

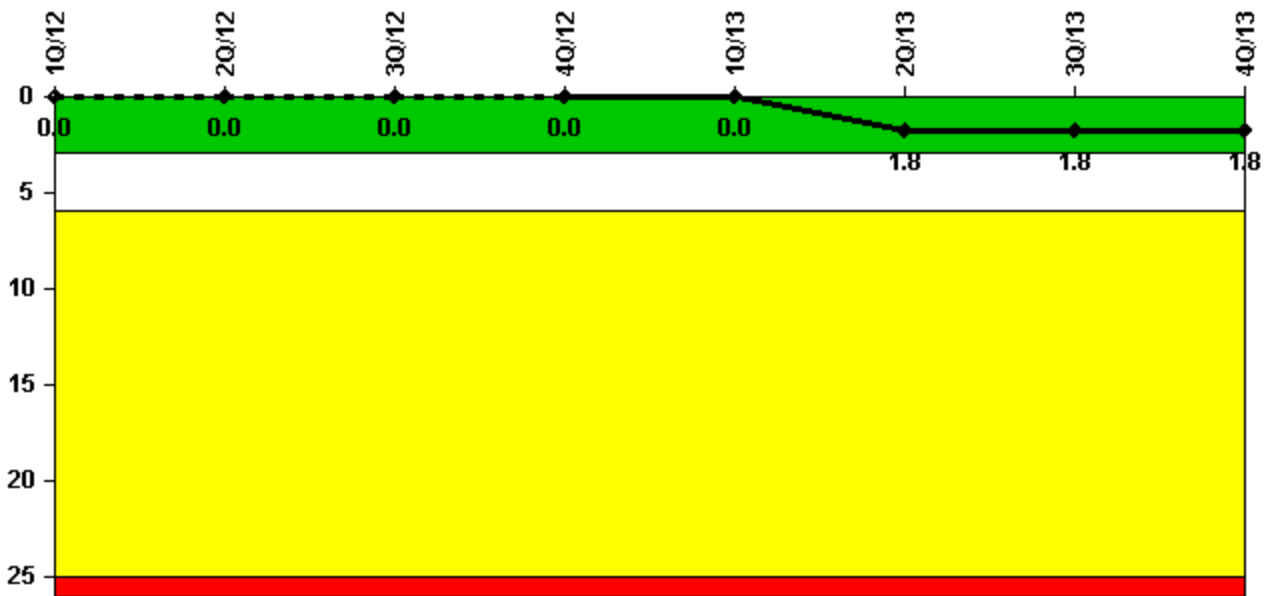
## Calvert Cliffs 2

### 4Q/2013 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

#### Unplanned Scrams per 7000 Critical Hrs



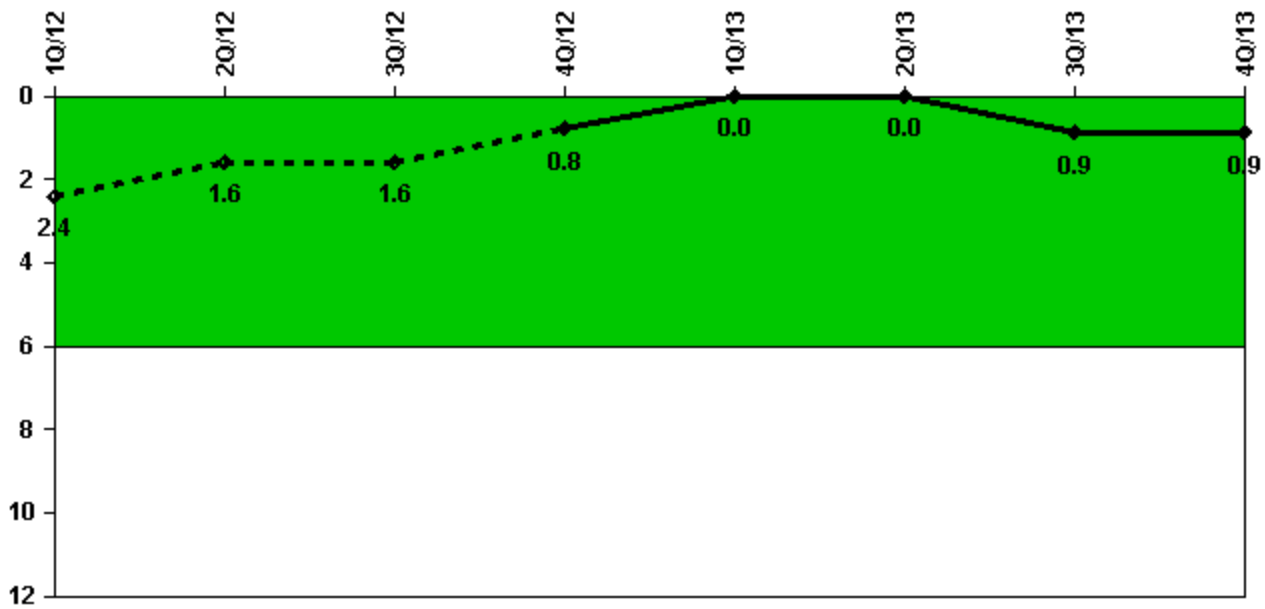
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

#### Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
Unplanned scrams	0	0	0	0	0	2.0	0	0
Critical hours	2183.0	2184.0	2208.0	2209.0	1323.2	2076.8	2104.1	2209.0
Indicator value	0	0	0	0	0	1.8	1.8	1.8

