

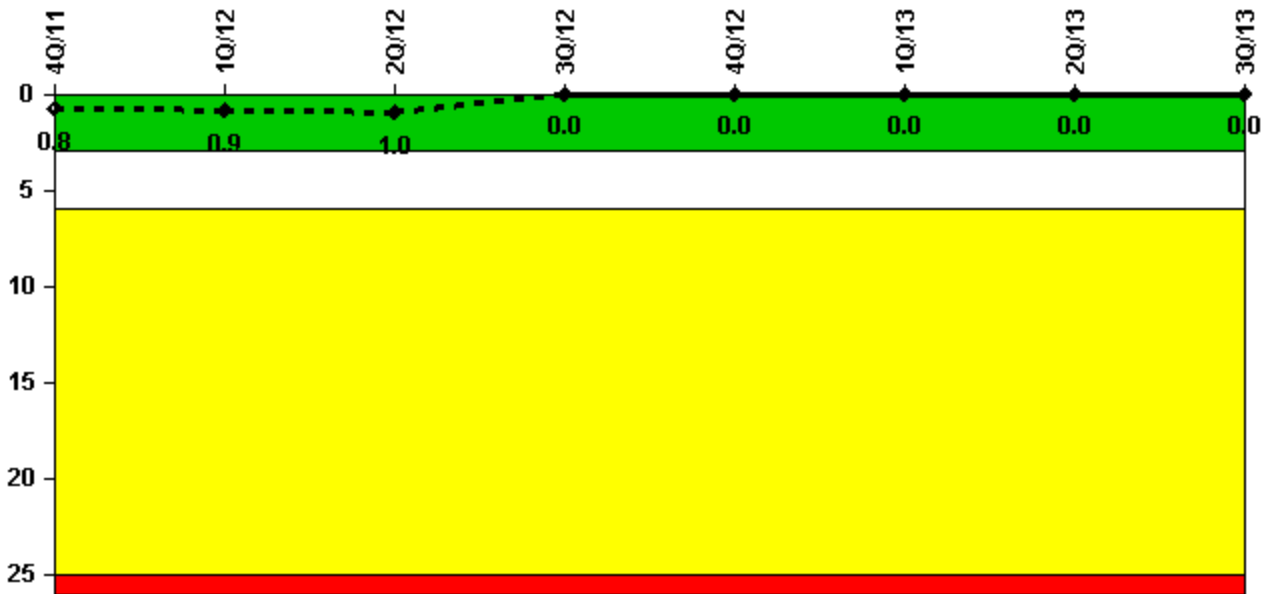
# Calvert Cliffs 1

## 3Q/2013 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



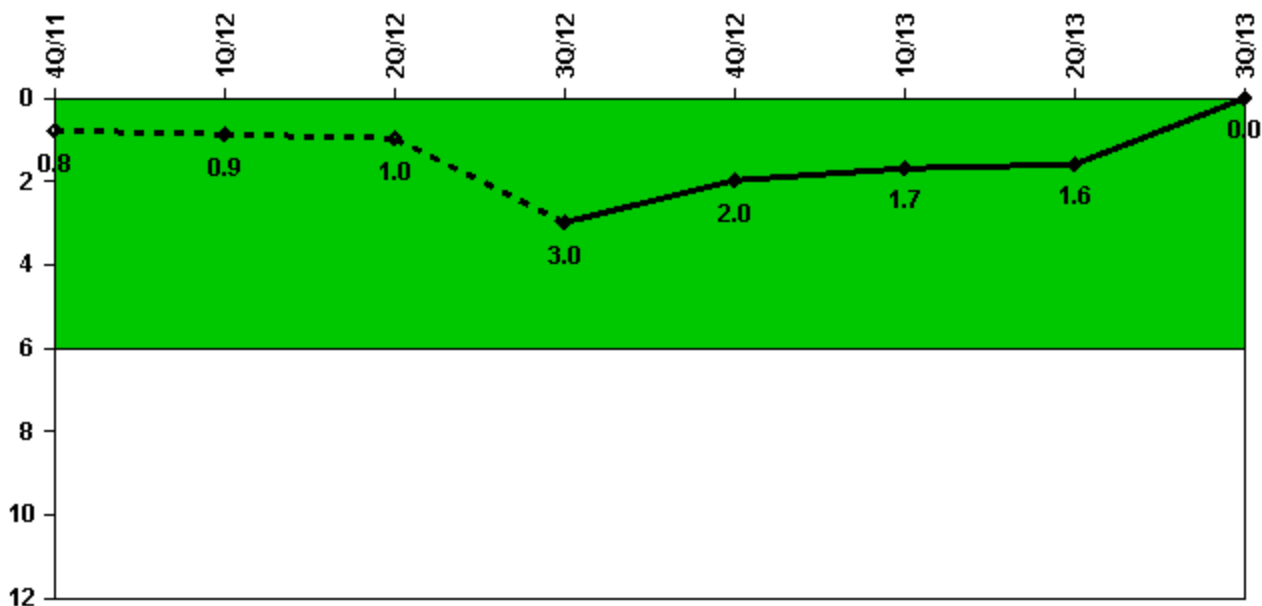
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2209.0	849.7	1997.4	2038.3	2116.5	2159.0	2184.0	2208.0
<b>Indicator value</b>	<b>0.8</b>	<b>0.9</b>	<b>1.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

