

## 4Q/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
<a href="#">Arkansas Nuclear 1</a>	<a href="#">Byron 1<sup>1</sup></a>	<a href="#">Cooper<sup>2</sup></a>	<a href="#">Palo Verde 3<sup>3</sup></a>	
<a href="#">Arkansas Nuclear 2</a>	<a href="#">Byron 2<sup>4</sup></a>	<a href="#">Palo Verde 1<sup>5</sup></a>		
<a href="#">Beaver Valley 1</a>	<a href="#">Comanche Peak 1<sup>6</sup></a>	<a href="#">Palo Verde 2<sup>7</sup></a>		
<a href="#">Beaver Valley 2</a>	<a href="#">Farley 1<sup>8</sup></a>			
<a href="#">Braidwood 1</a>	<a href="#">Grand Gulf 1<sup>9</sup></a>			
<a href="#">Braidwood 2</a>	<a href="#">Hatch 2<sup>10</sup></a>			
<a href="#">Browns Ferry 1</a>	<a href="#">Kewaunee<sup>11</sup></a>			
<a href="#">Browns Ferry 2</a>	<a href="#">McGuire 1<sup>12</sup></a>			
<a href="#">Browns Ferry 3</a>	<a href="#">McGuire 2<sup>13</sup></a>			
<a href="#">Brunswick 1</a>	<a href="#">Nine Mile Point 2<sup>14</sup></a>			
<a href="#">Brunswick 2</a>	<a href="#">Oconee 1<sup>15</sup></a>			
<a href="#">Callaway</a>	<a href="#">Palisades<sup>16</sup></a>			
<a href="#">Calvert Cliffs 1</a>	<a href="#">Prairie Island 1<sup>17</sup></a>			
<a href="#">Calvert Cliffs 2</a>	<a href="#">San Onofre 2<sup>18</sup></a>			
<a href="#">Catawba 1</a>				
<a href="#">Catawba 2</a>				
<a href="#">Clinton</a>				
<a href="#">Columbia Generating Station</a>				
<a href="#">Comanche Peak 2</a>				
<a href="#">Crystal River 3</a>				
<a href="#">D.C. Cook 1</a>				
<a href="#">D.C. Cook 2</a>				
<a href="#">Davis-Besse</a>				
<a href="#">Diablo Canyon 1</a>				
<a href="#">Diablo Canyon 2</a>				
<a href="#">Dresden 2</a>				
<a href="#">Dresden 3</a>				

[Duane Arnold](#)  
[Farley 2](#)  
[Fermi 2](#)  
[FitzPatrick](#)  
[Fort Calhoun](#)  
[Ginna](#)  
[Harris 1](#)  
[Hatch 1](#)  
[Hope Creek 1](#)  
[Indian Point 2<sup>19</sup>](#)  
[Indian Point 3<sup>20</sup>](#)  
[La Salle 1](#)  
[La Salle 2](#)  
[Limerick 1](#)  
[Limerick 2](#)  
[Millstone 2](#)  
[Millstone 3](#)  
[Monticello](#)  
[Nine Mile Point 1](#)  
[North Anna 1](#)  
[North Anna 2](#)  
[Oconee 2](#)  
[Oconee 3](#)  
[Oyster Creek](#)  
[Peach Bottom 2](#)  
[Peach Bottom 3](#)  
[Perry 1](#)  
[Pilgrim 1](#)  
[Point Beach 1](#)  
[Point Beach 2](#)  
[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 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. An IP 95002 inspection was successfully completed in December, 2008, so both findings will close at the end of 4Q08.
- ▲ 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: 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 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: 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 8: Farley Unit 1 is in the Regulatory Response Column due to a White PI for Emergency AC Power System and an associated White inspection Finding. Note that the White Finding is not double counted in the Action Matrix. A 95001 inspection was conducted in 3Q/2008.
- ▲ Note 9: Grand Gulf Nuclear Station is in the Regulatory Response Column because of a White performance indicator for Unplanned Scrams per 7000 Critical Hours. The performance indicator crossed the Green-White threshold due to an October 26, 2008 main generator trip and subsequent reactor scram. The IP 95001 inspection will be conducted in 1Q09 after the licensee completes a review and identifies corrective actions to address the causes for the multiple scrams which resulted in the White performance indicator.
- ▲ 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: Kewaunee is in the Regulatory Response Column due to one White finding in the Emergency Preparedness Cornerstone originating in 3Q2008. Finding was originally documented as an Apparent Violation in an inspection report issued on September 23, 2008. Final Determination Letter was issued on October 29, 2008.
- ▲ Note 12: McGuire Unit 1 is in the Regulatory Response Column due to one White finding in the Mitigating Systems Cornerstone originating in 3Q2008.
- ▲ Note 13: McGuire Unit 2 is in the Regulatory Response Column due to one White finding in the Mitigating Systems Cornerstone originating in 3Q2008.
- ▲ Note 14: Nine Mile Point (NMP) Unit 2 transitioned to the Regulatory Response Column due to one White performance indicator (PI) in the Mitigating System cornerstone originating in 4Q2008. The White PI was related to exceeding the limit for Cooling Water System unavailability and reliability. A supplemental inspection for the White PI will be performed.
- ▲ Note 15: Oconee Unit 1 is in the Regulatory Response Column due to one White finding in the Initiating Events Cornerstone originating in 4Q2008.
- ▲ Note 16: Palisades is in the Regulatory Response Column due to one White finding in the Occupational Radiation Safety Cornerstone originating in 4Q2008. Final Determination Letter was issued January 30, 2009.
- ▲ Note 17: Prairie Island Unit 1 is in the Regulatory Response Column due to one White finding in the Mitigating Systems Cornerstone originating in 4Q2008. Final Determination Letter was issued January 27, 2009.
- ▲ Note 18: San Onofre, Unit 2 is in the Regulatory Response Column based on one White finding associated

with the Mitigating Systems Cornerstone. On August 4, 2008, the NRC commenced a special inspection at Southern California Edison to inspect activities associated with deficient electrical connections with the potential to adversely affect the safety function of multiple safety systems used for accident mitigation. In Inspection Report 2008013, the NRC issued a white violation for the failure to establish appropriate instructions for performing maintenance activities on a safety-related 125 Vdc station battery breaker. The NRC will be conducting Supplemental Inspection 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area."

▲ Note 19: On December 16, 2008, the EDO approved the deviation memo to continue to provide heightened oversight for Indian Point Units 2 and 3 through calendar year 2009 because some exit criteria in the prior deviation related to ground water monitoring have not been met and the unique factors warranting a deviation from the ROP continue in 2009. This deviation is reduced in scope from prior years because the exit criteria related to the replacement alert and notification system have been met and the ROP is appropriate and sufficient to monitor performance in this regard.

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*Last modification: Feb 23, 2009*