



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
2100 RENAISSANCE BOULEVARD
KING OF PRUSSIA, PENNSYLVANIA 19406**

June 8, 2012

Mr. Michael J. Pacilio
Senior Vice President, Exelon Generation Company, LLC
President and Chief Nuclear Officer, Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

**SUBJECT: PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3 - NRC
TRIENNIAL FIRE PROTECTION INSPECTION REPORT 05000277/2012007
AND 05000278/2012007**

Dear Mr. Pacilio:

On May 18, 2012, the U.S. Nuclear Regulatory Commission (NRC) completed a triennial fire protection inspection at your Peach Bottom Atomic Station (PBAPS), Unit Nos. 2 and 3. The enclosed inspection report documents the inspection results, which were discussed on May 18, 2012, with Mr. Garey Stathes and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations, and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed station personnel. The inspectors also reviewed mitigation strategies for addressing large fires and explosions.

Based on the results of this inspection, no findings were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System (PARS) component of the NRC's document system, Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

A handwritten signature in black ink, appearing to read "John F. Rogge".

John F. Rogge, Chief
Engineering Branch 3
Division of Reactor Safety

Docket Nos. 50-277; 50-278
License Nos. DPR-44; DPR-56

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Sincerely,

/RA/

John F. Rogge, Chief
 Engineering Branch 3
 Division of Reactor Safety

Docket Nos. 50-277; 50-278
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M. Pacilio

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Enclosure:

Inspection Report 05000277/2012007 and 05000278/2012007
w/Attachment: Supplemental Information

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U. S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket Nos.: 50-277; 50-278

License Nos.: DPR-44; DPR-56

Report No.: 05000277/2012007 and 05000278/2012007

Licensee: Exelon Generating Company, LCC

Facility: Peach Bottom Atomic Power Station (PBAPS) Units 2 and 3

Location: 1848 Lay Road
Delta, PA 17314

Dates: April 30, 2012 through May 18, 2012

Inspectors: K. Young, Senior Reactor Inspector (Team Leader), Division of Reactor
Safety (DRS)
W. Cook, Senior Reactor Analyst, DRS
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Approved by: John F. Rogge, Chief
Engineering Branch 3
Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000277/2012007, 05000278/2012007; 04/30/2012 - 05/18/2012; Exelon Generation Company, LLC; Peach Bottom Atomic Power Station, Unit Nos. 2 and 3; Triennial Fire Protection Baseline Inspection.

This report covered a two week on-site triennial fire protection team inspection by specialist inspectors. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

Cornerstone: Mitigating Systems

No findings were identified.

Other Findings

One violation of very low safety significance, which was identified by the licensee, has been reviewed by the inspectors. Corrective actions taken or planned by Exelon have been entered into the corrective action program (CAP). This violation and the corrective action tracking numbers are listed in Section 4OA7.

Background

This report presents the results of a triennial fire protection inspection conducted in accordance with the U.S. Nuclear Regulatory Commission (NRC) Inspection Procedure (IP) 71111.05T, "Fire Protection." The objective of the inspection was to assess whether Exelon Generating Company, LLC has implemented an adequate fire protection program and that post-fire safe shutdown capabilities have been established and are being properly maintained at the Peach Bottom Atomic Power Station (PBAPS), Unit Nos. 2 and 3 facilities. The following fire areas (FAs) and/or fire zones (FZs) were selected for detailed review based on risk insights from the PBAPS Individual Plant Examination (IPE)/Individual Plant Examination of External Events (IPEEE).

- FA 6S, Unit 2, South Control Rod Drive (CRD) Equipment Area (Reactor Building)
- FA 31, Unit 3, Battery Room 266
- FA 35/FZ 122, Unit 3, Emergency Switchgear Room 263
- FA 44/FZ 133, Diesel Generator (E3) Building Bay C

Inspection of these areas/zones fulfills the inspection procedure requirement to inspect a minimum of three samples.

