            |
|--------------|------------------------------------|
| Mr. A. B. C. | 123 Main St., New York, N. Y.      |
| Mr. D. E. F. | 456 Elm St., Boston, Mass.         |
| Mr. G. H. I. | 789 Oak St., Chicago, Ill.         |
| Mr. J. K. L. | 101 Pine St., Philadelphia, Pa.    |
| Mr. M. N. O. | 202 Cedar St., St. Louis, Mo.      |
| Mr. P. Q. R. | 303 Birch St., San Francisco, Cal. |
| Mr. S. T. U. | 404 Spruce St., Portland, Me.      |
| Mr. V. W. X. | 505 Ash St., Cincinnati, O.        |
| Mr. Y. Z. A. | 606 Hickory St., Louisville, Ky.   |
| Mr. B. C. D. | 707 Walnut St., New Orleans, La.   |
| Mr. E. F. G. | 808 Chestnut St., Baltimore, Md.   |
| Mr. H. I. J. | 909 Elm St., Washington, D. C.     |
| Mr. K. L. M. | 1010 Main St., New York, N. Y.     |

TABLE 3.7-5 A

OPEN HEAD DELUGE WATER SPRAY SYSTEMS

| <u>LOCATION</u>              | <u>ACTUATION</u>         |
|------------------------------|--------------------------|
| 2-HV-AES-1 Charcoal Filters  | Manual - Electric - Heat |
| 2-HV-AES-2 Charcoal Filters  | Manual - Electric - Heat |
| 2-HV-ACRF-1 Charcoal Filters | Manual - Electric - Heat |
| 2-HV-CPR-1 Charcoal Filters  | Manual - Electric - Heat |
| 2-HV-CIPX Charcoal Filters   | Manual - Electric - Heat |
| 12-HV-AFX Charcoal Filters*  | Manual - Electric - Heat |

\*Shared system with Unit 1.

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TABLE 3.7-5 B

CLOSED HEAD SPRINKLER SYSTEMS

| <u>LOCATION</u>  | <u>TYPE SYSTEM</u>  | <u>ACTUATION</u> |
|--|---------------------|------------------|
| Auxiliary building<br>El. 587 ft.*/*** (Normally<br>accessible areas, charging<br>and Safety Injection Pump<br>Rooms, stairways to El.<br>573 and 609) | Preaction Sprinkler | Dry Pilot**      |
| Auxiliary building<br>El. 609 ft.*/*** (Normally<br>accessible areas, CCW<br>Pump area, stairways to<br>El. 633)                                       | Preaction Sprinkler | Dry Pilot**      |
| Auxiliary building<br>El. 633 ft.*/*** (Normally<br>accessible areas, excluding<br>HVAC Vestibule Areas and<br>stairways to El. 650)                   | Preaction Sprinkler | Dry Pilot**      |
| Auxiliary Turbine Driven<br>Feedwater Pump and<br>Pump Corridor*/***   | Wet Pipe            | Automatic        |
| Turbine Building 591 ft.<br>El. Generator End<br>(Extended to Diesel<br>Generator Corridor***)   | Wet Pipe            | Automatic        |
| Auxiliary Building Cask<br>Handling Area (El. 609)<br>*/***  | Preaction Sprinkler | Dry Pilot**      |
| Auxiliary Building Drumming<br>Area (El. 587)*/***   | Preaction Sprinkler | Dry Pilot**      |
| Reactor Coolant Pumps (4)***   | Preaction Sprinkler | Manual           |

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\*System protects area common to both Units 1 and 2.

\*\*Dry Pilot Actuation is considered to be a heat actuated pneumatic type  
detection system.

\*\*\*Located in areas which also have an automatic detection system.



## PLANT SYSTEMS

### LOW PRESSURE CO<sub>2</sub> SYSTEMS

#### LIMITING CONDITION FOR OPERATION

3.7.9.3 The low pressure CO<sub>2</sub> systems located in the areas shown in Table 3.7-6 shall be OPERABLE.

APPLICABILITY: Whenever equipment in the low pressure CO<sub>2</sub> protected areas is required to be OPERABLE.

