

10 CFR 50.82(a)(8)(i)(A)  
10 CFR 50.2

June 4, 2013

ZS-2013-0207

U.S. 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 Partial Exemption from 10 CFR 50.82(a)(8)(i)(A) and Request for Notice of Enforcement Discretion

**References:**

- 1) Letter, Patrick Daly (ZionSolutions, LLC (ZS)) to NRC, "Report on Status of Decommissioning Funding for Shutdown Reactors" (ZS-2013-0132), dated March 26, 2013.
- 2) Letter, Thomas A. O'Neil (Exelon Generating Corp.) and John Christian (ZS) to NRC, "Application for License Transfers and Conforming Administrative License Amendments," dated January 25, 2008.
- 3) Letter, Patrick Daly (ZS) to NRC, "Notification of Amended Post-Shutdown Decommissioning Activities Report (PSDAR) for Zion Nuclear Power Station, Units 1 and 2," dated March 18, 2008.
- 4) Letter, John B. Hickman (NRC) to John A. Christian (ZS), "Order Approving Transfer of Licenses and Conforming Amendments Relating to Zion Nuclear Power Station, Units 1 and 2," dated May 4, 2009.
- 5) Letter, John B. Hickman (NRC) to John A. Christian (ZS), "Issuance of Conforming Amendments Relating to Transfer of Licenses for Zion Nuclear Power Station, Units 1 and 2," dated September 1, 2010.
- 6) Letter from Tom R. Tramm (ZionSolutions) to NRC, "Notification of Changes to the Irradiated Fuel Management Plan," dated November 2, 2010.

Pursuant to 10 CFR 50.12, ZionSolutions, LLC (ZS) requests an exemption, to the extent necessary, to the provisions of 10 CFR 50.82(a)(8)(i)(A) to confirm its authorization to use its nuclear decommissioning trust funds (NDTs) to fund the full scope of activities currently planned in connection with the decommissioning of Zion Nuclear Power Station, Units 1 and 2 (ZNPS). ZS also requests that NRC issue a Notice of Enforcement Discretion (NOED) pending review of this exemption request.

*TSMEZO*

The use of funds set aside for decommissioning funding assurance under NRC's regulations are governed by 10 CFR 50.82(a)(8)(i)(A), which authorizes the use of funds if "[t]he withdrawals are for expenses for legitimate decommissioning activities consistent with the definition of decommissioning in § 50.2."

NRC's regulations in 10 CFR 50.2 define decommissioning as follows:

Decommission means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits-

- (1) Release of the property for unrestricted use and termination of the license; or
- (2) Release of the property under restricted conditions and termination of the license.

Similar to 10 CFR 50.82(a)(8)(i)(A), provisions of 10 CFR 50.75(h)(1)(iv) and (h)(2) dictate that, with certain exceptions, disbursements from NDT's "are restricted to decommissioning expenses." However, the operating licenses for ZNPS included "existing license conditions relating decommissioning trust agreements" on December 24, 2003, and as such, ZNPS is exempt from the provisions paragraphs (h)(1) through (h)(3) of the regulations in 10 CFR 50.75, pursuant to the terms of 10 CFR 50.75(h)(5).

ZS believes that its plans for the use of NDT funds to decommission ZNPS all involve the removal of ZNPS and its site safely from service and involve the reduction of radioactivity at the ZNPS site as necessary to ultimately release the site for unrestricted use and termination of the license. However, the United States Department of Energy (DOE) has failed to meet its obligations regarding the removal and permanent disposal of spent nuclear fuel. Thus, ZS is faced with circumstances that were not explicitly contemplated by the existing regulations, because it will not be possible to fully decommission the ZNPS and terminate the licenses without first arranging for interim storage of spent nuclear fuel at an on-site Independent Spent Fuel Storage Installation (ISFSI).

The ZS NDTs have been accumulated for purposes of complying with the financial assurance requirements of 10 CFR 50.75. Pursuant to the provisions of 10 CFR 50.75(c) n.1, the NRC's minimum financial assurance requirements exclude "the cost of removal and disposal of spent fuel." The management of spent nuclear fuel and planning for the funding spent fuel management is separately addressed by 10 CFR 50.54(bb), and therefore, the NRC's financial assurance requirements in 10 CFR 50.75 are not designed to capture the costs of removing and disposing spent nuclear fuel.

Notwithstanding the more limited scope of 10 CFR 50.75, the regulation also allows accumulation of funds pursuant to site specific cost estimates, which may include costs that go beyond NRC requirements. In fact, the accumulation of trust funds for ZNPS was based upon site specific cost estimates, which included costs for the management of spent nuclear fuel. For example, in a February 21, 2001 Amended Order, the Illinois Commerce Commission rejected arguments from intervenors that trust fund collection for ZNPS be adjusted to "remove spent fuel

storage costs from ComEd's estimates."<sup>1</sup> Moreover, in its license transfer application (Reference 2), ZS documented its plans to use funds from the NDTs to pay for the construction of an ISFSI and the transfer of spent nuclear fuel to the ISFSI. These plans were also included in the ZS PSDAR (Reference 3). Thereafter, these plans were reviewed and accepted in connection with NRC's Order approving the transfer of the ZNPS licenses to ZS and its accompanying safety Evaluation. See Reference 4. The Safety Evaluation Report (SER) acknowledges this use of the NDT monies, as follows:

All of its licensed activities would involve possession of radioactive material in connection with maintaining the safe storage condition of the plant, maintaining the spent fuel pool and proposed ISFSI, and completing the decommissioning of Zion. The existing decommissioning trust funds currently held by Exelon will be the primary source of funds to be used by ZS.