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



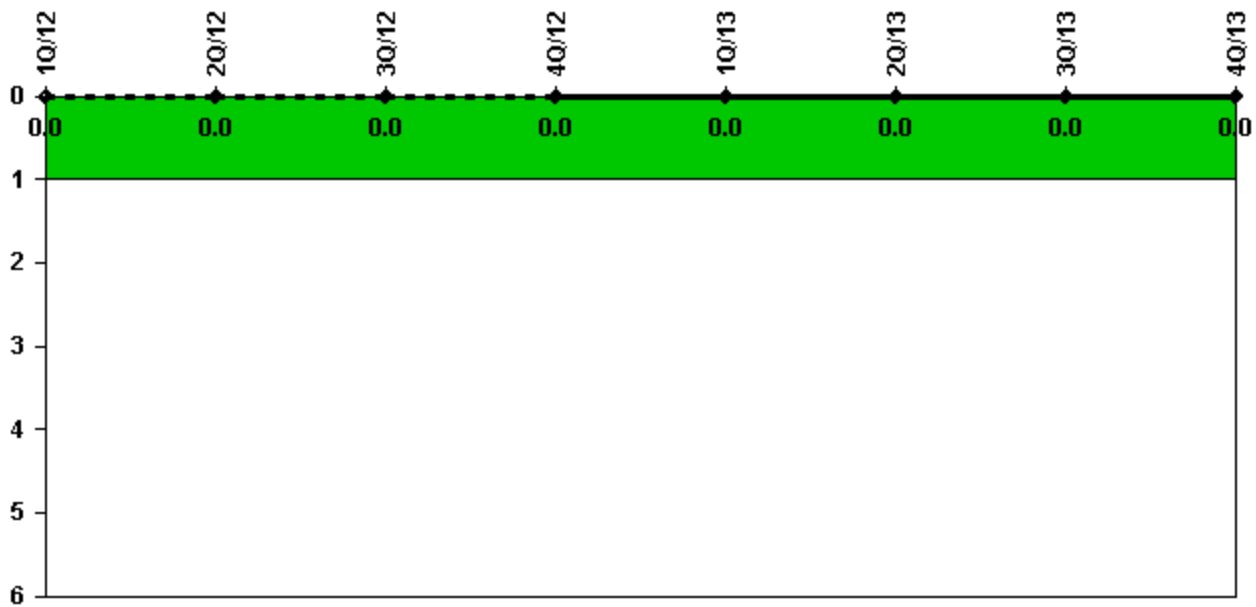
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
Unplanned power changes	1.0	0	0	0	0	0	1.0	0
Critical hours	2183.0	2184.0	2208.0	2209.0	1323.2	2076.8	2104.1	2209.0
<b>Indicator value</b>	<b>2.4</b>	<b>1.6</b>	<b>1.6</b>	<b>0.8</b>	<b>0</b>	<b>0</b>	<b>0.9</b>	<b>0.9</b>

Licensee Comments: none

### Unplanned Scrams with Complications



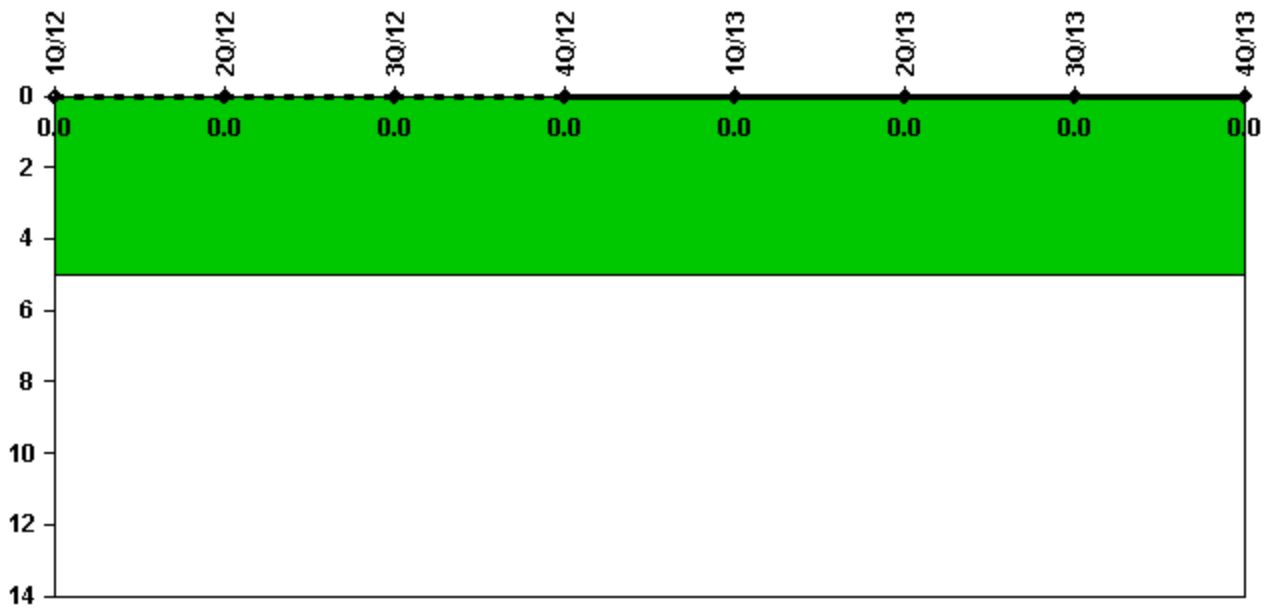
Thresholds: White > 1.0

#### Notes

Unplanned Scrams with Complications	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/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)