#### ACTION:

- a. With one or more of the required low pressure CO<sub>2</sub> systems isolated from automatic operation for personnel protection, verify that at least one zone of fire detection for the affected area is OPERABLE per Specification 4.3.3.8 in order to permit entry for routine tours, maintenance, construction, or surveillance testing.
- b. With one or more of the required CO<sub>2</sub> systems shown in Table 3.7-6 inoperable, within 1 hour: 1) verify at least one zone of fire detection for the affected area is OPERABLE per Specification 4.3.3.8, and establish a fire watch patrol to inspect the affected fire area once per hour, or 2) Establish a continuous fire watch to patrol the affected area.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.9.3 Each of the above required low pressure CO<sub>2</sub> systems shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying the CO<sub>2</sub> storage tank level to be greater than or equal to 50% and pressure to be greater than or equal to 285 psig, and
- b. At least once per 31 days by verifying that each manual valve in the flow path is in the correct position.
- b. At least once per 18 months by verifying:
  1. The systems valves, associated ventilation dampers and fans, and self-closing fire doors operate automatically upon receipt of a simulated actuation signal, and
  2. System actuation methods (automatic from detection system, manual pushbutton station, manual pneumatic release) are tested to verify proper actuation of the system.
  3. Flow from each nozzle during performance of an air flow or CO<sub>2</sub> "Puff Test".










— 3 —

*(The following information was obtained from the records of the Department of Social Services, State of New York.)*

1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Arar and Collins (1971) using a Shimadzu 1601 UV-Visible Spectrophotometer.

2.

TABLE 3.7-6

LOW PRESSURE CARBON DIOXIDE SYSTEMS

17 TON CAPACITY

| <u>LOCATION</u>                             | <u>ACTUATION PERIOD</u>                |
|---|--|
| Diesel Generator 2AB Room                   | Cross-Zoned Heat                       |
| Diesel Generator 2CD Room                   | Cross-Zoned Heat                       |
| Diesel Generator Fuel Oil Pump Room         | Heat                                   |
| 4KV Switchgear Rooms                        | Manual                                 |
| Control Rod Drive, Transf. Switchgear Rooms | Manual                                 |
| Engineered Safety Switchgear Room           | Manual                                 |
| Switchgear Room Cable Vault                 | Cross-Zoned Ionization<br>and Infrared |
| Auxiliary Cable Vault                       | Ionization                             |
| Control Room Cable Vault (Backup)*          | Manual                                 |
| Penetration Cable Tunnel Quadrant 1         | Manual                                 |
| Penetration Cable Tunnel Quadrant 2         | Manual                                 |
| Penetration Cable Tunnel Quadrant 3N        | Manual                                 |
| Penetration Cable Tunnel Quadrant 3M        | Manual                                 |
| Penetration Cable Tunnel Quadrant 3S        | Manual                                 |
| Penetration Cable Tunnel Quadrant 4         | Manual                                 |

\*Control Room Cable Vault CO<sub>2</sub> System is only required to be operable when the Cable Vault Halon System is inoperable..



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## PLANT SYSTEMS

### HALON SYSTEM

#### LIMITING CONDITION FOR OPERATION

3.7.9.4 The Halon system located in the Control Room Cable Vault shall be OPERABLE.

APPLICABILITY: Whenever equipment in the Halon protected area is required to be OPERABLE.

#### ACTION:

- a. With the Halon System isolated from automatic operation for personnel protection, verify that at least one zone of fire detection for the affected area is OPERABLE in order to permit entry into the cable vault.
- b. With the above required Halon system inoperable, within 1 hour: 1) verify that at least one zone of the fire detection system and the backup CO<sub>2</sub> fire suppression system for the affected area are OPERABLE per Specifications 4.3.3.8 and 4.7.9.3 respectively, or 2) establish a continuous fire watch patrol.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.9.4 The above required Halon system shall be demonstrated OPERABLE:

- a. At least once per 6 months by verifying each Halon storage tank to be greater than or equal to 95% of full charge weight or appropriate liquid level, and to be greater than or equal to 90% of full charge pressure corrected for ambient temperature.
- b. At least once per 18 months by:
  1. Verifying the system (including associated ventilation dampers and fans, and doors) is tested for proper operation by a simulated actuation signal.
  2. System actuation methods (automatic from detection system, manual pushbutton station, and manual cylinder actuator) are to be tested to verify proper actuation of the system.
  3. Performance of an air flow test or CO<sub>2</sub> puff test through headers and nozzles to assure that there is no blockage.

