

**NUCLEAR REGULATORY COMMISSION**

**[Docket Nos. 50-295 and 50-304; NRC-2015-0168]**

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

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Environmental assessment and finding of no significant impact; issuance.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing an environmental assessment and finding of no significant impact regarding exemptions from specific emergency planning requirements for License Nos. DPR-39 and DPR-48, issued to ZionSolutions, LLC, for the Zion Nuclear Power Station (ZNPS), Units 1 and 2.

**DATES:** The environmental assessment and finding of no significant impact referenced in this document is available on July 16, 2015.

**ADDRESSES:** Please refer to Docket ID **NRC-2015-0168** 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-2015-0168**. Address questions about NRC dockets to Carol Gallagher;

telephone: 301-415-3463; e-mail: [Carol.Gallagher@nrc.gov](mailto: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](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced (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 Hickman, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-00001; telephone: 301-415-3017; e-mail: [John.Hickman@nrc.gov](mailto:John.Hickman@nrc.gov).

**SUPPLEMENTARY INFORMATION:**

**I. Introduction**

The NRC is considering issuance of exemptions from specific emergency planning (EP) requirements of part 50 of Title 10 of the *Code of Federal Regulations* (10 CFR), for License Nos. DPR-39 and DPR-48, issued to *ZionSolutions*, LLC (ZS, the licensee), for the ZNPS, Units 1 and 2. Therefore, as required by 10 CFR 51.21, the NRC performed an environmental

assessment. Based on the results of the environmental assessment that follows, the NRC has determined not to prepare an environmental impact statement for the exemptions, and is issuing a finding of no significant impact.

Section 50.47, "Emergency plans," in 10 CFR part 50 provides in part, "...no initial operating license for a nuclear power reactor will be issued unless a finding is made by the NRC that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency." Appendix E to 10 CFR part 50, "Emergency Planning and Preparedness for Production and Utilization Facilities," provides in part, "This appendix establishes minimum requirements for emergency plans for use in attaining an acceptable state of emergency preparedness."

## **II. Environmental Assessment**

### *Description of Proposed Action:*

The proposed action would exempt ZS, a 10 CFR part 50 licensee, from certain 10 CFR 50.47, and 10 CFR part 50, appendix E, EP requirements because ZNPS is a permanently shut-down nuclear facility with all spent fuel stored in an independent spent fuel storage installation (ISFSI).

The proposed action is in accordance with the licensee's application dated May 27, 2014, (ADAMS Accession No. ML14148A295).

### *Need for Proposed Action:*

The ZNPS was shut down on February 21, 1997, and is currently in a permanently shut-down and defueled condition. In a letter dated May 4, 1998, the NRC acknowledged that pursuant to 10 CFR 50.82(a)(2), the 10 CFR part 50 licenses for the ZNPS, Units 1 and 2 no

longer authorize operation of the reactors, or emplacement or retention of fuel in the reactor vessels. Active decommissioning is currently underway. As of January 12, 2015, all of the spent fuel at the ZNPS had been transferred to the Zion ISFSI.

The licensee claims that the proposed action is needed because the EP regulations impose requirements on the ZNPS that are not necessary to meet the underlying purpose of the regulations in view of the greatly reduced offsite radiological consequences associated with the current plant status as permanently shut down and with the removal of all spent fuel from the Spent Fuel Pool and transfer to dry cask storage at the ISFSI. Additionally, the license was amended on January 14, 2015, (ADAMS Accession No. ML14295A716) to remove from the Technical Specifications functional, operational and staffing requirements associated with the storage of spent fuel in the spent fuel pool.

*Environmental Impacts of the Proposed Action:*

The NRC staff evaluated the environmental impacts of the proposed action and concludes that exempting the licensee from the emergency planning requirements will not have any adverse environmental impacts. With respect to radiological impacts, the NRC has determined that no credible events at the ZNPS would result in doses to the public beyond the owner controlled area boundary that would exceed the U.S. Environmental Protection Agency Protective Actions Guides at the site boundary. The proposed action is wholly procedural and administrative in nature. As such, the proposed action will not: significantly increase the probability or consequences of radiological accidents, result in any changes to the types of effluents that may be released offsite, and result in any significant increase in occupational or public radiation exposure. Therefore, there are no significant radiological environmental impacts associated with the proposed action.

With regard to potential non-radiological impacts, the proposed action does not involve any construction activities, renovation of buildings or structures, ground disturbing activities or other alteration to land. The proposed action will not change the site activities and therefore will not result in any changes to the workforce or vehicular traffic. Furthermore, the proposed action is not a type of activity that has the potential to cause effects on historic properties or cultural resources, including traditional cultural properties. In addition the proposed action will not result in any change to non-radiological plant effluents and thus, will have no impact on either air or water quality. As the proposed action is wholly procedural and administrative in nature, the NRC staff has determined that the proposed action will have no effect on listed species or critical habitat. Therefore, there are no significant non-radiological environmental impacts associated with the proposed action.

Accordingly, the NRC staff concludes that there are no significant environmental impacts associated with the proposed action.

*Environmental Impacts of the Alternatives to the Proposed Action:*

As an alternative to the proposed action, the NRC staff considered denial of the proposed action (i.e., the “no-action” alternative). Denial of the exemption request would result in no change in current environmental impacts because there would be no construction or major renovation of any buildings or structures, nor any associated ground disturbing activities. Thus, the environmental impacts of the proposed action and no-action alternative are similar. Therefore, the no-action alternative was not further considered.

*Conclusion:*

The NRC staff has concluded that the proposed action will not significantly impact the quality of the human environment, and that the proposed action is the preferred alternative.

*Agencies and Persons Consulted:*

The NRC contacted the Illinois Emergency Management Agency via e-mail on February 3, 2015, concerning this request. The State official replied via e-mail on February 5, 2015, stating that they had no questions or concerns and they did not object to the action (ADAMS Accession No. ML15168A221).

### **III. Finding of No Significant Impact**

The NRC staff has prepared this EA as part of its review of the proposed action. On the basis of this EA, the NRC finds that there are no significant environmental impacts from the proposed action, and that preparation of an environmental impact statement is not warranted. Accordingly, the NRC has determined that a Finding of No Significant Impact (FONSI) is appropriate. In accordance with 10 CFR 51.32(a)(4), this FONSI incorporates the EA set forth in this notice by reference.

Dated at Rockville, Maryland, this 8<sup>th</sup> day of July 2015.

FOR THE NUCLEAR REGULATORY COMMISSION

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