

NRC Commissioner Briefing Subsequent License Renewal BWR Lead Plant Peach Bottom Atomic Power Station 2 & 3

Michael P Gallagher
Vice President- License Renewal Projects
Exelon Generation
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Exelon is well positioned to be a lead applicant

- ✓ **Exelon has extensive aging management experience**
 - **22 of 23 units have renewed operating licenses**
 - **13 units are operating in PEO**

- ✓ **Exelon has held leadership positions and participates in NEI and EPRI initiatives preparing the industry for Subsequent License Renewal and Long Term Operations**

- ✓ **Exelon participated through NEI in providing comments to the staff on GALL-SLR**

- ✓ **Exelon will submit a high quality application that can support an 18 month staff review**

Peach Bottom is BWR lead plant

- ✓ **First Renewal Application submitted July 02, 2001**
 - **Approved May 7, 2003**
 - **Entered PEO 2013 Unit 2 & 2014 Unit 3**

- ✓ **Well run and maintained**
 - **11 years without an automatic scram**
 - **Over \$1.3 Billion in capital improvements 2012-2016**
 - **Achieved Extended Power Uprate on Both Units in 2015**
 - **Received 5th consecutive INPO Excellence Award**
 - **Named a “Top Plant” by POWER Magazine**

- ✓ **Community Commitment**
 - **Donated more than \$416,000 to local non-profits and charities in our community in 2016**

Approach to Subsequent License Renewal

- ✓ **Part 51 Environmental Review: utilize guidance in NUREG 1437 (GEIS), NUREG 1555 (SRP) and Reg Guide Supplement 1**

- ✓ **Part 54 Safety Review: utilize guidance in NUREG 2191 (GALL-SLR) and NUREG 2192 (SRP)**
 - **54.21(a) Integrated Plant Assessment**
 - **54.21(c) TLAA Evaluation**
 - **Aging Management Programs**

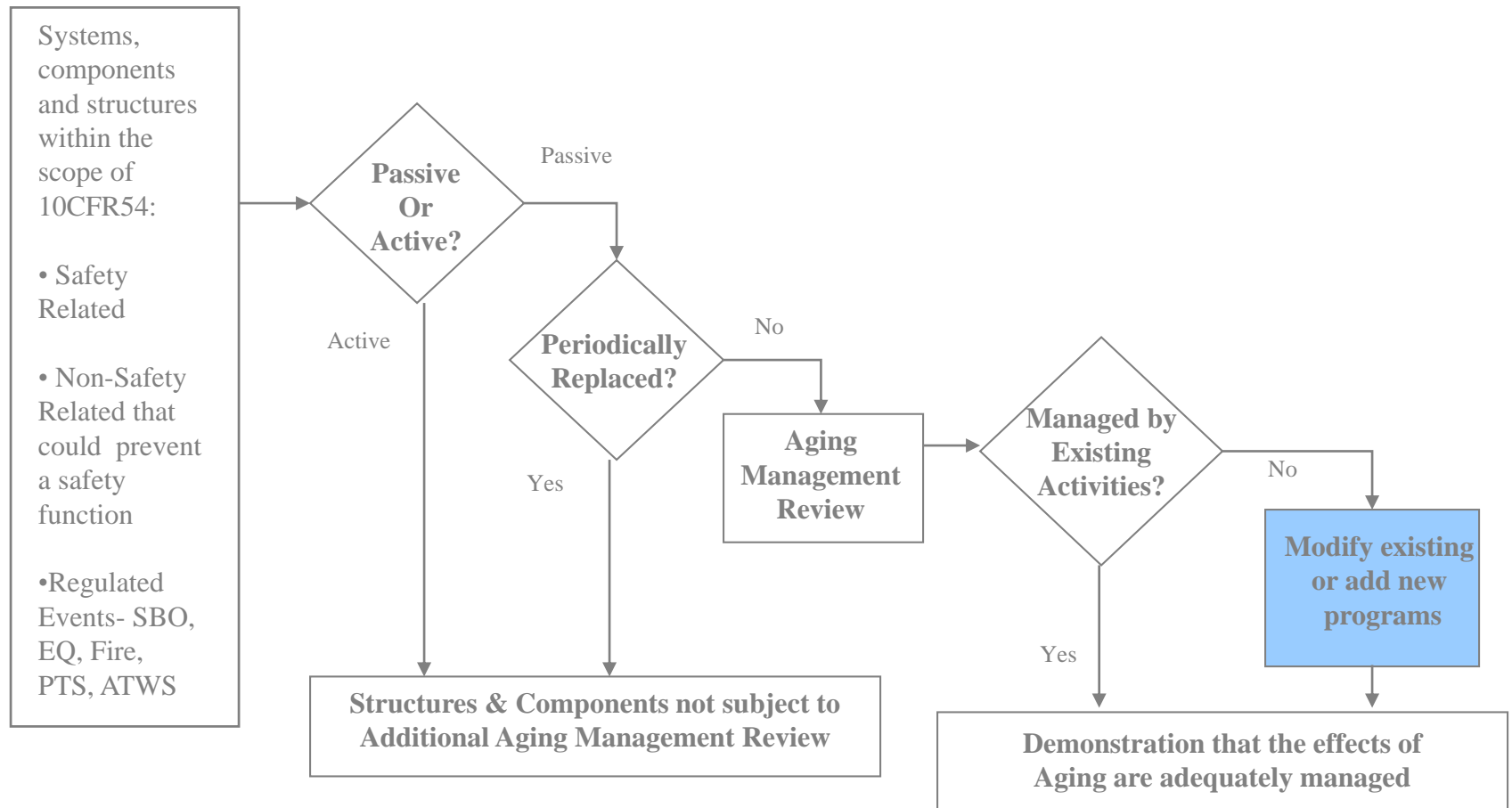
Aging Management Programs are implemented to ensure that the effects of aging will be adequately managed so that the intended function(s) will be maintained consistent with the Current Licensing Basis for the period of extended operation.