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## PLANT SYSTEMS

### FIRE HOSE STATIONS

#### LIMITING CONDITION FOR OPERATION

3.7.9.5 The fire hose stations shown in Table 3.7-7 shall be OPERABLE:

APPLICABILITY: Whenever equipment in the areas protected by the fire hose stations is required to be OPERABLE.

#### ACTION:

- a. With one or more of the fire hose stations shown in Table 3.7-7 inoperable: 1) For those areas where the inoperable fire hose station is the primary means of fire suppression (areas where no fixed systems are provided or areas where the fixed systems are inoperable), within 1 hour, route an additional equivalent capacity fire hose to the affected area(s) from an OPERABLE hose station(s) per Specification 4.7.9.5, or 2) within 1 hour, verify that the fixed fire suppression system(s) that also protects the affected area(s) serviced by the fire hose station(s) is OPERABLE.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.9.5 Each of the fire hose stations shown in Table 3.7-7 shall be demonstrated OPERABLE:

- a. At least once per 31 days by a visual inspection of the fire hose stations to assure all required equipment is at the station.
- b. At least once per 18 months by:
  1. Removing the hose for visual inspection and re-racking, and
  2. Replacement of all degraded gaskets in couplings.
- c. At least once per 3 years by:
  1. Partially opening each hose station valve to verify OPERABILITY and no flow blockage.
  2. Conducting a hose hydrostatic test at a pressure of 150 psig or at least 50 psi greater than the maximum pressure available at that hose station, whichever is greater.

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TABLE 3.7-7

FIRE HOSE STATIONS

|   |                                |
|---|--------------------------------|
| Auxiliary Building**                                      | Minimum 12*                    |
| Access to Diesel Generator Rooms                          | Hose Station No. 7             |
| Access to Switchgear Rooms                                | Hose Station No. 45 or No. 212 |
| Access to Control Room                                    | Hose Station No. 65 or No. 81  |
| Access to Pressurizer Heater Transformer Room             | Hose Station No. 12            |
| Access to ESW Pump Rooms, MCC Room, and ESW Basement Area | Hose Station No. 20            |
| Access to Auxiliary Feed Pump Rooms                       | Hose Station No. 9             |

\*Shared with Unit 1

\*\*Within the Controlled Area

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PLANT SYSTEMS

3/4.7.10 FIRE RATED ASSEMBLIES

LIMITING CONDITION FOR OPERATION

3.7.10 Fire rated assemblies shall be OPERABLE as follows:

- a. All fire rated assemblies (walls, floor/ceilings, and cable tray and conduit enclosures), separating safe shutdown fire areas or separating portions of redundant systems important to safe shutdown within a fire area shall be OPERABLE.
- b. All penetration sealing devices (fire door assemblies, fire dampers, and penetration seals for cable, around conduit, cable tray, piping and ventilation duct work) in the above fire rated assemblies shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

- a. With any of the above fire rated assemblies and/or sealing devices inoperable, within 1 hour: 1) verify that the fire detectors and/or fire suppression system on at least one side of the inoperable assembly are OPERABLE and establish an hourly fire watch patrol, or 2) establish a continuous fire watch patrol on one side of the penetration, or 3) secure the inoperable sealing device\* in the closed position, and establish an hourly fire watch patrol, or (4) for fire dampers and normally locked fire doors, secure the inoperable sealing device in the closed position.\*\*\*
- b. The provisions of Specification 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.10.1 At least once per 18 months the above required fire rated assemblies and penetration sealing devices shall be verified OPERABLE by:

- a. Performing a visual inspection of all accessible surfaces, of each fire rated assembly, for open penetrations.
- b. Performing a visual inspection of each fire damper and its associated hardware.
- c. Performing a Functional Test, requiring closure testing on 10% of the fire dampers.\*\*

\*Except fire doors on Turbine Driven Auxiliary Feedwater Pump and Hallway enclosures which must remain open due to HELB considerations.