The inspection team evaluated the licensee's fire protection program against applicable requirements which included plant Technical Specifications, Operating License Condition 2.C.(4), NRC Safety Evaluations, Title 10 of the *Code of Federal Regulations* (10 CFR) 50.48, and 10 CFR Part 50, Appendix R. The team also reviewed related documents that included the Updated Final Safety Analysis Report (UFSAR), Section 10.12, the fire protection program (FPP), the fire hazards analysis (FHA), and the post-fire safe shutdown analyses.

The team also evaluated five licensee mitigating strategies for addressing large fires and explosions as required by Operating License Condition 2.C.(11) and 10 CFR 50.54 (hh)(2). Inspection of these strategies fulfills the inspection procedure requirement to inspect a minimum of one sample.

Specific documents reviewed by the team are listed in the attachment to this report.

Report Details

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R05 Fire Protection (IP 71111.05T)

.01 Protection of Safe Shutdown Capabilities

a. Inspection Scope

The team reviewed the FHA, safe shutdown analyses and supporting drawings and documentation to verify that safe shutdown capabilities were properly protected. The team ensured that applicable separation requirements of Section III.G of 10 CFR Part 50, Appendix R, and the licensee's design and licensing bases were maintained for the credited safe shutdown equipment and their supporting power, control, and instrumentation cables. This review included an assessment of the adequacy of the selected systems for reactivity control, reactor coolant makeup, reactor heat removal, process monitoring, and associated support system functions.

b. Findings

No findings were identified.

.02 Passive Fire Protection

a. Inspection Scope

The team walked down accessible portions of the selected fire areas to evaluate whether the material conditions of the fire area boundaries were adequate for the fire hazards in the area. The team compared the fire area boundaries, including walls, ceilings, floors, fire doors, fire dampers, penetration seals, electrical raceway and conduit fire barriers, and redundant equipment fire barriers and radiant energy heat barriers to design and licensing basis requirements, industry standards, and the PBAPS FPP, as approved by the NRC, to identify any potential degradation or non-conformances.

The team reviewed selected engineering evaluations, installation and repair work orders, and qualification records for a sample of penetration seals to determine whether the fill material was properly installed and whether the as-left configuration satisfied design requirements for the intended fire rating. The team also reviewed similar records for selected fire protection wraps to verify whether the material and configuration was appropriate for the required fire rating and conformed to the engineering design.

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The team also reviewed recent inspection and functional test records for fire dampers, and the inspection records for penetration seals and fire barriers, to verify whether the inspection and testing was adequately conducted, the acceptance criteria were met, and any potential performance degradation was identified. In addition, the team reviewed recent test results for the carbon dioxide (CO₂) and fire damper functionality tests for the areas protected to verify the testing was adequately conducted, the acceptance criteria were met, and any performance degradation was identified.

b. Findings

No findings were identified.

.03 Active Fire Protection

a. Inspection Scope

The team evaluated manual and automatic fire suppression and detection systems in the selected fire areas to determine whether they were installed, tested, maintained, and operated in accordance with NRC requirements, National Fire Protection Association (NFPA) codes of record, and the PBAPS FPP, as approved by the NRC. The team also assessed whether the suppression systems capabilities were adequate to control and/or extinguish fires associated with the hazards in the selected areas.

The team reviewed the as-built capability of the fire water supply system to verify the design and licensing basis and NFPA code of record requirements were satisfied, and to assess whether those capabilities were adequate for the hazards involved. The team reviewed the fire water system hydraulic analyses to assess the adequacy of a single fire water pump to supply the largest single hydraulic load on the fire water system plus concurrent fire hose usage. The team evaluated the fire pump performance tests to assess the adequacy of the test acceptance criteria for pump minimum discharge pressure at the required flow rate, to verify the criteria was adequate to ensure that the design basis and hydraulic analysis requirements were satisfied. The team also evaluated the underground fire loop flow tests to verify the tests adequately demonstrated that the flow distribution circuits were able to meet design basis requirements. In addition, the team reviewed recent pump and loop flow test results to verify the testing was adequately conducted, the acceptance criteria were met, and any potential performance degradation was identified.

The team reviewed initial discharge testing, design specifications, vendor requirements, modifications and engineering evaluations, and routine functional testing for the CO₂ suppression systems for the areas protected. The team walked down accessible portions of the CO₂ system, including storage tanks and supply systems, to independently assess the material condition, operational lineup, and availability of the systems. The team also reviewed and walked down the associated fire fighting strategies and CO₂ system operating procedures.