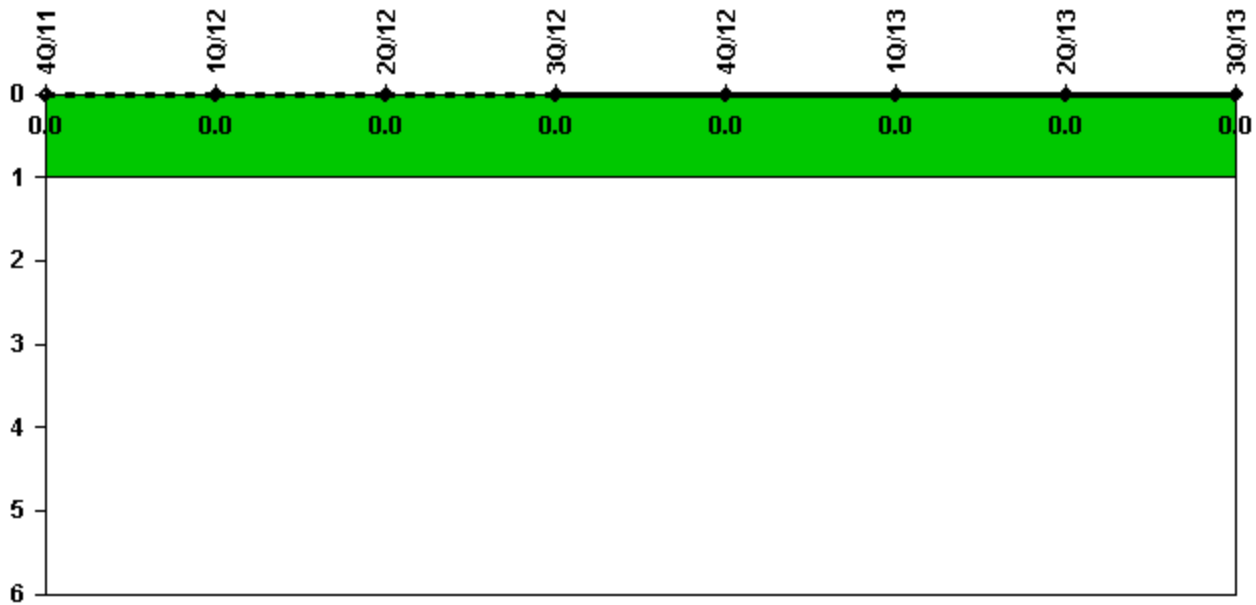
#### Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
Unplanned power changes	1.0	0	0	2.0	0	0	0	0
Critical hours	2209.0	849.7	1997.4	2038.3	2116.5	2159.0	2184.0	2208.0
<b>Indicator value</b>	<b>0.8</b>	<b>0.9</b>	<b>1.0</b>	<b>3.0</b>	<b>2.0</b>	<b>1.7</b>	<b>1.6</b>	<b>0</b>

#### Licensee Comments:

4Q/11: Power change occurrence selected during data entry in 11-2011 should have been "unplanned, NOT excluded per NEI 99-02" vs. incorrect selection "unplanned, excluded per NEI 99-02". Error discovered in October 2012 and corrected, CR-2012-009097 written. No thresholds or color changes were crossed as a result of including these power changes.

### Unplanned Scrams with Complications



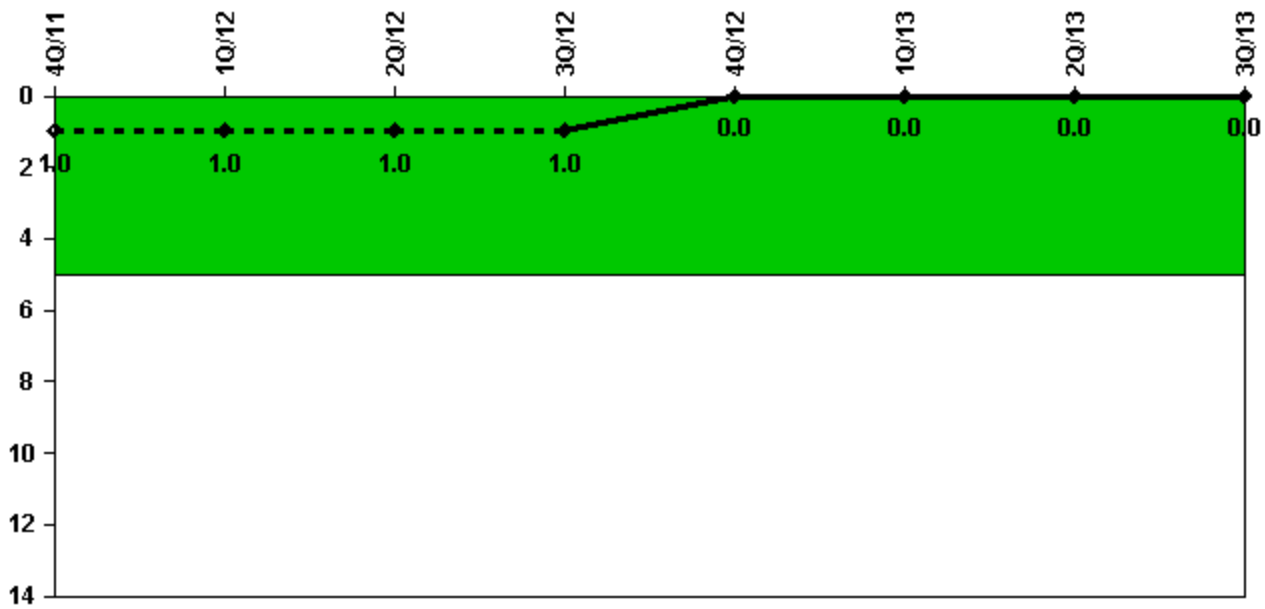
Thresholds: White > 1.0

#### Notes

Unplanned Scrams with Complications	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
Scrams with complications	0	0	0	0	0	0	0	0
<b>Indicator value</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Licensee Comments: none

