

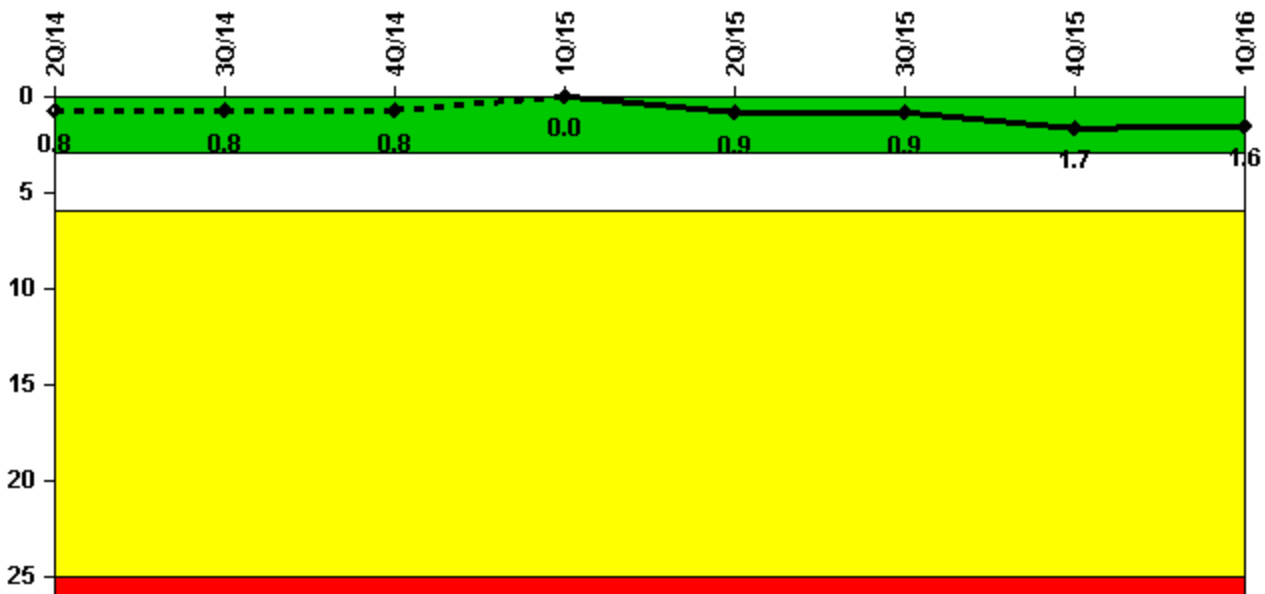
## Calvert Cliffs 2

### 1Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

#### Unplanned Scrams per 7000 Critical Hrs



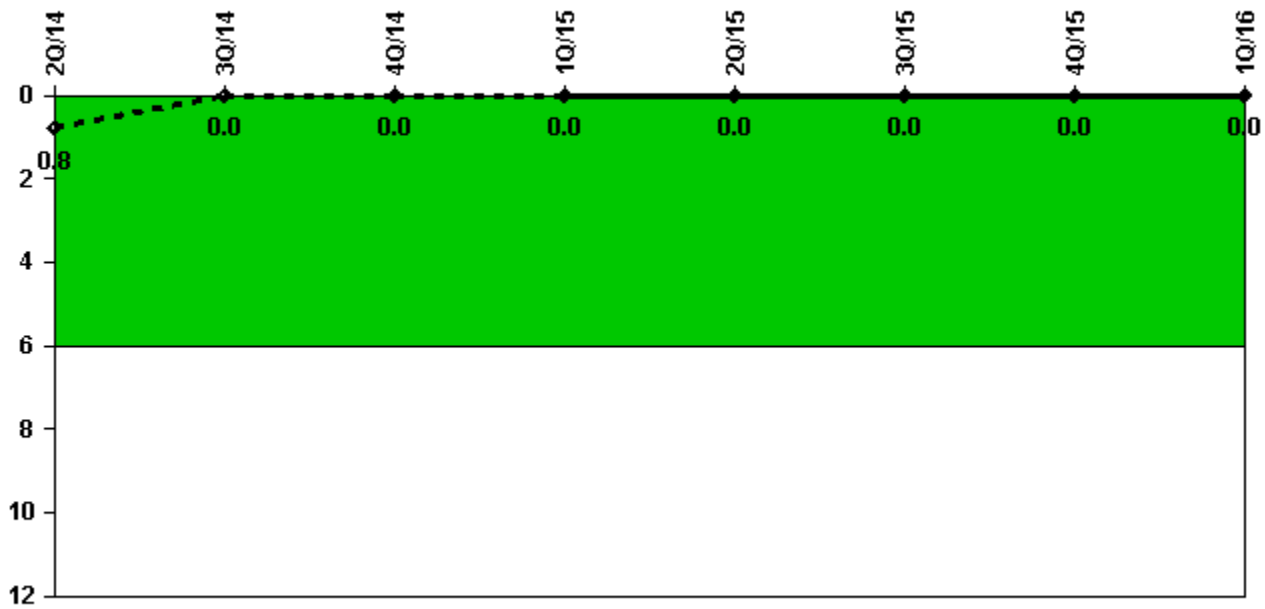
**Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0**

#### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Unplanned scrams	0	0	0	0	1.0	0	1.0	0
Critical hours	2184.0	2208.0	2209.0	1593.3	2137.8	2208.0	2095.1	2183.0
<b>Indicator value</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>0</b>	<b>0.9</b>	<b>0.9</b>	<b>1.7</b>	<b>1.6</b>

