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

1.0 INTRODUCTION

By application dated January 25, 2008, and supplemented on March 18, 2008, March 28, 2008, April 1, 2008, September 25, 2008, October 23, 2008, and February 4, 2009, including clarifying E-mails on March 14, 2008, May 16, 2008, and July 9, 2008, (collectively, the application) Exelon Generation Company, LLC, (Exelon) and ZionSolutions, LLC, (ZS) (together, the applicants) pursuant to Section 184 of the Atomic Energy Act of 1954, as amended, (the Act), and 10 CFR 50.80, requested that the United States Nuclear Regulatory Commission (NRC) consent to the direct transfer of Operating Licenses Nos. DPR-39, and DPR-48 for the Zion Nuclear Power Station, Units 1 & 2 (Zion). The application requested that the NRC consent to the direct transfer of Exelon's 100% ownership interest in Zion to ZS Zion with the exception of title to the real estate encompassing the Zion site, ownership of the spent nuclear fuel and the greater than Class C radioactive waste, as well as certain other improvements as discussed later in this Safety Evaluation, all of which will be retained by Exelon and accordingly transfer the licenses to ZS. ZS will assume all of Exelon's authority, obligations, and commitments under the licenses and all NRC Orders pertaining thereto. The March 18, 2008, March 28, 2008, April 1, 2008, September 25, 2008, and October 23, 2008, letters, and the March 14, 2008, May 16, 2008, and July 9, 2008, e-mails, provided clarification and did not expand of the application beyond the scope noticed in the *Federal Register*.

2.0 BACKGROUND

Zion Nuclear Power Station, Unit 1, is a Westinghouse 3250 MWt Pressurized Water Reactor which was granted an Operating License on October 19, 1973, and subsequently shut down on February 21, 1997. Zion Nuclear Power Station, Unit 2, is also a Westinghouse 3250 MWt Pressurized Water Reactor which was granted an Operating License on November 14, 1973, and was shut down on September 19, 1996.

In February 1998, pursuant to 10 CFR 50.82(a)(1)(i), Commonwealth Edison Company (which subsequently merged with PECO Energy Company, at which time Exelon was formed) certified to the NRC that as of February 13, 1998, operations had ceased at Zion, Units 1 & 2. Commonwealth Edison Company later certified, pursuant to 10 CFR 50.82(a)(1)(i), that all fuel had been removed from the reactor vessel of both units, and committed to maintaining the units in a permanently defueled status. Therefore, pursuant to 10 CFR 50.82(a)(2), operations at Zion are no longer authorized under the Part 50 licenses. Exelon is licensed to possess, but not use or operate Zion under license numbers DPR-39 and DPR-48.

On February 14, 2000, the Commonwealth Edison Company submitted a Post-Shutdown Decommissioning Activities Report (PSDAR) for the Zion Units, pursuant to 10 CFR 50.82(a)(4)(i). On March 24, 2008, Exelon submitted their Notification of "Amended Post-Shutdown Decommissioning Activities Report" in accordance with 10 CFR 50.82(a)(7). Both units remain defueled and in a SAFSTOR condition.

According to the application, the purpose of the proposed direct transfer of the licenses from Exelon to ZS is to permit accelerated radiological decontamination to facilitate the eventual complete decommissioning of Zion, and the environmental remediation of the Zion site. ZS justifies the proposed transfer of the licenses because it would take advantage of the capability of its parent company, EnergySolutions, LLC, with respect to the cost and burial capacity for low level waste disposal in future years.

ZS is a direct wholly owned subsidiary of EnergySolutions, LLC (ES) and was expressly created to take ownership of Zion. (ES, is a wholly owned subsidiary of EnergySolutions, Inc. EnergySolutions, Inc. is a publicly traded company, which was controlled by ENV Holdings, LLC, until a recent stock offering in the summer of 2008.) ES has entered into an agreement with Exelon under which ZS will assume ownership of Zion and undertake decommissioning activities, to be conducted by ES and its affiliated companies. As stated in the application, ZS, as the licensee for the Zion site, will be responsible for and have ultimate control and final authority over all licensed activities, including decommissioning.

According to the application, ES specializes in providing nuclear services, such as high level waste management, spent fuel handling and transportation, as well as complex decontamination and decommissioning projects. ES is a Delaware limited liability company.