The team walked down accessible portions of the detection and water suppression systems in the selected areas and major portions of the fire water supply system,

Enclosure

including motor and diesel driven fire pumps, interviewed system and program engineers, and reviewed selected issue reports (IRs) to independently assess the material condition of the systems and components. In addition, the team reviewed recent test results for the fire detection and suppression systems for the selected fire areas to verify the testing was adequately conducted, the acceptance criteria were met, and any performance degradation was identified.

The team assessed the fire brigade capabilities by reviewing training, qualification, and drill critique records. The team also reviewed PBAPS's fire fighting strategies (i.e., pre-fire plans) and smoke removal plans for the selected fire areas to determine if appropriate information was provided to fire brigade members and plant operators to identify safe shutdown equipment and instrumentation, and to facilitate suppression of a fire that could impact post-fire safe shutdown capability. The team independently inspected the fire brigade equipment, including personnel protective gear (e.g., turnout gear) and smoke removal equipment, to determine operational readiness for fire fighting. In addition, the team reviewed PBAPS's fire brigade equipment inventory and inspection procedure and recent inspection and inventory results to verify adequate equipment was available, and any potential material deficiencies were identified.

b. Findings

No findings were identified.

.04 Protection from Damage from Fire Suppression Activities

a. Inspection Scope

The team walked down the selected fire areas and adjacent areas, and reviewed selected documents to determine whether redundant safe shutdown trains could be potentially damaged from fire suppression activities or from the rupture or inadvertent operation of fire suppression systems. During the walkdowns, the team evaluated the adequacy and condition of floor drains, equipment elevations, and spray protection. Specifically, to determine whether a potential existed to damage redundant safe shutdown trains, the team evaluated whether:

- A fire in one of the selected fire areas would not release smoke, heat, or hot gases that could cause unintended activation of suppression systems in adjacent fire areas which could potentially damage all redundant safe shutdown trains; or
- A fire suppression system rupture, inadvertent actuation, or actuation due to a fire, in one of the selected fire areas, could not directly damage all redundant trains (e.g. sprinkler caused flooding of other than the locally affected train); and
- Adequate drainage was provided in areas protected by water suppression systems.

b. Findings

No findings were identified.

.05 Normal and Alternative Shutdown Capability

a. Inspection Scope

The team reviewed the safe shutdown analysis, operating procedures, piping and instrumentation drawings (P&IDs), electrical drawings, the UFSAR, and other supporting documents for the selected fire areas to verify that the licensee had properly identified the systems and components necessary to achieve and maintain safe shutdown conditions.

The team assessed the adequacy of the selected systems and components for reactivity control, reactor coolant makeup, reactor heat removal, process monitoring, and support system functions. This review included verification that alternative post-fire shutdown could be performed both with and without the availability of offsite power. Plant walkdowns were also performed to verify that the plant configuration was consistent with that described in the safe shutdown and fire hazards analyses. The team verified that the systems and components credited for use during shutdown would remain free from fire damage.

The team verified that the training program for licensed and non-licensed operators included alternative shutdown capability. The team also verified that personnel required for safe shutdown using the normal or alternative shutdown systems and procedures are trained and available onsite at all times, exclusive of those assigned as fire brigade members. Additionally, the team observed fire protection training provided to the operations department to determine its adequacy.

The team reviewed the adequacy of procedures utilized for post-fire shutdown and performed an independent walk through of procedure steps to ensure the implementation and human factors adequacy of the procedures. The team also verified that the operators could be reasonably expected to perform specific actions within the time required to maintain plant parameters within specified limits.

Specific procedures reviewed for normal and alternative post-fire shutdown included the following:

- ON-114, Actual Fire Reported in the Power Block, Diesel Generator Building, Emergency Pump, Inner Screen or Emergency Cooling Tower Structures – Procedure, Rev. 18;
- SE-10, Alternative Shut Down, Sheets 1 & 2, Revs. 18 and 16;
- T-306S-2(3), Area 06S Fire Guides, Revs. 6(3);
- T-331-2(3), Area 31 Fire Guides, Revs. 1(3);
- T-335-2(3), Area 35 Fire Guides, Revs. 1(1); and
- T-344-2(3), Area 44 Fire Guides, Revs. 1(1).

