3Q/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. Physical Protection 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	Brunswick 2[1]	Brunswick 1[2]	Palo Verde 3[3]	
Arkansas Nuclear 2	Byron 2[4]	D.C. Cook 1[5]		
Beaver Valley 1	Clinton[6]	D.C. Cook 2[7]		
Beaver Valley 2	Cooper[8]	Farley 1[9]		
Braidwood 1	Duane Arnold[10]	Farley 2[11]		
Braidwood 2	Fort Calhoun[12]	Kewaunee[13]		
Browns Ferry 1	Hatch 2[14]	Oconee 3[15]		
Browns Ferry 2	Nine Mile Point 1[16]	Palo Verde 1[17]		
Browns Ferry 3	Oconee 1[18]	Palo Verde 2[19]		
Byron 1	Oconee 2[20]			
Callaway	Perry 1[21]			
Calvert Cliffs 1	Vermont Yankee[22]			
Calvert Cliffs 2	Vogtle 1[23]			
Catawba 1	Vogtle 2[24]			
Catawba 2				
Columbia Generating Station				
Comanche Peak 1				
Comanche Peak 2				
Crystal River 3				
Davis-Besse				
Diablo Canyon 1				
Diablo Canyon 2				
Dresden 2				
Dresden 3				
Fermi 2				
FitzPatrick				
Ginna				
Grand Gulf 1				

Harris 1
Hatch 1
Hope Creek 1
Indian Point 2[25]
Indian Point 3[26]
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
Oyster Creek
Palisades
Peach Bottom 2
Peach Bottom 3
Pilgrim 1
Point Beach 1
Point Beach 2
Prairie Island 1[27]
Prairie Island 2[28]
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
Waterford 3
Watts Bar 1
Wolf Creek 1

- Note 1: Brunswick Unit 2 is in the Regulatory Response column due to a White performance indicator in the Mitigating System cornerstone (Emergency AC Power Systems) originating in 2Q/2006.
- Note 2: Brunswick Unit 1 Final SDP was issued on April 20 leading to the unit entering Degraded Cornerstone for a White Finding involving EDG #1 inoperability in combination with a previous White PI for emergency AC Power System. The White Finding was effective on February 28, 2007, the date of the AV. 95002 inspection was completed on August 30. Brunswick Unit 1 also has a White performance indicator in Mitigating Systems Cornerstone (Cooling Water Systems) originating in 3Q/2007.
- 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. The effectiveness of the licensee's corrective actions will be evaluated during the 95003 supplemental inspection being conducted in the fourth quarter of CY 2007.
- Note 4: Byron Unit 2 is in the Regulatory Response Column due to one white performance indicator in the Mitigating Systems Cornerstone originating in 2Q2006.
- Note 5: D.C. Cook Unit 1 is in the Degraded Cornerstone Column due to one yellow performance indicator in the Emergency Preparedness Cornerstone originating in 2Q2007
- Note 6: Clinton is in the Regulatory Response Column due to one white finding in the Mitigating Systems Cornerstone originating in 3Q2006. This finding was held open in accordance with MC 0305 for greater than 4 quarters pending the licensee notifying the NRC of its readiness for the required supplemental inspection (IP 95001). The supplemental inspection was successfully completed on September 7, 2007; therefore, the white finding was closed and will no longer be considered in the action matrix effective October 1, 2007.
- Note 7: D.C. Cook Unit 2 is in the Degraded Cornerstone Column due to one yellow performance indicator in the Emergency Preparedness Cornerstone originating in 2Q2007.
- Note 8: Cooper Nuclear Station is in the Regulatory Response Column because of a White finding and a White performance indicator for the Mitigating Systems Performance Index, Emergency AC Power Systems. The White finding was associated with the licensee's failure to identify and correct Emergency Diesel Generator Number 2 voltage regulator components that contributed to an emergency diesel generator failure on January 18, 2007. The White performance indicator was due to the Emergency Diesel Generator Number 2 over-voltage trip on January 18, 2007, which was caused by a failed voltage regulator card. Additionally, there was an Emergency Diesel Generator failure to run in the past 36 months because of a failed lube oil fitting. Consistent with the guidance in NRC Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," Section 06.06.b, the NRC staff performed a review of the EDG failure that was common to both the White performance indicator result and the White finding (i.e., a failed diode in the voltage regulator circuit of EDG 2) to determine whether or not the circumstances associated with this issue constitute "double counting" of a performance indicator and an inspection finding as currently defined by NRC guidance. The NRC has determined that the White Performance Indicator result and the White finding should be counted as one assessment input for the purposes of the Reactor Oversight Process Action Matrix and that CNS remains in the Regulatory Response Column of the NRC's Action Matrix.
- Note 9: 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 3rd Qtr 2007, and a parallel White Performance Indicator Finding in the Mitigating System Cornerstone for both units regarding breaker

failures issued in the 3rd Qtr 2007.

