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Serial No. RA-18-0232

10 CFR 50.90

February 5, 2019

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555

Subject: Duke Energy Carolinas, LLC (Duke Energy)  
McGuire Nuclear Station (MNS), Units 1 and 2  
Docket Numbers 50-369 and 50-370  
Renewed Facility Operating License Nos. NPF-9 and NPF-17  
Proposed editorial error correction of Technical Specification (TS) 3.0,  
SURVEILLANCE REQUIREMENT (SR) APPLICABILITY, SR 3.0.5 and proposed  
removal of expired TS footnotes from the MNS Unit 1 and Unit 2 TSs.

Pursuant to Section 50.90 of Title 10 of the Code of Federal Regulations (10 CFR), Duke Energy Carolinas herein submits a license amendment request (LAR) for McGuire Nuclear Station (MNS) Unit 1 and 2. This request for amendment proposes to correct an editorial error contained in Technical Specification (TS) 3.0, SURVEILLANCE REQUIREMENT (SR) APPLICABILITY, SR 3.0.5 and proposes removal of expired TS footnotes from the MNS Unit 1 and Unit 2 TSs.

The proposed changes have been evaluated in accordance with 10 CFR 50.91(a)(1) using criteria in 10 CFR 50.92(c), and it has been determined that the proposed changes involve no significant hazards consideration. The bases for these determinations are included in the Enclosure.

ADOL  
NRK

The Enclosure provides the SR 3.0.5 and TS footnote descriptions, the proposed changes, technical evaluation, regulatory evaluation, and environmental consideration for the requested changes. Attachment 1 provides markup copies of the affected TSs. Attachment 2 provides MNS TS Bases page markups for those TS Bases requiring changes (for information only). The TS Bases changes will be processed after LAR approval under the Duke Energy TS Bases Control Program. Reprinted (clean) TS pages will be provided to the NRC prior to issuance of the approved amendment.

In accordance with Duke Energy administrative procedures and Quality Assurance Program, this LAR has been reviewed and approved by the MNS Operations Review Committee.

Duke Energy requests approval of the proposed license amendments within one year of NRC acceptance, with the amendment being implemented within 120 days following approval.

Pursuant to 10 CFR 50.91, Duke Energy is notifying the State of North Carolina of this LAR by transmitting a copy to the designated official.

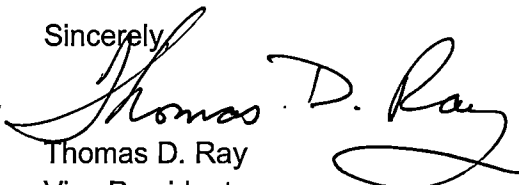
This LAR contains no regulatory commitments.

Implementation of this proposed LAR will not impact the MNS Updated Final Safety Analysis Report (UFSAR).

If you have any questions concerning this LAR, or require additional information, please contact Joseph Hussey at 980-875-5045.

I declare under penalty of perjury that the foregoing is true and correct. Executed on February 5, 2019.

Sincerely,

A handwritten signature in black ink, reading "Thomas D. Ray". The signature is fluid and cursive, with the first name "Thomas" being the most prominent.

Thomas D. Ray  
Vice President  
McGuire Nuclear Station

Enclosure

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MNS Master File – MG02DM (file MC 801.01)

## **Evaluation of the Proposed Changes**

**Subject:**

License Amendment Request Proposing to correct an editorial error contained in Technical Specification (TS) 3.0, SURVEILLANCE REQUIREMENT (SR) APPLICABILITY, SR 3.0.5 and removal of expired TS notes from McGuire Nuclear Station (MNS) Unit 1 and Unit 2 TS.

1. SUMMARY DESCRIPTION
2. DETAILED DESCRIPTION
3. TECHNICAL EVALUATION
4. REGULATORY EVALUATION
  - 4.1. Applicable Regulatory Requirements/Criteria
  - 4.2. No Significant Hazards Consideration Determination Analysis
  - 4.3. Conclusion
5. ENVIRONMENTAL CONSIDERATIONS

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## **ATTACHMENTS**

1. Technical Specification Page Markups
2. Bases Page Markups

1. Summary Description

Pursuant to Section 50.90 of Title 10 of the Code of Federal Regulations (10 CFR), Duke Energy Carolinas (DEC) herein proposes to correct an editorial error contained in Technical Specification (TS) 3.0, SURVEILLANCE REQUIREMENT (SR) APPLICABILITY, SR 3.0.5 and proposes removal of expired Technical Specification (TS) footnotes from the MNS Unit 1 and Unit 2 TSs.

2. Detailed Description

The proposed changes to Renewed Facility Operating License (FOL) NPF-9 and to Renewed FOL NPF-17 for the MNS Units 1 and 2, respectively, described below are administrative non-technical changes only.

