



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

February 26, 2018

Mr. Steven Capps
Senior Vice President
Nuclear Corporate
Duke Energy Corporation
526 South Church Street, EC-07H
Charlotte, NC 28202

SUBJECT: DUKE ENERGY CAROLINAS, LLC – CATAWBA NUCLEAR STATION, UNITS 1 AND 2, REGULATORY AUDIT TO SUPPORT COMMISSION APPROVAL OF PROPOSED AMENDMENTS FOR CHANGES TO TECHNICAL SPECIFICATION 3.8.1, "AC SOURCES – OPERATING" (CAC NOS. MF9667, MF9668, MF9671, AND MF9672; EPIDS L-2017-LLA-0256 AND L-2017-LLA-0257)


Dear Mr. Capps:

By letter dated May 2, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17122A116) as supplemented by letters dated July 20, 2017 (ADAMS Accession No. ML17201Q132) and November 21, 2017 (ADAMS Accession No. ML17325A588), Duke Energy Carolinas, LLC, submitted a proposed license amendment request for Catawba Nuclear Station (Catawba), Units 1 and 2, and McGuire Nuclear Station (McGuire), Units 1 and 2, for changes to Technical Specification 3.8.1, "AC Sources - Operating."

The NRC staff will conduct a regulatory audit to support its review of the proposed license amendment request for Catawba. The McGuire proposed license amendment request is not included in the scope of this audit. The audit will be performed remotely during the week of March 5, 2018. The logistics and scope of the audit were discussed with your staff on February 7, 2018. The audit plan is enclosed.

If you have any questions, please contact me by telephone at 301-415-3867 or by e-mail at Michael.Mahoney@nrc.gov.

Sincerely,



Michael Mahoney, Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-413 and 50-414

Enclosure:

1. Audit Plan

REGULATORY AUDIT IN SUPPORT OF THE COMMISSION APPROVAL OF LICENSE

AMENDMENT REQUESTS FOR PROPOSING CHANGES TO

TECHNICAL SPECIFICATION 3.8.1, "AC SOURCES - OPERATING"

DUKE ENERGY CAROLINAS, LLC

CATAWBA NUCLEAR STATION, UNITS 1 AND 2

DOCKET NOS. 50-413 AND 50-414

I. BACKGROUND

By letter dated May 2, 2017 as supplemented by letters dated July 20, and November 21, 2017 (References 1, 2, and 3, respectively), Duke Energy Carolinas, LLC (Duke, the licensee) proposed to amend the Catawba Nuclear Station (Catawba), Units 1 and 2, and McGuire Nuclear Station (McGuire), Units 1 and 2, Technical Specifications (TSs). Specifically the license amendment requests (LARs) propose to extend the Completion Time (CT) of TS 3.8.1, "AC Sources – Operating," Required Action B.6 (existing Required Action B.4, numbered as B.6) for an inoperable emergency diesel generator (DG) from 72 hours to 14 days. A conforming change is also proposed to extend the maximum Completion Time of TS 3.8.1 Required Actions A.3 and B.4. To support this request, Catawba and McGuire will add a supplemental power source (i.e., two supplemental diesel generators (SDGs) per site) with the capability to power any emergency bus. The SDGs will have the capacity to bring the affected unit to cold shutdown. Additionally, the amendments would modify TS 3.8.1 to add new two limiting conditions for operation to ensure that at least one train of shared components has an operable emergency power supply.

The Nuclear Regulatory Commission (NRC) staff's review of the LAR has commenced in accordance with the Office of Nuclear Reactor Regulation's (NRR) Office Instruction LIC-101, "License Amendment Review Procedures." The NRC staff has determined that a regulatory audit for the LAR (Catawba only) should be conducted in accordance with LIC-111, "Regulatory Audits," for the NRC staff to gain a better understanding of the proposed LAR.

A regulatory audit is a planned, license or regulation-related activity that includes the examination and evaluation of primarily non-docketed information. A regulatory audit is conducted with the intent to gain understanding, to verify information, and/or to identify information that will require docketing to support the basis of the licensing or regulatory decision. Performing a regulatory audit of licensee information is expected to assist the NRC staff in efficiently completing its review or gain insights on the licensee's analysis supporting the proposed amendments. Information that the NRC staff relies upon to make the safety evaluation must be submitted on the docket. However, there may be supporting information retained as records under 10 CFR 50.71 and/or 10 CFR 54.37 that, although not required to be submitted as part of the licensing action, would help the NRC staff better understand the licensee's submitted information.

The objective of this regulatory audit is to obtain information that demonstrates that the

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proposed changes to TS 3.8.1, with only one EDG from the opposite unit required to be operable, along with the proposed changes to the definition of power requirements for shared systems (i.e. both normal and emergency power for shared components must be operable) meet the regulatory requirements of 10 CFR 50.36.