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The team reviewed manual actions to ensure that they had been properly reviewed and approved and that the actions could be implemented in accordance with plant procedures in the time necessary to support the safe shutdown method for each fire area. The team also reviewed the periodic testing of the alternative shutdown transfer capability and instrumentation and control functions to ensure the tests are adequate to ensure the functionality of the alternative shutdown capability.

b. Findings

No findings were identified.

.06 Circuit Analysis

a. Inspection Scope

The team verified that the licensee performed a post-fire safe shutdown analysis for the selected fire areas and the analysis appropriately identified the structures, systems, and components important to achieving and maintaining safe shutdown. Additionally, the team verified that the licensee's analysis ensured that necessary electrical circuits were properly protected and that circuits that could adversely impact safe shutdown due to hot shorts or shorts to ground were identified, evaluated, and dispositioned to ensure spurious actuations would not prevent safe shutdown.

The team's review considered fire and cable attributes, cable routing, potential undesirable consequences and common power supply/bus concerns. Specific items included the credibility of the fire threat, cable insulation attributes, cable failure modes, and actuations resulting in flow diversion or loss of coolant events.

The team also reviewed cable raceway drawings and/or cable routing databases for a sample of components required for post-fire safe shutdown to verify that cables were routed as described in the safe-shutdown analysis. The team also reviewed equipment important to safe shutdown, but not part of the success path, to verify that the licensee had taken appropriate actions in accordance with the design and licensing basis and NRC Regulatory Guide 1.189, Revision 2.

Cable failure modes were reviewed for the following components:

- 0AP57, Emergency Service Water Pump A;
- 2AP37, Unit 2 Core Spray Pump A;
- FI2-14-50A, Unit 2 Core Spray Loop A Flow Indicator;
- LI2(3)-2-3-113, Units 2 and 3 Reactor Vessel Water Level Indicator;
- MO-2-13-030, Unit 2 Reactor Core Isolation Cooling (RCIC) Full Flow Test Valve (Multiple Spurious Operation (MSO) scenario 2aa);
- MO-2-14-012A, Core Spray Loop Inboard Isolation Valve (MSO scenario 2q);
- MO-2-23-016, Unit 2 High Pressure Coolant Injection (HPCI) Steam Supply Isolation Valve;

- MO-3-10-034A, Unit 3 Residual Heat Removal (RHR) Loop A Full Flow Test Line Block Valve (MSO scenario 5k);
- MO-3-23-015, Unit 3 HPCI Turbine Steam Line Inboard Isolation Valve (MSO scenario 5k);
- MO-3-23-019, Unit 3 HPCI Discharge to Feedwater Line A (MSO scenario 5k); and
- RV-3-02-071G, Unit 3 Main Steam Line C Safety Relief Valve (SRV) (MSO scenario 3a/b/c).

The team reviewed a sample of circuit breaker coordination studies to ensure equipment needed to conduct post-fire safe shutdown activities would not be impacted due to a lack of coordination that could result in a common power supply or common bus concern.

The team verified that the transfer of control from the control room to the alternative shutdown location(s) would not be affected by fire-induced circuit faults (e.g., by the provision of separate fuses and power supplies for alternative shutdown control circuits).

b. Findings

No findings were identified.

.07 Communications

a. Inspection Scope

The team reviewed safe shutdown procedures, the safe shutdown analysis, and associated documents to verify an adequate method of communications would be available to plant operators following a fire. During this review the team considered the effects of ambient noise levels, clarity of reception, reliability, and coverage patterns. The team also inspected the designated emergency storage lockers to verify the availability of portable radios for the fire brigade and for plant operators. The team also verified that communications equipment such as repeaters and transmitters would not be affected by a fire.

b. Findings

No findings were identified.

