

---

## Technical Specifications Task Force Improved Standard Technical Specifications Change Traveler

---

### Spent Fuel Storage Rack Neutron Absorber Monitoring Program

NUREGs Affected:  1430  1431  1432  1433  1434  2194

---

Classification: 1) Technical Change

Recommended for CLIP?: Yes

Correction or Improvement: Improvement

NRC Fee Status: Not Exempt

Changes Marked on ISTS Rev: 4.0

---

See attached justification.

---

### Revision History

#### OG Revision 0

**Revision Status: Closed**

---

Revision Proposed by: TSTF

Revision Description:  
Original Issue

---

#### TSTF Review Information

TSTF Received Date: 18-Apr-16

Date Distributed for Review 18-Apr-16

TSTF Comments:  
(No Comments)

TSTF Resolution: Approved for Use

Date: 26-Apr-16

---

#### TSTF Revision 1

**Revision Status: Active**

---

Revision Proposed by: TSTF

Revision Description:

Revised to incorporate reference to NEI 16-03-A, "Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools," Revision 0, May 2017.

Traveler changed from a "T" traveler to an "A" traveler.

Added NUREG-2194 (AP1000 STS) markups.

---

#### Owners Group Review Information

Date Originated by OG: 12-Sep-17

Owners Group Comments  
(No Comments)

Owners Group Resolution: Approved Date: 29-Sep-17

---

#### TSTF Review Information

---

31-Oct-17

---

**TSTF Revision 1****Revision Status: Active**

---

TSTF Received Date: 02-Oct-17

Date Distributed for Review 02-Oct-17

TSTF Comments:

(No Comments)

TSTF Resolution: Approved

Date: 31-Oct-17

---

---

**Affected Technical Specifications**

---

5.5.21	Spent Fuel Rack Neutron Absorber Monitoring Program	NUREG(s)- 1430 1431 1432 Only
	Change Description: New specification	
5.5.18	Spent Fuel Rack Neutron Absorber Monitoring Program	NUREG(s)- 1433 1434 Only
	Change Description: New specification	
5.5.15	Spent Fuel Rack Neutron Absorber Monitoring Program	NUREG(s)- 2194 Only
	Change Description: New specification	

---

---

*31-Oct-17*

## 1. SUMMARY DESCRIPTION

The proposed change revises Technical Specifications (TS) Section 5.5, "Programs and Manuals," to add a new program titled, "Spent Fuel Storage Rack Neutron Absorber Monitoring Program." The purpose of the program is to ensure the neutron absorber density assumed in the Spent Fuel Pool (SFP) storage rack nuclear criticality analyses remains conservative with respect to the actual plant conditions. The program is optional and may be adopted by licensees that have licensing requirements for a spent fuel pool neutron absorber monitoring program.

The proposed change adds a new program to the Improved Standard Technical Specifications (ISTS), NUREG-1430, "Standard Technical Specifications - Babcock & Wilcox plants," NUREG-1431, "Standard Technical Specifications - Westinghouse plants," NUREG-1432, "Standard Technical Specifications - Combustion Engineering plants," NUREG-1433, "Standard Technical Specifications - General Electric BWR/4 Plants<sup>1</sup>," NUREG-1434, "Standard Technical Specifications, General Electric BWR/6 Plants," and NUREG-2194, "Standard Technical Specifications - Westinghouse Advanced Passive 1000 (AP1000<sup>®</sup>) plants."

## 2. DETAILED DESCRIPTION

### 2.1. System Description

Neutron absorbing materials installed in Spent Fuel Pool (SFP) storage racks ensure that the effective neutron multiplication factor ( $k_{eff}$ ) does not exceed the values and assumptions used in the criticality analysis. This analysis is the basis, in part, for demonstrating compliance with plant TS and U.S. Nuclear Regulatory Commission (NRC) regulations. Degradation or deformation of the credited neutron absorbing materials may reduce safety margin and potentially challenge the subcriticality requirement.