**Proposed correction to FOL NPF-9 and NPF-17 TS 3.0, SR APPLICABILITY, SR 3.0.5**

- 2.1. By letter dated April 11, 2006, (Adams Accession Number ML061080409), DEC submitted a license amendment application for Technical Specification Change to Add/Revise LCO 3.0.8 on the Inoperability of Snubbers Using the Consolidated Line Item Improvement Process (CLIIP). By letter dated March 29, 2007, (Adams Accession Number ML063100490), the U.S. Nuclear Regulatory Commission issued Amendment No. 238 to FOL NPF-9 and Amendment No. 220 to FOL NPF-17. In the amendment application DEC proposed to renumber existing TS 3.0.8 to TS 3.0.9. DEC failed to provide the marked-up copy of page 3.0-6 showing the following change as being required.

SR 3.0.5 Surveillance Requirements shall apply to each unit individually unless otherwise indicated as stated in LCO 3.0.8.9 for individual Specifications or whenever certain portions of a Specification contain surveillance parameters different for each unit, which will be identified in parentheses or footnotes.

DEC proposes to correct this editorial error as shown in Attachment 1.

**Proposed changes to FOL NPF-9 and NPF-17 TS Footnotes.**

- 2.2. By letter dated September 14, 2017, (Adams Accession Number ML17262A090), as supplemented by letter dated December 12, 2017, (Adams Accession Number ML17349A157), DEC proposed a LAR for the TSs for the MNS, Units 1 and 2, to allow temporary changes to TS 3.5.2, Emergency Core Cooling System (ECCS) - Operating; TS 3.6.6, Containment Spray System (CSS); TS 3.7.5, Auxiliary Feedwater System;

(AFW) TS 3.7.6, Component Cooling Water (CCW) System; TS 3.7.7, Nuclear Service Water System (NSWS); TS 3.7.9, Control Room Area Ventilation System (CRAVS); TS 3.7.11, Auxiliary Building Filtered Ventilation Exhaust System (ABFVES), and TS 3.8.1, AC Sources- Operating. The proposed amendment permitted the 'A' Train NSWS to be inoperable for a total of 14 days to address a non-conforming condition on the 'A' Train supply piping from the Standby Nuclear Service Water Pond (SNSWP). By letter dated February 15, 2018, (Adams Accession Number ML18030A682), the U.S. Nuclear Regulatory Commission issued Amendment No. 308 to FOL NPF-9 and Amendment No. 287 to FOL NPF-17 allowing the 'A' Train NSWS to be inoperable for a total of 14 days to address a non-conforming condition on the 'A' Train supply piping from the SNSWP.

The 'A' Train NSWS non-conforming condition associated with the 'A' Train supply piping from the SNSWP was resolved on May 3, 2018, therefore the associated TS footnotes are considered expired. DEC proposes to remove the expired footnotes from the above-mentioned TSs.

- 2.3. By letter dated October 28, 2013, (Adams Accession Number ML13304B445), as supplemented by letter dated June 3, 2014, (Adams Accession Number ML14164A028), DEC, submitted a license amendment request to modify TS 3.8.4, "DC Sources- Operating." Specifically, the change provided a one-time extension to the completion time for Required Action A.2.2 to support replacement of the existing shared 125 VDC Vital Batteries. By letter dated September 10, 2014, (Adams Accession Number ML14231A634), the U.S. Nuclear Regulatory Commission issued Amendment No. 274 to FOL NPF-9 and Amendment No. 254 to FOL NPF-17.

MNS completed replacement of the Vital Batteries in May 2016. The TS 3.8.4 footnote associated with Amendments 274 and 254 expired on December 31, 2016. DEC proposes to remove the expired footnote from TS 3.8.4.

- 2.4. By letter dated August 28, 2015, (Adams Accession Number ML15244B179), as supplemented by letter dated November 13, 2015, (Adams Accession Number ML15331A039), DEC, submitted a license amendment request to modify TS Completion Time for TS 3.5.2, "ECCS [Emergency Core Cooling System] - Operating," Condition A. Specifically, the amendment would allow a one-time extension of the Completion Time to support maintenance on residual heat removal air handler unit 1A. By letter dated February 3, 2016, (Adams Accession Number ML16004A352), the U.S. Nuclear Regulatory Commission issued Amendment No. 281 to FOL NPF-9.

The TS 3.5.2 footnote associated with Amendment 281 expired on March 31, 2016. DEC proposes to remove the expired footnote from TS 3.5.2.

### 3. Technical Evaluation

The proposed change to SR 3.0.5 to correct the editorial error is an administrative non-technical change.

The proposed changes to TS 3.5.2, 3.6.6, 3.7.5, 3.7.6, 3.7.7, 3.7.9, 3.7.11 and 3.8.4 to remove the expired footnotes identified by a single asterisk, proposed change to TS 3.8.1 to remove the expired footnote identified by a double asterisk and the proposed change to TS 3.5.2 to remove the expired footnote identified by a single dagger are administrative non-technical changes.