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



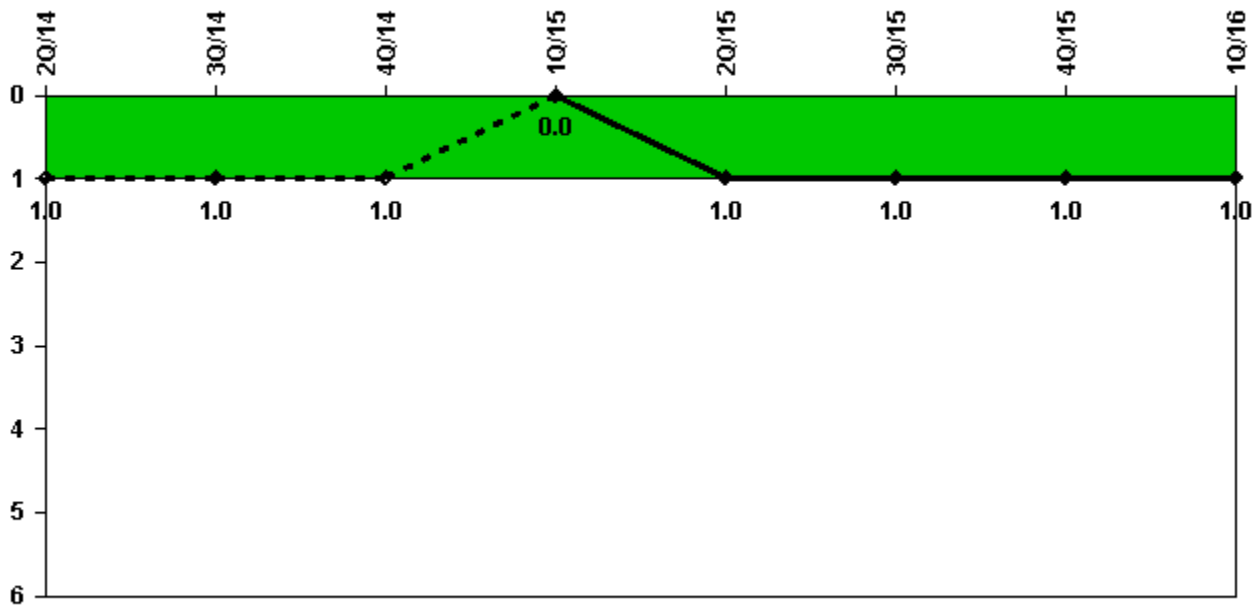
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2184.0	2208.0	2209.0	1593.3	2137.8	2208.0	2095.1	2183.0
<b>Indicator value</b>	<b>0.8</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



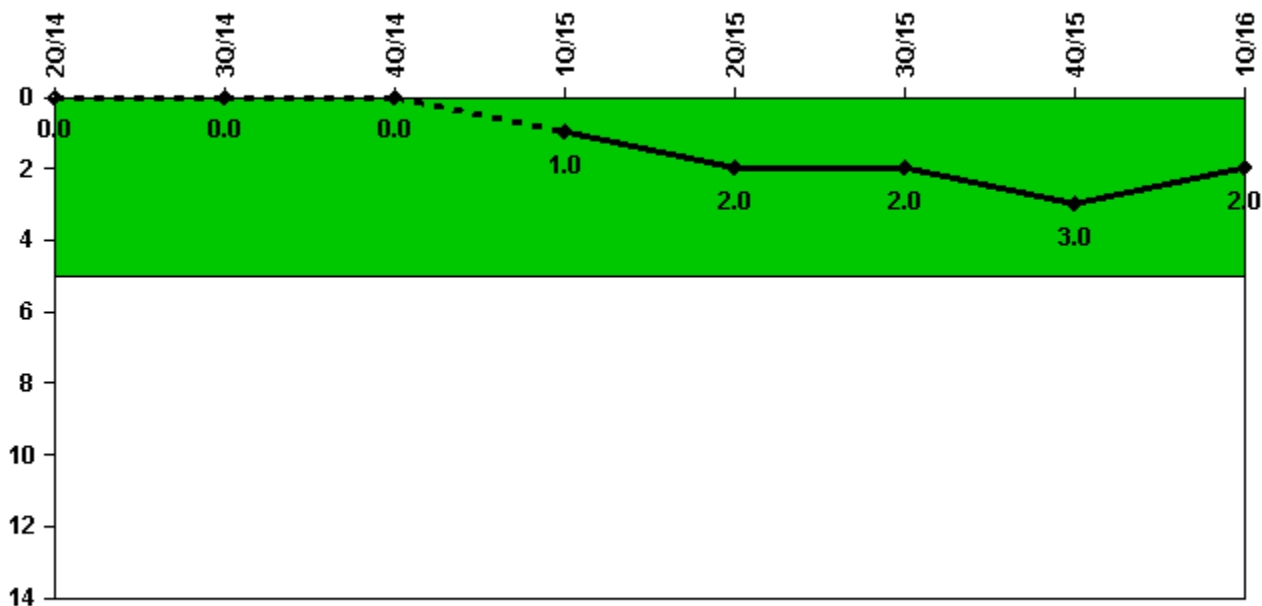
Thresholds: White > 1.0

#### Notes

Unplanned Scrams with Complications	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Scrams with complications	0	0	0	0	1.0	0	0	0
<b>Indicator value</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>0.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>