### 2.2. Current Technical Specifications Requirements

ISTS Chapter 4, "Design Features," Section 4.3, "Fuel Storage," provides limits on the SFP storage racks, including limits on  $k_{eff}$  in various conditions. Licensees may have credited neutron absorbing materials in the SFP storage racks to meet these requirements. There are currently no requirements in the ISTS that require monitoring the condition of the neutron absorber materials in the SFP.

### 2.3. Reason for the Proposed Change

SFP storage racks were originally designed to preclude a criticality event through geometric separation and neutronic decoupling of the spent fuel assemblies by a large distance, with no neutron absorbers. However, as reprocessing was no longer a viable option and the federal used

---

<sup>1</sup> NUREG 1433 is based on the BWR/4 plant design, but is also representative of the BWR/2, /3, and, in some cases, BWR/5 designs. NUREG 1434 is based on the BWR/6 plant design, and is representative, in some cases, of the BWR/5 design.

fuel repository was delayed, nuclear plants were faced with storing a greater number of discharged spent fuel assemblies in the SFP. Because the original racks utilized geometric spacing as the primary method of criticality control, a large part of the spent fuel pool was not being efficiently utilized for storage.

Beginning in the late 1970s, the nuclear industry proposed installing high-density storage racks in the SFP to accommodate the discharged fuel. Because the fuel assemblies were placed closer together, fixed neutron absorbers were installed between each storage cell to limit the reactivity. Many types of neutron absorbers have been used, but in all cases, the primary neutron absorbing isotope is  $^{10}\text{B}$  (an isotope of boron), which has a large thermal neutron absorption cross-section and is ideal for absorbing neutrons in the SFP.

With the use of fixed neutron absorbers, the NRC required monitoring of the behavior of the neutron absorber via coupons or in-situ measurements. The frequency of inspections and criteria for inspection were determined on a case-by-case basis, depending upon the type of material, historical operating experience for the specific material to be used, and other factors during the license amendment request process. In some cases, sufficient operating experience was acquired over several decades to allow individual licensees not to need coupons or in-situ examinations, but to rely on the collective industry experience.

In order to bring standardization and consistency to SFP neutron absorbing material monitoring, the Nuclear Energy Institute (NEI) developed NEI 16-03-A, "Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools," Revision 0, which was approved by the NRC in March 2017. The guidance describes acceptable methods that may be used to monitor fixed neutron absorbers in SFPs to ensure that aging effects, corrosion, and other degradation mechanisms are identified and evaluated prior to loss of the required capability.

The proposed traveler provides a standardized TS program requirement that implements the monitoring program in NEI 16-03-A.

#### **2.4. Description of the Proposed Change**

The proposed change adds the following specification to Section 5.5, "Programs and Manuals."

##### **5.5.XX [ Spent Fuel Storage Rack Neutron Absorber Monitoring Program**

This Program provides controls for monitoring the condition of the neutron absorber used in the spent fuel pool storage racks to verify the neutron absorber density is consistent with the assumptions in the spent fuel pool criticality analysis. The program shall be in accordance with NEI 16-03-A, "Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools," Revision 0, May 2017[, with the following exceptions:

1. ].]

The specification number for NUREG-1430, NUREG-1431, and NUREG-1432 is 5.5.21. The specification number for NUREG-1433 and NUREG-1434 is 5.5.18. The specification number

for NUREG-2194 is 5.5.15. The plant-specific specification number will depend on the current TS.

Should a licensee request an exception to NEI 16-03-A, optional provisions are made to capture those changes.

The specification is in brackets, indicating that its applicability is plant-specific. Only plants that credit neutron absorbing materials in their SFP criticality analysis require a monitoring program. In addition, plants that credit neutron absorbing materials may have adopted alternate TS or license condition monitoring requirements. For those plants, this program is unnecessary.

A model application is included. It is anticipated that licensees may request adoption of the proposed change as part of a larger license amendment request related to SFP storage and a revised SFP critical analysis. However, the model may be used by licensees desiring to adopt the traveler in lieu of existing requirements.