Under the terms of the proposed sale, which are set forth in the Asset Sales Agreement, (ASA), ES will accomplish the operational and physical decommissioning of the Zion Units. Spent fuel and greater than Class C radioactive waste which will be stored in an Independent Spent Fuel Storage Installation (ISFSI) to be constructed by ZS, will remain the property of Exelon. Pursuant to general licenses provided for in 10 CFR 31.9, 10 CFR 40.21 and 10 CFR 70.20, Exelon will retain title to this material and will remain responsible for the ultimate disposition of this material as provided for under the terms of Exelon's Standard Spent Fuel Disposal Contract with the Department of Energy.

3.0 REGULATORY EVALUATION

The applicants' request for approval of the direct transfer of the Zion licenses as described above, and discussed in this Safety Evaluation is made pursuant to 10 CFR 50.80. Section 50.80(a) of 10 CFR states:

> "No license for a production or utilization facility, or any right thereunder, shall be transferred, assigned, or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of the license to any person, unless the Commission shall give its consent in writing."

In addition, the requirements of 10 CFR 50.80(b) & (c) apply. Section 50.80(b) states that an application for a license transfer shall include as much information described in 10 CFR 50.33

and 10 CFR 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." Section 50.80(c) states that "the Commission will approve an application for the transfer of a license, if the Commission determines: (1) that the proposed transferee is qualified to be the holder of the license; and (2) that the transfer of the license is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto."

The staff used the following regulations and guidance during the technical qualification evaluation: 10 CFR 50.40(b), "Common Standards;" 10 CFR 50.80, "Transfer of Licenses;" the *Standard Review Plan* (SRP) NUREG-0800, Section 13.1.1, "Management and Technical Support Organization," and Sections 13.1.2 - 13.1.3, "Operating Organizations;" Regulatory Guide 1.8, Revision 3, May, 2000, *Qualification and Training of Personnel for Nuclear Power Plants*; American Nuclear Society/ American National standards Institute (ANS/ANSI) 3.1-1993, *Selection, Qualification and Training of Personnel for Nuclear Power Plants.*

The purpose of this evaluation is to ensure that the proposed corporate management is involved with, informed of, and dedicated to the safe decommissioning of the Zion site and that adequate technical and financial resources will be provided to support this action.

4.0 FINANCIAL EVALUATION

4.1 Financial Qualifications and Decommissioning Funding

ZS has been established solely for the purpose of acquiring the Zion site so the site will be decommissioned and eventually released for unrestricted use (except for the proposed ISFSI where the spent fuel and greater than Class C waste will be stored). The creation of the proposed ISFSI is not part of this Safety Evaluation.

Following the proposed direct transfer, ZS would not be authorized under the Part 50 licenses to operate the reactor. In addition, ZS would not be allowed to conduct any of the operations contemplated by the financial qualifications provisions of 10 CFR 50.33(f)(2). 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.

According to the application, in February 1999, TLG Services, Inc. (TLG) completed a Zion Nuclear Power Station site-specific decommissioning cost estimate. This estimate submitted by a Commonwealth Edison letter dated February 14, 2000, estimated the decommissioning cost at $904 million, in 1996 dollars. This site specific decommissioning cost estimate served as the Post Shutdown Decommissioning Activities Report (PSDAR), in accordance with 10 CFR 50.82(a)(7).

However, according to the application, if escalation is applied to account for inflation, the original PSDAR decommissioning cost estimate of $904 million in 1996 dollars is equivalent to $1.374 billion in 2008 dollars. The decommissioning cost estimate has been updated periodically by TLG to refine the costs as more detailed site-specific information is obtained and industry experience grows with the decommissioning of other nuclear plants. TLG's most recent site-specific decommissioning cost estimate is $1.043 billion, and was issued in February 2007, and reflected 2006 dollars. Escalating the 2006 dollars to 2008 dollars to account for inflation brings the total decommissioning cost estimate to $1.091 billion.

According to the application, the TLG estimates have been utilized to obtain site-specific commodity quantities, and then ES applied its own weights and currently estimated unit cost factors, which take into consideration the specific demolition methods and schedules ES plans to utilize, to arrive at an updated estimated cost to decommission Zion.

