

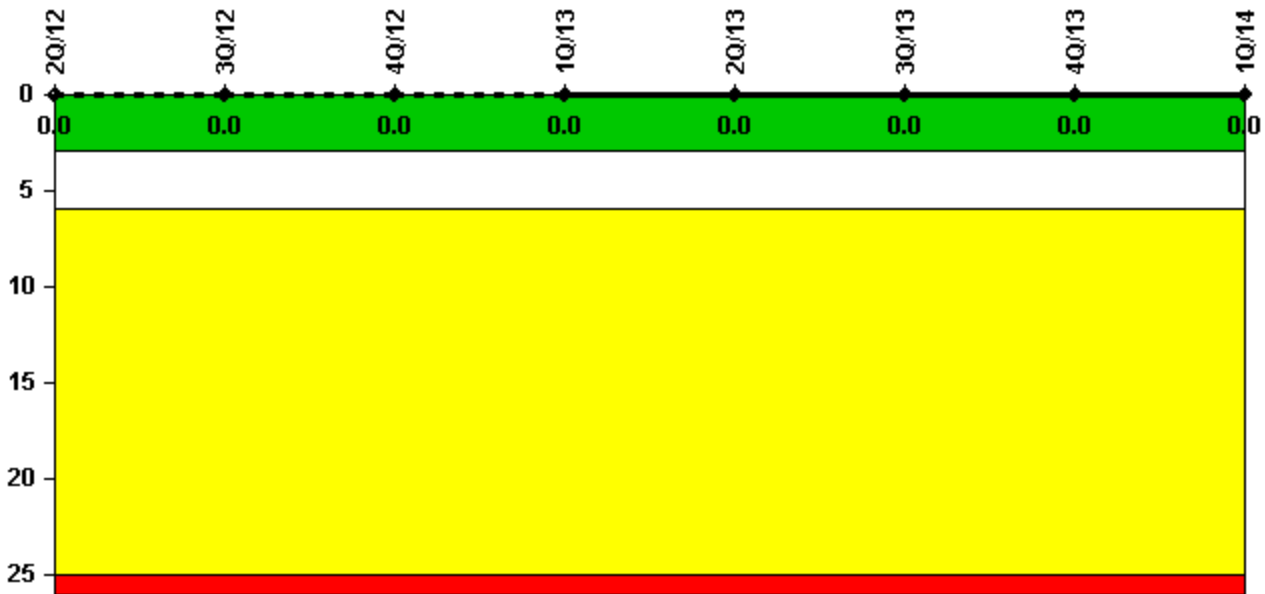
# Arkansas Nuclear 1

## 1Q/2014 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



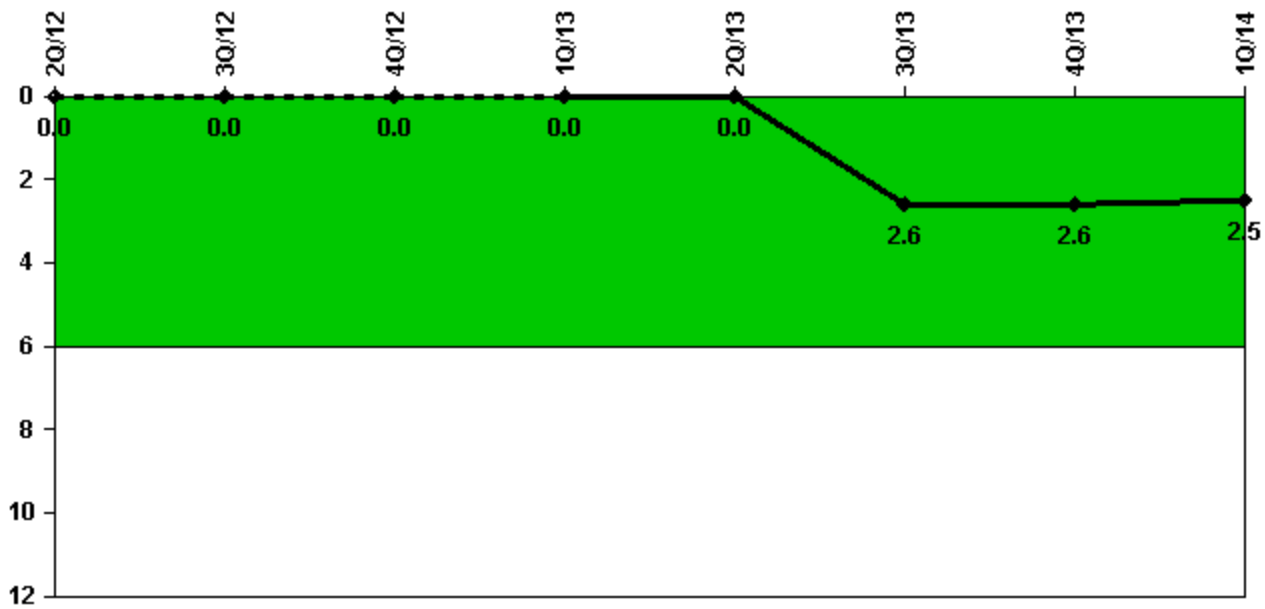
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2184.0	2208.0	2209.0	1975.0	0	1288.6	2209.0	2159.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



