

2Q/2008 ROP Action Matrix Summary

The assessment program collects information from inspections and performance indicators (PIs) in order to enable the agency to arrive at objective conclusions about the licensee's safety performance. Based on this assessment information, the NRC determines the appropriate level of agency response, including supplemental inspection and pertinent regulatory actions ranging from management meetings up to and including orders for plant shutdown. The Action Matrix Summary listed below reflects overall plant performance and is updated regularly to reflect inputs from the most recent performance indicators and inspection findings. [Security](#) information is not publicly available and the associated performance indicators and inspection findings are not integrated into the Action Matrix Summary.

Notes have been added to plants that are not in the licensee response column of the Action Matrix.

The substantive cross-cutting issues are available on the [ROP Substantive Cross Cutting Issues Summary](#) page for each of the plants.

Licensee Response Column	Regulatory Response Column	Degraded Cornerstone Column	Multiple/Repetitive Degraded Cornerstone Column	Unacceptable Performance Column
Arkansas Nuclear 1	Byron 1¹	Cooper²	Palo Verde 3³	
Arkansas Nuclear 2	Byron 2⁴	Farley 1⁵		
Beaver Valley 1	Comanche Peak 1⁶	Farley 2⁷		
Beaver Valley 2	Fort Calhoun⁸	Palo Verde 1⁹		
Braidwood 1	Hatch 2¹⁰	Palo Verde 2¹¹		
Braidwood 2				
Browns Ferry 1				
Browns Ferry 2				
Browns Ferry 3				
Brunswick 1				
Brunswick 2				
Callaway				
Calvert Cliffs 1				
Calvert Cliffs 2				
Catawba 1				
Catawba 2				
Clinton				
Columbia Generating Station				
Comanche Peak 2				
Crystal River 3				
D.C. Cook 1				
D.C. Cook 2				
Davis-Besse				
Diablo Canyon 1				
Diablo Canyon 2				
Dresden 2				
Dresden 3				
Duane Arnold				
Fermi 2				
FitzPatrick				
Ginna				

[Grand Gulf 1](#)
[Harris 1](#)
[Hatch 1](#)
[Hope Creek 1](#)
[Indian Point 2¹²](#)
[Indian Point 3¹³](#)
[Kewaunee](#)
[La Salle 1](#)
[La Salle 2](#)
[Limerick 1](#)
[Limerick 2](#)
[McGuire 1](#)
[McGuire 2](#)
[Millstone 2](#)
[Millstone 3](#)
[Monticello](#)
[Nine Mile Point 1](#)
[Nine Mile Point 2](#)
[North Anna 1](#)
[North Anna 2](#)
[Oconee 1](#)
[Oconee 2](#)
[Oconee 3](#)
[Oyster Creek](#)
[Palisades](#)
[Peach Bottom 2](#)
[Peach Bottom 3](#)
[Perry 1](#)
[Pilgrim 1](#)
[Point Beach 1](#)
[Point Beach 2](#)
[Prairie Island 1](#)
[Prairie Island 2](#)
[Quad Cities 1](#)
[Quad Cities 2](#)
[River Bend 1](#)
[Robinson 2](#)
[Saint Lucie 1](#)
[Saint Lucie 2](#)
[Salem 1](#)
[Salem 2](#)
[San Onofre 2](#)
[San Onofre 3](#)
[Seabrook 1](#)
[Sequoyah 1](#)
[Sequoyah 2](#)
[South Texas 1](#)
[South Texas 2](#)

[Summer](#)
[Surry 1](#)
[Surry 2](#)
[Susquehanna 1](#)
[Susquehanna 2](#)
[Three Mile Island 1](#)
[Turkey Point 3](#)
[Turkey Point 4](#)
[Vermont Yankee](#)
[Vogtle 1](#)
[Vogtle 2](#)
[Waterford 3](#)
[Watts Bar 1](#)
[Wolf Creek 1](#)

▲ Note 1: Byron Unit 1 is in the Regulatory Response Column due to one white finding in the Initiating Events Cornerstone originating in 1Q2008.

▲ Note 2: Cooper Nuclear Station is in the Degraded Cornerstone Column because of two White findings in the Mitigating Systems Cornerstone. The First White finding was issued on June 13, 2008 and involved two procedures used by operators to bring the plant to a safe shutdown condition in the event of certain postulated fire scenarios. The procedures could not be performed as written. The exit for this White finding was conducted on March 18, 2008. The Second White finding involved inadequate procedural guidance for maintenance activities that led to a failure of the Division 2 emergency diesel generator on January 15, 2008, from a loose electrical connection.

▲ Note 3: Palo Verde, Unit 3 is in the Repetitive Degraded Cornerstone because of one Yellow finding originating in 4Q2004 remaining open (see above discussion), and one White finding in the Mitigating Systems Cornerstone originating in 4Q2006. The white inspection finding was associated with failures of the Unit 3, Train A, emergency diesel generator on July 25 and September 22, 2006. The underlying performance deficiencies involved a failure to establish appropriate instructions for performing corrective maintenance activities on a relay, and the failure to identify and correct the cause of erratic relay operation prior to installation of the relay into the emergency diesel generator voltage regulator circuit. On June 21, 2007, a CAL was issued to the licensee in response to their shift to Column 4 of the action matrix. An IP 95003 inspection was conducted during the fourth quarter of CY 2007. At the time of the inspection, the licensee had not completed the actions associated with the Yellow and White findings. The IP 95003 inspection report was issued on February 1, 2008. On February 15, 2008, a revised CAL was issued that delineated the key performance areas that need to be addressed prior to Palo Verde Unit 3 exiting Column 4 of the action matrix.