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

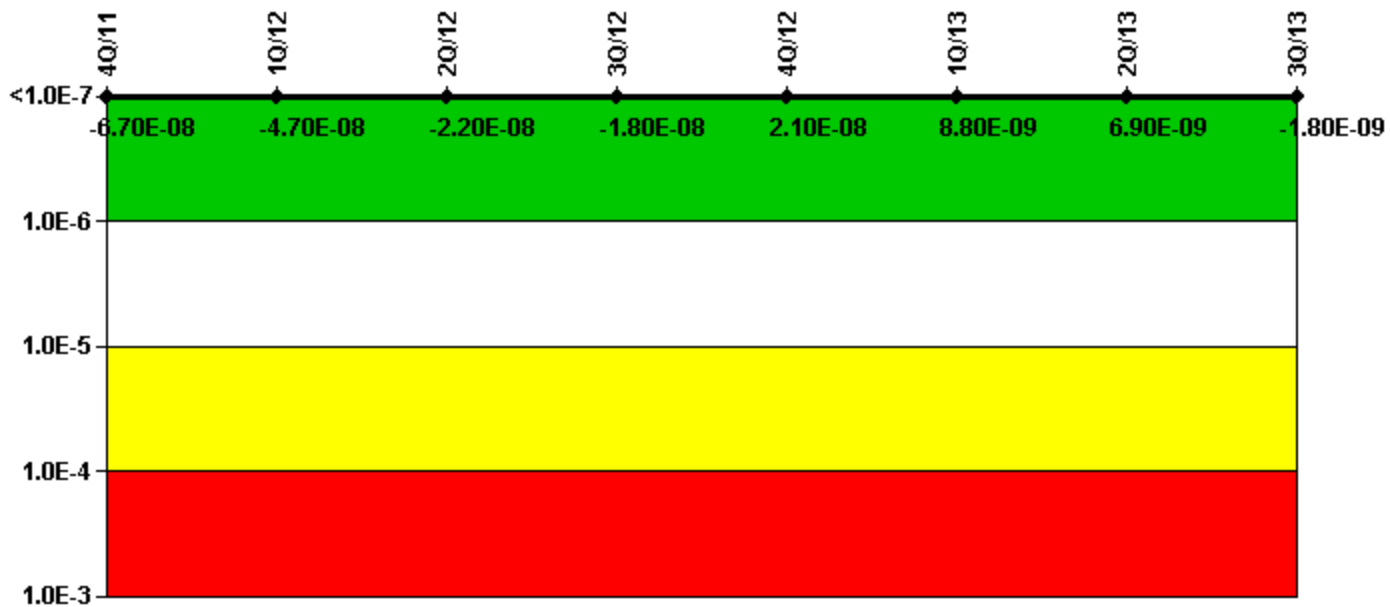
#### Notes

Safety System Functional Failures (PWR)	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
Safety System Functional Failures	1	0	0	0	0	0	0	0
<b>Indicator value</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments:

4Q/11: LER 2011-003-00

### Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

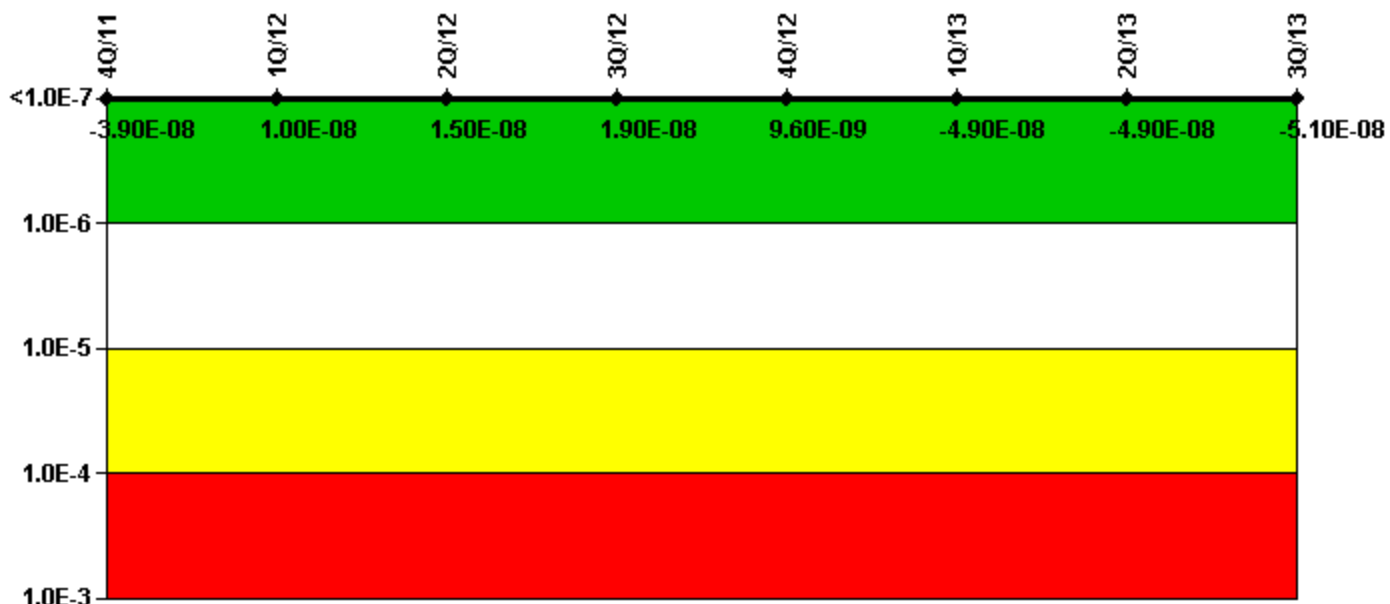
Mitigating Systems Performance Index, Emergency AC Power System	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
UAI ( $\Delta$ CDF)	-3.02E-08	-1.02E-08	1.33E-08	1.60E-08	4.91E-08	3.64E-08	2.50E-08	1.43E-08
URI ( $\Delta$ CDF)	-3.63E-08	-3.67E-08	-3.53E-08	-3.37E-08	-2.81E-08	-2.76E-08	-1.81E-08	-1.60E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-6.70E-08	-4.70E-08	-2.20E-08	-1.80E-08	2.10E-08	8.80E-09	6.90E-09	-1.80E-09

#### Licensee Comments:

1Q/12: 7-12-12: Hours revised for 7-2010 Unavailable hrs for 1A EDG due to error noted during data review. No color or threshold changes result from correction.

1Q/12: 7-12-12: Hours revised for 7-2010 Unavailable hrs for 1A EDG due to error noted during data review. No color or threshold changes result from correction.