Given the above, additional Technical Evaluation of the administrative non-technical changes proposed in this LAR is not necessary.

### 4. Regulatory Evaluation

#### 4.1 Applicable Regulatory Requirements/Criteria

The proposed changes in this LAR are administrative and non-technical in nature.

Upon approval and implementation of the proposed changes, MNS Units 1 and 2 will continue to comply with the applicable regulatory requirements and criteria discussed in the following Regulatory Evaluation:

- DEC's September 14, 2017, LAR, (Adams Accession Number ML17262A090), as supplemented by letter dated December 12, 2017, (Adams Accession Number ML17349A157), which was approved by the NRC as part of their February 15, 2018, SER, (Adams Accession Number ML18030A682).
- DEC's October 28, 2013, LAR, (Adams Accession Number ML13304B445), as supplemented by letter dated June 3, 2014, (Adams Accession Number ML14164A028), which was approved by the NRC as part of their September 10, 2014, SER, (Adams Accession Number ML14231A634).
- DEC's August 28, 2015, LAR, (Adams Accession Number ML15244B179), as supplemented by letter dated November 13, 2015, (Adams Accession Number ML15331A039), which was approved by the NRC as part of their February 3, 2016, SER, (Adams Accession Number ML16004A352).

- DEC's April 11, 2006, LAR, (Adams Accession Number ML061080409), which was approved by the NRC as part of their March 29, 2007, SER, (Adams Accession Number ML063100490)

Therefore, additional discussion of the applicable regulatory requirements and criteria is not necessary.

#### 4.2 No Significant Hazards Consideration Determination Analysis

Pursuant to Section 50.90 of Title 10 of the Code of Federal Regulations (10 CFR), DEC herein submits a license amendment request (LAR) for McGuire Nuclear Station (MNS) Unit 1 and 2. This request for amendment proposes to correct an editorial error contained in Technical Specification (TS) 3.0, SURVEILLANCE REQUIREMENT (SR) APPLICABILITY, SR 3.0.5 and proposes removal of expired Technical Specification (TS) footnotes from the MNS Unit 1 and Unit 2 TSs.

DEC has evaluated whether a significant hazards consideration is involved with the proposed amendment by analyzing the three standards set forth in 10 CFR 50.92(c) as discussed below:

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

Response: No.

This LAR proposes administrative non-technical changes only. These proposed changes do not adversely affect accident initiators or precursors nor alter the design assumptions, conditions, or configurations of the facility. The proposed changes do not alter or prevent the ability of structures, systems and components (SSCs) to perform their intended function to mitigate the consequences of an initiating event within the assumed acceptance limits.

Given the above discussion, it is concluded the proposed amendment does not significantly increase 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.

This LAR proposes administrative non-technical changes only. The proposed changes will not alter the design requirements of any Structure, System or Component (SSC) or its function during accident conditions. No new or different accidents result from the proposed changes. The changes do not involve a physical alteration of the plant or any changes in methods governing normal plant operation. The changes do not alter assumptions made in the safety analysis.

Given the above discussion, it is concluded the proposed amendment 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.

This LAR proposes administrative non-technical changes only. The proposed changes do not alter the manner in which safety limits, limiting safety system settings or limiting conditions for operation are determined. The safety analysis acceptance criteria are not affected by these changes. The proposed changes will not result in plant operation in a configuration outside the design basis. The proposed changes do not adversely affect systems that respond to safely shutdown the plant and to maintain the plant in a safe shutdown condition.

Given the above discussion, it is concluded the proposed amendment does not involve a significant reduction in the margin of safety.

#### 4.3 Conclusion

Based on the above, DEC concludes that the proposed amendment does not involve a 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.

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5. Environmental Considerations

This LAR proposes administrative non-technical changes only; DEC has determined that the proposed amendment does not change requirements with respect to the installation or use of a facility component located within the restricted area, as defined by 10 CFR 20. DEC has evaluated the proposed changes and has determined that they do not involve: (1) a significant hazards consideration, (2) a significant change in the types or a significant increase in the amounts of any effluents that may be released offsite, or (3) a significant increase in individual or cumulative occupational radiation exposures. Accordingly, the proposed amendment 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 needs to be prepared in connection with the proposed amendment.

Attachment 1

Technical Specification Page Markups

### 3.0 SR APPLICABILITY (continued)

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SR 3.0.4            Entry into a MODE or other specified condition in the Applicability of an LCO shall only be made when the LCO's Surveillances have been met within their specified Frequency, except as provided by SR 3.0.3. When an LCO is not met due to Surveillances not having been met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with LCO 3.0.4.

This provision shall not prevent entry into MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

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SR 3.0.5            Surveillance Requirements shall apply to each unit individually unless otherwise indicated as stated in LCO 3.0.8 & 9 for individual Specifications or whenever certain portions of a Specification contain surveillance parameters different for each unit, which will be identified in parentheses or footnotes.

