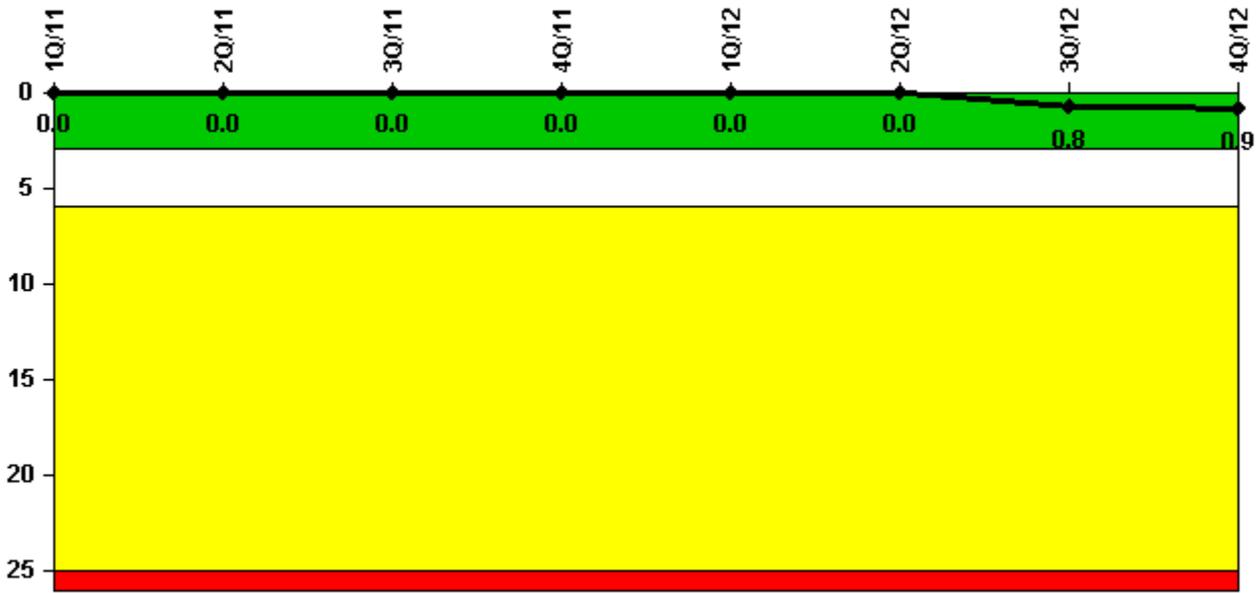


# Arkansas Nuclear 2

## 4Q/2012 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



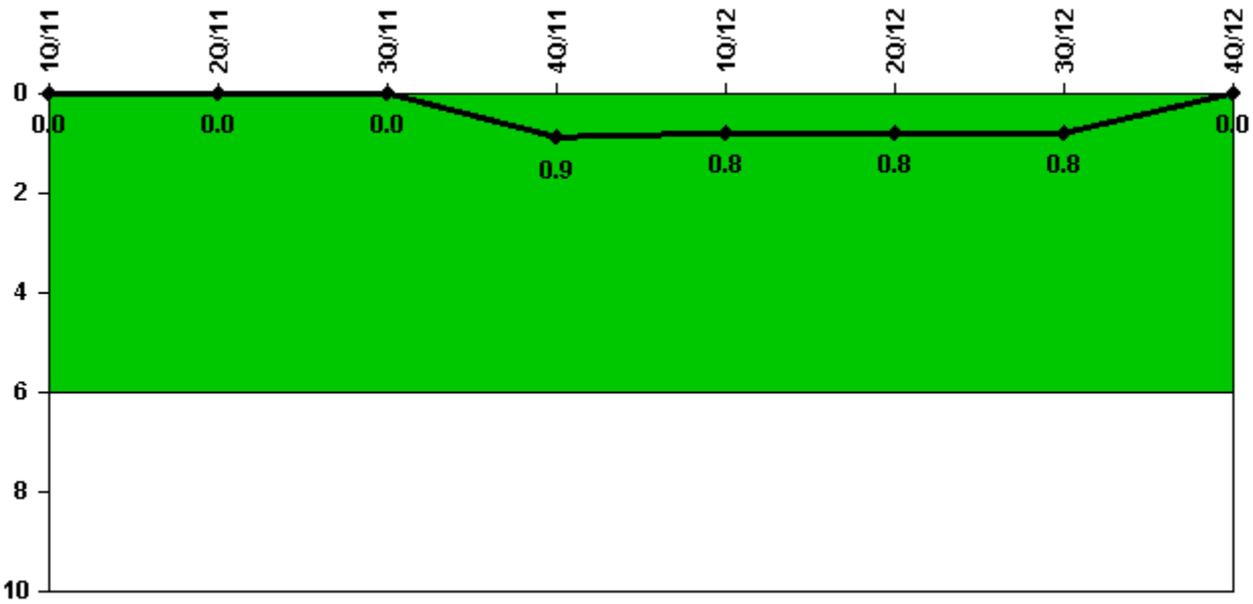
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Unplanned scrams	0	0	0	0	0	0	1.0	0
Critical hours	1355.0	2184.0	2208.0	2209.0	2183.0	2184.0	1755.3	1987.5
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.8</b>	<b>0.9</b>