### Mitigating Systems Performance Index, High Pressure Injection System



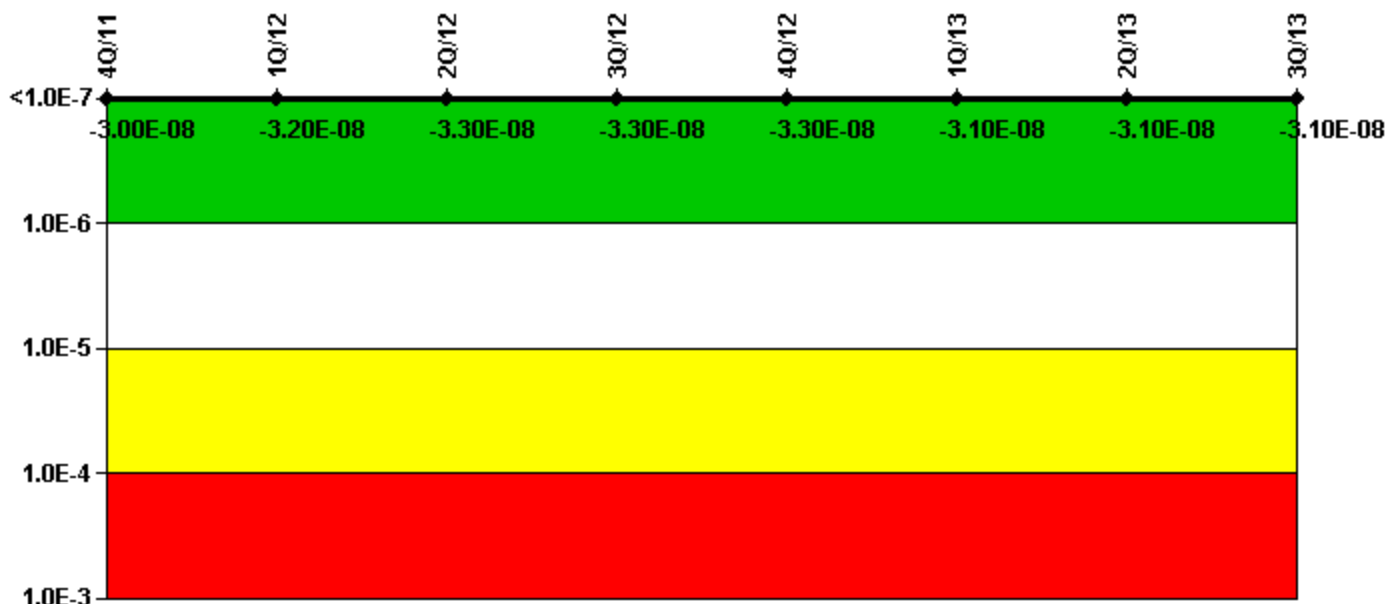
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, High Pressure Injection System	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
UAI ( $\Delta$ CDF)	-4.45E-09	4.91E-08	5.22E-08	5.68E-08	4.61E-08	-1.74E-08	-1.85E-08	-2.16E-08
URI ( $\Delta$ CDF)	-3.42E-08	-3.86E-08	-3.73E-08	-3.73E-08	-3.65E-08	-3.14E-08	-3.05E-08	-2.95E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.90E-08	1.00E-08	1.50E-08	1.90E-08	9.60E-09	-4.90E-08	-4.90E-08	-5.10E-08

Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



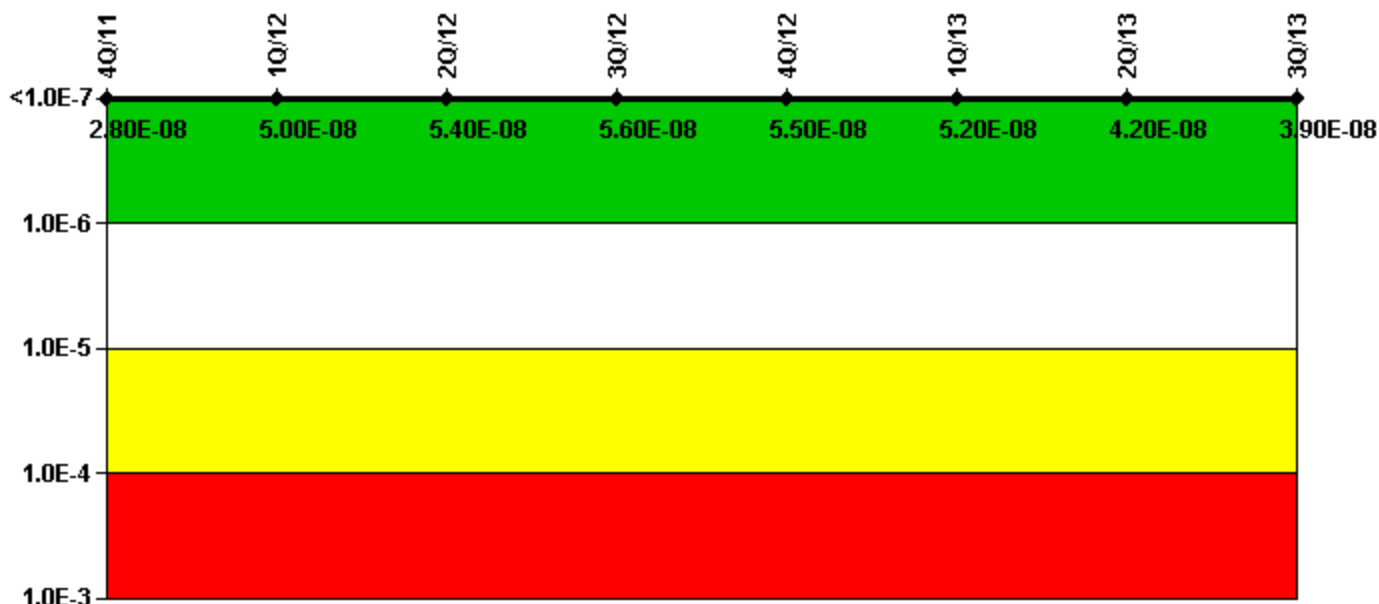
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Heat Removal System	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
UAI ( $\Delta$ CDF)	-7.61E-09	-7.59E-09	-7.59E-09	-7.58E-09	-7.99E-09	-7.99E-09	-7.99E-09	-7.80E-09
URI ( $\Delta$ CDF)	-2.22E-08	-2.46E-08	-2.58E-08	-2.58E-08	-2.54E-08	-2.33E-08	-2.33E-08	-2.33E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.00E-08	-3.20E-08	-3.30E-08	-3.30E-08	-3.30E-08	-3.10E-08	-3.10E-08	-3.10E-08