(SER, Section 4.0, Financial Evaluation.) The allocation of trust fund monies for spent fuel management purposes is further reflected in the SER's financial analysis Tables #1 through #3.

Following the transfer of the ZNPS licenses to ZS (Reference 5), ZS further documented these plans in a revised Irradiated Fuel Management Plan (Reference 6), which was submitted for purposes of assuring compliance with 10 CFR 50.54(bb).

Although the ZS plans to use NDT funds for spent fuel management have been well documented and previously accepted by the NRC, recent discussions with the NRC staff have suggested that there may be some ambiguity regarding the scope of "decommissioning" included within the definition in 10 CFR 50.2, and 10 CFR 50.82(a)(8)(i)(A) might therefore be construed to limit the use of NDT funds to exclude spent fuel management purposes. Thus, ZS requests an exemption from these regulations to the extent that they might be construed to restrict the use of NDT funds so as to not include the full scope of activities planned by ZS in its PSDAR.

In addition, ZS requests that NRC issue an NOED pending approval of the exemption request, in order to assure that there is no potential disruption to the current ongoing decommissioning activities at the ZNPS site, which include implementation of the plans relating to the management of spent fuel in the PSDAR and Irradiated Fuel Management Plan that are critical path on the decommissioning schedule.

The implementation of the plans for decommissioning ZNPS and the use of NDT funds to support the project will not present an undue risk to the public health and safety, and application of the regulations in this particular circumstance is not necessary to achieve the underlying purpose of the rule. ZS has submitted a site specific cost estimate (Reference 2) for the project, which has been periodically updated (*e.g.*, Reference 1), and the estimate and updates demonstrate that the NDTs contain adequate funds both to cover the estimated costs of radiological decommissioning and to cover the estimated costs for irradiated fuel management.

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<sup>1</sup> Amended Order, "Petition for Approval of Revised Decommissioning Expense Adjustment Rider," Docket No. 00-0361, page 24 (Feb. 21, 2001). In 2001, the Commonwealth Edison Company ("ComEd") owned ZNPS.

In addition, further assurance of the availability of funds to complete the decommissioning project is provided by: (1) an executed guaranty by EnergySolutions LLC, which guarantees the performance by ZS of its obligations to decommission ZNPS; (2) the provision of additional financial assurance in the form of a \$200 million irrevocable Letter of Credit; and (3) a disposal capacity easement assuring the availability of disposal capacity at the Clive, Utah disposal facility. These additional financial assurances were once again reviewed and accepted by the NRC in Reference 4.

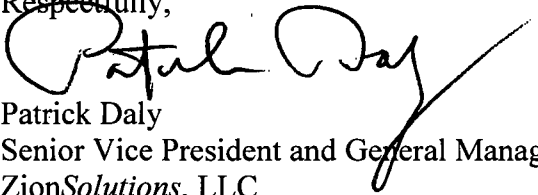
The funding available in the NDTs is demonstrably sufficient to fund the current cost estimate, budget and plans, and additional financial assurance has been provided beyond the NDTs. Any application of 10 CFR 50.82(a)(8)(i)(A) that would reduce ZS's ability to draw on the NDT funds to implement current plans is not necessary to provide reasonable assurance of adequate funding for the radiological decommissioning of ZNPS or to satisfy any other underlying purpose of the rules. Further, such application would impose an excessive and unnecessary economic burden on ZS. Restricting the immediate availability of funds for ZS to implement current plans would likely involve a significant adverse impact to the current decommissioning schedule and cause a significant increase to overall project costs and risks.

Further information in support of this exemption request is contained in the Attachment 1 to this letter. ZS requests approval of this exemption request as soon as possible but no later than August 1, 2013, in order to expeditiously resolve the matter and minimize any impacts to the ongoing decommissioning project.

ZS also requests that the NRC issue an NOED with respect to the matters discussed herein, including any past and ongoing expenditure of NDT monies consistent with the PSDAR and periodic notices that ZS has provided regarding its plans for withdrawals of funds from the NDTs. Further information regarding this Request for NOED is provided in Attachment 2.

If you have any questions or require additional information please contact Mr. Patrick Thurman (224) 782-4041 or Mr. Donald Beckman at (702) 278-7312.

Respectfully,



Patrick Daly  
Senior Vice President and General Manager  
ZionSolutions, LLC

Attachments:

1. Request For Exemption From 10 CFR 50.82(a)(8)(i)(A)
2. Request for Notice of Enforcement Discretion Regarding Use of Nuclear Decommissioning Trust Funds for Spent Fuel Management

cc: John Hickman, U.S. NRC Senior Project Manager  
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**ATTACHMENT 1**

**REQUEST FOR EXEMPTION FROM 10 CFR 50.82(a)(8)(i)(A)**

**ZION NUCLEAR POWER STATION**

**ZIONSOLUTIONS, LLC**

## I. DESCRIPTION

Pursuant to 10 CFR 50.12 “Specific exemptions,” ZionSolutions, LLC (ZS) requests an exemption from 10 CFR 50.82(a)(8)(i)(A) to confirm ZS’s authorization to use funds from the Zion Nuclear Power Station (ZNPS) nuclear decommissioning trust funds (NDTs) to fund the full scope of activities currently planned in connection with decommissioning of ZNPS, including the management of irradiated fuel consistent with the ZNPS updated Irradiated Fuel Management Plan and Post-Shutdown Decommissioning Activities Report (PSDAR).