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



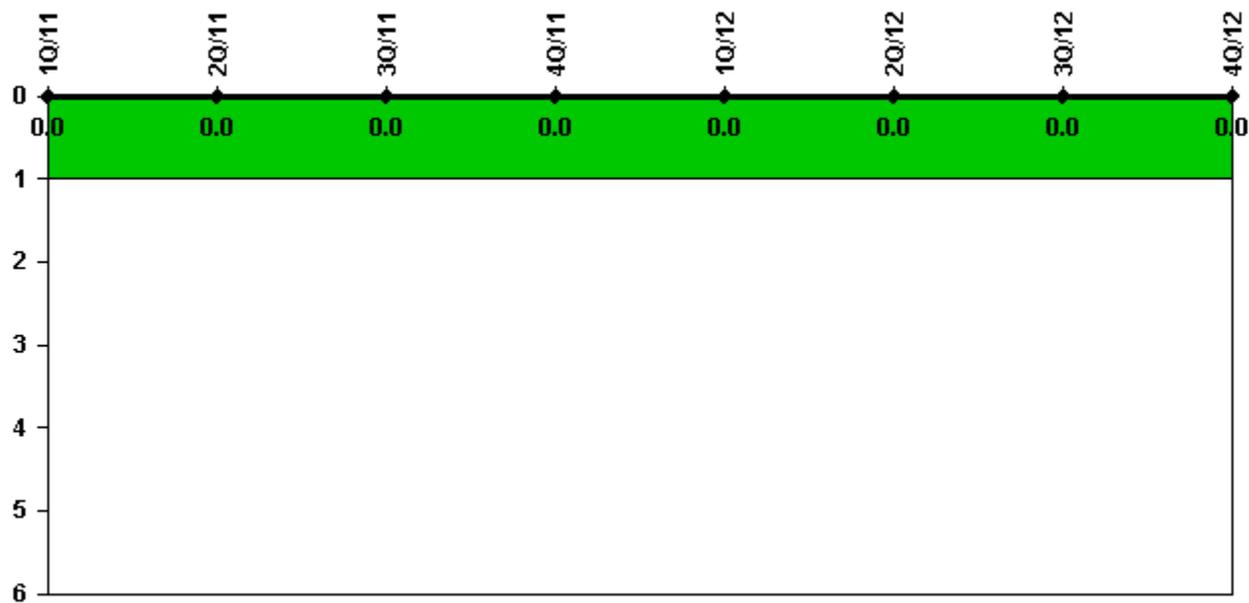
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Unplanned power changes	0	0	0	1.0	0	0	0	0
Critical hours	1355.0	2184.0	2208.0	2209.0	2183.0	2184.0	1755.3	1987.5
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.9</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>0</b>