Licensee Comments: none

### Mitigating Systems Performance Index, Residual Heat Removal System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

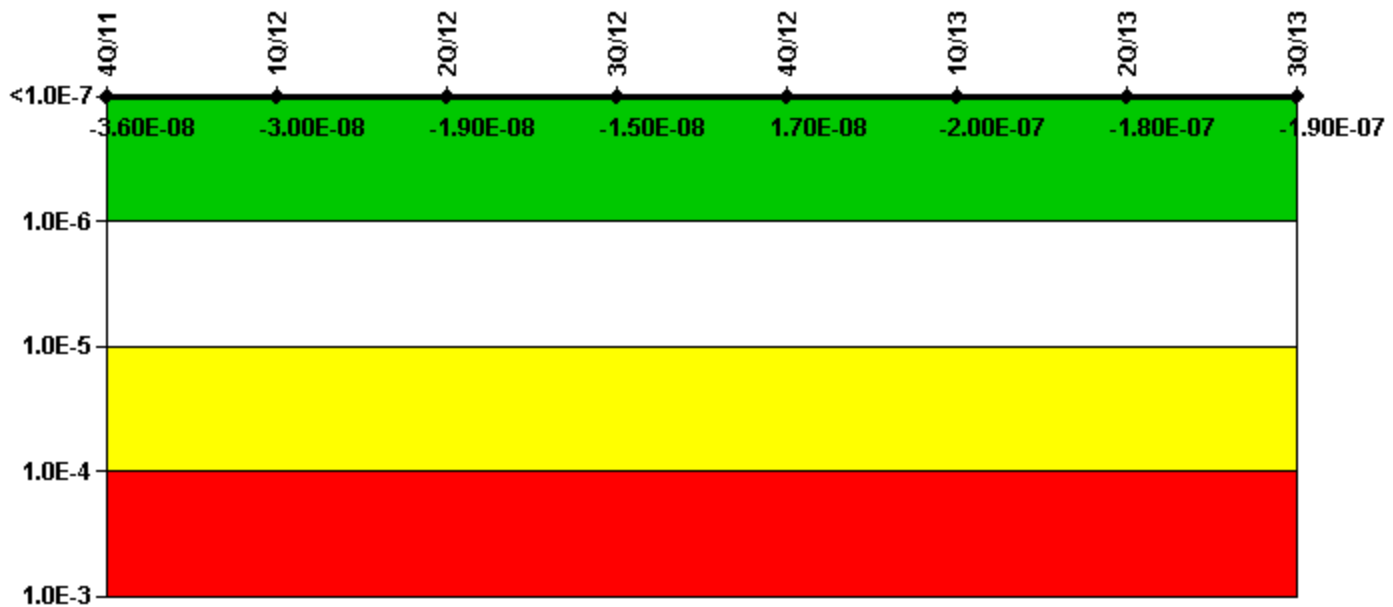
#### Notes

Mitigating Systems Performance Index, Residual Heat Removal System	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
UAI ( $\Delta$ CDF)	3.23E-08	5.50E-08	5.98E-08	6.17E-08	6.06E-08	5.68E-08	4.63E-08	4.36E-08
URI ( $\Delta$ CDF)	-4.15E-09	-5.25E-09	-5.59E-09	-5.59E-09	-5.67E-09	-4.89E-09	-4.78E-09	-4.85E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.80E-08	5.00E-08	5.40E-08	5.60E-08	5.50E-08	5.20E-08	4.20E-08	3.90E-08

Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

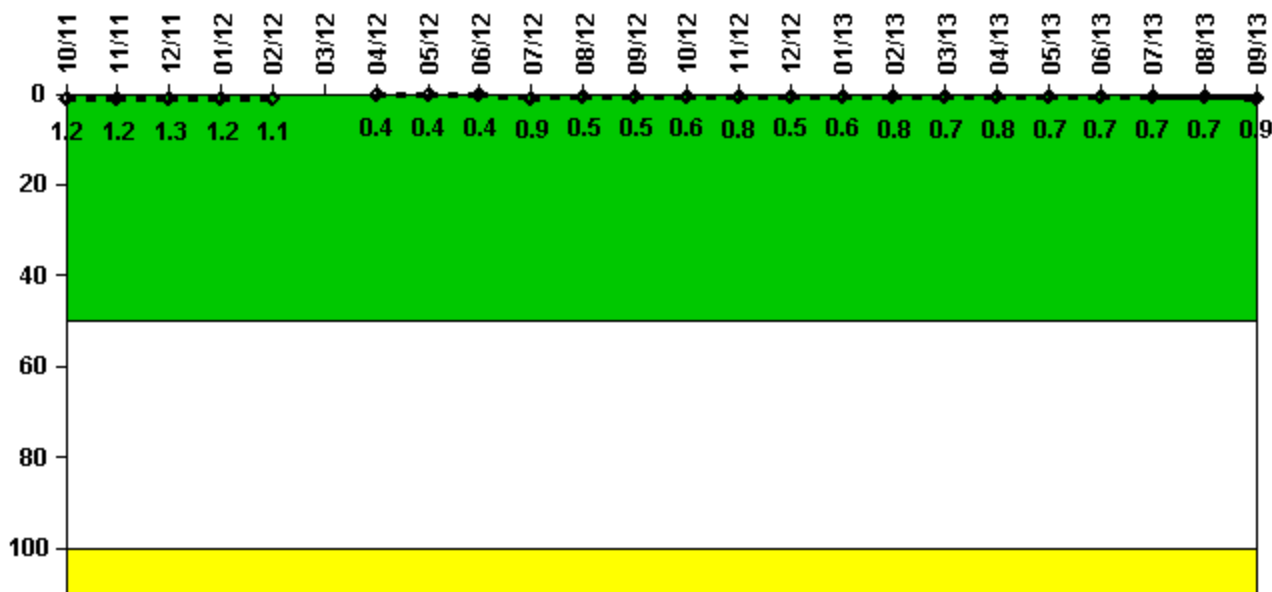
#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
UAI ( $\Delta$ CDF)	1.91E-07	1.98E-07	2.09E-07	2.13E-07	2.44E-07	2.77E-08	4.31E-08	4.12E-08
URI ( $\Delta$ CDF)	-2.27E-07	-2.27E-07	-2.27E-07	-2.27E-07	-2.27E-07	-2.27E-07	-2.27E-07	-2.27E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.60E-08	-3.00E-08	-1.90E-08	-1.50E-08	1.70E-08	-2.00E-07	-1.80E-07	-1.90E-07