By letter dated February 13, 1998, Commonwealth Edison, a predecessor as licensee of ZNPS, certified to the NRC the permanent cessation of operation of ZNPS. Subsequently, by separate letters dated February 14, 2000 (References 1 and 2), ZS submitted the ZNPS Irradiated Fuel Management Plan (as required by 10 CFR 50.54(bb)) and a PSDAR (as required by 10 CFR 50.82(a)(4)(i)). On January 25, 2008, Exelon, a predecessor as licensee, and ZS submitted a license transfer application which included changes to the spent fuel management plan (Reference 3). On March 18, 2008, ZS submitted an amended PSDAR for ZNPS (Reference 4). The updated PSDAR includes the estimated costs and available funds for decommissioning, dismantlement, and spent fuel management. The license transfer application demonstrated that the NDTs contained funds in excess of the amount needed to cover the estimated costs of radiological decommissioning and sufficient to also fund irradiated fuel management. The license transfer application reflects ZS’s intention to use the NDTs for irradiated fuel management.

10 CFR 50.82(a)(8)(i)(A) states that decommissioning trust funds may be used by licensees if the withdrawals are for expenses for legitimate decommissioning activities consistent with the definition of decommissioning in 10 CFR 50.2. The definition of decommissioning in 10 CFR 50.2 reads as follows:

to remove a facility or site safely from service and reduce residual radioactivity to a level that permits—

- (1) Release of the property for unrestricted use and termination of the license; or
- (2) Release of the property under restricted conditions and termination of the license.

Similar to 10 CFR 50.82(a)(8)(i)(A), provisions of 10 CFR 50.75(h)(1)(iv) and (h)(2) dictate that, with certain exceptions, disbursements from NDT’s “are restricted to decommissioning expenses.” However, the operating licenses for ZNPS included “existing license conditions relating decommissioning trust agreements” on December 24, 2003, and as such, ZNPS is exempt from the provisions paragraphs (h)(1) through (h)(3) of the regulations in 10 CFR 50.75, pursuant to the terms of 10 CFR 50.75(h)(5).

ZS believes that its plans for the use of NDT funds to decommission ZNPS all involve the removal of ZNPS and its site safely from service and involve the reduction of radioactivity at the ZNPS site as necessary to ultimately release the site for unrestricted use and termination of the license. However, the United States Department of Energy (DOE) has failed to meet its obligations regarding the removal and permanent disposal of spent nuclear fuel. Thus, ZS is faced with circumstances that were not explicitly contemplated by the existing regulations,

because it will not be possible to fully decommission ZNPS and terminate the licenses without first arranging for interim storage of spent nuclear fuel at an on-site Independent Spent Fuel Storage Installation (ISFSI).

The ZS NDTs have been accumulated for purposes of complying with the financial assurance requirements of 10 CFR 50.75. Pursuant to the provisions of 10 CFR 50.75(c) n.1, the NRC's minimum financial assurance requirements exclude "the cost of removal and disposal of spent fuel." The management of spent nuclear fuel and planning for the funding of spent fuel management is separately addressed by 10 CFR 50.54(bb), and therefore, the NRC's financial assurance requirements in 10 CFR 50.75 are not designed to capture the costs of removing and disposing spent nuclear fuel.

Notwithstanding the more limited scope of 10 CFR 50.75, the regulation also allows accumulation of funds pursuant to site-specific cost estimates, which may include costs that go beyond NRC requirements. In fact, the accumulation of trust funds for ZNPS was based upon site-specific cost estimates, which included costs for the management of spent nuclear fuel. For example, in a February 21, 2001 Amended Order (Reference 5), the Illinois Commerce Commission rejected arguments from intervenors that trust fund collections for ZNPS be adjusted to "remove spent fuel storage costs from ComEd's estimates" (Reference 5 at page 24). Moreover, in its license transfer application, ZS documented its plans to use funds from the NDTs to pay for the construction of an ISFSI and the transfer of spent nuclear fuel to the ISFSI. These plans were also included in the updated PSDAR (Reference 4). Thereafter, these plans were reviewed and accepted in connection with NRC's Order approving the transfer of the ZNPS licenses to ZS and its accompanying Safety Evaluation Report (SER) (Reference 6). The SER acknowledges this use of the NDT monies as follows:

All of its licensed activities would involve possession of radioactive material in connection with maintaining the safe storage condition of the plant, maintaining the spent fuel pool and proposed ISFSI, and completing the decommissioning of [ZNPS]. The existing decommissioning trust funds currently held by Exelon will be the primary source of funds to be used by ZS.

(SER, Section 4.0, Financial Evaluation.) The allocation of trust fund monies for spent fuel management purposes is further reflected in the SER's financial analysis Tables #1 through #3.

Following the transfer of the ZNPS licenses to ZS, ZS further documented these plans in a revised Irradiated Fuel Management Plan (Reference 7), submitted on November 2, 2010, which was submitted for the purpose of assuring compliance with 10 CFR 50.54(bb).

## **II. BACKGROUND**

The PSDAR includes a site-specific decommissioning cost analysis, which estimates the cost of radiological decommissioning, irradiated fuel management, and site restoration. The SER issued by the NRC in approving the license transfer of ZNPS includes a cash flow analysis demonstrating that the NDTs contain funds in excess of the estimated amount needed to cover radiological decommissioning and sufficient to also fund irradiated fuel management.