Licensee Comments: none

### Unplanned Scrams with Complications



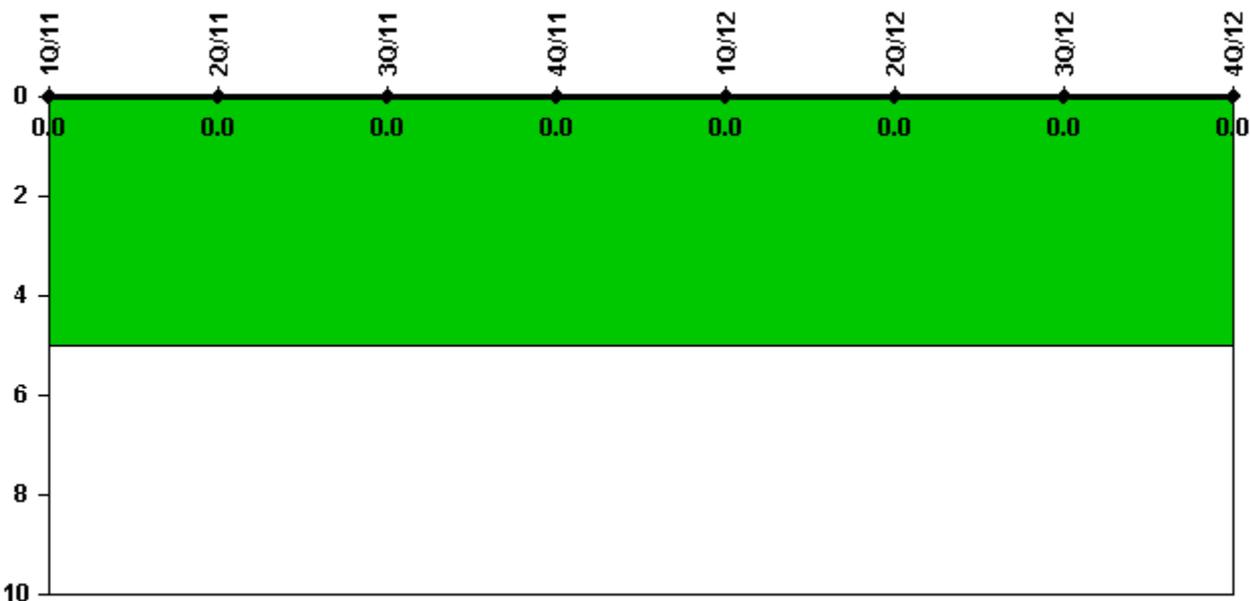
Thresholds: White > 1.0

#### Notes

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

Licensee Comments: none

### Safety System Functional Failures (PWR)



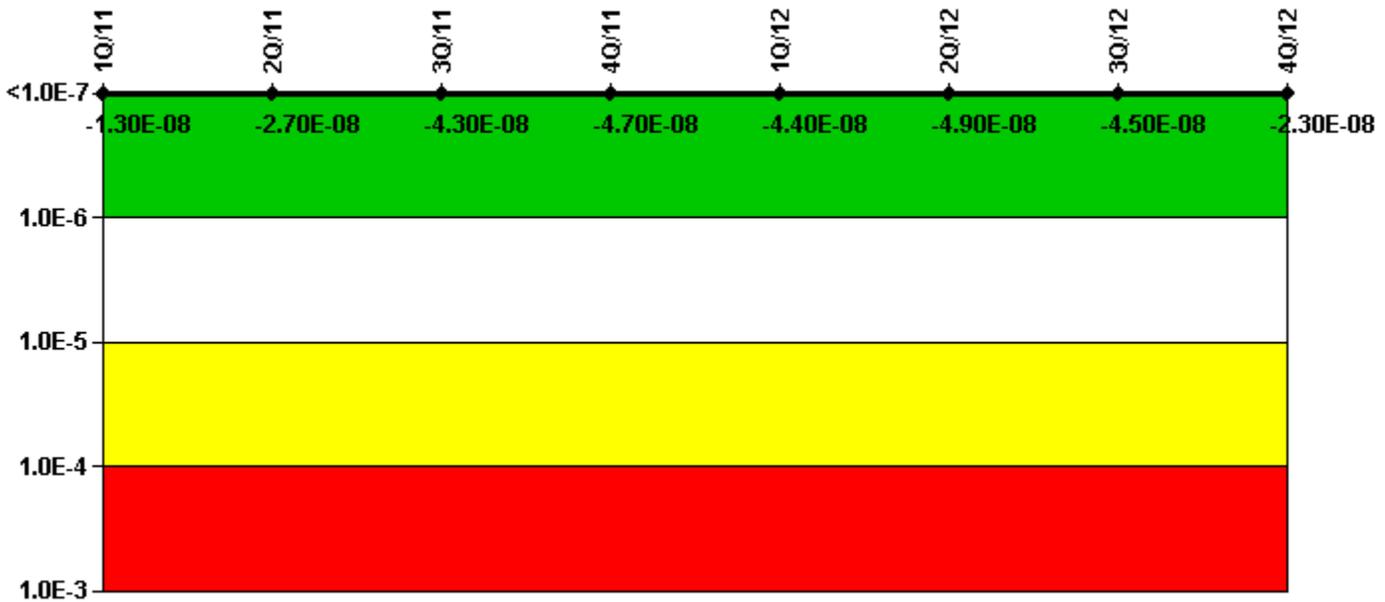
Thresholds: White > 5.0

#### Notes

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

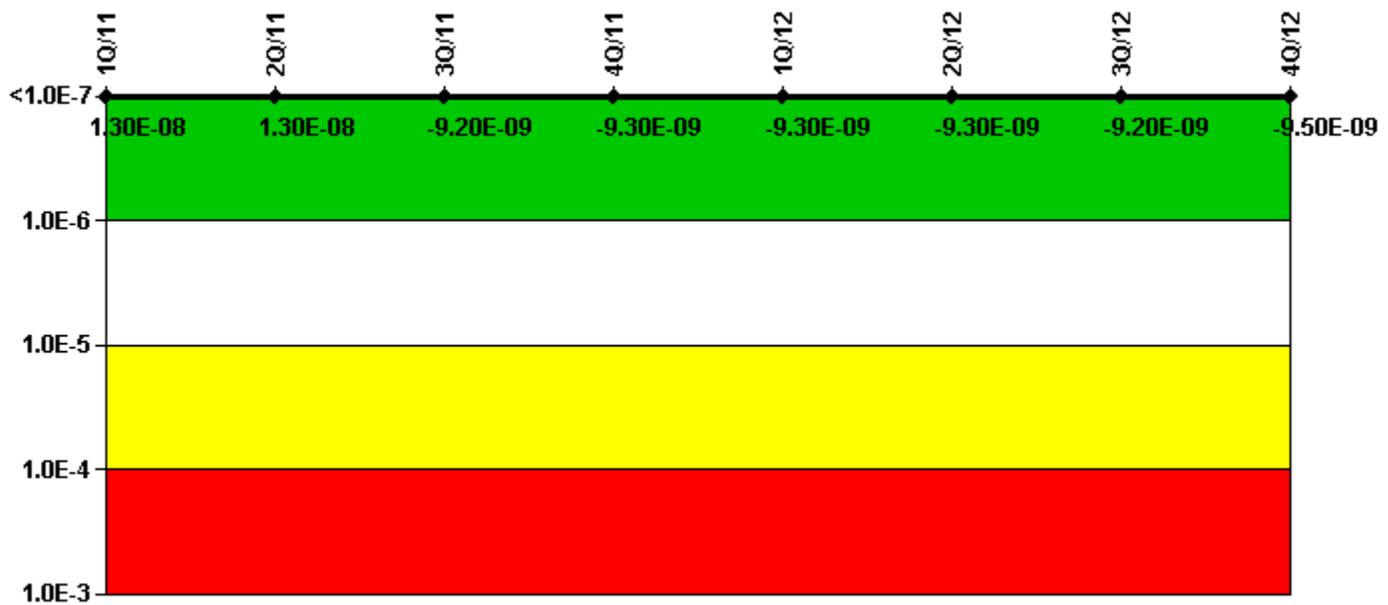
#### Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
UAI ( $\Delta$ CDF)	4.64E-08	3.07E-08	1.56E-08	9.45E-09	9.14E-09	8.46E-09	8.38E-09	3.12E-08
URI ( $\Delta$ CDF)	-5.91E-08	-5.80E-08	-5.85E-08	-5.65E-08	-5.34E-08	-5.70E-08	-5.36E-08	-5.42E-08
PLE	NO							
Indicator value	-1.30E-08	-2.70E-08	-4.30E-08	-4.70E-08	-4.40E-08	-4.90E-08	-4.50E-08	-2.30E-08

#### Licensee Comments:

1Q/12: The ANO-2 MSPI Basis Document was revised in the 1Q2012 to add the Emergency Diesel Generator (EDG) fuel oil transfer pumps to the scope of the EDG supercomponent boundary. There were no MSPI coefficient changes required as a result of this revision.