Licensee Comments:

4Q/11: Two CWS2 AOVs added due to current inability to validate their exclusion during the original MSPI scoping. CR-2011-008863

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Activity	10/11	11/11	12/11	1/12	2/12	3/12	4/12	5/12	6/12	7/12	8/12	9/12
Maximum activity	0.005870	0.005920	0.006670	0.006150	0.005650	N/A	0.002070	0.002160	0.002220	0.004310	0.002680	0.002720
Technical specification limit	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Indicator value	1.2	1.2	1.3	1.2	1.1	N/A	0.4	0.4	0.4	0.9	0.5	0.5

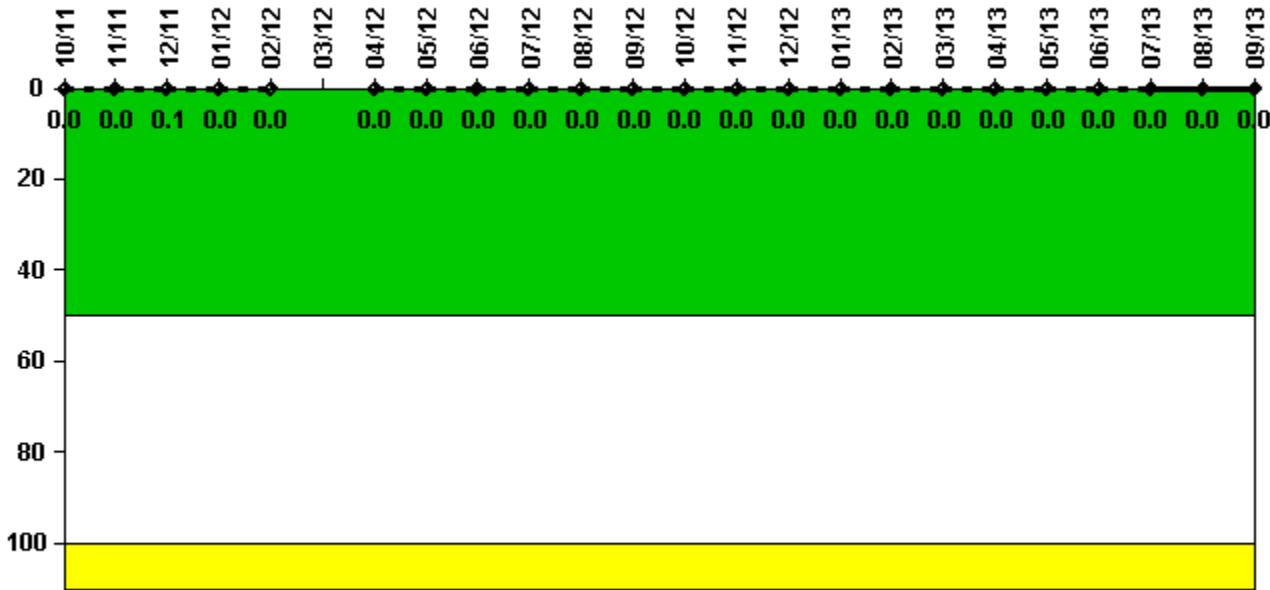
  

Reactor Coolant System Activity	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13	7/13	8/13	9/13
Maximum activity	0.003180	0.003870	0.002730	0.002950	0.003950	0.003280	0.004070	0.003300	0.003470	0.003550	0.003590	0.004260
Technical specification limit	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Indicator value	0.6	0.8	0.5	0.6	0.8	0.7	0.8	0.7	0.7	0.7	0.7	0.9

#### Licensee Comments:

3/12: Per NEI 99-02 "If in the entire month, plant conditions do not require RCS activity to be calculated, the data field is left blank for that month." Calvert Cliffs Unit 1 was in a refueling outage and shutdown for the entire month of March, 2012.

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

**Notes**

Reactor Coolant System Leakage	10/11	11/11	12/11	1/12	2/12	3/12	4/12	5/12	6/12	7/12	8/12	9/12
Maximum leakage	0	0	0.010	0	0	N/A	0	0	0	0	0	0
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0.1</b>	<b>0</b>	<b>0</b>	<b>N/A</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Reactor Coolant System Leakage	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13	7/13	8/13	9/13
Maximum leakage	0	0	0	0	0	0	0	0	0	0	0	0
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments:

6/12: CR-2012-009203. There was conflicting direction in station procedure vs. NEI and TS definitions for RCS Leakage. The corrected method to determine leakage relies exclusively on the NEI TS. 01/04/2013.