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### 3.5 EMERGENCY CORE COOLING SYSTEMS (ECCS)

#### 3.5.2 ECCS — Operating

LCO 3.5.2 Two ECCS trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

-----NOTE-----

In MODE 3, both safety injection (SI) pump or RHR pump flow paths may be isolated by closing the isolation valves for up to 2 hours to perform pressure isolation valve testing per SR 3.4.14.1.

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#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. One or more trains inoperable.</p> <p><u>AND</u></p> <p>At least 100% of the ECCS flow equivalent to a single OPERABLE ECCS train available.</p>	<p>A.1 Restore train(s) to OPERABLE status.</p>	72 hours*†
<p>B. Required Action and associated Completion Time not met.</p>	<p>B.1 Be in MODE 3.</p> <p><u>AND</u></p> <p>B.2 Be in MODE 4.</p>	<p>6 hours</p> <p>12 hours</p>

-----NOTE-----

\*'A' Train ECCS is allowed to be inoperable for a total of 14 days to address a non-conforming condition on the 'A' Train NSWS supply piping from the Standby Nuclear Service Water Pond (SNSWP). The 14 days may be taken consecutively or in parts until completion of the activity, or by March 31, 2019, whichever occurs first. During the period in which the 'A' Train NSWS supply piping from the SNSWP is not available, the 'A' Train NSWS will remain aligned to Lake Norman until the system is ready for post maintenance testing. Any maintenance that is performed on the remaining portions of 'A' Train NSWS during the period in which the 'A' NSWS from the SNSWP supply piping is not available will be limited to a 72 hour completion time. The latter will not count against the 14 day completion time. Allowance of the extended Completion Time is contingent on meeting the Compensatory Measures as described in MNS LAR submittal correspondence letter MNS-17-031.

† For Unit 1 only, the Completion Time for Required Action A.1 may be extended one-time to 10 days during the 1A RHR AHU repair evolution and is contingent on meeting the compensatory measures described in MNS correspondence letter MNS-15-093. Upon completion of the repair evolution, this footnote is no longer applicable and will expire on March 31, 2016.

### 3.6 CONTAINMENT SYSTEMS

#### 3.6.6 Containment Spray System

LCO 3.6.6 Two containment spray trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One containment spray train inoperable.	A.1 Restore containment spray train to OPERABLE status.	72 hours*
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3.	6 hours
	<u>AND</u> B.2 Be in MODE 5.	84 hours

#### NOTE

\* 'A' Train Containment Spray is allowed to be inoperable for a total of 14 days to address a non-conforming condition on the 'A' Train supply piping from the Standby Nuclear Service Water Pond (SNSWP). The 14 days may be taken consecutively or in parts until completion of the activity, or by March 31, 2019, whichever occurs first. During the period in which the 'A' Train NSWS supply piping from the SNSWP is not available, the 'A' Train NSWS will remain aligned to Lake Norman until the system is ready for post maintenance testing. Any maintenance that is performed on the remaining portions of 'A' Train NSWS during the period in which the 'A' NSWS from the SNSWP supply piping is not available will be limited to a 72 hour completion time. The latter will not count against the 14 day completion time. Allowance of the extended Completion Time is contingent on meeting the Compensatory Measures described in MNS LAR submittal correspondence letter MNS-17-031.

#### SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.6.6.1</p> <p><u>NOTE</u></p> <p>Not required to be met for system vent flow paths opened under administrative control.</p> <p>Verify each containment spray manual and power operated valve in the flow path that is not locked, sealed, or otherwise secured in position is in the correct position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

(continued)

### 3.7 PLANT SYSTEMS

#### 3.7.5 Auxiliary Feedwater (AFW) System

LCO 3.7.5 Three AFW trains shall be OPERABLE.

-----NOTE-----  
Only one AFW train, which includes a motor driven pump, is required to be OPERABLE in MODE 4.  
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APPLICABILITY: MODES 1, 2, and 3,  
MODE 4 when steam generator is relied upon for heat removal.

#### ACTIONS

-----NOTE-----  
LCO 3.0.4.b is not applicable when entering MODE 1.  
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CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. One steam supply to turbine driven AFW pump inoperable.</p> <p><u>OR</u></p> <p>-----NOTE----- Only applicable if MODE 2 has not been entered following refueling. -----</p> <p>One turbine driven AFW pump inoperable in MODE 3 following refueling.</p>	<p>A.1 Restore affected equipment to OPERABLE status.</p>	<p>7 days</p> <p><u>AND</u></p> <p>10 days from discovery of failure to meet the LCO</p>
<p>B. One AFW train inoperable in MODE 1, 2 or 3 for reasons other than Condition A.</p>	<p>B.1 Restore AFW train to OPERABLE status.</p>	<p>72 hours*</p> <p><u>AND</u></p> <p>10 days from discovery of failure to meet the LCO</p>