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



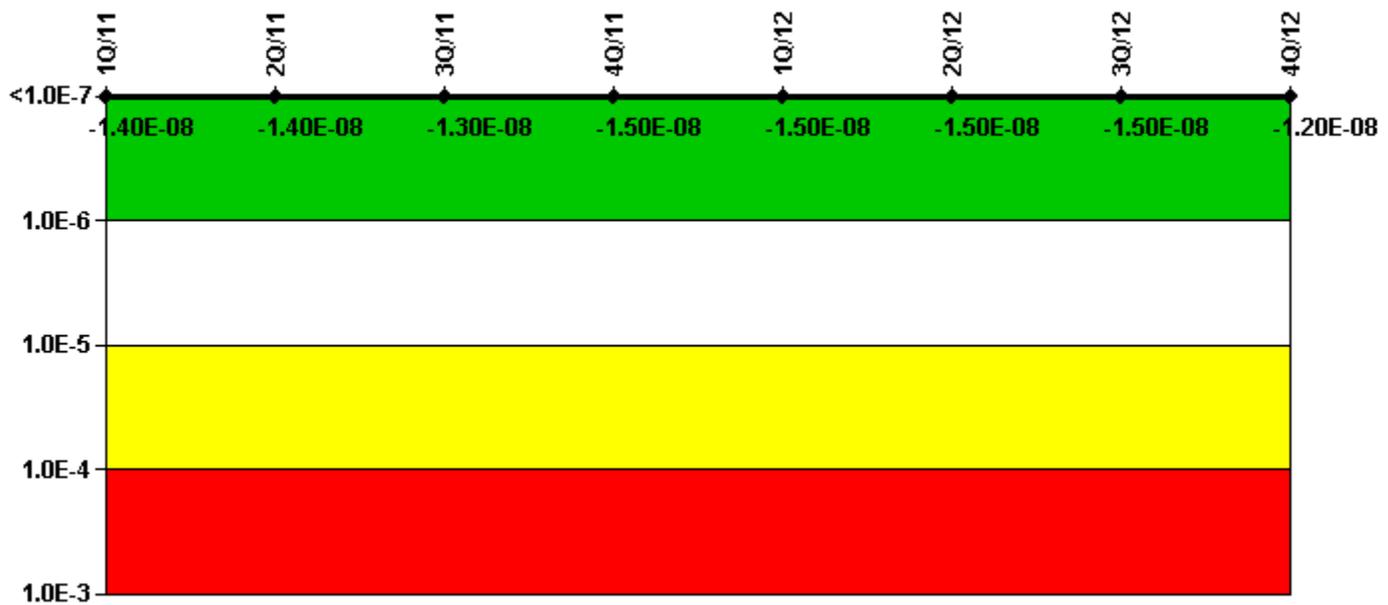
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
UAI ( $\Delta$ CDF)	-4.55E-09	-4.55E-09	-4.59E-09	-4.59E-09	-4.59E-09	-4.59E-09	-4.59E-09	-4.59E-09
URI ( $\Delta$ CDF)	1.77E-08	1.79E-08	-4.60E-09	-4.69E-09	-4.73E-09	-4.76E-09	-4.58E-09	-4.94E-09
PLE	NO							
Indicator value	1.30E-08	1.30E-08	-9.20E-09	-9.30E-09	-9.30E-09	-9.30E-09	-9.20E-09	-9.50E-09

Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



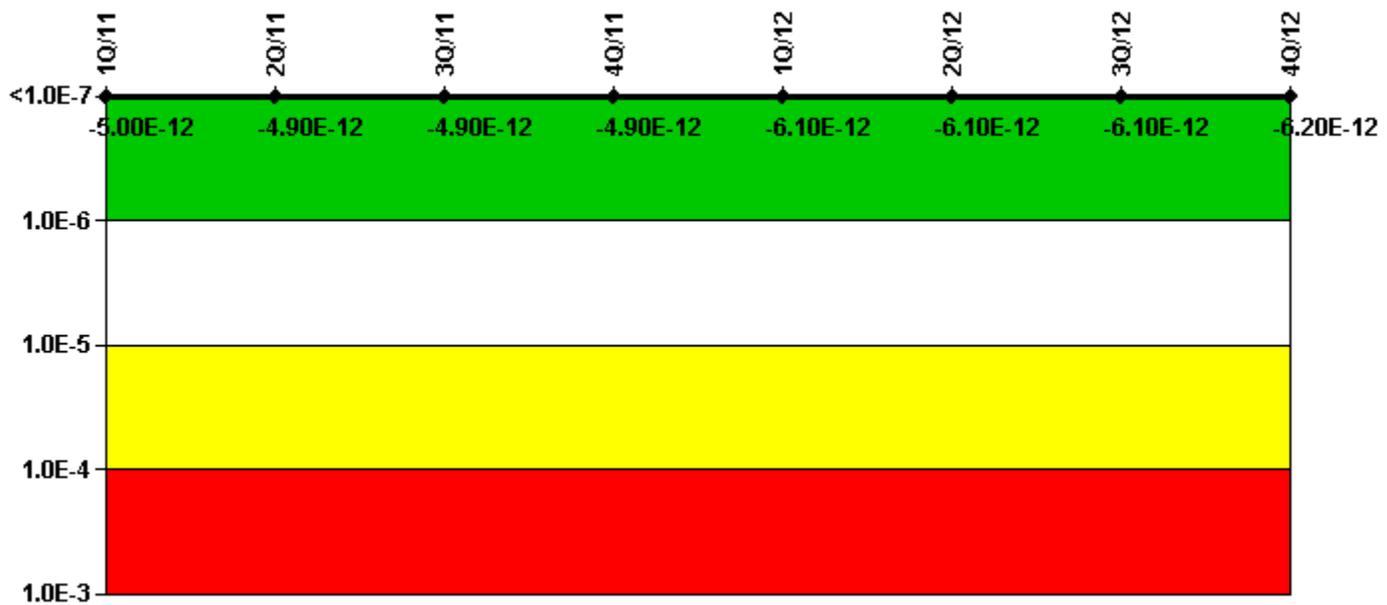
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
UAI ( $\Delta$ CDF)	-3.17E-10	-5.59E-10	1.19E-10	-1.52E-09	-1.29E-09	-2.12E-09	-2.16E-09	1.15E-09
URI ( $\Delta$ CDF)	-1.36E-08	-1.30E-08	-1.34E-08	-1.34E-08	-1.35E-08	-1.33E-08	-1.32E-08	-1.31E-08
PLE	NO							
Indicator value	-1.40E-08	-1.40E-08	-1.30E-08	-1.50E-08	-1.50E-08	-1.50E-08	-1.50E-08	-1.20E-08