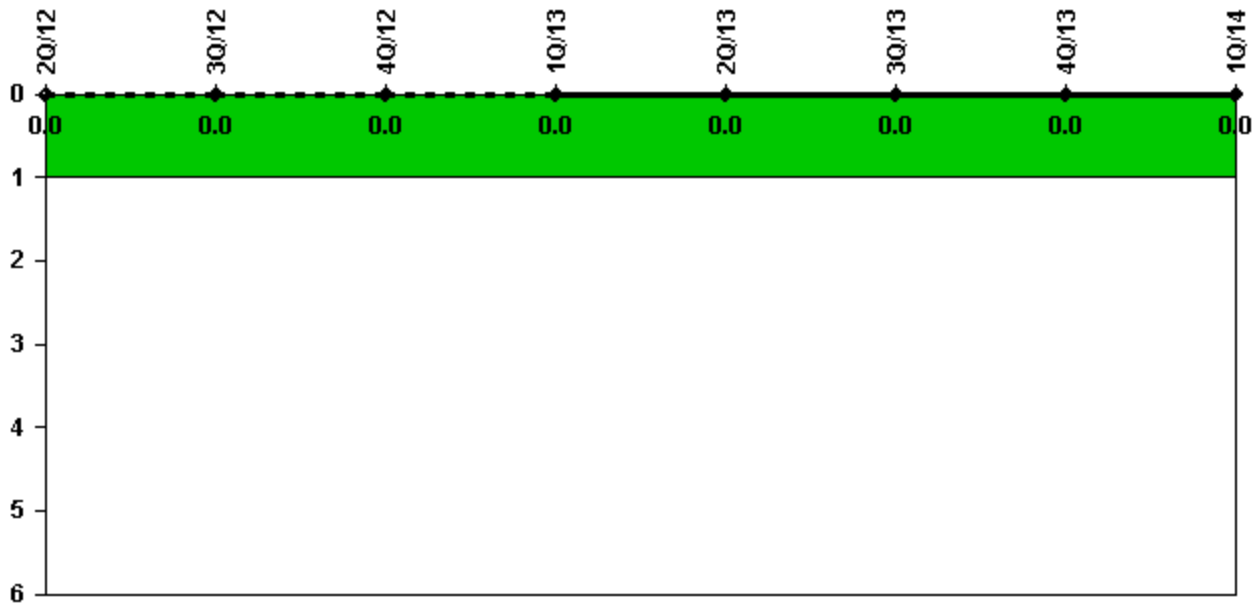
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Unplanned power changes	0	0	0	0	0	2.0	0	0
Critical hours	2184.0	2208.0	2209.0	1975.0	0	1288.6	2209.0	2159.0
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2.6</b>	<b>2.6</b>	<b>2.5</b>

Licensee Comments: none

### Unplanned Scrams with Complications



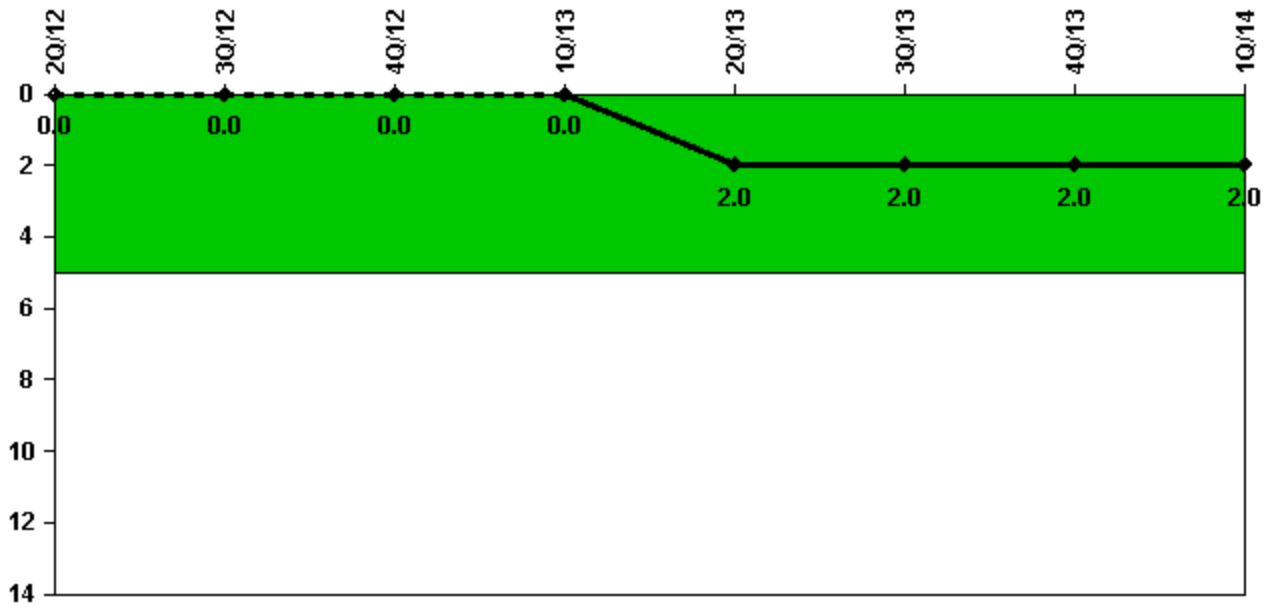
Thresholds: White > 1.0

#### Notes

Unplanned Scrams with Complications	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
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

