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Nuclear

RS-07-095

10 CFR 50.71(e)

June 29, 2007

United States Nuclear Regulatory Commission ATTN: Document Control Desk Washington, DC 20555

> Dresden Nuclear Power Station, Units 2 and 3 Renewed Facility Operating License Nos. DPR-19 and DPR-25 NRC Docket Nos. 50-237 and 50-249

Subject:

Updated Final Safety Analysis Report (UFSAR) Revision 7

In accordance with the requirements of 10 CFR 50.71, "Maintenance of records, making of reports," paragraph (e)(4), Exelon Generation Company LLC (EGC), is submitting Revision 7 to the UFSAR for Dresden Nuclear Power Station. Summaries of evaluations conducted in accordance with 10 CFR 50.59 "Changes, tests, and experiments," are being submitted in a separate letter.

Revision 7 of the UFSAR reflects changes to the facility and procedures, which were in effect through May 2007. The UFSAR is being submitted on CD-ROM in its entirety, including documents incorporated by reference (e.g., Technical Requirements Manual and the Technical Specifications Bases). All UFSAR pages changed as a result of this update are clearly delineated with "Rev. 7 2007" in the page header. The Fire Protection Report is being submitted in a separate letter.

Attachment A provides a brief summary of the changes incorporated into UFSAR Revision 7.

As Manager – Licensing, I certify that the information in this submittal accurately presents changes made since the previous submittal necessary to reflect information and analyses submitted to the NRC or prepared pursuant to NRC requirements, and changes made under the provisions of 10 CFR 50.59.

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One CD-ROM is enclosed with this submittal. The CD-ROM labeled, "Exelon Nuclear – Dresden Station UFSAR Rev 7 June 2007 UFSAR, TRM, Tech Spec Bases," contains the following three components:

- 1) UFSAR.pdf, 29.10 MegaBytes (MB), publicly available
- 2) TRM.pdf, 2.31 MB, publicly available
- 3) Tech Spec Bases.pdf, 2.68 MB, publicly available

Also included is a copy of Adobe Reader, Revision 7.

Attachment B contains the directory path, filename, and size of each individual file.

Should you have any questions concerning this letter, please contact Mr. Florencio M. Arrieta at (630) 657-2805.

Respectfully,

Patrick R. Simpson Manager – Licensing

# **Attachments**

cc: Regional Administrator – NRC Region III

NRC Senior Resident Inspector – Dresden Nuclear Power Station

# Attachment A Revision Packages Incorporated into Dresden Station Updated Final Safety Analysis Report - Revision 7

# 97008 Revision to UFSAR Section 6.4

Changes associated with clarifying capabilities of control room habitability with respect to food preparation, water, and sanitary facilities.

#### 98026 Revision to UFSAR Sections 10.4 and 11.2

Changes associated with the installation of an advanced resin cleaner for cleaning the ion-exchanger resins in the deep bed Condensate Treatment System.

#### 98036 Revision to UFSAR Section 8.3

Changes associated with clarifying that the Units 2 and 3 reactor building direct current busses are split busses in the 250-volt direct current distribution system.

# 99017 Revision to UFSAR Section 8.3

Changes associated with the change in electrical characteristics associated with the replacement of the Unit Auxiliary Transformer 31.

# 99035 Revision to UFSAR Sections 7.7 and 15.2

Changes associated with the change to the Unit 2 Electro-Hydraulic Control System Steam Line Resonance Compensator and pressure regulator cards, which reduced the bias between the operating and backup pressure regulators to 3 to 5 pounds per square inch bias.

# 99065 Revision to UFSAR Sections 6.4 and 9.2

Changes associated with modifying the description of the Unit 2 Containment Cooling Service Water System to include its capability to provide a safety-related source of service water to the Control Room Emergency Ventilation System Refrigeration Condensing Unit.

# 00044 Revision to UFSAR Sections 9.4, 10.4, and 12.3

Changes associated with the installation of a Condensate Prefilter System in each unit.

