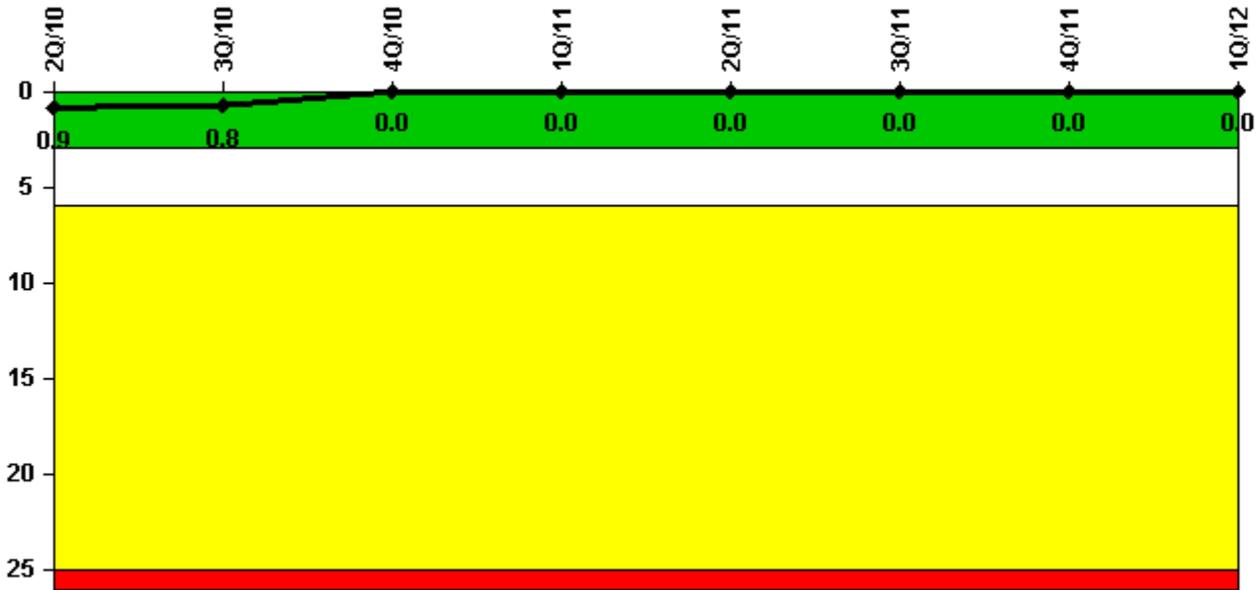


# Arkansas Nuclear 2

## 1Q/2012 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



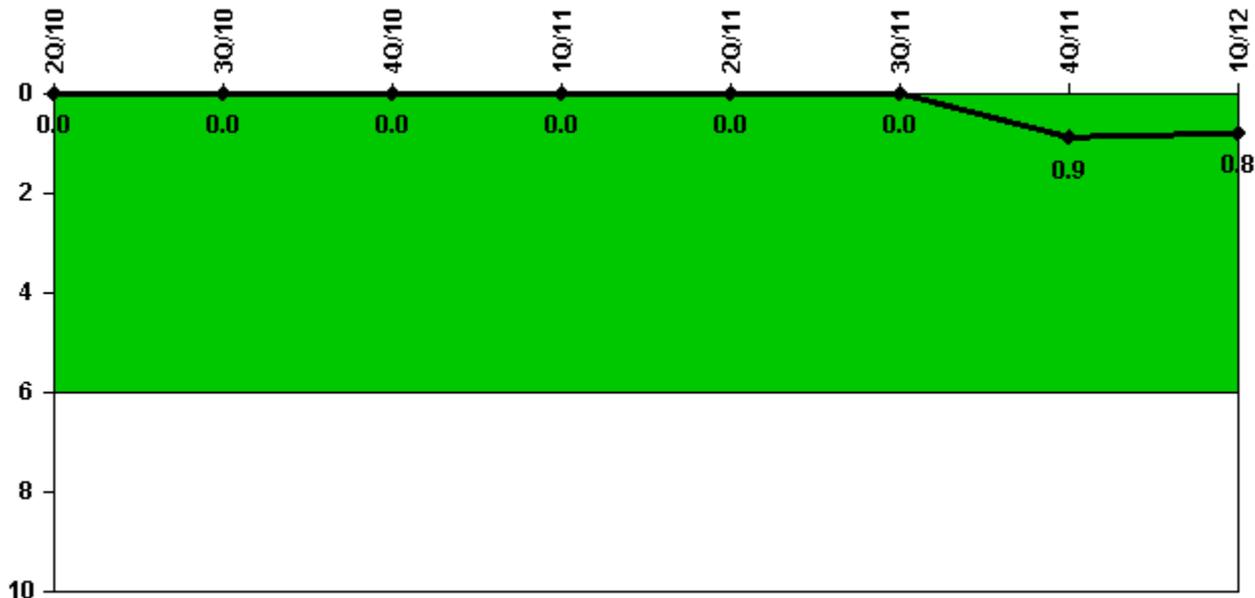
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2184.0	1929.3	2209.0	1355.0	2184.0	2208.0	2209.0	2183.0
Indicator value	0.9	0.8	0	0	0	0	0	0