While the cash flow analysis demonstrated that the NDTs are sufficient to cover the estimated costs not only of radiological decommissioning but also irradiated fuel management, there may be some ambiguity in the scope of “decommissioning” included within the definition of 10 CFR 50.2, and 10 CFR 50.82(a)(8)(i)(A) might therefore be construed to limit the use of NDT funds to exclude spent fuel management purposes.

### **III. JUSTIFICATION FOR EXEMPTIONS AND SPECIAL CIRCUMSTANCES**

10 CFR 50.12 states that the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of the regulations of Part 50 which are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the defense and security. 10 CFR 50.12 also states that the Commission will not consider granting an exemption unless special circumstances are present. As discussed below, this exemption request satisfies the provisions of Section 50.12.

#### **A. The exemption is authorized by law**

The proposed exemptions would confirm ZS’s authorization to use funds from the NDTs for irradiated fuel management, consistent with the ZNPS updated Irradiated Fuel Management Plan and PSDAR. As stated above, 10 CFR 50.12 allows the NRC to grant exemptions from the requirements of 10 CFR Part 50. The proposed exemptions would not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission’s regulations. Therefore, the exemptions are authorized by law.

#### **B. The exemption will not present an undue risk to public health and safety**

The underlying purpose of 10 CFR 50.82(a)(8)(i)(A) is to provide reasonable assurance that adequate funds will be available for decommissioning of power reactors within 60 years of cessation of operations. Based on the site-specific cost estimate and the cash flow analysis, the use of the NDTs in the proposed manner will not adversely impact ZS’s ability to complete the prompt radiological decommissioning of much of the ZNPS site and ultimately to terminate the ZNPS license (within 60 years), consistent with the schedule and costs contained in the ZNPS PSDAR. Therefore, the underlying purpose of the regulation will continue to be met. Since the underlying purpose of the rule will continue to be met, the exemption will not present an undue risk to the public health and safety.

#### **C. The exemption is consistent with the common defense and security**

The proposed exemption would confirm ZS’s authorization to use NDT funds for irradiated fuel management, consistent with the ZNPS updated Irradiated Fuel Management Plan and PSDAR. Irradiated fuel management is an integral part of the planned ZNPS decommissioning process as discussed in the ZNPS PSDAR and the updated Irradiated Fuel Management Plan. Use of the NDTs as contemplated by the Irradiated Fuel Management Plan and PSDAR will not adversely affect ZS’s ability to physically secure the site or protect special nuclear material. Therefore, the proposed exemptions are consistent with the common defense and security.

**D. Special Circumstances**

Pursuant to 10 CFR 50.12(a)(2), the NRC will not consider granting an exemption to its regulations unless special circumstances are present. ZS believes that special circumstances are present as discussed below.

**1. Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule. (10 CFR 50.12(a)(2)(ii))**

The underlying purpose of 10 CFR 50.82(a)(8)(i)(A) is to provide reasonable assurance that adequate funds will be available for decommissioning of power reactors within 60 years of cessation of operations. One possible interpretation of the regulation could limit the withdrawal of funds from the NDTs for activities associated with irradiated fuel management until the ZNPS license has been terminated. However, the ZNPS license cannot be terminated unless the irradiated fuel is first managed until the Secretary of Energy takes possession of the irradiated fuel. Moreover, the site-specific decommissioning cost analysis (discussed above) demonstrates that adequate funds are available in the NDTs to both manage the irradiated fuel and to complete all decommissioning activities, including the activities necessary to remove much of the ZNPS site from the license and proceed down the path toward ultimate license termination. Additionally, the NRC has already acknowledged this proposed use of the NDT funds in the SER for the ZNPS license transfer. Finally, additional assurances have been provided to assure the availability of funds for radiological decommissioning, including a \$200 million irrevocable letter of credit.

Therefore, since the underlying purposes of the rules would be achieved by allowing ZS to use the NDTs to fund the activities as discussed in its updated Irradiated Fuel Management Plan and PSDAR, the special circumstances required by 10 CFR 50.12(a)(2)(ii) exist.

**2. Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated. (10 CFR 50.12(a)(2)(iii))**

The NRC did not intend to prevent the use of these funds solely because they are commingled, and to do so would create an unnecessary financial burden without any corresponding safety benefit. The adequacy of the NDTs to cover the cost of activities associated with the different elements of decommissioning (including the irradiated fuel management) is supported by a site-specific decommissioning cost analysis. If ZS cannot use its NDTs for irradiated fuel management activities, it would be forced to obtain alternative sources of funding at substantial cost, or to modify its decommissioning plans. This could have a significant adverse impact on the current schedule and introduce increased project costs and risks. Either outcome would impose an unnecessary and undue burden in excess of that contemplated when the regulation was adopted.

Therefore, preventing ZS from using the NDTs for irradiated fuel management would result in an undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated. As such, the special circumstances required by 10 CFR 50.12(a)(2)(iii) exist.

**3. The exemption would result in benefit to the public health and safety that compensates for any decrease in safety that may result from the grant of the exemption. (10 CFR 50.12(a)(2)(iv))**

The proposed exemptions would confirm the availability for use of the NDTs for irradiated fuel management activities in accordance with the ZNPS updated Irradiated Fuel Management Plan and PSDAR. Adequate funds are available in the NDTs to complete all activities associated with license termination and irradiated fuel management. There is no decrease in safety associated with the NDTs being used to fund activities associated with irradiated fuel management. The exemption would confirm ZS's authorization to manage irradiated fuel in accordance with the updated Irradiated Fuel Management Plan and PSDAR.