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>C. Required Action and associated Completion Time for Condition A or B not met.</p> <p><u>OR</u></p> <p>Two AFW trains inoperable in MODE 1, 2, or 3.</p>	<p>C.1 Be in MODE 3.</p> <p><u>AND</u></p> <p>C.2 Be in MODE 4.</p>	<p>6 hours</p> <p>12 hours</p>
<p>D. Three AFW trains inoperable in MODE 1, 2, or 3.</p>	<p>D.1 -----NOTE----- LCO 3.0.3 and all other LCO Required Actions requiring MODE changes are suspended until one AFW train is restored to OPERABLE status. -----</p> <p>Initiate action to restore one AFW train to OPERABLE status.</p>	<p>Immediately</p>
<p>E. Required AFW train inoperable in MODE 4.</p>	<p>E.1 Initiate action to restore AFW train to OPERABLE status.</p>	<p>Immediately</p>

NOTE

~~\* 'A' Train AFW is allowed to be inoperable for a total of 14 days to address a non-conforming condition on the 'A' Train supply piping from the Standby Nuclear Service Water Pond (SNSWP). The 14 days may be taken consecutively or in parts until completion of the activity, or by March 31, 2019, whichever occurs first. During the period in which the 'A' Train NSWS supply piping from the SNSWP is not available, the 'A' Train NSWS will remain aligned to Lake Norman until the system is ready for post maintenance testing. Any maintenance that is performed on the remaining portions of 'A' Train NSWS during the period in which the 'A' NSWS from the SNSWP supply piping is not available will be limited to a 72 hour completion time. The latter will not count against the 14 day completion time. Allowance of the extended Completion Time is contingent on meeting the Compensatory Measures described in MNS LAR submittal correspondence letter MNS-17-031.~~

### 3.7 PLANT SYSTEMS

#### 3.7.6 Component Cooling Water (CCW) System

LCO 3.7.6 Two CCW trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One CCW train inoperable.	<p>A.1 -----NOTE----- Enter applicable Conditions and Required Actions of LCO 3.4.6, "RCS Loops — MODE 4," for residual heat removal loops made inoperable by CCW. -----</p> <p>Restore CCW train to OPERABLE status.</p>	72 hours*
B. Required Action and associated Completion Time of Condition A not met.	<p>B.1 Be in MODE 3.</p> <p><u>AND</u></p> <p>B.2 Be in MODE 5.</p>	<p>6 hours</p> <p>36 hours</p>

#### NOTE

\* 'A' Train CCW is allowed to be inoperable for a total of 14 days to address a non-conforming condition on the 'A' Train supply piping from the Standby Nuclear Service Water Pond (SNSWP). The 14 days may be taken consecutively or in parts until completion of the activity, or by March 31, 2019, whichever occurs first. During the period in which the 'A' Train NSWS supply piping from the SNSWP is not available, the 'A' Train NSWS will remain aligned to Lake Norman until the system is ready for post maintenance testing. Any maintenance that is performed on the remaining portions of 'A' Train NSWS during the period in which the 'A' NSWS from the SNSWP supply piping is not available will be limited to a 72 hour completion time. The latter will not count against the 14 day completion time. Allowance of the extended Completion Time is contingent on meeting the Compensatory Measures as described in MNS LAR submittal correspondence letter MNS-17-031.

### 3.7 PLANT SYSTEMS

#### 3.7.7 Nuclear Service Water System (NSWS)

LCO 3.7.7 Two NSWS trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One NSWS train inoperable.	<p>A.1 -----NOTES-----</p> <ol style="list-style-type: none"> <li>1. Enter applicable Conditions and Required Actions of LCO 3.8.1, "AC Sources— Operating," for emergency diesel generator made inoperable by NSWS.</li> <li>2. Enter applicable Conditions and Required Actions of LCO 3.4.6, "RCS Loops—MODE 4," for residual heat removal loops made inoperable by NSWS.</li> </ol> <p>-----</p> <p>Restore NSWS train to OPERABLE status.</p>	72 hours*
B. Required Action and associated Completion Time of Condition A not met.	<p>B.1 Be in MODE 3.</p> <p><u>AND</u></p> <p>B.2 Be in MODE 5.</p>	<p>6 hours</p> <p>36 hours</p>

NOTE

~~\* 'A' Train NSWS is allowed to be inoperable for a total of 14 days to address a non-conforming condition on the 'A' Train supply piping from the Standby Nuclear Service Water Pond (SNSWP). The 14 days may be taken consecutively or in parts until completion of the activity, or by March 31, 2019, whichever occurs first. During the period in which the 'A' Train NSWS supply piping from the SNSWP is not available, the 'A' Train NSWS will remain aligned to Lake Norman until the system is ready for post maintenance testing. Any maintenance that is performed on the remaining portions of 'A' Train NSWS during the period in which the 'A' NSWS from the SNSWP supply piping is not available will be limited to a 72 hour completion time. The latter will not count against the 14 day completion time. Allowance of the extended Completion Time is contingent on meeting the Compensatory Measures as described in MNS LAR submittal correspondence letter MNS-17-031.~~