Licensee Comments: none

## Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

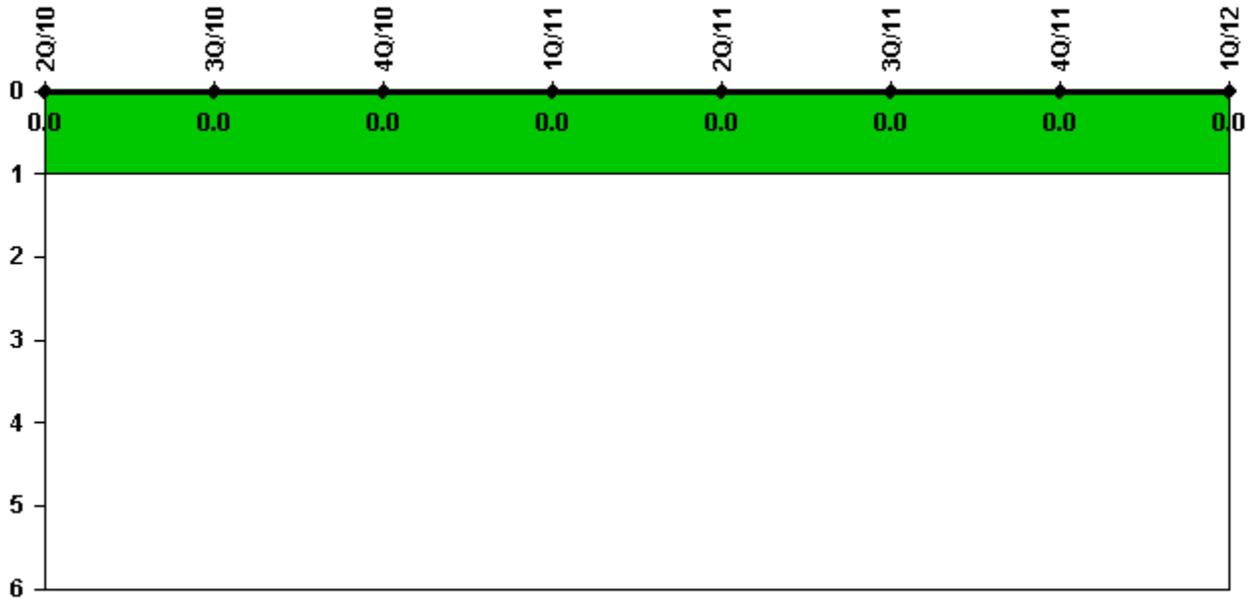
### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Unplanned power changes	0	0	0	0	0	0	1.0	0
Critical hours	2184.0	1929.3	2209.0	1355.0	2184.0	2208.0	2209.0	2183.0
Indicator value	0	0	0	0	0	0	0.9	0.8

Licensee Comments:

3Q/10: A manual plant shutdown required by Technical Specifications was performed in August to complete repairs to an Emergency Diesel Generator. The shutdown is excluded from this indicator due to the fact that preparations for the shutdown were made >72 hours prior to the initiation of the shutdown. The Unit returned to power operation in September.

## Unplanned Scrams with Complications



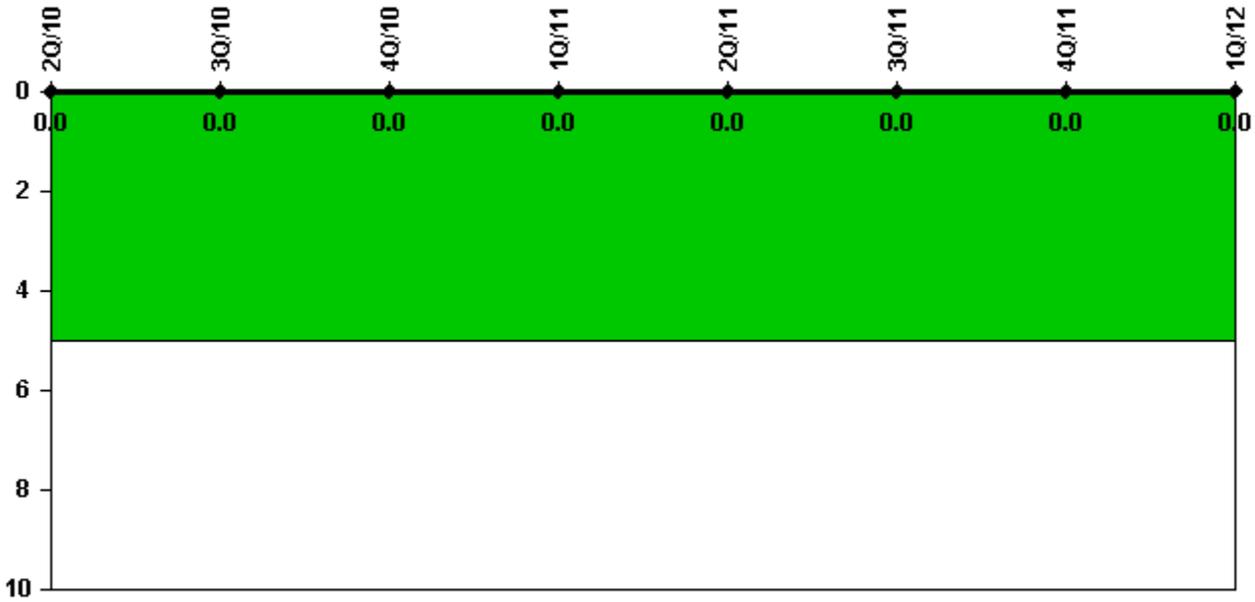
Thresholds: White > 1.0

### Notes

Unplanned Scrams with Complications	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