#### 01008 Revision to UFSAR Section 8.3

Changes associated with the description of the auto-transfer time delay associated with Emergency Diesel Generator 2/3.

# 01049 Revision to UFSAR Sections 6.2 and 7.3

Changes associated with the demolition and removal of the Drywell Pneumatics System.

# 01074 Revision to UFSAR Sections 6.0 and 6.2

Changes associated with the removal and abandonment of the Atmospheric Containment Atmosphere Dilution System.

#### 02001 Revision to UFSAR Section 10.3

Changes associated with the modification that removed the capability of the Main Steam System to supply steam to the main condenser low load reheat coils.

#### 02002 Revision to UFSAR Section 7.7

Changes associated with the description of the turbine generator control panel to clarify that extraction steam pressure is not a displayed parameter.

# 02003 Revision to UFSAR Sections 3.9, 4.5, 5.4, and 6.3

Changes associated with installation of the core shroud repair hardware on Unit 2, clarify a note on Table 6.3-6, clarify BWR Vessel and Internals Project guidelines used for the Recirculation, Low Pressure Coolant Injection and Core Spray Systems.

# 02007 Revision to UFSAR Section 11.4

Changes associated with addition of process control program procedure.

# 02008 Revision to UFSAR Section 5.4

Changes associated with changes to changes to chemistry procedure numbers.

# 02025 Revision to UFSAR Section 9.5

Changes associated with modifying the description of the motor driven emergency diesel generator circulation oil pumps.

#### 03001 Revision to UFSAR Sections 9.2 and 9.3

Changes associated with the replacement of the Unit 3 instrument air and service air compressors.

#### 04007 Revision to UFSAR Sections 4.4 and 7.2

Changes associated with Extended Power Uprate to the power to flow map figure.

#### 04016 Revision to UFSAR Section 8.2 and 8.3

Changes associated with additional of a manual tap changer to the Unit 3 Reserve Auxiliary Transformers 32 and 86.

# 05004 Revision to UFSAR Sections 7.3, 7.6, and 7.7

Changes associated with clarifications to the descriptions of the Core Spray, Low Pressure Coolant Injection, Automatic Depressurization, High Pressure Coolant Injection, Reactor Vessel Water Level and Main Turbine Systems.

#### 05005 Revision to UFSAR Sections 7.3 and 7.5

Changes associated with clarifications to the descriptions of the Core Spray, Low Pressure Coolant Injection, Automatic Depressurization, High Pressure Coolant and SPDS Systems.

# 05006 Revision to UFSAR Section 8.3

Changes associated with the description of the voltage of the Units 2 and 3 250 Vdc and Unit 2 125 Vdc systems.

#### 05011 Revision to UFSAR Sections 1.2, 7.2, 7.5, and 7.7

Changes associated with upgrade of the Unit 2 plant process computer.

#### 05012 Revision to UFSAR Section 8.3

Changes associated with revision to the setpoints for the over voltage and under voltage protective relays.

#### 05015 Revision to UFSAR Section 11.3

Changes associated with a revision to the description of the Mechanical Vacuum Pump System.

#### 05016 Revision to UFSAR Sections 1.2, 7.2, 7.5, and 7.7

Changes associated with upgrade of the Unit 3 plant process computer.

#### 05018 Revision to UFSAR Section 5.4

Changes associated with clarifying the Shutdown Cooling System cooling capacity.

#### 05019 Revision to UFSAR Section 8.3

Changes associated with adding three cells to the Unit 2 Alternate 125 volt direct current battery.

# 05020 Revision to UFSAR Section 11.5

Changes associated with replacing the Unit 3 Service Water Radiation Monitor sample probe with a trough type probe.

#### 05021 Revision to UFSAR Section 9.3

Changes associated with clarifying the operation of the Drywell Equipment and Floor Drain sump pumps.