Licensee Comments: none

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



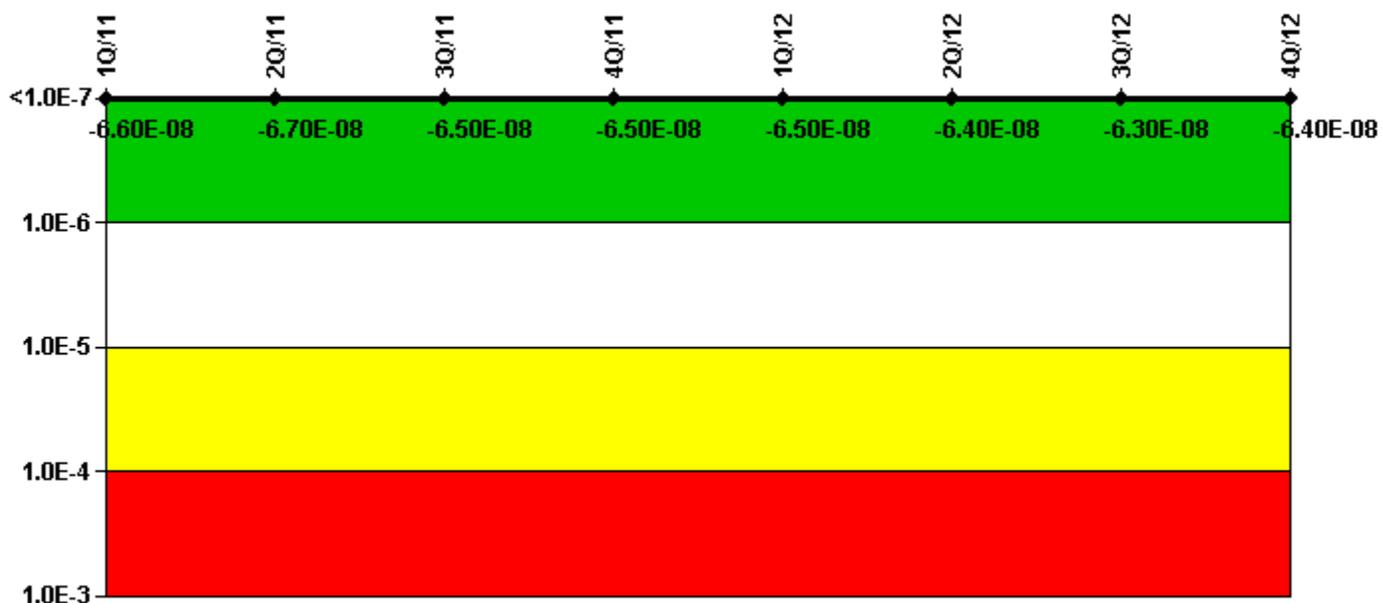
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
UAI ( $\Delta$ CDF)	-3.22E-12	-3.23E-12	-3.23E-12	-3.23E-12	-4.49E-12	-4.49E-12	-4.49E-12	-4.49E-12
URI ( $\Delta$ CDF)	-1.75E-12	-1.62E-12	-1.62E-12	-1.62E-12	-1.66E-12	-1.66E-12	-1.59E-12	-1.73E-12
PLE	NO							
Indicator value	<b>-5.00E-12</b>	<b>-4.90E-12</b>	<b>-4.90E-12</b>	<b>-4.90E-12</b>	<b>-6.10E-12</b>	<b>-6.10E-12</b>	<b>-6.10E-12</b>	<b>-6.20E-12</b>

Licensee Comments: none

### Mitigating Systems Performance Index, Cooling Water Systems



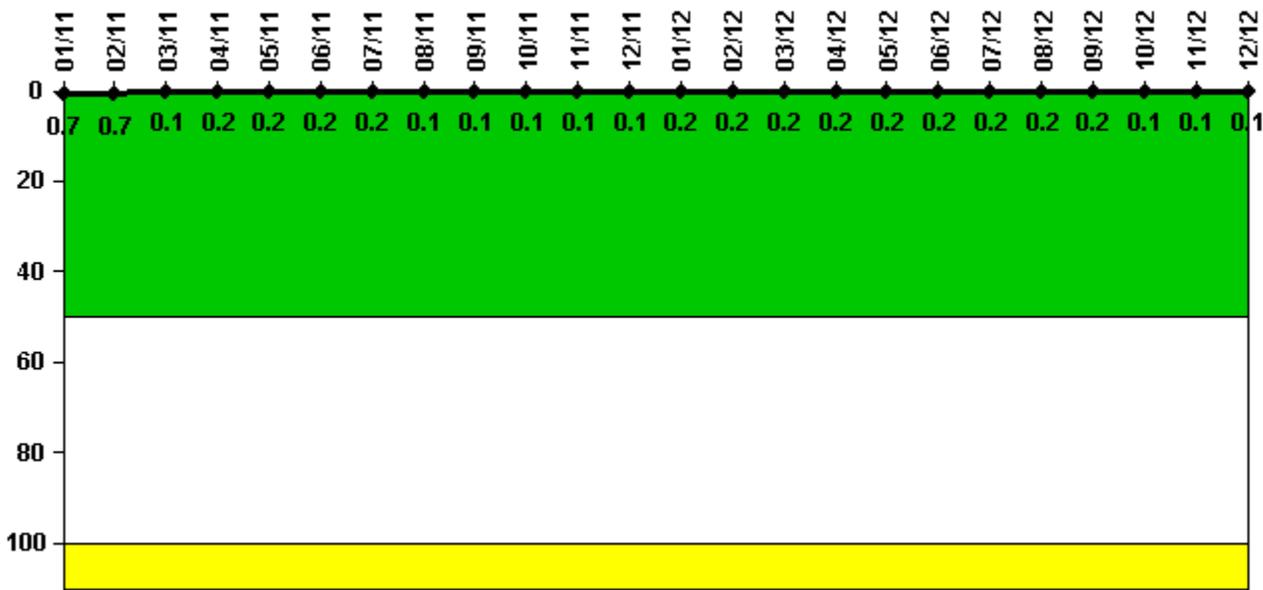
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

**Notes**

Mitigating Systems Performance Index, Cooling Water Systems	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
UAI ( $\Delta$ CDF)	0.00E+00							
URI ( $\Delta$ CDF)	-6.62E-08	-6.66E-08	-6.52E-08	-6.54E-08	-6.54E-08	-6.40E-08	-6.32E-08	-6.40E-08
PLE	NO							
Indicator value	-6.60E-08	-6.70E-08	-6.50E-08	-6.50E-08	-6.50E-08	-6.40E-08	-6.30E-08	-6.40E-08