## Safety System Functional Failures (PWR)



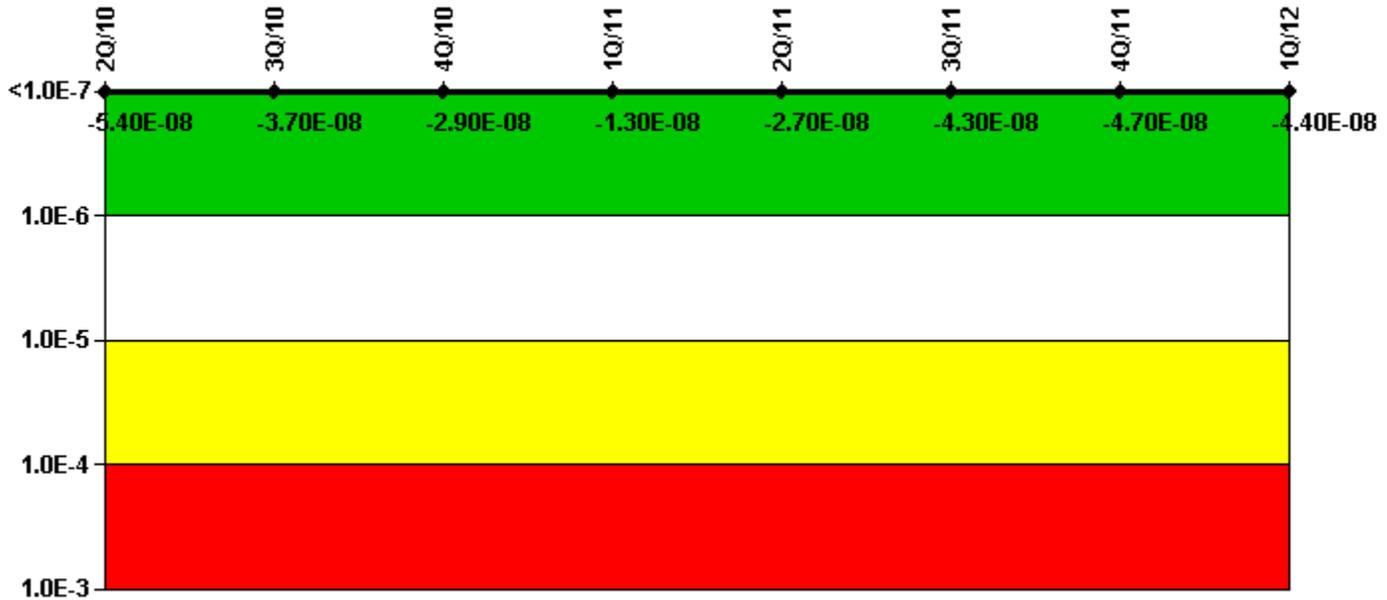
Thresholds: White > 5.0

### Notes

Safety System Functional Failures (PWR)	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

# Mitigating Systems Performance Index, Emergency AC Power System



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

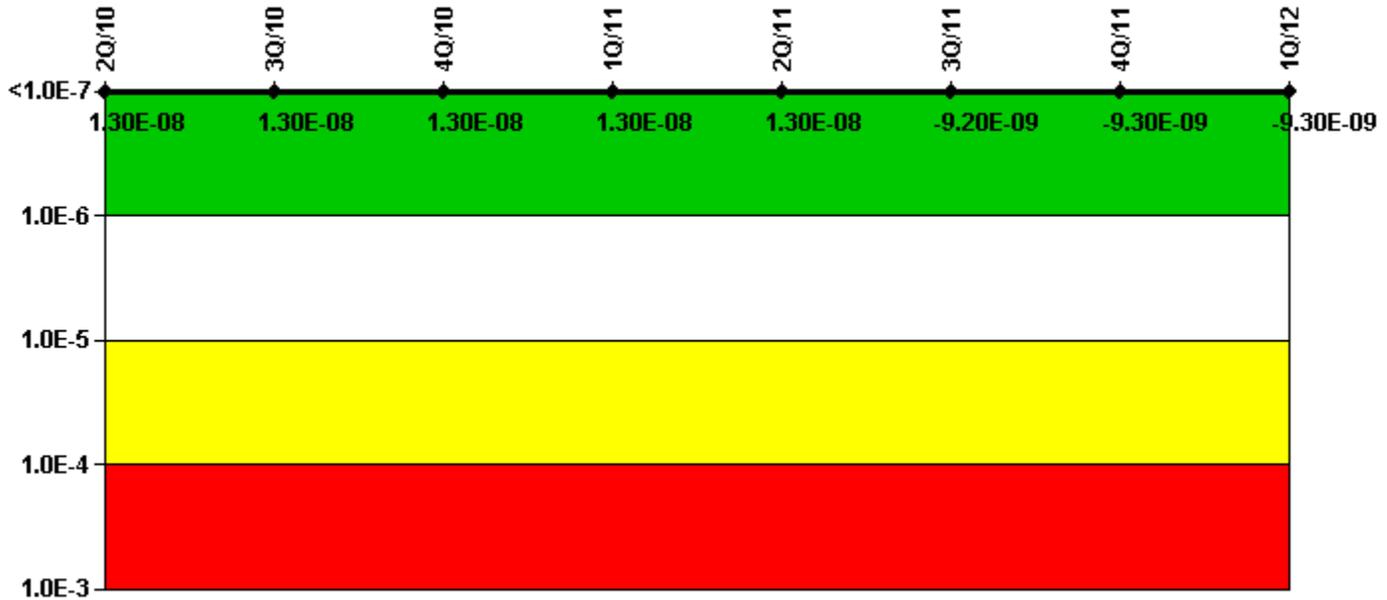
## Notes

Mitigating Systems Performance Index, Emergency AC Power System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	-6.71E-10	2.07E-08	2.93E-08	4.64E-08	3.07E-08	1.56E-08	9.45E-09	9.14E-09
URI ( $\Delta$ CDF)	-5.38E-08	-5.81E-08	-5.83E-08	-5.91E-08	-5.80E-08	-5.85E-08	-5.65E-08	-5.34E-08
PLE	NO							
Indicator value	-5.40E-08	-3.70E-08	-2.90E-08	-1.30E-08	-2.70E-08	-4.30E-08	-4.70E-08	-4.40E-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



