



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

January 10, 2019

Mr. John Sauger  
General Manager  
Zion Restoration Project  
ZionSolutions LLC  
101 Shiloh Blvd.  
Zion, IL 60099-2797

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION RELATED TO THE  
APPLICATION FOR LICENSE TRANSFERS AND CONFORMING  
ADMINISTRATIVE AMENDMENTS FROM ZIONSOLUTIONS, LLC TO EXELON  
GENERATION COMPANY, LLC (EPID NOS 000079/05000295/L-2018-LLA-  
0217 & 000079/05000304/L-2018-LLA-0217)

Dear Mr. Sauger:

By letter dated July 24, 2018 (Agencywide Documents Access and Management System Accession No. ML18211A303), ZionSolutions, LLC (ZS) and Exelon Generation Company, LLC (EGC) submitted for the U.S. Nuclear Regulatory Commission (NRC) review and approval an application requesting that the NRC consent to the transfer of ZS's Facility Operating License Nos. DPR-39 and DPR-48 and the transfer of the generally licensed Independent Spent Fuel Storage Installation for the Zion Nuclear Power Station, Units 1 and 2, to EGC. The NRC staff has reviewed the application and determined that additional information is needed to complete its review, as described in the enclosed request for additional information.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's ADAMS. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Should you have any questions regarding this action please contact me at 301-415-3017 or [John.Hickman@nrc.gov](mailto:John.Hickman@nrc.gov).

Sincerely,

/RA/

John B. Hickman, Project Manager  
Reactor Decommissioning Branch  
Division of Decommissioning, Uranium Recovery,  
and Waste Programs  
Office of Nuclear Material Safety  
and Safeguards

Docket Nos. 50-295 and 50-304

Enclosure: Request for Additional Information

J. Sauger

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cc: Zion Service List

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GENERATION COMPANY, LLC (EPID NOS.) **DATE January 10, 2019**

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**ADAMS Accession No.: ML19003A118**

**\* via email**

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## **Zion Nuclear Power Station, Units 1 and 2 Service List**

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**REQUEST FOR ADDITIONAL INFORMATION**  
**RELATED TO THE ZIONSOLUTIONS, LLC**  
**APPLICATION FOR LICENSE TRANSFERS AND**  
**CONFORMING ADMINISTRATIVE LICENSE AMENDMENTS**  
**FOR ZION NUCLEAR POWER STATION, UNITS 1 AND 2**

By letter dated July 24, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML18211A303), ZionSolutions, LLC (ZS) and Exelon Generation Company, LLC (EGC) submitted for the U.S. Nuclear Regulatory Commission (NRC) review and approval an application requesting that the NRC consent to the transfer of ZS's Facility Operating License Nos. DPR-39 and DPR-48 and the transfer of the generally licensed Independent Spent Fuel Storage Installation (ISFSI) for the Zion Nuclear Power Station (ZNPS), Units 1 and 2, to EGC. The NRC staff has reviewed the application, and determined that additional information is necessary in order to complete its review.

**Regulatory Basis for Request**

Title 10 of the *Code of Federal Regulations* (10 CFR) 50.80, "Transfer of licenses," paragraph (b)(1)(i) states, in part, that an application for transfer of a construction permit or operating license under this part, shall include as much of the information described in Sections 50.33 and 50.34 with respect to the identity and technical and financial qualifications of the proposed transferee as would be required by those sections if the application were for an initial license.

Regulation 10 CFR 72.50, "Transfer of license," paragraph (b)(1) states, in part, that an application for transfer of license [for an ISFSI] must include as much of the information described in Sections 72.22 and 72.28 with respect to the identity and the technical and financial qualification of the proposed transferee as would be required by those sections if the application were for an initial license.

**Request for Additional Information**

1. 10 CFR 50.33, "Contents of applications; general information," paragraph (d)(3) states, in relevant part:

*If applicant is a corporation or an unincorporated association, state:*

...

*(ii) The names, addresses and citizenship of its directors and of its principal officers;*

Similarly, 10 CFR 72.22, "Contents of application: General and financial information," paragraph (d)(3) states, in relevant part:

Enclosure

*Each application must state... [I]f the applicant is a corporation or an unincorporated association:*

...

*(ii) The names, addresses, and citizenship of its directors and of its principal officers;*

The application states, "EGC has a qualified corporate structure capable of maintaining safe storage of the spent fuel located at the ZNPS ISFSI." While this language provides a general statement on the applicant's corporate structure, the application does not provide complete information regarding all directors, principal officers, or board members of Exelon or its subsidiaries, including EGC.

Pursuant to 10 CFR 50.33(d)(3)(ii) and 10 CFR 72.22(d)(3)(ii), submit the names, addresses, and citizenship of the directors and principal officers of Exelon and all relevant subsidiaries, including EGC.

