



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

December 11, 2014

Mr. Gerard van Noordennen  
Vice President Regulatory Affairs  
Zion Nuclear Power Station, Units 1 and 2  
ZionSolutions, LLC.  
101 Shiloh Boulevard  
Zion, Illinois 60099

SUBJECT: RESPONSE TO REQUEST FOR EXEMPTION FROM PORTIONS OF TITLE 10 OF THE *CODE OF FEDERAL REGULATIONS* SECTIONS 72.212(a)(2), 72.212(b)(3), 72.212(b)(5)(i), 72.212(b)(11), AND 72.214 REGARDING TRANSFER TIMES OF LOADED MAGNASTOR<sup>®</sup> CANISTERS FOR THE ZION NUCLEAR POWER STATION INDEPENDENT SPENT FUEL STORAGE INSTALLATION (TAC NO. L24933)

Dear Mr. van Noordennen:

This is in response to your letter dated June 25, 2014 (Agencywide Document Access and Management System (ADAMS) Accession No. ML14182A474), requesting an exemption under Title 10 of the *Code of Federal Regulations* (10 CFR) 72.7. 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 72.212(b)(11), and 10 CFR 72.214, which states that the licensee shall comply with the terms, conditions, and specifications of the certificate of compliance being utilized, specifically, Certificate of Compliance (CoC) No. 1031, Amendment No. 3, for the MAGNASTOR<sup>®</sup> storage system.

The NAC International Inc. MAGNASTOR<sup>®</sup> Cask System, CoC No. 1031, specifies requirements, conditions, and operating limits in Appendix A, Technical Specifications. ZionSolutions LLC., (ZS) has been loading spent fuel in the MAGNASTOR<sup>®</sup> Cask System for storage at the Zion Nuclear Power Station Independent Spent Fuel Storage Installation under CoC No. 1031, Amendment No. 3, as authorized by the general license provisions of 10 CFR Part 72. ZS is seeking an exemption from the CoC conditions requiring the general license to meet all the requirements of the technical specifications for the MAGNASTOR<sup>®</sup> Cask System. Specifically, ZS is requesting an exemption from Table A of Limiting Conditions of Operation (LCO) 3.1.1, Section 1 of the Technical Specification for MAGNASTOR<sup>®</sup> CoC No. 1031 Amendment No. 3, to change the time allowed after helium backfill from 8 hours to 600 hours for transferring a canister containing  $\leq 20$  kilowatts of decay heat from the decontamination pit to a vertical concrete cask.

The U.S. Nuclear Regulatory Commission (NRC) staff reviewed ZS' exemption request for the Zion Nuclear Power Station Independent Spent Fuel Storage Installation, and details of the review are included in the enclosed exemption, which will be published in the Federal Register. Based upon the staff 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 granted ZS, via the notice published in the *Federal Register*, an exemption from the requirements in 10 CFR 72.212(a)(2), 72.212(b)(3), 72.212(b)(5)(i), 72.212(b)(11), and 72.214 that states the licensee shall comply with the terms, conditions, and specifications of the CoC only so that ZS may use up to 600 hours after helium backfill to transfer loaded MAGNASTOR<sup>®</sup> canisters with heat loads up to 20 kilowatts from the decontamination pit to vertical concrete canisters at the Zion Nuclear Power Station Independent Spent Fuel Storage Installation, rather than the 8 hours permitted by LCO 3.1.1 of MAGNASTOR<sup>®</sup> CoC No. 1031 Amendment No. 3.

In accordance with 10 CFR 2.390 of the 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) 287-0673, or Bernard White of my staff, at (301) 287-0810.

Sincerely,

**/RA/**

Anthony H. Hsia, Deputy Director  
Division of Spent Fuel Management  
Office of Nuclear Material Safety  
and Safeguards

Docket Nos.: 50-295, 50-304, 72-1037

TAC No.: L24933

Enclosure: Exemption

cc: Zion Nuclear Power Station Service List w/o Enclosure

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Anthony H. Hsia, Deputy Director  
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Docket Nos.: 50-295, 50-304, 72-1037  
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cc: Zion Nuclear Power Station Service List w/o Enclosure  
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<b>OFC</b>	NMSS/SFM	NMSS/SFM	NMSS/SFM	NMSS/SFM
<b>NAME</b>	BWhite	WWheatley	JChang via email	CAraguas via email
<b>DATE</b>	10/27/14	10/28/14	10/27/14	10/31/14
<b>OFC</b>	OGC	NMSS/SFM	NMSS/SFM	
<b>Name</b>	S. Clark Via email	MSampson	AHsia	
<b>DATE</b>	12/3/14	12/3/14	12/11/14	

**OFFICIAL RECORD COPY**

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