Licensee Comments: none

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

#### Notes

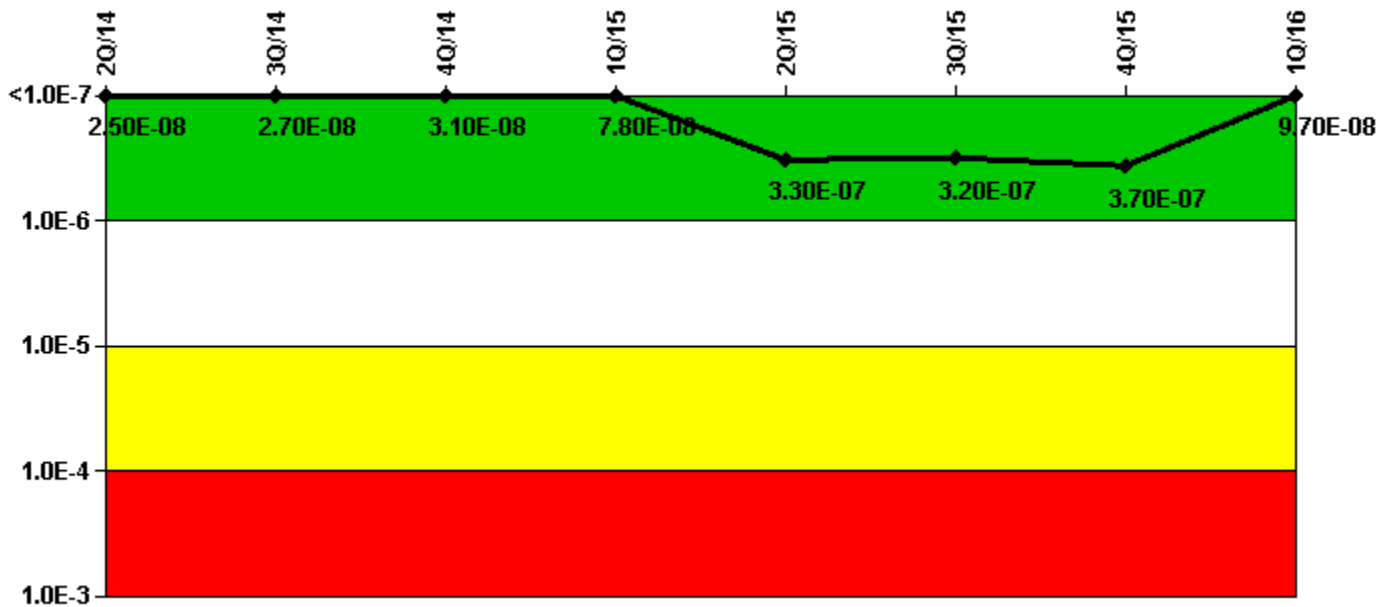
Safety System Functional Failures (PWR)	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Safety System Functional Failures	0	0	0	1	1	0	1	0
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>

Licensee Comments:

2Q/15: 6/5/2015: LER 318/2015-002-00

1Q/15: 3/22/2015: LER 2015-001-00 05000317/05000318

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



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

#### Notes

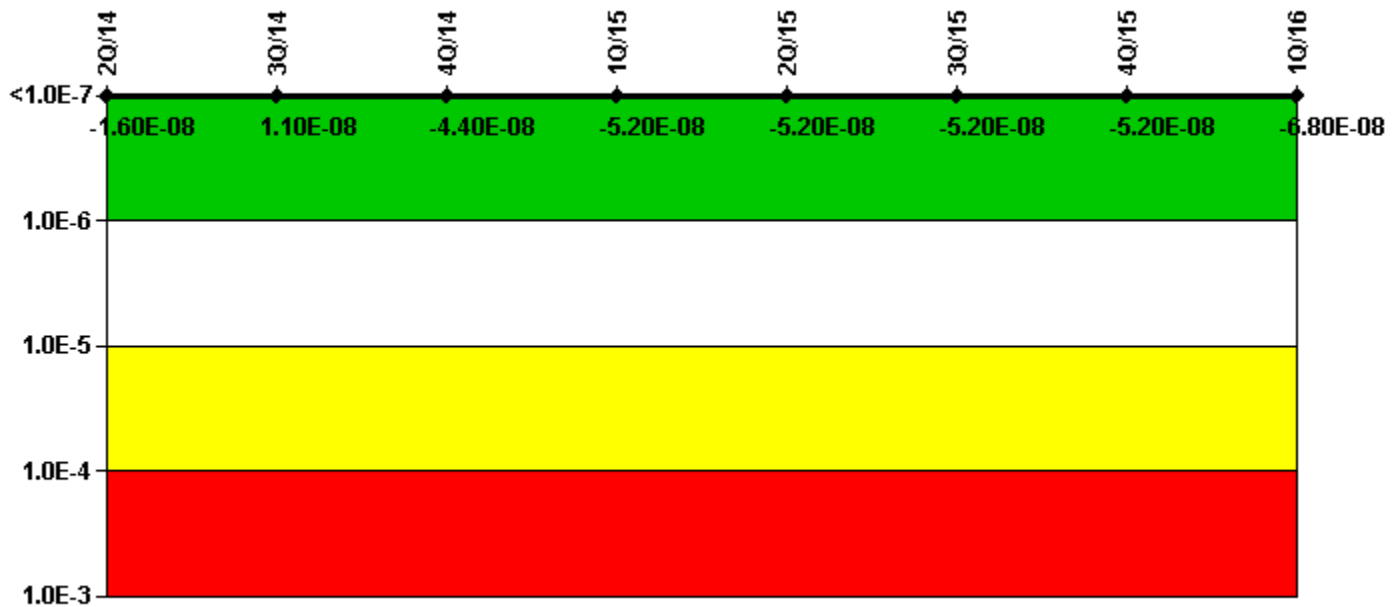
Mitigating Systems Performance Index, Emergency AC Power System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI (ΔCDF)	4.11E-08	4.01E-08	-5.25E-08	-9.69E-11	6.56E-10	6.56E-10	5.93E-08	8.00E-09
URI (ΔCDF)	-1.62E-08	-1.32E-08	8.35E-08	7.77E-08	3.25E-07	3.23E-07	3.14E-07	8.91E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.50E-08	2.70E-08	3.10E-08	7.80E-08	3.30E-07	3.20E-07	3.70E-07	9.70E-08

