



Exelon Generation®

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10 CFR 50.71(e)(4)  
10 CFR 54.37(b)  
NEI 99-04

September 14, 2015

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

Calvert Cliffs Nuclear Power Plant, Units 1 and 2  
Renewed Facility Operating License Nos. DPR-53 and DPR-69  
NRC Docket Nos. 50-317 and 50-318

SUBJECT: Submittal of Updated Final Safety Analysis Report, Revision 48

In accordance with 10 CFR 50.71(e)(4) and 10 CFR 50.4(b)(6), enclosed is Revision 48 of the Updated Final Safety Analysis Report (UFSAR) for Calvert Cliffs Nuclear Power Plant (CCNPP). The enclosed UFSAR revision is being provided to the U.S. Nuclear Regulatory Commission (NRC) in electronic format on CD-ROM. The electronic version of the UFSAR revision is being submitted in entirety and is a complete document.

10 CFR 50.71(e)(4) stipulates subsequent revisions must be filed annually or 6 months after each refueling outage provided the interval between successive updates does not exceed 24 months and the revisions must reflect all changes up to a maximum of 6 months prior to the date of filing. Revision 48 of the UFSAR incorporates applicable changes for the required updating period. The previous revision (i.e., Revision 47) of the CCNPP was submitted on September 19, 2014.

Attachment 1 provides a brief summary of the changes incorporated into UFSAR Revision 48. Attachment 2 includes file directory structure information identifying directory path, filename, and size of the individual files on the enclosed CD.

In addition, pursuant to the requirements of 10 CFR 54.37(b) and the guidance specified in Regulatory Issue Summary 2007-16, Revision 1, "*Implementation of the Requirements of 10 CFR 54.37(b) for Holders of Renewed Licenses*," the UFSAR update required by 10 CFR 50.71(e) must include any Structures, Systems, or Components (SSCs) newly identified that would have been subject to an aging management review or evaluation of time-limited aging analyses in accordance with 10 CFR 54.21. The UFSAR update must describe how the licensee will manage the effects of aging in order to effectively maintain the intended function(s) of newly-identified SSCs. An evaluation was completed to determine whether any newly-identified SSCs existed in support of submitting UFSAR Revision 48 for CCNPP, Units 1 and 2. As a result of this evaluation, there were no newly-identified SSCs for which aging management reviews or time-limited aging analyses would apply.

A053  
MRR

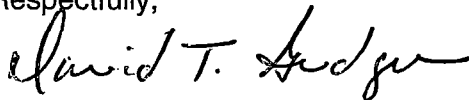
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Furthermore, in accordance with the guidance NEI 99-04, "*Guidelines for Managing NRC Commitment Changes*," this submittal addresses commitment changes made since the previous UFSAR submittal on September 19, 2014. There are no commitment changes being reported in conjunction with this submittal.

As required by 10CFR50.71(e)(2)(i), I certify that to the best of my knowledge, Revision 48 of the UFSAR accurately reflects information and analyses submitted to the NRC, or prepared pursuant to NRC requirements as described above.

If you have any questions or require further information, please contact Richard Gropp at (610) 765-5557.

Respectfully,



David T. Gudger  
Manager, Licensing and Regulatory Affairs  
Exelon Generation Company, LLC

Attachments: Attachment 1 – Brief Summary of the Changes  
Attachment 2 – Electronic File Directory Structure

Enclosure: CCNPS, Units 1 and 2, UFSAR Revision 48 (CD-ROM)

cc:	Regional Administrator, Region I, USNRC	w/ Enclosure/Attachments
	USNRC Senior Resident Inspector, CCNPP	"
	USNRC Senior Project Manager NRR, CCNPP	"
	S. T. Gray, State of Maryland	"