### **3. TECHNICAL EVALUATION**

The TS Section 5.5 program imposes a requirement to have a licensee-controlled program that is in accordance with NEI 16-03-A, "Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools," Revision 0, May 2017. In the Safety Evaluation dated March 3, 2017, the Nuclear Regulatory Commission (NRC) approved NEI 16-03 and accepted the document for referencing in licensing applications for nuclear power plants. NEI 16-03-A and the NRC's Safety Evaluation provide the technical justification for the proposed program.

### **4. REGULATORY EVALUATION**

Section IV, "The Commission Policy," of the "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" (58 Federal Register 39132), dated July 22, 1993, states in part:

The purpose of Technical Specifications is to impose those conditions or limitations upon reactor operation necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety by identifying those features that are of controlling importance to safety and establishing on them certain conditions of operation which cannot be changed without prior Commission approval.

...[T]he Commission will also entertain requests to adopt portions of the improved STS even if the licensee does not adopt all STS improvements.

...The Commission encourages all licensees who submit Technical Specification related submittals based on this Policy Statement to emphasize human factors principles.

...In accordance with this Policy Statement, improved STS have been developed and will be maintained for each NSSF owners group. The Commission encourages licensees to use the improved STS as the basis for plant-specific Technical Specifications.

...[I]t is the Commission's intent that the wording and Bases of the improved STS be used ... to the extent practicable.

As described in the Commission's "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors," recommendations were made by NRC and industry task groups for new STS that include greater emphasis on human factors principles in order to add clarity and understanding to the text of the STS, and provide improvements to the Bases of STS, which provides the purpose for each requirement in the specification. Improved vendor-specific STS were developed and initially issued by the NRC in September 1992.

Additionally, 10 CFR 50.36(b) requires:

Each license authorizing operation of a ... utilization facility ... will include technical specifications. The technical specifications will be derived from the analyses and evaluation included in the safety analysis report, and amendments thereto, submitted pursuant to [10 CFR] 50.34 ["Contents of applications; technical information"]. The Commission may include such additional technical specifications as the Commission finds appropriate.

The categories of items required to be in the TSs are provided in 10 CFR 50.36(c). As required by 10 CFR 50.36(c)(2)(i), the TSs will include LCOs, which are the lowest functional capability or performance levels of equipment required for safe operation of the facility. Per 10 CFR 50.36(c)(2)(i), when an LCO of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the TSs until the condition can be met.

The regulation at 10 CFR 50.36(c)(4) requires TSs to include those design features of the facility such as materials of construction and geometric arrangements, which, if altered or modified, would have a significant effect on safety and are not covered in categories described in paragraphs (c) (1), (2), and (3) of that section.

The regulation at 10 CFR 50.36(c)(5) requires TSs to include administrative controls, which are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner.

Per 10 CFR 50.90, whenever a holder of a license desires to amend the license, application for an amendment must be filed with the Commission, fully describing the changes desired, and following as far as applicable, the form prescribed for original applications.

Per 10 CFR 50.92(a), in determining whether an amendment to a license will be issued to the applicant, the Commission will be guided by the considerations which govern the issuance of initial licenses to the extent applicable and appropriate.

The NRC staff's guidance for the review of TSs is in Chapter 16, "Technical Specifications," of NUREG-0800, Revision 3, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants" (SRP), dated March 2010 (ADAMS Accession No. ML100351425). As described therein, as part of the regulatory standardization effort, the NRC staff has prepared STS for each of the light-water reactor nuclear designs.

In conclusion, based on the considerations discussed above, the proposed revision does not alter the current manner of operation and (1) there is reasonable assurance that the health and safety of the public will not be endangered by continued operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the approval of the proposed change will not be inimical to the common defense and security or to the health and safety of the public.

## **5. REFERENCES**

1. Letter from Kevin Hsueh (NRC) to Kristopher Cummings (NEI), "Final Safety Evaluation for Nuclear Energy Institute Topical Report NEI 16-03 – Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools," March 3, 2017 (ADAMS Accession No. ML16354A486).