Licensee Comments:

3Q/14: 2A DG failure on 6/9/14 was determined to be an MSPI failure per AR 02384639.

2Q/14: 2A DG failure on 6/9/14 was determined to be an MSPI failure per AR 02384639.

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



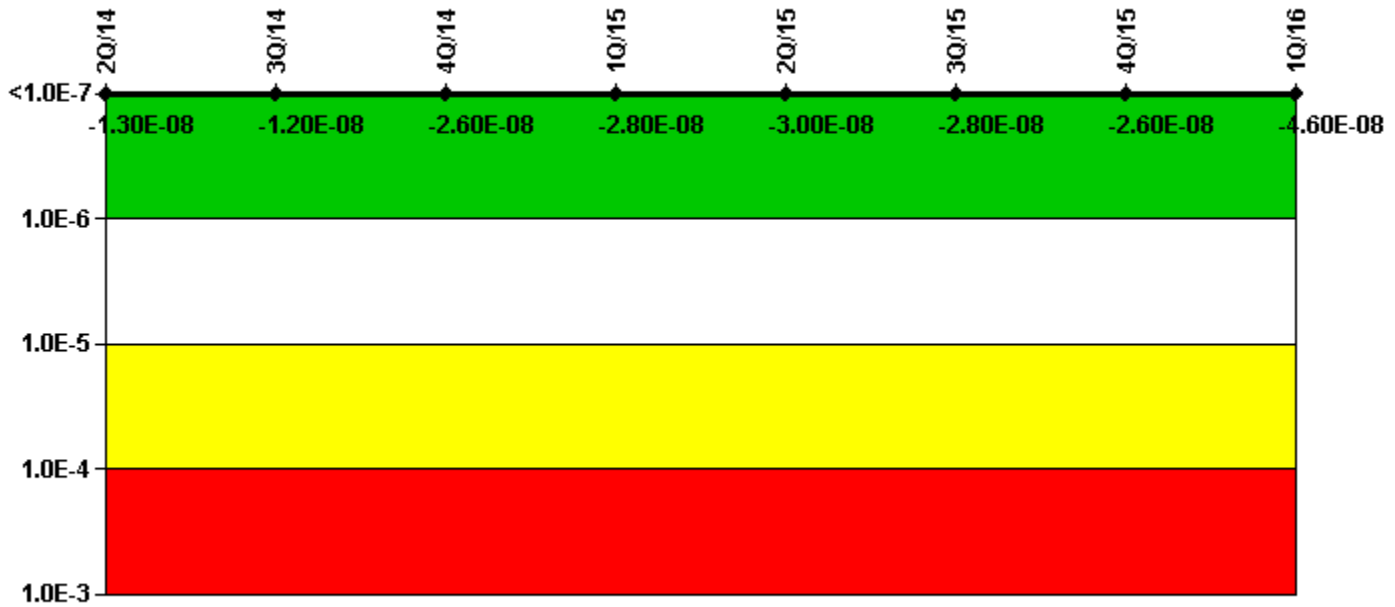
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI ( $\Delta$ CDF)	3.06E-08	5.49E-08	-1.74E-09	-5.89E-09	-5.54E-09	-5.54E-09	-6.18E-09	-2.67E-08
URI ( $\Delta$ CDF)	-4.68E-08	-4.40E-08	-4.22E-08	-4.62E-08	-4.62E-08	-4.64E-08	-4.62E-08	-4.13E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.60E-08	1.10E-08	-4.40E-08	-5.20E-08	-5.20E-08	-5.20E-08	-5.20E-08	-6.80E-08

Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



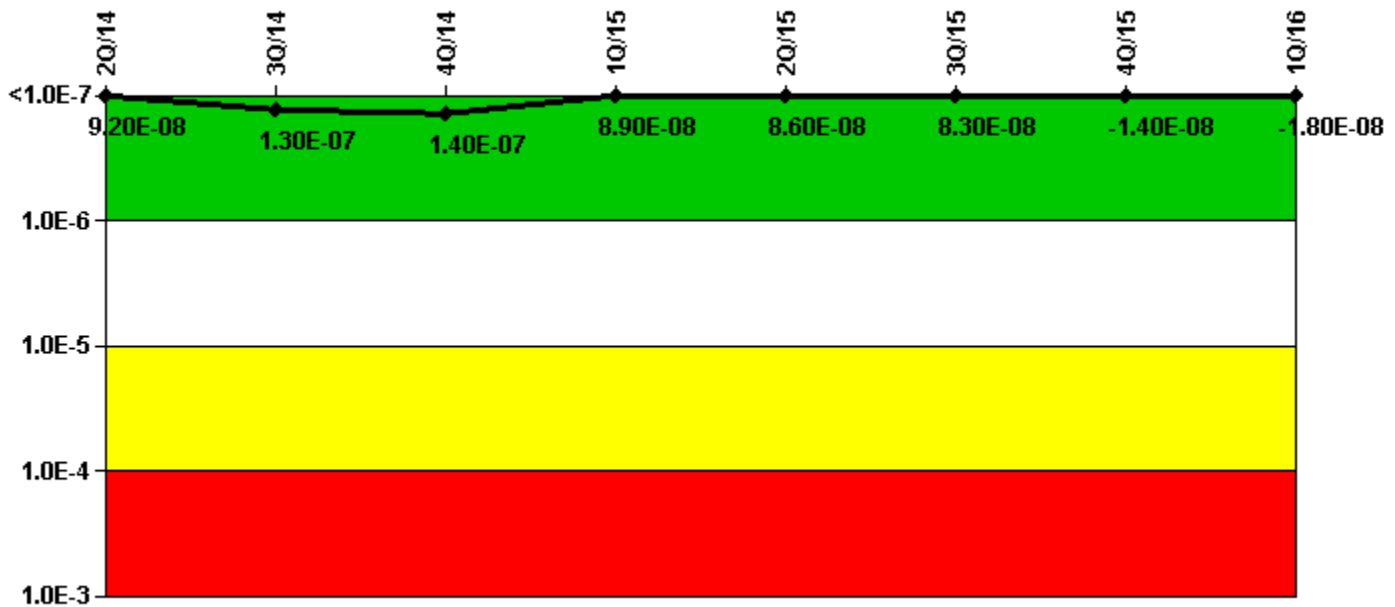
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI ( $\Delta$ CDF)	-2.68E-09	-2.73E-09	-6.30E-09	-3.55E-09	-5.15E-09	-3.03E-09	-1.02E-09	-8.56E-09
URI ( $\Delta$ CDF)	-1.01E-08	-9.54E-09	-1.93E-08	-2.40E-08	-2.51E-08	-2.51E-08	-2.51E-08	-3.71E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-08	-1.20E-08	-2.60E-08	-2.80E-08	-3.00E-08	-2.80E-08	-2.60E-08	-4.60E-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

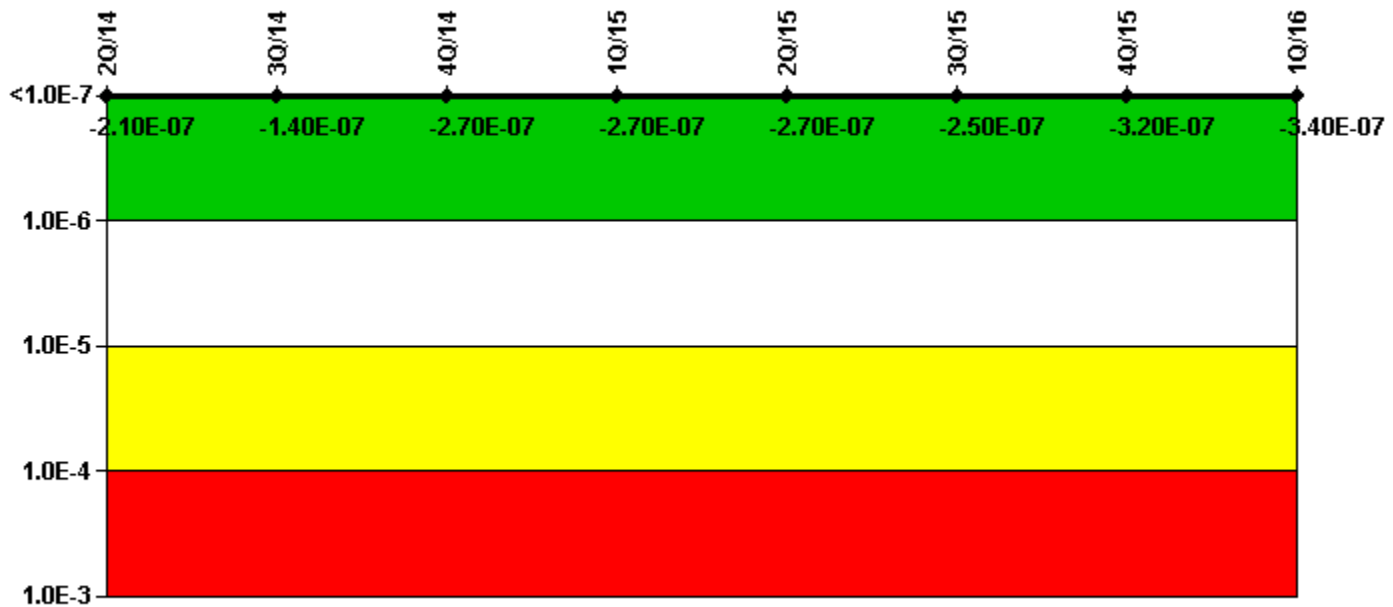
#### Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI ( $\Delta$ CDF)	9.11E-08	1.32E-07	1.37E-07	8.93E-08	8.65E-08	8.34E-08	-8.96E-09	-1.31E-08
URI ( $\Delta$ CDF)	1.10E-09	1.46E-09	1.20E-10	-4.83E-10	-3.33E-10	-4.45E-10	-4.65E-09	-4.78E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	9.20E-08	1.30E-07	1.40E-07	8.90E-08	8.60E-08	8.30E-08	-1.40E-08	-1.80E-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/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI ( $\Delta$ CDF)	2.64E-08	9.70E-08	-4.84E-08	-4.91E-08	-4.25E-08	-2.91E-08	-1.00E-07	-8.91E-08
URI ( $\Delta$ CDF)	-2.38E-07	-2.37E-07	-2.24E-07	-2.24E-07	-2.24E-07	-2.23E-07	-2.23E-07	-2.50E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.10E-07	-1.40E-07	-2.70E-07	-2.70E-07	-2.70E-07	-2.50E-07	-3.20E-07	-3.40E-07

