UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

August 27, 2015

Mr. Steven D. Capps
Vice President
McGuire Nuclear Station
Duke Energy Carolinas, LLC
12700 Hagers Ferry Road
Huntersville, NC 28078-8985

SUBJECT: MCGUIRE NUCLEAR STATION, UNITS 1 AND 2: REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT REQUEST NUCLEAR SERVICE WATER SYSTEM ALLOWED OUTAGE TIME EXTENSION (TAC NOS. MF2983 AND MF2984)

Dear Mr. Capps:

By letter dated June 30, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15191A025), Duke Energy Carolinas, LLC (the licensee) submitted a license amendment request, which requested to modify selected Technical Specification Completion Times to support repair activity associated with the Nuclear Service Water System, Train 'A'.

The U.S. Nuclear Regulatory Commission staff has reviewed the licensee's submittal and determined that additional information is needed in order to complete its review. The enclosed document describes this request for additional information (RAI). On August 24, 2014, the Duke staff indicated that a response to the RAI would be provided within 30 days.

If you have any questions, please call me at 301-415-2481.

Sincerely,

G. Edward Miller, Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-369 and 50-370

Enclosure:
Request for Additional
Information

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION

MCGUIRE NUCLEAR STATION, UNITS 1 AND 2

RELATED TO A LICENSE AMENDMENT REQUEST SUPPORTING CORRECTION OF A

NUCLEAR SERVICE WATER SYSTEM DEGRADED CONDITION

DUKE ENERGY CAROLINAS, LLC

DOCKET NOS. 50-369 AND 50-370

By letter dated June 30, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15191A025), Duke Energy Carolinas, LLC (Duke Energy) submitted a license amendment request (LAR) to temporarily change McGuire Nuclear Station (MNS), Units 1 and 2, Technical Specifications (TSs) for correction of a degraded condition affecting the 'A' Train of the nuclear service water system (NSWS). The requested amendment would temporarily change the following TSs to allow the inoperability of the 'A' Train of the NSWS for a total of up to 14 days: 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, 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 'A' Train of the shared NSWS would be inoperable while the safety-related supply from the MNS Nuclear Service Water Pond was drained and isolated to correct a degraded condition affecting that line.

Based on the NRC staff's review of this amendment request, the NRC staff has determined the following additional information is necessary to support completion of its technical review:

SBPB-RAI-001

The LAR included a potential activity to install a piping penetration in the drained section of the NSWS within the auxiliary building if required for personnel access to remove suspected blockage. The LAR also included information indicating the opening in the pipe for personnel access establishes the potential for NSWS leakage into the auxiliary building. To ensure against the potential for significant leakage, the LAR indicated that the Standby Nuclear Service Water Pond (SNSWP) water source would be isolated by the installation of a bolted flange and the Lake Norman water source would be isolated by closure of 0RN-7A under procedural controls. Dedicated personnel and procedures would be established to address excessive leakage past the valve. However, the MNS Updated Final Safety Analysis Report included information indicating the auxiliary building is a Category 1 structure that is sealed to provide protection against external flooding. Although unlikely, the procedural control of valve 0RN-7A position creates the credible potential for inadvertent opening of the valve while the piping penetration in the auxiliary building is open that could cause flooding of the auxiliary building from Lake Norman.

Please clarify how this approach is consistent with defense-in-depth, particularly the principal of avoiding an over-reliance on programmatic activities. The programmatic control of the 0RN-7A valve position and the programmatic response to significant valve leakage should have reliability commensurate with the likelihood and consequences of significant leakage past valve 0RN-7A with an opening in the pipe within the auxiliary building. The NRC staff requests additional information that addresses these considerations. As appropriate, these considerations may be addressed by eliminating the need for a piping penetration within the auxiliary building, establishing by analysis that the consequences of flooding through the auxiliary building penetration would be small (e.g., passive barriers within the auxiliary building would protect essential equipment from flooding through that path), or providing independent additional piping isolations (e.g., a freeze seal in the NSWS piping between valve 0RN-7A and Lake Norman).

SBPB-RAI-002

The LAR describes activities and design features that provide protection against macro-fouling of the NSWS from Lake Norman (i.e., inspection of fish barrier) and the SNSWP (i.e., fish population controls, fish population survey, and fish barrier). Please describe how the timeliness of these activities in managing the potential for macro-fouling will be verified prior to removing the SNSWP supply to 'A' NSWS Train from service.

August 27, 2015

Mr. Steven D. Capps
Vice President
McGuire Nuclear Station
Duke Energy Carolinas, LLC
12700 Hagers Ferry Road
Huntersville, NC 28078-8985

SUBJECT: MCGUIRE NUCLEAR STATION, UNITS 1 AND 2: REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT REQUEST NUCLEAR SERVICE WATER SYSTEM ALLOWED OUTAGE TIME EXTENSION (TAC NOS. MF2983 AND MF2984)

Dear Mr. Capps:

By letter dated June 30, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15191A025), Duke Energy Carolinas, LLC (the licensee) submitted a license amendment request, which requested to modify selected Technical Specification Completion Times to support repair activity associated with the Nuclear Service Water System, Train 'A'.

The U.S. Nuclear Regulatory Commission staff has reviewed the licensee's submittal and determined that additional information is needed in order to complete its review. The enclosed document describes this request for additional information (RAI). On August 24, 2014, the Duke staff indicated that a response to the RAI would be provided within 30 days.

If you have any questions, please call me at 301-415-2481.

Sincerely,

/RA/
G. Edward Miller, Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-369 and 50-370

Enclosure:
Request for Additional
Information

cc w/encl: Distribution via Listserv

DISTRIBUTION:

Public	LPL2-1 R/F
RidsAcrsAcnw_MailCTR Resource	RidsNrrDorlLpl2-1 Resource
RidsNrrDeEicb Resource	RidsNrrPMMcGuireResource (hard copy)
RidsNrrLASFigueroa Resource	RidsRgn2MailCenter Resource

ADAMS Accession No. ML15237A416 ***via E-mail**

OFFICE	NRR/LPL2-1/PM	NRR/LPL2-1/LA	NRR/DE/SBPB/BC	NRR/LPL2-1/BC
NAME	GEMiller	SFigueroa	GCasto*	RPascarelli
DATE	08/27/15	08/26/15	08/14/15	08/27/15

OFFICIAL RECORD COPY