

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50-295 and 50-304; NRC-2015-0024]

ZionSolutions, LLC, Zion Nuclear Power Station, Units 1 and 2

AGENCY: Nuclear Regulatory Commission.

ACTION: Exemption; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing an exemption in response to an October 27, 2014, request from *ZionSolutions*, LLC (ZS), for Zion Nuclear Power Station (ZNPS), Units 1 and 2 (Docket Nos. 50-295 and 50-304), from the requirement to investigate and report to the NRC when ZS does not receive notification or receipt of a shipment, or part of a shipment, of low-level radioactive waste within 20 days after transfer. *ZionSolutions* is currently in the process of decommissioning the ZNPS site. Inherent to the decommissioning process, large volumes of slightly contaminated debris are generated and require disposal at distant locations. Historical data from the experiences of other decommissioning reactor sites indicates that rail transportation time to waste disposal facilities frequently exceeded the 20-day reporting requirement. The licensee requested that the time period for it to receive acknowledgement that the shipment has been received by the intended recipient be extended from 20 to 45 days to avoid an excessive administrative burden because of required investigations and reporting arising from rail shipments that frequently take more than 20 days to reach their destination.

ADDRESSES: Please refer to Docket ID **NRC-2015-0024** when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2015-0024**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-287-3422; e-mail: Carol.Gallagher@nrc.gov. For technical questions, contact the individual listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **NRC's Agencywide Documents Access and Management System (ADAMS):** You may obtain publicly available documents online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "[ADAMS Public Documents](#)" and then select "[Begin Web-based ADAMS Search](#)." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. The ADAMS accession number for each document referenced in this document (if that document is available in ADAMS) is provided the first time that a document is referenced.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: John B. Hickman, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington DC 20555-0001; telephone: 301-415-3017, e-mail: John.Hickman@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Background.

The ZNPS facility was shut down on February 21, 1997, and is currently in a permanently shut-down and defueled condition. ZionSolutions is the current holder of Facility Operating License Nos. DPR-39 and DPR-48, for ZNPS Units 1 and 2. The license, pursuant to the Atomic Energy Act of 1954 and 10 CFR Part 50, allows ZS to possess but not operate the defueled ZNPS facility. ZionSolutions is currently in the process of decommissioning the ZNPS.

II. Request/Action.

By letter dated October 27, 2014, (ADAMS Accession Number ML14309A197) ZS requested an exemption from Part 20 of Title 10 of the *Code of Federal Regulations* (10 CFR), appendix G, "Requirements for Transfers of Low-Level Radioactive Waste Intended for Disposal at Licensed Land Disposal Facilities and Manifests," Section III. E. for ZNPS. Specifically, ZS is requesting that the time period for ZS to receive acknowledgement that the shipment has been received by the intended recipient be extended from 20 to 45 days for rail shipments from ZNPS. The NRC's regulations in 10 CFR 20.2301 allow the Commission to grant exemptions if it determines the exemption would be lawful and would not result in undue hazard to life or property. Inherent to the decommissioning process, large volumes of slightly contaminated debris are generated and require disposal. The licensee transports low-level radioactive waste from ZNPS Units 1 and 2 to distant locations such as a waste disposal facility operated by EnergySolutions in Clive, Utah, and waste processors in Texas. Experience with waste shipments from ZNPS and at other decommissioning reactor sites indicates that rail

transportation time to waste disposal facilities frequently exceeds the 20-day reporting requirement.

III. Discussion.

- **The Exemption is Authorized by Law**

Pursuant to 10 CFR 20.2301, the Commission may, upon application by a licensee or upon its own initiative, grant an exemption from the requirements of regulations in 10 CFR Part 20 if it determines the exemption is authorized by law and would not result in undue hazard to life or property. There are no provisions in the Atomic Energy Act of 1954, as amended (or in any other Federal statute) that impose a requirement to investigate and report on low-level radioactive waste shipments that have not been acknowledged by the recipient within 20 days of transfer. Therefore, the NRC concludes that there is no statutory prohibition on the issuance of the requested exemption and the NRC is authorized to grant the exemption by law.

- **The Exemption Would Not Result In Undue Hazard to Life or Property**

The NRC finds that the underlying purpose of 10 CFR Part 20, Appendix G, Section III.E is to require licensees to investigate, report, and trace radioactive shipments that have not reached their destination, as scheduled, for unknown reasons. Data from San Onofre Nuclear Generating Station found that rail shipments took over 16 days on average, and on occasion, took up to 57 days. The NRC acknowledges that, based on the history of low-level radioactive waste shipments from the San Onofre Nuclear Generating Station and Humboldt Bay Power Plant sites, the need to investigate and report on shipments that take longer than 20 days could result in an excessive administrative burden on the licensee. For rail shipments, ZS will require electronic data tracking system interchange, or similar tracking systems that allow monitoring the progress of the shipments by the rail carrier on a daily basis. Because of the oversight and

monitoring of radioactive waste shipments throughout the entire journey from ZNPS to the disposal site, it is unlikely that a shipment could be lost, misdirected, or diverted without the knowledge of the carrier or ZS. Furthermore, by extending the elapsed time for receipt acknowledgment to 45 days before requiring investigations and reporting, a reasonable upper limit on shipment duration (based on historical analysis) is still maintained if a breakdown of normal tracking systems were to occur. Consequently, the NRC finds that there is no hazard to life or property by extending the investigation and reporting time for low-level radioactive waste shipments from 20 to 45 days for rail shipments. The NRC also finds that the underlying purpose of 10 CFR Part 20, Appendix G, Section III.E will be met.

IV. Conclusions.

Accordingly, the NRC has determined that, pursuant to 10 CFR 20.2301, the exemption is authorized by law and will not result in undue hazard to life or property. Therefore, the NRC hereby grants *ZionSolutions*, LLC an exemption from 10 CFR Part 20, Appendix G, Section III.E to extend the requirement to investigate, trace, and report on rail shipments of low-level radioactive waste intended for disposal at a licensed land disposal facility that have not been received at the disposal facility within 20 days to 45 days after transfer.

Dated at Rockville, Maryland, this 30th the day of January 2015.

For the Nuclear Regulatory Commission.

/RA/

Larry W. Camper, Director,
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