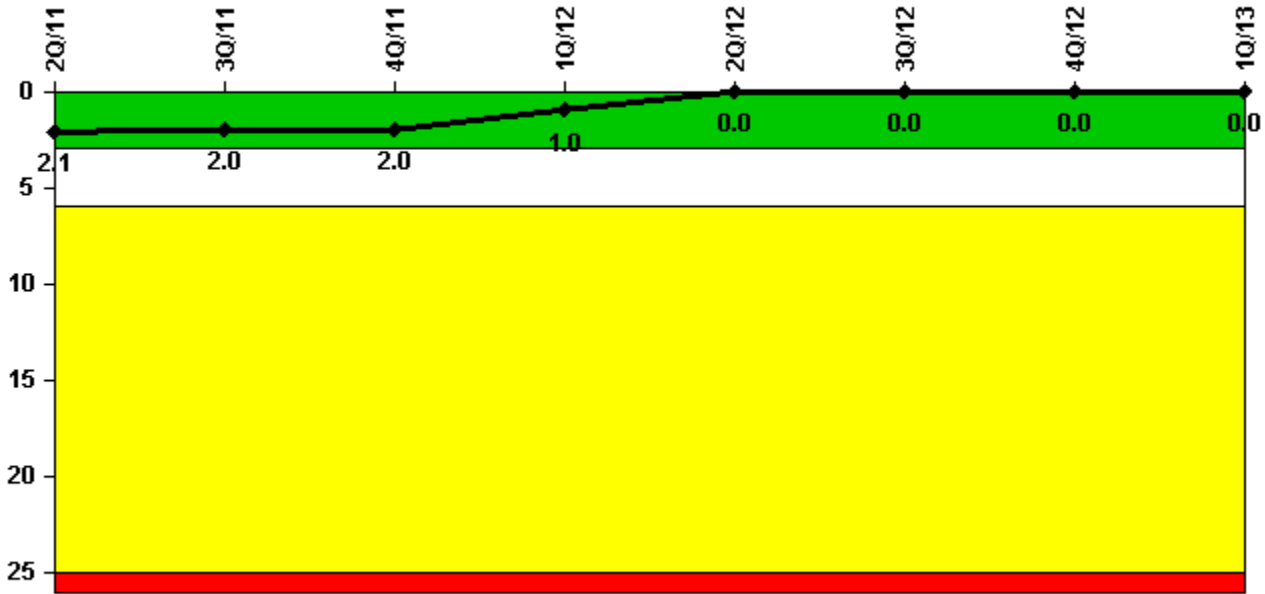


## Surry 2

### 1Q/2013 Performance Indicators

Licensee's General Comments: none

#### Unplanned Scrams per 7000 Critical Hrs



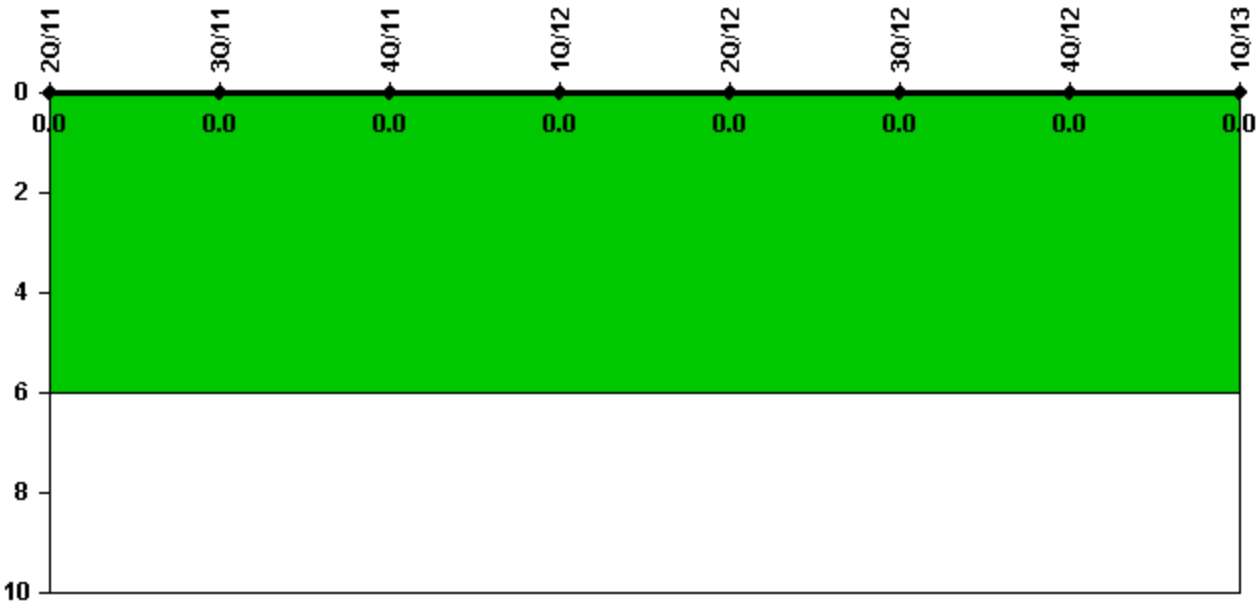
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

#### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Unplanned scrams	1.0	0	0	0	0	0	0	0
Critical hours	623.8	2208.0	2209.0	2183.0	2184.0	2208.0	1452.1	2159.0
<b>Indicator value</b>	<b>2.1</b>	<b>2.0</b>	<b>2.0</b>	<b>1.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