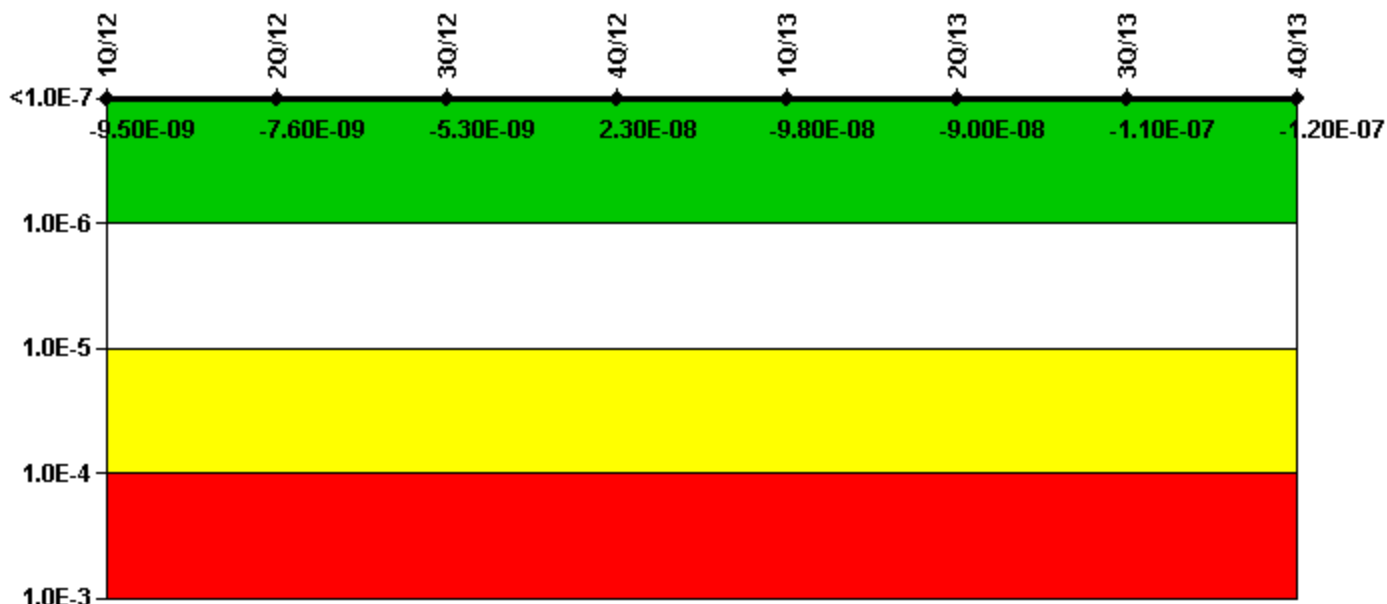
Thresholds: White > 5.0

#### Notes

Safety System Functional Failures (PWR)	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
Safety System Functional Failures	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

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



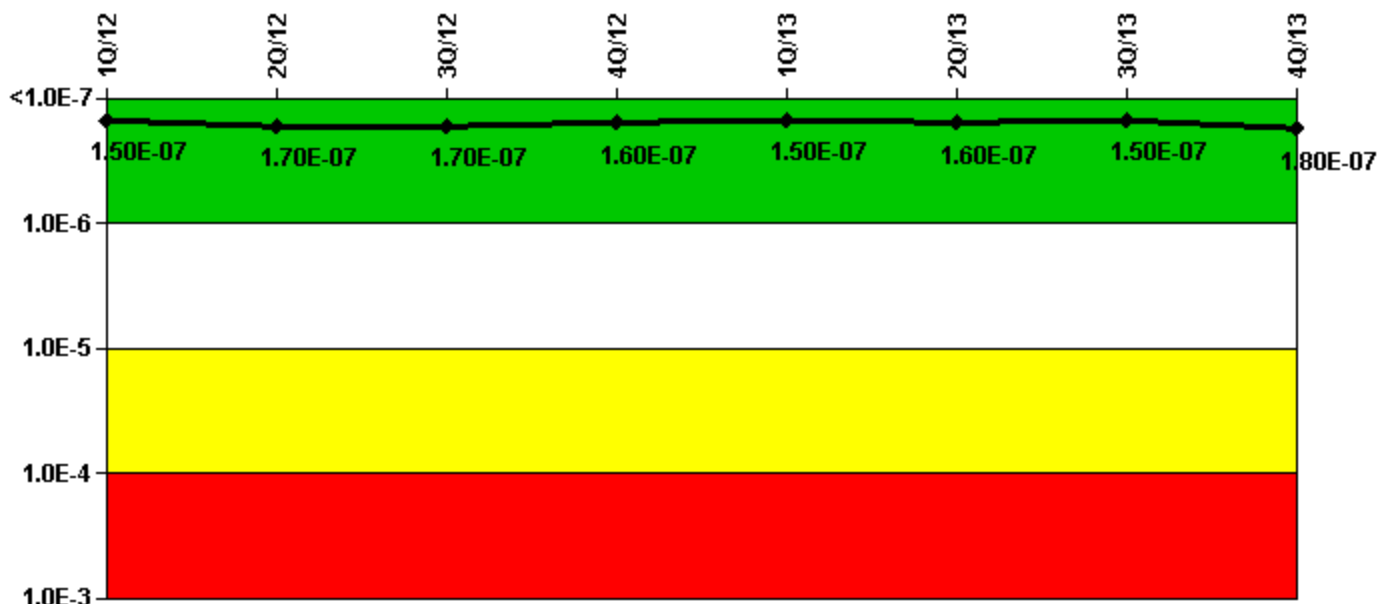
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
UAI ( $\Delta$ CDF)	6.53E-08	6.53E-08	6.38E-08	8.52E-08	3.93E-08	4.49E-08	3.19E-08	1.31E-08
URI ( $\Delta$ CDF)	-7.48E-08	-7.29E-08	-6.91E-08	-6.22E-08	-1.38E-07	-1.35E-07	-1.39E-07	-1.35E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.50E-09	-7.60E-09	-5.30E-09	2.30E-08	-9.80E-08	-9.00E-08	-1.10E-07	-1.20E-07

