



10 CFR Part 50.55a/Power-Operated Valve Discussion

Douglas Bollock and Thomas Scarbrough

Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission

ROP Monthly Public Meeting
January 2021



POV Inspections 2020 Overview

- A total of 18 sites / 30 plants inspected in 2020
- Inspection at each site focused on a select 8 – 12 POVs
- Many inspections were conducted using remote means due to COVID-19.
 - Many remote inspections conducted walkdowns onsite, or used resident inspectors as proxy in conducting walkdowns
- Early communications between NRC inspectors and licensee staff were instrumental in focusing the inspection on safety significant and risk-informed valve samples.



POV Inspection Findings 2020

- 8 Green Non-Cited Violations (NCVs) identified.
- Multiple minor and licensee identified violations
 - Many licensee identified violations were found using experience from first two POV inspections
- Findings were collated into 14 high level event categories and presented at a public meeting held on December 8, 2020.



50.55a/POV – Item for Discussion

There appears to be uncertainty in the nuclear industry with respect to the condition in 10 CFR 50.55a(b)(3)(xi), “OM condition: Valve Position Indication,” associated with ISTC-3700, “Position Verification Testing,” in Subsection ISTC of the 2012 Edition, and later editions, of the ASME OM Code. The NRC regulations require implementation of the condition upon updating the IST Program to the 2012 or later edition of the ASME OM Code.



50.55a/POV – Item for Discussion - Continued

- In 2017, the NRC incorporated by reference the 2012 Edition of the ASME OM Code in 10 CFR 50.55a, the NRC staff included 10 CFR 50.55a(b)(3)(xi) to supplement the implementation of the valve position verification requirements in paragraph ISTC-3700 of the ASME OM Code.
- 10 CFR 50.55a(b)(3)(xi) is a condition on paragraph ISTC-3700 effective when licensees update their IST program plan to the 2012 Edition of the ASME OM Code.



50.55a/POV – Item for Discussion - Continued

- When performing ISTC-3700 under the requirements of 2012 Edition, licensees shall verify that valve operation is accurately indicated by supplementing valve position indicating lights with other indications, such as flow meters or other suitable instrumentation to provide assurance of proper obturator position for valves with remote position indication.



50.55a/POV – Item for Discussion – Q&A

Specific Questions and Answers

- When is compliance with 10 CFR 50.55a(b)(3)(xi) required and what is the frequency of the supplemental testing?
 - The proposed rulemaking would have had the condition become effective 30 days after publication of the final rule in the *Federal Register*. Addressing public feedback, NRC changed the condition to become effective when updating to the 2012 Edition of the OM Code.
 - ISTC-3700 requires valve position testing every 2 years and the (b)(3)(xi) condition applies when the ISTC-3700 test is performed.



50.55a/POV – Item for Discussion – Q&A

Specific Questions and Answers

- Is concurrent testing for supplemental valve position indication testing required?
 - Concurrent testing is not required as allowed by ISTC-3700.



50.55a/POV – Item for Discussion – Q&A

Specific Questions and Answers

- What requirement will inspectors verify regarding supplemental valve position indication requirements?
 - 10 CFR 50.55a(b)(3)(xi), and paragraph ISTC-3700 of the ASME OM Code.
 - Inspectors will verify that the licensees have performed the testing in accordance with the ISTC-3700 schedule of two years since the previous testing. If licensees use the 6 month grace period they will need to have justified the reason in accordance with the ASME OM Code.



QUESTIONS?

Douglas.Bollock@nrc.gov

301-415-6609