

RS-07-138

10 CFR 50.71(e)

October 19, 2007

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001Quad Cities Nuclear Power Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-29 and DPR-30
NRC Docket Nos. 50-254 and 50-265

Subject: Updated Final Safety Analysis Report (UFSAR), Revision 9

In accordance with the requirements of 10 CFR 50.71, "Maintenance of Records, Making of Reports," paragraph (e)(4), Exelon Generation Company (EGC), LLC submits Revision 9 to the Updated Final Safety Analysis Report (UFSAR) and Revision 18 to the Fire Protection Report (FPR) for Quad Cities Nuclear Power Station. Summaries of evaluations conducted pursuant to 10 CFR 50.59 "Changes, Tests, and Experiments," are submitted under separate cover.

Revision 9 of the UFSAR reflects changes to the facility and procedures, which were in effect through August 2007. The UFSAR is being submitted on CD-ROM in its entirety, including documents incorporated by reference (e.g., FPR, Technical Requirements Manual and the Technical Specifications Bases). All UFSAR pages changed as a result of this update are clearly delineated with "Revision 9, October 2007" in the page footer.

Attachment A provides a brief summary of the changes incorporated into UFSAR Revision 9.

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 (1) Compact Disk – Read Only Memory (CD-ROM) is included in this submission. The CD-ROM labeled, "Exelon Nuclear – Quad Station UFSAR Rev 9 Oct 2007 UFSAR, TRM, Tech Spec Bases, Fire Prot Rpt" contains the following four components:

- 1) UFSAR.pdf, 33.8 MegaBytes (MB), publicly available
- 2) TRM.pdf, 1.68 MegaBytes (MB), publicly available
- 3) Tech Spec Bases.pdf, 2.48 MegaBytes (MB), publicly available
- 4) Fire Protection Report.pdf, 4.91 MegaBytes (MB), publicly available

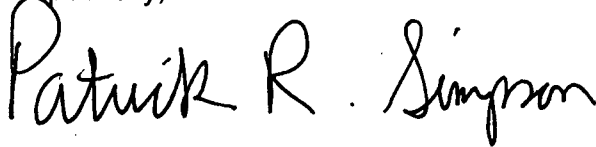
Also included is a copy of Adobe Reader, Revision 6.

Attachment B provides a brief summary of the changes incorporated into FPR Revision 18.

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

Should you have any questions concerning this letter, please contact Ms. Amy M. Hambly at (630) 657-2808 or via e-mail at amy.hambly@exeloncorp.com.

Respectfully,



Patrick R. Simpson
Manager – Licensing

Attachments

cc: Regional Administrator - NRC Region III
NRC Senior Resident Inspector – Quad Cities Station

Attachment A
Draft Revision Packages (DRPs) Incorporated into Quad Cities Station
Updated Final Safety Analysis Report – Revision 9

05-R9-001, Revision to UFSAR Sections 5.4 and 10.4

Revised to reflect upgrades to the Unit 2 Hydrogen Water Chemistry (HWC) System.

05-R9-002, Revision to UFSAR Sections 6.2 and 9.3

Revised to reflect removal of the enclosed walkway to the Unit 1 High Radiation Sampling System (HRSS) building (walkway removal supports replacement of the Unit 1 Reserve Auxiliary Transformer).

05-R9-003, Revision to UFSAR Sections 6.2 and 9.3

Revised to reflect removal of the enclosed walkway to the Unit 2 HRSS building (walkway removal supports replacement of the Unit 2 Reserve Auxiliary Transformer).

05-R9-004, Revision to UFSAR Section 9.3

Revised Table 9.3-2 to reflect the usage of an increased concentration of Boron-10 in the sodium pentaborate solution utilized in the Unit 2 Standby Liquid Control (SLC) tank.

05-R9-005, Revision to UFSAR Section 9.3

Revised Table 9.3-2 to reflect the usage of an increased concentration of Boron-10 in the sodium pentaborate solution utilized in the Unit 1 SLC tank.

05-R9-006, Revision to UFSAR Section 5.4

Revised to reflect the installation of a switch that provides the ability to execute remote manual containment isolation of the Unit 1 RCIC torus suction line from the Main Control Room.