Licensee Comments: none

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



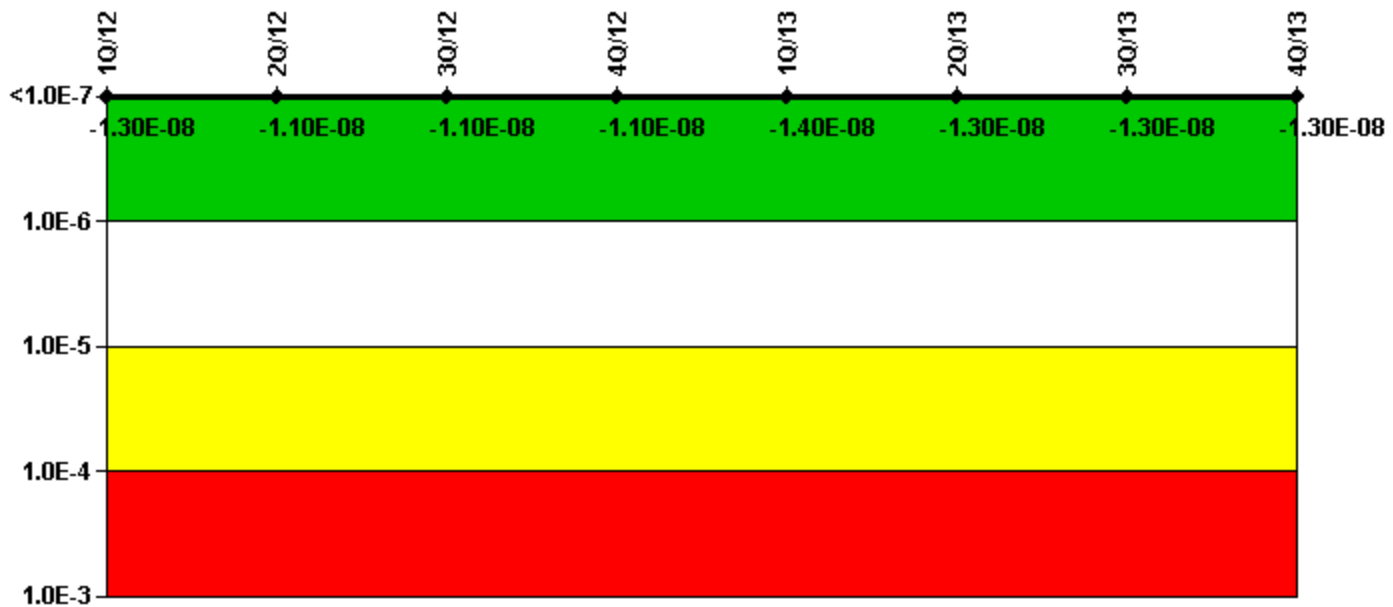
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
UAI ( $\Delta$ CDF)	4.27E-08	5.53E-08	6.19E-08	4.62E-08	5.50E-08	6.62E-08	6.30E-08	9.11E-08
URI ( $\Delta$ CDF)	1.09E-07	1.11E-07	1.12E-07	1.09E-07	9.58E-08	9.47E-08	9.20E-08	8.87E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.50E-07	1.70E-07	1.70E-07	1.60E-07	1.50E-07	1.60E-07	1.50E-07	1.80E-07

Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



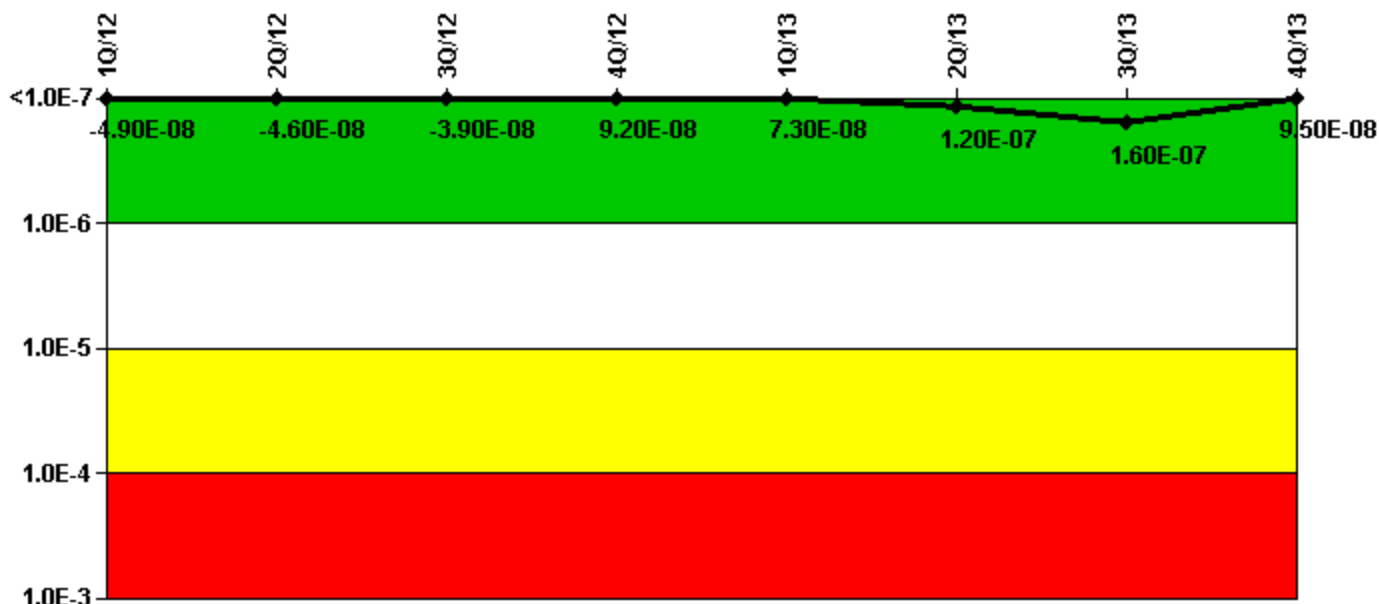
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
UAI ( $\Delta$ CDF)	-2.46E-09	-8.59E-10	-8.25E-10	-7.43E-10	-2.88E-09	-2.44E-09	-3.08E-09	-2.04E-09
URI ( $\Delta$ CDF)	-1.06E-08	-1.03E-08	-1.02E-08	-1.02E-08	-1.06E-08	-1.06E-08	-1.04E-08	-1.08E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-08	-1.10E-08	-1.10E-08	-1.10E-08	-1.40E-08	-1.30E-08	-1.30E-08	-1.30E-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