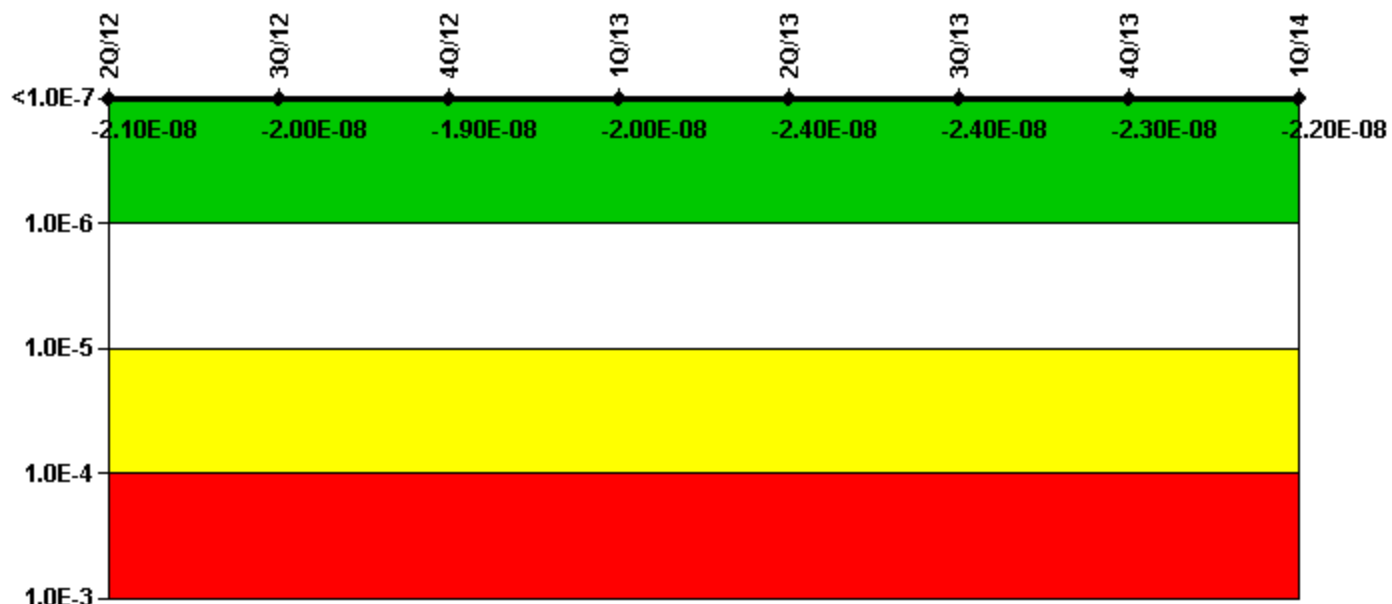
#### Notes

Safety System Functional Failures (PWR)	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Safety System Functional Failures	0	0	0	0	2	0	0	0
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>

Licensee Comments:

2Q/13: April 2013 - Licensee Event Report 50-368/2013-002-00: Emergency Control Room Chiller Inoperability.  
 May 2013 - Licensee Event Report 50-313/2013-001-00: ANO-1 Main Generator Stator Temporary Lift Assembly Failure

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



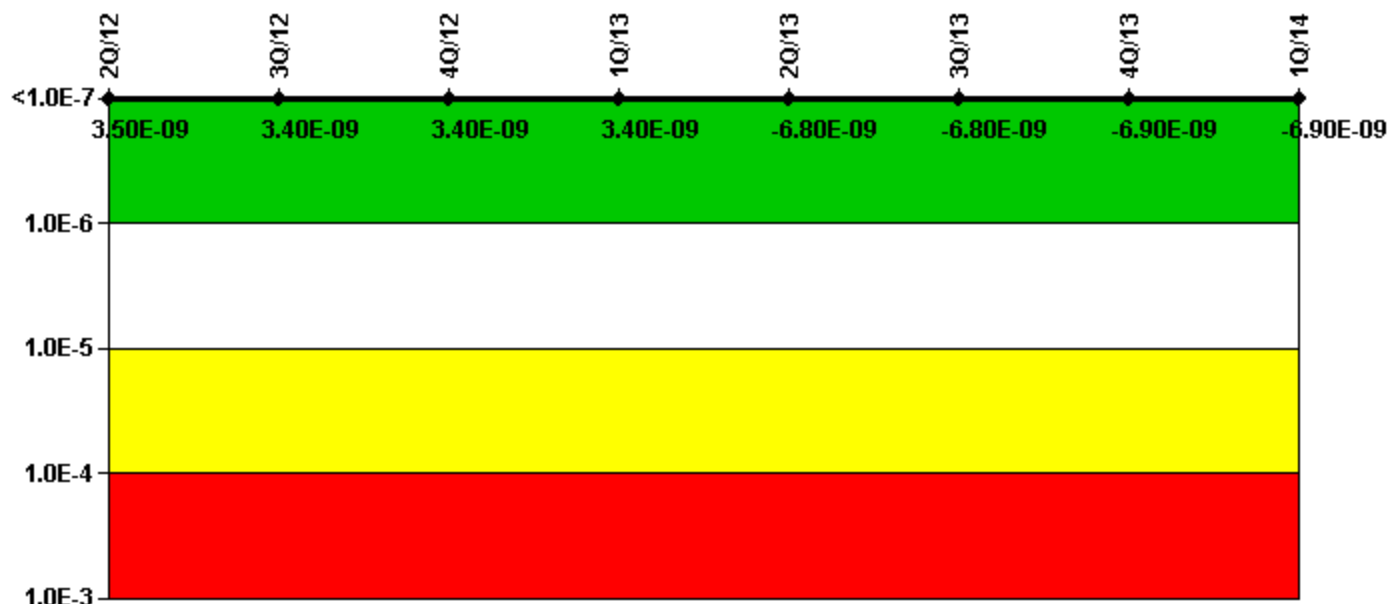
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Emergency AC Power System	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
UAI ( $\Delta$ CDF)	-2.38E-09	-2.38E-09	-2.38E-09	-2.38E-09	-2.42E-09	-2.20E-09	-1.98E-09	-6.29E-10
URI ( $\Delta$ CDF)	-1.88E-08	-1.81E-08	-1.71E-08	-1.77E-08	-2.17E-08	-2.18E-08	-2.14E-08	-2.16E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.10E-08	-2.00E-08	-1.90E-08	-2.00E-08	-2.40E-08	-2.40E-08	-2.30E-08	-2.20E-08