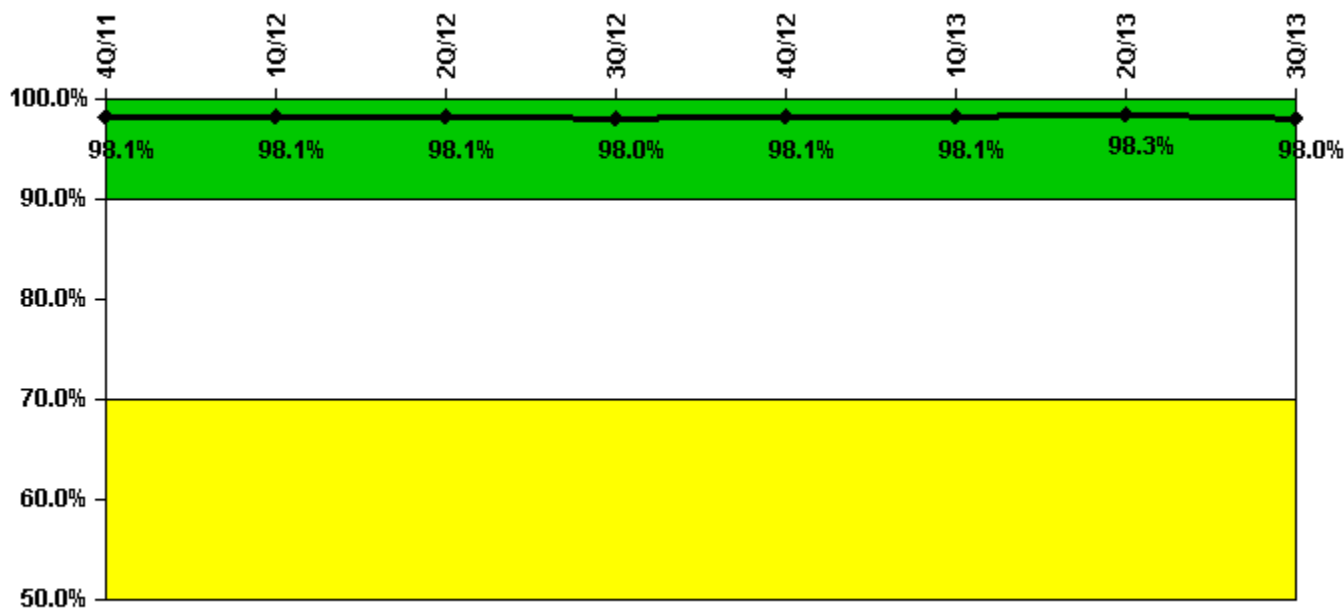
6/12: CR-2012-009203. There was conflicting direction in station procedure vs. NEI and TS definitions for RCS Leakage. The corrected method to determine leakage relies exclusively on the NEI TS. 01/04/2013.

3/12: Per NEI 99-02 "If in the entire month, plant conditions do not require RCS activity to be calculated, the data field is left blank for that month." Calvert Cliffs Unit 1 was in a refueling outage and shutdown for the entire

month of March, 2012. Entry 2 for Jan/Feb 2012: CR-2012-009203. There was conflicting direction in station procedure vs. NEI and TS definitions for RCS Leakage. The corrected method to determine leakage relies exclusively on the NEI TS. 01/04/2013.

12/11: CR-2012-009203. There was conflicting direction in station procedure vs. NEI and TS definitions for RCS Leakage. The corrected method to determine leakage relies exclusively on the NEI TS. 01/04/2013.

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

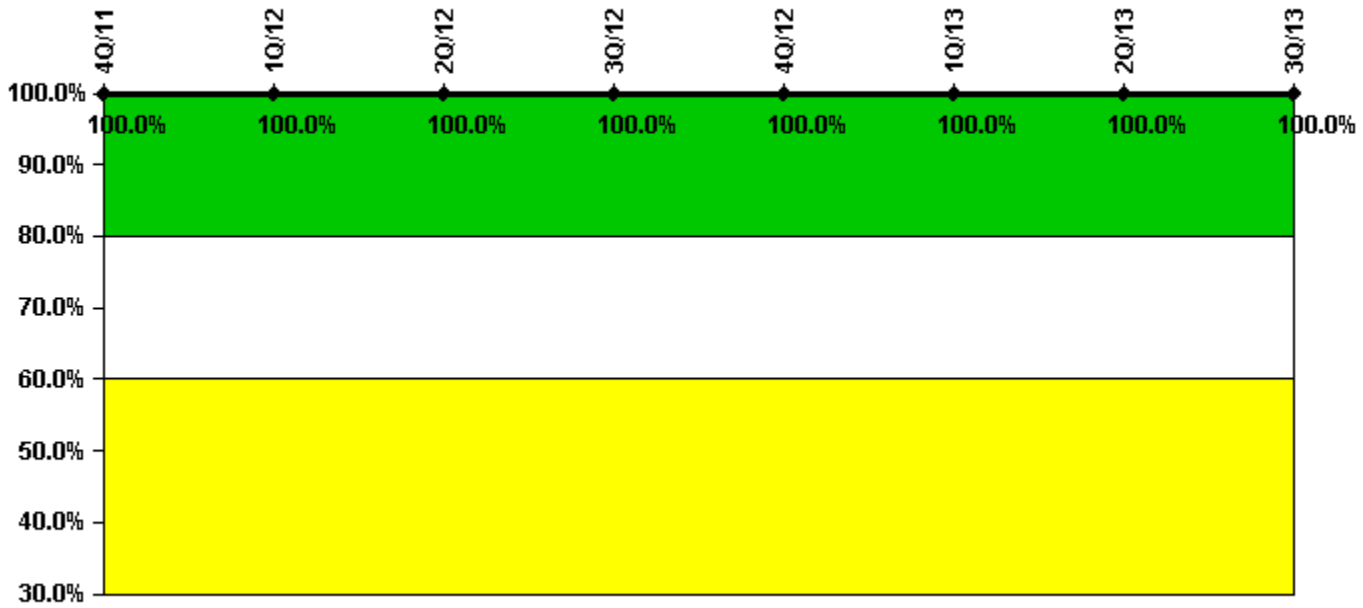
### Notes

Drill/Exercise Performance	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
Successful opportunities	55.0	5.0	25.0	12.0	67.0	2.0	32.0	53.0
Total opportunities	57.0	5.0	25.0	13.0	68.0	2.0	32.0	54.0
Indicator value	98.1%	98.1%	98.1%	98.0%	98.1%	98.1%	98.3%	98.0%

### Licensee Comments:

4Q/11: CR-2012-007357: While reviewing the 10/04/2011 crew competency work sheet and initial notification form, EP found setps A.4 and A.7 were incorrect. EP removed the notification performance success from the statistics and corrected the 4Q2011 data record.

