

10 CFR 50.12

April 5, 2011

ZS-2011-0144 Revision 1

U.S. Nuclear Regulatory Commission  
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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 the Record Keeping Requirements of 10 CFR 50 Appendix A Criterion 1, 10 CFR 50 Appendix B Criterion XVII and 10 CFR 50.59(d)(3)

This letter is a revision to the Zion Solutions (ZS) letter of the same subject, dated February 28, 2011. The only material change is the addition of 10 CFR 50.7(c) to the list of requested exemptions as enumerated below. No other changes have been made to the contents of the letter.

On September 1, 2010, the NRC issued License Amendment 185 for the Zion Nuclear Power Station, Unit 1 and License Amendment 172 for the Zion Nuclear Power Station, Unit 2 (Ref. 1). These amendments implemented the May 4, 2009 NRC Order approving the License Transfer of the Zion Nuclear Power Station (ZNPS) from Exelon Generation Company, LLC (Exelon) to *ZionSolutions, LLC* (*ZionSolutions*) (Ref. 2). *ZionSolutions* assumed authority and responsibility for the functions necessary to fulfill the record keeping requirements of the Permanently Defueled Technical Specifications and the requirements specified in 10 CFR 50, Appendix A, 10 CFR 50, Appendix B, and 10 CFR 50.59.

In accordance with 10 CFR 50.12, Specific Exemptions, *ZionSolutions* is hereby requesting the following exemption from the record retention requirements of:

- (1) 10 CFR 50 Appendix A Criterion 1 which requires certain records be retained “throughout the life of the unit”;
- (2) 10 CFR 50 Appendix B Criterion XVII which requires certain records be retained consistent with regulatory requirements for a duration established by the licensee; and
- (3) 10 CFR 50.59(d)(3) which requires certain records be maintained until “termination of a license issued pursuant to” Part 50.
- (4) 10 CFR 50.71(c) which requires certain records to be maintained consistent with various elements of the NRC regulations, facility technical specifications and other licensing bases documents.

Instead, *ZionSolutions* proposes to eliminate these records when: 1) the licensing basis requirements previously applicable to the nuclear power units and associated systems, structures, and components (SSC) are no longer effective (e.g. removed from the Defueled Safety Analysis Report and/or Technical Specifications by appropriate change mechanisms), or similarly, 2) for SSCs associated with safe storage of fuel in the spent fuel pool, when spent nuclear fuel has been completely transferred from the spent fuel pool to dry storage, and the Spent Fuel Building is ready for demolition and the associated licensing bases are no longer effective.

ZionSolutions is not requesting exemption associated with any record keeping requirements for storage of spent fuel at its future Independent Spent Fuel Storage Installation (ISFSI) under 10 CFR 50 or the General License requirements of 10 CFR 72 nor for the other requirements of 10 CFR 50 or Facility Operating License Nos. DPR-39 and DPR-48 applicable to decommissioning and dismantlement.

#### Background

ZionSolutions is the licensee and holder of Facility Operating Licenses Nos. DPR-39 and DPR-48 for the Zion Nuclear Power Station (ZNPS), Units 1 and 2. The ZNPS is a permanently shutdown facility and is currently undergoing decommissioning. Although permanently shutdown, this facility is still subject to applicable rules, regulations, and orders of the U. S. NRC.

Decommissioning of the ZNPS has begun and the nuclear reactor and essentially all associated systems, structures, and components (SSCs) in the nuclear steam supply system and balance of plant that supported the generation of power have been retired in place and are being prepared for removal. SSCs that remain operable are associated with the spent fuel pool and the Spent Fuel Building, are needed to meet other regulatory requirements or are needed support other site facilities (e.g., radwaste handling, HVAC, etc). There are no SSCs classified as safety related. SSCs related to safe storage of nuclear fuel are designated as *Important to the Defueled Condition* (ITDC) by the current licensing basis.

ZionSolutions' dismantlement plans involve evaluating SSCs with respect to the current facility safety analysis; progressively removing them from the licensing basis where necessary through appropriate change mechanisms (e.g. 10 CFR 50.59 or NRC approved Technical Specification changes, as applicable); revising the DSAR if and as necessary; and, then proceeding with an orderly dismantlement. Dismantlement of the plant structures will also include dismantling the existing records storage facilities.

While ZionSolutions intends to retain the records required by our license as the project transitions from the current plant conditions to fully dismantled with the fuel in dry storage, plant dismantlement will obviate the regulatory and business needs for maintenance of most of the records. As the SSCs are removed from the licensing basis and the need for their records is, on a practical basis, eliminated, we propose that ZionSolutions be exempted from the records retention requirements for SSCs and historical activities that are no longer relevant and eliminate the associated, unnecessary regulatory and economic burdens of creating alternative storage locations, relocating and retaining records for them.