\*\*This testing is in addition to the testing required by Specifications 4.7.9.3.c.1 and 4.7.9.4.b.1.

\*\*\*Option (4) should be used for fire dampers only after the appropriate HVAC and radiological reviews have been performed.



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## PLANT SYSTEMS

### SURVEILLANCE REQUIREMENTS Con't

- d. Performing a visual inspection of at least 10 percent of each type of penetration seal (cable, around conduit, cable tray, piping, and ventilation duct work penetration seals; and cable tray and conduit enclosures required for Appendix R compliance). If apparent changes in appearance or abnormal degradations are found that could indicate a plant wide trend, a visual inspection of an additional 10 percent of each type of penetration seal shall be made. This inspection process shall continue until a 10 percent sample with no apparent changes in appearance or abnormal degradation is found.

4.7.10.2 Each of the required fire doors shall be verified OPERABLE by:

- a. Inspecting the hold-open, release, and closing mechanism and latches at least once per 6 months.
- b. Verifying the position of each closed fire door at least once per 24 hours.
- c. Verifying that doors with hold-open and release mechanisms are free of obstructions at least once per 24 hours.
- d. Verifying the position of each locked closed fire door at least once per 7 days.

4.7.10.3 Following repairs or maintenance on an above required fire rated assembly or sealing device, the fire rated assembly or sealing device shall be verified to be operable before exiting the applicable action statement.-

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## PLANT SYSTEMS

### BASES

#### 3/4.7.6 ESF VENTILATION SYSTEM

The OPERABILITY of the ESF ventilation system ensures that adequate cooling is provided for ECCS equipment and that radioactive materials leaking from the ECCS equipment within the pump rooms following a LOCA are filtered prior to reaching the environment. The operation of this system and the resultant effect on offsite dosage calculations were assumed in the accident analyses.

The 1980 version of ANSI N510 is used as a testing guide. This standard, however, is intended to be rigorously applied only to systems which, unlike the ESF ventilation system, are designed to ANSI N509 standards. For the specific case of the air-aerosol mixing uniformity test required by ANSI N510 as a prerequisite to in-place leak testing of charcoal and HEPA filters, the air-aerosol uniform mixing test acceptance criteria were not rigorously met. For this reason, a statistical correction factor will be applied to applicable surveillance test results where required.

#### 3/4.7.7 HYDRAULIC SNUBBERS

All snubbers are required OPERABLE to ensure that the structural integrity of the reactor coolant system and all other safety related systems is maintained during and following a seismic or other event initiating dynamic loads. Snubbers excluded from this inspection program are those installed on non-safety 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.

The visual inspection frequency is based upon maintaining a constant level of snubber protection to systems. The method for determining the next interval for the visual inspection of snubbers is provided based upon the number of unacceptable snubbers found during the previous inspection, the category size for each snubber type, and the previous inspection interval per NRC Generic Letter 90-09. A snubber is considered unacceptable if it fails to satisfy the acceptance criteria of the visual inspection. Any inspection whose results required a shorter inspection interval will override the previous schedule.

When the cause of the rejection of a snubber is clearly established and remedied for that snubber and for any other snubbers that may be generically susceptible, and verified by inservice functional testing, that snubber may be exempted from being counted as inoperable. Generically susceptible snubbers are those which are of a specific make or model and have the same design features directly related to rejection of the snubber by visual inspection, or are similarly located or exposed to the same environmental conditions such as temperature, radiation, and vibration.

The service life of a snubber is evaluated via manufacture's input and information through consideration of the snubber service conditions and associated installation and maintenance records (newly installed snubber, seal replaced, spring replaced, in high radiation area, in high temperature area, etc...). The requirement to monitor the snubber service life is



## PLANT SYSTEMS

### BASES

included to ensure that the snubbers periodically undergo a performance evaluation in view of their age and operating conditions. These records will provide statistical bases for future consideration of snubber service life. The requirements for the maintenance of records and the snubber service life review are not intended to affect plant operation.

