



Indiana Michigan
Power Company
Nuclear Generation Group
One Cook Place
Bridgman, MI 49106
aep.com

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AEP-NRC-2020-10
10 CFR 50.90

Docket Nos.: 50-315
50-316

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

Donald C. Cook Nuclear Plant, Unit 1 and Unit 2
APPLICATION TO REVISE TECHNICAL SPECIFICATIONS TO
ADOPT TSTF-541, REVISION 2, "ADD EXCEPTIONS TO SURVEILLANCE REQUIREMENTS
FOR VALVES AND DAMPERS LOCKED IN THE ACTUATED POSITION"

Pursuant to 10 CFR 50.90, Indiana Michigan Power Company (I&M), the licensee for Donald C. Cook Nuclear Plant (CNP), is submitting a request for an amendment to the Technical Specifications (TS) for CNP Unit 1 and Unit 2.

I&M requests adoption of TSTF-541, "Add Exceptions to Surveillance Requirements for Valves and Dampers Locked in the Actuated Position," which is an approved change to the Standard Technical Specifications into the CNP Unit 1 and Unit 2 Technical Specifications. The proposed amendment modifies certain TS Surveillance Requirements (SRs) by adding exceptions to consider the SR met when automatic valves or dampers are locked, sealed, or otherwise secured in the actuated position, in order to consider the SR met. Securing the automatic valve or damper in the actuated position may affect the operability of the system or any supported systems. The associated Limiting Condition for Operation is met if the subject structure, system or component remains operable (i.e., capable of performing its specified safety function).

Enclosure 1 provides an affirmation statement pertaining to the information contained herein. Enclosure 2 provides a description and assessment of the proposed changes. Enclosures 3 and 4 provide Unit 1 and Unit 2 TS pages, respectively, marked to show the proposed changes. New clean Unit 1 and Unit 2 TS pages with proposed changes incorporated will be provided to the Nuclear Regulatory Commission (NRC) Licensing Project Manager when requested. Enclosures 5 and 6 provide existing TS Bases pages marked to show the proposed changes for information only.

I&M requests that the amendment be reviewed under the Consolidated Line Item Improvement Process. Approval of the proposed amendment is requested commensurate with the NRC's normal review schedule. Once approved, the amendment shall be implemented within 60 days.

ADD
NRR

There are no regulatory commitments made in this submittal.

In accordance with 10 CFR 50.91, a copy of this application, with enclosures, is being provided to the designated Michigan state officials.

If you should have any questions regarding this submittal, please contact Mr. Michael K. Scarpello, Regulatory Affairs Director, at (269) 466-2649.

Sincerely,



Q. Shane Lies
Site Vice President
Indiana Michigan Power Company

BMC/mlI

Enclosures:

1. Affirmation
2. Description and Assessment of the Technical Specification Changes
3. Donald C. Cook Nuclear Plant Unit 1 Technical Specification Pages Marked to Show Proposed Changes
4. Donald C. Cook Nuclear Plant Unit 2 Technical Specification Pages Marked to Show Proposed Changes
5. Donald C. Cook Nuclear Plant Unit 1 Technical Specification Bases Pages Marked to Show Proposed Changes (For Information Only)
6. Donald C. Cook Nuclear Plant Unit 2 Technical Specification Bases Pages Marked to Show Proposed Changes (For Information Only)

c: R. J. Ancona – MPSC
EGLE – RMD/RPS
J. B. Giessner – NRC Region III
NRC Resident Inspector
S. P. Wall – NRC Washington, D.C.
A. J. Williamson – AEP Ft. Wayne, w/o enclosures

Enclosure 1 to AEP-NRC-2020-10

AFFIRMATION

I, Q. Shane Lies, being duly sworn, state that I am the Site Vice President of Indiana Michigan Power Company (I&M), that I am authorized to sign and file this request with the U. S. Nuclear Regulatory Commission on behalf of I&M, and that the statements made and the matters set forth herein pertaining to I&M are true and correct to the best of my knowledge, information, and belief.