#### Discussion

In order for an exemption to be granted from the requirements of 10 CFR Part 50, Appendices A and B and 10 CFR 50.59(d)(3), the licensee must show that the requirements of 10 CFR 50.12(a)(1) are met and that special circumstances, as specified in 10 CFR 50.12(a)(2), exist. As discussed below, this ZionSolutions request satisfies the above standards for the regulatory exemption.

#### I. General Justification for Granting the Exemption Request

##### A. Nuclear Power Generation SSCs

The ZNPS nuclear steam supply system and balance of plant SSCs have been largely retired in place pending dismantlement. The SSCs are no longer operable or maintained except as required by the ITDC and other support needs described above. The general justification for eliminating records associated with that portion of the plant "footprint" is simple and straightforward in that these SSCs are currently or will in the future be removed from service under the NRC license, dismantled or demolished, and will not in the future serve in any ZNPS function regulated by the NRC.

ZS recognizes that a portion of the SSC and activity related records related to the nuclear steam supply system and balance of plant will continue to be under NRC regulation primarily due to residual radioactivity. The radiological and other necessary programmatic controls (such as security, quality assurance, etc.) for the facility and the implementation of controls for the defueled condition and the decommissioning activities are and will continue to be appropriately addressed through the license and current plant documents such as the updated Defueled Safety Analysis Report and Technical Specifications. Except for future changes made through the operative change controls, these programmatic elements and their associated records are unaffected by the exemption request.

B. Spent Fuel and Associated SSCs and Activities

All records necessary for spent fuel and spent fuel storage SSCs and activities have been and will continue to be retained for the SFP through its functional life. Similar to the other plant records, once the SFP is emptied of fuel, drained and ready for demolition, there will be no safety-significant function or other regulatory need for retaining SFP related records. Also, similar to the power generation “footprint”, the SFP SSCs “footprint” remains under the radiological controls provided by the Defueled Safety Analysis Report, Quality Assurance Project Plan, Physical Security Plan, and other programmatic elements as appropriate through final dismantlement.

The exemption requested is consistent with recent Commission clarification of Independent Spent Fuel Storage Installations (ISFSI) records disposition. In this analogous case, the NRC clarified the retention period for records of changes in the facility or spent fuel storage cask design implemented under 10 CFR 72.48, *Changes, Tests, and Experiments*, i.e. records are to be retained until “... Spent fuel is no longer stored in the facility” (10 CFR 72.48(d)(3)(i)). This is analogous to this ZionSolutions requested case when the fuel is no longer stored in the SFP and the SFP building is ready for demolition.

C. ISFSI and Spent Nuclear Fuel

ZionSolutions is not requesting any exemption associated with retention of these records.

II Specific Justification for Exemptions and Special Circumstances

A. Specific Exemption is Authorized by Law

ZionSolutions exemption request to reduce retention durations is authorized by law and within the Commission’s authority. The request does not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission’s regulations. In fact, based on similar action for other decommissioning nuclear power plants, it appears reasonable that the Commission would have previously made these clarifying changes to the requirements had there been sufficient industry experience in performing decommissioning and license termination at Part 50 facilities when the record retention rules were originally promulgated. Similar exemptions were previously granted to Rancho Seco, Haddam Neck and Maine Yankee, which are other nuclear power plants that have undergone decommissioning.

B. Specific Exemption Will Not Present an Undue Risk to the Public Health and Safety

The public health and safety are unaffected by the proposed exemption. Removal of the underlying SSCs associated with the records has been or will be determined by ZionSolutions,

in accordance with 10 CFR 50.59 or NRC-approved license amendment, to have no adverse public health and safety impact prior to elimination of any records. Elimination of associated records for these SSCs can have no additional impact.

C. Specific Exemption Consistent with the Common Defense and Security

The elimination of these records is administrative in nature and does not involve information or activities that could potentially impact the common defense and security of the United States. Upon dismantlement of the affected SSCs, the records have no functional purpose relative to maintaining the safe operation of the SSCs nor to maintaining conditions that would affect the ongoing health and safety of workers or the public.

