

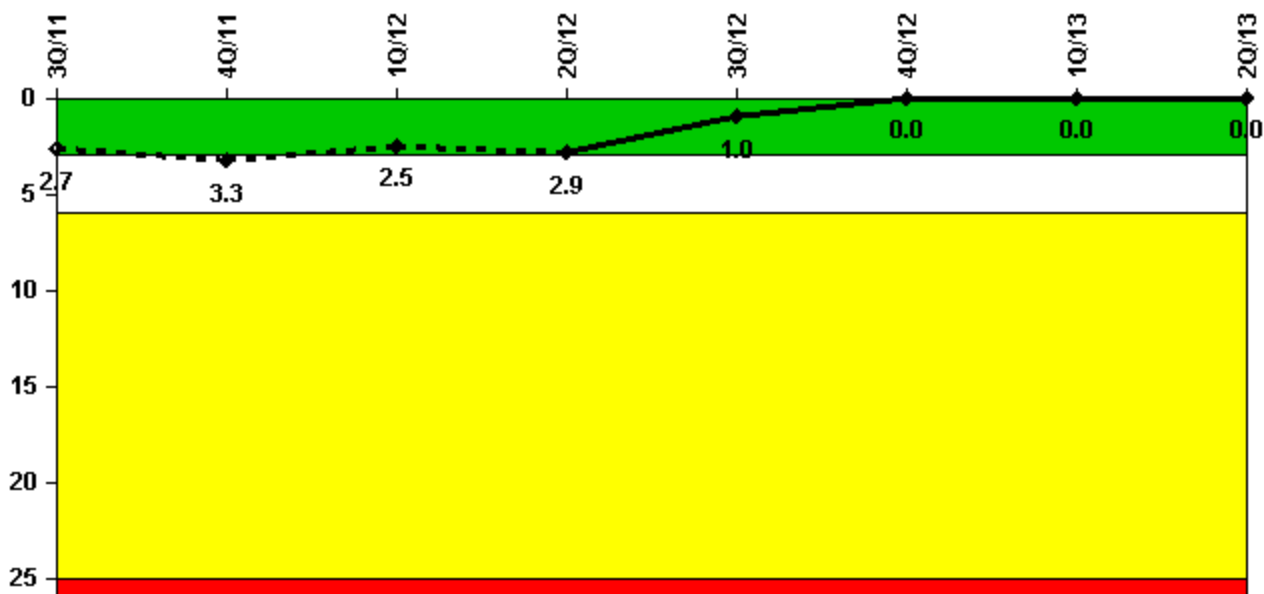
# Palisades

## 2Q/2013 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



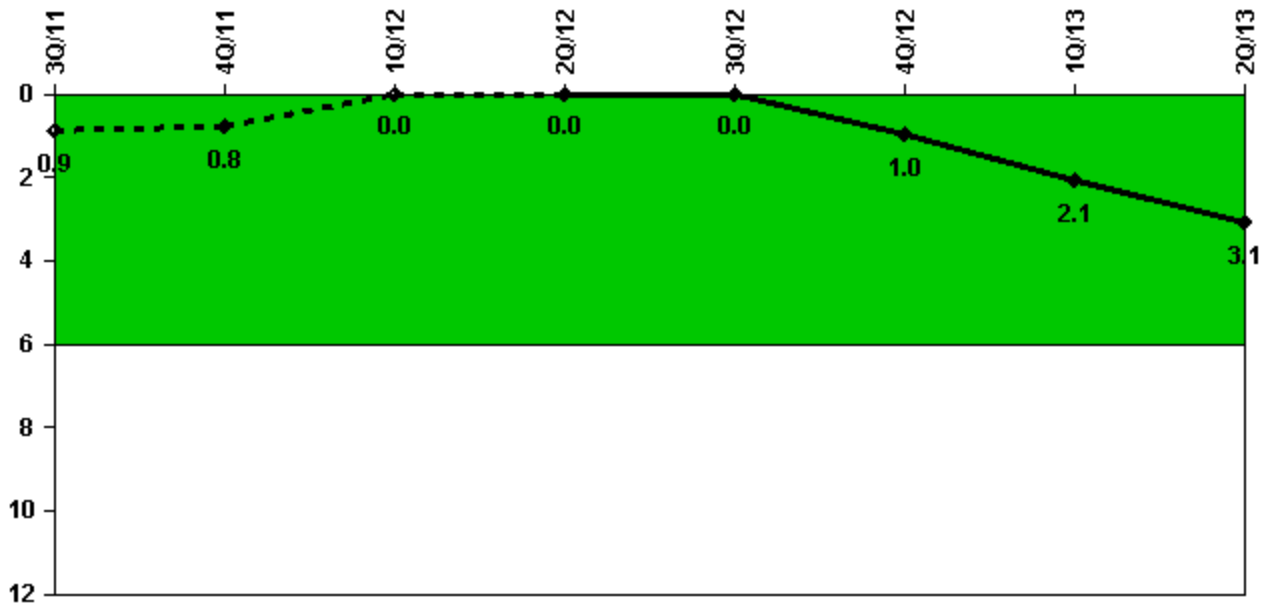
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Unplanned scrams	2.0	1.0	0	0	0	0	0	0
Critical hours	1998.9	2160.5	2108.4	965.4	1544.8	2151.5	2017.0	1158.4
Indicator value	2.7	3.3	2.5	2.9	1.0	0	0	0