The number of snubbers to be functionally tested during each surveillance is based on calculations performed to allow extension of the surveillance interval from 18 months to 24 months, and therefore, the number of snubbers functionally tested deviates from the number required by the Westinghouse Standard Technical Specifications (NUREG-0452, Revision 4).

A list of individual snubbers with detailed information of snubber location and size and of system affected shall be available at the plant in accordance with Section 50.71(c) of 10 CFR Part 50. The accessibility of each snubber shall be determined and approved by the Plant Nuclear Safety Review Committee. The determination shall be based upon the existing radiation levels and the expected time to perform a visual inspection in each snubber location as well as other factors associated with accessibility during plant operations (e.g., temperature, atmosphere, location, etc.), and the recommendations of Regulatory Guides 8.8 and 8.10. The addition or deletion of any snubber shall be made in accordance with Section 50.59 of 10 CFR Part 50.

### 3/4.7.8 SEALED SOURCE CONTAMINATION

The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(c) limits for plutonium. This limitation will ensure that leakage from byproduct, source and special nuclear material sources will not exceed allowable intake values.

### 3/4.7.9 FIRE SUPPRESSION SYSTEMS

The OPERABILITY of the fire suppression systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety related equipment is located. The fire suppression system consists of the water system, spray and/or sprinklers, CO<sub>2</sub>, Halon and fire hose stations. The collective capability of the fire suppression systems is adequate to minimize potential damage to safety related equipment and is a major element in the facility fire protection program.

In the event that one or more CO<sub>2</sub> Suppression System requiring automatic actuation must be isolated for personal protection to permit entry for routine tours, maintenance, construction, or surveillance testing in the protected area, the fire detection system(s) required to be operable by Specification 3.3.3.7 shall be verified to be operable. Isolation of an automatic CO<sub>2</sub> suppression system temporarily puts this system in a manual actuation mode. Reliance on the fire detection system, in conjunction with the ability to manually discharge the CO<sub>2</sub> suppression system will provide adequate fire protection for periods when personnel are required to work in these areas.



## ADMINISTRATIVE CONTROLS

6.10.2 The following records shall be retained for the duration of the Facility Operating License:

- a. Records and drawing changes reflecting unit design modifications made to systems and equipment described in the Final Safety Analysis Report.
- b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.
- c. Records of radiation exposure for all individuals entering radiation control areas.
- d. Records of gaseous and liquid radioactive material released to the environs.
- e. Records of transient or operational cycles for those facility components identified in Table 5.7-1.
- f. Records of reactor tests and experiments.
- g. Records of training and qualification for current members of the Plant Staff.
- h. Records of in-service inspections performed pursuant to these Technical Specifications.
- i. Records of Quality Assurance activities required by the QA Manual.
- j. Records of reviews performed for changes made to procedures or equipment or review of tests and experiments pursuant to 10 CFR 50.59.
- k. Records of meetings of the PNSRC and the NSDRC.
- l. Records of radioactive shipments.
- m. Records of the service lives of hydraulic snubbers including the date at which service life commences and associated installation and maintenance records.

## 6.11 RADIATION PROTECTION PROGRAM

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

## 6.12 HIGH RADIATION AREA

- 6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR 20, each high radiation area in which the intensity of radiation is 1000 mrem/hr or less shall be barricaded and



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ATTACHMENT 1 TO AEP:NRG:1137B

10 CFR 50.92 ANALYSIS FOR CHANGES  
TO THE DONALD C. COOK NUCLEAR PLANT  
UNITS 1 AND 2 TECHNICAL SPECIFICATIONS

A. DESCRIPTION OF CHANGES AND REASONS FOR CHANGES

This amendment request proposes various changes to the technical specifications (T/S) that are administrative or editorial in nature. The changes are intended to correct various oversights or errors in the present document, or to update the document to reflect current plant conditions. The changes are discussed individually below.