Licensee Comments: none

### Reactor Coolant System Activity



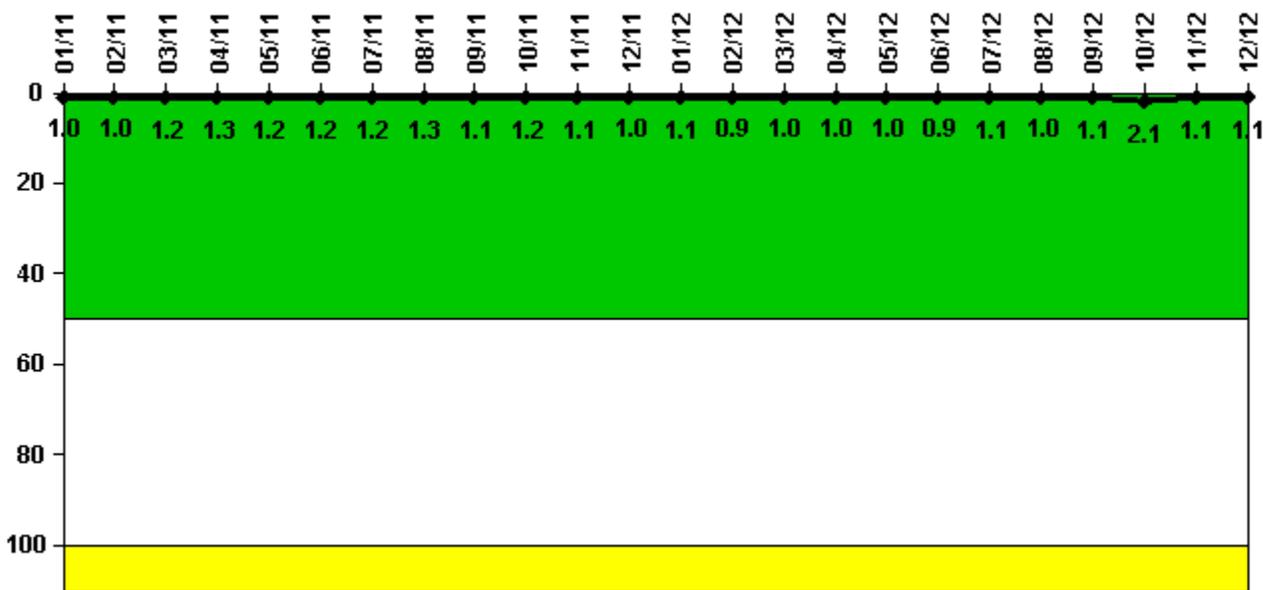
Thresholds: White > 50.0 Yellow > 100.0

**Notes**

Reactor Coolant System Activity	1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11
Maximum activity	0.006990	0.007020	0.001210	0.001920	0.002030	0.002090	0.002030	0.001350	0.001440	0.001440	0.001470	0.001450
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	0.7	0.7	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
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	0.001570	0.001580	0.001640	0.001650	0.001700	0.001710	0.001720	0.001780	0.001760	0.000649	0.000720	0.000747
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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11
Maximum leakage	0.096	0.102	0.118	0.126	0.118	0.124	0.115	0.126	0.111	0.115	0.110	0.102
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>1.0</b>	<b>1.0</b>	<b>1.2</b>	<b>1.3</b>	<b>1.2</b>	<b>1.2</b>	<b>1.2</b>	<b>1.3</b>	<b>1.1</b>	<b>1.2</b>	<b>1.1</b>	<b>1.0</b>

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	0.105	0.093	0.095	0.100	0.096	0.094	0.105	0.102	0.106	0.212	0.113	0.114
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>1.1</b>	<b>0.9</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>0.9</b>	<b>1.1</b>	<b>1.0</b>	<b>1.1</b>	<b>2.1</b>	<b>1.1</b>	<b>1.1</b>

Licensee Comments:

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

3/12: Total Leakage is being reported in lieu of Identified Leakage.

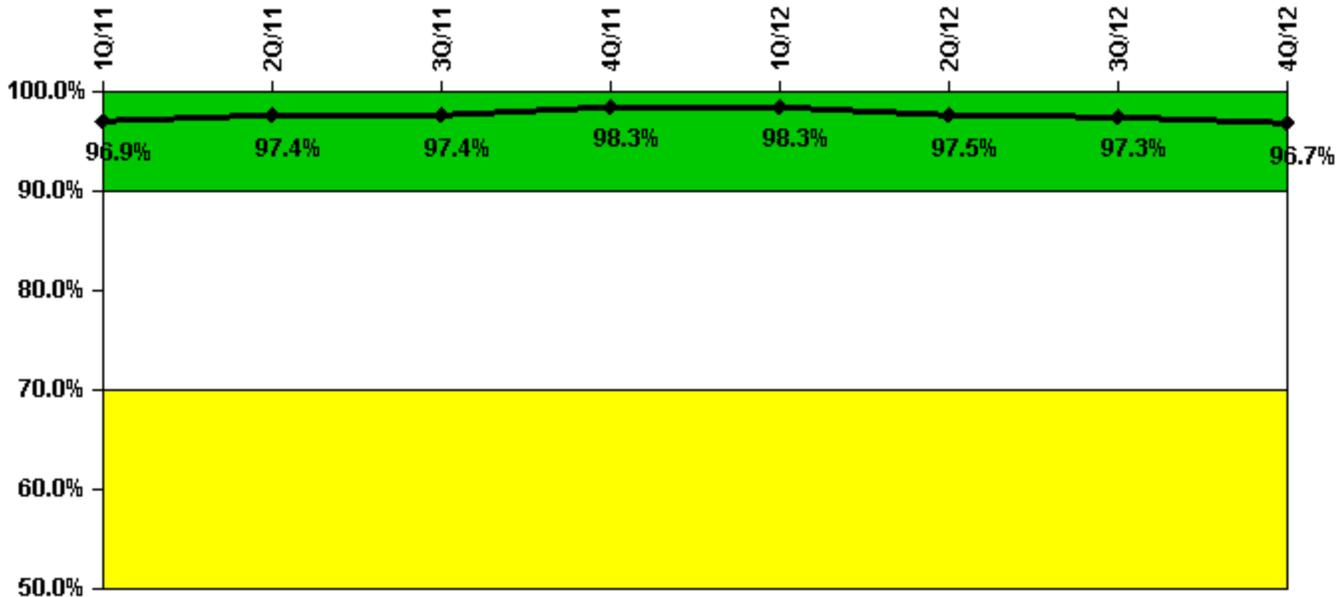
12/11: Total Leakage is being reported in lieu of Identified Leakage.

9/11: Total Leakage is being reported in lieu of Identified Leakage.

6/11: Total Leakage is being reported in lieu of Identified Leakage.

3/11: Total Leakage is being reported in lieu of Identified Leakage.