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



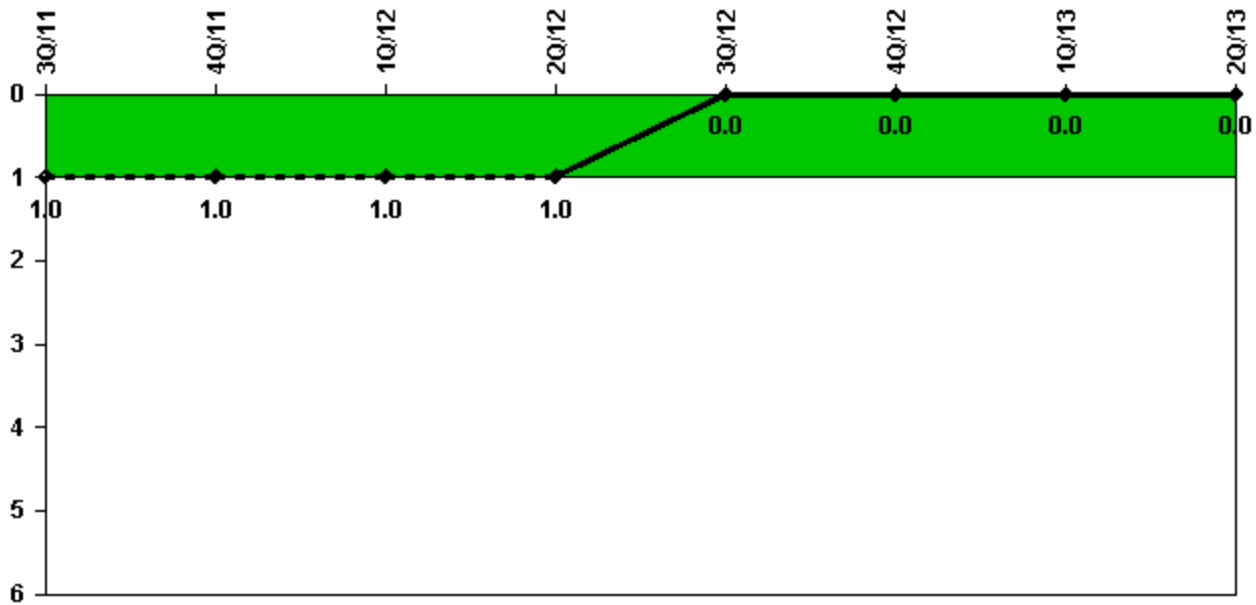
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Unplanned power changes	0	0	0	0	0	1.0	1.0	1.0
Critical hours	1998.9	2160.5	2108.4	965.4	1544.8	2151.5	2017.0	1158.4
<b>Indicator value</b>	<b>0.9</b>	<b>0.8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1.0</b>	<b>2.1</b>	<b>3.1</b>

Licensee Comments: none

### Unplanned Scrams with Complications



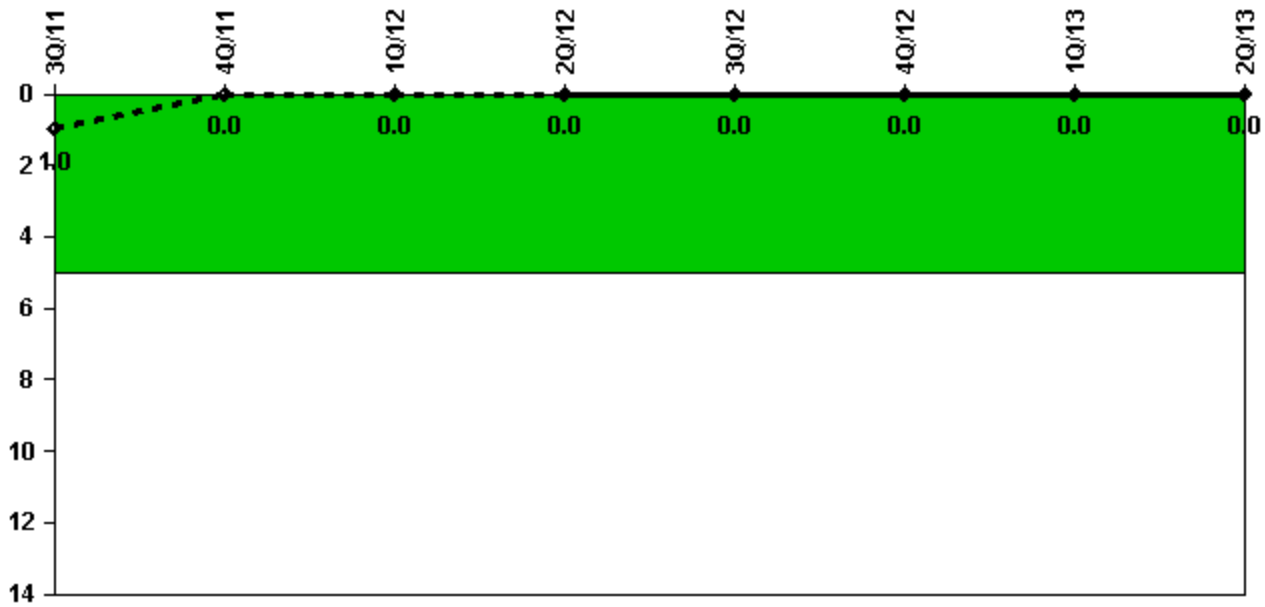
Thresholds: White > 1.0

#### Notes

Unplanned Scrams with Complications	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Scrams with complications	1.0	0	0	0	0	0	0	0
<b>Indicator value</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</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)