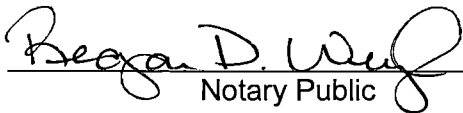
Indiana Michigan Power Company



Q. Shane Lies
Site Vice President

SWORN TO AND SUBSCRIBED BEFORE ME

THIS 30 DAY OF April 2020



Notary Public

My Commission Expires 01/21/2025

Enclosure 2 to AEP-NRC-2020-10

Description and Assessment of Technical Specification Changes

1.0 DESCRIPTION

Indiana Michigan Power Company (I&M), the licensee for Donald C. Cook Nuclear Plant (CNP) Unit 1 and Unit 2, requests adoption of TSTF-541, "Add Exceptions to Surveillance Requirements for Valves and Dampers Locked in the Actuated Position," which is an approved change to the Standard Technical Specifications (STS), into the CNP Unit 1 and Unit 2 Technical Specifications (TS). The proposed amendment modifies the TS Surveillance Requirements (SRs) by adding exceptions to consider the SR met when automatic valves or dampers are locked, sealed, or otherwise secured in the actuated position, in order to consider the SR met. Securing the automatic valve or damper in the actuated position may affect the operability of the system or of any supported systems. The associated Limiting Condition for Operation (LCO) is met if the subject structure, system or component (SSC) remains operable (i.e., capable of performing its specified safety function). The following SRs are affected by the proposed change.

TS 3.7.10, "Control Room Emergency Ventilation (CREV) System"

TS 3.7.12, "Engineered Safety Features (ESF) Ventilation System"

TS 3.7.13, "Fuel Handling Area Exhaust Ventilation (FHAEV) System"

While the proposed exceptions permit automatic valves and dampers that are locked, sealed, or otherwise secured in the actuated position to be excluded from the SR in order to consider the SR met, the proposed changes will not permit a system that is made inoperable by locking, sealing, or otherwise securing an automatic valve or damper in the actuated position to be considered operable. As stated in the SR 3.0.1 Bases, "Nothing in this Specification, however, is to be construed as implying that systems or components are OPERABLE when: a. The systems or components are known to be inoperable, although still meeting the SRs."

2.0 ASSESSMENT

2.1 Applicability of Safety Evaluation

I&M has reviewed the safety evaluation for TSTF-541 provided to the Technical Specifications Task Force in a letter dated December 10, 2019. This review included a review of the Nuclear Regulatory Commission (NRC) staff's evaluation, as well as the information provided in TSTF-541. As described herein, I&M has concluded that the justifications presented in TSTF-541 and the safety evaluation prepared by the NRC staff are applicable to CNP Unit 1 and Unit 2, and justify this amendment for the incorporation of the changes to the CNP Unit 1 and Unit 2 TS.

I&M acknowledges that under the proposed change, the affected valves and dampers may be excluded from the SR when locked, sealed or otherwise secured in the actuated position. However, if the safety analysis assumes movement from the actuated position following an event, or the system is rendered inoperable by locking, sealing, or otherwise securing the valve or damper in the actuated

position, then the system cannot perform its specified safety function and is inoperable regardless of whether the SR is met.

I&M acknowledges for components for which the SR allowance can be utilized, the SR must be verified to have been met within its required Frequency after removing the valve or damper from the locked, sealed or otherwise secured status. If the SR exception is utilized to not test the actuation of a valve or damper and the specified Frequency of the SR is exceeded without testing the component, the SR must be performed on the component when it is returned to service in order to meet the SR.

2.2 Optional Changes and Variations

I&M is proposing the following variations from the TS changes described in the TSTF-541 or the applicable parts of the NRC staff's safety evaluation:

The CNP Unit 1 and Unit 2 TS utilize different numbering and titles than the STS on which TSTF-541 was based. Specifically:

- TS 3.7.10, "Control Room Emergency Filtration System (CREFS)," is titled "Control Room Emergency Ventilation (CREV) System" in the CNP Unit 1 and Unit 2 TS.
- TS 3.7.12, "Emergency Core Cooling System (ECCS) Pump Room Exhaust Air Cleanup System (PREACS)" is titled "Engineered Safety Features (ESF) Ventilation System" in the CNP Unit 1 and Unit 2 TS.
- TS 3.7.13, "Fuel Building Air Cleanup System (FBACS)," is titled "Fuel Handling Area Exhaust Ventilation (FHAEV) System" in the CNP Unit 1 and Unit 2 TS
- The SR listed as SR 3.7.13.3 in the STS, to verify that each FBACS (FHAEV at CNP) train actuates on an actual or simulated actuation signal, is listed as SR 3.7.13.4 in the CNP Unit 1 and Unit 2 TS

These differences are administrative and do not affect the applicability of TSTF-541 to the CNP Unit 1 and Unit 2 TS.