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Successful opportunities	11.0	39.0	17.0	9.0	21.0	48.0	16.0	13.0
Total opportunities	11.0	40.0	17.0	10.0	21.0	50.0	16.0	15.0
Indicator value	96.9%	97.4%	97.4%	98.3%	98.3%	97.5%	97.3%	96.7%

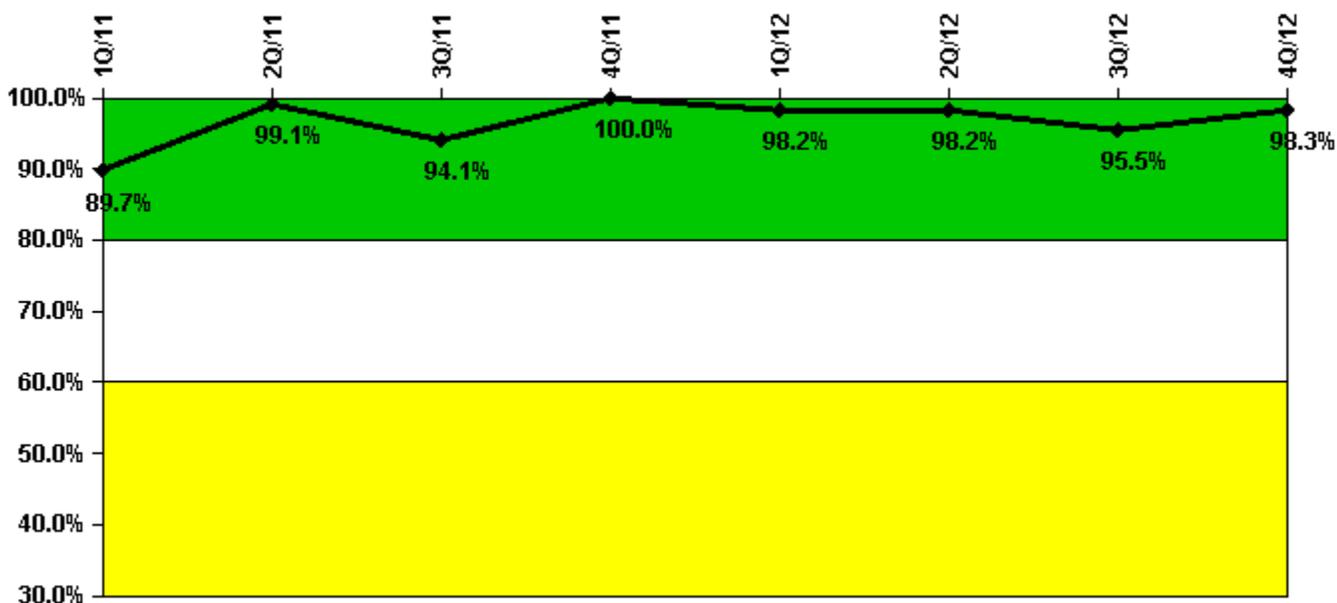
#### Licensee Comments:

3Q/11: The April 2011 ERO Drill Exercise Performance was revised with the 3rd quarter 2011 submittal. April Successful Drills and Total Drills were reduced from 11 each, to 10 each. This revision does not affect the indicator color.

2Q/11: The April 2011 ERO Drill Exercise Performance was revised with the 3rd quarter 2011 submittal. April Successful Drills and Total Drills were reduced from 11 each, to 10 each. This revision does not affect the indicator color.

1Q/11: Two additional Successful Event Opportunities and two Total Event Opportunities were identified that were not included in the original June 2009 data submittal. Both June 2009 data elements were revised from 22 to 24 in the first quarter 2011 data submittal. This results in no significant change to the 8 quarter performance indicator.

### ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

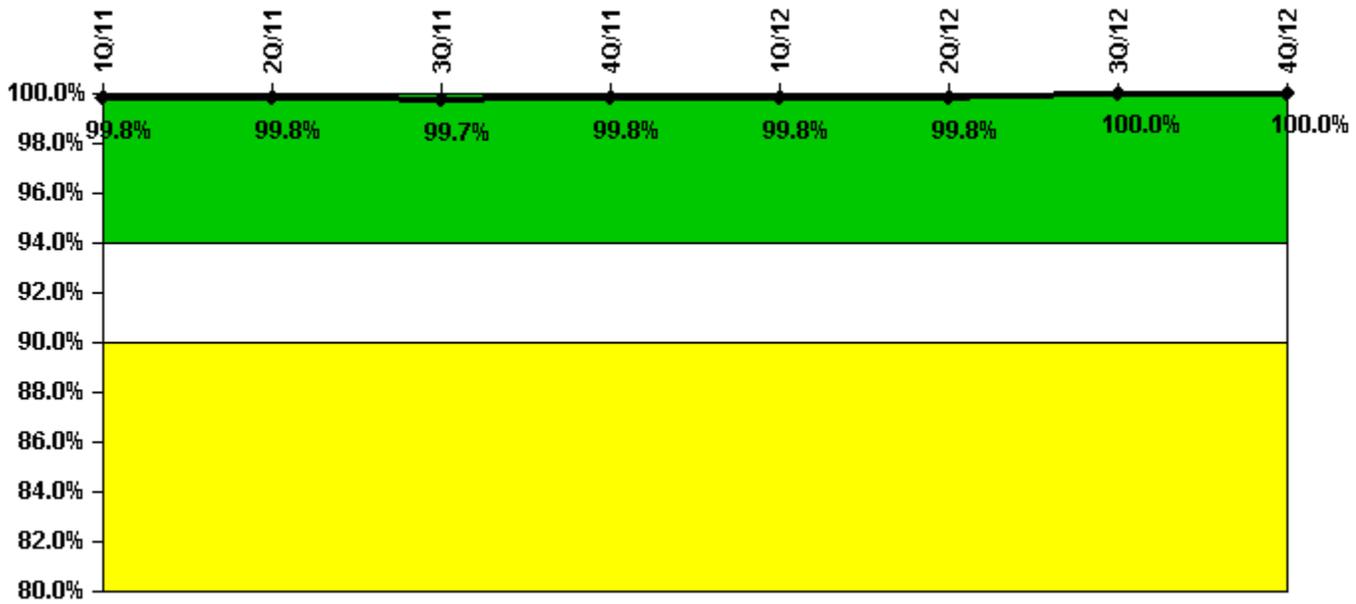
#### Notes

ERO Drill Participation	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Participating Key personnel	105.0	114.0	111.0	114.0	111.0	112.0	106.0	115.0
Total Key personnel	117.0	115.0	118.0	114.0	113.0	114.0	111.0	117.0
Indicator value	89.7%	99.1%	94.1%	100.0%	98.2%	98.2%	95.5%	98.3%

#### Licensee Comments:

2Q/11: In the 2nd Quarter 2011, Emergency Planning determined that 3 historical ERO drills were not eligible to be counted as performance indicator drills. As a result, credit for historical ERO drill participation was removed for several ERO members. This resulted in data revisions to the ERO Drill Participation PI from the 3rd Quarter 2009 to the 1st Quarter 2011. These revisions did not change the ERO Drill Participation PI color for these periods.