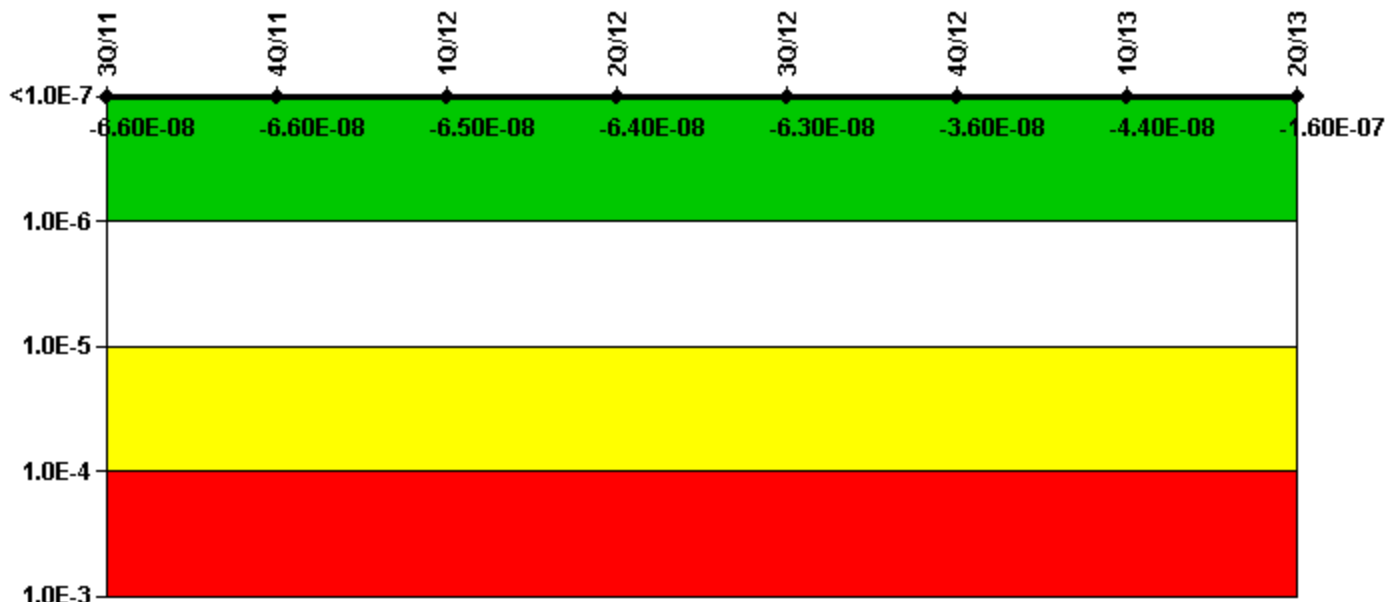
Thresholds: White > 5.0

#### Notes

Safety System Functional Failures (PWR)	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Safety System Functional Failures	0	0	0	0	0	0	0	0
<b>Indicator value</b>	<b>1</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	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
UAI ( $\Delta$ CDF)	-2.36E-08	-2.36E-08	-2.36E-08	-2.35E-08	-2.34E-08	2.06E-09	-6.50E-09	4.86E-09
URI ( $\Delta$ CDF)	-4.25E-08	-4.25E-08	-4.15E-08	-4.04E-08	-3.94E-08	-3.83E-08	-3.72E-08	-1.63E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-6.60E-08	-6.60E-08	-6.50E-08	-6.40E-08	-6.30E-08	-3.60E-08	-4.40E-08	-1.60E-07

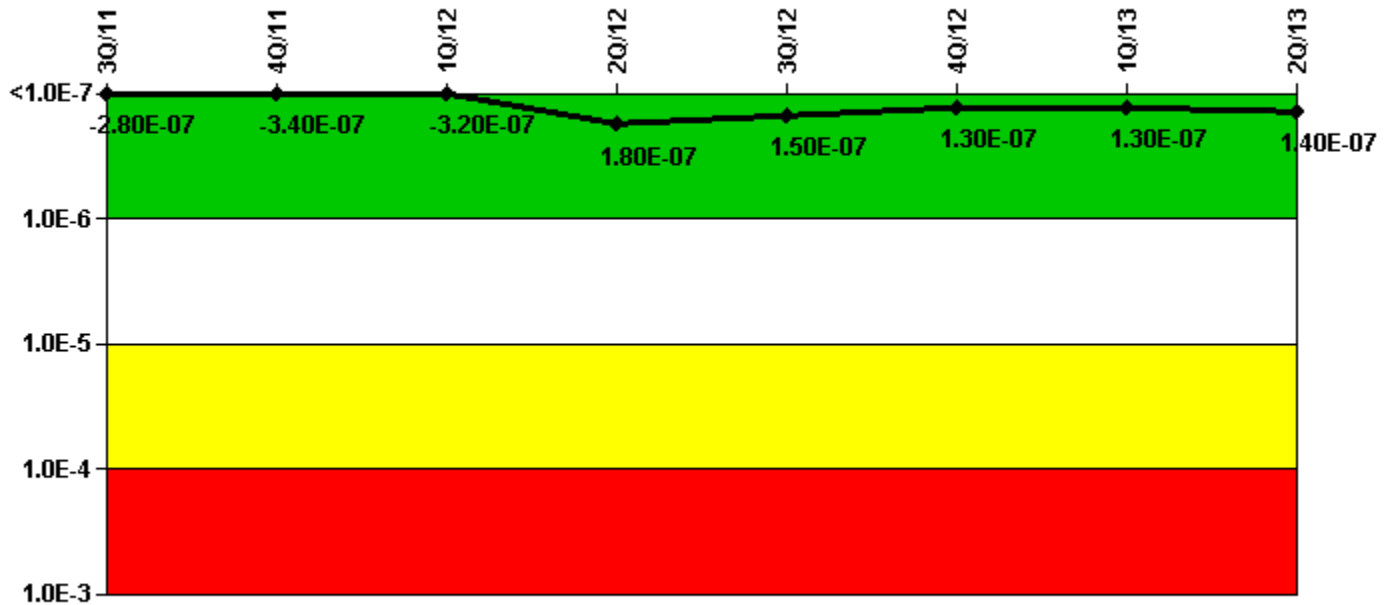
#### Licensee Comments:

1Q/12: MSPI Basis Document update made to address Frequently Asked Question (FAQ) 484 (11-07) "FOTP Failures" and FAQ 480 (11-06) "EDG Run Hour Reporting". Revised Emergency Diesel Generator load demand and run-time estimates due to FAQ 480.

4Q/11: Evaluation of Emergency Diesel Generator K-6BG Jacket Water Pump P-211B Mechanical Seal Leakage from April 2011 concluded No MSPI Failure occurred. (Reference CR-PLP-2011-01933)

3Q/11: Evaluation is pending of Emergency Diesel Generator K-6BG Jacket Water Pump P-211B Mechanical Seal Leakage identified in April 2011. (Reference CR-PLP-2011-01933)

### 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	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
UAI ( $\Delta$ CDF)	-1.30E-08	-7.45E-08	-5.41E-08	-5.12E-08	-8.27E-08	-1.03E-07	-1.03E-07	-9.51E-08
URI ( $\Delta$ CDF)	-2.65E-07	-2.65E-07	-2.65E-07	2.35E-07	2.35E-07	2.35E-07	2.35E-07	2.35E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.80E-07	-3.40E-07	-3.20E-07	1.80E-07	1.50E-07	1.30E-07	1.30E-07	1.40E-07

Licensee Comments:

2Q/13: Risk Cap Invoked.