The CNP Unit 1 and Unit 2 TS contain requirements that differ from the STS on which TSTF-541 was based, but these differences do not affect the applicability of the TSTF-541 justification. Specifically:

- CNP Unit 1 and Unit 2 do not have an Iodine Cleanup System, so the changes to TS 3.6.11, "Iodine Cleanup System (ICS) (Atmospheric and Subatmospheric)" described in TSTF-541 do not apply to CNP Unit 1 and Unit 2 TS.
- CNP Unit 1 and Unit 2 do not have a Shield Building Air Cleanup System, so the changes to TS 3.6.13, "Shield Building Air Cleanup System (SBACS) (Dual and Ice Condenser)" described in TSTF-541 do not apply to CNP Unit 1 and Unit 2 TS.
- CNP Unit 1 and Unit 2 TS do not have an SR equivalent to STS SR 3.7.12.5, to verify that the ECCS PREACS filter bypass damper can be closed, so the changes to SR 3.7.12.5 described in TSTF-541 are not applicable to the CNP Unit 1 and Unit 2 TS. At CNP Unit 1 and Unit 2 this capability is tested during the performance of SR 3.7.12.3.
- CNP Unit 1 and Unit 2 TS do not have an SR equivalent to STS SR 3.7.13.5, to verify that the FBACS filter bypass damper can be closed, so the changes to SR 3.7.13.5 described in TSTF-541 are not applicable to the CNP Unit 1 and Unit 2 TS. At CNP Unit 1 and Unit 2 these dampers are verified to be closed during the performance of SR 3.7.13.1.

- CNP Unit 1 and Unit 2 do not have a Penetration Room Exhaust Air Cleanup System, so the changes to TS 3.7.14, "Penetration Room Exhaust Air Cleanup System (PREACS)" described in TSTF-541 do not apply to CNP Unit 1 and Unit 2 TS.

CNP Unit 1 and Unit 2 TS contain a Surveillance Frequency Control Program. Therefore, the Frequency for the affected SRs is "In accordance with the Surveillance Frequency Control Program." This has no effect on the applicability of the proposed change.

2.3 Licensee Verifications

I&M confirms that existing administrative processes, such as the Corrective Action Program, Operability Determination process, the maintenance, design control, configuration control, and operating procedures, etc., will be used to assess the operability of the system or of any supported systems when utilizing the SR allowances, which includes consideration of whether movement of the affected valves or dampers following an event is assumed in the safety analysis.

3.0 REGULATORY ANALYSIS

3.1 No Significant Hazards Consideration Analysis

Indiana Michigan Power Company (I&M), the licensee for Donald C. Cook Nuclear Plant (CNP) Unit 1 and Unit 2, requests adoption of TSTF-541, "Add Exceptions to Surveillance Requirements for Valves and Dampers Locked in the Actuated Position," which is an approved change to the Standard Technical Specifications (STS), into the CNP Unit 1 and Unit 2 Technical Specifications (TS). The proposed amendment modifies the TS Surveillance Requirements (SRs) by adding exceptions to consider the SR met when automatic valves or dampers are locked, sealed, or otherwise secured in the actuated position, in order to consider the SR met. Securing the automatic valve or damper in the actuated position may affect the operability of the system or of any supported systems. The associated Limiting Condition for Operation (LCO) is met if the subject structure, system or component (SSC) remains operable (i.e., capable of performing its specified safety function).

I&M has evaluated whether or not 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 revises SRs by adding exceptions excluding from actuation and isolation time testing those valves and dampers that are locked, sealed or otherwise secured in the actuated position. The performance or lack of performance of SRs is not an initiator of any accident previously evaluated. As a result, the proposed change has no effect on the probability of any accident previously evaluated. The proposed change excludes performance of portions of certain SRs, but the SSC must still be capable of performing the safety functions assumed in the accident analysis. Otherwise, the SSC is inoperable, and the associated TS

Actions are followed. As a result, the SSCs continue to perform their mitigating functions and the consequences of any accident previously evaluated are not affected.