TABLES #1, #2, and #3, are projected cash flows which are composed from estimated yearly expense data, and reflect the stated amount of decommissioning funds available as of April 30, 2008, as provided by the applicant. The NRC staff developed the projected cash flow tables by calculating the yearly declining fund balance due to withdrawals offset by the interest earned.

The licensee's total estimated cost for complete decommissioning of Zion is approximately $978.0 million (in 2007 dollars), see TABLE #1. This estimate includes provisions for storage of spent fuel and greater than Class C wastes on the Zion site until 2018, as well as complete site restoration costs, also referred to as "green field," for all areas except for the proposed ISFSI.

According to the application, as of December 31, 2007, the assets in Zion Qualified Decommissioning Trust Funds and Non-Qualified Decommissioning Trust Funds had an approximate market value of $912 million. Approximately $42 million was withdrawn by Exelon in January 2008 to pay for pre-2007 decommissioning expenses, leaving a remaining value of $870 million. As of April 30, 2008, the value of the Decommissioning Trust was $858.9 million. The Summary of Projected Cash Flow, TABLE #1 above, shows the anticipated yearly expenses for complete and total decommissioning activities (green field), along with the associated withdrawals offset by forecasted interest earned at a 2.00% Real Rate of Return (RRR) from the declining total decommissioning trust.

The regulations at 10 CFR 50.75(e)(1)(i) only allow for up to a 2.00% RRR for a pre-paid decommissioning trust, for forecasting purposes. Since ZS is not regulated by any "rate-setting authority," ZS is not authorized to use a RRR higher than 2.00% for forecasting purposes. Therefore, as shown in Table 1, the NRC staff estimates a $63 million shortfall in total available decommissioning trust funds towards the total estimated expenses of $978 million for all decommissioning activities.

However, the NRC staff must find reasonable assurance that there are sufficient financial resources to complete radiological decontamination and decommissioning activities that will meet the NRC radiological release criteria. In addition, 10 CFR 50.2 states that "decommissioning 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."

Pursuant to 10 CFR 50.82(a)(6)(iii), licensees shall not perform any decommissioning activities, as defined in 10 CFR 50.2, that results in there no longer being reasonable assurance that adequate funds will be available for decommissioning.

TABLE #1

ZIONSOLUTIONS, LLC
SUMMARY OF PROJECTED CASH FLOW
FOR TOTAL & ALL DECOMMISSIONING ACTIVITIES**
USING ALL AVAILABLE TRUST FUNDS
(In $millions of 2007 $)

** As of April 30, 2008*	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**TOTAL**
OPENING TRUST FUND BALANCE:	*$858.9	$788.5	$707.7	$595.7	$420.1	$252.0	$105.2	$13.8	($47.6)	($57.4)	($60.7)	
EXPENSES												
Fuel Storage Cost by Exelon:	$21.0											
Fund Retained by Exelon:	$25.0											
Tax Liability paid by Exelon:	$11.0											
Preliminary Planning:	$12.7											
Decontamination:		$0.7		$0.2	$0.4	$1.1	$1.2	$0.9				
Removal:	$1.0	$17.0	$35.4	$29.8	$15.3	$23.7	$19.9	$0.7				
Transport & Disposal:	$0.1	$2.5	$4.1	$25.7	$33.0	$31.4	$31.1	$39.5	$3.9			
Project Staffing:	$9.4	$33.5	$33.1	$32.8	$32.3	$30.8	$20.5	$11.2	$2.3	$0.4		
Materials & Equipment:	$1.9	$15.8	$2.0	$5.8	$1.8	$2.0	$1.2	$0.4	$0.1	$0.1		
Insurance & Reg. Fees:	$0.1	$0.4	$0.4	$0.4	$0.4	$0.4	$0.4	$0.3				
Other:	$2.1	$13.9	$12.6	$13.9	$12.7	$12.7	$10.2	$5.7	$0.8	$0.5	$0.3	
SUB TOTAL:	$84.3	$83.8	$87.6	$108.6	$95.9	$102.1	$84.5	$58.7	$7.1	$1.0	$0.3	
Spent Fuel Storage:	$1.2	$8.6	$32.8	$69.5	$67.1	$22.3	$1.7	$1.6	$2.3	$2.3	$1.7	
Site Restoration:	$0.4	$2.2	$3.3	$5.8	$10.0	$24.5	$5.4	$1.1	$0.4			
TOTAL:	$85.9	$94.6	$123.7	$183.9	$173.0	$148.9	$91.6	$61.4	$9.8	$3.3	$2.0	$978.1
2% RRR INTEREST	$15.5	$13.9	$11.7	$8.2	$4.9	$2.1	$0.3					