**SURVEILLANCE REQUIREMENTS**

SURVEILLANCE		FREQUENCY
SR 3.7.7.1	<p style="text-align: center;"><del>-----NOTE-----</del></p> <p>Isolation of NSWS flow to individual components does not render the NSWS inoperable.</p> <p>-----</p> <p>Verify each NSWS manual, power operated, and automatic valve in the flow path servicing safety related equipment, that is not locked, sealed, or otherwise secured in position, is in the correct position.</p>	In accordance with the Surveillance Frequency Control Program
SR 3.7.7.2	Verify each NSWS automatic valve in the flow path servicing safety related equipment, that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal.	In accordance with the Surveillance Frequency Control Program
SR 3.7.7.3	Verify each NSWS pump starts automatically on an actual or simulated actuation signal.	In accordance with the Surveillance Frequency Control Program

## 3.7 PLANT SYSTEMS

## 3.7.9 Control Room Area Ventilation System (CRAVS)

LCO 3.7.9 Two CRAVS trains shall be OPERABLE.

## -----NOTE-----

The control room envelope (CRE) boundary may be opened intermittently under administrative control.

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APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6,  
During movement of irradiated fuel assemblies,  
During CORE ALTERATIONS.

## ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One CRAVS train inoperable for reasons other than Condition B.	A.1 Restore CRAVS train to OPERABLE status.	7 days*
B. One or more CRAVS trains inoperable due to inoperable CRE boundary in MODE 1,2,3, or 4.	B.1 Initiate action to implement mitigating actions.	Immediately
	<u>AND</u>	24 hours
	B.2 Verify mitigating actions ensure CRE occupant exposures to radiological, chemical, and smoke hazards will not exceed limits.	
C. Required Action and associated Completion Time of Condition A or B not met in MODE 1, 2, 3, or 4.	<u>AND</u>	90 days
	B.3 Restore CRE boundary to OPERABLE status.	
	C.1 Be in MODE 3.	6 hours
	<u>AND</u>	
	C.2 Be in MODE 5.	36 hours
		(continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
G. One or more CRAVS train(s) heater inoperable.	G.1 Restore CRAVS train(s) heater to OPERABLE status.	7 days
	<u>OR</u> G.2 Initiate action in accordance with Specification 5.6.6.	7 days

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**NOTE**

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~~\* 'A' Train CRAVS is allowed to be inoperable for a total of 14 days to address a non-conforming condition on the 'A' Train supply piping from the Standby Nuclear Service Water Pond (SNSWP). The 14 days may be taken consecutively or in parts until completion of the activity, or by March 31, 2019, whichever occurs first. During the period in which the 'A' Train NSWS supply piping from the SNSWP is not available, the 'A' Train NSWS will remain aligned to Lake Norman until the system is ready for post maintenance testing. Any maintenance that is performed on the remaining portions of 'A' Train NSWS during the period in which the 'A' NSWS from the SNSWP supply piping is not available will be limited to a 72 hour completion time. The latter will not count against the 14 day completion time. Allowance of the extended Completion Time is contingent on meeting the Compensatory Measures as described in MNS LAR submittal correspondence letter MNS-17-031.~~

### 3.7 PLANT SYSTEMS

#### 3.7.11 Auxiliary Building Filtered Ventilation Exhaust System (ABFVES)

LCO 3.7.11 Two ABFVES shall be OPERABLE.

-----NOTE-----  
The Auxiliary Building pressure boundary may be opened intermittently under administrative controls.  
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APPLICABILITY: MODES 1, 2, 3, and 4.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One ABFVES inoperable.	A.1 Restore ABFVES to OPERABLE status.	7 days*
B. Two ABFVES inoperable.	B.1 Restore one ABFVES to OPERABLE status.	24 hours
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 3.	6 hours
	<u>AND</u> C.2 Be in MODE 5.	36 hours

-----NOTE-----  
\* 'A' Train ABFVES is allowed to be inoperable for a total of 14 days to address a non-conforming condition on the 'A' Train supply piping from the Standby Nuclear Service Water Pond (SNSWP). The 14 days may be taken consecutively or in parts until completion of the activity, or by March 31, 2019, whichever occurs first. During the period in which the 'A' Train NSWS supply piping from the SNSWP is not available, the 'A' Train NSWS will remain aligned to Lake Norman until the system is ready for post maintenance testing. Any maintenance that is performed on the remaining portions of 'A' Train NSWS during the period in which the 'A' NSWS from the SNSWP supply piping is not available will be limited to a 72 hour completion time. The latter will not count against the 14 day completion time. Allowance of the extended Completion Time is contingent on meeting the Compensatory Measures as described in MNS LAR submittal correspondence letter MNS-17-031.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. (continued)	B.4 Restore DG to OPERABLE status.	72 hours **  <u>AND</u>  6 days from discovery of failure to meet LCO
C. Two offsite circuits inoperable.	C.1 Declare required feature(s) inoperable when its redundant required feature(s) is inoperable.  <u>AND</u>  C.2 Restore one offsite circuit to OPERABLE status.	12 hours from discovery of Condition C concurrent with inoperability of redundant required feature(s)          24 hours