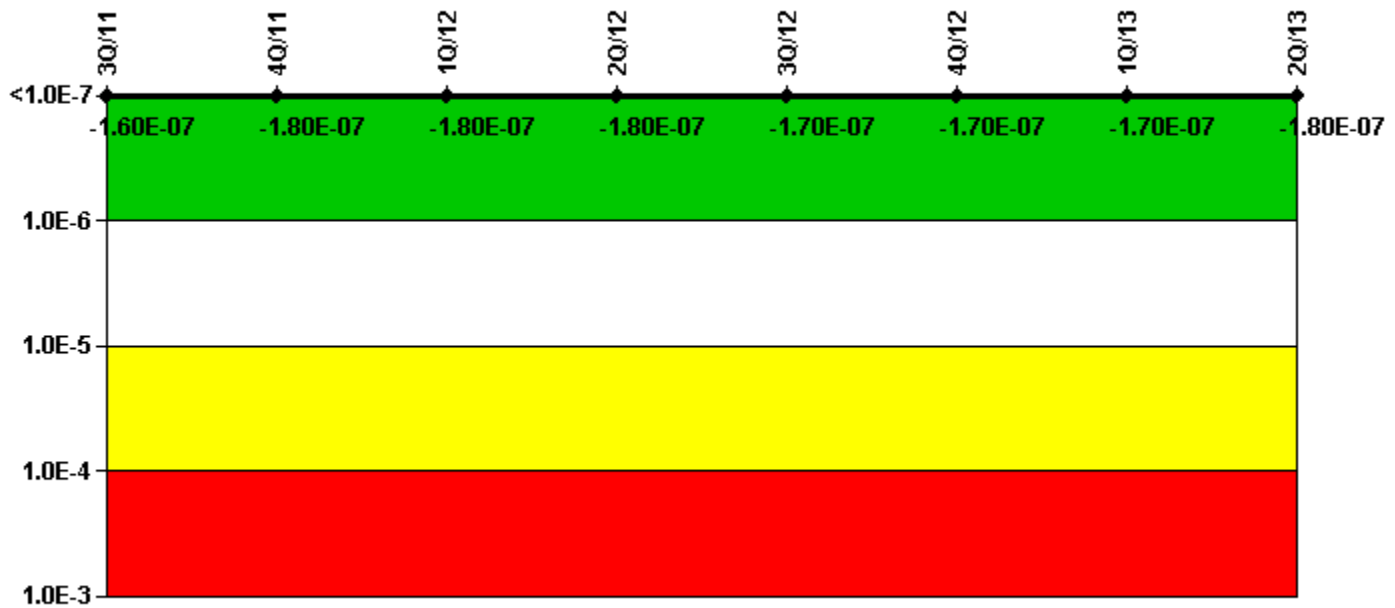
1Q/13: Risk Cap Invoked.

4Q/12: Risk Cap Invoked.

3Q/12: Risk Cap Invoked.

2Q/12: Risk Cap Invoked.

### Mitigating Systems Performance Index, Heat Removal System



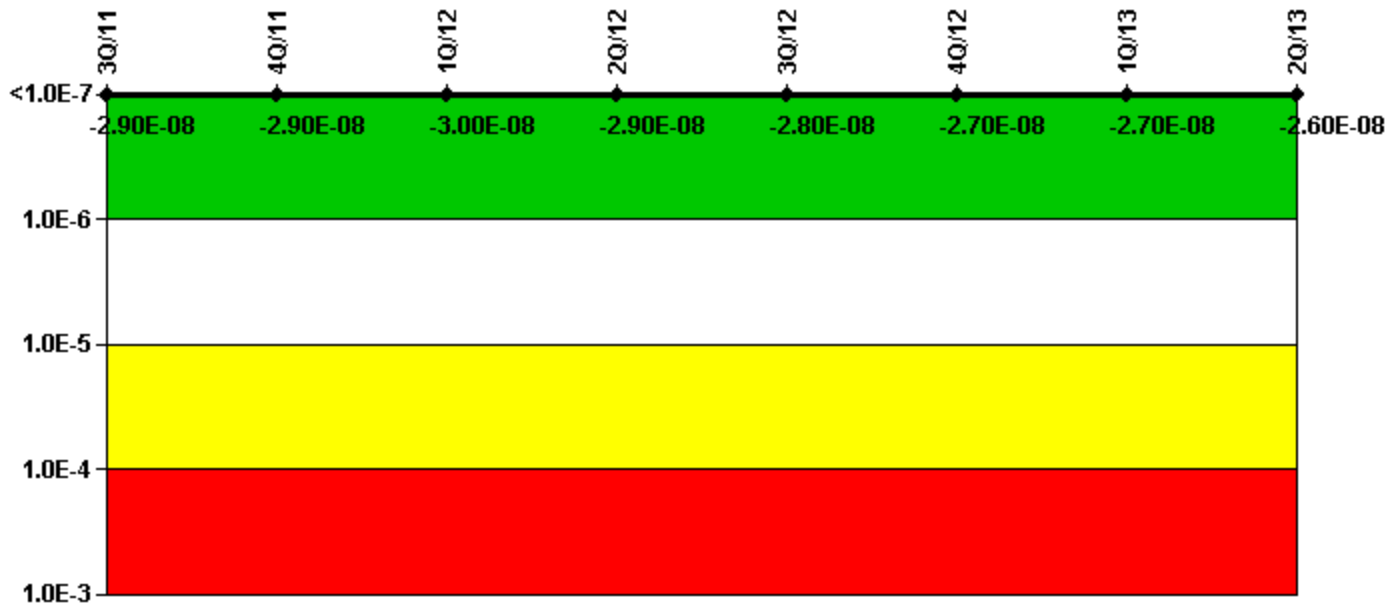
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
UAI ( $\Delta$ CDF)	3.73E-08	1.92E-08	1.82E-08	1.87E-08	3.35E-08	3.15E-08	3.26E-08	2.13E-08
URI ( $\Delta$ CDF)	-2.01E-07	-2.01E-07	-2.01E-07	-2.01E-07	-2.01E-07	-2.01E-07	-2.01E-07	-2.01E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.60E-07	-1.80E-07	-1.80E-07	-1.80E-07	-1.70E-07	-1.70E-07	-1.70E-07	-1.80E-07

