4Q/2007 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 <u>ROP Substantive Cross Cutting Issues Summary</u> page for each of the plants.

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Licensee Response Column	Regulatory Response Column	Degraded Cornerstone Column	Multiple/Repetitive Degraded Cornerstone Column	Unacceptable Performance Column
Arkansas Nuclear 1	Brunswick 1 ¹	Browns Ferry 1 ²	Palo Verde 3 ³	
Arkansas Nuclear 2	Byron 2 ⁴	Farley 1 ⁵		
Beaver Valley 1	<u>Cooper⁶</u>	Farley 2 ⁷		
Beaver Valley 2	Hatch 2 ⁸	Fort Calhoun ⁹		
Braidwood 1	Nine Mile Point 1 ¹⁰	Kewaunee 11		
Braidwood 2	<u>Perry 1¹²</u>	Palo Verde 1 ¹³		
Browns Ferry 2	Vogtle 1 ¹⁴	Palo Verde 2 ¹⁵		
Browns Ferry 3	Vogtle 2 ¹⁶	Salem 1 ¹⁷		
Brunswick 2				
Byron 1				
<u>Callaway</u>				
Calvert Cliffs 1				
Calvert Cliffs 2				
Catawba 1				
Catawba 2				
<u>Clinton</u>				
Columbia Generating Station				
Comanche Peak 1				
Comanche Peak 2				
Crystal River 3				
<u>D.C. Cook 1</u>				
<u>D.C. Cook 2</u>				
<u>Davis-Besse</u>				
Diablo Canyon 1				
Diablo Canyon 2				
Dresden 2				
<u>Dresden 3</u>				
Duane Arnold				
Fermi 2				
<u>FitzPatrick</u>				

Ginna Grand Gulf 1 Harris 1 Hatch 1 Hope Creek 1 Indian Point 2¹⁸ <u>Indian Point 3¹⁹</u> La Salle 1 La Salle 2 Limerick 1 Limerick 2 McGuire 1 McGuire 2 Millstone 2 Millstone 3 **Monticello** 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 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 2

Summer Surry 1

San Onofre 2
San Onofre 3
Seabrook 1
Sequoyah 1
Sequoyah 2
South Texas 1
South Texas 2

Surry 2
Susquehanna 1
Susquehanna 2
Three Mile Island 1
Turkey Point 3
Turkey Point 4
Vermont Yankee
Waterford 3

Wolf Creek 1

Watts Bar 1

▲ Note 1: Brunswick Unit 1 is in the Regulatory Response Column for a White Finding involving EDG #1 inoperability in 1Q/2007.

▲ Note 2: Browns Ferry Unit 1 is in the Degraded Cornerstone Column due to one Yellow Performance Indicator for Unplanned Scrams in the Initiating Events Cornerstone originating in 4Q/2007.

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 report is expected to be issued on or before February 1, 2008. The licensee will receive an updated CAL incorporating the results of the 95003 supplemental inspection and review of the site improvement plan following issuance of the IP 95003 report.

▲ Note 4: Byron Unit 2 is in the Regulatory Response Column due to one white performance indicator in the Mitigating Systems Cornerstone originating in 2Q/2006.

▲ 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 in 3Q/2007, and a parallel White Performance Indicator Finding in the Mitigating System Cornerstone for both units regarding breaker failures issued in the 3Q/2007.

▲ Note 6: Cooper Nuclear Station is in the Regulatory Response Column because of a White finding in the Mitigating Systems Cornerstone originating in 2Q/2007.

A Note 7: Farley Unit 2 is in the Degraded Cornerstone Column due to a White PI in the Mitigating Systems Cornerstone for RHR issues originating in 2Q/2007, and a parallel White Performance Indicator Finding in the Mitigating Systems Cornerstone for both units regarding breaker failures issued in the 3Q/2007.

▲ Note 8: Hatch Unit 2 is in the Regulatory Response Column due to a White PI in the Mitigating Systems Cornerstone for High Head Safety Injection system issues originating in 2Q/2007.

Note 9: Fort Calhoun Station is in the Degraded Cornerstone column of the NRC's Action Matrix based on two White findings associated with the Mitigating Systems Cornerstone. One White finding involved the improper installation of the valve disk of Containment Spray Header Isolation Valve HCV-345, issued May 29, 2007 (NRC EA-07-047). The second involved inadequate corrective actions and improper maintenance on emergency diesel generators, issued December 7, 2007 (NRC EA-07-0194). The Safety System Functional Failure performance indicator also crossed the Green to White threshold during the second quarter of 2007 because of seven reported failures. Currently, this performance indicator is Green since the licensee has re-evaluated two previously reported failures. The NRC is reviewing the re-characterization of these two issues. The 95002 supplemental inspection will be conducted during the first quarter of CY 2008.

▲ Note 10: Nine Mile Point (NMP) Unit 1 was in the Regulatory Response Column due to one White inspection

finding in the Mitigating System cornerstone originating in 1Q/2007. The White finding involved a failure to ensure the integrity of NMP's licensed operator re-qualification exams for Unit 1, calendar years 2005 and 2006. The supplemental inspection for the White finding was completed in December 2007. Based on the results, this finding will be removed from consideration in the performance assessment process in 1Q/2008.

- ▲ Note 11: Kewaunee is in the Degraded Cornerstone Column due to one yellow finding in the Mitigating Systems Cornerstone originating in 1Q2007.
- ▲ Note 12: Perry is in the Regulatory Response Column due to one white performance indicator in the Mitigating Systems Cornerstone originating in 1Q/2007 and one white performance indicator in the Initiating Events Cornerstone.
- ▲ Note 13: 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.
- ▲ Note 14: Vogtle Unit 1 is in the Regulatory Response column due to a White finding in the Emergency Preparedness cornerstone originating in 3Q/2006. In addition, a White performance indicator in the Mitigating Systems Cornerstone for cooling water was reported for Unit 1 in 4Q/2007 and for Unit 2 in 3Q/2007.
- A Note 15: 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.
- ▲ Note 16: Vogtle Unit 2 is in the Regulatory Response column due to a White finding in the Emergency Preparedness cornerstone originating in 3Q/2006. In addition, a White performance indicator in the Mitigating Systems Cornerstone for cooling water was reported for Unit 1 in 4Q/2007 and for Unit 2 in 3Q/2007.
- ▲ Note 17: Salem Unit 1 transitioned to the Degraded Cornerstone Column due to on Yellow performance indicator (PI) in the Mitigating System cornerstone originating in 4Q2007. The Yellow PI involved exceeding the limits for Emergency AC Power Systems reliability. A supplemental inspection for the Yellow PI will be performed.
- A Note 18: On December 19, 2007, the EDO approved the deviation memo to continue to provide heightened oversight for Indian Point 2 and 3 plants through calendar year 2008, or until the licensee 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 19:

 On December 19, 2007, the EDO approved the deviation memo to continue to provide heightened oversight for Indian Point 2 and 3 plants through calendar year 2008, or until the licensee 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

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