#### Licensee Comments:

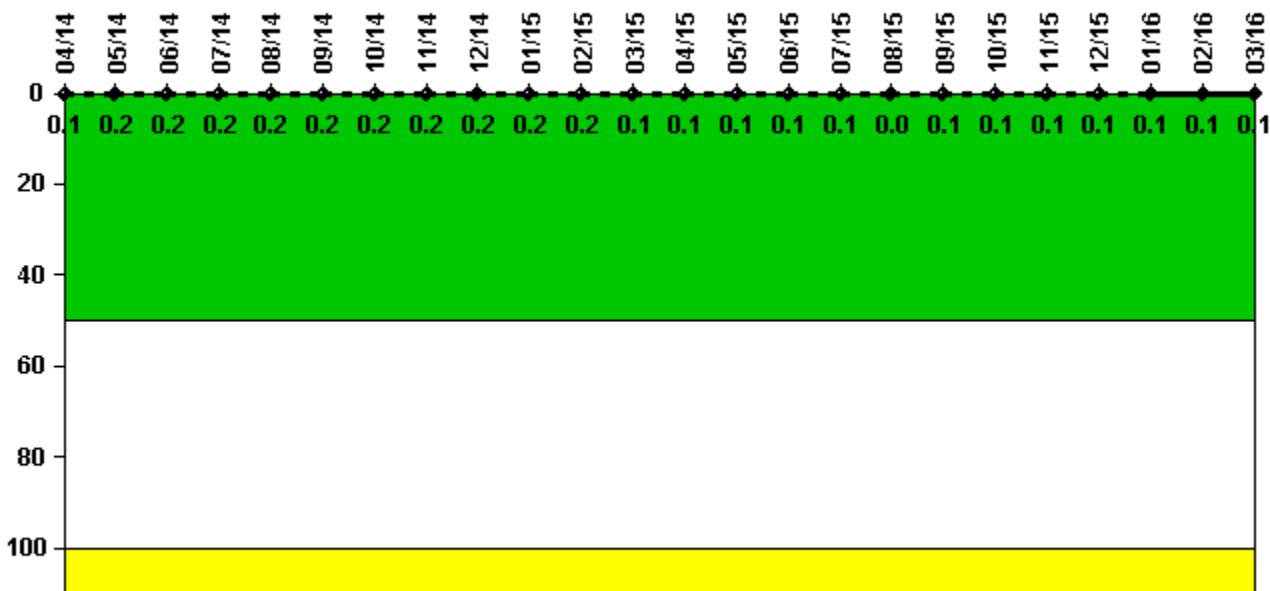
3Q/15: 21 SW Train unavailability was incorrectly reported in October 2014 as 46 hours. Data identified and corrected on 10/15/2015. Correct hours are 6.4. IR 2571219

2Q/15: 21 SW Train unavailability was incorrectly reported in October 2014 as 46 hours. Data identified and corrected on 10/15/2015. Correct hours are 6.4. IR 2571219

1Q/15: 21 SW Train unavailability was incorrectly reported in October 2014 as 46 hours. Data identified and corrected on 10/15/2015. Correct hours are 6.4. IR 2571219

4Q/14: 21 SW Train unavailability was incorrectly reported in October 2014 as 46 hours. Data identified and corrected on 10/15/2015. Correct hours are 6.4. IR 2571219