# 05022 Revision to UFSAR Sections 6.2 and 6.3

Changes associated with clarifying section references.

#### 05023 Revision to UFSAR Sections 9.1

Changes associated with clarifying the restart of the Fuel Pool Cooling System without operator action inside the reactor building and changes associated with the replacement of the Unit 2 transformer.

#### 05024 Revision to UFSAR Section 9.5

Changes associated with modifying the minimum flow rates of the Unit 2 and 3 diesel generator cooling water pumps to include the keep-fill flow required for the CCSW System.

# 05025 Revision to UFSAR Sections 1.8, 5.3, 6.3, 9.2, and 13.1

Changes associated with correcting typographic errors and reinserting a missing figure.

# 05026 Revision to UFSAR Section 2.3

Changes associated with clarifying the design basis of the HVAC systems for outside temperature ranges.

#### 05027 Revision to UFSAR Sections 5.4, 6.3, 7.7, 15.0, 15.1, and 15.2

Changes associated with GE analysis for asymmetric feedwater, equipment out of service, power load unbalance.

#### 05028 Revision to UFSAR Section 15.1

Changes associated with clarifying alternate core cooling for certain transients with postulated additional HPCI System failure.

#### 05029 Revision to UFSAR Section 10.4

Changes associated with increasing Unit 2 and 3 Condenser Prefilter flow rates.

#### 05031 Revision to UFSAR Section 3.6

Changes associated with adding a description of the analysis of a Reactor Building Closed Cooling Water System moderate energy line break.

# 06001 Revision to UFSAR Sections 3.4, 5.4, and 15.1

Changes associated with clarifying descriptions of NRC commitments.

#### 06002 Revision to UFSAR Sections 6.2

Changes associated with deleting reference to valves in Table 6.2-9.

# 06003 Revision to UFSAR Section 6.2

Changes associated with replacing the push button with a control switch for the Unit 3 MSIV test control.

#### 06004 Revision to UFSAR Section 9.1

Changes associated with upgrading the Reactor Building Overhead Crane.

# 06005 Revision to UFSAR Section 9.1 and 15.7

Changes associated with upgrading the fuel grapple design information.

#### 06007 Revision to UFSAR Sections 6.2

Changes associated with adding a redundant drywell pneumatic air supply line for the MSIVs.

# 06008 Revision to UFSAR Section 6.3

Changes associated with incorporating a GE analysis for line break instrumentation.

#### 06009 Revision to UFSAR Section 3.6

Changes associated with adding a description for use of the Isolation Condenser and Control Rod Drive Systems for a high-energy line break transients.

# 06010 Revision to UFSAR Section 3.9

Changes associated with replacement of the reactor vessel steam dryers for Unit 3.

# 06011 Revision to UFSAR Section 4.4

Changes associated with changes to reinsert missing information.

# 06013 Revision to UFSAR Sections 3.9, 4.1, 4.2, 4.3, 4.4, 5.2, 6.2, 6.3, 7.6, 9.1, 15.0, 15.1, 15.2, 15.3, 15.4, 15.5, 15.6, 15.7, and 15.8

Changes associated with incorporation SVEA-96 Optima 2 fuel design and associated Westinghouse analyses.

#### 06014 Revision to UFSAR Section 7.7

Changes associated with correcting a drawing symbol on Figure 7.7-3.

# 06016 Revision to UFSAR Section 7.6

Changes associated with removal of Reactor Vessel flange leak detection alarm sensed from the level switch.

#### 06018 Revision to UFSAR Section 9.3

Changes associated with addition of enriched Boron-10 in the Standby Liquid Control System and use of single pump operation.

# 06019 Revision to UFSAR Section 10.2

Changes associated with clarifying description of the extraction steam non-return valves.

#### 06021 Revision to UFSAR Section 8.2

Changes associated with correction of a previously approved change for the Unit 2 switchyard.