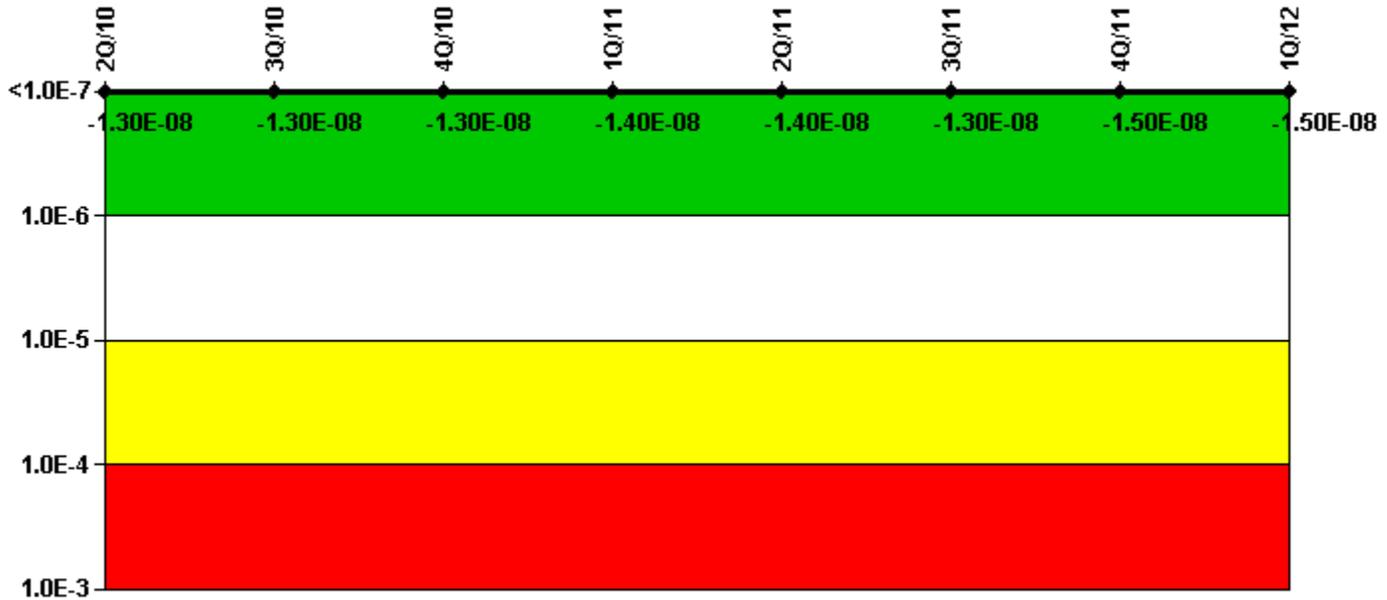
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	-4.55E-09	-4.55E-09	-4.55E-09	-4.55E-09	-4.55E-09	-4.59E-09	-4.59E-09	-4.59E-09
URI ( $\Delta$ CDF)	1.74E-08	1.74E-08	1.75E-08	1.77E-08	1.79E-08	-4.60E-09	-4.69E-09	-4.73E-09
PLE	NO							
Indicator value	1.30E-08	1.30E-08	1.30E-08	1.30E-08	1.30E-08	-9.20E-09	-9.30E-09	-9.30E-09

Licensee Comments: none

# Mitigating Systems Performance Index, Heat Removal System



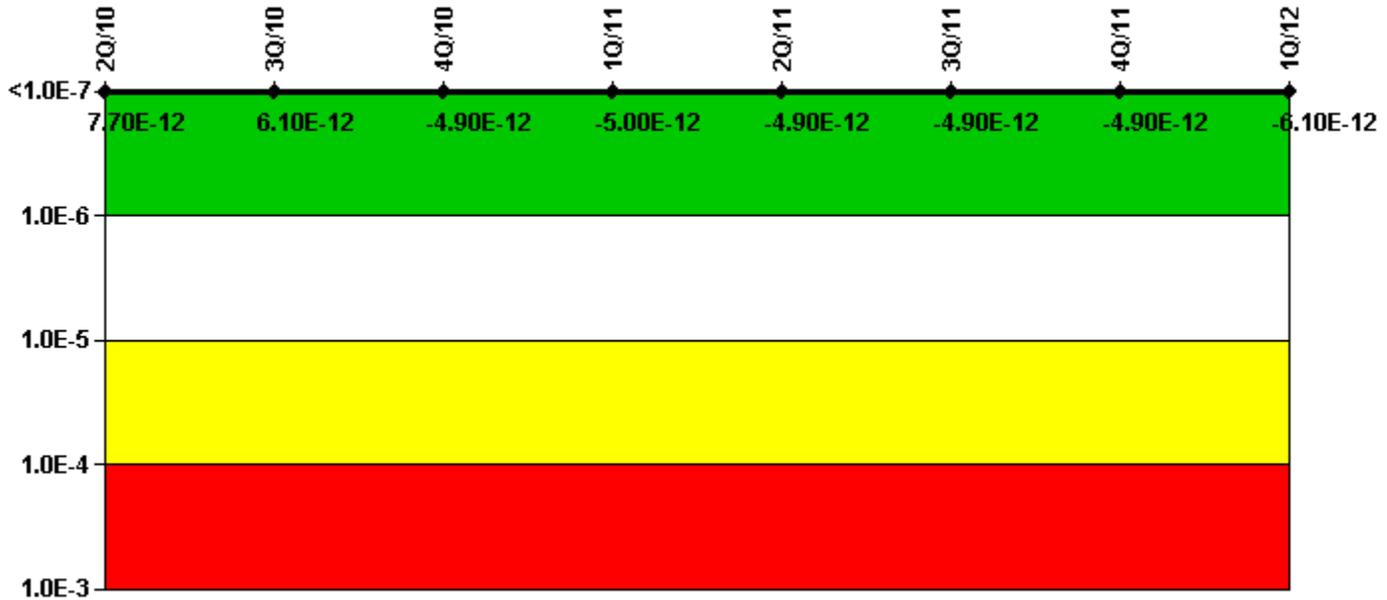
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	-3.82E-10	7.71E-10	4.63E-10	-3.17E-10	-5.59E-10	1.19E-10	-1.52E-09	-1.29E-09
URI ( $\Delta$ CDF)	-1.31E-08	-1.34E-08	-1.34E-08	-1.36E-08	-1.30E-08	-1.34E-08	-1.34E-08	-1.35E-08
PLE	NO							
Indicator value	-1.30E-08	-1.30E-08	-1.30E-08	-1.40E-08	-1.40E-08	-1.30E-08	-1.50E-08	-1.50E-08