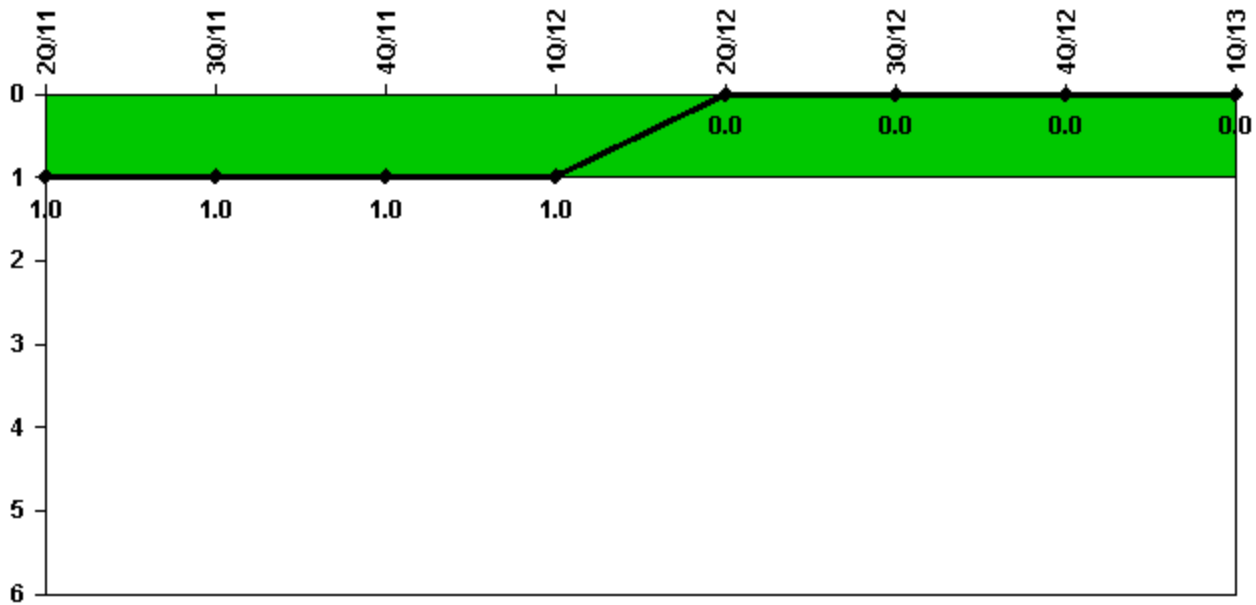
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	623.8	2208.0	2209.0	2183.0	2184.0	2208.0	1452.1	2159.0
<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

### Unplanned Scrams with Complications



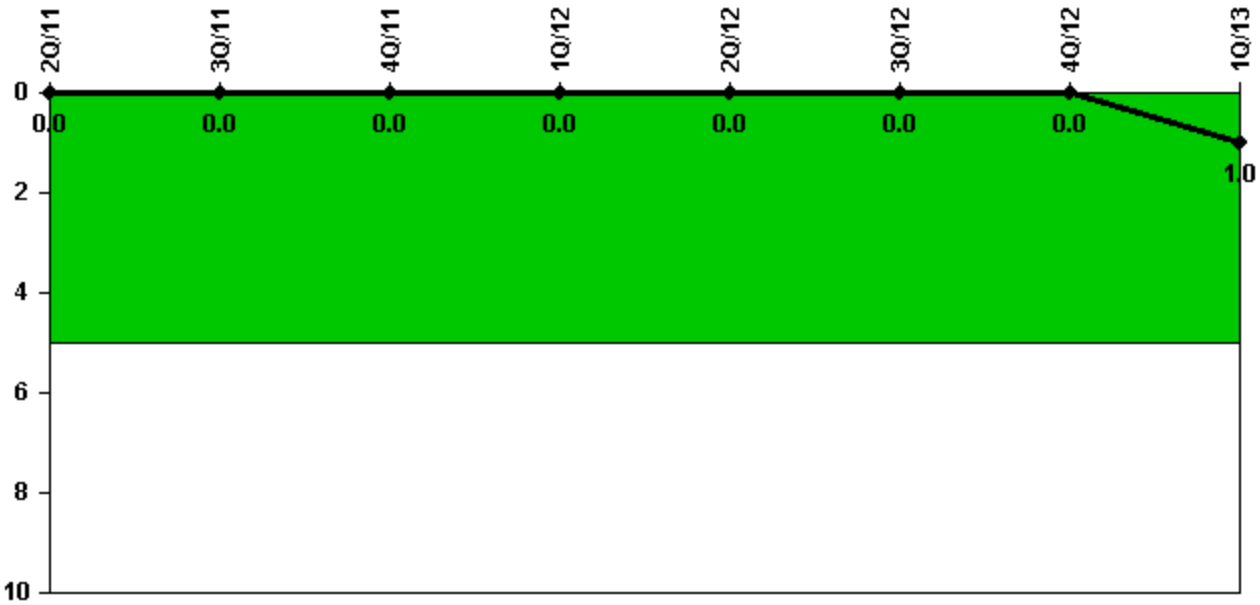
Thresholds: White > 1.0

#### Notes

Unplanned Scrams with Complications	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/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