CLOSING TRUST FUND BALANCE:	$788.5	$707.7	$595.7	$420.1	$252.0	$105.2	$13.8	($47.6)	($57.4)	($60.7)	($62.7)

TABLE #2

***Refers to all NRC requirements, spent fuel storage, reclamation, and return to green field*

ZIONSOLUTIONS, LLC
SUMMARY OF PROJECTED CASH FLOW
NRC RADIOLOGICAL DECONTAMINATION ONLY
USING ONLY NRC DEDICATED TRUST FUNDS
(In $millions of 2007 $)

** As of April 30, 2008*	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
OPENING TRUST FUND BALANCE:	*$594.7	$591.7	$518.1	$439.1	$337.1	$246.0	$146.8	$63.5	$4.9	($2.2)	($3.2)	
EXPENSES												
Decontamination:		$0.7		$0.2	$0.4	$1.1	$1.2	$0.9				
Removal:	$1.0	$17.0	$35.4	$29.8	$15.3	$23.7	$19.9	$0.7				
Transport & Disposal:	$0.1	$2.5	$4.1	$25.7	$33.0	$31.4	$31.1	$39.5	$3.9			
Project Staffing:	$9.4	$33.5	$33.1	$32.8	$32.3	$30.8	$20.5	$11.2	$2.3	$0.4		
Materials & Equipment:	$1.9	$15.8	$2.0	$5.8	$1.8	$2.0	$1.2	$0.4	$0.1	$0.1		
Insurance & Reg. Fees:	$0.1	$0.4	$0.4	$0.4	$0.4	$0.4	$0.4	$0.3				
Other:	$2.1	$13.9	$12.6	$13.9	$12.7	$12.7	$10.2	$5.7	$0.8	$0.5	$0.3	
TOTAL:	$84.3	$83.8	$87.6	$108.6	$95.9	$102.1	$84.5	$58.7	$7.1	$1.0	$0.3	$644.2
2% RRR INTEREST	$11.6	$10.2	$8.6	$6.6	$4.8	$2.9	$1.2	$0.1				
CLOSING TRUST FUND BALANCE:	$591.7	$518.1	$439.1	$337.1	$246.0	$146.8	$63.5	$4.9	($2.2)	($3.2)	($3.5)	

TABLE #3

ZIONSOLUTIONS, LLC
SUMMARY OF PROJECTED CASH FLOW
NRC RADIOLOGICAL DECONTAMINATION ONLY
USING ALL AVAILABLE TRUST FUNDS
(In $millions of 2007 $)

** As of April 30, 2008*	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**TOTAL**
OPENING TRUST FUND BALANCE:	*$858.9	$861.2	$792.9	$719.4	$623.1	$537.7	$444.3	$367.0	$314.5	$313.5	$318.8	
EXPENSES												
Decontamination:		$0.7		$0.2	$0.4	$1.1	$1.2	$0.9				
Removal:	$1.0	$17.0	$35.4	$29.8	$15.3	$23.7	$19.9	$0.7				
Transport & Disposal:	$0.1	$2.5	$4.1	$25.7	$33.0	$31.4	$31.1	$39.5	$3.9			
Project Staffing:	$9.4	$33.5	$33.1	$32.8	$32.3	$30.8	$20.5	$11.2	$2.3	$0.4		
Materials & Equipment:	$1.9	$15.8	$2.0	$5.8	$1.8	$2.0	$1.2	$0.4	$0.1	$0.1		
Insurance & Reg. Fees:	$0.1	$0.4	$0.4	$0.4	$0.4	$0.4	$0.4	$0.3				
Other:	$2.1	$13.9	$12.6	$13.9	$12.7	$12.7	$10.2	$5.7	$0.8	$0.5	$0.3	
TOTAL:	$84.3	$83.8	$87.6	$108.6	$95.9	$102.1	$84.5	$58.7	$7.1	$1.0	$0.3	$644.2
2% RRR INTEREST	$16.9	$15.5	$14.1	$12.2	$10.5	$8.7	$7.2	$6.2	$6.1	$6.3	$6.4	
CLOSING TRUST FUND BALANCE:	$861.2	$792.9	$719.4	$623.1	$537.7	$444.3	$367.0	$314.5	$313.5	$318.8	$324.8	

