

10 CFR 50.4(b)(6)
10 CFR 50.71(e)
10 CFR 50.59(d)(2)

RS-06-119

October 2, 2006

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

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: Submittal of Defueled Safety Analysis Report Update, Revision 4
Report of Changes, Tests and Experiments

References: (1) Exelon Generation Company, LLC (EGC) letter, "Submittal of Defueled
Safety Analysis Report Update," dated October 11, 2004

(2) Exelon Generation Company, LLC (EGC) letter, "Report of Changes, Tests
And Experiments," dated December 11, 2002

In accordance with the requirements of 10 CFR 50.71, "Maintenance of records, making of reports," paragraph (e), Exelon Generation Company, LLC (EGC) is submitting Revision 4 of the Defueled Safety Analysis Report (DSAR) for the Zion Nuclear Power Station (ZNPS). In accordance with 10 CFR 50.71(e)(4), the DSAR update is being submitted within 24 months of the previous ZNPS DSAR revision which was submitted in Reference (1).

In accordance with 10 CFR 50.59, "Changes, tests, and experiments," paragraph (d)(2), a report of changes, tests, and experiments, including a summary of the 10 CFR 50.59 evaluation of each change is also required to be submitted on a biennial basis. In Reference (2), the previous ZNPS 10 CFR 50.59 report was submitted. There were no 10 CFR 50.59 evaluations performed for ZNPS in the reporting periods from December 11, 2002 to August 31, 2006 and therefore, a summary of evaluations is not required to be submitted.

The changes to the DSAR reflect administrative changes (i.e., editorial and DSAR text changes) and plant design changes. Revision 4 includes changes made from October 11, 2004, through July 31, 2006. We have evaluated the DSAR changes and determined the changes screened out as not requiring an evaluation under 10 CFR 50.59.

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Attachment 1 contains a summary of the DSAR changes. Attachment 2 contains page change instructions. Attachment 3 contains the update to the ZNPS DSAR. As required by 10 CFR 50.71(e), this attachment consists of replacement pages to be inserted the DSAR. Changes to the DSAR are indicated by revision bars.

As Manager – Licensing, I certify that the information in this submittal accurately presents changes made since the previous submittals necessary to reflect information and analyses submitted to the NRC or prepared in accordance with NRC requirements.

Should you have any questions concerning this letter, please contact Ms. Alison M. Mackellar at (630) 657-2817.

Respectfully,

A handwritten signature in cursive script that reads "Joseph A. Bauer". The signature is written in black ink and is positioned above the printed name and title.

Joseph A. Bauer
Manager – Licensing (acting)

Attachment 1: Summary of Changes
Attachment 2: Page Change Instructions
Attachment 3: ZNPS DSAR Revision 4

ATTACHMENT 1

SUMMARY OF CHANGES

Changes Made to the DSAR But Not Previously Submitted

Pages	Description of Change
6-1, 6-2, 6-i (Chapter Table of Contents), 6-i (Master Table of Contents)	Delete specific discussion of staff duties and responsibilities. This information is contained in administrative procedures.

ATTACHMENT 2

PAGE CHANGE INSTRUCTIONS

To perform the October 2006 Zion Defueled Safety Analysis Report (DSAR) update, please remove the existing pages and insert pages dated October 2006 as follows:

<u>SECTION</u>	<u>REMOVE</u>	<u>INSERT</u>
List of Effective Pages	LOEP-2	LOEP-2
List of Effective Pages	LOEP-7	LOEP-7
Master Table of Contents	page 6-i	page 6-i
Chapter 6	page 6-i	page 6-i
Chapter 6	page 6-1	page 6-1
Chapter 6	page 6-2	page 6-2

