

October 27, 2014

ZS-2014-0371

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: Request for Exemption from 10 CFR 20, Appendix G, Section III.E

In accordance with 10 CFR 20.2301, "Applications for exemptions," *ZionSolutions, LLC (ZS)* requests NRC approval for exemption from the requirements of Section III.E of 10 CFR 20, Appendix G, "Requirements for Transfers of Low-Level Radioactive Waste Intended for Disposal at Licensed Land Disposal Facilities and Manifests," to investigate and report to the NRC when ZS does not receive notification of receipt of a shipment, or part of a shipment, of low-level radioactive waste within 20 days after transfer. 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 days to 45 days for shipments from Zion Nuclear Power Station. The requested exemption would be applicable to Zion Nuclear Power Station Units 1 & 2 rail shipments. The enclosure to this letter provides an evaluation of the request, which includes a description and purpose of the request, as well as justification for granting the exemption.

The requested exemption is similar to one submitted to the NRC on January 26, 2004, by Southern California Edison Company for the San Onofre Nuclear Generating Station Units 1, 2 and 3, and was approved by the NRC on June 2, 2004 in a letter to Southern California Edison Company. In addition, the requested exemption is similar to one submitted by Pacific Gas & Electric to the NRC on September 4, 2009, and approved by the NRC on December 11, 2009.

This exemption request is not required to address an immediate safety concern. However, ZS has been making low-level radioactive waste shipments, and therefore requests NRC approval of this exemption request within six months. If you have any questions regarding this submittal please contact at me (224) 789-4025.

Respectfully,



Gerard van Noordennen
Vice President Regulatory Affairs
ZionSolutions, LLC

Attachment: Exemption Request Evaluation

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

Handwritten: NMSS01
NMSS

Zion Nuclear Power Station, Unit 1 and 2 License Transfer Service List

cc:

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Exemption Request Evaluation

1.0 DESCRIPTION

In accordance with 10 CFR 20.2301, "Applications for exemptions," ZionSolutions (ZS) requests NRC approval for exemption from the requirements of Section III.E of 10 CFR 20, Appendix G, "Requirements for Transfers of Low-Level Radioactive Waste Intended for Disposal at Licensed Land Disposal Facilities and Manifests," to investigate and report to the NRC when ZS does not receive notification of receipt of a shipment, or part of a shipment, of low-level radioactive waste within 20 days after transfer. 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 days to 45 days for shipments from Zion Nuclear Power Station (ZNPS) Units 1 & 2. The requested exemption would be applicable to ZNPS rail shipments.

2.0 PURPOSE

As described in Section 3.0 below, ZS's experience in September and October 2014 and historical data obtained from Southern California Edison Company indicates that numerous rail shipments could take longer than 20 days, resulting in an excessive administrative burden for ZS because of required investigations and reporting. By extending the time for receipt notification to 45 days before requiring investigation and reporting, a reasonable upper limit on shipment duration is still maintained if a shipment is delayed.

3.0 BACKGROUND

Section III.E of 10 CFR 20, Appendix G requires that any shipment, or part of a shipment, be investigated by the shipper if the shipper has not received notification of receipt within 20 days after transfer. Each licensee who conducts a trace investigation shall file a written report with the appropriate NRC Regional Office within two weeks of completion of the investigation.

ZS is in the process of decommissioning ZNPS Units 1 & 2. Inherent to the decommissioning process, large volumes of slightly contaminated debris are generated and require disposal. ZS transports low-level radioactive waste from ZNPS Units 1 & 2 to distant locations such as a waste disposal facility operated by EnergySolutions in Clive, Utah, and waste processors in Texas.

On September 11, 2014, ZS shipped two gondola railcars of low-level radioactive waste to the EnergySolutions' Clive Disposal Facility in Clive, UT. The railcars reported to the Clive Facility on October 9, 2014, a duration of 28 days. This was investigated by ZS and reported to the NRC in a letter dated October 20, 2014 (Reference 1). In addition, historical data derived from the experiences of Southern California Edison Company's San Onofre Nuclear Generating Station (SONGS), indicates that rail transportation time to waste disposal facilities frequently exceeded the 20-day reporting requirement. The SONGS data indicates that transportation time for shipments by rail or truck/rail took over 16 days on average and, on occasion, took up to 57 days. In addition, administrative processes at the disposal facilities and mail delivery times could add several additional days.