.08 Emergency Lighting

a. Inspection Scope

The team observed the placement and coverage area of eight-hour emergency lights throughout the selected fire areas to evaluate their adequacy for illuminating access and egress pathways and any equipment requiring local operation or instrumentation monitoring for post-fire safe shutdown. The team also verified that the battery power supplies were rated for at least an eight-hour capacity. Preventive maintenance

procedures, the vendor manual, completed surveillance tests, and battery replacement practices were also reviewed to verify that the emergency lighting was being maintained consistent with the manufacturer's recommendations and in a manner that would ensure reliable operation.

b. Findings

No findings were identified.

.09 Cold Shutdown Repairs

a. Inspection Scope

The team verified that the licensee had dedicated repair procedures, equipment, and materials to accomplish repairs of components required for cold shutdown which might be damaged by the fire to ensure cold shutdown could be achieved within the time frames specified in their design and licensing bases. The team verified that the repair equipment, components, tools, and materials (e.g. pre-cut cables with prepared attachment lugs) were available and accessible on site.

b. Findings

No findings were identified.

.10 Compensatory Measures

a. Inspection Scope

The team verified compensatory measures were in place for out-of-service, degraded, or inoperable fire protection and post-fire safe shutdown equipment, systems, or features (e.g., detection and suppression systems and equipment, passive fire barriers, pumps, valves, or electrical devices providing safe shutdown functions or capabilities). The team evaluated whether the short term compensatory measures adequately compensated for the degraded function or feature until appropriate corrective action could be taken and whether Exelon was effective in returning the equipment to service in a reasonable period of time.

b. Findings

No findings were identified.

.11 Review and Documentation of the Fire Protection Program Changes

a. Inspection Scope

The team reviewed recent changes to the approved fire protection program to verify the changes did not constitute an adverse effect on the ability to safely shutdown.

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b. Findings

No findings were identified.

12 Control of Transient Combustibles and Ignition Sources

a. Inspection Scope

The team reviewed the licensee's procedures and programs for the control of ignition sources and transient combustibles to assess their effectiveness in preventing fires and in controlling combustible loading within limits established in the FHA. A sample of hot work and transient combustible control permits were also reviewed. The team performed plant walkdowns to verify that transient combustibles and ignition sources were being implemented in accordance with the administrative controls.

b. Findings

No findings were identified.

13 Large Fires and Explosions Mitigation Strategies

a. Inspection Scope

The team conducted a review of selected mitigation strategies intended to maintain or restore core cooling, containment integrity, and spent fuel pool cooling capabilities under the circumstances associated with the loss of large areas of the plant due to explosions and/or fires. The team assessed whether Exelon continued to meet the requirements of Operating License Condition 2.C(11) and 10 CFR 50.54(hh)(2). The team reviewed the following mitigation strategies:

- TSG 4.1, Attachment 1 - Internal Spent Fuel Pool (SFP) Makeup & Spray;
- TSG 4.1, Attachment 2 - External SFP Makeup & Spray;
- TSG 4.1, Attachment 9 - Reactor Core Isolation Cooling (RCIC) System Manual Start on Loss of DC Power;
- TSG 4.1, Attachment 11 - Alternate Injection into the Residual Heat Removal (RHR) System; and,
- TSG 4.1, Attachment 16 - Manual Operation of Containment (Drywell) Vent Valves.

The team's review included: a detailed assessment of the procedural guidance; a walkdown of the strategy with trained operators to assess the feasibility of the strategy and operator familiarity; maintenance and surveillance testing of all designated strategy equipment; and an inventory check of all strategy equipment to ensure the appropriateness of equipment storage and availability. The team also evaluated the adequacy of corrective actions associated with issues identified during previous

inspections in this area. A list of documents reviewed is provided in the Supplemental Information attached to this report.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

4OA2 Identification and Resolution of Problems (IP 71152)

a. Inspection Scope

The team verified that the licensee was identifying fire protection and post-fire safe shutdown issues at an appropriate threshold and entering them into the CAP. The team also reviewed a sample of selected issues to verify that the licensee had taken or planned appropriate corrective actions.

b. Findings

No findings were identified.