Therefore, since granting the exemption would result in benefit to the public health and safety and would not result in a decrease in safety, the special circumstances required by 10 CFR 50.12(a)(2)(iv) exist.

#### **IV. ENVIRONMENTAL CONSIDERATION**

The proposed exemption meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(25), because the proposed exemption involves: (i) no significant hazards consideration; (ii) no significant change in the types or significant increase in the amounts of any effluent that may be released offsite; (iii) no significant increase in individual or cumulative occupational radiation exposure; (iv) no significant construction impact; (v) no significant increase in the potential for consequences from radiological accidents; and (vi) the requirements from which the exemption is sought involve surety, insurance or indemnity requirements or other requirements of an administrative nature. Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed exemptions.

**(i) No significant hazards consideration**

ZS has evaluated the proposed exemption to determine whether or not a significant hazards consideration is involved by focusing on the three standards set forth in 10 CFR 50.92 as discussed below:

**1. Does the proposed exemption involve a significant increase in the probability or consequences of an accident previously evaluated?**

The proposed exemption would confirm ZS's authorization to withdraw funds from the ZNPS NDTs to conduct activities associated with irradiated fuel management in accordance with the ZNPS PSDAR and updated Irradiated Fuel Management Plan. The proposed exemption has no effect on plant structures, systems, and components (SSCs) and no effect on the capability of any plant SSC to perform its design function. The proposed exemption would not increase the likelihood of the malfunction of any plant SSC. The proposed exemption would have no effect on any of the previously evaluated accidents in the ZNPS Updated Safety Analysis Report. Use of funds in the NDTs as confirmed under the exemption will not affect the probability of occurrence of any previously analyzed accident. The proposed exemption does not change the requirements pertaining to irradiated fuel management.

Therefore, the proposed exemption does not involve a significant increase in the probability or consequences of an accident previously evaluated.

**2. Does the proposed exemption create the possibility of a new or different kind of accident from any accident previously evaluated?**

The proposed exemption does not involve a physical alteration of the plant. No new or different type of equipment will be installed and there are no physical modifications to existing equipment associated with the proposed exemption. Similarly, the proposed exemption would not physically change any structures, systems, or components involved in the mitigation of any accidents. Thus, no new initiators or precursors of a new or different kind of accident are created. Furthermore, the proposed exemption does not create the possibility of a new accident as a result of new failure modes associated with any equipment or personnel failures. No changes are being made to parameters within which the plant is normally operated, or in the setpoints which initiate protective or mitigative actions, and no new failure modes are being introduced.

Therefore, the proposed exemption does not create the possibility of a new or different kind of accident from any previously evaluated.

**3. Does the proposed exemption involve a significant reduction in a margin of safety?**

The proposed exemption does not alter the design basis or any safety limits for the plant. The proposed exemption does not impact station operation or any plant SSC that is relied upon for accident mitigation.

Therefore, the proposed exemption does not involve a significant reduction in a margin of safety.

Based on the above, ZS concludes that the proposed exemptions present no significant hazards consideration, and, accordingly, a finding of “no significant hazards consideration” is justified.

(ii) **There is no significant change in the types or significant increase in the amounts of any effluent that may be released offsite.**

There are no expected changes in the types, characteristics, or quantities of effluents discharged to the environment associated with the proposed exemption. There are no materials or chemicals introduced into the plant that could affect the characteristics or types of effluents released offsite. In addition, the method of operation of waste processing systems will not be affected by the exemption. The proposed exemption will not result in changes to the design basis requirements of SSCs that function to limit or monitor the release of effluents. All the SSCs associated with limiting the release of effluents will continue to be able to perform their functions. Therefore, the proposed exemption will result in no significant change to the types or significant increase in the amounts of any effluents that may be released offsite.

(iii) **There is no significant increase in individual or cumulative occupational radiation exposure.**

The exemption would result in no expected increases in individual or cumulative occupational radiation exposure on either the workforce or the public. There are no expected changes in normal occupational doses. Likewise, design basis accident dose is not impacted by the proposed exemption.

(iv) **There is no significant construction impact.**

There are no construction activities associated with the proposed exemptions.

(v) **There is no significant increase in the potential for consequences from radiological accidents.**

See the no significant hazards considerations discussion in item 1 above.

(vi) **The requirement from which an exemption is sought involves surety, insurance or indemnity requirements or other requirements of an administrative nature.**

The underlying purpose of the requirement from which an exemption is sought is to provide reasonable assurance that adequate funds will be available for decommissioning of power reactors within 60 years of cessation of operations. This requirement provides surety for decommissioning funding.

## V. CONCLUSION

Pursuant to the provisions of 10 CFR 50.12, “Specific exemptions,” ZS is requesting, to the extent necessary, an exemption from 10 CFR 50.82(a)(8)(i)(A) for ZNPS. The proposed

exemption would confirm ZS's authorization to use funds from the ZNPS NDTs for the full scope of activities set forth in the PSDAR, including the management of irradiated fuel consistent with the ZNPS updated Irradiated Fuel Management Plan and PSDAR, and to make such disbursements in the same manner as withdrawals for radiological decommissioning.

Granting this exemption will be consistent with the purposes underlying NRC decommissioning regulations as it: (1) would not foreclose release of the site for possible unrestricted use; (2) would not result in significant environmental impacts not previously reviewed by the NRC; and (3) would not undermine the existing and continuing reasonable assurance that adequate funds will be available for decommissioning.