(continued)

~~\*\* 'A' Train EDGs are allowed to be inoperable for a total of 14 days to address a non-conforming condition on the 'A' Train supply piping from the Standby Nuclear Service Water Pond (SNSWP). The 14 days may be taken consecutively or in parts until completion of the activity, or by March 31, 2019, whichever occurs first. During the period in which the 'A' Train NSWS supply piping from the SNSWP is not available, the 'A' Train NSWS will remain aligned to Lake Norman until the system is ready for post maintenance testing. Any maintenance that is performed on the remaining portions of 'A' Train NSWS during the period in which the 'A' NSWS from the SNSWP supply piping is not available will be limited to a 72 hour completion time. The latter will not count against the 14 day completion time. Allowance of the extended Completion Time is contingent on meeting the Compensatory Measures as described in MNS LAR submittal correspondence letter MNS-17-031.~~

### 3.8 ELECTRICAL POWER SYSTEMS

#### 3.8.4 DC Sources — Operating

LCO 3.8.4 The four channels of DC sources shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One channel of DC source inoperable.	A.1 Restore channel of DC source to OPERABLE status.	2 hours
	<u>OR</u>	
	A.2.1 Verify associated bus tie breakers are closed between DC channels.	2 hours
	<u>AND</u>	
	A.2.2 Restore channel of DC source to OPERABLE status.	72 hours*
B. Required Action and Associated Completion Time not met.	B.1 Be in MODE 3.	6 hours
	<u>AND</u>	
	B.2 Be in MODE 5.	36 hours

~~\*The Completion Time that one channel of DC source can be inoperable as specified by Required Action A.2.2 may be extended beyond the "72 hours" for up to 14 days as part of the battery replacement project. This allowance may be used one-time for each of the four DC channels. Upon completion of the battery replacement project, this footnote is no longer applicable and will expire on December 31, 2016.~~

Attachment 2

Bases Page Markups

For Information Only

## BASES

## ACTIONS (continued)

An event accompanied by a loss of offsite power and the failure of an EDG can disable one ECCS train until power is restored. A reliability analysis (Ref. 6) has shown that the impact of having one full ECCS train inoperable is sufficiently small to justify continued operation for 72 hours.

Reference 7 describes situations in which one component, such as an RHR crossover valve, can disable both ECCS trains. With one or more component(s) inoperable such that 100% of the flow equivalent to a single OPERABLE ECCS train is not available, the facility is in a condition outside the accident analysis. Therefore, LCO 3.0.3 must be immediately entered.

As part of the 1A RHR AHU repair evolution, the Completion Time that one train of ECCS can be inoperable as specified by Required Action A.1 may be extended beyond the "72 hours" for up to 10 days (on Unit 1 only). This allowance may be used one-time for the 1A RHR AHU repair. Upon completion of the repair and restoration, the Completion Time footnote is no longer applicable and will expire on March 31, 2016. The commitments from the LAR submittal are as follows:

Commitment	Description
1	<del>The alternate forced cooling equipment (chiller and AHU) will be installed and tested in accordance with the EC process prior to the 1A RHR AHU repair evolution.</del>
2	<del>At least one WZ C sump pump will be available prior to the 1A RHR AHU repair evolution.</del>
3	<del>The following SSCs will be protected prior to the 1A RHR AHU repair evolution, and elective maintenance to them will be deferred during the repairs to the 1A RHR pump motor AHU:</del> <ul style="list-style-type: none"> <li><del>• 1B RHR train</del></li> <li><del>• 1B Nuclear Service Water System (NSWS) train</del></li> <li><del>• 1B Component Cooling Water System (CCWS) train</del></li> <li><del>• 1B Emergency Diesel Generator (EDG)</del></li> <li><del>• Power supply to the alternate cooling equipment</del></li> <li><del>• One WZ C sump pump</del></li> </ul>
4	<del>Prior to the 1A RHR AHU repair evolution, McGuire will monitor the National Weather Service for potential severe weather conditions. To the extent practical, severe weather conditions will be avoided.</del>
5	<del>Prior to the 1A RHR AHU repair evolution, and daily thereafter, McGuire will contact the Transmission Control Center (TCC) regarding system grid stability. To the extent practical, system grid instability will be avoided.</del>