In addition, 10 CFR 50.82(a)(8)(i) states that decommissioning trust funds may be used by licensees if: (A) the withdrawals are for expenses for legitimate decommissioning activities consistent with the definition of decommissioning in 10 CFR 50.2; (B) the expenditure would not reduce the value of the decommissioning trust below an amount necessary to place and maintain the reactor in a safe storage condition if unforeseen conditions or expenses should arise; and (C) the withdrawals would not inhibit the ability of the licensee to complete funding of any shortfalls in the decommissioning trust needed to ensure the availability of funds to ultimately release the site and terminate the license.

TABLE #2 shows that as of April 30, 2008, the assets in Zion Qualified Decommissioning Trust Funds and Non-Qualified Decommissioning Trust Funds expressly dedicated towards NRC radiological decontamination had an approximate market value of $594.7 million. The Summary of Projected Cash Flow, TABLE #2 above, shows the anticipated yearly expenses for total decommissioning activities, along with the associated withdrawals offset by forecasted interest earned at a 2.00% RRR from the declining NRC dedicated decommissioning trust funds. According to the application, ZS estimates NRC radiological decontamination costs to be $644 Million. Given the proposed method outlined by ZS to conduct radiological decontamination, the NRC staff has no reason to believe that the estimated radiological decontamination nominal cost of $644 million is not reasonable.

Under these assumptions, the NRC staff estimates that by the year 2018 there will be a $3.5 million shortfall in available NRC dedicated decommissioning trust funds, as shown on TABLE #2.

However, the NRC staff notes that in the course of performing radiological decontamination, additional non-NRC dedicated decommissioning trust funds will also be available to complete the required radiological decontamination to NRC standards as defined in 10 CFR 50.2. See TABLE #3.

4.2 Additional Financial Assurance

The application states that pursuant to the terms of the Credit Support Agreement, ES will provide a $200 million Irrevocable Letter of Credit to ZS, which is payable to a backup non-qualified decommissioning trust, that will be established at the closing, which will be drawn against a thrift institution to be named. The NRC staff notes that ES is a billion dollar company, and assumes that ES will be able to procure the $200 million irrevocable Letter of Credit for ZS. Therefore, as a condition of the license transfer:

> Prior to the closing of the license transfer from Exelon to ZS, ZS will provide written proof that an irrevocable Letter of Credit in the amount of at least $200 million has been established by EnergySolutions, LLC, in accordance with the application, for the decommissioning of the Zion Nuclear Power Station, Units 1&2. The letter of credit cannot be terminated without 30 days prior written notice to the Director of the Office of Nuclear Reactor Regulation, and cannot be terminated if the NRC objects in writing.

In addition to the Credit Support Agreement, ES will provide an Irrevocable Easement for Disposal Capacity of 7.5 million cubic feet to ZS, which provides for rights for disposal capacity at the Clive, Utah facility sufficient to dispose of all of the Class A Low Level Waste that will be shipped from Zion. According to the applicant, this Irrevocable Easement for Disposal may be exercised such that zero dollars of additional financial expenses will be incurred by the project. The NRC staff notes that even though no definitive financial expense may be incurred by the project under such circumstances, there is none the less a positive economic value benefiting the overall project. ES owns and operates the Clive, Utah disposal facility. The NRC staff considers this easement a material factor in assessing the financial qualifications of the proposed transferee. Therefore, as a condition of the license transfer:

> Prior to the closing of the license transfer from Exelon to ZS, ZS will provide written proof that an Irrevocable Easement for Disposal Capacity of 7.5 million cubic feet has been established by EnergySolutions, LLC, in accordance with the application, for the decommissioning of the Zion Nuclear Power Station, Units 1&2. The Easement for Disposal Capacity cannot be terminated without 30 days prior written notice to the Director of the Office of Federal and State Materials and Environmental Management Programs and Director of the Office of Nuclear Reactor Regulation, and cannot be terminated if the NRC objects in writing.