06022 Revision to UFSAR Sections 1.1, 1.8, 2.3, 3.1, 3.2, 6.0, 6.2, 6.3, 6.4, 7.2, 9.3, 9.4, 11.5, 15.0, 15.4, 15.6, and 15.7

Changes associated with incorporation of the NRC approval of the Alternative Source Term Methodology.

# 06025 Revision to UFSAR Section 5.4

Changes associated with incorporation of Westinghouse asymmetric feedwater enthalpy evaluation.

# 06026 Revision to UFSAR Section 8.3

Changes associated with addition of a reference to the electrical load monitoring system.

# 06028 Revision to UFSAR Section 11.2

Changes associated with clarifying the use of the Floor Drain Surge Tank pumps for freeze protection.

#### 06031 Revision to UFSAR Section 11.5

Changes associated with the replacement of the radiation monitoring instrumentation for the Service Water System.

#### 07001 Revision to UFSAR Section 2.1

Changes associated with updating population information for census population numbers from 2000.

# 07002 Revision to UFSAR Section 3.11

Changes associated with correction of a previously approved change on Table 3.11-2.

#### 07004 Revision to UFSAR Section 3.11

Changes associated with correction to the High Energy Leak Break temperature and pressure for Zone 20A.

# 07005 Revision to UFSAR Section 11.5

Changes associated with replacement of the Service Water System radiation monitoring instrumentation.

# 07006 Revision to UFSAR Section 6.2, 6.3, and 8.3

Changes associated with new electrical loading values for the Unit 2 and 3 emergency diesel generators.

#### 07007 Revision to UFSAR Section 10.4

Changes associated with eliminating excess details on the for the circulating water pumps.

# 07008 Revision to UFSAR Section 6.2

Changes associated with clarifying the assumptions for short-term and long-term containment analyses.

# 07009 Revision to UFSAR Section 7.3

Changes associated with clarifying the number of Automatic Depressurization System valves.

# 07010 Revision to UFSAR Section 9.1

Changes associated with correction of a previously approved change to the description of the Fuel Pool Cooling System.

#### 07012 Revision to UFSAR Section 9.5

Changes associated with clarifying the description of the diesel fuel pump available fuel.

# 07014 Revision to UFSAR Section 2.3

Changes associated with removing historic information from Appendix 2A.

# 07015 Revision to UFSAR Section 3.1 and 3.6

Changes associated with removing historic information from Appendix 3A and replacing Appendix B and C with references to correspondence.

# 07016 Revision to UFSAR Section 1.2, 3.9, 5.2, 5.3, and 5.7

Changes associated with replacing Appendix 5A, B and C with references.

# CD-ROM Attachment B Directory Structure Page 1 of 1

Directory Path	Filename	File Size
D:\Dresden\01 Dresden UFSAR Rev 7	00 List of Effective Pages.pdf	205033
D:\Dresden\01 Dresden UFSAR Rev 7	01 Chapter 1 Introduction.pdf	482763
D:\Dresden\01 Dresden UFSAR Rev 7	02 Chapter 2 Site Characteristics.pdf	902430
D:\Dresden\01 Dresden UFSAR Rev 7	03 Design of Struct, Comp, Equip .pdf	3942558
D:\Dresden\01 Dresden UFSAR Rev 7	04 Chapter 4 Reactor.pdf	2441411
D:\Dresden\01 Dresden UFSAR Rev 7	05 Chapter 5 RCS.pdf	3039125
D:\Dresden\01 Dresden UFSAR Rev 7	06 Chapter 6 Engineered Safety Features.pdf	3939412
D:\Dresden\01 Dresden UFSAR Rev 7	07 Chapter 7 Inst and Controls.pdf	3510427
D:\Dresden\01 Dresden UFSAR Rev 7	08 Chapter 8 Electrical Power.pdf	562462
D:\Dresden\01 Dresden UFSAR Rev 7	09 Chapter 9 Auxiliary Systems.pdf	1574900
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