A similar exemption from the reporting requirements of 10 CFR 20, Appendix G, Section III.E was submitted to the NRC by Southern California Edison Company on January 26, 2004 for SONGS Units 1, 2 and 3 (Reference 2). That exemption was approved by the NRC on June 2, 2004 in a letter to Southern California Edison Company granting SONGS an extension to 35 days (Reference 3). In addition, another similar exemption from the reporting requirements of 10 CFR 20, Appendix G, Section III.E was submitted to the NRC by Pacific Gas and Electric Company on September 4, 2009 for Humboldt Bay Power Plant, Unit 3 (Reference 4). That exemption was approved by the NRC on December 11, 2009 in a letter to Pacific Gas and Electric Company granting Humboldt Bay Power Plant, Unit 3 an extension to 45 days (Reference 5).

Shipping from ZNPS will require rail shipments to waste disposal facilities or processors. Rail shipments may sit on the rail spur at a remote railyard (e.g., waiting for the train to depart) and may add to shipping delays that exceed the time of shipments from ZNPS. In addition, administrative processes at the disposal facility and mail delivery times could add several additional days. Therefore, ZS is requesting an extension to 45 days for receipt of a rail shipment at the disposal or processing facility.

4.0 JUSTIFICATION FOR EXEMPTION

As stated in 10 CFR 20.2301, "The Commission may, upon application by a licensee or upon its own initiative, grant an exemption from the requirements of the regulations in this part if it determines the exemption is authorized by law and would not result in undue hazard to life or property."

(1) The Requested Exemption is Authorized by Law

There are no provisions in the Atomic Energy Act (or in any other federal statute) that impose a requirement to investigate and report to the NRC low-level radioactive waste shipments that have not been acknowledged by the intended recipient within 20 days after transfer. Therefore, there is no statutory prohibition on the issuance of the requested exemption, and the NRC is authorized to grant the exemption under law.

(2) The Requested Exemption Would Not Result in Undue Hazard to Life or Property

The intent of 10 CFR 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. For rail shipments, ZS will require electronic data tracking system interchange, or similar tracking systems that allows monitoring the progress of the shipments by the rail carrier on a daily basis. As a result, granting an exemption to ZS for ZNPS shipments of low-level radioactive waste to waste disposal facilities or waste processors results in no undue hazard to life or property.

The underlying purpose of the 10 CFR 20, Appendix G regulation is to investigate a late shipment that may be lost, misdirected, or diverted. For rail shipments, ZS will require electronic data tracking system interchange, or similar tracking systems that allows monitoring the progress of the shipments on a daily basis. As a result, it will be unlikely that a shipment could be lost, misdirected, or diverted without the knowledge of the carrier or ZS.

5.0 CONCLUSION

The information provided gives the NRC sufficient basis for granting ZS an exemption from 10 CFR 20, Appendix G, Section III.E. Under the exemption, ZS would not be required to report a late shipment in accordance with 10 CFR 20, Appendix G, Section III.E unless a copy of the signed NRC Form 540 (or NRC Form 540A, if required) acknowledging receipt has not been received by ZS within 45 days of the shipment leaving ZNPS. ZS will request a daily update to be provided for the location of the conveyance via email. As a result, it will be unlikely that a shipment could be lost, misdirected, or diverted without the knowledge of the carrier or ZS.

6.0 REFERENCES

1. Gerard van Noordennen, ZionSolutions, LLC, letter to US NRC Region III, "Report of Investigation Pursuant to 10 CFR Part 20 Appendix G," dated October 20, 2014
2. Southern California Edison letter from Mr. Edward Scherer, Manager of Nuclear Regulatory Affairs, to the Nuclear Regulatory Commission, Dr. William Travers, Executive Director for Operations, re: Request for Exemption from 10 CFR 20 Appendix G Section III.E, dated January 26, 2004.
3. Nuclear Regulatory Commission letter from Mr. William C. Huffman, Project Manager, to Southern California Edison Company, Mr. Harold B. Ray, Executive Vice President, re: Exemption From Certain Low-Level Waste Shipment Tracking Requirements of 10 CFR Part 20, Appendix G, Section III.E (TAC NO. L52615), dated June 2, 2004.
4. Pacific Gas and Electric letter from Mr. Paul J. Roller, Director and Plant Manager Humboldt Bay Nuclear, to the Nuclear Regulatory Commission, re: Request for Exemption from 10 CFR 20, Appendix G, Section III.E, dated September 4, 2009.
5. Nuclear Regulatory Commission letter from Mr. Keith L. McConnell, Deputy Director, to Pacific Gas and Electric Company, re: Exemption from Certain Low-Level Waste Shipment Tracking Requirements in 10 CFR Part 20 Appendix G, dated December 11, 2009.