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	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
UAI ( $\Delta$ CDF)	-3.28E-14	-3.28E-14	-3.28E-14	-8.92E-12	-7.71E-12	-4.32E-12	-8.30E-12	-8.30E-12
URI ( $\Delta$ CDF)	3.48E-09	3.40E-09	3.43E-09	3.38E-09	-6.78E-09	-6.82E-09	-6.90E-09	-6.93E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	3.50E-09	3.40E-09	3.40E-09	3.40E-09	-6.80E-09	-6.80E-09	-6.90E-09	-6.90E-09

Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



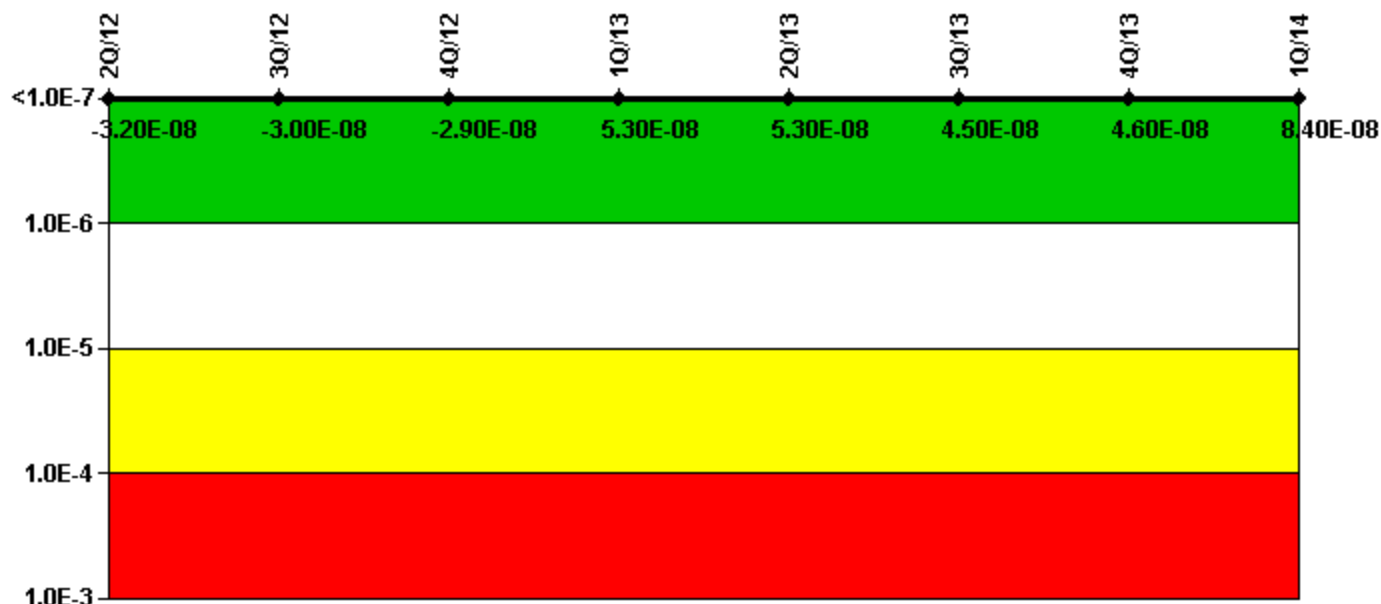
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
UAI ( $\Delta$ CDF)	2.89E-09	2.23E-09	1.01E-08	8.43E-09	7.53E-09	3.87E-09	1.29E-09	4.28E-10
URI ( $\Delta$ CDF)	-2.73E-08	-2.73E-08	-2.73E-08	-2.72E-08	-2.58E-08	-2.35E-08	-2.28E-08	-2.17E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.40E-08	-2.50E-08	-1.70E-08	-1.90E-08	-1.80E-08	-2.00E-08	-2.10E-08	-2.10E-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

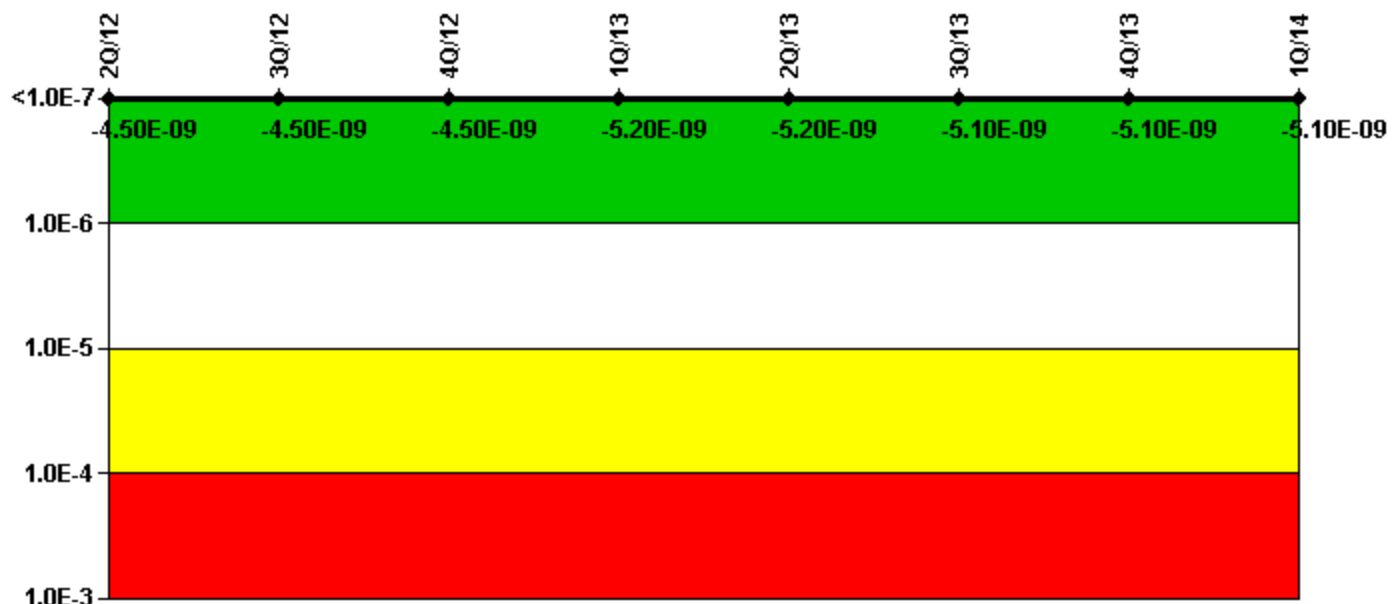
#### Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
UAI ( $\Delta$ CDF)	6.66E-09	1.03E-08	1.29E-08	2.35E-09	5.45E-09	8.16E-09	8.16E-09	4.62E-08
URI ( $\Delta$ CDF)	-3.88E-08	-3.98E-08	-4.15E-08	5.03E-08	4.75E-08	3.73E-08	3.76E-08	3.76E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.20E-08	-3.00E-08	-2.90E-08	5.30E-08	5.30E-08	4.50E-08	4.60E-08	8.40E-08

Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



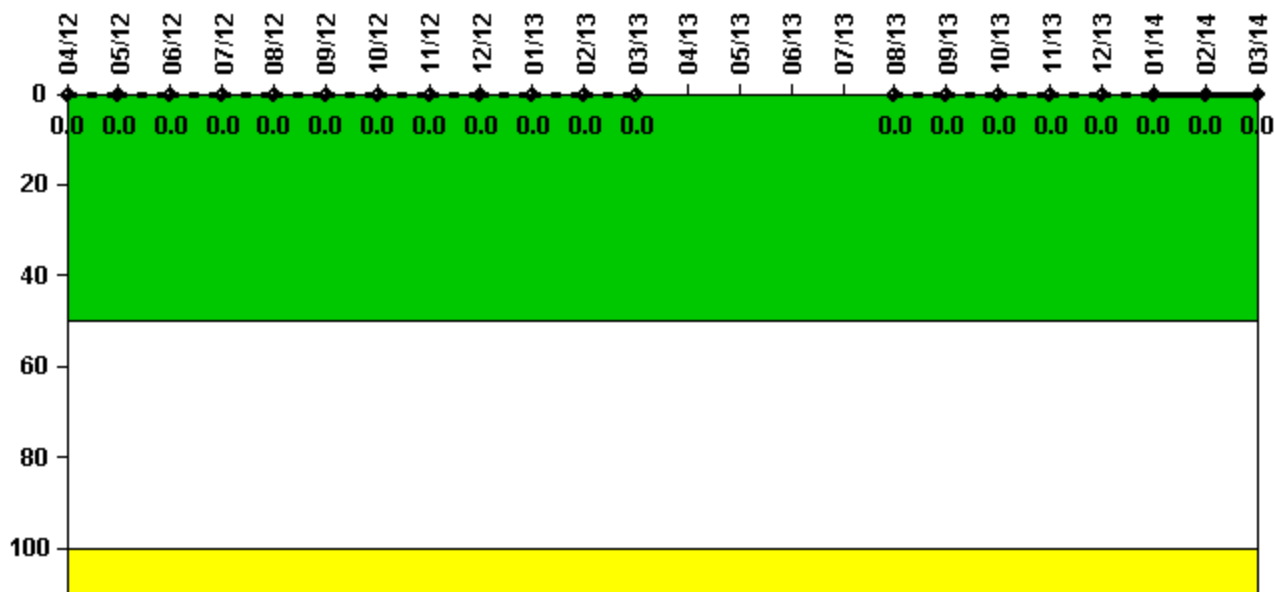
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
UAI ( $\Delta$ CDF)	-2.75E-09	-2.75E-09	-2.75E-09	-3.49E-09	-3.49E-09	-3.39E-09	-3.39E-09	-3.39E-09
URI ( $\Delta$ CDF)	-1.70E-09	-1.71E-09	-1.72E-09	-1.71E-09	-1.72E-09	-1.70E-09	-1.71E-09	-1.71E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.50E-09	-4.50E-09	-4.50E-09	-5.20E-09	-5.20E-09	-5.10E-09	-5.10E-09	-5.10E-09

