

Pre-Submittal Meeting for Exelon Relief Request N-921: ASME Code Case to Extend 120-month Inservice Inspection Interval

November 16, 2021



Exelon Generation[®]

Agenda

- Relief Request
- Code Case
- 10 CFR and ASME References
- Precedent
- Summary/Key Takeaways
- Questions/Comments

Relief Request

- Submittal would be a request for alternative under 50.55a(z), *Alternatives to codes and standards requirements*
- Exelon intends to implement the ASME Code Case N-921, which extends the inspection interval from 10 to 12 years.
- The proposed alternative would be to extend the Inservice Inspection (ISI) Interval by 2 years as described in the Code Case.
- Goal is to submit the request by the end of 2021.

Code Case

- ASME Section XI currently breaks up the 10-year inspections interval into three “periods” (three/four/three years).
- This Code Case extends the inspection interval from 10 to 12-years, which will allow for an even number of years in each period (four/four/four).
 - Each inspection interval may be extended or reduced by as much as 1 year.
 - Plants that are out of service continuously for 6 months or more may extend the interval.
- Under Code Case N-921, the current code rules would essentially be applied to a 12-year inspection interval.

Code Case

- This is a marginal extension from a 10-year to 12-year interval which supports a minimum two outages per period if possible.
 - This will reduce the overall scheduling during the one period that has only one outage under the current scheme.
 - Supports improved operational strategies such as skip ISI outages and divisional outages.

Code Case

Inspection Period (Years)	Minimum Examinations Completed, % [Note (1)]	Maximum Examinations Credited, % [Note (1)]
4	16	50
8	50 [Note (2)]	75
12	100	100

- (1) For IWE, completion percentage applies only to moisture barriers (Examination Category E-A, Item No. E1.32). This requirement does not apply to use of this Case with Editions prior to the 2017 Edition.
- (2) If the first period completion percentage for any examination category exceeds 34%, at least 16% of the required examinations shall be performed in the second period.

10 CFR and ASME References

- Exelon has reviewed the following provisions of 10 CFR 50.55a and the ASME Codes:
 - 10 CFR 50.55a(b)(5)
 - 10 CFR 50.55a(g)(4)
 - 10 CFR 50.55a(g)(5)
 - ASME B&PV Code, Section XI, 2007 Edition, no Addenda, and 2013 Edition:
 - ✓ IWA-2410 - APPLICATION OF CODE EDITION AND ADDENDA
 - ✓ IWA-2430(a) through (g) - INSPECTION INTERVALS
 - ✓ IWA-2431 - INSPECTION PROGRAM
 - ✓ Table IWB-2411-1, IWC-2411-1, IWD-2411-1, IWE-2411-1, and IWF-2410-1 – Inspection Program – These Tables provide the calendar years for each period (3 years, 7 years, 10 years).
- Exelon plans to submit a Relief Request based on the precedent on the next slides.

Precedent

- NRC approvals of 120-month interval modifications through 50.55a(z):
 - Indian Point Nuclear Generating Unit No. 3 (July 18, 2018) (ML181938030)
 - ✓ 12-month extension
 - Fitzpatrick Nuclear Power Plant (August 4, 2017) (ML17201M289)
 - ✓ 8-month extension (IST program)
 - Limerick Generating Station, Units 1 and 2 (January 24, 2007) (ML063390103)
 - ✓ Reduced the duration of the second ISI interval for LGS Unit 2 by approximately 3 years
 - Arkansas Nuclear One, Unit 1 (August 6, 2007) (ML071730556)
 - ✓ Extend its third 10-year ISI interval by approximately 6 months beyond the 1-year extension (18 months)
 - Point Beach Nuclear Power Plants, Units 1 and 2 (June 18, 2001) (ML011570015)
 - ✓ Interval shortened 3 months.

Precedent

- NRC approvals of 120-month interval modifications through 50.55a(z) (continued):
 - McGuire Nuclear Station, Unit 1 (August 21, 2020) (ML20230A205)
 - ✓ Extended Code of Record for first period (3-year extension) of successive interval
 - ✓ SER cited 10 CFR 50.55a(g)(4)(ii)
 - Arkansas Nuclear One, Unit 2 (June 11, 2019) (ML19156A400)
 - ✓ Extended the Code of Record for 10 years
 - ✓ Maintained 2007/2008 Edition as part of the new update
 - ✓ Did not update to 2013 Edition
 - ✓ SER cited 10 CFR 50.55a(g)(4)(ii)
 - Surry Power Station, Units 1 and 2 (April 29, 2013) (ML13100A049)
 - ✓ Extended the Code of Record for 10 years
 - ✓ Maintained 2004 Edition as part of the new update
 - ✓ Did not update to 2007/2008 Edition
 - ✓ SER cited 10 CFR 50.55a(g)(4)

Precedent

- NRC approvals of 120-month interval modifications through 50.55a(z) (continued):
 - McGuire Nuclear Station, Unit 1 (March 3, 2011) (ML110410172)
 - ✓ Extended Code of Record for approximately 3 years
 - ✓ SER cited 10 CFR 0.55a(g)(4)(ii)

Summary/Key Takeaways

- Exelon intends to implement the ASME Code Case N-921, which extends the inspection interval from 10 to 12 years.
- Goal is to submit the request by the end of 2021.
- Under Code Case N-921, the current code rules would essentially be applied to a 12-year inspection interval.
- Precedent for extensions longer than 2 years.

QUESTIONS/COMMENTS