The requested exemption is authorized by law, will not present an undue risk to the public health and safety, is consistent with the common defense and security and special circumstances are present as set forth in 10 CFR 50.12(a)(2).

### References

1. Letter from R. M. Krich (Commonwealth Edison) to NRC, "Notification of the Irradiated Fuel Management Plan for Zion Nuclear Power Station, Units 1 and 2," dated February 14, 2000
2. Letter from R. M. Krich (Commonwealth Edison) to NRC, "Submittal of the Zion Nuclear Power Station, Units 1 and 2 Post- Shutdown Decommissioning Activities Report," dated February 14, 2000.
3. Letter from Patrick R. Simpson (Exelon Generation Company) and Patrick Daly (ZionSolutions, LLC) to NRC, "Application for License Transfers and Conforming Administrative License Amendments," dated January 25, 2008
4. Letter from Patrick Daly (ZionSolutions, LLC) to NRC, "Notification of Amended Post-Shutdown Decommissioning Activities Report (PSDAR) for Zion Nuclear Power Station, Units 1 and 2," dated March 18, 2008
5. Amended Order, Petition for Approval of a Revised Decommissioning Expense Adjustment Rider, Commonwealth Edison Company, Illinois Commerce Commission, Docket No. 00-0361 (Feb. 21, 2001)
6. Letter from John B. Hickman (NRC) to John A. Christian (ZionSolutions, LLC) "Order Approving Transfer of Licenses and Conforming Amendments Relating to Zion Nuclear Power Station, Units 1 and 2," dated May 4, 2009 (Enclosure 4: Safety Evaluation by the Office of Nuclear Reactor Regulation Related to Amendment No. 185 to Facility Operating License No. DPR-39 and Amendment No. 172 to Facility Operating License No. DPR-48, Exelon Generation Company, LLC, Zion Nuclear Power Station, Units 1 and 2, Docket Nos. 50-295 and 50-304)
7. Letter from Tom R. Tramm (ZionSolutions, LLC) to NRC, "Notification of Changes to the Irradiated Fuel Management Plan," dated November 2, 2010

**ATTACHMENT 2**

**Request for Notice of Enforcement Discretion Regarding Use of  
Nuclear Decommissioning Trust Funds for Spent Fuel Management**

**Request for Notice of Enforcement Discretion (NOED) Regarding Use of Nuclear Decommissioning Trust Funds for Irradiated Fuel Management**

**1. The Technical Specification (TS) or other license conditions that will be violated.**

ZionSolutions, LLC (ZS) specifically requests enforcement discretion related to the requirements of 10 CFR 50.82(a)(8)(i)(A) involving the use of nuclear decommissioning trust (NDT) funds. ZS is using funds from its NDTs for decommissioning activities, including the management of irradiated fuel for the Zion Nuclear Power Station (ZNPS). Although the ZS plans for use of NDT funds for irradiated fuel management have been well documented and previously accepted by the NRC, recent discussions with the NRC staff have suggested that there may be some ambiguity regarding the scope of “decommissioning” included within the definition of 10 CFR 50.2, and 10 CFR 50.82(a)(8)(i)(A) might therefore be construed to limit the use of NDT funds to exclude spent fuel management purposes. ZS is requesting, in parallel to this request, an exemption from this regulation to the extent one is necessary to use the NDT funds for irradiated fuel management. While the NRC is reviewing the exemption request, ZS requests enforcement discretion to allow it to continue with its planned decommissioning activities.

**2. The circumstances surrounding the situation: including likely causes; the need for prompt action; action taken in attempt to avoid the need for an NOED; and identification of any relevant historical events.**

By letter dated February 13, 1998, Commonwealth Edison, a predecessor as licensee of ZNPS, certified to the NRC the permanent cessation of operation of ZNPS. Subsequently, by separate letters dated February 14, 2000 (References 1 and 2), ZS submitted the ZNPS Irradiated Fuel Management Plan (as required by 10 CFR 50.54(bb)) and a PSDAR (as required by 10 CFR 50.82(a)(4)(i)). On January 25, 2008, Exelon, a predecessor as licensee, and ZS submitted a license transfer application which included changes to the irradiated fuel management plan (Reference 3). On March 18, 2008, ZS submitted an amended PSDAR for ZNPS (Reference 4). The updated PSDAR includes the estimated costs and available funds for decommissioning, dismantlement, and spent fuel management. The license transfer application demonstrates the NDTs contain funds in excess of the amount needed to cover the estimated costs of radiological decommissioning and irradiated fuel management. The license transfer application reflects ZS’s intention to use the NDTs for irradiated fuel management.

10 CFR 50.82(a)(8)(i)(A) states that decommissioning trust funds may be used by licensees if the withdrawals are for expenses for legitimate decommissioning activities consistent with the definition of decommissioning in 10 CFR 50.2. The definition of decommissioning in 10 CFR 50.2 reads as follows:

to remove a facility or site safely from service and reduce residual radioactivity to a level that permits—

- (1) Release of the property for unrestricted use and termination of the license; or
- (2) Release of the property under restricted conditions and termination of the license.



Similar to 10 CFR 50.82(a)(8)(i)(A), provisions of 10 CFR 50.75(h)(1)(iv) and (h)(2) dictate that, with certain exceptions, disbursements from NDT's "are restricted to decommissioning expenses." However, the operating licenses for ZNPS included "existing license conditions relating decommissioning trust agreements" on December 24, 2003, and as such, ZNPS is exempt from the provisions paragraphs (h)(1) through (h)(3) of the regulations in 10 CFR 50.75, pursuant to the terms of 10 CFR 50.75(h)(5).