Licensee Comments: none

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

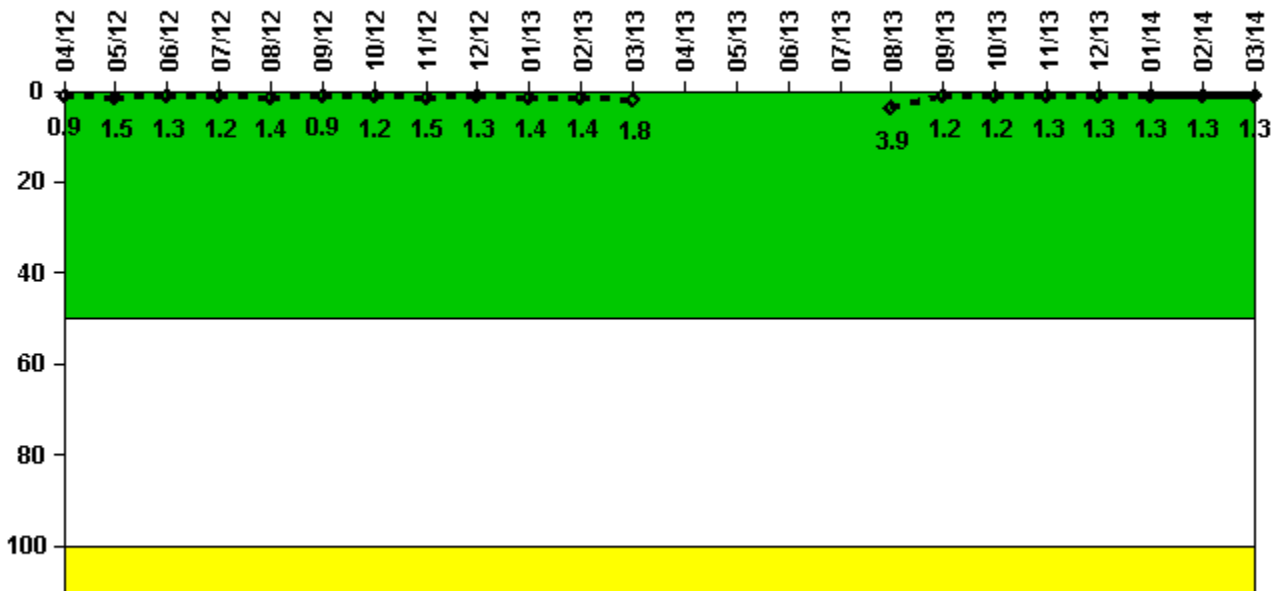
Reactor Coolant System Activity	4/12	5/12	6/12	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13
Maximum activity	0.000112	0.000109	0.000120	0.000114	0.000119	0.000125	0.000220	0.000135	0.000204	0.000139	0.000142	0.000379
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14
Maximum activity	N/A	N/A	N/A	N/A	0.000066	0.000066	0.000066	0.000076	0.000089	0.000082	0.000084	0.000161
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	N/A	N/A	N/A	N/A	0	0	0	0	0	0	0	0

Licensee Comments:

9/13: ANO-1 was off line the entire month of July.

6/13: ANO-1 was off line for the entire second quarter 2013.

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Leakage	4/12	5/12	6/12	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13
Maximum leakage	0.094	0.149	0.129	0.124	0.136	0.088	0.124	0.145	0.128	0.139	0.141	0.181
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
Indicator value	0.9	1.5	1.3	1.2	1.4	0.9	1.2	1.5	1.3	1.4	1.4	1.8

Reactor Coolant System Leakage	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14
Maximum leakage	N/A	N/A	N/A	N/A	0.389	0.123	0.115	0.128	0.132	0.128	0.128	0.127
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
Indicator value	N/A	N/A	N/A	N/A	3.9	1.2	1.2	1.3	1.3	1.3	1.3	1.3

#### Licensee Comments:

12/13: Total Leakage is being reported in lieu of Identified Leakage.

9/13: Total Leakage is being reported in lieu of Identified Leakage. ANO-1 was off line the entire month of July.

6/13: ANO-1 was off line for the entire second quarter 2013.

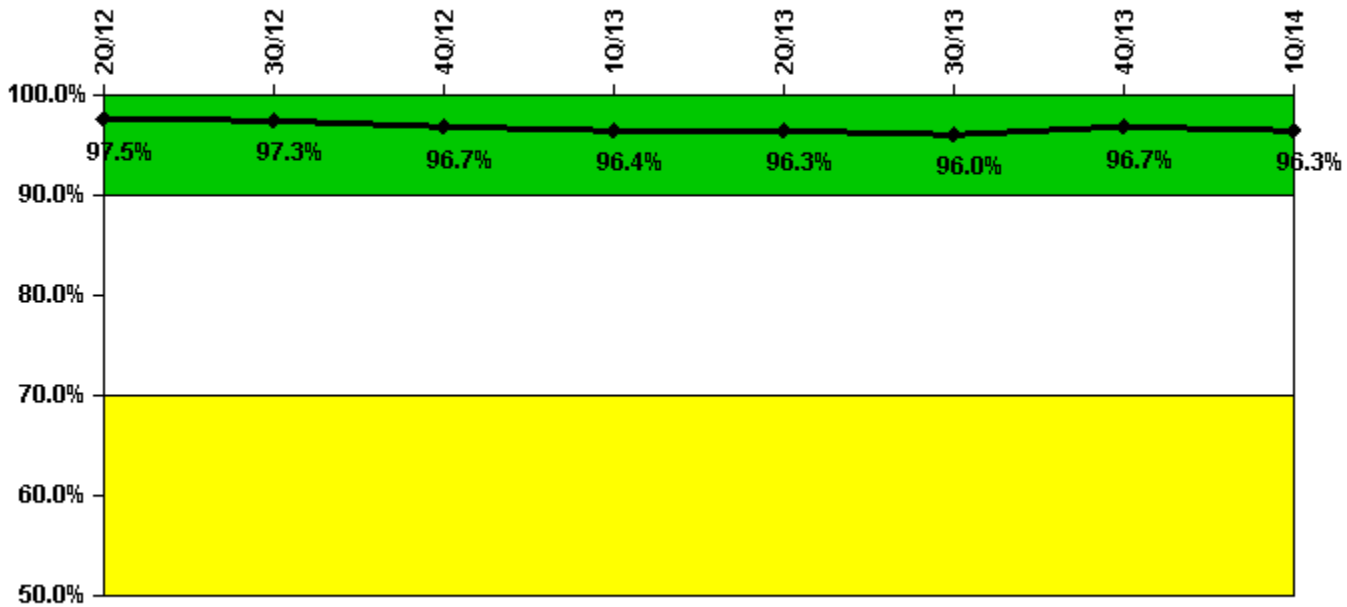
3/13: Total Leakage is being reported in lieu of Identified Leakage

12/12: Total Leakage is being reported in lieu of Identified Leakage.

9/12: Total Leakage is being reported in lieu of Identified Leakage.