### Reactor Coolant System Activity



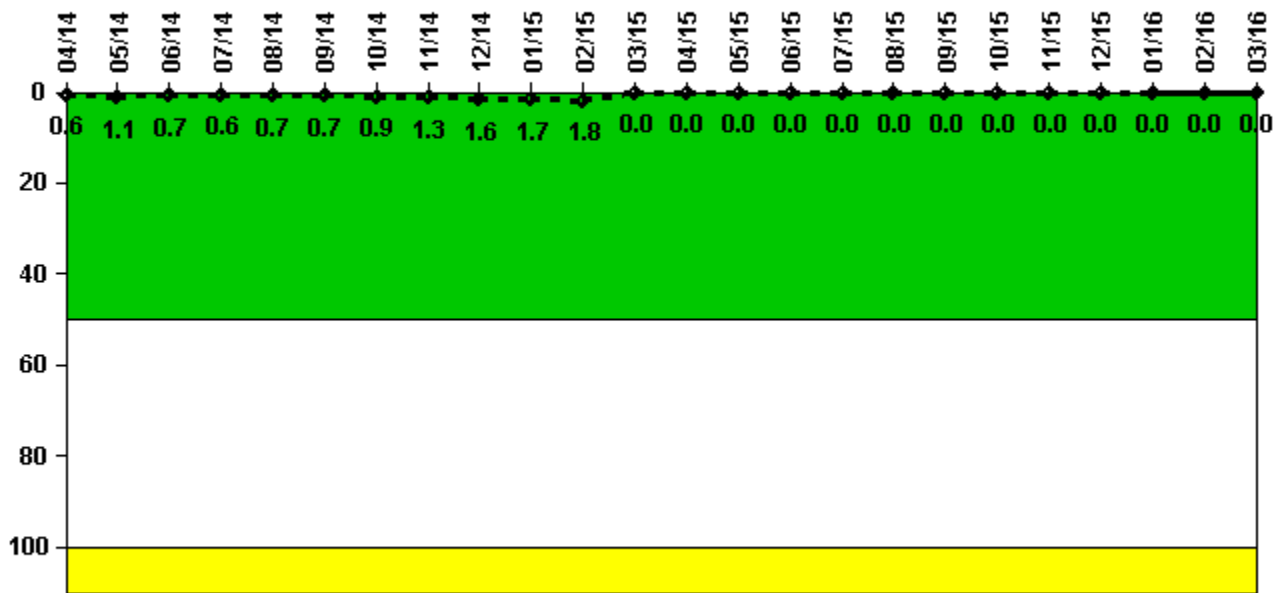
Thresholds: White > 50.0 Yellow > 100.0

### Notes

Reactor Coolant System Activity	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15
Maximum activity	0.000723	0.000765	0.000842	0.000863	0.001000	0.001200	0.001120	0.000807	0.000806	0.000903	0.001170	0.000279
Technical specification limit	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Indicator value	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
Reactor Coolant System Activity	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16
Maximum activity	0.000511	0.000288	0.000310	0.000301	0.000249	0.000332	0.000394	0.000406	0.000431	0.000415	0.000444	0.000417
Technical specification limit	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Indicator value	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

### Notes

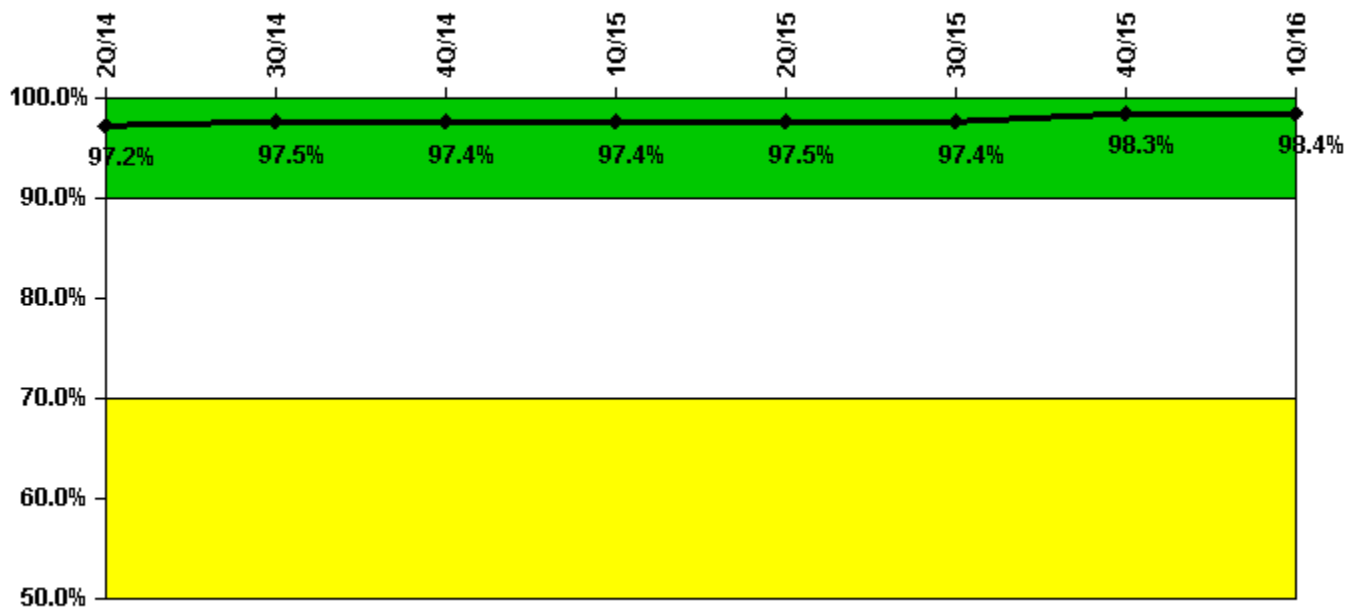
Reactor Coolant System Leakage	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15
Maximum leakage	0.060	0.110	0.070	0.060	0.070	0.070	0.090	0.130	0.160	0.170	0.180	0
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
<b>Indicator value</b>	<b>0.6</b>	<b>1.1</b>	<b>0.7</b>	<b>0.6</b>	<b>0.7</b>	<b>0.7</b>	<b>0.9</b>	<b>1.3</b>	<b>1.6</b>	<b>1.7</b>	<b>1.8</b>	<b>0</b>

Reactor Coolant System Leakage	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16
Maximum leakage	0	0	0	0	0	0	0	0	0	0	0	0
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>0</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>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Successful opportunities	48.0	51.0	47.0	9.0	75.0	44.0	60.0	42.0
Total opportunities	50.0	52.0	48.0	9.0	76.0	45.0	60.0	42.0
<b>Indicator value</b>	<b>97.2%</b>	<b>97.5%</b>	<b>97.4%</b>	<b>97.4%</b>	<b>97.5%</b>	<b>97.4%</b>	<b>98.3%</b>	<b>98.4%</b>