4.3 Financial Qualifications Findings

Given the forecast expenses estimated by ZS, the available decommissioning funds, a $200 million letter of credit, and the economic value of the disposal rights, the NRC staff finds that ZS is financially qualified to hold the licenses for Zion as proposed.

5.0 ANTITRUST REVIEW

The Act does not require or authorize antitrust reviews of post-operating license transfer applications. *Kansas Gas and Electric Co., et. al.* (Wolf Creek Generating Station, Unit 1), CLI-99-19, 49 NRC 441 (1999). The application here postdates the issuance of the operating licenses for the units under consideration in this Safety Evaluation, and therefore no antitrust review is required or authorized.

6.0 FOREIGN OWNERSHIP, CONTROL, or DOMINATION

Sections 103d and 104d of the Atomic Energy Act of 1954 as amended, prohibit the NRC from issuing a license for a nuclear power plant to "any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government." The NRC's regulation, 10 CFR 50.38, contains language to implement this prohibition.

According to the application, ZS is incorporated in the State of Delaware. ZS's directors and executive officers are all United States citizens.

ZS is a wholly owned subsidiary of ES. Based upon its own review of the known and identifiable equity investors in ES's parent companies, no single foreign entity or group owns more than 5% of the equity interests in ES (indirectly through EnergySolutions, Inc., the parent, which is publically traded).

The application states that ES holds a security clearance from the U.S. Department of Energy, which is based in part upon findings and ongoing oversight to assure that the company is not subject to foreign ownership, control or influence.

According to the application, ZS is not owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government. The NRC staff does not know or have reason to believe otherwise.

7.0 NUCLEAR INSURANCE & INDEMNITY

The provisions of the Price-Anderson Act (Section 170 of the Act) and the Commission's regulations at 10 CFR Part 140 require that the current indemnity agreement reflect that ZS will be the licensee after the proposed direct transfer takes effect.

ZS will be required to maintain the financial protection required by 10 CFR Part 140 and the property insurance required by 10 CFR 50.54(w). The NRC staff will issue to ZS modified Price-Anderson indemnity agreements to reflect that ZS will be the owner and licensee.

Exelon requests NRC approval of the assignment and transfer of the Price-Anderson indemnity agreements for ZNPS to ZS upon the close of the direct transfer of the licenses. Prior to the license direct transfers, ZS will obtain not less than $50 million onsite insurance coverage and not less than $100 million offsite coverage in accordance with the exemptions to 10 CFR 50.54(w) and 10 CFR 140.11 issued by the NRC in a letter dated December 21, 1999. In addition, participation in the secondary insurance pool is not required based on the permanently defueled status of Zion. Therefore, as a condition of the license transfer:

> Prior to the closing of the license transfer from Exelon to ZS, ZS shall provide the Director of the Office of Federal and State Materials and Environmental Management Programs and Director of the Office of Nuclear Reactor Regulation satisfactory documentary evidence that it has obtained the appropriate amount of insurance required of a licensee under 10 CFR Part 140 of the Commission's regulations and consistent with the exemptions issued to Zion on December 21, 1999.

8.0 TECHNICAL EVALUATION

8.1 Management and Technical Support Organization

The staff reviewed the application to determine the acceptability of the proposed corporate management and technical support organization. The staff evaluated the submittal using the applicable acceptance criteria contained in SRP Section 13.1.1, "Management and Technical Support Organization."

The applicants stated that, “The ZS management team is experienced and qualified, and the organization is well-designed to accomplish the decontamination and restoration of the site. The necessary management processes and controls will be applied, with clear lines of authority and communication. Present site personnel will be integrated into the ZS organization to continue to apply existing programs, processes, and practices. The nuclear onsite organizations and staff will also be incorporated into the ZS organization. Accordingly, the proposed transfers have the potential to achieve synergies and management efficiencies at Zion. For these reasons, ZS and its management team have the necessary technical qualifications to safely perform the decontamination and decommissioning of Zion.”