D. Special Circumstances

Further ZionSolutions provides the following regulatory basis for meeting the requirements of:

10 CFR 50.12(a)(2)(ii):

*Application of the Regulation in the Particular Circumstances would not serve the underlying purpose of the Rule.*

The common and underlying purpose for the records related regulations cited above is to ensure that the licensing and design basis of the facility is understood, documented, preserved and retrievable relative to establishing and maintaining the SSCs' safety functions. The current licensing basis defines those elements of SSCs and associated activities that have been found by the NRC to provide reasonable assurance of safe facility operation. The licensing basis is maintained current by evaluating changes against up-to-date information. The terms such as "safety functions", and "safe operation" become inapplicable as a facility is dismantled and disposed of. In this case, which represents the ZNPS situation, retention of records associated with SSCs that are or will no longer be in the licensing bases serves no safety or regulatory purpose. Therefore, application of these record requirements in ZionSolutions circumstances does not serve the underlying purpose of the regulations.

10 CFR 50.12(a)(2)(iii):

*Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted.*

The records retention requirements applied by the NRC to the construction and operation of nuclear power plants are intended to demonstrate, on a broad basis, that SSC and activities are supportive of the safety analysis and the requirements of the NRC license for an operating reactor and operability of its safety functions. The records program requirements provide assurance that records will be captured, indexed, stored in environmentally suitable and retrievable condition resulting in a significant volume of records of many forms and a significant associated cost. The burden associated with the operations phase records requirements was understood and considered appropriate by the NRC and their reactor licensees. However, the effect of the operations phase record retention requirements that survived the life of a facility and no longer served an underlying safety purpose were not fully understood or considered. This is the current situation at the decommissioning facilities. The operating reactor records retention requirements to which ZNPS is currently regulated are no

longer necessary nor appropriate in that the SSCs and activities to which many of the records apply are no longer important to the public or worker health and safety.

Existing ZNPS records storage facilities will be eliminated as decommissioning progresses. Retaining records associated with SSCs and activities that no longer serve a safety or regulatory purpose will be an undo hardship as continued retention of the records will necessitate near term creation of new facilities and retention of otherwise un-needed administrative support personnel. It will become more of a hardship and cost increase as we must make provisions for off-site storage well in advance of building demolition.

10CFR 50.12(a)(2)(vi):

*There is present any other material circumstances not considered when the regulation was adopted for which it would be in the public interest to grant an exemption.*

Firstly, the cost associated with maintaining records that serve no safety or regulatory purpose can be significant, particularly for a decommissioning facility that will no longer exist within a few years. Decommissioning costs, including record maintenance, are paid by the ratepayers that benefited from the power produced by the ZNPS when it was operating. The ratepayers deserve a cost-efficient decommissioning unencumbered by unnecessary regulatory restraints.

Secondly, elimination of these records ensures their future unavailability to individuals and groups interested in adversely affecting the security of commercial nuclear facilities.

### Summary

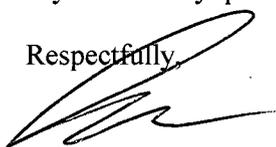
The information provided above gives the NRC sufficient basis for granting an exemption from the recordkeeping requirements of 10 CFR 50 Appendix A Criterion 1, 10 CFR 50 Appendix B Criterion XVII, and 10 CFR 50.59(d)(3) for: 1) records pertaining to SSCs or activities associated with the nuclear power unit and associated support systems that are no longer required to support licensed operations at the ZNPS site; and 2) records pertaining to the spent fuel pool and associated support systems for the safe storage of fuel in the spent fuel pool after all the spent nuclear fuel has been transferred from the spent fuel pool to the ISFSI and the Spent Fuel Building is ready for demolition. This exemption does not apply to any record keeping requirements for storage of the spent fuel at the ZNPS ISFSI under 10 CFR 50 or the general requirements of 10 CFR 72.

ZionSolutions requests that the NRC approve this exemption request at your earliest convenience. ZionSolutions will use the exemption, if granted, to eliminate the applicable records associated with SSCs and activities no longer required by the licensing basis.

There are no regulatory commitments contained in this submittal.

If you have any questions regarding this submittal, please contact me at (224) 789-4041.

Respectfully,



Patrick S. Thurman, Esq.  
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References:

- 1) John B. Hickman (U.S. Nuclear Regulatory Commission) Letter to John A. Christian, President, ZionSolutions, LLC, "Issuance of Conforming Amendments Relating to the Transfer of Licenses for Zion Nuclear Power Station, Units 1 and 2", dated September 1, 2010
- 2) John B. Hickman (U.S. Nuclear Regulatory Commission) Letter to John A. Christian, President, ZionSolutions, LLC, "Order Approving Transfer of Licenses and Conforming Amendments Relating to Zion Nuclear Power Station, Units 1 and 2", dated May 4, 2009

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

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

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