1. Erroneous Description of Operator Action for Rollup Doors

Unit: 1 and 2

T/S: Bases 3/4.9.12 (Units 1 and 2)

Page: B 3/4 9-3 (Units 1 and 2)

In Amendments 124 (Unit 1) and 111 (Unit 2) a clarification was added to the Bases for the storage pool ventilation system T/S to indicate that the crane bay rollup door and the drumming room rollup doors could be opened under administrative control during movement of fuel within the storage pool or during crane operation with loads over the pool. The clarification added to the bases contains an example of an acceptable administrative control, i.e., stationing of an individual at the door during these operations that would be in communication with personnel in the storage pool area and could close the door in the event of a fuel handling emergency. However, the example was inadvertently worded such that the individual stationed at the door is described as having to open the door in the event of an emergency, rather than close it. Since the purpose of stationing the individual at the door would be to close the door to prevent radioactive gases from escaping through the door, the present description is clearly erroneous. We are proposing to change the wording to indicate that the individual is to close the door in the event of an emergency.

2. Incorrect Unit Numbers for Fire Detection Systems and Incorrect Room Description

Unit: 1 and 2

T/S: 3.3.3.8, Table 3.3-10 (Unit 1), 3.3.3.8, Table 3.3-11 (Unit 2)

Page: 3/4 3-53a (Unit 1), 3/4 3-52 (Unit 2)

Unit 1 Table 3.3-10 (Unit 1 and Common Fire Detection Systems) incorrectly identifies some Unit 1 charcoal filter ventilation units. The prefix given in Table 3.3-10 identifies these ventilation units as being in Unit 2, when they actually are in Unit 1. The current listing of the incorrect units is as follows:



### U1 Charcoal Filter Ventilation Units

- a) 2-HV-AES-1
- b) 2-HV-AES-2
- c) 2-HV-ACRF
- d) 2-HV-CIPX
- e) 2-HV-CPR

The listing of these units is corrected by changing the first digit from a "2" to a "1." Unit 2 has analogous ventilation units, which are correctly listed in Unit 2 Table 3.3-11.

One editorial change is proposed to Unit 2 Table 3.3-11 on page 3/4 3-52. The table listing that currently reads "U2 Diesel Fuel Oil XFMR. Rm" is being changed to U2 Diesel Fuel Oil Transfer Pump Rm." The room contains the fuel oil transfer pumps, not transformers. The analogous Unit 1 room is appropriately described in Unit 1 Table 3.3-10. This change corrects the error in the Unit 2 table and makes the listings consistent between the units.

### 3. Correction of Figure Reference

Unit: 1 and 2  
T/S: 3.11.2.4 (Units 1 and 2)  
Page: 3/4 11-12 (Units 1 and 2)

In the first sentence of the limiting condition for operation, reference is made to "Figure 5.1.3." The actual figure reference is "Figure 5.1-3."

### 4. Reference to Correct Version of FSAR

Unit: 1 and 2  
T/S: 6.2.1.a (Units 1 and 2)  
Page: 6-1 (Units 1 and 2)

T/S 6.2.1.a currently states that organizational charts will be documented in the FSAR. In practice, the organizational charts are documented in the Updated FSAR (UFSAR). Therefore, we are proposing to change the reference from "FSAR" to "UFSAR."

5. Reference to 10 CFR 55

Unit: 1 and 2

T/S: 6.4 (Units 1 and 2)

Page: 6-4 (Units 1 and 2)

T/S 6.4 (Training) references Appendix A to 10 CFR 55. 10 CFR 55 has been rewritten, and the material formerly included in Appendix A has been incorporated into the body of 10 CFR 55. Therefore, we are proposing to change the reference to 10 CFR 55.

6. Description of P-8 Interlock

Unit: 1 and 2

T/S: 3.3.1.1, Table 3.3-1 (Units 1 and 2)

Page: 3/4 3-9 (Unit 1), 3/4 3-8 (Unit 2)

As currently written, the description of the P-8 interlock is as follows:

P-8 prevents or defeats the automatic block of reactor trip caused by either a low coolant flow condition in a single loop or a reactor coolant pump breaker trip on a single loop. (emphasis added)

In T/S amendment 140 (Unit 1) and 127 (Unit 2), the NRC approved deletion of the aspect of the P-8 interlock function involving reactor trip on reactor coolant pump breaker trip in a single loop. Prior to Amendment 140/127, the reactor coolant pump breaker position provided an anticipatory reactor trip for low flow in one loop in a one out of four trip logic above the P-8 interlock. Via amendment 140/127, this was modified such that it is a two out of four logic for all power levels above the P-7 permissive. This change was made to avoid a spurious reactor trip on a false signal from a single reactor coolant pump breaker auxiliary contact.