## BASES

## ACTIONS (continued)

6	<p>Prior to the 1A RHR AHU repair evolution, roving fire watches will be established in the following areas to minimize the chance of fire-induced LOCAs:</p> <ul style="list-style-type: none"><li>• Unit 1 4.16kV Switchgear Rooms</li><li>• Unit 1 Auxiliary Feedwater Pump Room</li><li>• 1B Diesel Generator Room</li><li>• Fire Area 14—vicinity of 1/2EMXB4</li><li>• Fire Area 19—vicinity of 1/2EMXG</li><li>• Fire Area 25—vicinity of 1IC02</li></ul>
7	<p>Prior to the 1A RHR AHU repair evolution, procedures will have been developed to start the alternate cooling when required, and personnel will be designated to ensure that the equipment is started before room temperatures exceed the limits.</p>

B.1 and B.2

If the inoperable trains cannot be returned to OPERABLE status within the associated Completion Time, the plant must be brought to a MODE in which the LCO does not apply. To achieve this status, the plant must be brought to MODE 3 within 6 hours and MODE 4 within 12 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

SURVEILLANCE  
REQUIREMENTSSR 3.5.2.1

Verification of proper valve position ensures that the flow path from the ECCS pumps to the RCS is maintained. Misalignment of these valves could render both ECCS trains inoperable. Securing these valves using the power disconnect switches in the correct position ensures that they cannot change position as a result of an active failure or be inadvertently misaligned. These valves are of the type, described in Reference 7, that can disable the function of both ECCS trains and invalidate the accident analyses. The Surveillance Frequency is based on operating experience, equipment reliability, and plant risk and is controlled under the Surveillance Frequency Control Program.

SR 3.5.2.2

Verifying the correct alignment for manual, power operated, and automatic valves in the ECCS flow paths provides assurance that the proper flow paths will exist for ECCS operation. This SR does not apply

## BASES

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### ACTIONS (continued)

This is an exception to LCO 3.0.6 and ensures the proper actions are taken for these components. The 72 hour Completion Time is based on the redundant capabilities afforded by the OPERABLE train, and the low probability of a DBA occurring during this time period.

~~A onetime change to TS 3.7.7 extends Action A.1 completion time (CT) from 72 hours to 14 days. The change also affects TS 3.5.2, Emergency Core Cooling System (ECCS) Operating; TS 3.6.6, Containment Spray System (CSS); TS 3.7.5, Auxiliary Feedwater (AFW) System; TS 3.7.6, Component Cooling Water (CCW) System; TS 3.7.7, Nuclear Service Water System (NSWS); TS 3.7.9, Control Room Area Ventilation System (CRAVS); TS 3.7.11, Auxiliary Building Filtered Ventilation Exhaust System (ABFVES), and TS 3.8.1, AC Sources Operating.~~

#### B.1 and B.2

If the NSWS train cannot be restored to OPERABLE status within the associated Completion Time, the unit must be placed in a MODE in which the LCO does not apply. To achieve this status, the unit must be placed in at least MODE 3 within 6 hours and in MODE 5 within 36 hours.

The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

## BASES

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### ACTIONS (continued)

If one of the required channels of DC is inoperable (e.g., inoperable battery, inoperable battery charger(s), or inoperable battery charger and associated inoperable battery), the remaining DC channels have the capacity to support a safe shutdown and to mitigate an accident condition. If the channel of DC cannot be restored to OPERABLE status, Action A.2 must be entered and the DC channel must be energized from an OPERABLE channel; from the same train, within 2 hours. The capacity of the redundant channel is sufficient to supply its normally supplied channel and cross tied channel for the required time, in case of a DBA event. The inoperable channel of DC must be returned to OPERABLE status within 72 hours and the cross ties to the other channel open. The 72 hour Completion Time reflects a reasonable time to assess unit status as a function of the inoperable channel of DC and, if the DC channel is not restored to OPERABLE status, to prepare to effect an orderly and safe unit shutdown.

~~As part of the battery replacement project, the Completion Time that one channel of DC source can be inoperable as specified by Required Action A.2.2 may be extended beyond the "72 hours" for up to 14 days. This allowance may be used one time for each of the four DC channels. Upon completion of the battery replacement project, the Completion Time footnote is no longer applicable and will expire on December 31, 2016.~~

#### B.1 and B.2

If the inoperable channel of DC cannot be restored to OPERABLE status within the required Completion Time, the unit must be brought to a MODE in which the LCO does not apply. To achieve this status, the unit must be brought to at least MODE 3 within 6 hours and to MODE 5 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging plant systems. The Completion Time to bring the unit to MODE 5 is consistent with the time required in Regulatory Guide 1.93 (Ref. 9).

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### SURVEILLANCE REQUIREMENTS

#### SR 3.8.4.1

Verifying battery terminal voltage while on float charge for the batteries helps to ensure the effectiveness of the charging system and the ability of the batteries to perform their intended function. Float charge is the condition in which the charger is supplying the continuous charge required to overcome the internal losses of a battery (or battery cell) and maintain the battery (or a battery cell) in a fully charged state. The voltage requirements are based on the nominal design voltage of the battery and are consistent with the initial voltages assumed in the battery