05-R9-007, Revision to UFSAR Section 5.4

Revised to reflect the installation of a switch that provides the ability to execute remote manual containment isolation of the Unit 2 RCIC torus suction line from the Main Control Room.

05-R9-008, Revision to UFSAR Section 7.3

Revised to reflect the replacement of the differential pressure switches for the Unit 2 main steam line high flow function with differential pressure transmitters and trip units.

05-R9-009, Revision to UFSAR Section 9.1

Revised the discussion on the diesel fire pumps as a result of the installation of new higher capacity pumps.

05-R9-010, Revision to UFSAR Sections 3.1, 4.3, 4.4, 7.2, 7.6, 7.7, 15.0, 15.1, 15.3 and 15.4

Revised to reflect activation of the Oscillation Power Range Monitor (OPRM) automatic suppression function.

05-R9-012, Revision to UFSAR Appendix A

Revised to reflect the latest EPRI documents upon which the Chemistry program/procedures are based.

05-R9-014, Revision to UFSAR Sections 2.3, 11.3 and 11.5

Revised to achieve consistency with the newly reformatted Offsite Dose Calculation Manual (ODCM).

05-R9-017, Revision to UFSAR Sections 1.2, 3.1, 9.1 and 15.7

Revised to reflect utilization of the Independent Spent Fuel Storage Installation (ISFSI) for dry cask storage.

05-R9-019, Revision to UFSAR Sections 7.5, 7.6 and 11.5

Revised the discussion to support recorder upgrades.

Attachment A
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05-R9-024, Revision to UFSAR Section 6.3

Revised the discussion pertaining to the monitoring of the standby pressure in the low-pressure ECCS discharge headers.

05-R9-025, Revision to UFSAR Section 6.2

Revised air pilot valve discussion for the Main Steam Isolation Valves (MSIVs).

05-R9-026, Revision to UFSAR Section 11.5

Revised Figure 11.5-1 to reflect installation of a second air supply solenoid valve for the Unit 2 Off-Gas filters outlet valve.

05-R9-027, Revision to UFSAR Sections 8.2 and 8.3

Revised to reflect the installation of a new Unit 2 Reserve Auxiliary Transformer (RAT), which includes a load tap change feature.

05-R9-028, Revision to UFSAR Sections 5.1, 5.3 and Appendix A

Revised to reflect the new Reactor Pressure Vessel (RPV) Pressure-Temperature curves which are valid to 54 EFPY.

05-R9-029, Revision to UFSAR Section 7.3

Revised to clarify a discussion in Section 7.3.2.6.1 pertaining to logic response time.

05-R9-030, Revision to UFSAR Section 9.1

Revised to incorporate the necessary changes to support receipt and storage of Westinghouse Optima2 fuel.

05-R9-031, Revision to UFSAR Sections 6.3 and 10.4

Revised to reflect the installation on Unit 2 of a Circulating Water Pump trip on a LOCA signal.

05-R9-032, Revision to UFSAR Sections 6.3 and 10.4

Revised to reflect the installation on Unit 1 of a Circulating Water Pump trip on a LOCA signal.

05-R9-033, Revision to UFSAR Section 8.3

Revised Table 8.3-1 to reflect the appropriate MVA rating and impedance value for the replacement Unit 2 Main Power Transformer (MPT).

05-R9-034, Revision to UFSAR Sections 1.2, 3.9, 4.1, 4.2, 4.3, 4.4, 6.2, 6.3, 15.0, 15.2, 15.3, 15.4, 15.5, 15.6, 15.7 and 15.8

Revised to incorporate the necessary changes to support use of Westinghouse Optima2 fuel beginning with Unit 2 Cycle 19.

05-R9-035, Revision to UFSAR Sections 8.2 and 8.3

Revised to reflect the installation of a new Unit 1 RAT, which includes a load tap change feature.

05-R9-036, Revision to UFSAR Sections 3.9 and 5.2

Revised to reflect installation of an acoustic side branch to the inlet piping of the Main Steam Safety Valves (MSSVs) and Electromatic Relief Valves (ERVs) on both units.

05-R9-037, Revision to UFSAR Sections 7.7, 8.3, 10.2, 10.4, 15.1 and 15.2

Revised to reflect installation of a digital Electro-Hydraulic Control (EHC) System on Unit 1.