<u>Change Number</u>	<u>Brief Description of Change</u>
UCR00789	Update UFSAR Section 7.5.7 (Seismic Instrumentation) to remove seismic triggers 0-YS-001 and 0-YS-002 and seismic playback 0-YR-001.
UCR00816	Add description for new UFSAR Section 16.3.4 Reactor Pressure Vessel Toughness Requirements.
UCR00850	Revise UFSAR Section 7.4.5 to describe changes in the Feedwater control system and Steam Generator feed pump turbine speed control system.
UCR00861	Revise UFSAR Sections 7.10.2 and 14.4 related to Excess Load event.
UCR00866	Revise description in UFSAR Table 16-2 for Line Item 189.
UCR00867	Revise description in UFSAR Table 16-2 for Line Item 254.
UCR00868	Revise UFSAR Section 11.2.3.1 and Table 11-11 to reflect changes related to area radiation monitors.
UCR00870	Revise UFSAR Table 9-20 to add a note to allow different piping material and pressure class.
UCR00872	Revise UFSAR Table 11-10 to reflect changes in the display for the Main Steam Line radiation monitors.
UCR00873	Revise description in UFSAR Table 16-2 for Line Item 245a.
UCR00875	Revise description in UFSAR Table 16-2 for Line Item 216.
UCR00877	Add description for new UFSAR Section 16.3.1 Containment Tendon Prestress Loss and update various line items in Table 16-2.
UCR00883	Revise UFSAR Section 8.4.4 related to the installation of a new Automatic Voltage Regulator.
UCR00884	Add description for new UFSAR Section 16.3.2 Poison Sheets in Spent Fuel Pool.
UCR00885	Add description for new UFSAR Section 16.3.3 10 CFR 50.49 Environmental Qualification Program.
UCR00886	Revise UFSAR Table 9-18 concerning maintaining Diesel Generator Room temperature.
UCR00887	Add description for new UFSAR Section 16.3.5 Reactor Vessel Internals.
UCR00891	Update UFSAR Sections 3.3, 3.4, 3.5, and 3.7 to include information for Unit 2 (Cycle 21) fuel batch and burnable poison data, cycle limiting values and excess shutdown margin, quarter core assembly map, relative power densities at different conditions.
UCR00892	Update UFSAR Sections 7.5.4 and 7.5.5 related Plant Process Computer.
UCR00893	Revise description in UFSAR Table 16-2 for Line Item 156.
UCR00894	Revise UFSAR Section 7.4.7.2 description related to Turbine high exhaust temperature trip.
UCR00896	Revise UFSAR Sections 14.13, 14.14, and 14.17 for Unit 2 Cycle 21 concerning use of AREVA fuel.
UCR00898	Revise UFSAR Section 8.4 description regarding diesel fuel oil calculation method.
UCR00902	Revise UFSAR to add new information in Section 9.3.2.1 (Circulating Water System).
UCR00919	Revise UFSAR Section 5A.3.5 (References) to correct a date reference.
UCR00921	Revise various UFSAR sections and LOEP references to make editorial corrections.

Electronic File Directory Structure

Directory Path	File Name - UFSAR	File Size (Bytes)
d:\CC UFSAR R48	001 01 Intro and Summary.pdf	439,721
d:\CC UFSAR R48	002 01 Intro and Summary Fig.pdf	9,068,115
d:\CC UFSAR R48	003 02 Site and Environment.pdf	524,131
d:\CC UFSAR R48	004 02 Site and Environment Fig.pdf	9,550,886
d:\CC UFSAR R48	005 03 Reactor.pdf	1,021,075
d:\CC UFSAR R48	006 03 Reactor Fig.pdf	5,118,278
d:\CC UFSAR R48	007 04 RCS and Associated Sys.pdf	587,169
d:\CC UFSAR R48	008 04 RCS and Associated Sys Fig.pdf	1,294,709
d:\CC UFSAR R48	009 05 Structures.pdf	539,775
d:\CC UFSAR R48	010 05 Structures Fig.pdf	4,762,226
d:\CC UFSAR R48	011 05 Structures App.pdf	526,778
d:\CC UFSAR R48	012 05 Structures App Fig.pdf	752,402
d:\CC UFSAR R48	013 06 Eng Safety Features.pdf	332,286
d:\CC UFSAR R48	014 06 Eng Safety Features Fig.pdf	782,253
d:\CC UFSAR R48	015 07 Instr and Controls.pdf	679,439
d:\CC UFSAR R48	016 07 Instr and Controls Fig.pdf	3,142,618
d:\CC UFSAR R48	017 08 Electrical Sys.pdf	349,620
d:\CC UFSAR R48	018 08 Electrical Sys Fig.pdf	2,927,288
d:\CC UFSAR R48	019 09 Auxiliary Systems.pdf	675,986
d:\CC UFSAR R48	020 09 Auxiliary Systems Fig.pdf	4,610,173
d:\CC UFSAR R48	021 10 Steam and Power Conv.pdf	1,135,669
d:\CC UFSAR R48	022 10 Steam and Power Conv Fig.pdf	4,382,137
d:\CC UFSAR R48	023 11 Waste Processing and RP.pdf	419,647
d:\CC UFSAR R48	024 11 Waste Processing and RP Fig.pdf	3,458,674
d:\CC UFSAR R48	025 12 Conduct of Operations.pdf	137,173
d:\CC UFSAR R48	026 12 Conduct of Operations Fig.pdf	183,564
d:\CC UFSAR R48	027 13 Initial Tests and Operation.pdf	110,508
d:\CC UFSAR R48	028 14 Safety Analysis.pdf	1,280,677
d:\CC UFSAR R48	029 14 Safety Analysis Fig.pdf	3,774,102
d:\CC UFSAR R48	030 15 Technical Req Manual.pdf	71,877
d:\CC UFSAR R48	031 16 License Renewal.pdf	401,930

ENCLOSURE

Calvert Cliffs Nuclear Power Plant  
Units 1 and 2

Updated Final Safety Analysis Report, Revision 48

Compact Disk (CD)