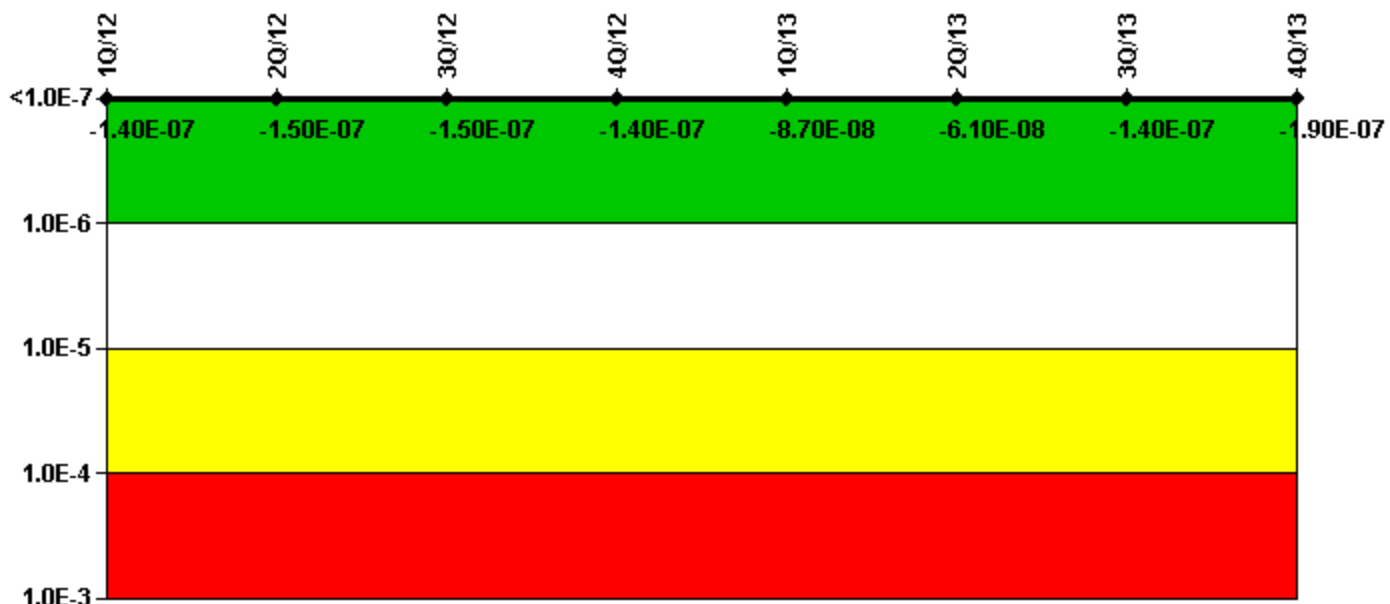
#### Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
UAI ( $\Delta$ CDF)	-4.43E-08	-4.10E-08	-3.45E-08	9.07E-08	7.29E-08	1.19E-07	1.58E-07	9.51E-08
URI ( $\Delta$ CDF)	-4.61E-09	-4.62E-09	-4.47E-09	1.39E-09	-1.28E-10	-1.54E-10	-3.66E-10	-1.79E-10
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.90E-08	-4.60E-08	-3.90E-08	9.20E-08	7.30E-08	1.20E-07	1.60E-07	9.50E-08

Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



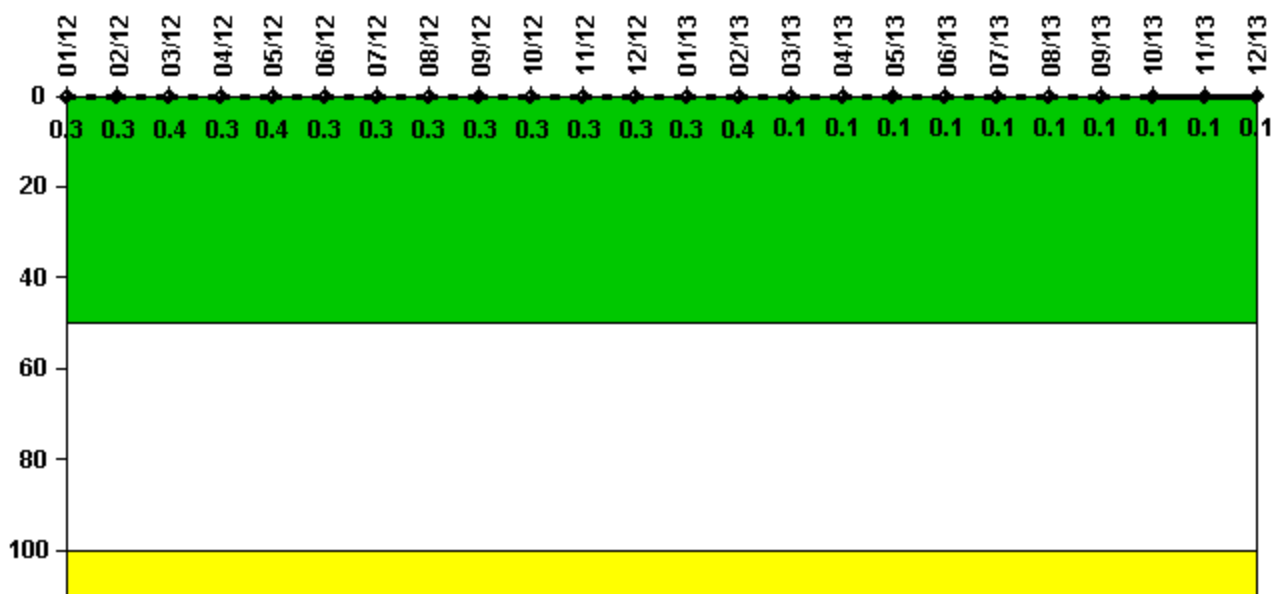
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
UAI ( $\Delta$ CDF)	9.35E-08	8.44E-08	9.11E-08	9.61E-08	1.51E-07	1.77E-07	9.51E-08	5.06E-08
URI ( $\Delta$ CDF)	-2.38E-07	-2.38E-07	-2.38E-07	-2.38E-07	-2.38E-07	-2.38E-07	-2.38E-07	-2.38E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.40E-07	-1.50E-07	-1.50E-07	-1.40E-07	-8.70E-08	-6.10E-08	-1.40E-07	-1.90E-07

Licensee Comments: none

### Reactor Coolant System Activity



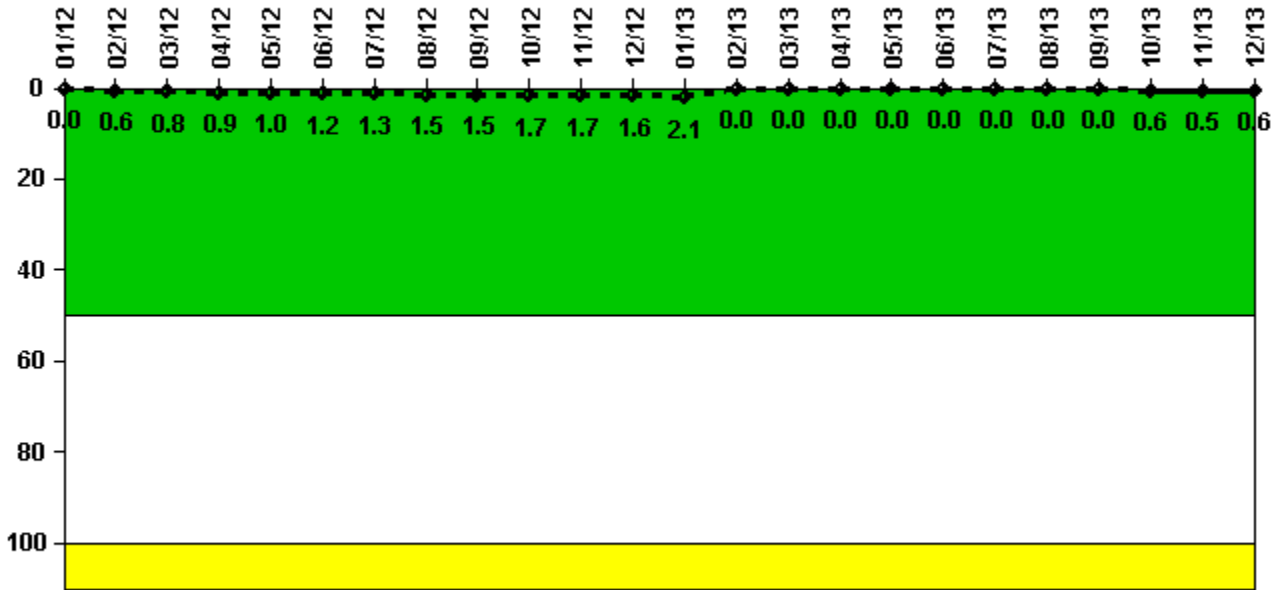
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Activity	1/12	2/12	3/12	4/12	5/12	6/12	7/12	8/12	9/12	10/12	11/12	12/12
Maximum activity	0.001270	0.001420	0.001770	0.001310	0.001780	0.001430	0.001370	0.001400	0.001460	0.001550	0.001540	0.001590
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	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Reactor Coolant System Activity	1/13	2/13	3/13	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13
Maximum activity	0.001660	0.001760	0.000316	0.000536	0.000257	0.000617	0.000583	0.000645	0.000693	0.000725	0.000610	0.000586
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	0.3	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

**Notes**

Reactor Coolant System Leakage	1/12	2/12	3/12	4/12	5/12	6/12	7/12	8/12	9/12	10/12	11/12	12/12
Maximum leakage	0	0.060	0.080	0.090	0.100	0.120	0.130	0.150	0.150	0.170	0.170	0.160
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>0.6</b>	<b>0.8</b>	<b>0.9</b>	<b>1.0</b>	<b>1.2</b>	<b>1.3</b>	<b>1.5</b>	<b>1.5</b>	<b>1.7</b>	<b>1.7</b>	<b>1.6</b>