Licensee Comments: none

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



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

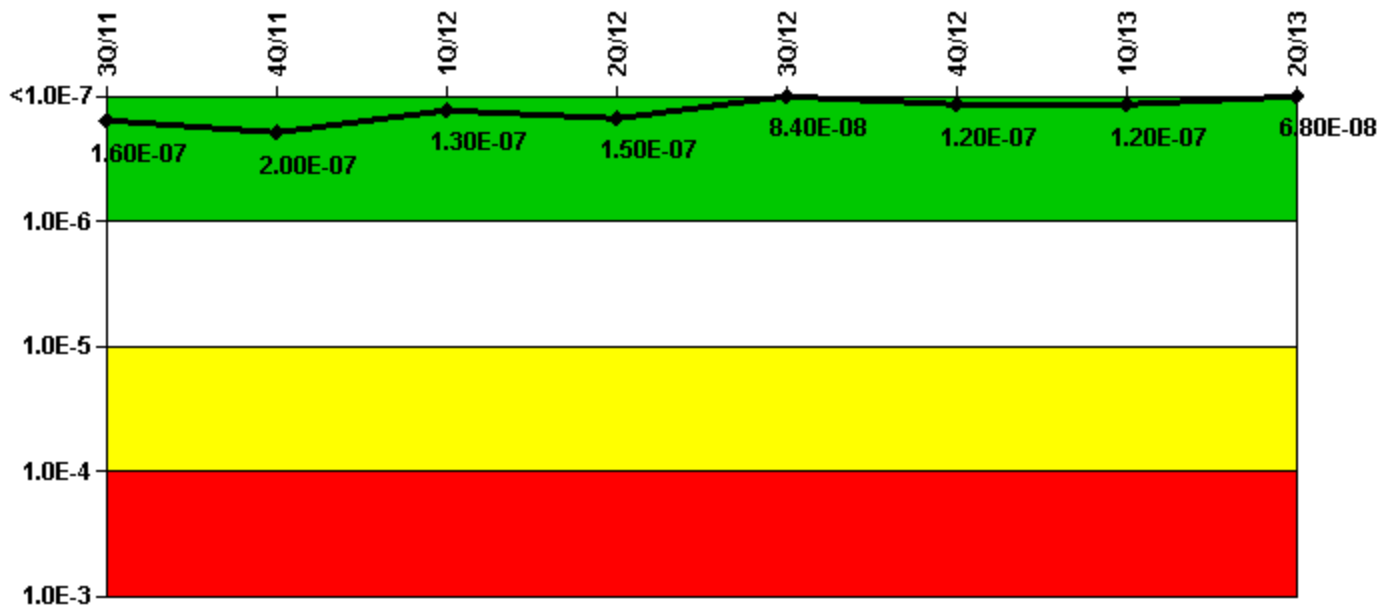
#### Notes

Mitigating Systems Performance Index, Residual Heat Removal System	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
UAI ( $\Delta$ CDF)	1.17E-08	1.11E-08	1.07E-08	1.16E-08	1.28E-08	1.29E-08	1.32E-08	1.49E-08
URI ( $\Delta$ CDF)	-4.04E-08	-4.04E-08	-4.04E-08	-4.04E-08	-4.04E-08	-4.04E-08	-4.04E-08	-4.04E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.90E-08	-2.90E-08	-3.00E-08	-2.90E-08	-2.80E-08	-2.70E-08	-2.70E-08	-2.60E-08

Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



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

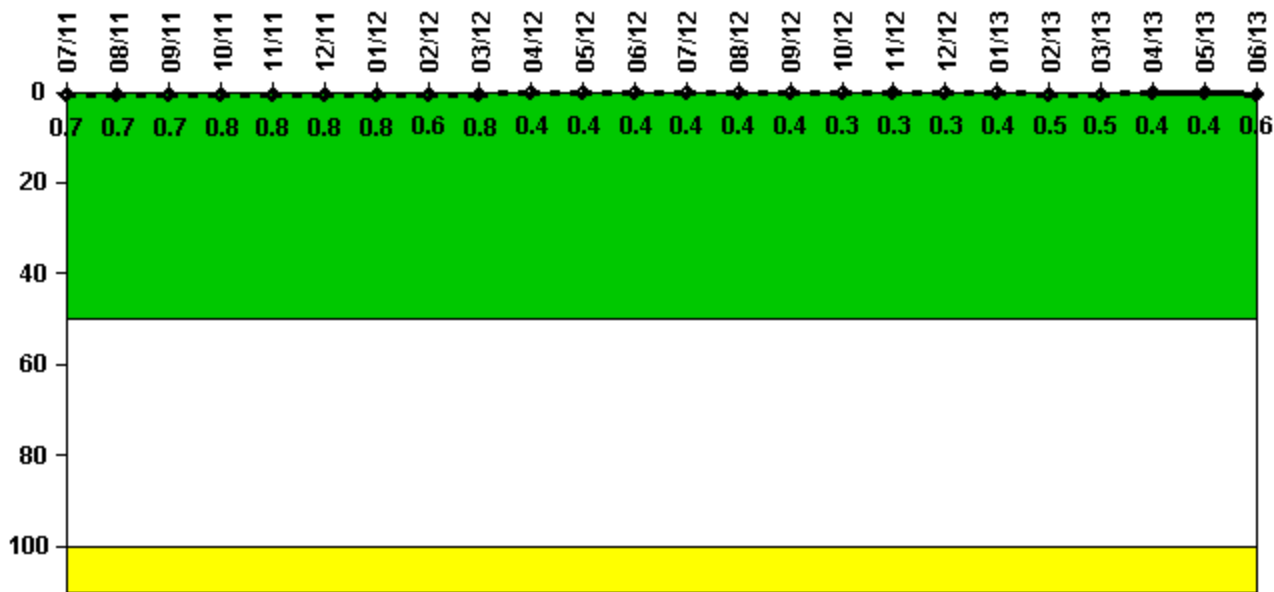
#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
UAI (ΔCDF)	2.98E-07	3.44E-07	2.75E-07	2.97E-07	2.70E-07	3.07E-07	3.03E-07	2.55E-07
URI (ΔCDF)	-1.42E-07	-1.42E-07	-1.42E-07	-1.42E-07	-1.87E-07	-1.87E-07	-1.87E-07	-1.87E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.60E-07	2.00E-07	1.30E-07	1.50E-07	8.40E-08	1.20E-07	1.20E-07	6.80E-08

Licensee Comments:

1Q/12: MSPI Basis Document update made to address Frequently Asked Question (FAQ) 482 (11-01) "Cooling Water Boundary".

