



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

September 20, 2017

Ms. Tanya M. Hamilton
Site Vice President
Shearon Harris Nuclear Power Plant
5413 Shearon Harris Rd.
M/C HNP01
New Hill, NC 27562-0165

SUBJECT: SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1 – ACCEPTANCE OF REQUESTED LICENSING ACTION REGARDING SPENT FUEL STORAGE POOL CRITICALITY ANALYSES LICENSE AMENDMENT REQUEST (CAC NO. MF9996)

Dear Ms. Hamilton:

By letter dated June 28, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17193B165), Duke Energy Progress, LLC (Duke Energy) requested an amendment to the Technical Specifications (TSs) of Renewed Facility Operating License No. NPF-63 for the Shearon Harris Nuclear Power Plant, Unit 1. The proposed license amendment would revise the TSs for fuel storage criticality to account for the use of Metamic neutron absorbing spent fuel pool rack inserts and soluble boron for the purpose of criticality control in the boiling-water reactor (BWR) storage racks that currently credit Boraflex. TS 5.6.1.3, "BWR Storage Racks in Pools 'A' and 'B'," would be modified to reflect the respective design features of the two BWR rack types utilized in these pools, including adjusted requirements for the racks that credit the use of neutron absorbing Metamic inserts and soluble boron for criticality control in place of the existing credited Boraflex.

On August 28, 2017, the U.S. Nuclear Regulatory Commission (NRC) staff held a conference call with members of your staff to discuss insufficiencies identified during the acceptance review of the amendment request. Specifically, Section 4.0 of the license amendment request (LAR) contains discussions regarding whether or not the regulatory requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.68 and Appendix A to 10 CFR Part 50, General Design Criteria 61 and 62, would continue to be met. However, Section 4.0 of your LAR contains no discussion of whether or not the regulatory requirements of 10 CFR 50.36 will continue to be met, given the proposed changes to the TSs. The NRC staff requested Duke Energy to provide a full description of the applicable regulatory requirements for the proposed changes, including 10 CFR 50.36, and describe how these requirements will continue to be met. By letter dated August 30, 2017 (ADAMS Accession No. ML17241A018), you were informed of the above insufficiencies and informed that the LAR would need to be supplemented by September 14, 2017.

By letter dated September 14, 2017 (ADAMS Accession No. ML17257A245), supplemental information was submitted by Duke Energy. The NRC staff has reviewed the supplemental information and concluded that it does provide technical information in sufficient detail to enable the staff to (1) perform its detailed technical review, and (2) make an independent assessment regarding the acceptability of the proposed amendment in terms of regulatory requirements and the protection of the public health and safety and environment.

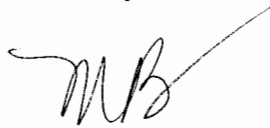
Given the lesser scope and depth of the acceptance review as compared to the detailed technical review, there may be instances in which issues that impact the NRC staff's ability to complete the detailed technical review are identified, despite completion of an adequate acceptance review. You will be advised of any further information needed to support the NRC staff's detailed technical review by separate correspondence.

Based on the information provided in your submittal, the NRC staff has estimated that this licensing request will take approximately 570 hours to complete. The NRC staff expects to complete this review in approximately 18 months, which is March 2019. If there are emergent complexities or challenges in our review that would cause changes to the initial forecasted completion date or significant changes in the forecasted hours, the reasons for the changes, along with the new estimates, will be communicated during the routine interactions with the assigned project manager.

These estimates are based on the NRC staff's initial review of the application and they could change, due to several factors including requests for additional information, unanticipated addition of scope to the review, and review by NRC advisory committees or hearing-related activities. Additional delay may occur if the submittal is provided to the NRC in advance or in parallel with industry program initiatives or pilot applications.

If you have any questions, please contact me at (301) 415-2760 or Martha.Barillas@nrc.gov.

Sincerely,



Martha C. Barillas, Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-400

cc: Distribution via Listserv

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