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 previously evaluated?*

Response: No

The proposed change revises SRs by adding exceptions excluding from actuation and isolation time testing those valves and dampers that are locked, sealed or otherwise secured in the actuated position. The proposed change will not change the design function or operability requirements of the affected SSCs. The SSC must still be capable of performing the safety functions assumed in the accident analysis or the SSC is inoperable, and the associated TS Actions are followed. The proposed change does not create any 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 previously evaluated.

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

Response: No

The proposed change revises SRs by adding exceptions excluding from actuation and isolation time testing those valves and dampers that are locked, sealed or otherwise secured in the actuated position. The proposed change does not alter the manner in which safety limits, limiting safety system settings or limiting conditions for operation are determined. The safety analysis assumptions and acceptance criteria are not affected by this change.

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

Based on the above, I&M 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 would 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 would change an inspection or surveillance requirement. However, 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.

Enclosure 3 to AEP-NRC-2020-10

**Donald C. Cook Nuclear Plant Unit 1 Technical Specification Pages Marked to Show
Proposed Changes**

SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | | FREQUENCY |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| SR 3.7.10.1 | Operate each CREV train for ≥ 15 minutes. | In accordance with the Surveillance Frequency Control Program |
| SR 3.7.10.2 | Perform required CREV System filter testing in accordance with the Ventilation Filter Testing Program (VFTP). | In accordance with the VFTP |
| SR 3.7.10.3 | <p>-----NOTE----- Only required to be met in MODES 1, 2, 3, and 4. -----</p> <p>Verify each CREV System train actuates on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.</p> | In accordance with the Surveillance Frequency Control Program |
| SR 3.7.10.4 | Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program. | In accordance with the Control Room Envelope Habitability Program |

SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | | FREQUENCY |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| SR 3.7.12.1 | Operate each ESF Ventilation train for ≥ 15 minutes. | In accordance with the Surveillance Frequency Control Program |
| SR 3.7.12.2 | Perform required ESF Ventilation System filter testing in accordance with the Ventilation Filter Testing Program (VFTP). | In accordance with the VFTP |
| SR 3.7.12.3 | Verify each ESF Ventilation train actuates on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position. | In accordance with the Surveillance Frequency Control Program |
| SR 3.7.12.4 | Verify one ESF Ventilation train can maintain a negative pressure relative to adjacent areas during the post accident mode of operation at a flow rate of $\leq 22,500$ cfm. | In accordance with the Surveillance Frequency Control Program |

SURVEILLANCE REQUIREMENTS (continued)

| SURVEILLANCE | | FREQUENCY |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| SR 3.7.13.3 | Perform required FHAEV System filter testing in accordance with the Ventilation Filter Testing Program (VFTP). | In accordance with the VFTP |
| SR 3.7.13.4 | Verify required FHAEV train actuates on an actual or simulated actuation signal, <u>except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.</u> | In accordance with the Surveillance Frequency Control Program |
| SR 3.7.13.5 | Verify required FHAEV train can maintain a pressure ≥ 0.125 inches of vacuum water gauge with respect to atmospheric pressure during the accident mode of operation at a flow rate $\leq 27,000$ cfm. | In accordance with the Surveillance Frequency Control Program |

Enclosure 4 to AEP-NRC-2020-10

**Donald C. Cook Nuclear Plant Unit 2 Technical Specification Pages
Marked to Show Proposed Changes**

SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | | FREQUENCY |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| SR 3.7.10.1 | Operate each CREV train for ≥ 15 minutes. | In accordance with the Surveillance Frequency Control Program |
| SR 3.7.10.2 | Perform required CREV System filter testing in accordance with the Ventilation Filter Testing Program (VFTP). | In accordance with the VFTP |
| SR 3.7.10.3 | <p>-----NOTE----- Only required to be met in MODES 1, 2, 3, and 4. -----</p> <p>Verify each CREV System train actuates on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.</p> | In accordance with the Surveillance Frequency Control Program |
| SR 3.7.10.4 | Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program. | In accordance with the Control Room Envelope Habitability Program |

SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | | FREQUENCY |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| SR 3.7.12.1 | Operate each ESF Ventilation train for ≥ 15 minutes. | In accordance with the Surveillance Frequency Control Program |
| SR 3.7.12.2 | Perform required ESF Ventilation System filter testing in accordance with the Ventilation Filter Testing Program (VFTP). | In accordance with the VFTP |
| SR 3.7.12.3 | Verify each ESF Ventilation train actuates on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position. | In accordance with the Surveillance Frequency Control Program |
| SR 3.7.12.4 | Verify one ESF Ventilation train can maintain a negative pressure relative to adjacent areas during the post accident mode of operation at a flow rate of $\leq 22,500$ cfm. | In accordance with the Surveillance Frequency Control Program |

