



J. Ed Burchfield, Jr.
Vice President
Oconee Nuclear Station

Duke Energy
ON01VP | 7800 Rochester Hwy
Seneca, SC 29672

o: 864.873.3478
f: 864.873.4208

Ed.Burchfield@duke-energy.com

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10 CFR 50.55a(z)(1)

February 19, 2018

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Duke Energy Carolina, LLC (Duke Energy)
Oconee Nuclear Station, Units 1, 2 and 3
Docket Numbers 50-269, 50-270, 50-287
Renewed License Numbers DPR-38, DPR-47, and DPR-55

Subject: Duke Energy Response to Request for Additional Information (RAI); Request for Alternative to Codes and Standards Requirements Pursuant to 10 CFR 50.55a(z) to Satisfy 10 CFR 50.55a(h)(2) Associated with Bronze Tape Wrapped Emergency Power Cables in Use at the Oconee Nuclear Station

References:

1. Duke Energy Letter to the NRC, "Request for Alternative to Codes and Standards Requirements pursuant to 10 CFR 50.55a(z) to satisfy 10 CFR 50.55a(h)(2) associated with Bronze Tape Wrapped Emergency Power Cables in Use at the Oconee Nuclear Station," dated February 15, 2016.
2. NRC Email, "Request for Additional Information - Oconee Nuclear Station - Proposed Alternatives to Cable Separation Requirements," from Audrey Klett (NRC) to Chris Wasik (Duke Energy), dated February 1, 2018.
3. Duke Energy Letter to the NRC, "Responses to Request for Additional Information (RAI); Request for Alternative to Codes and Standards Requirements Pursuant to 10 CFR 50.55a(z) to Satisfy 10 CFR 50.55a(h)(2) Associated with Bronze Tape Wrapped Emergency Power Cables in Use at the Oconee Nuclear Station," dated February 12, 2018.
4. NRC Email, "Request for Additional Information #6 - Oconee Nuclear Station - Proposed Alternatives to Cable Separation Requirements," from Audrey Klett (NRC) to Chris Wasik (Duke Energy), dated February 15, 2018.

By letter dated February 15, 2016, Duke Energy Carolinas, LLC. (Duke Energy), submitted a request to the U.S. Nuclear Regulatory Commission (NRC) for the use of alternatives to portions of Institute of Electrical and Electronic Engineers (IEEE) Standard 279-1971, "Criteria for Protection Systems for Nuclear Power Stations," for specific configurations at the Oconee Nuclear Station, Units 1, 2, and 3 (Ref. 1).

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By email dated February 1, 2018; the NRC requested additional information (Ref. 2) associated with the February 15, 2016, submittal. Duke Energy responded to this request by letter dated February 12, 2018 (Ref. 3).

On February 15, 2018, the NRC submitted an additional RAI item (Ref. 4). This letter addresses this latest RAI.

Should you have any questions regarding this submittal, please contact Stephen C. Newman, Lead Nuclear Engineer, Oconee Regulatory Affairs, at (864) 873-4388.

Sincerely,



J. Ed Burchfield, Jr.
Vice President
Oconee Nuclear Station

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cc (w/enclosure):

Ms. Catherine Haney, Administrator, Region II
U.S. Nuclear Regulatory Commission
Marquis One Tower
245 Peachtree Center Ave., NE, Suite 1200
Atlanta, GA 30303-1257

Ms. Audrey L. Klett, Project Manager
(by electronic mail only)
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Mail Stop O-08B1A
Rockville, MD 20852-2738

Mr. Eddy Crowe
NRC Senior Resident Inspector
Oconee Nuclear Station

ENCLOSURE

Duke Energy Response to NRC Request for Additional Information No. 6

RAI 6

In Sections 4.2.2 and 4.3.2 of the supplement dated February 12, 2018, the licensee requested NRC authorization of the as-is configuration of the normally de-energize 13.8-kV power feed from the KHS to the PSW building as an alternative to 10 CFR 50.55a(h)(2) requirements. The staff requests the licensee to provide additional detail about the as-is configurations that would better explain why the alternative is needed (e.g., whether the power feed is routed closely to I&C cables that cannot be covered with an enclosure). In addition, the staff requests the licensee to clarify which items from the bulleted lists in Sections 4.2 and 4.3 are applicable to the alternatives in 4.2.2 and 4.3.2.

Duke Energy Response to RAI 6

The requests associated with Sections 4.2.2 and 4.3.2 of the February 12, 2018, supplement to the submittal seek NRC approval of the as-is condition associated with a portion of the normally de-energized 13.8 kV power feed from KHS to the PSW building. These portions of the submittal are similar to the request in Section 4.1.1 for the PSW ductbank manhole locations in that they involve the same 13.8 kV power feed and the justifications are similar. The reasons for the requests of Sections 4.2.2 and 4.3.2 are: (1) the separation requirements of IEEE Std. 384-1992 for the subject power and control cables are not met, and (2) it is impractical to install cable enclosures per IEEE Std. 384-1992 due to physical interferences with other plant equipment and structures, limited free space, and the ability to structurally support the additional enclosures.

The bulleted lists provided at the end of Sections 4.2 and 4.3 are nearly identical to each other and are intended to represent a collective basis for acceptability for the requests within those sections of the submittal. With respect to the specific requests in Sections 4.2.2 and 4.3.2, all of the bullets noted in Sections 4.2 and 4.3 respectively, apply to the justification, with the exception of the third bullet in each list which is only associated with the enclosure modifications described in Sections 4.2.1 and 4.3.1. It should be noted that the cable "limited exposure distance" identified in the bulleted lists of the original submittal (i.e., 100 feet and 90 feet) were written primarily to bound the original, pre-modification, temporary as-is configurations of the request, but they also bound the much shorter distances associated with the requests of Sections 4.2.2 and 4.3.2.