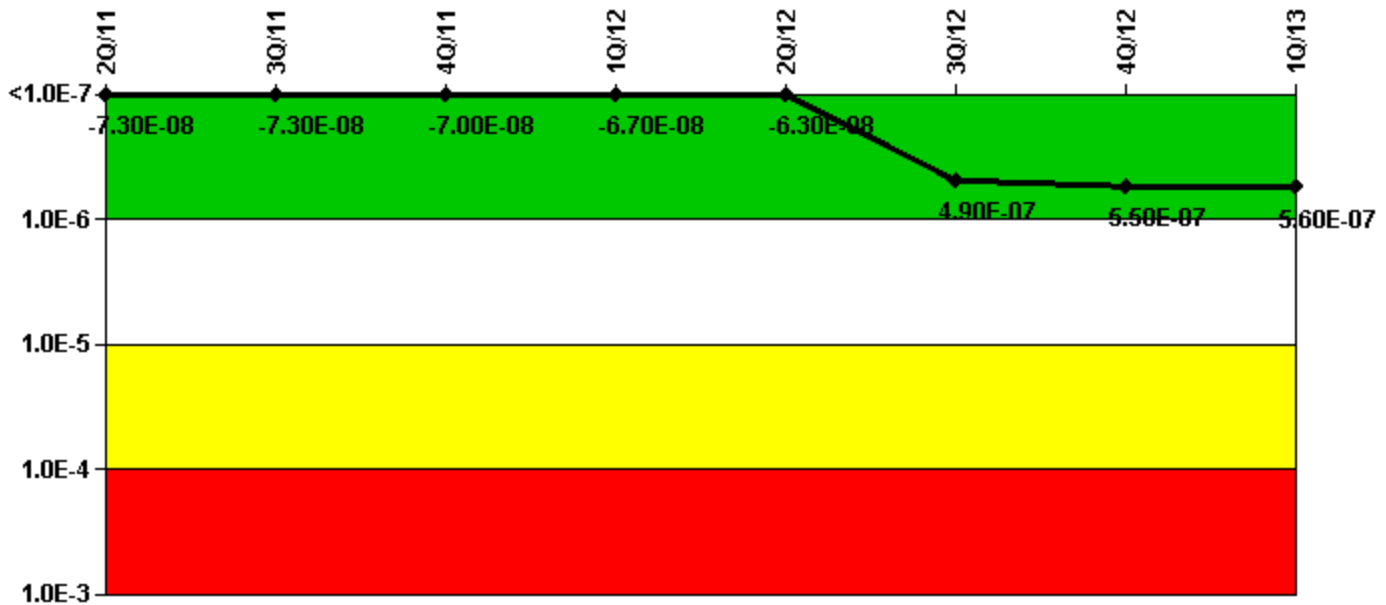
#### Notes

Safety System Functional Failures (PWR)	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Safety System Functional Failures	0	0	0	0	0	0	0	1
<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>1</b>

Licensee Comments:

1Q/13: See Surry LER S1-2013-001-00 dated January 30, 2013.

### 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/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI ( $\Delta$ CDF)	-2.05E-09	-2.69E-09	-2.99E-09	-3.00E-09	-3.00E-09	4.58E-08	2.85E-08	3.22E-08
URI ( $\Delta$ CDF)	-7.05E-08	-7.00E-08	-6.73E-08	-6.36E-08	-6.03E-08	4.44E-07	5.21E-07	5.27E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-7.30E-08	-7.30E-08	-7.00E-08	-6.70E-08	-6.30E-08	4.90E-07	5.50E-07	5.60E-07

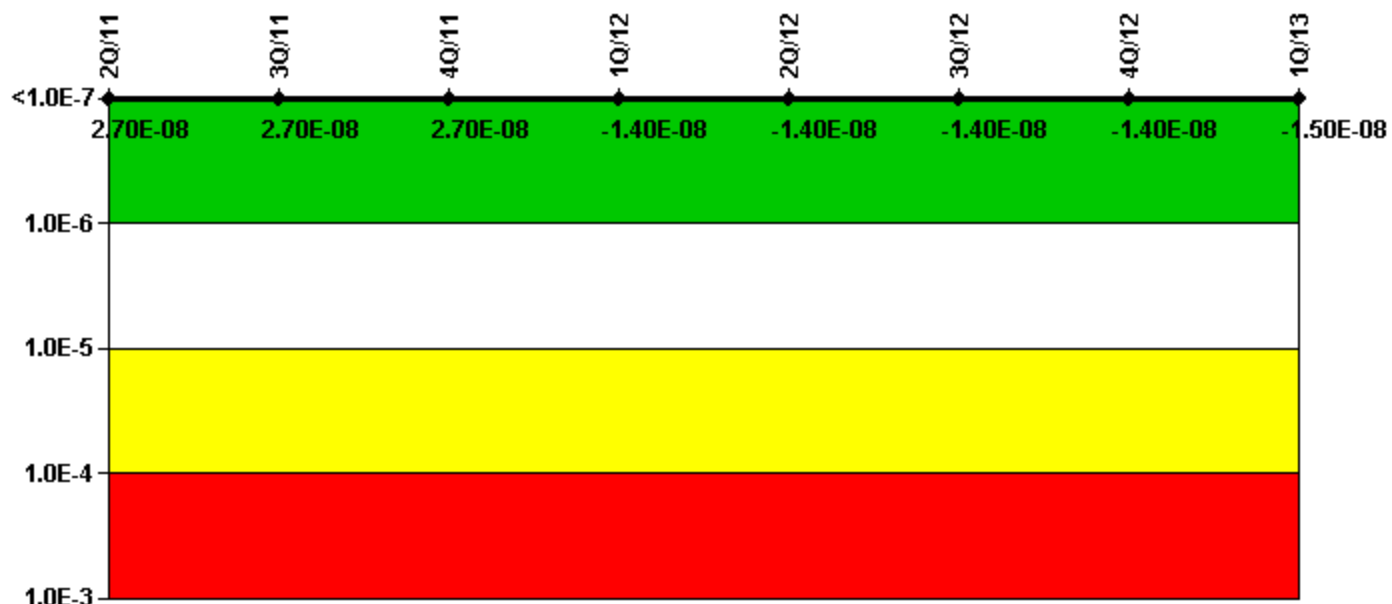
Licensee Comments:

1Q/13: Risk Cap Invoked.