In effect, the ZS organization will consist of existing staff, augmented by an experienced management team. An organization chart of the management structure was provided, along with resumes of corporate officers and station managers. The ZS management team consists of personnel with prior experience in their areas of responsibility at previously decommissioned nuclear facilities. Continued availability of current station staff is demonstrated by the applicant’s Exhibit J, “Leased Personnel Agreement”. Additionally, the applicants stated, “ZS will integrate the existing site personnel into the ZS organization at Zion. These personnel will be offered employee status with ZS, will continue to be located and assigned with clear and unambiguous responsibilities, and with reporting relationships to the site General Manager. ZS's operations at the ZNPS will essentially be self-sufficient. However, additional support for certain functions (e.g., training, emergency preparedness and quality assurance) may be obtained from EnergySolutions' corporate organization or from Exelon (by contract) during the transition period.”

Accordingly, the staff concludes that the proposed management and technical organization will adequately support the proposed decontamination and decommissioning activities.

8.2 Onsite Organization

The staff reviewed the application to determine the acceptability of the onsite organization and to evaluate changes to the organization proposed as a result of the license transfer. The application states that the personnel presently employed by Exelon will be integrated into the ZS organization. The application’s organization chart shows that the incumbent Plant Operations Manager will continue in that position under the proposed ZS organization.

The initial operating organization was determined to be acceptable by the initial licensing review. Subsequent safety-related changes to the operating organization should have been evaluated with an appropriate methodology. Therefore, the existing operating organization remains acceptable. The staff’s review focused on evaluating any changes to the operating organization proposed as a result of the transfer.

The applicants’ submittal indicated that the personnel presently employed by Exelon will be integrated into the ZS organization, and it will have no impact on their ability to continue to safely operate the facilities. The organization chart included in the submittal shows that the incumbent Plant Operations Manager will continue in that position under the proposed ZS organization.

Because the organizations and personnel now responsible for the maintenance of the Zion facilities will not be affected by the license transfer from Exelon to ZS, the staff concludes that onsite organizations will adequately support the proposed decontamination and decommissioning activities.

8.3 Technical Qualifications Findings

Exelon and ZS have described the corporate level management and technical support organization and the onsite operating organization that will be responsible for the maintenance and decommissioning of Zion after the transfer of licensed authority to ZS. The staff concludes that (1): ZS will have an acceptable corporate organization; (2): ZS will retain an acceptable onsite organization; and (3): ZS will have adequate resources to support for the safe decommissioning of the Zion site, after the transfer of licensed authority from Exelon to ZS. The applicants' submittal adequately addresses the relevant requirements of 10 CFR 50.40 (b) and 10 CFR 50.80. Accordingly, in light of the foregoing evaluation, the staff concludes that ZionSolutions, LLC will be technically qualified to hold the Zion licenses # DPR-39, and DPR-48.

9.0 <u>CONFORMING AMENDMENTS</u>

9.1 Conforming Amendment

The applicants requested conforming amendments to Facility Operating License Nos. DPR-39 and DPR-48 for Zion. No physical or operating changes to the facility are requested. The proposed conforming amendments only reflect the transfer action. The amendments involve no safety question and are administrative in nature. Accordingly, the proposed amendments are acceptable.

9.2 Change to High Radiation Area

The applicants also proposed to change all references to high radiation areas as 1000 mrem/hr in section 5.8 to 100 mrem/hr. This proposed change will be addressed in a separate amendment.

9.3 State Consultation

In accordance with the Commission's regulations, the Illinois State official was notified of the proposed issuance of the amendment. The State official had no comments.

9.4 Conforming Amendment Conclusion

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by the proposed action; (2) such activities will be conducted in compliance with the Commission's regulations; and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

10.0 ENVIRONMENTAL CONSIDERATION

The subject application is for approval of a transfer of licenses issued by the NRC and approval of conforming amendments. Accordingly, the actions involved meet the eligibility criteria for categorical exclusion set for the in 10 CFR 51.22(c)(21). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with approval of the transfer application.

11.0 CONCLUSION

Based on the foregoing, and subject to the conditions described herein, the staff finds that ZionSolutions is qualified to hold the licenses for the Zion Nuclear Power Station, Units 1 & 2, licenses as described in the application, and that the direct transfer of the licenses is otherwise consistent with applicable provisions of laws, regulations and orders issued by the Commission pursuant thereto.

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