ZS believes that its plans for the use of NDT funds to decommission ZNPS all involve the removal of ZNPS and its site safely from service and involve the reduction of radioactivity at the ZNPS site as necessary to ultimately release the site for unrestricted use and termination of the license. However, the United States Department of Energy (DOE) has failed to meet its obligations regarding the removal and permanent disposal of spent nuclear fuel. Thus, ZS is faced with circumstances that were not explicitly contemplated by the existing regulations, because it will not be possible to fully decommission ZNPS and terminate the licenses without first arranging for interim storage of spent nuclear fuel at an on-site Independent Spent Fuel Storage Installation (ISFSI).

The ZS NDTs have been accumulated for purposes of complying with the financial assurance requirements of 10 CFR 50.75. Pursuant to the provisions of 10 CFR 50.75(c) n.1, the NRC's minimum financial assurance requirements exclude "the cost of removal and disposal of spent fuel." The management of spent nuclear fuel and planning for the funding of spent fuel management is separately addressed by 10 CFR 50.54(bb), and therefore, the NRC's financial assurance requirements in 10 CFR 50.75 are not designed to capture the costs of removing and disposing spent nuclear fuel.

Notwithstanding the more limited scope of 10 CFR 50.75, the regulation also allows accumulation of funds pursuant to site-specific cost estimates, which may include costs that go beyond NRC requirements. In fact, the accumulation of trust funds for ZNPS was based upon site-specific cost estimates, which included costs for the management of spent nuclear fuel. For example, in a February 21, 2001 Amended Order (Reference 5), the Illinois Commerce Commission rejected arguments from intervenors that trust fund collection for ZNPS be adjusted to "remove spent fuel storage costs from ComEd's estimates" (Reference 5 at page 24). Moreover, in its license transfer application, ZS documented its plans to use funds from the NDTs to pay for the construction of an ISFSI and the transfer of spent nuclear fuel to the ISFSI. These plans were also included in the PSDAR. Thereafter, these plans were reviewed and accepted in connection with NRC's Order approving the transfer of the ZNPS licenses to ZS and its accompanying Safety Evaluation Report (SER) (Reference 6). The SER acknowledges this use of the NDT monies as follows:

All of its licensed activities would involve possession of radioactive material in connection with maintaining the safe storage condition of the plant, maintaining the spent fuel pool and proposed ISFSI, and completing the decommissioning of [ZNPS]. The existing decommissioning trust funds currently held by Exelon will be the primary source of funds to be used by ZS.

(SER, Section 4.0, Financial Evaluation.) The allocation of trust fund monies for spent fuel management purposes is further reflected in the SER's financial analysis Tables #1 through #3.

Following the transfer of the ZNPS licenses to ZS, ZS further documented these plans in a revised Irradiated Fuel Management Plan (Reference 7), submitted on November 2, 2010, which was submitted for the purpose of assuring compliance with 10 CFR 50.54(bb).

**3. Information to show that the cause and proposed path to resolve the situation are understood, such that there is a high likelihood that planned actions to resolve the situation can be completed within the proposed NOED time frame.**

ZS has requested an exemption under 10 CFR 50.12 from 10 CFR 50.82(a)(8)(i)(A), to the extent necessary, to confirm ZS's authorization to use NDT funds for irradiated fuel management. Once the NRC has issued its decision on the exemption request, enforcement discretion will no longer be necessary.

**4. The safety basis for the request, including an evaluation of the safety significance and potential consequences of the proposed course of action.**

The underlying purpose of 10 CFR 50.82(a)(8)(i)(A) is to provide reasonable assurance that adequate funds will be available for decommissioning of power reactors within 60 years of cessation of operations. Based on the site-specific cost estimate and the cash flow analysis, use of the NDTs in the proposed manner will not adversely impact ZS's ability to complete the prompt radiological decommissioning of much of the ZNPS site and ultimately to terminate the ZNPS license (within 60 years), consistent with the schedule and costs contained in the ZNPS PSDAR. Therefore, the underlying purpose of the regulation will continue to be met. Since the underlying purpose of the rule will continue to be met, the exemption will not present an undue risk to the public health and safety.

**5. The justification for the duration of the non-compliance.**

ZS has requested an exemption under 10 CFR 50.12 from 10 CFR 50.82(a)(8)(i)(A), to the extent necessary, to confirm ZS's authorization to use NDT funds for irradiated fuel management. ZS is requesting enforcement discretion only as long as the exemption request is pending to allow ZS to continue its planned decommissioning activities on schedule. A change in this schedule would result in a very large increase in costs for ZS.

**6. The condition and operational status of the plant (including safety-related equipment out of service or otherwise inoperable).**

By letter dated February 13, 1998, Commonwealth Edison, a predecessor as licensee of ZNPS, certified to the NRC the permanent cessation of operation of ZNPS. ZNPS is currently undergoing decommissioning.

**7. The status and potential challenges to off-site and on-site power sources.**

Because the plant has permanently ceased operations, there are no potential challenges to off-site and on-site power sources.