Licensee Comments: none

# Mitigating Systems Performance Index, Residual Heat Removal System



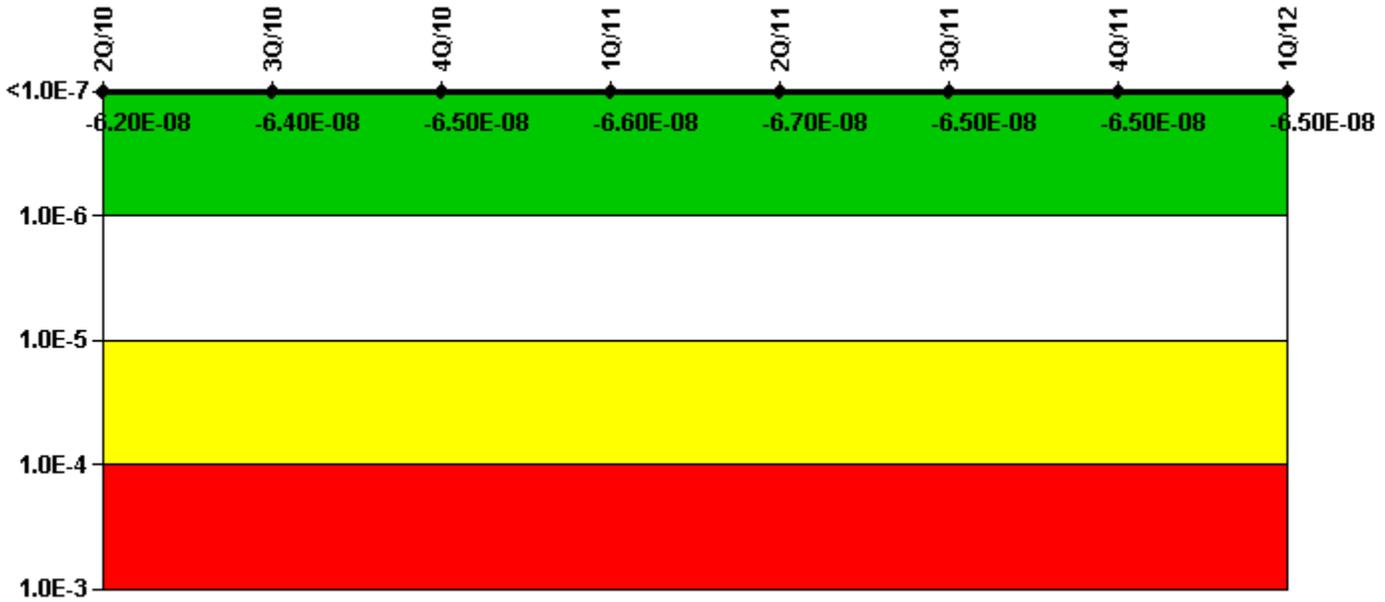
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	9.49E-12	7.96E-12	-3.24E-12	-3.22E-12	-3.23E-12	-3.23E-12	-3.23E-12	-4.49E-12
URI ( $\Delta$ CDF)	-1.83E-12	-1.86E-12	-1.63E-12	-1.75E-12	-1.62E-12	-1.62E-12	-1.62E-12	-1.66E-12
PLE	NO							
Indicator value	7.70E-12	6.10E-12	-4.90E-12	-5.00E-12	-4.90E-12	-4.90E-12	-4.90E-12	-6.10E-12

Licensee Comments: none

# Mitigating Systems Performance Index, Cooling Water Systems



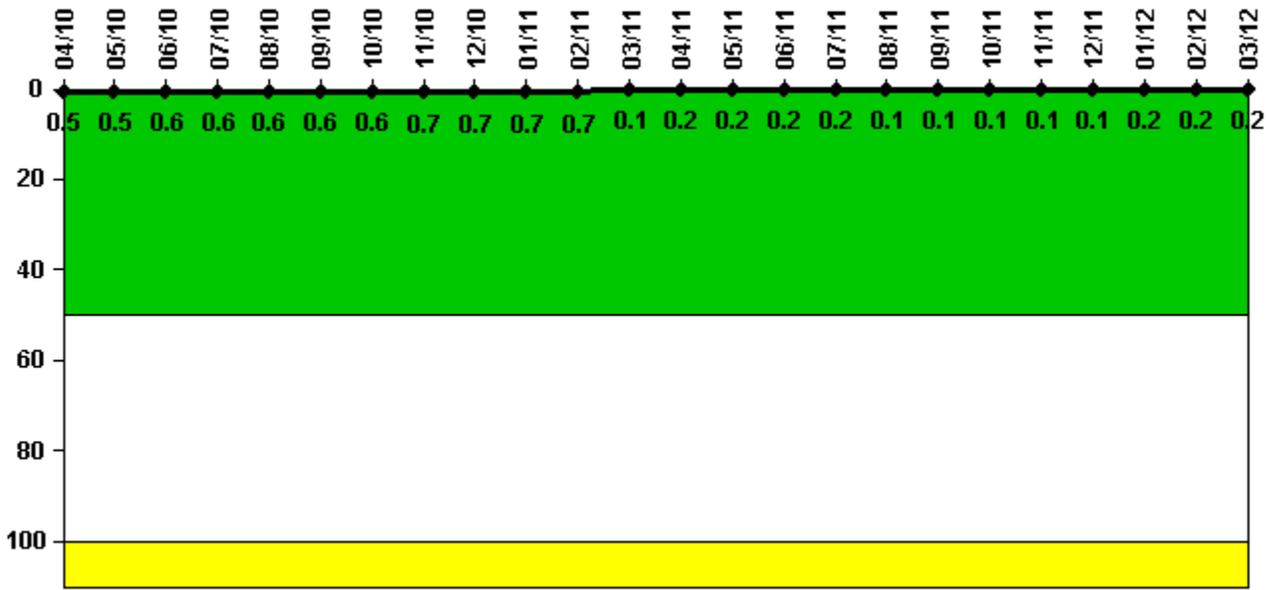
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	9.71E-11	9.82E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
URI ( $\Delta$ CDF)	-6.17E-08	-6.42E-08	-6.51E-08	-6.62E-08	-6.66E-08	-6.52E-08	-6.54E-08	-6.54E-08
PLE	NO							
Indicator value	-6.20E-08	-6.40E-08	-6.50E-08	-6.60E-08	-6.70E-08	-6.50E-08	-6.50E-08	-6.50E-08