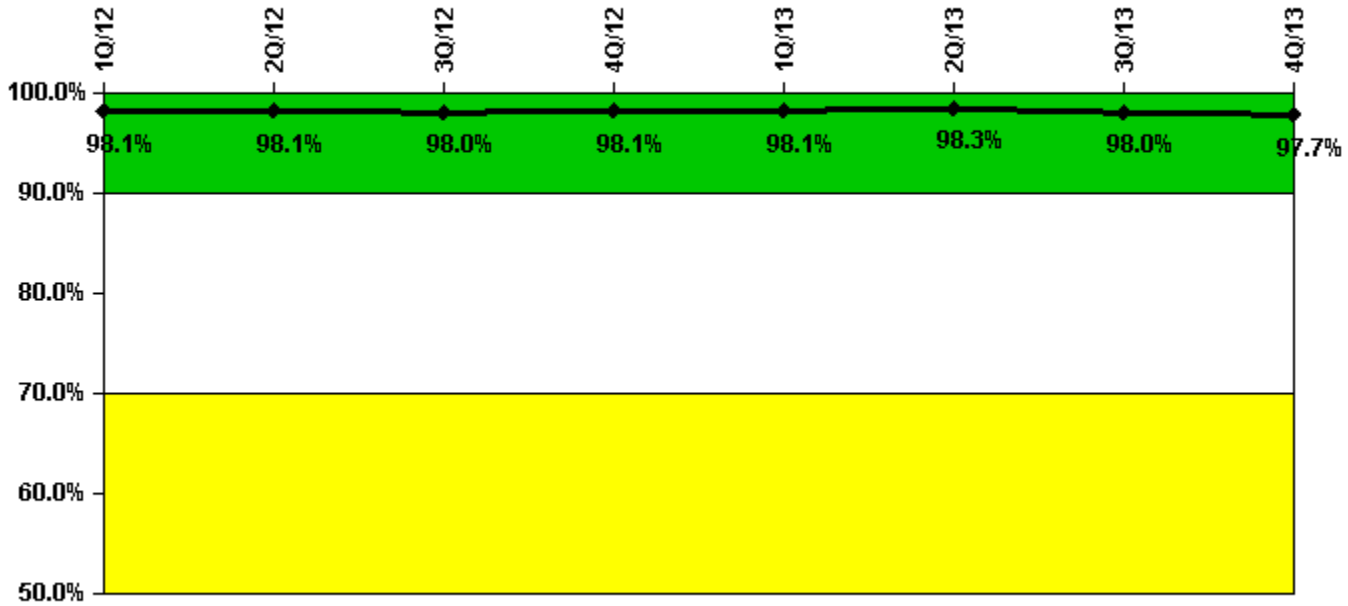
Reactor Coolant System Leakage	1/13	2/13	3/13	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13
Maximum leakage	0.210	0	0	0	0	0	0	0	0	0.060	0.050	0.060
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
<b>Indicator value</b>	<b>2.1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.6</b>	<b>0.5</b>	<b>0.6</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.

3/12: 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.

### Drill/Exercise Performance



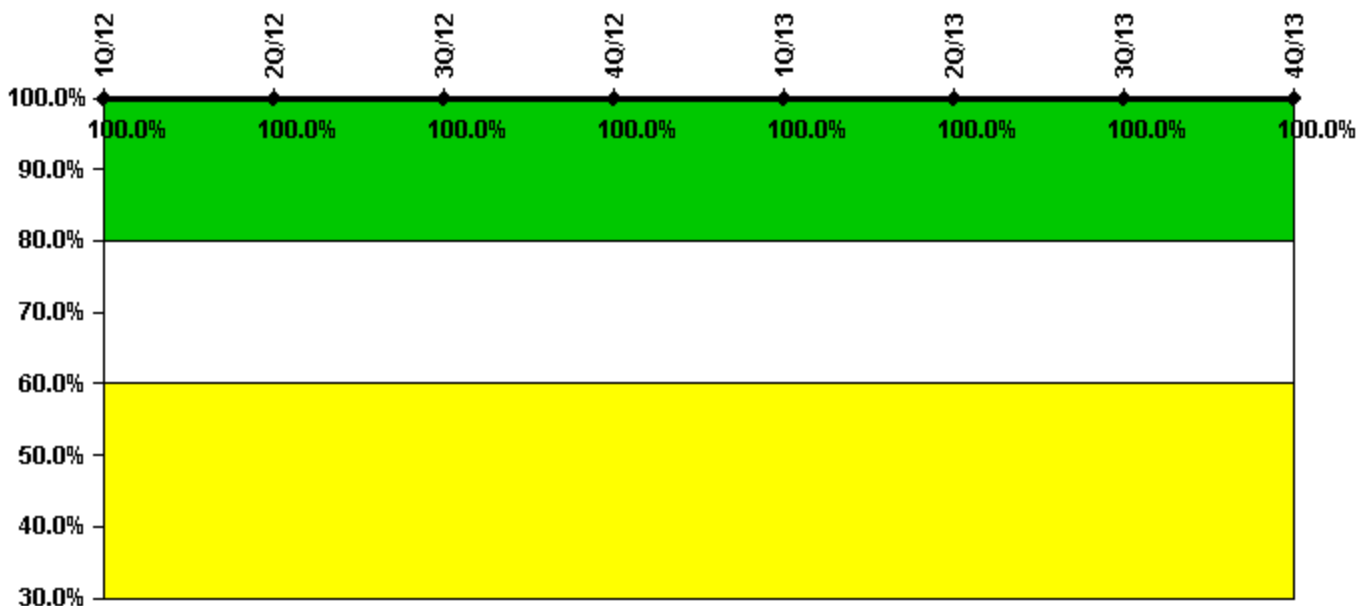
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
Successful opportunities	5.0	25.0	12.0	67.0	2.0	32.0	53.0	61.0
Total opportunities	5.0	25.0	13.0	68.0	2.0	32.0	54.0	64.0
<b>Indicator value</b>	<b>98.1%</b>	<b>98.1%</b>	<b>98.0%</b>	<b>98.1%</b>	<b>98.1%</b>	<b>98.3%</b>	<b>98.0%</b>	<b>97.7%</b>