- Note 10: Duane Arnold is in the Regulatory Response Column due to one white finding in the Emergency Preparedness Cornerstone originating in 4Q2006.
- Note 11: Farley Unit 2 entered the degraded cornerstone column in the 3rd quarter 2007 based on the Yellow finding in the mitigating systems cornerstone.
- Note 12: Fort Calhoun Station is in the Regulatory Response column of the NRC's Action Matrix based on one White finding in the Mitigating Systems Cornerstone. The White finding involved the improper installation of the valve disk of Containment Spray Header Isolation Valve. The Safety System Functional Failure performance indicator transitioned from White to Green in the 3rd Qtr 2007. The staff will still conduct the IP 95002 inspection since the plant was in Column 3 of the ROP Action Matrix during the 2nd Qtr 2007 (currently scheduled for early 2008).
- Note 13: Kewaunee is in the Degraded Cornerstone Column due to one yellow finding in the Mitigating Systems Cornerstone originating in 1Q2007 and one white performance indicator in the Initiating Events Cornerstone originating in 4Q2006
- Note 14: Hatch Unit 2 is in the Regulatory Response Column due to a White PI in the Mitigating System Cornerstone for High Head Safety Injection system issues originating in 2nd Qtr 2007.
- Note 15: Oconee Unit 3 remained in the Degraded Cornerstone Column due to the 3Q/2006 White SSF flood wall breach Finding and a 4Q/2006 White reactor building emergency sump debris Finding.
- Note 16: 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 1Q2007. 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 (95001) for the White finding is scheduled for November 2007.
- Note 17: 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. The effectiveness of the licensee’s corrective actions will be evaluated during the performance of the IP 95003 supplemental inspection being in the fourth quarter of CY 2007.
- Note 18: Upon changing to a "four segment" calculational approach, the 3Q/2007 MSPI for Emergency AC Power turned from White to Green for all three Oconee Units. Consequently, Oconee Units 1 and 2 went from the Degraded Cornerstone Column to the Regulatory Response Column due to the remaining 3Q/2006 White SSF flood wall breach Finding.
- Note 19: 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. The effectiveness of the licensee’s corrective actions will be evaluated during the performance of the IP 95003 supplemental inspection being in the fourth quarter of CY 2007.
- Note 20: Upon changing to a "four segment" calculational approach, the 3Q/2007 MSPI for Emergency AC Power turned from White to Green for all three Oconee Units. Consequently, Oconee Units 1 and 2 went from the Degraded Cornerstone Column to the Regulatory Response Column due to the remaining 3Q/2006 White SSF flood wall breach Finding.
- Note 21: Perry is in the Regulatory Response Column due to one white performance indicator in the Mitigating Systems Cornerstone originating in 1Q2007.

- Note 22: Vermont Yankee was in the Regulatory Response Column due to one White inspection finding in the Public Radiation Safety cornerstone originating in 4Q2006. The White finding involved a Vermont Yankee radioactive material shipment to another site that exceeded Department of Transportation regulatory specifications for external radiation exposure rate on the surface of the affected package. The supplemental inspection (95001) for the White finding was completed in July 2007. Based on the results, this finding will be removed from consideration in the performance assessment process in 4Q2007.
- Note 23: Vogtle Unit 1 and 2 are in the Regulatory Response column due to a White finding in the Emergency Preparedness cornerstone originating in 3Q/2006.
- Note 24: Vogtle Unit 1 and 2 are in the Regulatory Response column due to a White finding in the Emergency Preparedness cornerstone originating in 3Q/2006.
- Note 25: On December 21, 2006, the EDO approved the deviation memo to continue to provide heightened oversight for Indian Point 2 and 3 plants through calendar year 2007, 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 26: On December 21, 2006, the EDO approved the deviation memo to continue to provide heightened oversight for Indian Point 2 and 3 plants through calendar year 2007, 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 27: Prairie Island Unit 1 corrected the Occupational Radiation Safety Cornerstone performance indicator data for 2Q2006 and 4Q2006. As a result, Prairie Island Unit 1 was in the Regulatory Response Column in 4Q2006 and 1Q2007 due to one white performance indicator.
- Note 28: Prairie Island Unit 2 corrected the Occupational Radiation Safety Cornerstone performance indicator data for 2Q2006 and 4Q2006. As a result, Prairie Island Unit 2 was in the Regulatory Response Column in 4Q2006 and 1Q2007 due to one white performance indicator.

Last modification: Dec 05, 2007