**8. The basis for the conclusion that the noncompliance will not be of potential detriment to the public health and safety.**

ZS has evaluated the proposed request to determine whether or not a significant hazards consideration is involved by focusing on the three standards set forth in 10 CFR 50.92 as discussed below:

- (i) Do the proposed changes involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The proposed request would confirm ZS's authorization to withdraw funds from the ZNPS NDTs to conduct activities associated with irradiated fuel management in accordance with the ZNPS PSDAR and updated Irradiated Fuel Management Plan. The proposed request has no effect on plant structures, systems, and components (SSCs) and no effect on the capability of any plant SSC to perform its design function. The proposed request would not increase the likelihood of the malfunction of any plant SSC. The proposed request would have no effect on any of the previously evaluated accidents in the ZNPS Updated Safety Analysis Report. Use of funds in the NDTs as confirmed under the exemption will not affect the probability of occurrence of any previously analyzed accident. The proposed request does not change the requirements pertaining to irradiated fuel management.

Therefore, the proposed request does not involve a significant increase in the probability or consequences of an accident previously evaluated.

- (ii) Do the proposed changes create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

The proposed request does not involve a physical alteration of the plant. No new or different type of equipment will be installed and there are no physical modifications to existing equipment associated with the proposed exemption. Similarly, the proposed request would not physically change any structures, systems, or components involved in the mitigation of any accidents. Thus, no new initiators or precursors of a new or different kind of accident are created. Furthermore, the proposed request does not create the possibility of a new accident as a result of new failure modes associated with any equipment or personnel failures. No changes are being made to parameters within which the plant is normally operated, or in the setpoints which initiate protective or mitigative actions, and no new failure modes are being introduced.

Therefore, the proposed request does not create the possibility of a new or different kind of accident from any previously evaluated.

- (iii) Do the proposed changes involve a significant reduction in a margin of safety?

Response: No

The proposed request does not alter the design basis or any safety limits for the plant. The proposed request does not impact station operation or any plant SSC that is relied upon for accident mitigation.

Therefore, the proposed request does not involve a significant reduction in a margin of safety.

**9. The basis for the conclusion that the noncompliance will not involve adverse consequences to the environment.**

ZS has determined that the proposed request would not change requirements with respect to the installation or use of a facility component located within the restricted area, as defined in 10 CFR Part 20, or would not change an inspection or surveillance requirement. This request for enforcement discretion meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) as specified below:

- (i) Involves no significant hazards consideration.

As demonstrated above, this request does not involve any significant hazards consideration.

- (ii) There is no significant change in the types of or significant increase in the amounts of any effluents that may be released offsite.

There are no expected changes in the types, characteristics, or quantities of effluents discharged to the environment associated with the proposed request. There are no materials or chemicals introduced into the plant that could affect the characteristics or types of effluents released offsite. In addition, the method of operation of waste processing systems will not be affected by the request. The proposed request will not result in changes to the design basis requirements of SSCs that function to limit or monitor the release of effluents. All the SSCs associated with limiting the release of effluents will continue to be able to perform their functions. Therefore, the proposed request will result in no significant change to the types or significant increase in the amounts of any effluents that may be released offsite.

- (iii) There is no significant increase in individual or cumulative occupational radiation exposure.

The request would result in no expected increases in individual or cumulative occupational radiation exposure on either the workforce or the public. There are no expected changes in normal occupational doses. Likewise, design basis accident dose is not impacted by the proposed exemption.

Accordingly, the proposed request meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), an environmental assessment of the proposed request is not required.

**10. A statement that the request has been approved by the facility organization that normally reviews safety issues (Plant Safety Review Committee).**

Because the plant has permanently ceased operation, a review by the Plant Safety Review Committee is unnecessary.

**11. The request must specifically address which of the NOED criteria for appropriate plant conditions specified in Section B of Part 9900, "Operations - Notices of Enforcement Discretion," is satisfied and how it is satisfied**

Because this request is neither related to technical specifications or other license conditions and does not affect radiological safety nor is related to severe weather or other natural phenomena, the criteria specified in Section B of Part 9900, "Operations – Notices of Enforcement Discretion," are inapplicable.

This request will only allow ZS to continue decommissioning ZNPS in the manner detailed in the PSDAR as approved by the NRC in the SER for the 2009 license transfer. The request is merely to allow the NRC time to consider ZS's exemption request and allow ZS to continue performing decommissioning activities in accordance with the PSDAR.

**12. Unless otherwise agreed as discussed in Section B of Part 9900, a commitment is required that the written NOED request will be submitted within 2 working days and the follow-up amendment will be submitted within 4 working days of verbally granting the NOED.**

This request for enforcement discretion is a one-time only request made during the pendency of an exemption request. As such, a follow-up License Amendment is not required.

**13. For a severe weather NOED request provide the following information:**

The name, organization and telephone number of the official in the government or independent entity who made the emergency situation determination. Details of the basis and nature of the emergency situation, including, but not limited to, its effect on:

- i. on-site and off-site emergency preparedness
- ii. plant and site ingress and egress
- iii. off-site and on-site power sources
- iv. grid stability; and
- v. actions taken to avert and or alleviate the emergency situation (e.g., coordinating with other utilities and the load dispatcher organization for buying additional power or for cycling load, or shedding interruptible industrial or non-emergency loads).

ZionSolutions, LLC

ZS-2013-0207: Attachment 2

Potential consequences of compliance with existing license requirements (e.g., plant trip, controlled shutdown).

The impact of the emergency situation on plant safety including the capability of the ultimate heat sink.

Potential adverse effects on public health and safety from enforcing compliance with specific license requirements during the emergency situation.

This is not a severe weather NOED request.