SURVEILLANCE REQUIREMENTS (continued)

| SURVEILLANCE | | FREQUENCY |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| SR 3.7.13.3 | Perform required FHAEV System filter testing in accordance with the Ventilation Filter Testing Program (VFTP). | In accordance with the VFTP |
| SR 3.7.13.4 | Verify required FHAEV train actuates on an actual or simulated actuation signal, <u>except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.</u> | In accordance with the Surveillance Frequency Control Program |
| SR 3.7.13.5 | Verify required FHAEV train can maintain a pressure ≥ 0.125 inches of vacuum water gauge with respect to atmospheric pressure during the accident mode of operation at a flow rate $\leq 27,000$ cfm. | In accordance with the Surveillance Frequency Control Program |

Enclosure 5 to AEP-NRC-2020-10

**Donald C. Cook Nuclear Plant Unit 1 Technical Specification Bases Pages
Marked to Show Proposed Changes (For Information Only)**

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.7.10.3

This SR verifies that each CREV train starts and operates on an actual or simulated actuation signal. The SR excludes automatic dampers and

valves that are locked, sealed, or otherwise secured in the actuated position. The SR does not apply to dampers or valves that are locked, sealed, or otherwise secured in the actuated position since the affected dampers or valves were verified to be in the actuated position prior to being locked, sealed, or otherwise secured. Placing an automatic valve or damper in a locked, sealed, or otherwise secured position requires an assessment of the operability of the system or any supported systems, including whether it is necessary for the valve or damper to be repositioned to the non-actuated position to support the accident analysis. Restoration of an automatic valve or damper to the non-actuated position requires verification that the SR has been met within its required Frequency.

The only actuation signal necessary to be verified is the Safety Injection (SI) signal, since the Control Room Radiation - High signal is not assumed in the accident analysis. A Note has been included that states the Surveillance is only required to be met in MODES 1, 2, 3, and 4, since these are the MODES the SI signal is assumed to start the CREV trains. The CREV trains are assumed to be manually started during a fuel handling accident. The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

SR 3.7.10.4

This SR verifies the OPERABILITY of the CRE boundary by testing for unfiltered air leakage past the CRE boundary and into the CRE. The details of the testing are specified in the Control Room Envelope Habitability Program.

The CRE is considered habitable when the radiological dose to CRE occupants calculated in the licensing basis analyses of DBA consequences is no more than 5 rem TEDE, the CRE occupants are protected from smoke, and analyses demonstrate that the CREV System is not needed to prevent exceeding hazardous chemical limits. This SR verifies that the unfiltered air leakage into the CRE is no greater than the flow rate assumed in the licensing basis analyses of DBA consequences. When unfiltered air leakage is greater than the assumed flow rate, Condition B must be entered. Required Action B.3 allows time to restore the CRE boundary to OPERABLE status provided mitigating actions can ensure that the CRE remains within the licensing basis habitability limits for the occupants following an accident. Compensatory measures are discussed in Regulatory Guide 1.196, Section C.2.7.3, (Ref. 4) which endorses, with exceptions, NEI 99-03, Section 8.4 and Appendix F (Ref. 5). These compensatory measures

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.7.12.2

This SR verifies that the required ESF Ventilation System testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The VFTP includes testing HEPA filter performance, charcoal adsorbers efficiency, minimum and maximum system flow rate, and the physical properties of the activated charcoal (general use and following specific operations). Specific test Frequencies and additional information are discussed in detail in the VFTP.

SR 3.7.12.3

This SR verifies that each ESF Ventilation train starts and operates on an actual or simulated actuation signal. The SR excludes automatic

dampers and valves that are locked, sealed, or otherwise secured in the actuated position. The SR does not apply to dampers or valves that are locked, sealed, or otherwise secured in the actuated position since the affected dampers or valves were verified to be in the actuated position prior to being locked, sealed, or otherwise secured. Placing an automatic valve or damper in a locked, sealed, or otherwise secured position requires an assessment of the operability of the system or any supported systems, including whether it is necessary for the valve or damper to be repositioned to the non-actuated position to support the accident analysis. Restoration of an automatic valve or damper to the non-actuated position requires verification that the SR has been met within its required

Frequency.

