

June 5, 2014

ZS-2014-0215

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Zion Nuclear Power Station, Units 1 and 2  
Facility Operating License Nos. DPR-39 and DPR-48  
NRC Docket Nos. 50-295 and 50-304

Subject: ZionSolutions' Amended Reply to a Notice of Violation; EA-13-208

- References:
- 1) Patrick Thurman, ZionSolutions, LCC, Letter to U.S. Nuclear Regulatory Commission "ZionSolutions' Reply to a Notice of Violation; EA-13-208," dated December 12, 2013.
  - 2) Robert J. Orlikowski, U.S. Nuclear Regulatory Commission, Letter to Patrick Daly, ZionSolutions, LCC, "NRC Inspection Report 5000295/2013011(DNMS); 05000304/2013011(DNMS) - Zion Nuclear Power Station," dated November 14, 2013.

The purpose of this letter is to revise a corrective action commitment provided in Reference 1, in response to the violation identified in Reference 2.

On November 14, 2013, NRC issued a Notice of Violation (NOV) to ZionSolutions (ZS) identifying a violation of NRC requirements set forth in 10 CFR Part 20. (Reference 2) The violation, identified as Severity Level IV, involved ZS's failure to conduct adequate radiological surveys of a work area. On December 12, 2013, ZS responded to the NOV and included details regarding completed and remaining corrective actions necessary to resolve the violation.

Corrective action commitment seven (7) listed under the section entitled, "Corrective Steps Taken and Results Achieved," describes the following action:

On October 16, 2013, a site wide memo was issued by the VP of Environmental Health and Safety to no longer allow non-trained radiation workers into the Reactor Buildings (Containments). Such individuals are "members of the public" and have a higher potential for exceeding regulatory dose limits through incidental contact with discrete radioactive particles (DRPs). The memo stated:

*No visitors are permitted to enter Unit 1 and Unit 2 Containments unless they have successfully completed ZionSolutions NGET/Rad Worker Training.*

*Reactor Vessel Segmentation and D&D activities inside both containments present too great a radiological risk to those individuals that are not trained radiation workers. While the radiological levels and controls in place are acceptable for trained radiation workers, untrained personnel have a much lower limit for radiation exposure. Due to the current radiological conditions in both Containments, the potential risk of an untrained individual exceeding applicable site and regulatory limits is deemed to be too high.*

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*All departments are encouraged to ensure you have identified and trained contractor personnel that may be required for any type of support in these areas. Failure to plan ahead could result in significant delays while personnel are getting NGET/Rad Worker Training. The necessity to place these same restrictions on the Fuel Handling Building when Fuel Transfer Operations begin will be assessed as we proceed with the project but the same planning for specialty contractors is strongly encouraged.*

*These restrictions do not apply to members of the Nuclear Regulatory Commission (NRC).*

ZS hereby amends this commitment to allow non-Radiation Worker Trained visitors into Unit 1 and Unit 2 Containments only when the Radiation Protection (RP) supervisory staff escorts the non-trained visitor.

Due to current decommissioning activities, it may be necessary for visitor "members of the public" to enter each Reactor Building to perform scoping activities to support future D&D operations. Providing Radiation Worker Training to each visitor places a burden on the Training Department resources. To alleviate this burden, ZS intends to allow non-trained visitor "members of the public" into the Reactor Buildings only when escorted by a member of the RP supervisory staff. This continuous observation and oversight of visitors will help ensure the visitors do not perform any actions resulting in unnecessary dose or inadvertently contact discrete radioactive particles.

In the six months since Reference 1 was provided, ZS has experienced improved performance in identification and removal of discrete radioactive particles. The corrective actions taken have further reduced the occurrences of personal contamination events as well as the significance of personal contamination events, not only in both Reactor Buildings but in all radiologically posted areas. While there are still discrete radioactive particles present in both Reactor Buildings, the risk of exposure has been reduced through these corrective actions. The risk has not been eliminated, but can be mitigated through direct RP monitoring of non-Radiation Worker Trained visitors in these locations. The direct RP monitoring will be restricted to members of RP Supervision and above.

Should you have any questions or require additional information regarding the content of this response, please contact me at (224) 789-4025.

Respectfully,



Gerard van Noordennen  
Vice President of Regulatory Affairs

cc: John Hickman, U.S. NRC Senior Project Manager  
Service List

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