Attachment A
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Updated Final Safety Analysis Report – Revision 9

05-R9-038, Revision to UFSAR Section 4.5

Revised to reflect the materials of the replacement restrainer gates and slip joint clamps installed on selected Unit 2 jet pumps.

05-R9-039, Revision to UFSAR Section 9.1

Revised Table 9.1-2 to incorporate the utilization of a new reactor cavity 360-degree work platform.

05-R9-040, Revision to UFSAR Section 9.4

Revised to incorporate a design basis discussion pertaining to the Battery Room Ventilation System.

05-R9-041, Revision to UFSAR Section 8.3

Revised to incorporate the approval for the automatic operation of the load tap changers for the RATs.

05-R9-042, Revision to UFSAR Section 9.2

Revised to reflect the ability to inject a corrosion inhibitor into the intake bay for the Residual Heat Removal Service Water (RHRSW) and Diesel Generator Cooling Water (DGCW) systems.

05-R9-043, Revision to UFSAR Section 8.3

Revised to clarify the notes in Tables 8.3-2 and 8.3-3 pertaining to Emergency Diesel Generator (EDG) loading.

05-R9-044, Revision to UFSAR Section 9.3

Revised the HRSS discussion to incorporate the regulatory basis of the Extended Power Uprate (EPU) effects.

05-R9-045, Revision to UFSAR Sections 8.1 and 8.2

Revised to reflect the current transmission network with which the Commonwealth Edison Company (CECO) transmission system is associated.

05-R9-046, Revision to UFSAR Section 5.4

Revised to reflect upgrades to the Unit 1 HWC System.

05-R9-047, Revision to UFSAR Section 8.3

Revised text in Section 8.3.1.6.3 to remove a reference to UFSAR Tables which were previously deleted.

05-R9-048, Revision to UFSAR Sections 6.3 and 15.8

Revised to reflect the results of revisions to the LOCA and ATWS analyses.

05-R9-050, Revision to UFSAR Sections 1.2, 1.8, 2.1, 2.3, 3.2, 3.8, 6.0, 6.4, 6.5, 7.2, 7.3, 9.3, 15.0, 15.4, 15.6 and 15.7

Revised to reflect the transition to an alternative accident source term in accordance with 10 CFR 50.67.

05-R9-051, Revision to UFSAR Section 11.4

Revised to remove baling as one of the methods for compacting dry active waste.

05-R9-052, Revision to UFSAR Section 8.3

Revised Table 8.3-1 to reflect the appropriate MVA rating and impedance value for the new Unit 1 MPT.

05-R9-053, Revision to UFSAR Section 3.9

Revised to remove obsolete information pertaining to the original Source Range Monitor (SRM) / Intermediate Range Monitor (IRM) dry tubes, which have been replaced.

Attachment A
Draft Revision Packages (DRPs) Incorporated into Quad Cities Station
Updated Final Safety Analysis Report – Revision 9

05-R9-055, Revision to UFSAR Section 9.5

Revised to update the discussion on the flow requirements for the ECCS room coolers.

05-R9-056, Revision to UFSAR Section 10.4

Revised to reflect the ability to manually control the emergency drains for the Unit 1 “B” low-pressure heaters.

05-R9-057, Revision to UFSAR Sections 4.1, 5.2, 6.2, 6.3, 15.0, 15.1, 15.2 and 15.4

Revised to reflect the Unit 1 Cycle 20 reload design.

05-R9-058, Revision to UFSAR Section 6.5

Revised to update the revision specified for Regulatory Guide 1.52, and incorporate that a test aerosol (equivalent to a DOP aerosol) can be used for factory testing the high efficiency particulate air (HEPA) prefilters for the Standby Gas Treatment (SBGT) System.

05-R9-059, Revision to UFSAR Section 7.7

Revised to remove obsolete information associated with the Economic Generation Control (EGC) System, which has been previously abandoned.

05-R9-060, Revision to UFSAR Section 3.9

Revised to update the feedwater sparger discussion by incorporating information on the inspection techniques and removal of the reference to temperature monitoring.

05-R9-061, Revision to UFSAR Sections 2.5, 3.7 and Appendix 2A

Revised to remove Appendix 2A (Quad Cities Station Foundation Grouting Report) and refer to the document as a reference.