### Alert & Notification System



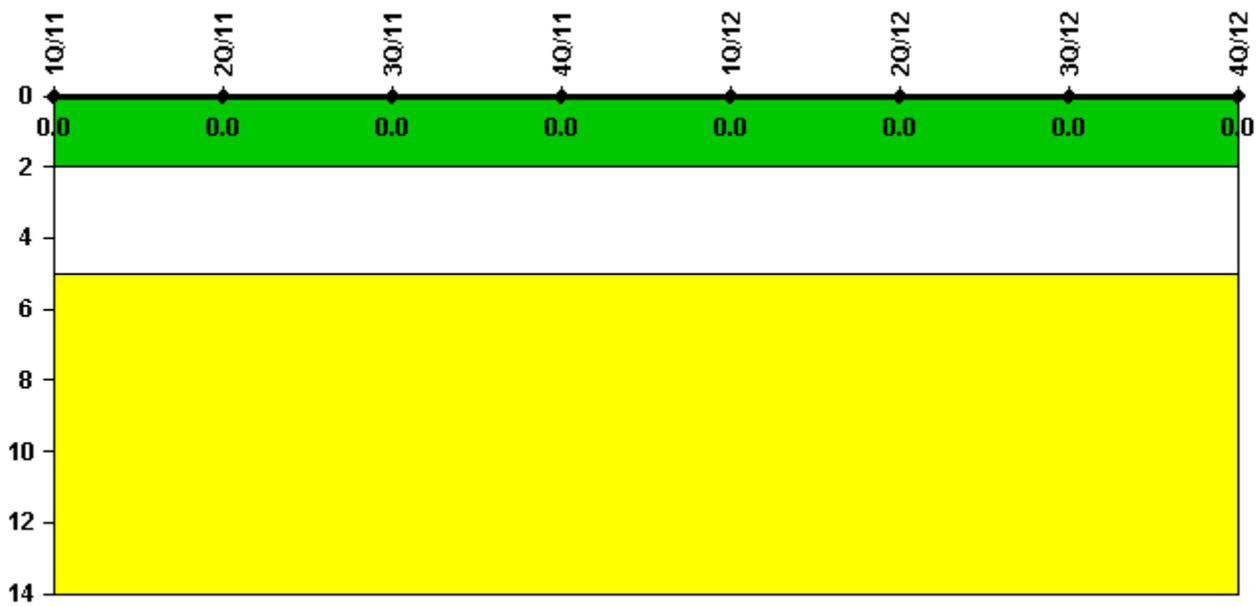
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Successful siren-tests	147	147	146	147	147	147	147	147
Total sirens-tests	147	147	147	147	147	147	147	147
Indicator value	99.8%	99.8%	99.7%	99.8%	99.8%	99.8%	100.0%	100.0%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



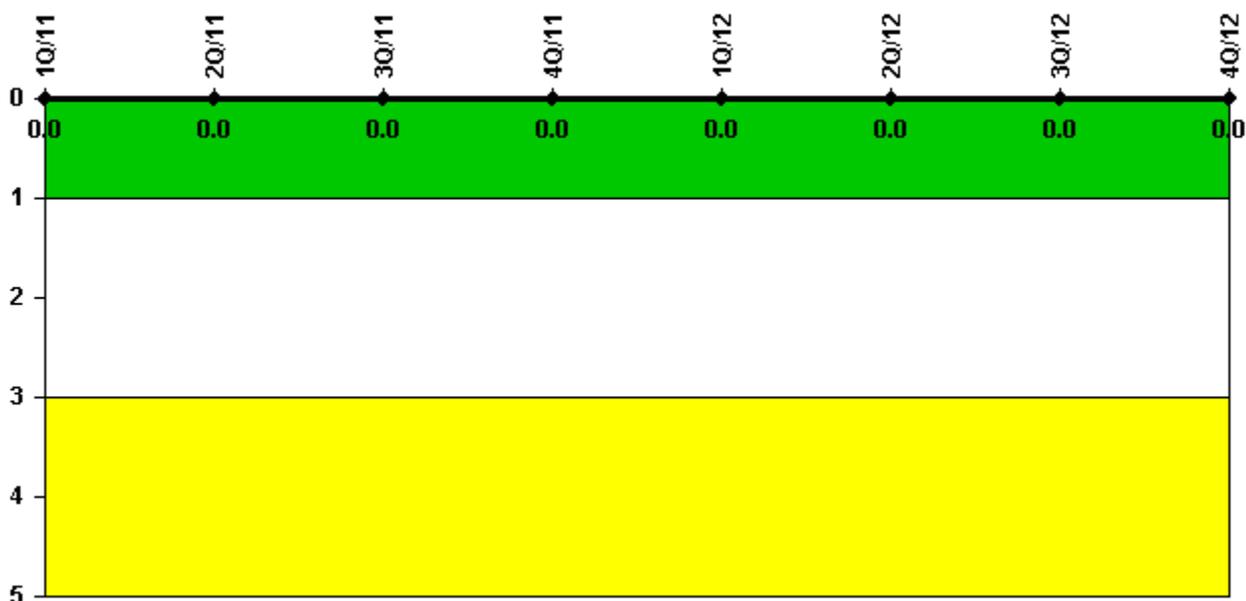
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
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>							

Licensee Comments: none

### RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

#### Notes

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