One ESF Ventilation train is normally operating with flow bypassing the charcoal adsorber section. This test confirms that each train, when in standby, starts upon receipt of a Containment Pressure - High High signal and that the exhaust flow can be directed through the entire filter unit including the HEPA filter and charcoal adsorber section. The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

SR 3.7.12.4

This SR verifies the integrity of the ESF enclosure. The ability of the ESF enclosure to maintain a negative pressure, with respect to potentially uncontaminated adjacent areas, is periodically tested to verify proper functioning of the ESF Ventilation System. During the post accident mode of operation, the ESF Ventilation System is designed to maintain a slight negative pressure in the ESF enclosure, with respect to adjacent areas, at a flowrate $\leq 22,500$ cfm to prevent unfiltered leakage. The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.7.13.3

This SR verifies that the required FHAEV System testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The VFTP includes testing HEPA filter performance, charcoal adsorber efficiency, minimum and maximum system flow rate, and the physical properties of the activated charcoal (general use and following specific operations). Specific test frequencies and additional information are discussed in detail in the VFTP.

SR 3.7.13.4

This SR verifies that the required FHAEV train actuates on an actual or simulated actuation signal. The SR excludes automatic dampers and

valves that are locked, sealed, or otherwise secured in the actuated position. The SR does not apply to dampers or valves that are locked, sealed, or otherwise secured in the actuated position since the affected dampers or valves were verified to be in the actuated position prior to being locked, sealed, or otherwise secured. Placing an automatic valve or damper in a locked, sealed, or otherwise secured position requires an assessment of the operability of the system or any supported systems, including whether it is necessary for the valve or damper to be repositioned to the non-actuated position to support the accident analysis. Restoration of an automatic valve or damper to the non-actuated position requires verification that the SR has been met within its required Frequency.

The test must verify that the signal automatically shuts down each of the Fuel Handling Area Supply Air System fans. The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

SR 3.7.13.5

This SR verifies the integrity of the auxiliary building enclosure. The ability of the pool storage area to maintain negative pressure with respect to potentially uncontaminated adjacent areas is periodically tested to verify proper function of the FHAEV train. During the accident mode of operation, the FHAEV train is designed to maintain a slight negative pressure in the FHAEV train, to prevent unfiltered leakage. The FHAEV train is designed to maintain a pressure ≥ 0.125 inches of vacuum water gauge with respect to atmospheric pressure at a flow rate of $\leq 27,000$ cfm. The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

REFERENCES

1. UFSAR, Section 9.9.3.2.
2. UFSAR, Section 14.2.1.

Enclosure 6 to AEP-NRC-2020-10

**Donald C. Cook Nuclear Plant Unit 2 Technical Specification Bases Pages
Marked to Show Proposed Changes (For Information Only)**

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.7.10.3

This SR verifies that each CREV train starts and operates on an actual or simulated actuation signal. The SR excludes automatic dampers and valves that are locked, sealed, or otherwise secured in the actuated position. The SR does not apply to dampers or valves that are locked, sealed, or otherwise secured in the actuated position since the affected dampers or valves were verified to be in the actuated position prior to being locked, sealed, or otherwise secured. Placing an automatic valve or damper in a locked, sealed, or otherwise secured position requires an assessment of the operability of the system or any supported systems, including whether it is necessary for the valve or damper to be repositioned to the non-actuated position to support the accident analysis. Restoration of an automatic valve or damper to the non-actuated position requires verification that the SR has been met within its required Frequency.

The only actuation signal necessary to be verified is the Safety Injection (SI) signal, since the Control Room Radiation - High signal is not assumed in the accident analysis. A Note has been included that states the Surveillance is only required to be met in MODES 1, 2, 3, and 4, since these are the MODES the SI signal is assumed to start the CREV trains. The CREV trains are assumed to be manually started during a fuel handling accident. The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

SR 3.7.10.4

This SR verifies the OPERABILITY of the CRE boundary by testing for unfiltered air inleakage past the CRE boundary and into the CRE. The details of the testing are specified in the Control Room Envelope Habitability Program.