ATTACHMENT 3

**ZION NUCLEAR POWER STATION
DEFUELED SAFETY ANALYSIS REPORT REVISION 4**

ZION STATION DSAR

LIST OF EFFECTIVE PAGES

PAGE	DATE	PAGE	DATE
Controlled Copy Cover Sheet	OCTOBER 2002	Figure 1-8	AUGUST 1998
List of Effective Pages Tab		Figure 1-9	AUGUST 1998
LOEP-2	OCTOBER 2006	Figure 1-10	AUGUST 1998
LOEP-3	OCTOBER 2000	Figure 1-11	AUGUST 1998
LOEP-4	OCTOBER 2004	Figure 1-12	OCTOBER 2000
LOEP-5	OCTOBER 2004	Figure 1-13	AUGUST 1998
LOEP-6	OCTOBER 2004	Figure 1-14	OCTOBER 2000
LOEP-7	OCTOBER 2006	Figure 1-15	AUGUST 1998
Master Table of Contents Tab		Figure 1-16	AUGUST 1998
1-i	AUGUST 1998	Figure 1-17	AUGUST 1998
2-i	AUGUST 1998	Chapter 2 Tab	
2-ii	AUGUST 1998	2-i	AUGUST 1998
3-i	AUGUST 1998	2-ii	AUGUST 1998
3-ii	OCTOBER 2002	2-iii	AUGUST 1998
3-iii	AUGUST 1998	2-iv	AUGUST 1998
3-iv	OCTOBER 2000	2-v	AUGUST 1998
3-v	OCTOBER 2004	2-1	OCTOBER 2002
4-i	AUGUST 1998	2-2	AUGUST 1998
4-ii	OCTOBER 2004	2-3	AUGUST 1998
5-i	AUGUST 1998	2-4	AUGUST 1998
6-i	OCTOBER 2006	2-5	AUGUST 1998
7-i	OCTOBER 2000	2-6	AUGUST 1998
Chapter 1 Tab		2-7	AUGUST 1998
1-i	AUGUST 1998	2-8	OCTOBER 2000
1-ii	AUGUST 1998	2-9	OCTOBER 2000
1-iii	AUGUST 1998	2-10	AUGUST 1998
1-1	OCTOBER 2002	2-11	AUGUST 1998
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1-4	OCTOBER 2002	2-14	AUGUST 1998
1-5	OCTOBER 2002	2-15	AUGUST 1998
1-6	OCTOBER 2002	2-16	AUGUST 1998
1-7	OCTOBER 2000	2-17	AUGUST 1998
1-8	AUGUST 1998	2-18	AUGUST 1998
1-9	OCTOBER 2002	2-19	AUGUST 1998
Table 1-1(1)	AUGUST 1998	2-20	AUGUST 1998
Figure 1-1	AUGUST 1998	2-21	AUGUST 1998
Figure 1-2	AUGUST 1998	2-22	AUGUST 1998
Figure 1-3	AUGUST 1998	2-23	AUGUST 1998
Figure 1-4	AUGUST 1998	2-24	AUGUST 1998
Figure 1-5	AUGUST 1998	2-25	AUGUST 1998
Figure 1-6	AUGUST 1998	2-26	AUGUST 1998
Figure 1-7	OCTOBER 2000	2-27	AUGUST 1998
		Table 2-1(1)	AUGUST 1998

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LIST OF EFFECTIVE PAGES

<u>PAGE</u>	<u>DATE</u>	<u>PAGE</u>	<u>DATE</u>
Figure 5-4	AUGUST 1998		
Chapter 6 Tab			
6-i	OCTOBER 2006		
6-1	OCTOBER 2006		
6-2	OCTOBER 2006		
6-3	OCTOBER 2000		
6-4	OCTOBER 2002		
6-5	OCTOBER 2000		
Chapter 7 Tab			
7-i	OCTOBER 2000		
7-1	OCTOBER 2000		
7-2	OCTOBER 2000		

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ZION STATION DSAR

6. CONDUCT OF OPERATIONS

6.1 RESPONSIBILITY AND ORGANIZATION

Onsite and offsite organizations are established for unit and corporate management, respectively. The onsite and offsite organizations include the positions for activities affecting the safety of the facility.

1. Lines of authority, responsibility, and communication are established and defined for the highest management levels through intermediate levels including all operating organization positions. These relationships are documented and updated, as appropriate, in the form of organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent form of documentation.
2. A Corporate Vice President has corporate responsibility for decommissioning activities and the safe storage of spent nuclear fuel at the facility.
3. Zion Station is managed by the Decommissioning Plant Manager. The Decommissioning Plant Manager has day-to-day responsibility for the facility and has control of the onsite activities necessary for the safe operation and maintenance of structures and systems required for the safe storage of spent nuclear fuel.
4. The individuals who train the operating staff and those who carry out radiation protection and quality functions may report to an appropriate onsite manager; however, they have sufficient organizational freedom to ensure their independence from operating pressures.

6.1.1 On-Site Organization

6.1.1.1 Duties and Responsibilities of Staff Personnel

Duties and responsibilities of staff personnel are contained in site administrative procedures and organizational charts.

ZION STATION DSAR

6.2 TECHNICAL SPECIFICATIONS

Zion Station is governed by the Technical Specifications provided as Appendix A to Operating License Nos. DPR-39 and DPR-48, Docket Nos. 50-295 and 50-304.