The change to the reactor trip logic was appropriately reflected in changes to Functional Unit 20 of T/S Table 3.3-1. However, the change was not captured in the description of the P-8 interlock included at the end of that table. In order to correct this oversight, we are proposing to reword the P-8 interlock description to delete reference to the reactor trip on reactor coolant pump breaker trip on a single loop. The revised description is as follows:

P-8 prevents or defeats the automatic block of reactor trip caused by a low coolant flow condition in a single loop.

One minor editorial change is proposed in conjunction with this change. We are proposing to delete the word "POWER" in the description of the P-8 interlock in Unit 1 so that the Unit 1 and Unit 2 descriptions are identical.

7. Correction of Meteorological Tower Location

Unit: 1 and 2

T/S: 5.8.1 (Unit 1), 5.5.1 (Unit 2), Figure 5.1-1 (Units 1 and 2)  
Page: 5-9 and 5-2 (Unit 1), 5-5 and 5-2 (Unit 2)

T/S 5.8.1 (Unit 1) and 5.5.1 (Unit 2), entitled "Meteorological Tower Location," states that the meteorological tower location is depicted in Figure 5.1-1. Figure 5.1-1 shows a meteorological tower located between the plant and Interstate 94. This was the correct location for the old meteorological tower. However, a new meteorological tower has been installed, as approved by the NRC via Amendment 127 (Unit 1) and 113 (Unit 2). The location of the new tower is correctly shown on Figure 5.1-3.

In order to correct this error, we are proposing to change the figure reference for T/S 5.8.1 (Unit 1) and 5.5.1 (Unit 2) from Figure 5.1-1 to Figure 5.1-3, and to remove the meteorological tower depiction from Figure 5.1-1.

8. Removal of Outdated Footnotes for Post-Accident Instrumentation

Unit: 1 and 2

T/S: 3/4.3.3.8, Tables 3.3-11 and 4.3-7, and Bases 3/4.3.3.8 (Unit 1)

3/4.3.3.6, Tables 3.3-10 and 4.3-10

Page: 3/4 3-55 and 56, B 3/4 3-6 (Unit 1)

3/4 3-46 and 47 (Unit 2)

We are proposing to remove the footnotes for the containment sump level and containment water level instruments which state that the requirements for these instruments will become effective after the level transmitters are modified or replaced and become operational. The instruments have been in service for several years, and therefore the footnote is no longer needed. We are also modifying the Unit 1 Bases section to remove discussion related to these footnotes.

We are also proposing to delete the quintuple footnote for Table 3.3-11 (Unit 1) and Table 3.3-10 (Unit 2) associated with the safety valve position indicator acoustic monitor. These footnotes were added in Amendment 161 (Unit 1) and 145 (Unit 2), and provided exemptions from the T/S requirements associated with these monitors for the previous fuel cycles. An identical change was proposed in our letter AEP:NRC:1170D, dated August 12, 1992, but is repeated here for consistency.

Additionally, we are proposing to delete footnote 4 for Unit 2, Table 4.3-10. This footnote indicated that surveillances associated with functional Unit 15 (Core Exit Thermocouples) were not required until after the 1988 refueling outage. This footnote is no longer needed, and therefore is proposed for deletion.

9. Correction of Error in Storage Pool Ventilation System Flow Rate

Unit: 2  
T/S: 4.9.12.b.4  
Page: 3/4 9-13

We are proposing to correct a typographical error in the storage pool ventilation system flow rate in T/S 4.9.12.b.4. The flow rate is listed as "30,0000 cfm." This value contains an extra "0." The correct flow rate is 30,000 cfm, as indicated elsewhere in T/S 4.9.12 and in the Unit 1 T/S.