Licensee Comments: none

# Reactor Coolant System Activity



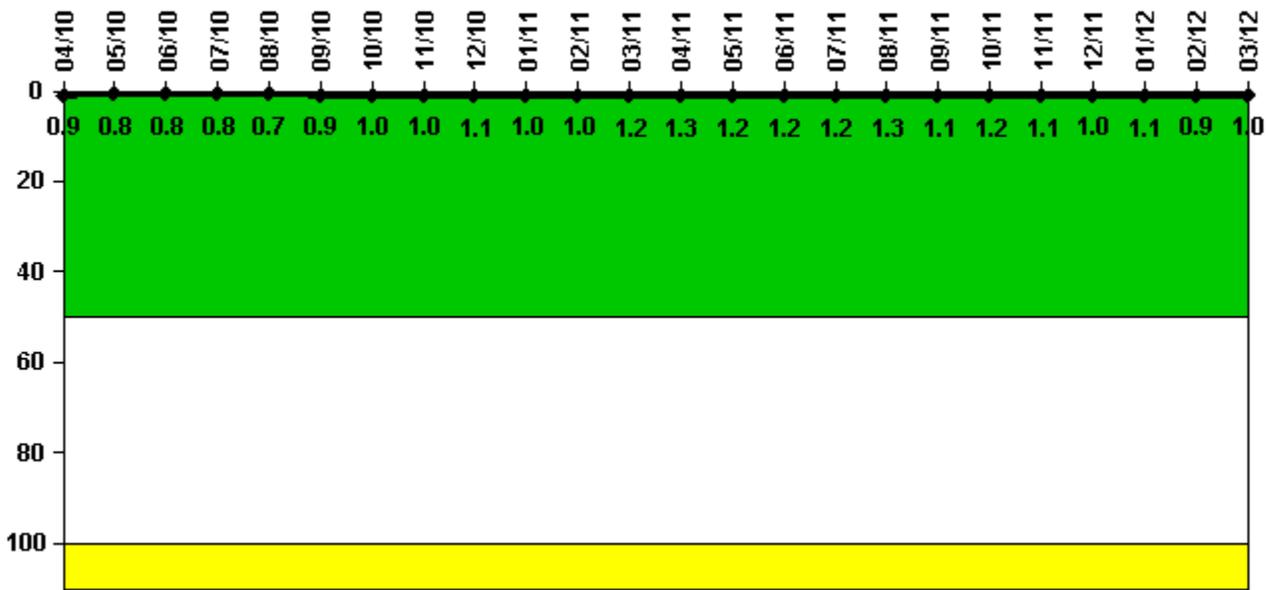
Thresholds: White > 50.0 Yellow > 100.0

## Notes

Reactor Coolant System Activity	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11
Maximum activity	0.005210	0.005240	0.005500	0.005750	0.005830	0.006060	0.006410	0.006510	0.006760	0.006990	0.007020	0.001210
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	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.1
Reactor Coolant System Activity	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12
Maximum activity	0.001920	0.002030	0.002090	0.002030	0.001350	0.001440	0.001440	0.001470	0.001450	0.001570	0.001580	0.001640
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	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2

Licensee Comments: none

## Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

### Notes

<b>Reactor Coolant System Leakage</b>	<b>4/10</b>	<b>5/10</b>	<b>6/10</b>	<b>7/10</b>	<b>8/10</b>	<b>9/10</b>	<b>10/10</b>	<b>11/10</b>	<b>12/10</b>	<b>1/11</b>	<b>2/11</b>	<b>3/11</b>
Maximum leakage	0.086	0.079	0.083	0.082	0.074	0.088	0.097	0.104	0.106	0.096	0.102	0.118
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	0.8	0.8	0.8	0.7	0.9	1.0	1.0	1.1	1.0	1.0	1.2
<b>Reactor Coolant System Leakage</b>	<b>4/11</b>	<b>5/11</b>	<b>6/11</b>	<b>7/11</b>	<b>8/11</b>	<b>9/11</b>	<b>10/11</b>	<b>11/11</b>	<b>12/11</b>	<b>1/12</b>	<b>2/12</b>	<b>3/12</b>
Maximum leakage	0.126	0.118	0.124	0.115	0.126	0.111	0.115	0.110	0.102	0.105	0.093	0.095
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	1.3	1.2	1.2	1.2	1.3	1.1	1.2	1.1	1.0	1.1	0.9	1.0

Licensee Comments:

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.

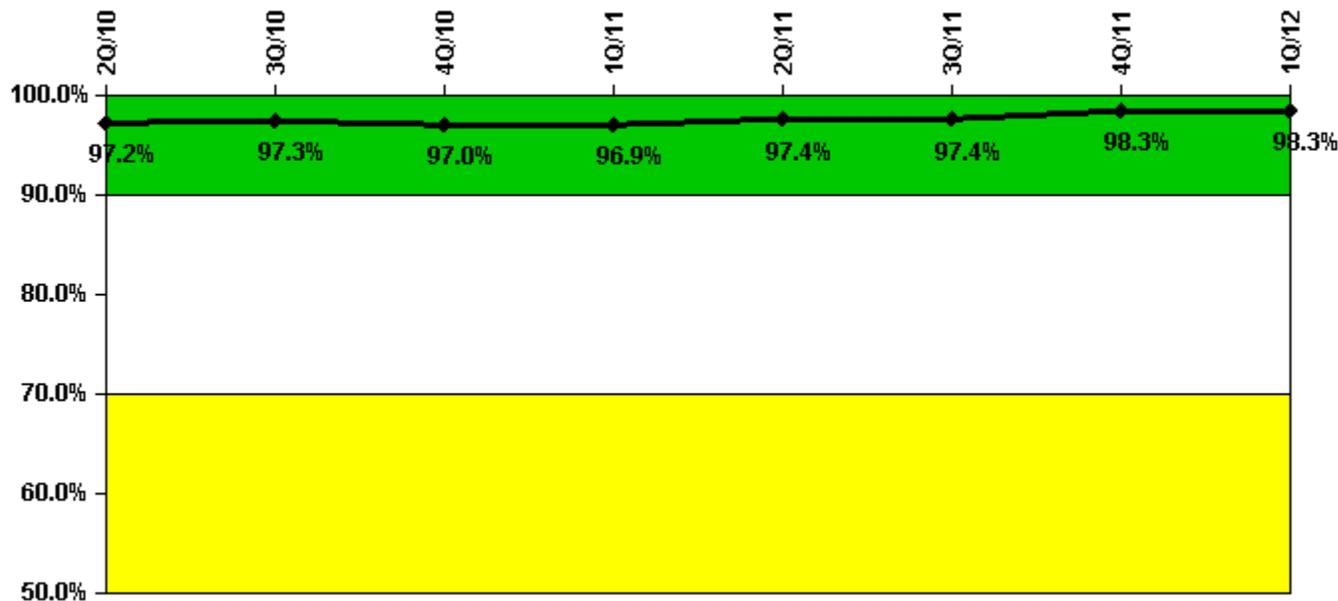
3/11: Total Leakage is being reported in lieu of Identified Leakage.