II. REGULATORY AUDIT BASIS

The basis for the regulatory audit are:

- concerns regarding the revision of the definition of operability of shared components which required normal or emergency power requirements;
- demonstration of how the licensee's proposed changes meet the regulatory requirements of 10 CFR 50.36 with only one EDG from the opposite unit required to be operable
- explanation of the regulatory adequacy of proposed TS 3.8.1, as to whether sufficient equipment is specified to be operable, such that a LOCA in an affected Unit is mitigated and the opposite Unit can be brought to cold shutdown.

III. REGULATORY AUDIT SCOPE OR METHOD

The scope of the audit will include reviewing Catawba shared systems (such as the Nuclear Service Water System (NSWS)) interactions with power requirements associated with the proposed LAR. The NRC staff will review information provided by the licensee via an online document file sharing portal and conference call. The audit will identify information which will be docketed by the licensee for the NRC staff to complete its review of the LAR.

IV. INFORMATION AND OTHER MATERIAL NECESSARY FOR THE AUDIT

At a minimum, electronic copies of the following documentation should be available to the audit team:

- Documentation (e.g., calculations, drawings, system schematics, etc.)
- Discussion with the licensee representatives on issues related to shared systems, capacity, and dependencies.

V. TEAM ASSIGNMENTS

The audit will be conducted by NRC staff from the Office of Nuclear Reactor Regulation (NRR) from the Division of Safety Systems (DSS), Division of Engineering (DE) and Division of Operator Reactor Licensing (DORL).

The NRC Audit Team Leader will be Michael Mahoney and the NRC Technical Lead will be Jerry Purciarello. The team leader will conduct daily briefings on the status of the review and coordinate audit activities.

The NRC staff members participating in the audit are:

NRC Staff	Organization
Michael Mahoney	NRR/DORL/LPL2-1
Gerard Purciarello	NRR/DSS/SBPB
Pete Snyder	NRR/DSS/STSB
Roy Mathew	NRR/DE/EEOB
Shavon Morris	NRR/DE/EEOB

The table below shows the audit milestones and schedule.

Audit Milestones and Schedule		
Activity	Time Frame	Comments
Audit Kick-Off Meeting	Day 1	NRC/Duke will conduct a brief introduction and scope of the Audit.
Conduct Audit	Day 1 – Day 2	Review licensee's draft response to issues and supporting documentation. Meetings with licensee to answer any questions the NRC staff may have.
Audit Exit Meeting	Day 2	Reviewers present preliminary observations to licensee.
Audit Summary (see VIII)	Day 32	To document the audit.

VI. LOGISTICS

This regulatory audit is planned for the week of March 5, 2018, and will last approximately two days. These dates are subject to change based on mutual agreement between the licensee and the NRC. An entrance meeting for this audit will be held on the first day and an exit meeting will be held on the final audit day to provide preliminary feedback to the licensee.

VII. SPECIAL REQUESTS

The regulatory audit team will require the following to support the regulatory audit:

- Access to licensee personnel knowledgeable to the Catawba NSWS system design.
- Electronic access to documentation.

VIII. DELIVERABLES

A regulatory audit summary will be issued within approximately 30 days of the completion of the audit. The summary will use the guidance of NRR Office Instruction LIC-111 for content. This audit may result in formal requests for additional information (RAIs) for the licensee regarding the LARs; however, the summary itself is expected to document the licensee's adherence to the accepted process as an internal memorandum from the audit team leader to the responsible supervisors. The audit summary will be placed in the Agencywide Documents Access and Management System.

IX REFERENCES

1. Letter from Kelvin Henderson, Duke Energy Carolinas, LLC, Catawba Nuclear Station, Unit Nos. 1 and 2, McGuire Nuclear Station, Unit Nos. 1 and 2, to U.S. Nuclear Regulatory Commission, "License Amendment Request Proposing Changes to Catawba and McGuire Technical Specification 3.8.1, "AC Sources – Operating", May 2, 2017 (Agency Wide Documents Management System (ADAMS) Accession No. ML17122A116)
2. Letter from Kelvin Henderson, Duke Energy Carolinas, LLC, Catawba Nuclear Station, Unit Nos. 1 and 2, McGuire Nuclear Station, Unit Nos. 1 and 2, to U.S. Nuclear Regulatory Commission, "Supplement to License Amendment Request Proposing Changes to Catawba and McGuire Technical Specification 3.8.1, "AC Sources – Operating", July 20, 2017 (ADAMS Accession No. ML17201Q132)
3. Letter from Kelvin Henderson, Duke Energy Carolinas, LLC, Catawba Nuclear Station, Unit Nos. 1 and 2, McGuire Nuclear Station, Unit Nos. 1 and 2, to U.S. Nuclear Regulatory Commission, "Supplement to License Amendment Request Proposing Changes to Catawba and McGuire Technical Specification 3.8.1, "AC Sources – Operating", November 21, 2017 (ADAMS Accession No. ML17325A588)

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PM Reading File

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ADAMS Accession No.: ML18046B077

OFFICE	NRR/LPL2-1/PM	NRR/LPL2-1/LA	NRR/LPL2-1/BC	NRR/LPL2-1/PM
NAME	MMahoney	KGoldstein	MMarkley	MMahoney
DATE	02/21/18	02/16/18	02/26/18	02/26/18

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