### Reactor Coolant System Activity



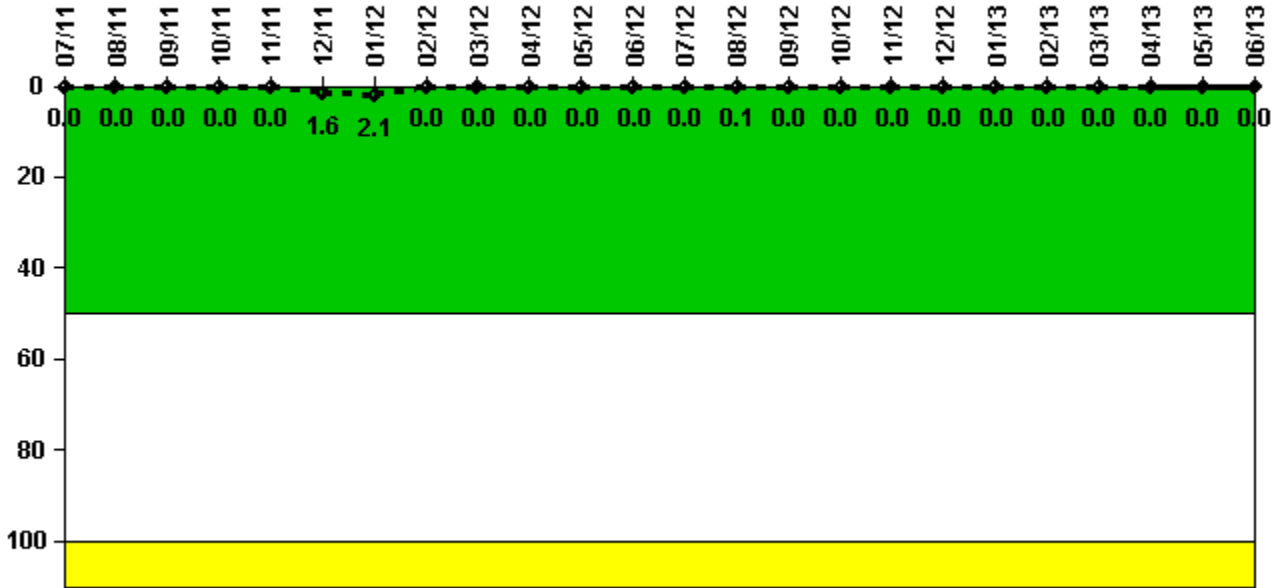
Thresholds: White > 50.0 Yellow > 100.0

**Notes**

Reactor Coolant System Activity	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12	4/12	5/12	6/12
Maximum activity	0.006810	0.007120	0.007170	0.007630	0.007830	0.007790	0.008060	0.006240	0.007910	0.004180	0.003670	0.003660
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
<b>Indicator value</b>	<b>0.7</b>	<b>0.7</b>	<b>0.7</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>0.6</b>	<b>0.8</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>
Reactor Coolant System Activity	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13
Maximum activity	0.003860	0.003940	0.004060	0.003050	0.003310	0.003360	0.003630	0.004960	0.005250	0.003880	0.003880	0.005740
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
<b>Indicator value</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.4</b>	<b>0.5</b>	<b>0.5</b>	<b>0.4</b>	<b>0.4</b>	<b>0.6</b>

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

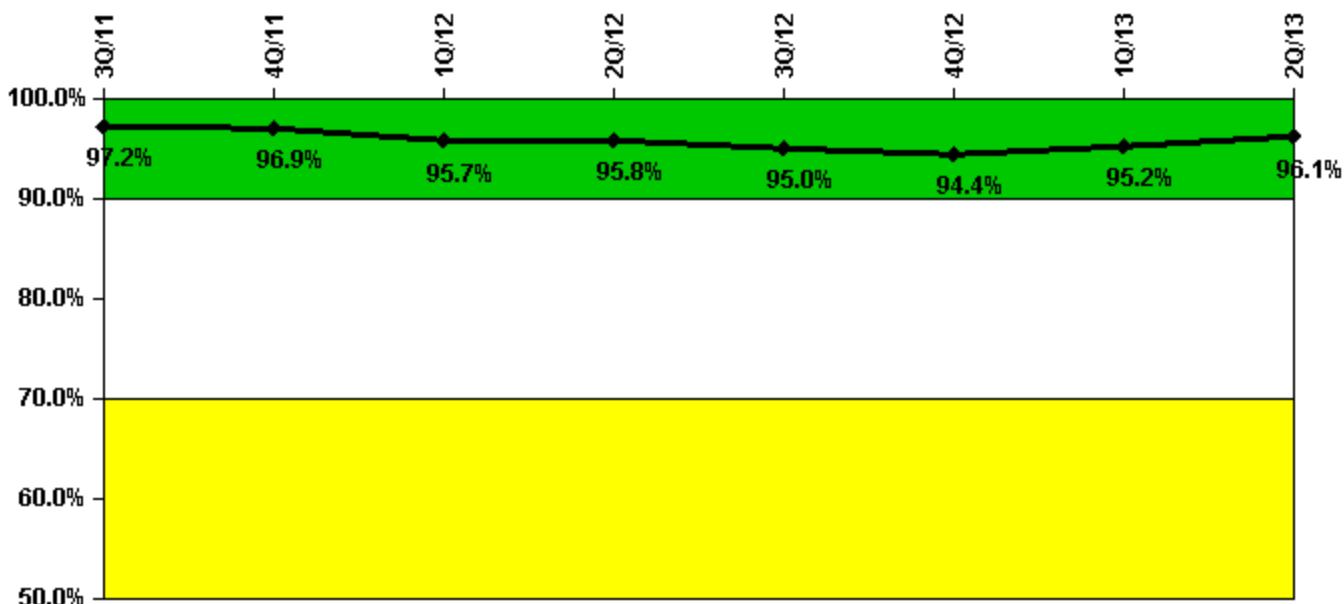
Reactor Coolant System Leakage	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12	4/12	5/12	6/12
Maximum leakage	0.001	0.001	0.001	0.001	0.001	0.159	0.211	0.001	0.001	0.001	0.001	0.001
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0	0	0	0	0	1.6	2.1	0	0	0	0	0