12/10: Total Leakage is being reported in lieu of Identified Leakage.

9/10: Total Leakage is being reported in lieu of Identified Leakage

6/10: 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/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Successful opportunities	26.0	35.0	17.0	11.0	39.0	17.0	9.0	21.0
Total opportunities	26.0	35.0	18.0	11.0	40.0	17.0	10.0	21.0
Indicator value	97.2%	97.3%	97.0%	96.9%	97.4%	97.4%	98.3%	98.3%

### Licensee Comments:

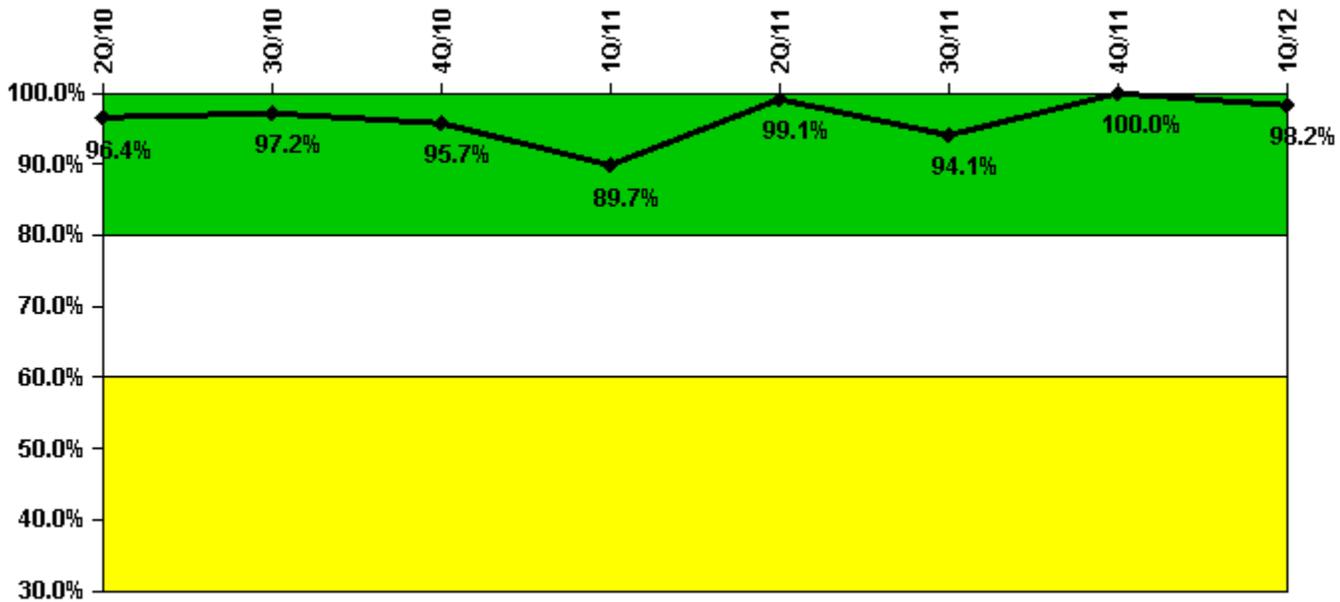
3Q/11: The April 2011 ERO Drill Exercise Performance was revised with the 3rd quarter 2011 submittal. April Successful Drills and Total Drills were reduced from 11 each, to 10 each. This revision does not affect the indicator color.

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.

3Q/10: One (1) ANO Notifications Performance Indicator for a 10/21/2009 Tabletop Evaluation has been changed from successful to unsuccessful. This was discovered during an NRC Inspection conducted 09/20/2010 through 09/24/2010.

## ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

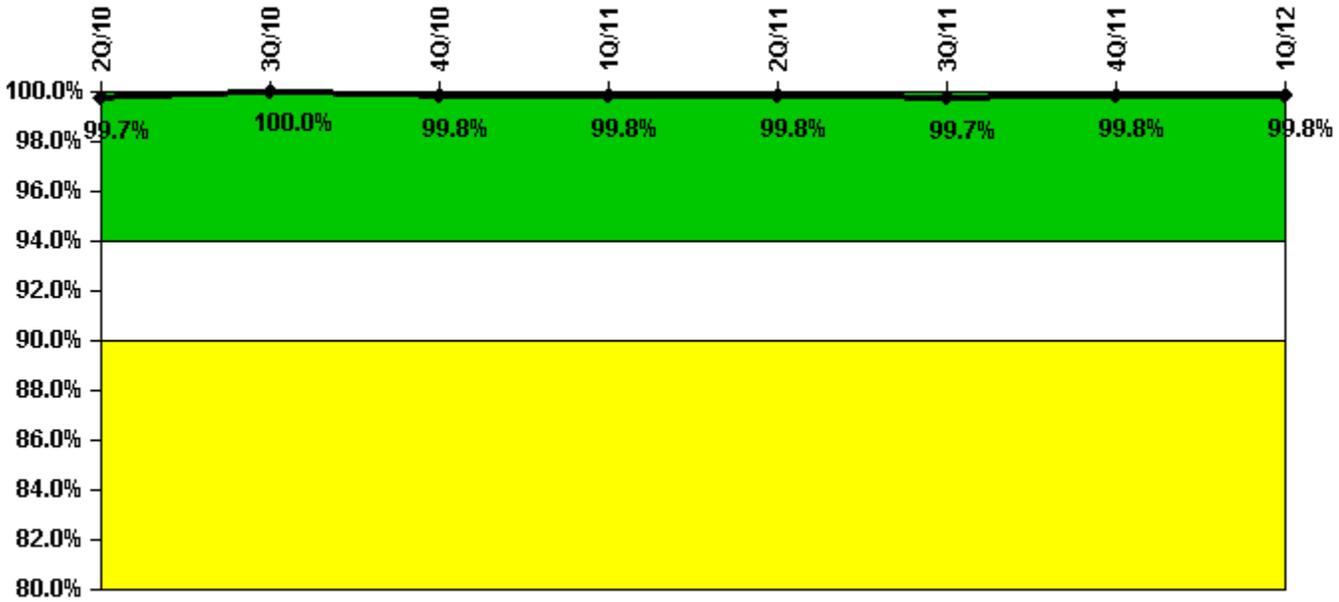
### Notes

ERO Drill Participation	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Participating Key personnel	106.0	106.0	110.0	105.0	114.0	111.0	114.0	111.0
Total Key personnel	110.0	109.0	115.0	117.0	115.0	118.0	114.0	113.0
Indicator value	96.4%	97.2%	95.7%	89.7%	99.1%	94.1%	100.0%	98.2%