DRAFT

TSTF-557, Rev. 1

**Model Application**

[DATE]

10 CFR 50.90

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

DOCKET NO.PLANT NAME

[50][52]-[xxx]

SUBJECT: Application to Revise Technical Specifications to Adopt  
TSTF-557 Revision 1, "Spent Fuel Storage Rack Neutron  
Absorber Monitoring Program"

Pursuant to 10 CFR 50.90, [LICENSEE] is submitting a request for an amendment to the Technical Specifications (TS) for [PLANT NAME, UNIT NOs.].

[LICENSEE] requests adoption of TSTF-557 Revision 1, "Spent Fuel Storage Rack Neutron Absorber Monitoring Program." The proposed change revises TS Section 5.5, "Programs and Manuals," to add a new program titled, "Spent Fuel Storage Rack Neutron Absorber Monitoring Program." The program ensures the neutron absorber density assumed in the Spent Fuel Pool (SFP) storage rack nuclear criticality analyses remains conservative with respect to the actual plant conditions.

The enclosure provides a description and assessment of the proposed changes. Attachment 1 provides the existing TS pages marked to show the proposed changes. Attachment 2 provides revised (clean) TS pages.

Approval of the proposed amendment is requested by [date]. Once approved, the amendment shall be implemented within [ ] days.

There are no regulatory commitments made in this submittal.

In accordance with 10 CFR 50.91, [LICENSEE] is notifying the State of [name of state] of this LAR by transmitting a copy of this letter and enclosure to the designated State Official.

[In accordance with 10 CFR 50.30(b), a license amendment request must be executed in a signed original under oath or affirmation. This can be accomplished by attaching a notarized affidavit confirming the signature authority of the signatory, or by including the following statement in the cover letter: "I declare under penalty of perjury that the foregoing is true and correct. Executed on (date)." The alternative statement is pursuant to 28 USC 1746. It does not require notarization.]

# DRAFT

TSTF-557, Rev. 1

If you should have any questions regarding this submittal, please contact [NAME, TELEPHONE NUMBER].

Sincerely,

[Name, Title]

Enclosure: Description and Assessment

Attachments: 1. Proposed Technical Specification Changes (Mark-Up)  
2. Revised Technical Specification Pages

[The attachments are to be provided by the licensee and are not included in the model application.]

cc: NRC Project Manager  
NRC Regional Office  
NRC Resident Inspector  
State Contact

## ENCLOSURE

### DESCRIPTION AND ASSESSMENT

#### 1.0 DESCRIPTION

[LICENSEE] requests adoption of TSTF-557 Revision 1, "Spent Fuel Storage Rack Neutron Absorber Monitoring Program." The proposed change revises Technical Specifications (TS) Section 5.5, "Programs and Manuals," to add a new program titled, "Spent Fuel Storage Rack Neutron Absorber Monitoring Program." The program ensures the neutron absorber density assumed in the Spent Fuel Pool (SFP) storage rack nuclear criticality analyses remains conservative with respect to the actual plant conditions. The program requires [LICENSEE] to implement a program consistent with NEI 16-03-A, "Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools," which was approved on March 3, 2017 (ADAMS Accession No. ML16354A486).

#### 2.0 ASSESSMENT

##### 2.1 Applicability of Safety Evaluation

[LICENSEE] has reviewed the NRC safety evaluation for TSTF-557 Revision 1 provided to the Technical Specifications Task Force in a letter dated [DATE]. This review included a review of the NRC staff's evaluation, as well as the information provided in TSTF-557 Revision 1. [As described herein,] [LICENSEE] has concluded that the justifications presented in TSTF-557 Revision 1 and the safety evaluation prepared by the NRC staff are applicable to [PLANT, UNIT NOS.] and justify this amendment for the incorporation of the changes to the [PLANT] TS.