Licensee Comments: none

### ERO Drill Participation



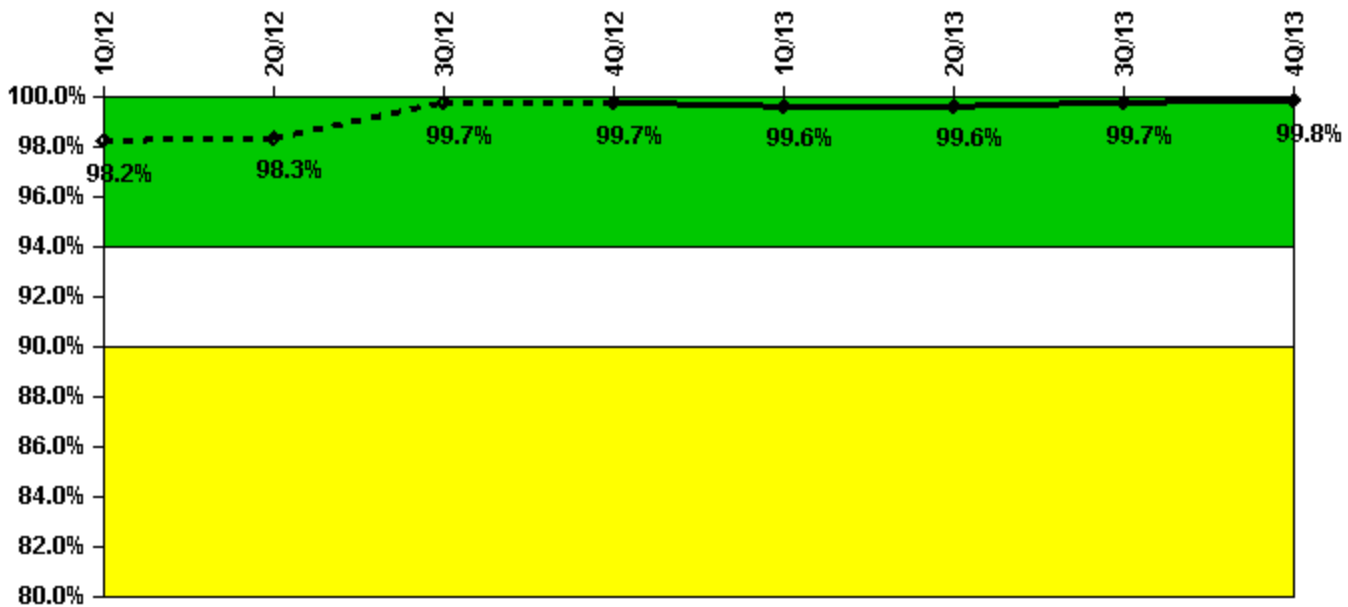
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

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

Licensee Comments: none

### Alert & Notification System



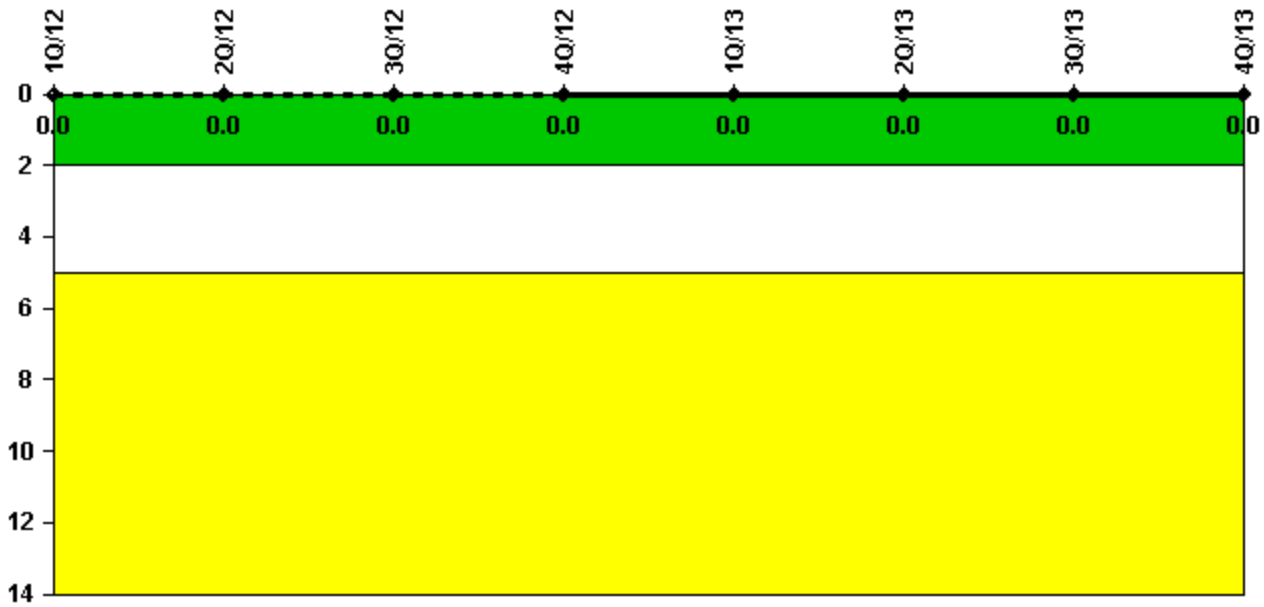
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13
Successful siren-tests	947	948	945	1016	871	948	971	947
Total sirens-tests	949	949	949	1022	876	949	972	949
Indicator value	98.2%	98.3%	99.7%	99.7%	99.6%	99.6%	99.7%	99.8%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/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	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/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: January 22, 2014*