

## **NRR-PMDAPEm Resource**

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**From:** Miller, Ed  
**Sent:** Friday, August 28, 2015 3:50 PM  
**To:** 'Murphy, George M (George.Murphy2@duke-energy.com)'  
**Subject:** Draft RAI for NSW Temp AOT Extension  
**Attachments:** MF6409\_10 Draft RAI\_SRXB\_SCVB.docx

George,

The NRC staff's draft RAI for the subject relief request is attached to this e-mail. The draft RAI is not an official NRC staff request and is being provided to you to facilitate a subsequent conference call to determine: 1) If the questions clearly convey the NRC staff information needs; 2) Whether the regulatory basis for the questions is understood; 3) Whether the information is already available in existing, docketed, correspondence; and 4) To determine an appropriate response time-frame. After you've had a chance to review the draft information request, please contact me to schedule the conference call.

Ed Miller  
(301) 415-2481

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"Murphy, George M (George.Murphy2@duke-energy.com)" <George.Murphy2@duke-energy.com>  
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**REQUEST FOR ADDITIONAL INFORMATION**  
**BY THE OFFICE OF NUCLEAR REACTOR REGULATION**  
**RELATED TO A LICENSE AMENDMENT REQUEST SUPPORTING CORRECTION OF A**  
**NUCLEAR SERVICE WATER SYSTEM DEGRADED CONDITION**  
**DUKE ENERGY CAROLINAS, LLC**  
**MCGUIRE NUCLEARSTATION, UNITS 1 AND 2**  
**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, 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 '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:

**SCVB-RAI-001**

The license amendment focuses on the temporary alignments and changes requested for the Nuclear Service Water System, however, these changes impact other systems. For the Containment Spray System, Control Room Area Ventilation System, and the Auxiliary Building Filtered Ventilation Exhaust System:

- a. Explain the available capabilities of the above systems during the time when the requested temporary technical specifications changes would be enacted.
- b. Discuss the impact of any deviations from standard alignment and operation of the systems.

**SRXB-RAI-001**

While the approach taken in the proposed LAR is a qualitative risk approach, please address the need to preclude potentially high-risk plant configurations that could result if additional equipment, not associated with the proposed change, is taken out of service during the proposed AOT extension. Provide a justification to limiting the prohibition of discretionary maintenance to the following systems:

- a. 1A EDG;
- b. 2A EDG;
- c. The 'A' Train of NSWS excluding the activities described in the LAR for the 'A' Train NSWS piping to the SNSWP;
- d. The 'B' Train of NSWS, ECCS, CSS, AFW, CCW, CRAVS, ABFVES or the EDGs;
- e. The switchyard and other offsite power sources; and
- f. The SSF.

Specifically, provide a justification for not implementing a broader limitation on discretionary maintenance (e.g., such as that of the cited STPNOC precedent (ML050100291), "*STPNOC will not perform any planned voluntary maintenance in Unit 1 during the extended AOT (EAOT) that would increase the ICCDP.*").

#### **SRXB-RAI-002**

The LAR lists the following equipment to be protected during the AOT extension of the 'A' train of NSWS:

- a. 'B' Train NSWS
- b. 1B EDG
- c. 2B EDG
- d. 1B ECCS
- e. 2B ECCS
- f. 1B CSS
- g. 2B CSS
- h. 1B AFW
- i. 2B AFW
- j. 1B CCW
- k. 2B CCW
- l. B CRAVS
- m. B ABFVES
- n. Auxiliary Building WZ Sump and equipment supporting function of sump

Provide a discussion on the criteria used to determine the protected equipment. Include a justification for not including the turbine driven AFW pump, Containment Ventilation Cooling Water (RV) system and the Standby Shutdown Facility (SSF) standby makeup pump, which appear to be important to managing the risk of the proposed AOT extension.

### **SRXB-RAI-003**

Clarify whether any maintenance will be allowed on the 'A' Train NSWS that would impact the ability of the system to operate taking suction from the Lake Norman Low Level Intake (LLI) (even if these activities are within the 72 completion time) during the period that the Standby Nuclear Service Water Pond (SNSWP) suction is not available for the 'A' train of NSWS.

Specifically, address what is meant by the following statement in section 3.5 of the LAR:

- 2. Any maintenance that is performed on the remaining portions of the 'A' Train NSWS during the period in which the 'A' NSWS piping from the SNSWP is not available will be limited to a 72 hour completion time.*