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



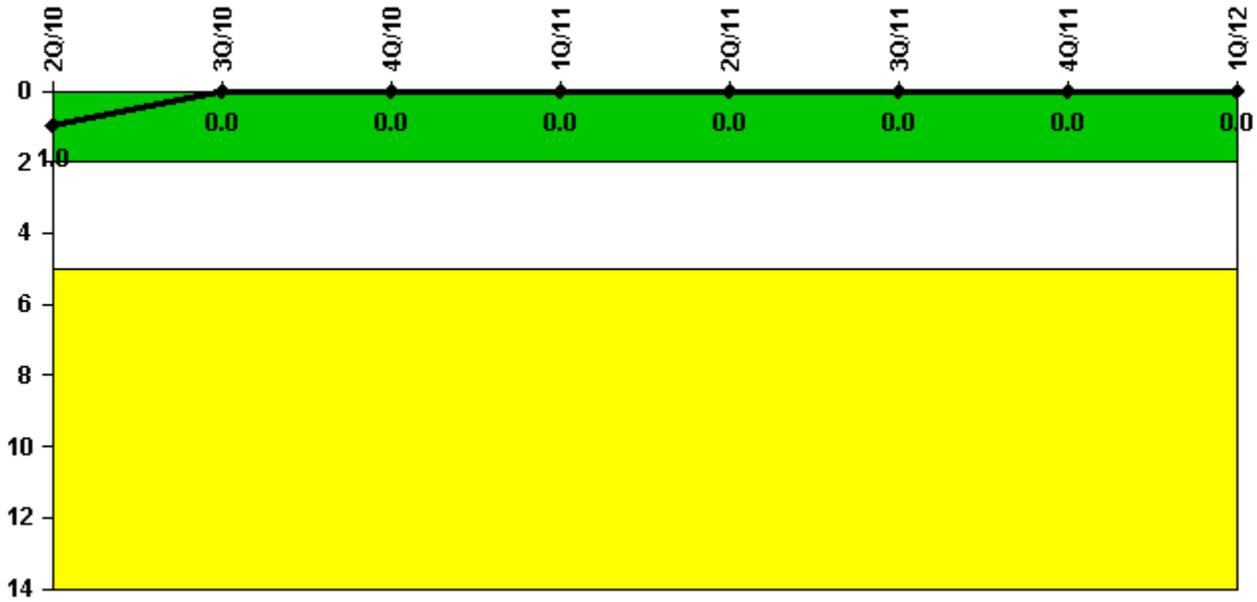
**Thresholds:** White < 94.0% Yellow < 90.0%

## Notes

Alert & Notification System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Successful siren-tests	147	147	146	147	147	146	147	147
Total sirens-tests	147	147	147	147	147	147	147	147
Indicator value	99.7%	100.0%	99.8%	99.8%	99.8%	99.7%	99.8%	99.8%

Licensee Comments: none

# Occupational Exposure Control Effectiveness



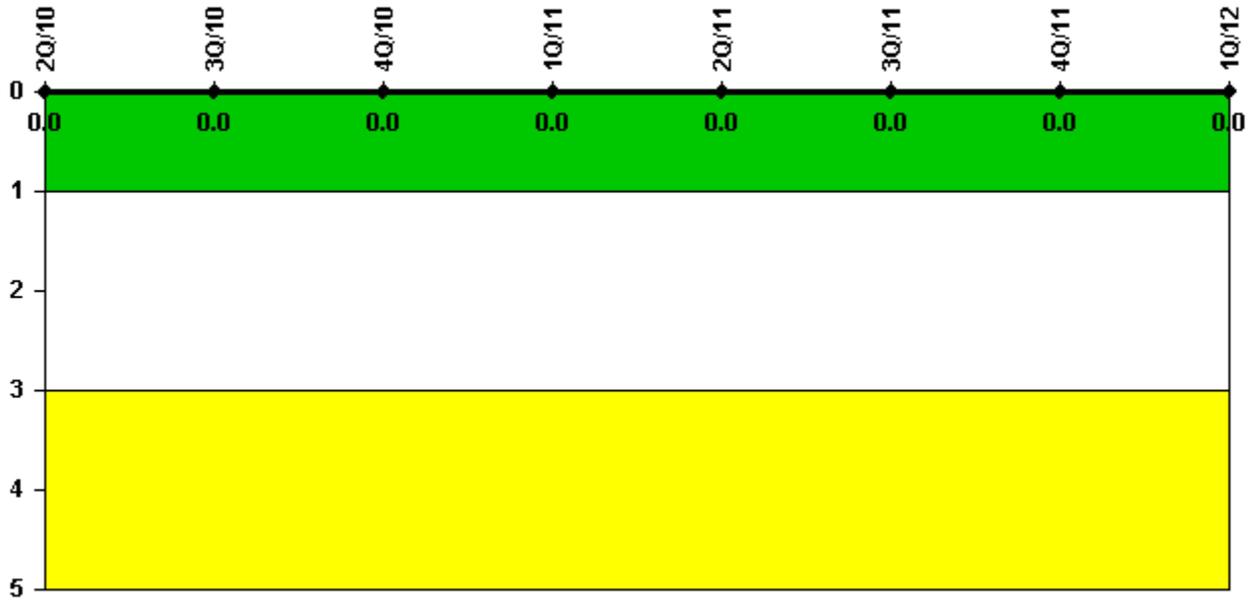
Thresholds: White > 2.0 Yellow > 5.0

## Notes

Occupational Exposure Control Effectiveness	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/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>1</b>	<b>0</b>						

Licensee Comments: none

# RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

## Notes

RETS/ODCM Radiological Effluent	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Security](#) information not publicly available.