The CRE is considered habitable when the radiological dose to CRE occupants calculated in the licensing basis analyses of DBA consequences is no more than 5 rem TEDE, the CRE occupants are protected from smoke, and analyses demonstrate that the CREV System is not needed to prevent exceeding hazardous chemical limits. This SR verifies that the unfiltered air inleakage into the CRE is no greater than the flow rate assumed in the licensing basis analyses of DBA consequences. When unfiltered air inleakage is greater than the assumed flow rate, Condition B must be entered. Required Action B.3 allows time to restore the CRE boundary to OPERABLE status provided mitigating actions can ensure that the CRE remains within the licensing basis habitability limits for the occupants following an accident. Compensatory measures are discussed in Regulatory Guide 1.196, Section C.2.7.3, (Ref. 4) which endorses, with exceptions, NEI 99-03, Section 8.4 and Appendix F (Ref. 5). These compensatory measures

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.7.12.2

This SR verifies that the required ESF Ventilation System testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The VFTP includes testing HEPA filter performance, charcoal adsorbers efficiency, minimum and maximum system flow rate, and the physical properties of the activated charcoal (general use and following specific operations). Specific test Frequencies and additional information are discussed in detail in the VFTP.

SR 3.7.12.3

This SR verifies that each ESF Ventilation train starts and operates on an actual or simulated actuation signal. The SR excludes automatic

dampers and valves that are locked, sealed, or otherwise secured in the actuated position. The SR does not apply to dampers or valves that are locked, sealed, or otherwise secured in the actuated position since the affected dampers or valves were verified to be in the actuated position prior to being locked, sealed, or otherwise secured. Placing an automatic valve or damper in a locked, sealed, or otherwise secured position requires an assessment of the operability of the system or any supported systems, including whether it is necessary for the valve or damper to be repositioned to the non-actuated position to support the accident analysis. Restoration of an automatic valve or damper to the non-actuated position requires verification that the SR has been met within its required

Frequency.

One ESF Ventilation train is normally operating with flow bypassing the charcoal adsorber section. This test confirms that each train, when in standby, starts upon receipt of a Containment Pressure - High High signal and that the exhaust flow can be directed through the entire filter unit including the HEPA filter and charcoal adsorber section. The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

SR 3.7.12.4

This SR verifies the integrity of the ESF enclosure. The ability of the ESF enclosure to maintain a negative pressure, with respect to potentially uncontaminated adjacent areas, is periodically tested to verify proper functioning of the ESF Ventilation System. During the post accident mode of operation, the ESF Ventilation System is designed to maintain a slight negative pressure in the ESF enclosure, with respect to adjacent areas, at a flowrate $\leq 22,500$ cfm to prevent unfiltered leakage. The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.7.13.3

This SR verifies that the required FHAEV System testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The VFTP includes testing HEPA filter performance, charcoal adsorber efficiency, minimum and maximum system flow rate, and the physical properties of the activated charcoal (general use and following specific operations). Specific test frequencies and additional information are discussed in detail in the VFTP.

SR 3.7.13.4

This SR verifies that the required FHAEV train actuates on an actual or simulated actuation signal. The SR excludes automatic dampers and

valves that are locked, sealed, or otherwise secured in the actuated position. The SR does not apply to dampers or valves that are locked, sealed, or otherwise secured in the actuated position since the affected dampers or valves were verified to be in the actuated position prior to being locked, sealed, or otherwise secured. Placing an automatic valve or damper in a locked, sealed, or otherwise secured position requires an assessment of the operability of the system or any supported systems, including whether it is necessary for the valve or damper to be repositioned to the non-actuated position to support the accident analysis. Restoration of an automatic valve or damper to the non-actuated position requires verification that the SR has been met within its required Frequency.

The test must verify that the signal automatically shuts down each of the Fuel Handling Area Supply Air System fans. The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

SR 3.7.13.5

This SR verifies the integrity of the auxiliary building enclosure. The ability of the pool storage area to maintain negative pressure with respect to potentially uncontaminated adjacent areas is periodically tested to verify proper function of the FHAEV train. During the accident mode of operation, the FHAEV train is designed to maintain a slight negative pressure in the FHAEV train, to prevent unfiltered leakage. The FHAEV train is designed to maintain a pressure ≥ 0.125 inches of vacuum water gauge with respect to atmospheric pressure at a flow rate of $\leq 27,000$ cfm. The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

REFERENCES

1. UFSAR, Section 9.9.3.2.
2. UFSAR, Section 14.2.1.