



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

May 16, 2022

Shawn Gibby
Vice President, Nuclear Engineering
Duke Energy Carolinas, LLC
526 South Church Street, EC-07H
Charlotte, NC 28202

SUBJECT: MCGUIRE NUCLEAR GENERATING STATION INDEPENDENT SPENT FUEL
STORAGE INSTALLATION – ISSUANCE OF EXEMPTION

Dear Shawn Gibby:

This is in response to your letter dated April 7, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22097A057), as supplemented on April 28, 2022 (ADAMS Accession No. ML22118B165), requesting an exemption under Title 10 of the Code of Federal Regulations (10 CFR) 72.7 to load and store spent fuel in MAGNASTOR® storage casks with concrete cask lids that were not designed and fabricated in accordance with Technical Specification A4.2 as specified in Amendment No. 7 of the NAC International (NAC) Certificate of Compliance No. 1031 for the MAGNASTOR® storage system. Specifically, Duke Energy Carolinas, LLC (Duke Energy) requested an exemption from the requirements of 10 CFR 72.212(a)(2), 10 CFR 72.212(b)(3), 10 CFR 72.212(b)(5)(i), 10 CFR 72.214, and the portion of 10 CFR 72.212(b)(11), which requires storage of spent nuclear fuel under a general license in dry storage casks approved under the provisions of 10 CFR Part 72, and compliance with the terms and conditions set forth in the certificate of compliance for each spent fuel cask used by an independent spent fuel storage installation (ISFSI) general licensee.

Duke Energy uses NAC's MAGNASTOR® storage cask utilizing CoC No. 1031, Amendment No. 7 for dry storage of spent fuel assemblies at the McGuire Nuclear Station ISFSI. Duke Energy stated that it has 30 loaded storage casks and 8 casks to be loaded using concrete cask lids fabricated by NAC that do not meet the requirement in Technical Specification, Appendix A, A4.2 to be designed and fabricated in accordance with the American Concrete Institute Specifications ACI 349, "Code Requirements for Nuclear Safety Related Concrete Structures," and ACI 318, "Building Code Requirements for Structural Concrete," which according to the technical specifications govern the concrete cask design and construction, respectively.

The NRC staff reviewed Duke Energy's exemption request for the McGuire Nuclear Station ISFSI. The details of the review are included in the enclosed safety evaluation report. Based upon the staff's evaluation, the NRC has determined that, pursuant to 10 CFR 72.7, the exemption is authorized by law, will not endanger life or property or the common defense and security, and is otherwise in the public interest. Therefore, the NRC is granting Duke Energy an exemption from the requirements in 10 CFR 72.212(a)(2), 10 CFR 72.212(b)(3), 10 CFR 72.212(b)(5)(i), 10 CFR 72.214, and the portion of 10 CFR 72.212(b)(11) that requires compliance with terms, conditions, and specifications of the Certificate of Compliance No. 1031, Amendment No. 7 to load and store spent fuel in storage casks with vertical concrete cask serial numbers MN-VCC-053 through MN-VCC-070; MN-DF-VCC-071; MN-DF-VCC-072; and MN-VCC-100 through MN-VCC-117 at the McGuire Nuclear Station ISFSI in storage cask with

concrete cask lids that have not been shown to be fabricated in accordance with ACI 349, and ACI 318.

In accordance with 10 CFR 2.390 of the U.S. Nuclear Regulatory Commission's (NRC's) "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the publicly available records component of the NRC's document system, ADAMS. ADAMS is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html>.

If you have any questions, please contact me at (301) 415-8064, or Bernard White of my staff, at (301) 415-6577.

Sincerely,



Signed by Diaz-Sanabria, Yaira
on 05/16/22

Yaira K. Diaz-Sanabria, Chief
Storage and Transportation Licensing Branch
Division of Fuel Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 72-1031, 72-38,
50-369 and 50-370
EPID No. L-2022-LLE-0015

SUBJECT: MCGUIRE NUCLEAR GENERATING STATION INDEPENDENT SPENT FUEL
STORAGE INSTALLATION – ISSUANCE OF EXEMPTION

DOCUMENT DATE: May 16, 2022

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Closes EPID No. L-2022-LLE-0015

PACKAGE ADAMS Accession No.: ML22111A310

OFFICIAL AGENCY RECORD

MCGUIRE NUCLEAR GENERATING STATION INDEPENDENT SPENT FUEL STORAGE
 INSTALLATION — ISSUANCE OF EXEMPTION DATE May 16, 2022

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DATE	May 2, 2022	May 13, 2022	May 16, 2022	

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