05-R9-062, Revision to UFSAR Sections 3.6, 3.11, and Appendices 3A and 3B

Revised to remove Appendices 3A and 3B, pertaining to high-energy line breaks, and refer to these documents as references.

05-R9-063, Revision to UFSAR Sections 3.9, 5.1 and Appendix 5A

Revised to remove Appendix 5A (Reactor Pressure Vessel Design Report) and refer to the document as a reference.

05-R9-064, Revision to UFSAR Section 12.3 and Appendix 12A

Revised to remove Appendix 12A (Post-Accident Radiation Levels Report) and refer to the document as a reference.

05-R9-065, Revision to UFSAR Sections 4.4 and 7.6

Revised text that references UFSAR subsections which were previously removed or renumbered.

Attachment B

Change Packages Incorporated into Quad Cities Station Fire Protection Report – Revision 18

FPR-R18-001, Revision to FPR Volume 1 Sections 1, 2, 3 and 4

Remove references to the CO2 hose reel stations located in the plant.

FPR-R18-002, Revision to FPR Volume 1 Table 2.1-2, Section 2.4.1.1, Table 3.8-1 and Section 5.5.E.2

Change the existing Fire Pump capacity description from 2,000 gpm @ 125 psi to 2,500 gpm @ 139 psi for the 1/2A pump.

FPR-R18-004, Revision to FPR Volume 1 Section 4

Increase the fire severity classification for Fire Area CT-1.

FPR-R18-005, Revision to FPR Volume 2 Sections 3 and 4

Require the use of two RHR and RHRSW pumps to assure adequate NPSH for the RHR pumps.

FPR-R18-008, Revision to FPR Volume 1 Section 2.4.1.1, Table 3.8-1, Fire Zone 11.4.B and Section 5.5.E.2

Change the existing Fire Pump capacity description from 2,000 gpm @ 125 psi to 2,500 gpm @ 139 psi for the 1/2A and 1/2B pumps. Supercedes FPR-R18-002 except for page 2.1-10.

FPR-R18-009, Revision to FPR Volume 2 Sections 3 and 7

Corrects erroneous discussion of SBO fuel oil capacity and clarifies required SSMP operation off of CCST.

FPR-R18-010, Revision to FPR Volume 2 Sections 3, 4, 6 and Table 3.0-1

Clarifies that the transfer of HPCI from the CCST to the Torus is an automatic transfer upon receipt of Torus level of +5". Also adds a clarifying paragraph discussing manual operation of the RCIC system.

CD-ROM Attachment C
 Directory Structure
 Page 1 of 1

Directory Path	File Name	Size
D:\01 QDC UFSAR Rev 9	00 QDC UFSAR LOEP Rev 9.pdf	162656
D:\01 QDC UFSAR Rev 9	01 Chapter 01 Introduction.pdf	299428
D:\01 QDC UFSAR Rev 9	02 Chapter 02 Site Characteristics.pdf	1138643
D:\01 QDC UFSAR Rev 9	03 Chapter 03 Design of SSC.pdf	4946086
D:\01 QDC UFSAR Rev 9	04 Chapter 04 Reactor.pdf	3926086
D:\01 QDC UFSAR Rev 9	05 Chapter 05 RCS and Connected Systems.pdf	1404350
D:\01 QDC UFSAR Rev 9	06 Chapter 06 ESF.pdf	6852039
D:\01 QDC UFSAR Rev 9	07 Chapter 07 Instr and Controls.pdf	3191223
D:\01 QDC UFSAR Rev 9	08 Chapter 08 Elect Power.pdf	665951
D:\01 QDC UFSAR Rev 9	09 Chapter 09 Aux Systems.pdf	2176090
D:\01 QDC UFSAR Rev 9	10 Chapter 10 Power Conversion.pdf	375937
D:\01 QDC UFSAR Rev 9	11 Chapter 11 Rad Waste Mgmt.pdf	1405705
D:\01 QDC UFSAR Rev 9	12 Chapter 12 Rad Protection.pdf	315978
D:\01 QDC UFSAR Rev 9	13 Chapter 13 Conduct of Operations.pdf	580677
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D:\01 QDC UFSAR Rev 9	16 Chapter 16 Tech Specs.pdf	43206
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