4Q/12: Risk Cap Invoked. An evaluation for an August run failure of #2 emergency diesel was completed. Therefore historical data for August 2012 was changed with no change in color.

3Q/12: Risk Cap Invoked.

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



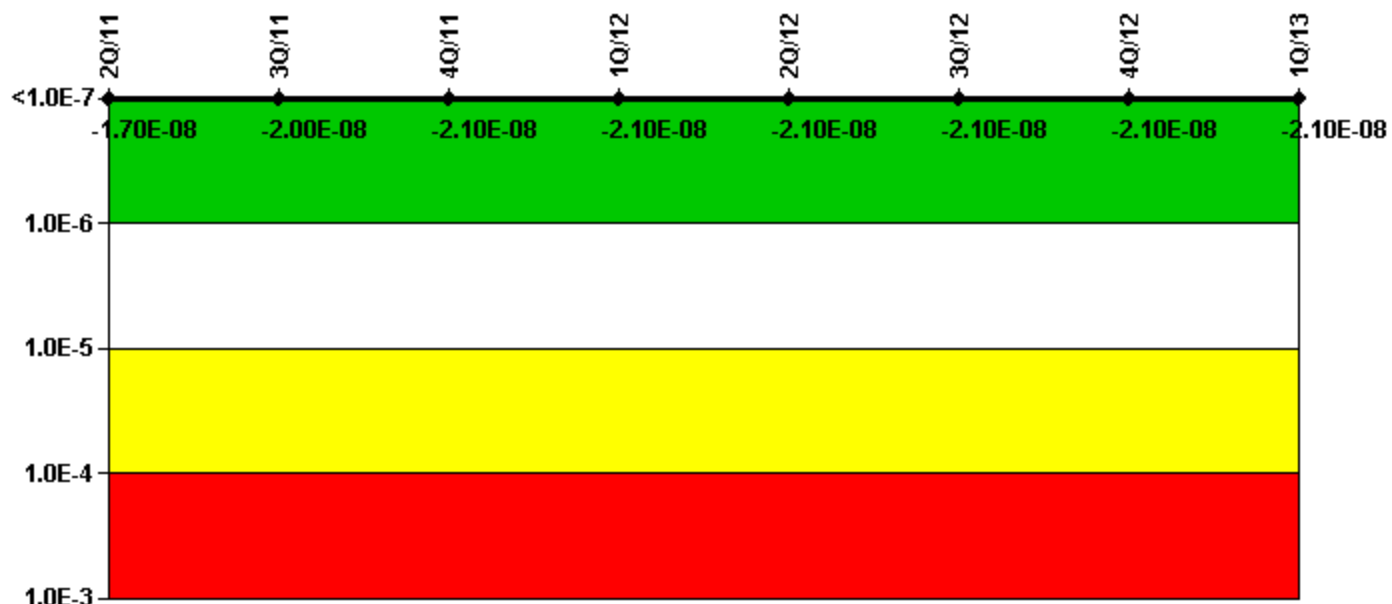
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI ( $\Delta$ CDF)	1.55E-09	1.68E-09	2.30E-09	1.95E-09	1.92E-09	1.32E-09	1.31E-09	-2.13E-10
URI ( $\Delta$ CDF)	2.56E-08	2.50E-08	2.47E-08	-1.58E-08	-1.55E-08	-1.51E-08	-1.52E-08	-1.51E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.70E-08	2.70E-08	2.70E-08	-1.40E-08	-1.40E-08	-1.40E-08	-1.40E-08	-1.50E-08

Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



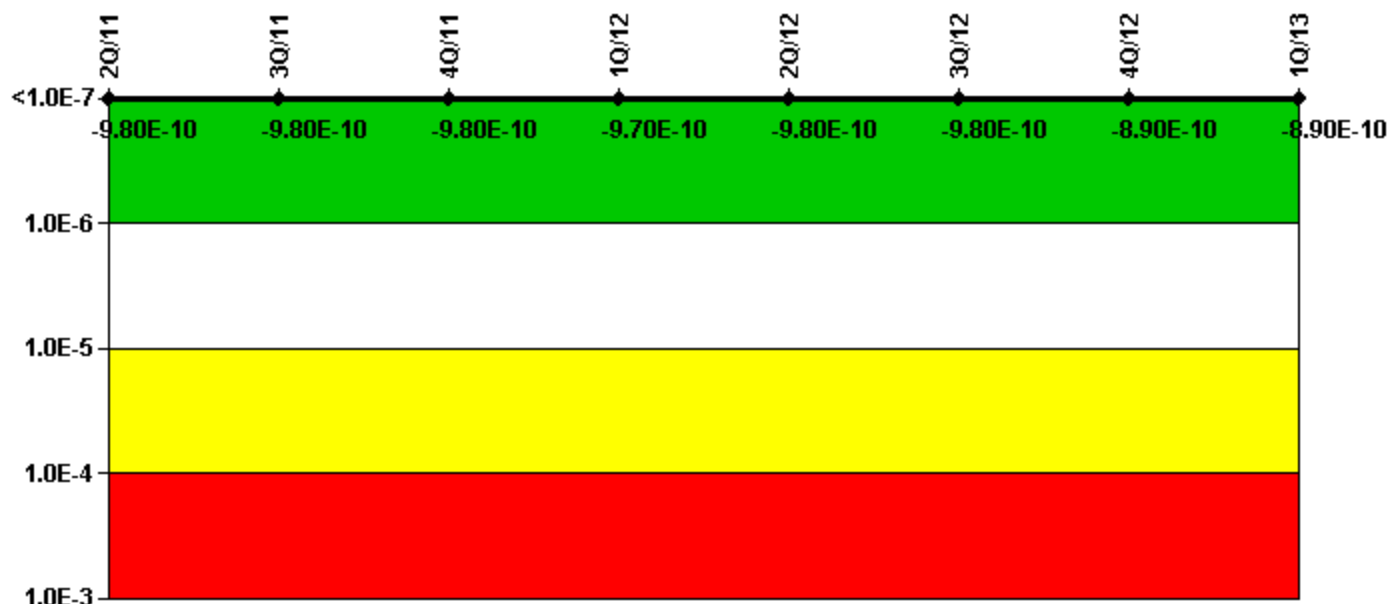
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI ( $\Delta$ CDF)	-1.49E-09	-5.50E-09	-5.77E-09	-5.77E-09	-5.72E-09	-5.69E-09	-5.68E-09	-5.68E-09
URI ( $\Delta$ CDF)	-1.54E-08	-1.49E-08	-1.49E-08	-1.54E-08	-1.49E-08	-1.49E-08	-1.54E-08	-1.54E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.70E-08	-2.00E-08	-2.10E-08	-2.10E-08	-2.10E-08	-2.10E-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