##### 2.2 Optional Changes and Variations

[LICENSEE is not proposing any variations from the TS changes described in TSTF-557 or the applicable parts of the NRC staff's safety evaluation dated [DATE].] [LICENSEE is proposing the following variations from the TS changes described in TSTF-557 or the applicable parts of the NRC staff's safety evaluation: describe the variations]

[The [PLANT] TS utilize different [numbering][and][titles] than the Standard Technical Specifications on which TSTF-557 was based. Specifically, [describe differences between the plant-specific TS numbering and/or titles and the TSTF-557 numbering and titles.] These differences are administrative and do not affect the applicability of TSTF-557 to the [PLANT] TS.]

[The [PLANT] TS contain requirements that differ from the Standard Technical Specifications on which TSTF-557 was based, but are encompassed in the TSTF-557 justification. [Describe differences and why TSTF-557 is still applicable.]]

[LICENSEE is proposing the following exceptions from NEI 16-03-A, which are included in the proposed TS program. [DESCRIBE AND JUSTIFY EACH EXCEPTION.] ]

{Reviewer's Note: The following variation is included for use by licensees that currently have neutron absorber monitoring requirements in their license and desire to replace the existing program, TS requirement, or license condition with the proposed program.} [The [PLANT] [TS / Operating License] contain Spent Fuel Pool storage rack neutron absorber material monitoring requirements approved by the NRC in [Reference]. [Describe, at a high level, the existing requirements and location.] [LICENSEE] proposes to replace the existing requirements with the TS Administrative Controls program in TSTF-557. This is acceptable as the NRC has reviewed and approved NEI 16-03-A and determined it is an adequate monitoring program for SFP storage rack neutron absorber material.

### 3.0 REGULATORY ANALYSIS

#### 3.1 No Significant Hazards Consideration Analysis

[LICENSEE] requests adoption of TSTF-557 Revision 1, "Spent Fuel Storage Rack Neutron Absorber Monitoring Program." The proposed change revises Technical Specifications (TS) Section 5.5, "Programs and Manuals," to add a new program titled, "Spent Fuel Storage Rack Neutron Absorber Monitoring Program." The program ensures the neutron absorber density assumed in the Spent Fuel Pool (SFP) storage rack nuclear criticality analyses remains conservative with respect to the actual plant conditions. The program requires [LICENSEE] to implement a program consistent with NEI 16-03-A, "Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools."

[LICENSEE] has evaluated if a significant hazards consideration is involved with the proposed amendment(s) by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

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

Response: No

The proposed change incorporates a new program into the TS to monitor the condition of the neutron absorber material used in the SFP storage racks to ensure they will continue to perform their assumed design functions. SFP storage rack neutron absorber monitoring is an administrative requirement that does not affect the ability of any structures, systems, or components (SSCs) to perform a design function. A SFP storage rack neutron absorber monitoring program is not an initiator to any accident previously evaluated and does not affect the consequences of any accident previously evaluated.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

Response: No

The proposed change incorporates a new program into the TS to monitor the condition of the neutron absorber material used in the SFP storage racks to ensure they will continue to perform their assumed design functions. SFP storage rack neutron absorber monitoring is an administrative requirement that does not alter the design function or operation of the SSCs involved, and does not involve installation of a new SSC. The proposed change will not create the possibility of a new or different kind of accident due to credible new failure mechanisms, malfunctions, or accident initiators not considered in the design and licensing bases.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

Response: No

The proposed change incorporates a new program into the TS to monitor the condition of the neutron absorber material used in the SFP storage racks to ensure the material will continue to perform its assumed design functions. SFP storage rack neutron absorber monitoring is an administrative requirement that does not affect the ability of any SSCs to perform a design function. No safety limits are affected. No Limiting Conditions for Operation or Surveillance limits are affected. The new Technical Specification requirements assure sufficient criticality safety margins are maintained. The proposed change does not adversely affect existing plant safety margins or the reliability of the equipment assumed to operate in the safety analysis. As such, there are no changes being made to safety analysis assumptions, safety limits, or limiting safety system settings that would adversely affect plant safety.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, [LICENSEE] concludes that the proposed change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

### 3.2 Conclusion

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

## 4.0 ENVIRONMENTAL EVALUATION

The proposed change does not change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or does not change an inspection or surveillance requirement. The proposed change does not involve (i) a

significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed change meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9).

Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed change.

**Technical Specifications Changes**

## 5.5 Programs and Manuals

---

### 5.5.20 [ Surveillance Frequency Control Program ]

This program provides controls for Surveillance Frequencies. The program shall ensure that Surveillance Requirements specified in the Technical Specifications are performed at intervals sufficient to assure the associated Limiting Conditions for Operation are met.

- a. The Surveillance Frequency Control Program shall contain a list of Frequencies of those Surveillance Requirements for which the Frequency is controlled by the program.
- b. Changes to the Frequencies listed in the Surveillance Frequency Control Program shall be made in accordance with NEI 04-10, "Risk-Informed Method for Control of Surveillance Frequencies," Revision 1.
- c. The provisions of Surveillance Requirements 3.0.2 and 3.0.3 are applicable to the Frequencies established in the Surveillance Frequency Control Program. ]

### 5.5.21 [ *Spent Fuel Storage Rack Neutron Absorber Monitoring Program* ]

*This Program provides controls for monitoring the condition of the neutron absorber used in the spent fuel pool storage racks to verify the neutron absorber density is consistent with the assumptions in the spent fuel pool criticality analysis. The program shall be in accordance with NEI 16-03-A, "Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools," Revision 0, May 2017[, with the following exceptions:*

1. ...].]
- 
-

5.5 Programs and Manuals

---

5.5.19 Setpoint Control Program (continued)

3. If the as-found value of the instrument channel trip setting is less conservative than the specified AV, then the SR is not met and the instrument channel shall be immediately declared inoperable.
  4. The instrument channel setpoint shall be reset to a value that is within the as-left tolerance around the NTSP at the completion of the surveillance test; otherwise, the channel is inoperable (setpoints may be more conservative than the NTSP provided that the as-found and as-left tolerances apply to the actual setpoint used to confirm channel performance).
- e. The program shall be specified in [insert the facility FSAR reference or the name of any document incorporated into the facility FSAR by reference]. ]

5.5.20 [ Surveillance Frequency Control Program

This program provides controls for Surveillance Frequencies. The program shall ensure that Surveillance Requirements specified in the Technical Specifications are performed at intervals sufficient to assure the associated Limiting Conditions for Operation are met.

- a. The Surveillance Frequency Control Program shall contain a list of Frequencies of those Surveillance Requirements for which the Frequency is controlled by the program.
- b. Changes to the Frequencies listed in the Surveillance Frequency Control Program shall be made in accordance with NEI 04-10, "Risk-Informed Method for Control of Surveillance Frequencies," Revision 1.
- c. The provisions of Surveillance Requirements 3.0.2 and 3.0.3 are applicable to the Frequencies established in the Surveillance Frequency Control Program. ]

5.5.21 [ *Spent Fuel Storage Rack Neutron Absorber Monitoring Program*

*This Program provides controls for monitoring the condition of the neutron absorber used in the spent fuel pool storage racks to verify the neutron absorber density is consistent with the assumptions in the spent fuel pool criticality analysis. The program shall be in accordance with NEI 16-03-A, "Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools," Revision 0, May 2017[, with the following exceptions:*

1. . . .].]
-

## 5.5 Programs and Manuals

---

### 5.5.19 Setpoint Control Program (continued)

- e. The program shall be specified in [insert the facility FSAR reference or the name of any document incorporated into the facility FSAR by reference]. ]

### 5.5.20 [ Surveillance Frequency Control Program

This program provides controls for Surveillance Frequencies. The program shall ensure that Surveillance Requirements specified in the Technical Specifications are performed at intervals sufficient to assure the associated Limiting Conditions for Operation are met.