### ERO Drill Participation



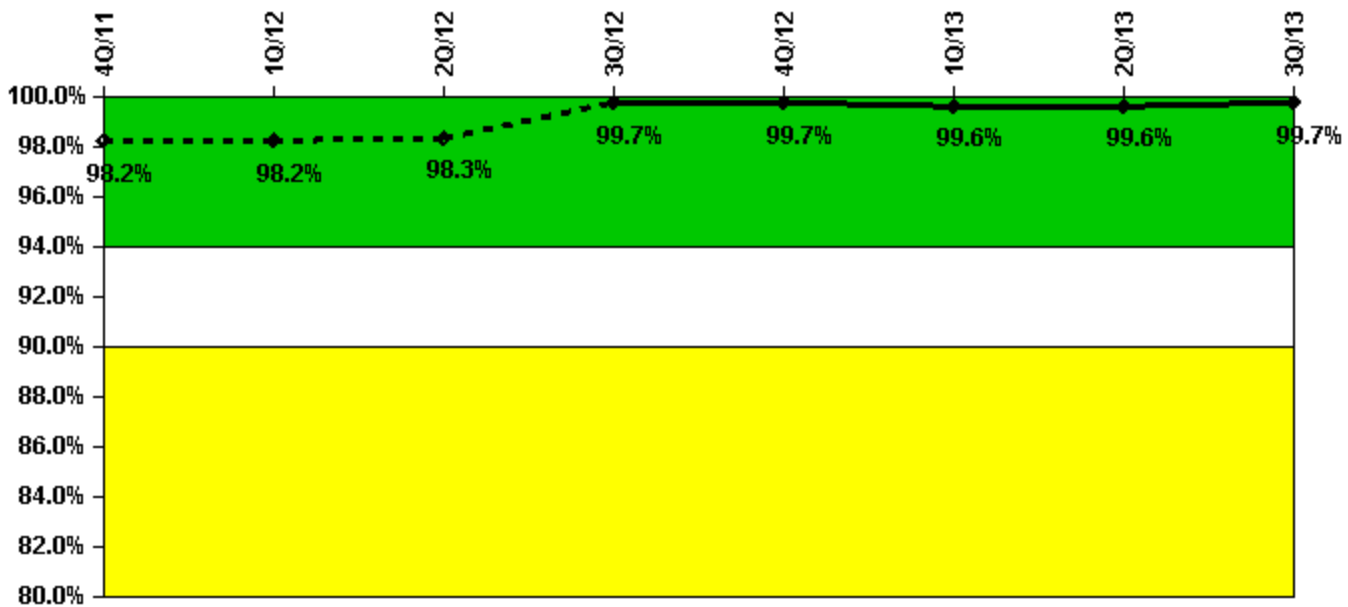
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
Participating Key personnel	84.0	86.0	80.0	83.0	84.0	79.0	79.0	80.0
Total Key personnel	84.0	86.0	80.0	83.0	84.0	79.0	79.0	80.0
<b>Indicator value</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Licensee Comments: none

### Alert & Notification System



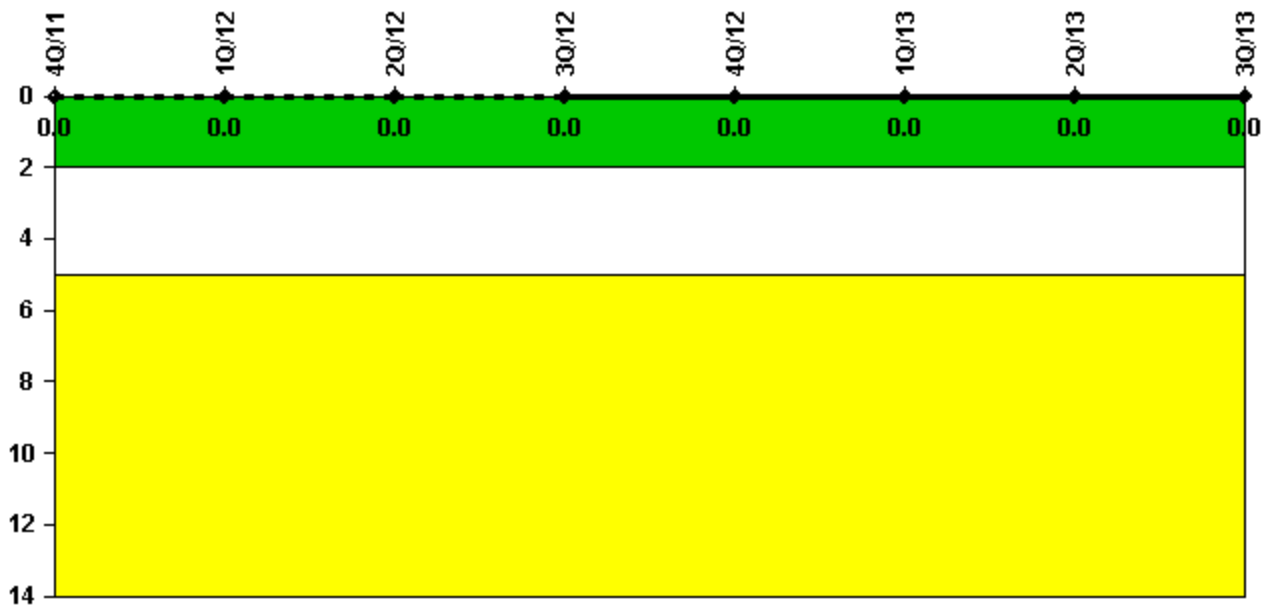
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
Successful siren-tests	946	947	948	945	1016	871	948	971
Total sirens-tests	949	949	949	949	1022	876	949	972
Indicator value	98.2%	98.2%	98.3%	99.7%	99.7%	99.6%	99.6%	99.7%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
High radiation area occurrences	0	0	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

### RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

#### Notes

RETS/ODCM Radiological Effluent	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.



 [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

*Last Modified: October 22, 2013*