2. 10 CFR 72.22, paragraph (e) states, in relevant part:

*Each application must state ... information sufficient to demonstrate to the Commission the financial qualifications of the applicant to carry out, in accordance with the regulations in this chapter, the activities for which the license is sought...The information must show that the applicant either possesses the necessary funds, or that the applicant has reasonable assurance of obtaining the necessary funds...to cover the following:*

...

*(2) Estimated operating costs over the planned life of the ISFSI; and*

*(3) Estimated decommissioning costs, and the necessary financial arrangements to provide reasonable assurance before licensing, that decommissioning will be carried out after the removal of spent fuel, high-level radioactive waste, and/or reactor-related GTCC waste from storage.*

- A) The application states that, "Because EGC is no longer authorized under the 10 CFR Part 50 licenses to operate or load fuel pursuant to the 10 CFR 50.82(a)(2), EGC will not conduct any of the operations contemplated by the financial qualifications provisions of 10 CFR 50.33(f)(2), but rather all of its licensed activities will involve possession of radioactive material in connection with maintaining the ISFSI, and completing the decommissioning of the ISFSI following transfer of all irradiated fuel." The application further states that, "Upon license transfer approval, EGC will assume responsibilities for managing the stored fuel and greater than class C (GTCC) waste and provide funding for the management of all irradiated nuclear fuel at ZNPS until title... and possession of the fuel is transferred to the Secretary of Energy." While the NRC staff recognizes that, once decommissioning of the reactor facility is complete, there are no longer operational expenses associated with the reactor facility, there does remain operational expenses associated with spent fuel management, including ISFSI operations and maintenance expenses, which require a financial qualification determination. While the application references an Updated Irradiated Fuel Management Plan for ZNPS that was submitted in

2010 following the transfer of the license from EGC to ZS, it does not include the updated remaining operational expenses, in current year dollars, or the method by which the applicant possesses or has reasonable assurance of obtaining funds to cover the remaining operational expenses associated with spent fuel management for ZNPS.

Pursuant to 10 CFR 72.22(e)(2) and 10 CFR 50.54(bb), provide the remaining expected operational costs associated with spent fuel management for ZNPS, in current year dollars. Additionally, provide information related to the method by which the applicant possesses or has reasonable assurance of obtaining funds to cover the remaining operational expenses associated with spent fuel management for ZNPS. For clarity, please provide an updated cash flow analysis reflecting the remaining spent fuel management expenses.

- B) According to the application, in 2010, at the time of transferring the ZNPS license to ZS, EGC retained \$25 million in its Non-Qualified Decommissioning Fund for maintenance and decommissioning of the ISFSI upon return of the license to EGC. Additionally, the application references the ZNPS ISFSI Decommissioning Funding Plan (DFP), submitted by EGC to the NRC in accordance with 10 CFR 72.30, "Financial assurance and record keeping," paragraph (c), dated October 17, 2016 (ADAMS Accession No. ML16291A505). While the 2016 DFP contained information required for the NRC staff to make a determination that there is reasonable assurance that EGC will be able to decommission the ISFSI and that the licensee is in compliance with the reporting requirements in 10 CFR 72.30(b) and 72.30(c), for the purpose of this application the staff requires updated information, in current year dollars, related to the expected cost to decommission the ISFSI and the current decommissioning trust fund value.

Pursuant to 10 CFR 72.30(b), each holder of, or applicant for, a license under Part 72 must submit for NRC review and approval a DFP containing information on how reasonable assurance will be provided that funds will be available to decommission its ISFSI. The DFP must contain a detailed decommissioning cost estimate (DCE), in an amount reflecting: (1) the cost of an independent contractor to perform all decommissioning activities, (2) an adequate contingency factor, and (3) the cost of meeting the 10 CFR 20.1402 unrestricted use criteria (or the cost of meeting the 10 CFR 20.1403 restricted use criteria, provided the licensee can demonstrate its ability to meet these criteria). The licensee's DFP must also identify and justify using the key assumptions contained in the DCE. Further, the DFP must describe the method of assuring funds for ISFSI decommissioning, including means for adjusting cost estimates and associated funding levels periodically over the life of the ISFSI. Additionally, the DFP must specify the volume of onsite subsurface material containing residual radioactivity that will require remediation to meet the criteria for license termination, and contain a certification that financial assurance for ISFSI decommissioning has been provided in the amount of the DCE.

Pursuant to 10 CFR 72.30(c), at the time of license renewal and at intervals not to exceed 3 years, the decommissioning funding plan (DFP) required to be submitted by 10 CFR 72.30(b) must be resubmitted with adjustments as necessary to account for changes in costs and the extent of contamination. The DFP must update the information submitted with the original or prior approved plan. In addition, the DFP must also specifically consider the effect of the following events on decommissioning costs, as required by 10 CFR 72.30(c)(1)-(4): (1) spills of radioactive material producing additional residual radioactivity in onsite

subsurface material, (2) facility modifications, (3) changes in authorized possession limits, and (4) actual remediation costs that exceed the previous cost estimate.

Provide the information required in 10 CFR 72.30(b) and 10 CFR 72.30(c), as applicable, in current year dollars.