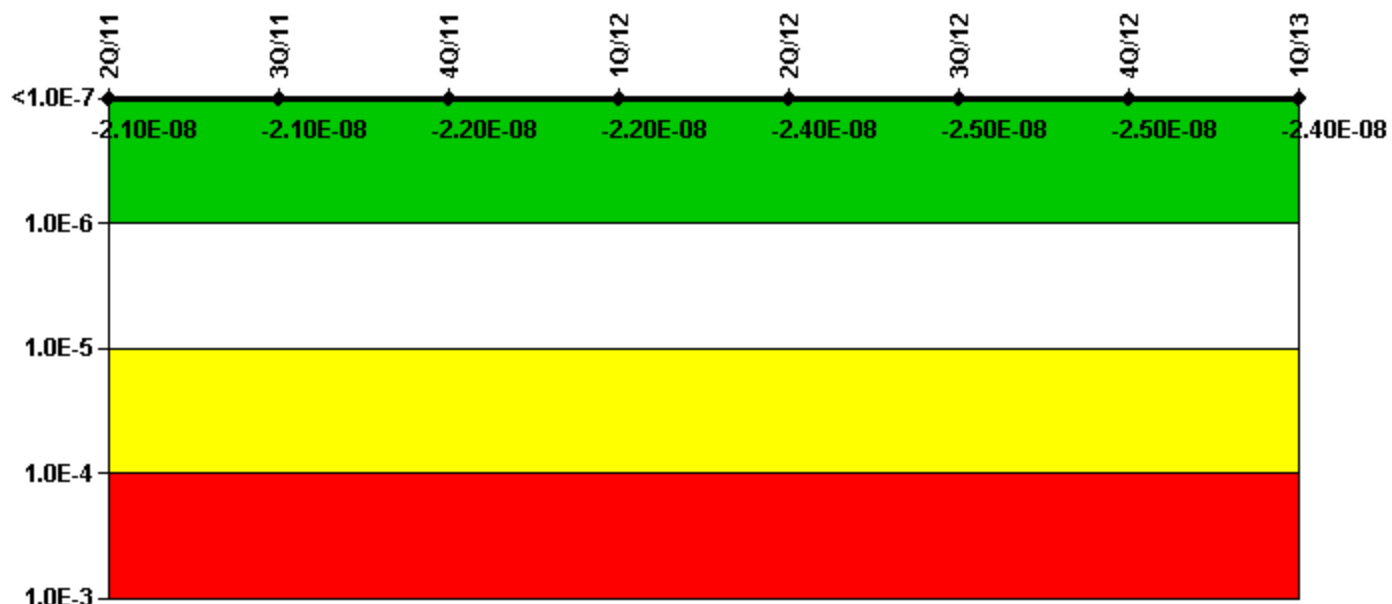
#### Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI ( $\Delta$ CDF)	1.13E-10	1.25E-10	1.30E-10	1.53E-10	1.50E-10	1.46E-10	1.47E-10	1.47E-10
URI ( $\Delta$ CDF)	-1.09E-09	-1.10E-09	-1.11E-09	-1.13E-09	-1.13E-09	-1.13E-09	-1.03E-09	-1.04E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.80E-10	-9.80E-10	-9.80E-10	-9.70E-10	-9.80E-10	-9.80E-10	-8.90E-10	-8.90E-10

Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



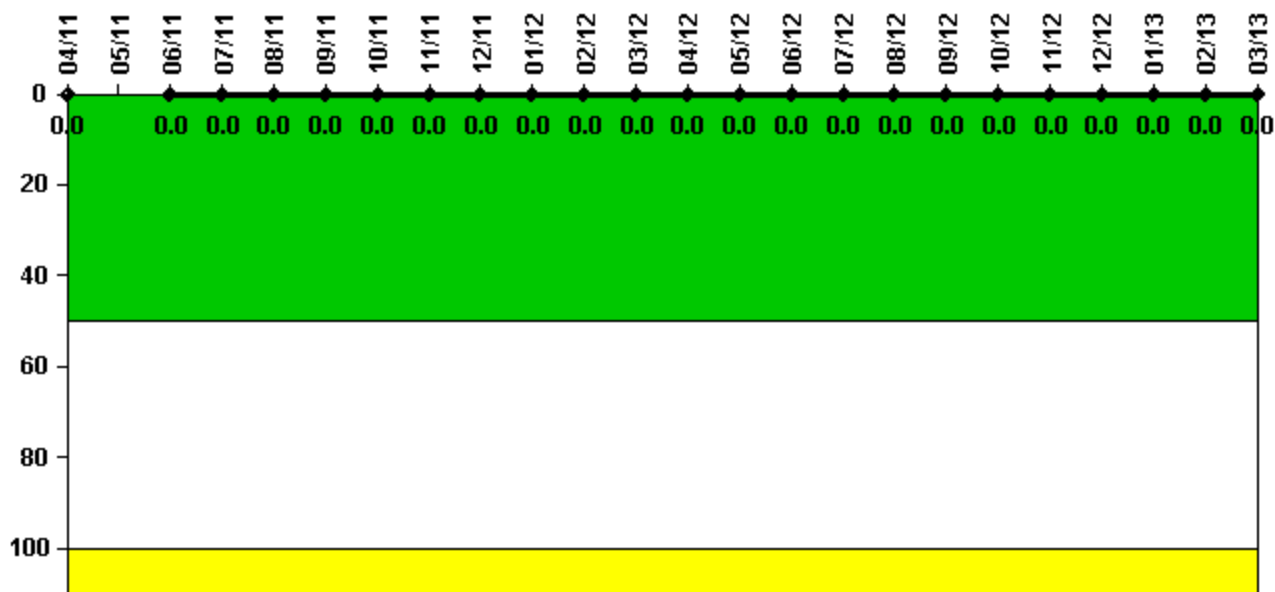
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI ( $\Delta$ CDF)	2.11E-09	1.38E-09	1.21E-09	1.01E-09	7.76E-13	-1.53E-09	-1.34E-09	-1.11E-09
URI ( $\Delta$ CDF)	-2.28E-08	-2.27E-08	-2.31E-08	-2.35E-08	-2.37E-08	-2.39E-08	-2.34E-08	-2.32E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.10E-08	-2.10E-08	-2.20E-08	-2.20E-08	-2.40E-08	-2.50E-08	-2.50E-08	-2.40E-08

Licensee Comments: none

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

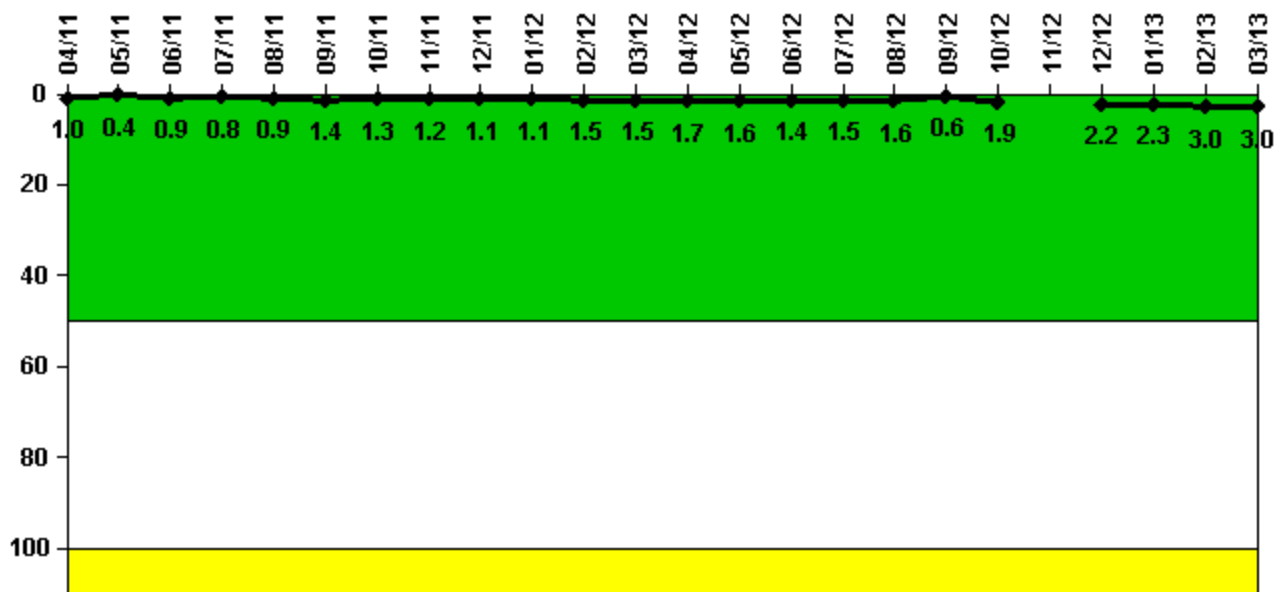
Reactor Coolant System Activity	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12
Maximum activity	0.000281	N/A	0.000140	0.000120	0.000131	0.000212	0.000155	0.000315	0.000198	0.000149	0.000196	0.000185
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	N/A	0	0	0	0	0	0	0	0	0	0

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	0.000231	0.000202	0.000165	0.000174	0.000202	0.000224	0.000190	0.000180	0.000132	0.000100	0.000131	0.000105
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