6/12: Total Leakage is being reported in lieu of Identified Leakage

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Successful opportunities	48.0	16.0	13.0	26.0	8.0	51.0	50.0	51.0
Total opportunities	50.0	16.0	15.0	27.0	8.0	53.0	51.0	53.0
Indicator value	97.5%	97.3%	96.7%	96.4%	96.3%	96.0%	96.7%	96.3%

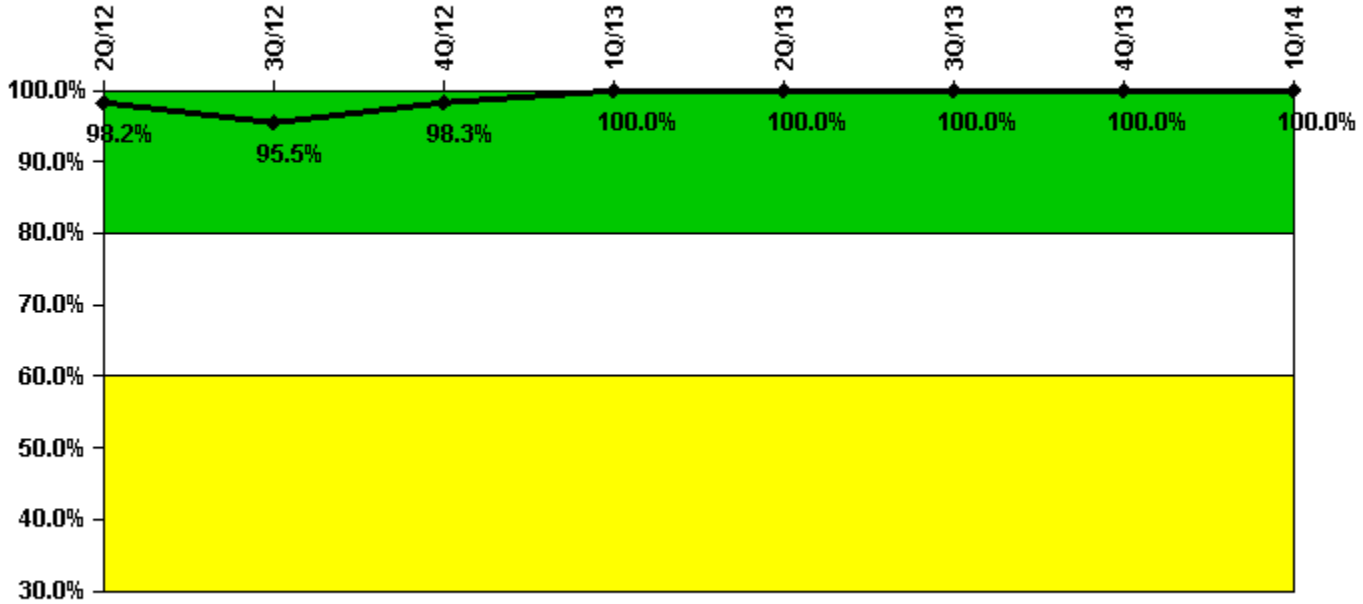
Licensee Comments:

4Q/13: Change to correct counting of the number of drills performed in the 4th qtr.

3Q/13: Change to correct counting of the number of drills performed in the 3rd qtr.

3Q/13: In January of 2014, five drills that were not previously counted were added to the 3rd Quarter 2013 Emergency Preparedness data.

### ERO Drill Participation



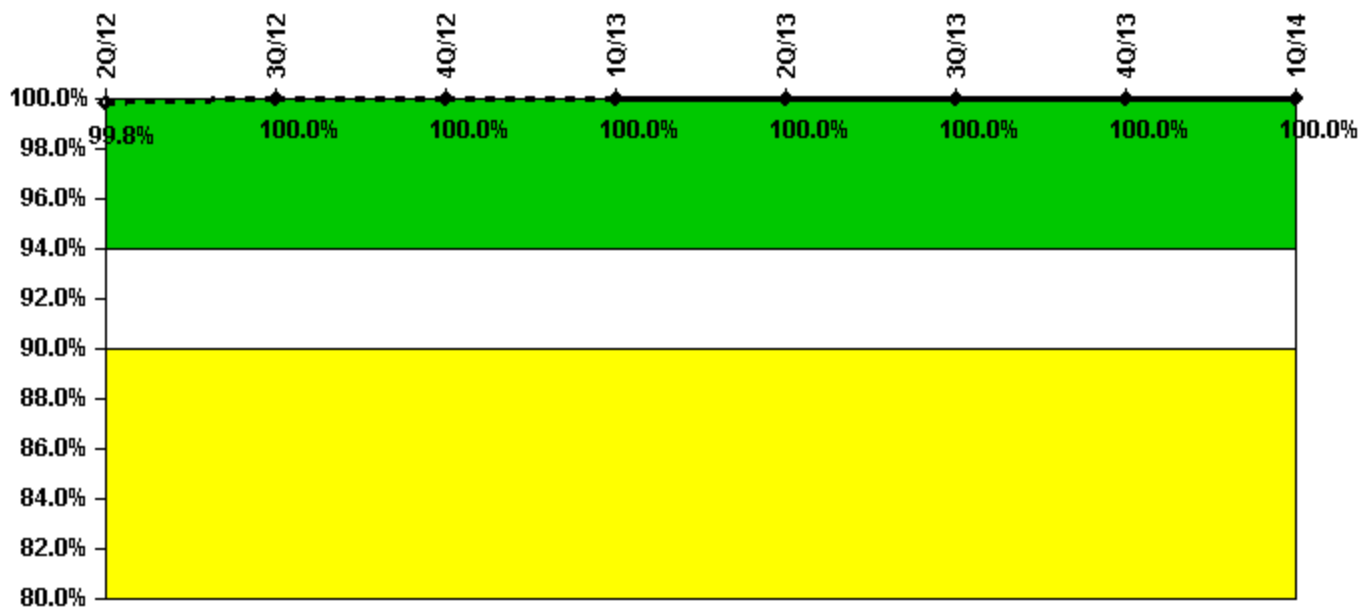
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Participating Key personnel	112.0	106.0	115.0	84.0	81.0	98.0	99.0	103.0
Total Key personnel	114.0	111.0	117.0	84.0	81.0	98.0	99.0	103.0
<b>Indicator value</b>	<b>98.2%</b>	<b>95.5%</b>	<b>98.3%</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