- a. The Surveillance Frequency Control Program shall contain a list of Frequencies of those Surveillance Requirements for which the Frequency is controlled by the program.
- b. Changes to the Frequencies listed in the Surveillance Frequency Control Program shall be made in accordance with NEI 04-10, "Risk-Informed Method for Control of Surveillance Frequencies," Revision 1.
- c. The provisions of Surveillance Requirements 3.0.2 and 3.0.3 are applicable to the Frequencies established in the Surveillance Frequency Control Program. ]

### 5.5.21 [ *Spent Fuel Storage Rack Neutron Absorber Monitoring Program*

*This Program provides controls for monitoring the condition of the neutron absorber used in the spent fuel pool storage racks to verify the neutron absorber density is consistent with the assumptions in the spent fuel pool criticality analysis. The program shall be in accordance with NEI 16-03-A, "Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools," Revision 0, May 2017[, with the following exceptions:*

1. . . .].]
- 
-

5.5 Programs and Manuals

---

5.5.17 Surveillance Frequency Control Program (continued)

- a. The Surveillance Frequency Control Program shall contain a list of Frequencies of those Surveillance Requirements for which the Frequency is controlled by the program.
- b. Changes to the Frequencies listed in the Surveillance Frequency Control Program shall be made in accordance with NEI 04-10, "Risk-Informed Method for Control of Surveillance Frequencies," Revision 1.
- c. The provisions of Surveillance Requirements 3.0.2 and 3.0.3 are applicable to the Frequencies established in the Surveillance Frequency Control Program. ]

5.5.18 *[ Spent Fuel Storage Rack Neutron Absorber Monitoring Program*

*This Program provides controls for monitoring the condition of the neutron absorber used in the spent fuel pool storage racks to verify the neutron absorber density is consistent with the assumptions in the spent fuel pool criticality analysis. The program shall be in accordance with NEI 16-03-A, "Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools," Revision 0, May 2017[, with the following exceptions:*

1. . . .].]
- 
-

5.5 Programs and Manuals

---

5.5.17 Surveillance Frequency Control Program (continued)

- b. Changes to the Frequencies listed in the Surveillance Frequency Control Program shall be made in accordance with NEI 04-10, "Risk-Informed Method for Control of Surveillance Frequencies," Revision 1.
- c. The provisions of Surveillance Requirements 3.0.2 and 3.0.3 are applicable to the Frequencies established in the Surveillance Frequency Control Program. ]

5.5.18 *[ Spent Fuel Storage Rack Neutron Absorber Monitoring Program*

*This Program provides controls for monitoring the condition of the neutron absorber used in the spent fuel pool storage racks to verify the neutron absorber density is consistent with the assumptions in the spent fuel pool criticality analysis. The program shall be in accordance with NEI 16-03-A, "Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools," Revision 0, May 2017[, with the following exceptions:*

1. *...].]*
-

## 5.5 Programs and Manuals

---

### 5.5.14 Setpoint Program (SP) (continued)

- d. The difference between the instrument channel trip setting as-found value and the previously recorded as-left value for each Technical Specification required automatic protection instrumentation function shall be trended and evaluated to verify that the instrument channel is functioning in accordance with its design basis.
- e. The SP shall establish a document containing the current value of the specified NTS, AFT, and ALT for each Technical Specification required automatic protection instrumentation function and references to the calculation documentation. Changes to this document shall be governed by the regulatory requirement of 10 CFR 50.59. In addition, changes to the specified NTS, AFT, and ALT values shall be governed by the approved setpoint methodology. This document, including any revisions or supplements, shall be provided upon issuance to the NRC.

### 5.5.15 *[ Spent Fuel Storage Rack Neutron Absorber Monitoring Program*

*This Program provides controls for monitoring the condition of the neutron absorber used in the spent fuel pool storage racks to verify the neutron absorber density is consistent with the assumptions in the spent fuel pool criticality analysis. The program shall be in accordance with NEI 16-03-A, "Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools," Revision 0, May 2017[, with the following exceptions:*

1. . . . .]
-