▲ Note 4: Byron Unit 2 is in the Regulatory Response Column due to one white finding in the Initiating Events Cornerstone originating in 1Q2008.

▲ Note 5: Farley Unit 1 is in the Degraded Cornerstone Column due to a White PI in the Mitigating System Cornerstone for Cooling Water System issues originating 3Q/2007, and a parallel White Performance Indicator Finding in the Mitigating System Cornerstone for both units regarding breaker failures issued 3Q/2007. The Parallel White finding and White MSPI were inspected (95002) during 2Q/2008 and the licensee's actions were found sufficient. The licensee implemented a modification to decrease the risk associated with a Component Cooling Water (CCW) pump failure in 2Q/2008 which could improve the currently White Cooling Water MSPI. Also, Farley Unit 1 reported a White Performance Indicator for Emergency AC Power Systems in the Mitigating Systems Cornerstone 1Q/2008. An inspection (95001) is planned for 3Q 2008.

▲ Note 6: Comanche Peak, Unit 1 is in the Regulatory Response Column based on a White finding associated with the Mitigating Systems Cornerstone. The finding was issued on February 29, 2008 and involved exceeding the Technical Specification allowed outage time for emergency diesel generators when diesel generator 1-02 was rendered inoperable due to painting activities resulting in paint being deposited on at least one fuel rack in a location that prevented motion required to support operation of the diesel generator. This caused diesel generator 1-02 to fail to start during a surveillance test on

November 21, 2007. A 95001 supplemental inspection was conducted on June 2 – 6, 2008 to assess the adequacy of the licensee's corrective actions.

- ▲ Note 7: Farley Unit 2 is in the Degraded Cornerstone Column due to a Yellow Finding for repetitive failures of a containment sump valve and a parallel White Performance Indicator Finding in the Mitigating Systems Cornerstone regarding breaker failures issued 3Q/2007. The Yellow finding, Parallel White finding, and previously White RHR MSPI were inspected (95002) during 2Q/2008 and the licensee's actions were found to be sufficient. The previously White RHR MSPI was reported Green 2Q/2008.
- ▲ Note 8: Fort Calhoun was in the Regulatory Response Column due to one White EDG finding being open during the quarter. During 1Q2008, the NRC conducted an IP 95002 inspection and closed most of the issues, but held the White EDG finding open pending the development of additional corrective measures by the licensee. During 2Q2008, the NRC reviewed the corrective measures and found them acceptable. The White EDG finding will be closed and Fort Calhoun will transition to the Licensee Response Column in 3Q2008 absent further action matrix inputs.
- ▲ Note 9: Palo Verde Nuclear Generating Station, Units 1, and 2 are in Degraded Cornerstone Column because of one Yellow finding in the Mitigating Systems Cornerstone originating in 4Q2004. The significance determination for this final Yellow finding and corresponding Notice of Violation were issued on April 8, 2005. A supplemental inspection completed in December 2005, determined that the Yellow finding would remain open because of inadequate root and contributing causes and ineffective corrective actions. A followup supplemental inspection, completed in September 2006, also determined that the Yellow finding would remain open because of ineffective corrective actions involving root causes and programmatic concerns involving questioning attitude, technical rigor, and operability determinations. An IP 95003 inspection was conducted during the fourth quarter of CY 2007. At the time of the inspection, the licensee had not completed the actions associated with the Yellow finding. The adequacy of licensee corrective actions will be reviewed during CAL followup inspections.
- ▲ Note 10: Hatch Unit 2 is in the Regulatory Response Column due to a White PI in the Mitigating Systems Cornerstone for High Pressure Injection system issues originating 2Q/2007. A 95001 inspection was completed 1Q/2008.
- ▲ Note 11: Palo Verde Nuclear Generating Station, Units 1, and 2 are in Degraded Cornerstone Column because of one Yellow finding in the Mitigating Systems Cornerstone originating in 4Q2004. The significance determination for this final Yellow finding and corresponding Notice of Violation were issued on April 8, 2005. A supplemental inspection completed in December 2005, determined that the Yellow finding would remain open because of inadequate root and contributing causes and ineffective corrective actions. A followup supplemental inspection, completed in September 2006, also determined that the Yellow finding would remain open because of ineffective corrective actions involving root causes and programmatic concerns involving questioning attitude, technical rigor, and operability determinations. An IP 95003 inspection was conducted during the fourth quarter of CY 2007. At the time of the inspection, the licensee had not completed the actions associated with the Yellow finding. The adequacy of licensee corrective actions will be reviewed during CAL followup inspections.
- ▲ Note 12: On December 19, 2007, the EDO approved the deviation memo to continue to provide heightened oversight for Indian Point Units 2 and 3 through calendar year 2008, or until Entergy meets the criteria defined in the deviation memo. The deviation from the Reactor Oversight Process Action Matrix includes oversight activities to monitor licensee actions to: 1) characterize and remediate groundwater contamination found onsite, and 2) improve the reliability of the emergency siren system.
- ▲ Note 13: On December 19, 2007, the EDO approved the deviation memo to continue to provide heightened oversight for Indian Point Units 2 and 3 through calendar year 2008, or until Entergy meets the criteria defined in the deviation memo. The deviation from the Reactor Oversight Process Action Matrix includes oversight activities to monitor licensee actions to: 1) characterize and remediate groundwater contamination found onsite, and 2) improve the reliability of the emergency siren system.