Reactor Coolant System Leakage	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13
Maximum leakage	0.001	0.008	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
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	0.1	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

### Drill/Exercise Performance



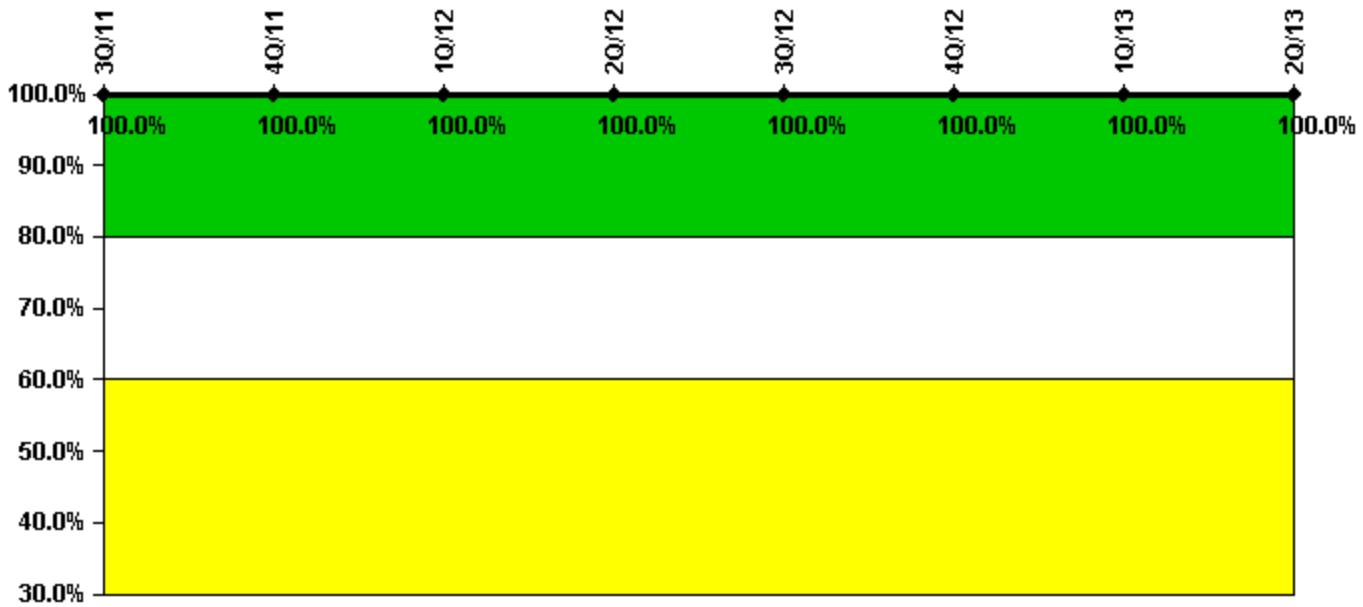
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Successful opportunities	24.0	19.0	34.0	16.0	35.0	30.0	68.0	95.0
Total opportunities	25.0	20.0	37.0	17.0	39.0	32.0	68.0	96.0
Indicator value	97.2%	96.9%	95.7%	95.8%	95.0%	94.4%	95.2%	96.1%

Licensee Comments: none

### ERO Drill Participation



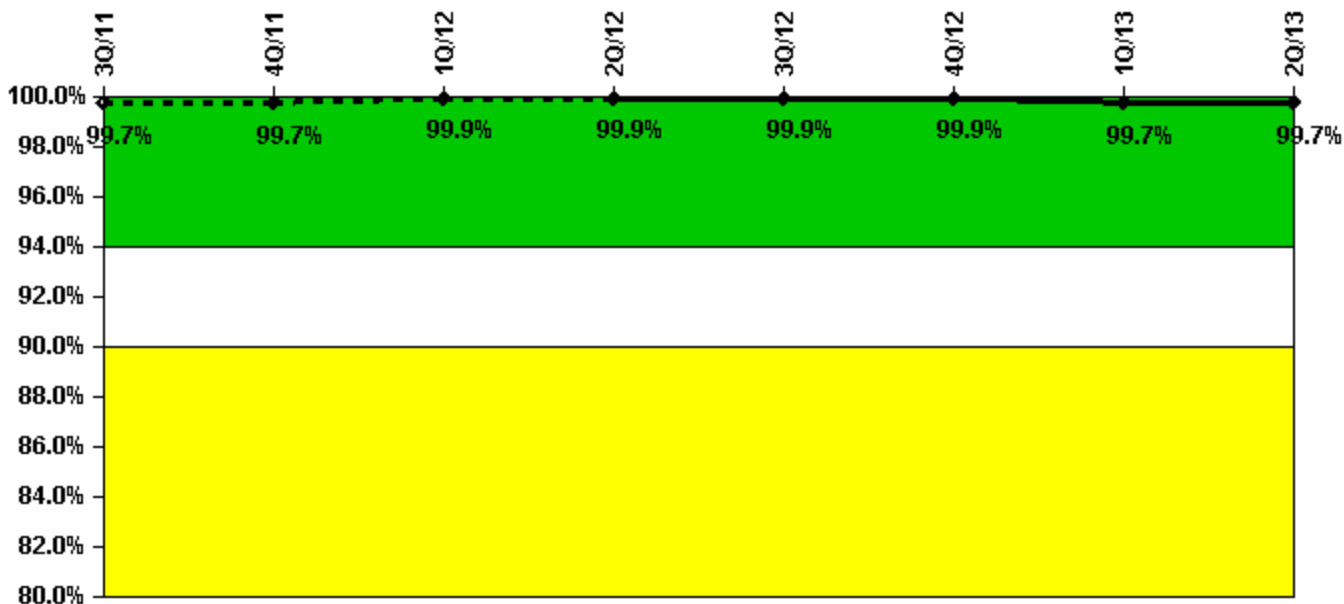
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Participating Key personnel	85.0	85.0	83.0	84.0	80.0	80.0	80.0	75.0
Total Key personnel	85.0	85.0	83.0	84.0	80.0	80.0	80.0	75.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

