



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

July 6, 2023

John T. Sauger, General Manager
Zion Restoration Project ZionSolutions, LLC
101 Shiloh Boulevard
Zion, IL 60099-2797

SUBJECT: REVIEW OF ZIONSOLUTIONS RESPONSES TO REQUESTS FOR
ADDITIONAL INFORMATION RELATED TO ZION NUCLEAR POWER
STATION, UNITS 1 AND 2 DECOMMISSIONING AND ESTIMATED PARTIAL
SITE RELEASE REVIEW SCHEDULE

Dear John Sauger:

The purpose of this letter is to provide the status of the U.S. Nuclear Regulatory Commission (NRC) staff's evaluation of the ZionSolutions, LLC (ZS or the Licensee) March 8, 2022, responses (Agencywide Documents Access and Management System Accession (ADAMS) No. [ML22069A329](#)) to 11 requests for additional information (RAIs) issued on August 19, 2021, ([ML21231A187](#)) and October 14, 2021 ([ML21238A067](#)). Additionally, based on the currently available information, this letter provides the NRC plans for conducting a Confirmatory Survey. This letter also provides the estimated review schedule which outlines the steps to complete the review of the ZS Partial Site Release (PSR) request dated June 5, 2020, ([ML20164A096](#)) for the Zion Nuclear Power Station, Units 1 and 2 (ZNPS).

Status of Responses to Request for Additional Information

The RAIs, mentioned above, were issued because additional information was needed to complete the NRC staff's review of the Final Status Survey Reports (FSSRs) after the discrete radioactive particles (DRPs) were found during the April 2021 Confirmatory Survey at ZNPS. When evaluating these RAI responses, the NRC staff considered the information gained from the NRC 2022 audit ([ML22313A053](#)); the ZS's September 30, 2022 ([ML22279A993](#)) assertion that all ZS has submitted all documents for license termination, the October 17, 2022 ([ML22293A431](#)) revised RAI 1-g response, the ZS response to audit questions ([ML22293A432](#)), and the clarifying information provided by ZS at the May 4, 2023, NRC-ZS clarification meeting. At this time the NRC has no further questions on the RAI responses; however, the NRC may revisit them, as needed, based on the results of the Confirmatory Survey.

Confirmatory Survey

NRC considered the RAI responses and other the information submitted by ZS, as described above, to risk-inform its next steps for the completion of the PSR review. The NRC's plans to conduct a Confirmatory Survey are summarized below. The NRC believes this approach will be effective and efficient to complete the PSR review by allowing the staff to analyze additional independent data. More coordination with ZS will be needed in the next month for logistic planning purposes. The estimated PSR review schedule then follows.

The Confirmatory Survey will identify areas where it believes there are remaining survey

information gaps and independently develop a sampling and analysis plan for DRPs to verify whether DRP identification and remediation at ZNPS were effective. The NRC plans to conduct both surface surveys and subsurface sampling. Subsurface data are necessary for dose compliance modeling demonstration. Also, sampling of certain areas of the subsurface will assist in verifying ZS contamination control practices. The NRC staff believes that the Confirmatory Survey will also serve to verify FSS survey results.

Concurrent with the Confirmatory Survey, the NRC intends to resume its review of all the submitted FSSRs for non-DRPs. The NRC will determine whether any survey units must be resurveyed for final status by ZS to address DRPs of concern or whether the NRC will revisit RAI responses 1 through 11, as informed by the results of the Confirmatory Survey.

Estimated PSR Review Schedule

The estimated schedule for completing the PSR request is shown below. It includes NRC FSSR reviews, the Confirmatory Survey, and other necessary steps to complete the PSR request.

The NRC staff will try to complete the PSR review no later than February 28, 2024, with a full time equivalent (FTE) estimate of approximate 800 hours, not including the Confirmatory Survey. Based on the results of the Confirmatory Survey, NRC will reevaluate whether the review schedule should be modified. If there are emergent complexities or challenges in our review, such unanticipated addition of scope to the review that would cause changes to the initial forecasted completion date, or delays in the Confirmatory Survey or requirement for ZS to re-perform FSS for certain survey units, the reasons for the changes, along with a new estimate, will be communicated during the routine interactions with the assigned project manager.

- May – August: NRC Review of FSSRs for non-DRP and develop draft Safety Evaluation Reports (SERs) for FSS submittals
- May – June: Preparation for Confirmatory Survey
- June – August: Confirmatory Survey and Evaluation
- August: Evaluation of Information/Data Needs

Provided No Additional Data Needs based on Confirmatory Survey(s)

- June: Begin completing draft SER for PSR to include any update on waste disposition and insurance information
- September - Finalize SERs for FSSR Reviews
- December: As needed, Environmental Protection Agency-NRC Memorandum of Understanding Coordination and Finality on Decommissioning and Decontamination of Contaminated Sites (67 FR 65375, 65375-65379)
- January- February 2024: Final SER for PSR

During the review of FSSRs and development of Final SER (May-December 2023), there is likely a need for clarification calls or publicly noticed calls. This will require a high level of commitment to resources and quick turnaround on information requests so as not to impact the review schedule.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter is available for inspection at the Public Document Room Monday-Friday by appointment or electronically from the Publicly Available Records component of ADAMS. ADAMS is accessible from the NRC Web site at <https://www.nrc.gov/reading-rm/adams.html>. To schedule an appointment to visit the Public Document Room, please email

PDR.Resource@nrc.gov or call 1-800-397-4209.

If you have any questions, please contact me by phone at 301-415-6822, or by email at Amy.Snyder@nrc.gov.

Sincerely,



Signed by Snyder, Amy
on 07/06/23

Amy M. Snyder, Senior Project Manager
Reactor Decommissioning Branch
Division of Decommissioning, Uranium Recovery
and Waste Programs
Office of Nuclear Material Safety
and Safeguards

Docket Nos.: 50-295 and 50-304

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Distribution: Zion Listserv

REVIEW OF ZIONSOLUTIONS RESPONSES TO REQUESTS FOR ADDITIONAL INFORMATION RELATED TO ZION NUCLEAR POWER STATION, UNITS 1 AND 2 DECOMMISSIONING AND ESTIMATED PARTIAL SITE RELEASE REVIEW SCHEDULE DATE JUNE X, 2023

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