



U.S.NRC

UNITED STATES NUCLEAR REGULATORY COMMISSION

Protecting People and the Environment

Region III Fire Protection Utilities Group Meeting

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Topics

- Inspections
- Fire Protection Staff
- Triennial Findings
- Quarterly Report Findings
- New Inspection Procedure

Fire Protection Staff

- EB3 inspectors
 - Alan Dahbur, Jasmine Gilliam, Jessie Hafeez, George Hausman, John Robbins, Atif Shaikh, Dariusz Szwarc
- DRS inspectors
 - Jamie Benjamin, Matt Domke

2018 Inspections

- Palisades 2018011 & 2018415
 - 1 FP finding
 - 1 licensee-identified
 - 1 URI
 - B.5.b finding
- Perry 2018011
 - 3 findings

2019 Inspections

- Byron 2019011
- Davis-Besse 2019012
- Prairie Island 2019012
- DC Cook 2019012
- Point Beach 2019012 (report not issued)
- Quad Cities 2019013 (report not issued)

2020 Inspections

- Monticello
- LaSalle
- Fermi
- Dresden
- Clinton

Recent Findings and Violations

- Triennial fire protection inspections
 - 2018 2nd – four findings, one URI, one LIV
 - 2019 – one finding
- Resident inspector reports (2019)
 - One finding, two LIVs

Fire Protection System Functional Test Procedure

- Palisades 2018011
- Hydraulic and system flow calcs
 - Assumed C-factor of 120 (new pipe)
 - Pipe was not new
 - Required discharge pressure should have been higher
- TS 5.4.1, “Procedures”
- Green NCV

Failure to Correctly Assess the Suppression System in the CSR in the PRA

- Palisades 2018011 and 2015008
- Certain PRA scenarios assumed suppression of fires and no propagation beyond ZOI
- Significant obstructions at ceiling
- Licensee-identified Green NCV

Monitoring Program

- Palisades 2018011 and 2018003
- Failure to set action levels to ensure that assumptions in analysis remain valid
- Revision of FAQ 10-0059
 - The MR performance criteria for those SSCs promoted to or already considered high safety significant in the MR can be used as an acceptable action threshold.
- No violation

Vulnerability to Cause Secondary Fire due to Unfused Circuit

- Perry 2018011
- DG building ventilation fan
- Mod allowed local capability to start fan and bypass blown control fuse
- Could cause secondary fire
- Green NCV

Failure to Implement Fire Watch

- Perry 2018011
- ESW pump house
- Temporary cables routed near SSD cables w/o eval or transient permit
- Temporary oil pump
- Postulated fire could damage both SSD circuits
- Green NCV

Incorrect Height of Smoke Detectors

- Perry 2018011
- ESW pump house smoke detectors were at ceiling and 18 inches below
- Ceiling was approximately 62 feet
- NFPA 72E-1974 (4-4.5) requirement if for at least half to be at least 36 inches below
- Stratification concern
- Green NCV

FP Water System Flow Test Procedure Issue

- DC Cook 2019012
- TRS requires verification of fire suppression water system
- Procedure had no quantitative acceptance criteria
 - Could not verify functionality (Sep 2016)
- Dec. 2016 calculation (9/16 test concern)
- 2019 flow test did not pass
- Green NCV

Quarterly Inspection Report Findings

- Quad Cities 2019002
 - Inoperable detection system
- LaSalle 2019003
 - Pre-Action system drainage issue
- Point Beach 2019003
 - Potential of fire-induced circuit failures to inadvertently cross-tie energized buses

New Inspection Procedure

71111.21N.05

- Remains triennial
- Two-week – no info gathering trip
- No B.5.b
- Revised RFI letter
- FP as a program inspection

New Sample Requirements

Sample Requirements		Minimum Baseline Sample Completion Requirements		Budgeted Range	
Sample Type	Section	Frequency	Sample Size (per site)*	Samples (per site)	Hours per Site every four years
Structures, Systems and Components (SSCs) Credited for Fire Prevention, Detection, Suppression, or Post-Fire SSD	03.01	Quadrennially	3**	3-4	210+/-21
Fire Protection Program (FPP) Administrative Controls	03.02		1	1-2	
FPP Changes	03.03		1	1-2	

Summary

- Inspections
- Triennial findings
- Quarterly report findings
- Inspection procedure changes

QUESTIONS?

Thank You

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