### Alert & Notification System



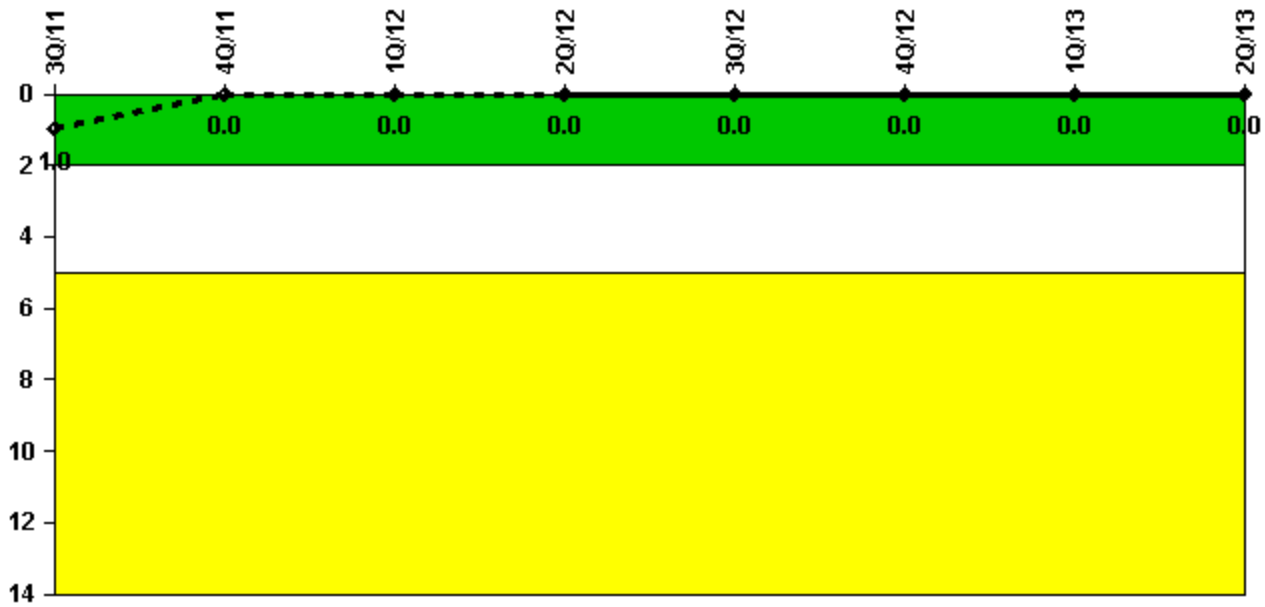
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/13
Successful siren-tests	182	183	183	183	182	183	182	183
Total sirens-tests	183	183	183	183	183	183	183	183
Indicator value	99.7%	99.7%	99.9%	99.9%	99.9%	99.9%	99.7%	99.7%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



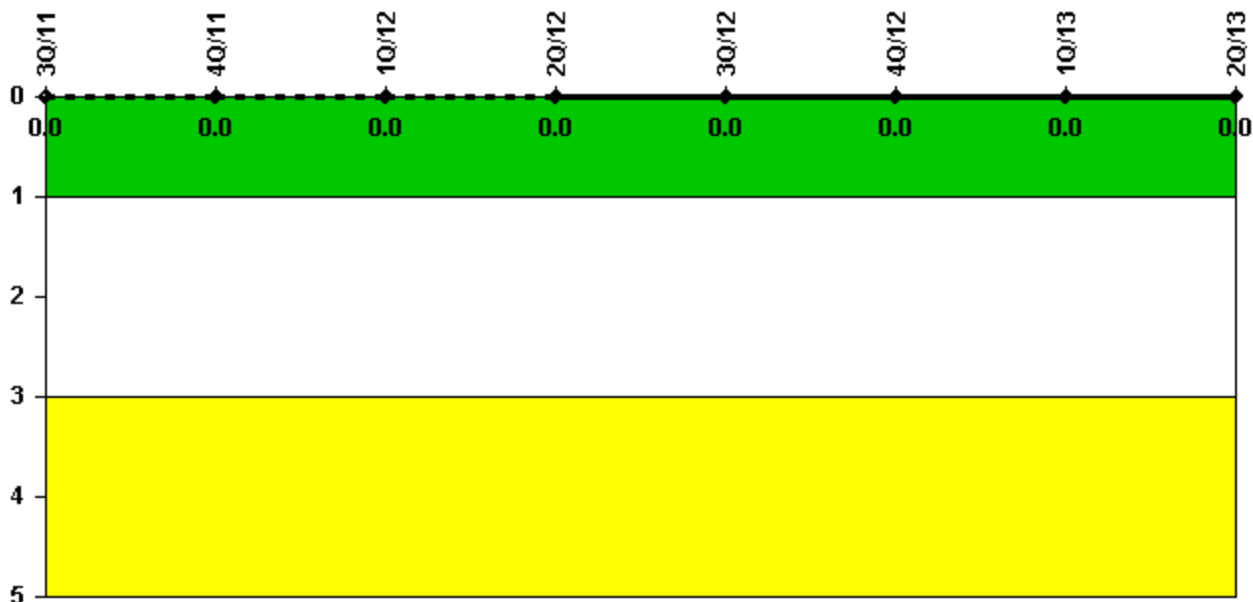
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/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>1</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	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13	2Q/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: August 19, 2013*