Part 54 Application Integrated Plant Assessment

Scope

Screen

Aging Management Review



48 Anticipated Aging Management Programs

Mechanical		Structural
XI.M1 ASME Section XI Inservice Inspection, Subsections IWB, IWC, and IWD	XI.M27 Fire Water System	XI.S1 ASME Section XI, Subsection IWE
XI.M2 Water Chemistry	XI.M29 Outdoor and Large Atmospheric Metallic Tanks	XI.S3 ASME Section XI, Subsection IWF
XI.M3 Reactor Head Closure Stud Bolting	XI.M30 Fuel Oil Chemistry	XI.S4 10 CFR Part 50, Appendix J
XI.M4 BWR Vessel ID Attachment Welds	XI.M31 Reactor Vessel Material Surveillance	XI.S5 Masonry Walls
XI.M7 BWR Stress Corrosion Cracking	XI.M32 One-Time Inspection	XI.S6 Structures Monitoring
XI.M8 BWR Penetrations	XI.M33 Selective Leaching	XI.S7 Inspection of Water-Control Structures Associated with Nuclear Power Plants
XI.M9 BWR Vessel Internals	XI.M35 ASME Code Class 1 Small-Bore Piping	XI.S8 Protective Coating Monitoring and Maintenance
XI.M.12 Thermal Aging Embrittlement of Cast Austenitic Stainless Steel (CASS)	XI.M36 External Surfaces Monitoring of Mechanical Components	Electrical
XI.M17 Flow-Accelerated Corrosion	XI.M38 Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components	XI.E1 Electrical Insulation for Electrical Cables and Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements
XI.M18 Bolting Integrity	XI.M39 Lubricating Oil Analysis	XI.E2 Electrical Insulation for Electrical Cables and Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements Used in Instrumentation Circuits
XI.M20 Open-Cycle Cooling Water System	XI.M40 Monitoring of Neutron-Absorbing Materials Other than Boraflex	XI.E3A Electrical Insulation for Inaccessible Medium Voltage Power Cables Not Subject to 10 CFR 50.49 Environmental Qualification Requirements
XI.M21A Closed Treated Water Systems	XI.M41 Buried and Underground Piping and Tanks	XI.E3B Electrical Insulation for Inaccessible Instrumentation and Control Cables Not Subject to 10 CFR 50.49 Environmental Qualification Requirements
XI.M23 Inspection of Overhead Heavy Load and Light Load (Related to Refueling) Handling Systems	XI.M42 Internal Coatings/Linings for in scope Piping, Piping Components, Heat Exchangers, and Tanks	XI.E3C Electrical Insulation for Inaccessible Low Voltage Power Cables Not Subject to 10 CFR 50.49 Environmental Qualification Requirements
XI.M24 Compressed Air Monitoring	X.M1 Fatigue Monitoring	XI.E4 Metal Enclosed Bus
XI.M25 BWR Reactor Water Cleanup System	X.M2 Neutron Fluence Monitoring	XI.E5 Fuse Holders
XI.M26 Fire Protection	Plant Specific	XI.E6 Electrical Cable Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements
	Wooden Pole Program	X.E1 Environmental Qualification of Electric Components

Summary

- ✓ **The GALL-SLR and GEIS guidance is comprehensive, clear and has been developed based on learnings from first license renewal, research and operating experience**
- ✓ **The Peach Bottom SLR application will be consistent to GALL-SLR and GEIS to the greatest extent possible**
- ✓ **Exelon will submit a high quality application that can support an 18 month staff review**
- ✓ **The Peach Bottom SLR application development is on track for submittal in 3rd quarter 2018**

Questions?



Exelon Generation®