Licensee Comments: none

### Reactor Coolant System Leakage



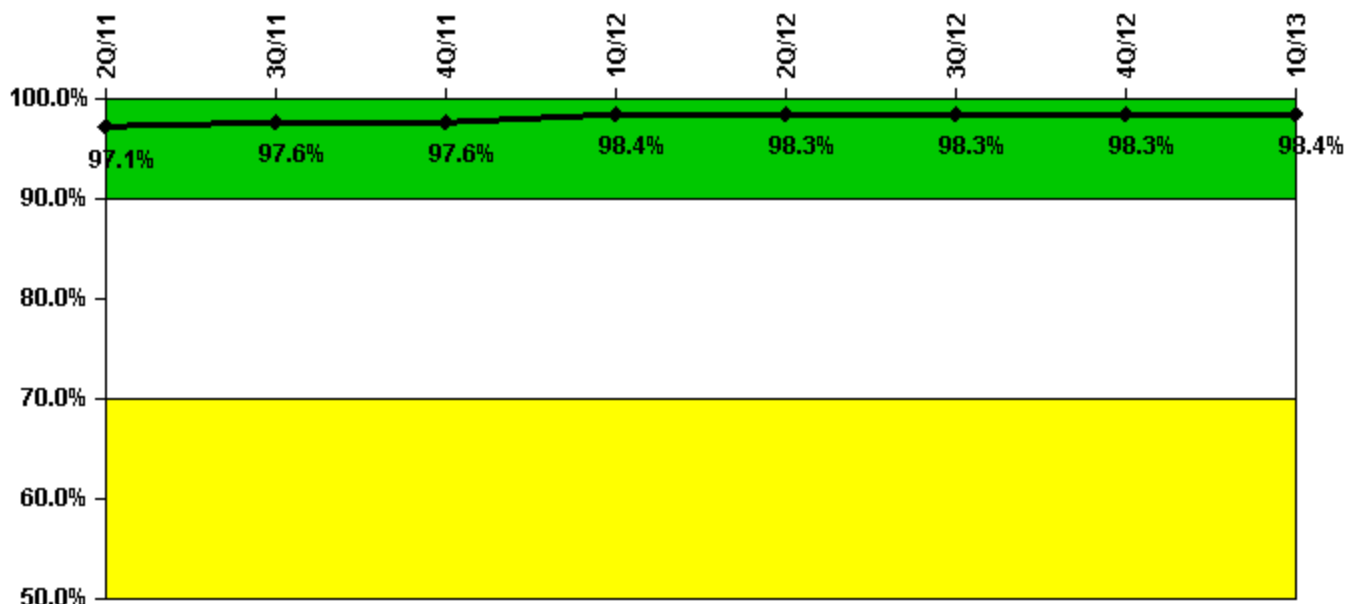
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Leakage	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 leakage	0.100	0.043	0.090	0.080	0.090	0.140	0.130	0.120	0.110	0.110	0.150	0.150
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	1.0	0.4	0.9	0.8	0.9	1.4	1.3	1.2	1.1	1.1	1.5	1.5
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	0.170	0.160	0.140	0.150	0.160	0.060	0.190	N/A	0.220	0.230	0.300	0.300
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	1.7	1.6	1.4	1.5	1.6	0.6	1.9	N/A	2.2	2.3	3.0	3.0

Licensee Comments: none

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

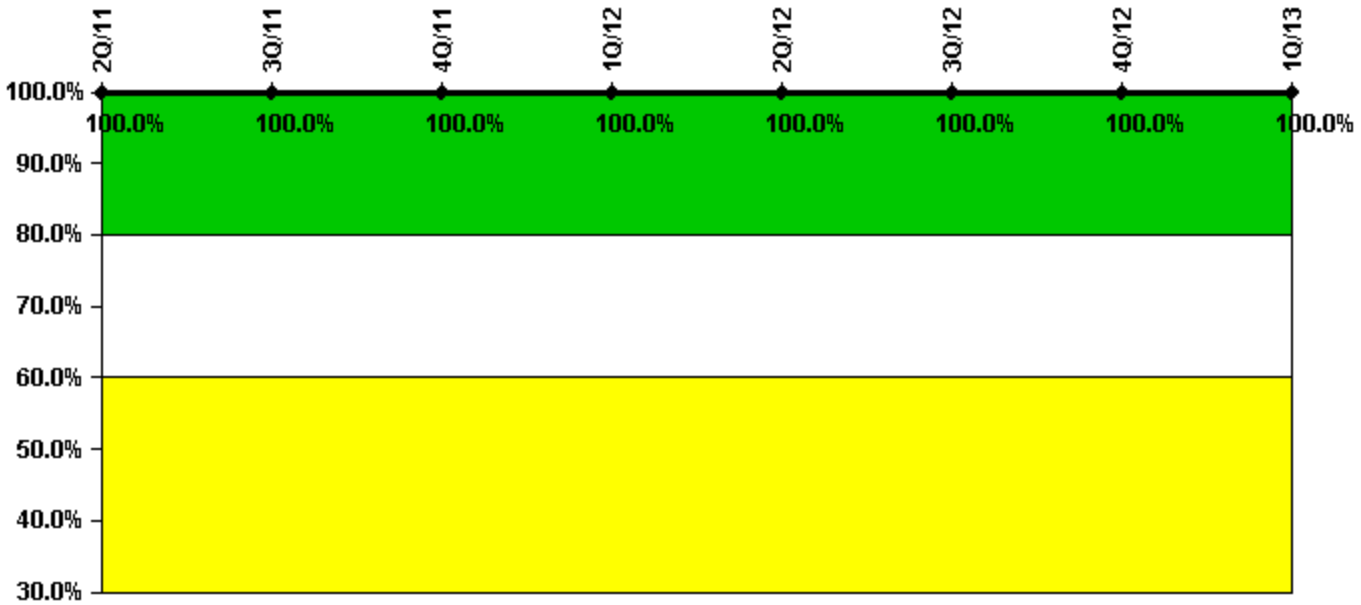
#### Notes

Drill/Exercise Performance	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Successful opportunities	27.0	31.0	27.0	38.0	24.0	32.0	24.0	48.0
Total opportunities	28.0	31.0	27.0	38.0	26.0	32.0	24.0	49.0
Indicator value	97.1%	97.6%	97.6%	98.4%	98.3%	98.3%	98.3%	98.4%

Licensee Comments:

3Q/11: An NRC assessment determined a missed classification occurred in June 2011. Historical data was corrected with no change in color.

### ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Participating Key personnel	139.0	138.0	141.0	153.0	150.0	151.0	155.0	165.0
Total Key personnel	139.0	138.0	141.0	153.0	150.0	151.0	155.0	165.0
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%

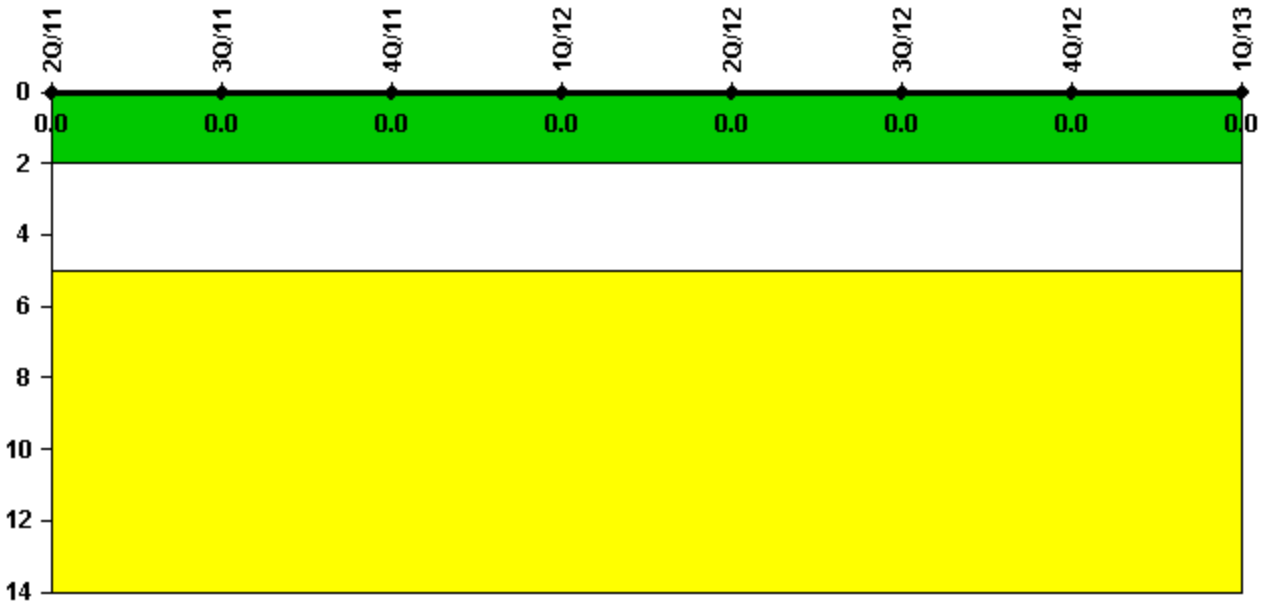
#### Notes

Alert & Notification System	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Successful siren-tests	544	476	544	476	544	476	559	497
Total sirens-tests	544	476	544	476	544	476	559	497
Indicator value	99.7%	99.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments:

2Q/11: A self-assessment identified a siren activation test was not counted in March 2011. Historical data was corrected with no change in color.

### Occupational Exposure Control Effectiveness



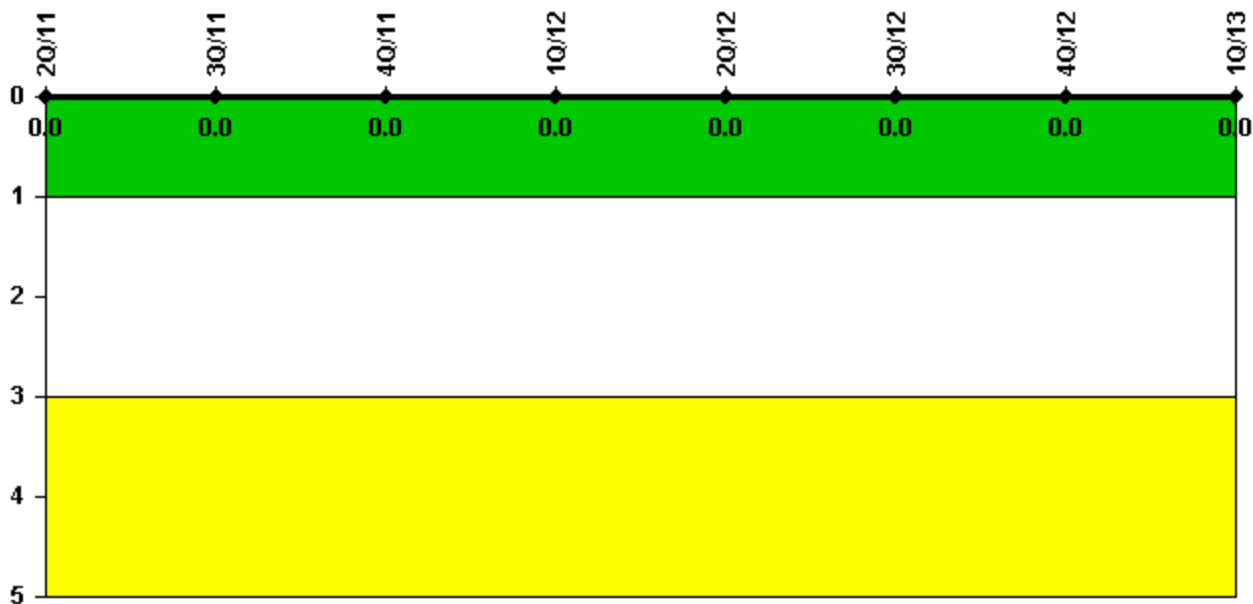
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/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	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/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: April 23, 2013*