4OA3 Follow-up of Events and Notices of Enforcement Discretion

.1 (Closed) Licensee Event Report (LER) 05000278/11-004-00: HPCI Cable Routing Error Results in Degraded Post-Fire Safe Shutdown (FSSD) Analysis

On November 15, 2011, a fire protection program document impact review was performed for the MSO modifications installed during the Unit 3 refueling outage (RFO) P3R18 in September 2011. As a result of the review, the licensee determined that the modification for the HPCI turbine steam supply valve (MO-3-23-014) control circuit adversely impacted the PBAPS post-FSSD analysis. Specifically, the modification routed a new cable through a fire area (fire area 13S, room 257, south CRD Equipment Room) that relies on the HPCI system to achieve post-fire safe shutdown following a fire in that specific fire area.

PBAPS determined that the cause of the cable routing error was plant procedures and administrative controls were not followed. This resulted in the FSSD analysis of the modification not being performed until after it was completed. Plant procedures provide control to ensure such analyses are completed and approved before a FSSD modification is installed. PBAPS entered this issue into the CAP (IR 01290922), established compensatory measures, performed an extent of condition review for other MSO modifications, and performed a root cause analysis. PBAPS also revised configuration change procedures and accountability standards to prevent recurrence. Additionally, PBAPS modified the circuit design for the HPCI turbine steam supply valve at the motor operated valve (MOV) MO-3-23-014 and at the motor control center (MCC) so that the new cable was not needed for MSO fire scenarios. There was no actual

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safety consequences associated with this event. The enforcement aspects of this LER are discussed in Section 4OA7. This LER is closed.

4OA5 Other Activities

.1 (Closed) AV 05000277, 05000278/2000003-01, Apparent Violation of 10 CFR Part 50 Appendix R Sections III.G and III.L Requirement to Protect Alternative Shutdown Equipment from the Adverse Effects of a Fire

During the 2000 triennial fire protection inspection, the NRC identified an apparent violation that the licensee adopted a licensing position that the mechanical damage scenario described in NRC Information Notice (IN) 92-18, "Potential for Loss of Remote Shutdown Capability during a Control Room Fire," was outside the design and licensing basis of the facility. As a result, the licensee did not evaluate the impact that this concern may have on their facility with regard to post-fire safe shutdown. IN 92-18 described the potential for control room fires causing "multiple hot shorts" (i.e., short circuits between control wiring and power sources) for certain MOVs needed for post-fire safe shutdown actions. These hot shorts could ultimately result in mechanical damage to the valves or other components, rendering them incapable of performing their required post-fire safe shutdown function.

The potential of multiple hot shorts during a fire and whether the accumulated effects of these multiple hot shorts should be addressed in licensee's fire protection programs became a generic issue that needed to be resolved between the NRC [Nuclear Reactor Regulation (NRR)] and the nuclear industry. In October 2009, the NRC issued guidance in Regulatory Guide (RG) 1.189, "Fire Protection for Nuclear Power Plants," Revision 2, to identify acceptable methods for resolving issues related to circuits required and important for post-fire safe shutdown. Additionally, the guidance provided the methods to evaluate circuits for single and multiple spurious operations (MSOs) and thus allowing the industry to appropriately identify and correct circuit issues. PBAPS evaluated their post-fire safe shutdown circuits per the NRC and the Nuclear Energy Institute (NEI) guidance and identified MOVs needing modifications. The licensee entered the identified issues into their corrective action program, established compensatory measures, and developed technical evaluations/modification packages to resolve the issue. The modifications for the affected MOVs needing an outage were installed during RFO P3R18 (September 2011), for Unit 3 and are scheduled to be installed for the affected MOVs for Unit 2 during RFO P2R19 (September 2012). Modifications that do not require an outage are scheduled to be completed prior to November 2012. The team verified that the licensee followed the NRC and NEI guidance to identify and resolve this issue. Additionally, the team reviewed a sample of modifications associated with IN 92-18 and identified no issues. PBAPS continues to maintain compensatory measures pending completion of the modifications. The NRC will continue to inspect this aspect of circuit evaluations in the baseline triennial fire protection inspection program. This item had remained open to track the issue until generic guidance was promulgated and appropriate corrective actions to resolve were identified, therefore this AV is now administratively closed.

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