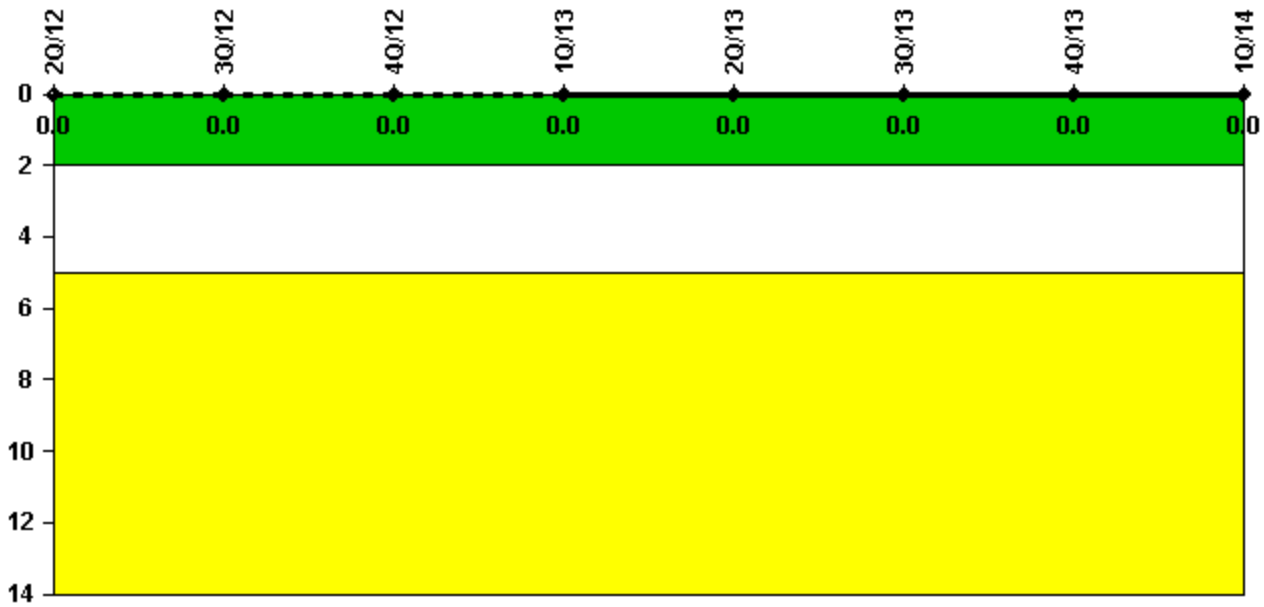
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
Successful siren-tests	147	147	147	147	147	147	147	147
Total sirens-tests	147	147	147	147	147	147	147	147
Indicator value	99.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



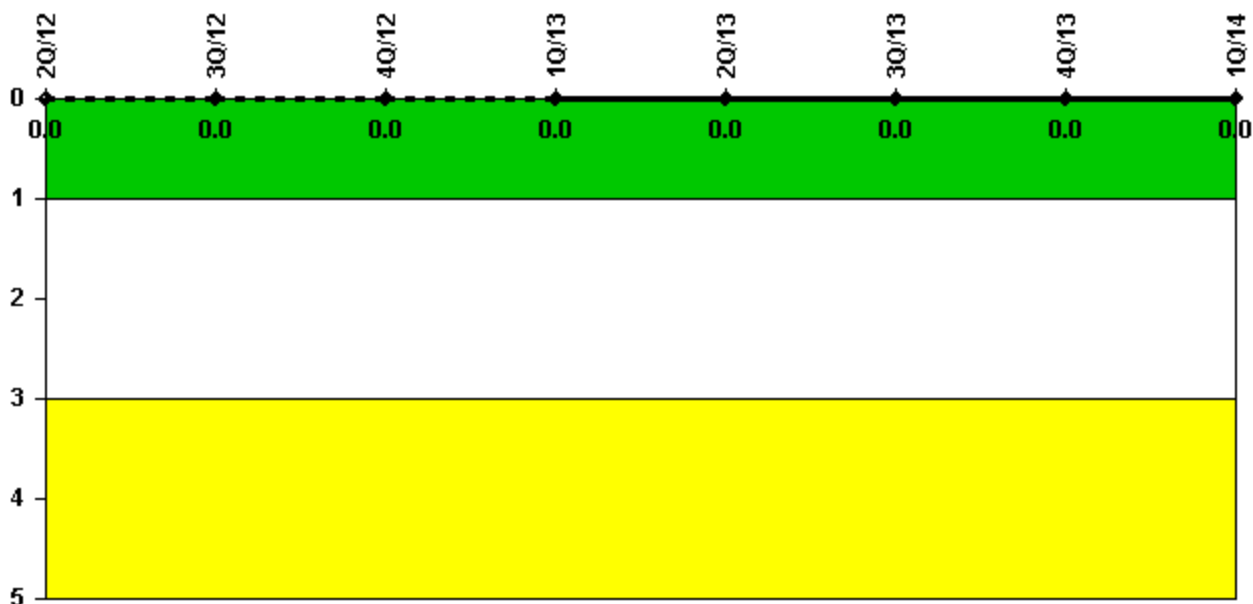
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
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	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14
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: April 23, 2014*