10. Correction of Crane Travel Surveillance Requirements

Unit: 1 and 2  
T/S: 4.9.7.1 (Units 1 and 2)  
Page: 3/4 9-8 (Unit 1), 3/4 9-7 (Unit 2)

T/S 4.9.7.1 requires demonstration of operability of the auxiliary building crane interlocks and physical stops which prevent crane travel with loads in excess of 2,500 pounds over fuel assemblies. Although there are physical stops on the crane trolley and bridge rails, these stops are not in locations that prevent crane travel over fuel assemblies. The protection required by the T/S is accomplished through the crane interlocks. Therefore, we are proposing to delete reference to the physical stops so that the T/S accurately reflects the crane design.

11. Removal of Unnecessary Bases Material on APDMS

Unit: 2

T/S: Bases 3/4.3.3.7

Page: B 3/4 3-3

Unit 2 Bases section 3/4.3.3.7 contains explanatory material for the Axial Power Distribution Monitoring System (APDMS). However, T/S Amendment 82 eliminated T/S 3/4.3.3.7, and the equipment was subsequently removed. The Bases section should have been removed at that time, but was not due to an oversight. Therefore, we are proposing to delete the Bases text.

12. Correction of Control Room Cable Vault Fire Protection Requirements

Unit: 1

T/S: 3.7.9.3, Table 3.7-6

Page: 3/4 7-41

We are proposing to modify the footnote associated with the control room cable vault (backup) CO<sub>2</sub> system. Currently, the footnote states that the CO<sub>2</sub> system is only required to be operable when the cable vault halon system is operable. Since the CO<sub>2</sub> system is a backup to the halon system, the footnote should state that the CO<sub>2</sub> system is required when the cable vault halon system is inoperable. The wording is correct in the corresponding Unit 2 page.

13. Correction of Automatic Trip Logic Action

Unit: 2

T/S: 3.3.1.1, Table 3.3-1

Page: 3/4 3-4

Functional Unit 22 (Automatic Trip Logic) of Table 3.3-1 (Reactor Trip System Instrumentation) needs clarification in the "Applicable Modes" and "Action" columns. Specifically, we are proposing to revise these columns for Functional Unit 22 such that it is clear that Action 1 applies in Modes 1 and 2, and Action 14 in Modes 3, 4, and 5.

The "Applicable Modes" versus "Action" listing is correctly shown in the Unit 1 T/S. The Unit 2 T/S was corrected in Amendment 107. However, the error was accidentally reintroduced in Amendment 127 due to an overlap of submittals.



B. 10 CFR 50.92 Criteria

Per 10 CFR 50.92, a proposed amendment does not involve a significant hazards consideration if the change does not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated,
2. Create the possibility of a new or different kind of accident from any accident previously evaluated, or
3. Involve a significant reduction in a margin of safety.

Criterion 1

The proposed changes are administrative or editorial in nature. The purpose is to correct errors in the T/S, or to make the T/S more consistent with plant design or operation. No changes in physical design of the plant or changes in the manner in which the plant is operated will result from these changes. Therefore, the changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

Criterion 2

The proposed changes are administrative or editorial in nature. The purpose is to correct errors in the T/S, or to make the T/S more consistent with plant design or operation. No changes in physical design of the plant or changes in the manner in which the plant is operated will result from these changes. Therefore, the changes do not create the possibility of a new or different kind of accident from any previously analyzed.

Criterion 3

The proposed changes are administrative or editorial in nature. The purpose is to correct errors in the T/S, or to make the T/S more consistent with plant design or operation. No changes in physical design of the plant or changes in the manner in which the plant is operated will result from these changes. Therefore, the changes do not involve a significant reduction in a margin of safety.



Lastly, we note that the NRC has provided guidance concerning the determination of significant hazards consideration by providing examples (48 FR 14870) of amendments considered not likely to involve significant hazards consideration. The first of these examples refers to changes that are administrative in nature: for example, changes to achieve consistency throughout the T/S, correction of an error, or a change in nomenclature. As discussed above, these changes all fit within this description. Thus, we conclude that the example cited is applicable and that the changes should not involve significant hazards consideration.

ATTACHMENT 2 TO AEP:NRG:1137B

EXISTING TECHNICAL SPECIFICATION  
PAGES MARKED TO REFLECT PROPOSED CHANGES

11/11/11

