

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

April 21, 2020

Mr. Gerard van Noordennen, Senior Vice President Regulatory Affairs ZionSolutions, LLC 101 Shiloh Boulevard Zion IL 60099

SUBJECT: ISSUANCE OF EXEMPTION FOR ZION INDEPENDENT SPENT FUEL STORAGE INSTALLATION

Dear Mr. van Noordennen:

By letter dated December 30, 2019 (Agencywide Documents Access and Management System Accession No. ML20003D845), as supplemented on January 30, 2020 (ADAMS Accession No. ML20035E402) and March 11, 2020 (ADAMS Accession No. ML20076C530), ZionSolutions LLC, submitted an application requesting an exemption pursuant to Title 10 of the Code of Federal Regulations (10 CFR) 72.7, for the Zion Nuclear Station (Zion) to use two exceptions to the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code for the storage of spent fuel in the independent spent fuel storage installation (ISFSI) at Zion using the MAGNASTOR storage cask. Specifically, you 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 compliance with the terms and conditions set forth in the CoC for each spent fuel cask used by an ISFSI general licensee.

The NRC staff reviewed Zion Solutions' exemption request for the Zion 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.

Accordingly, the NRC hereby grants Zion Solutions 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 CoC to load and store spent fuel using Amendment No. 6 of CoC No. 1031 (ADAMS Package Accession No. ML16319A064) for the MAGNASTOR® storage system to authorize two exceptions to the ASME B&PV Code Section III, Division 1, Subsection NG-2300, Charpy V-notch testing direction requirement for carbon steel plate material greater than 0.625 inches thick and the post-heat treatment ultrasonic testing (UT) requirements in ASME B&PV Code Section III, Division 1, Subsection NG-2500, for rolled carbon steel plate material greater than 0.75 inches thick.

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) 415-5722, or Bernard White of my staff, at (301) 415-6577.

Sincerely,

John McKirgan, Chief Storage and Transportation Licensing Branch Division of Fuel Management Office of Nuclear Material Safety and Safeguards

Docket Nos. 72-1037 EPID Nos. L-2020-LLE-0000 SUBJECT: ISSUANCE OF EXEMPTION FOR ZION INDEPENDENT SPENT FUEL STORAGE INSTALLATION

DOCUMENT DATE: April 21, 2020

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DFM r/f J. Hickman, NMSS

Closes EPID No. L-2020-LLE-0000

PACKAGE ADAMS Accession No.: ML20098E710 Letter ADAMS Accession No.: ML20098E711 SER ADAMS Accession No.: ML20098E712

* via email

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