Relief Request #1 for four RHR valves (E1150F006A/B/C/D)

Background:

The fourth 10-year IST interval begins on February 17, 2020. The ASME 2012 OM Code to be used for the fourth interval includes Mandatory Appendix III, which requires preservice testing for MOVs. Four Residual Heat Removal (RHR) MOVs were not required to be tested according to Mandatory Appendix III during the third (i.e., current) 10-year IST interval. Per the new requirements, testing of these four RHR MOVs was scheduled to be performed prior to February 17, 2020 without the need for any relief.

Subsequent review of the test plans just prior to performance identified an operational risk to the work which could result in a loss of a safety function and result in rapid plant shutdown. Due to this risk, the testing should be performed during plant shutdown conditions only. The next scheduled plant shutdown for Fermi 2 is refueling outage 20 (RF20). RF20 is not scheduled to begin until spring 2020, which would be after the fourth 10-year IST interval start date of February 17, 2020. Fermi 2 will be in non-compliance with the ASME 2012 OM code (and associated 10 CFR 50.55a) on February 17, 2020 unless relief from Mandatory Appendix III is granted.

Proposed Relief Request Summary:

Fermi 2 would seek relief from ASME OM Code 2012 Edition Mandatory Appendix III, Section III-3200. The relief would be requested under 10 CFR 50.55a(z)(2) as compliance with the specified requirements of this section would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. The basis for relief would be the testing that has been previously performed on the valves, including: thrust testing, motor control center-based (MCC-based) testing, and quarterly stroke time testing. These tests provide reasonable assurance that the safety functions of the valves can be met. The requested duration of the relief would only be a few months, specifically from February 17, 2020 until testing can be performed in spring 2020 during RF20.

Relief Request #2 for one HPCI (E4150F007) and one RCIC (E5150F012) valve

Background:

The fourth 10-year IST interval begins on February 17, 2020. The ASME 2012 OM Code to be used for the fourth interval includes Mandatory Appendix III, which requires preservice testing for MOVs. An MOV for High Pressure Coolant Injection (HPCI) and an MOV for Reactor Core Isolation Cooling (RCIC) (i.e., two MOVs total) were not required to be tested according to Mandatory Appendix III during the third (i.e., current) 10-year IST interval. Rather than testing these two MOVs per the new requirements, reclassification of the valves was planned as part of the interval update. The MOVs would no longer be relied upon to perform a pressure isolation valves (PIVs) safety function; existing check valves would be

relied upon instead as the PIVs.

Subsequent review of the plans identified that reclassification could not be completed until the check valves had seat leakage testing and the seat leakage testing should be performed during plant shutdown conditions only. The next scheduled plant shutdown for Fermi 2 is refueling outage 20 (RF20). RF20 is not scheduled to begin until spring 2020, which would be after the fourth 10-year IST interval start date of February 17, 2020. Without the reclassification, the MOVs remain subject to the new code requirements for which they have not been tested. Fermi 2 will be in non-compliance with the ASME 2012 OM code (and associated 10 CFR 50.55a) on February 17, 2020 unless relief from Mandatory Appendix III is granted.

Proposed Relief Request Summary:

Fermi 2 would seek relief from ASME OM Code 2012 Edition Mandatory Appendix III, Section III-3200. The relief would be requested under 10 CFR 50.55a(z)(2) as compliance with the specified requirements of this section would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. The basis for relief would be that there is reasonable assurance that the MOVs can continue to perform their PIV safety function even without performance of the new Appendix III testing. This basis will include credit for the presence of the check valves, even though check valve seat leakage testing has not yet been performed. The requested duration of the relief would only be a few months, specifically from February 17, 2020 until seat leakage testing of the check valves can be performed in Spring 2020 during RF20 and then valve reclassification can be completed.