Licensee Comments: none

### ERO Drill Participation



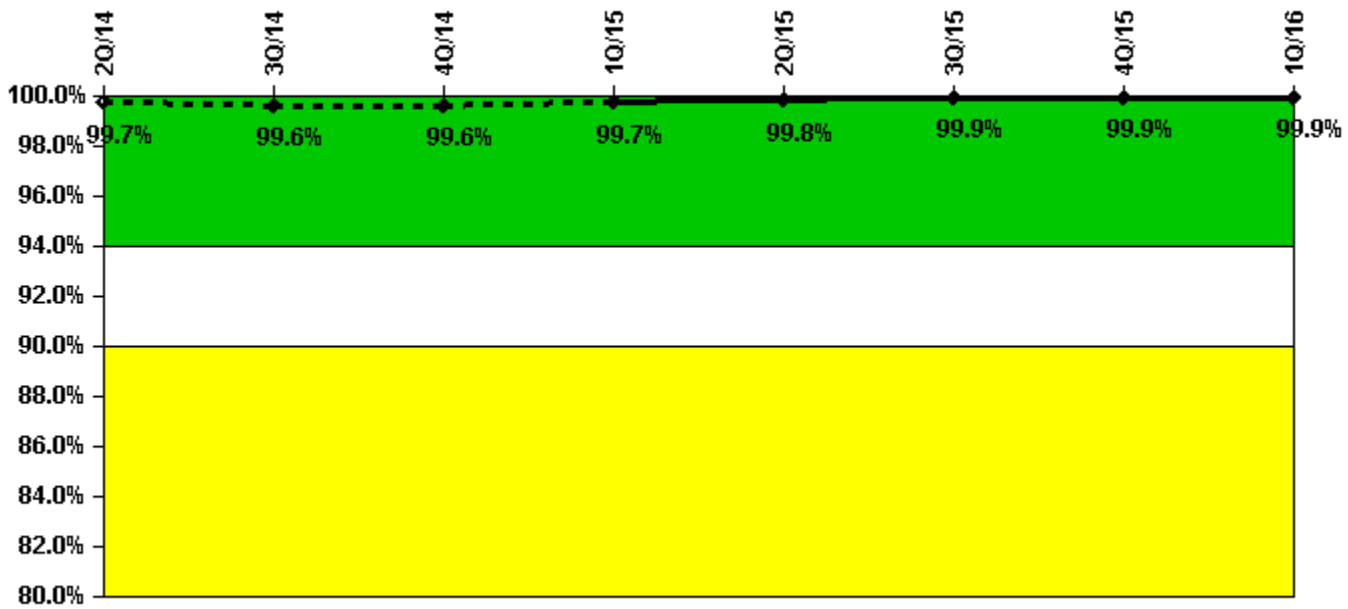
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Participating Key personnel	49.0	53.0	55.0	49.0	46.0	46.0	46.0	52.0
Total Key personnel	49.0	53.0	55.0	49.0	46.0	46.0	46.0	52.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

### Alert & Notification System



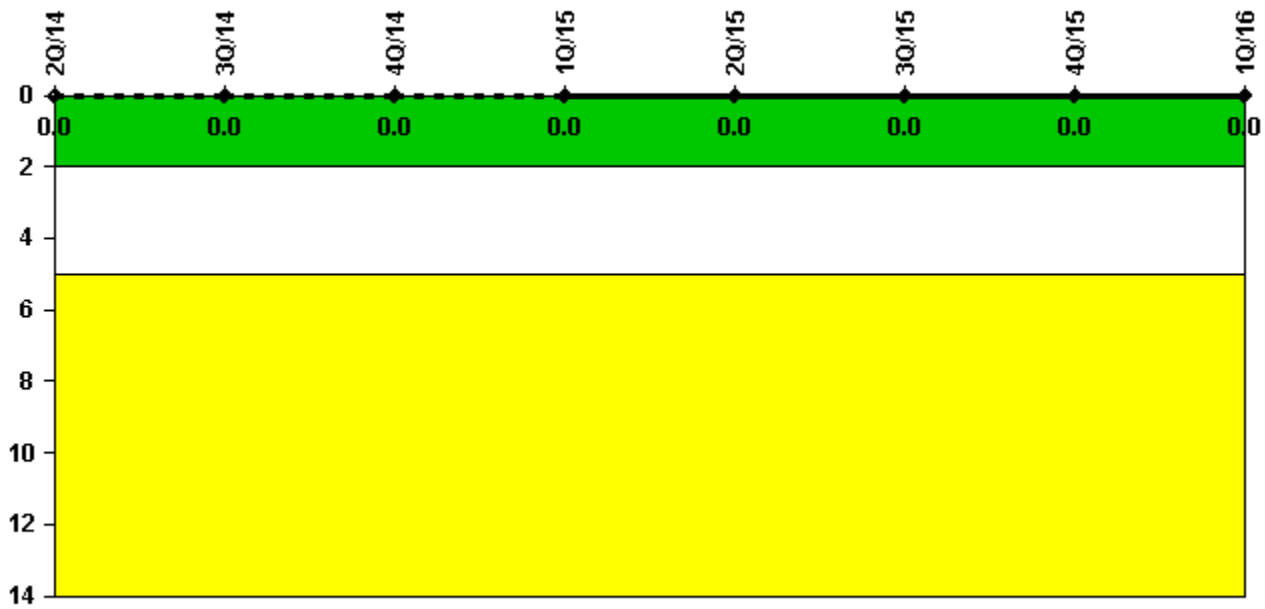
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Successful siren-tests	946	945	947	947	948	949	948	949
Total sirens-tests	949	949	949	949	949	949	949	949
Indicator value	99.7%	99.6%	99.6%	99.7%	99.8%	99.9%	99.9%	99.9%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



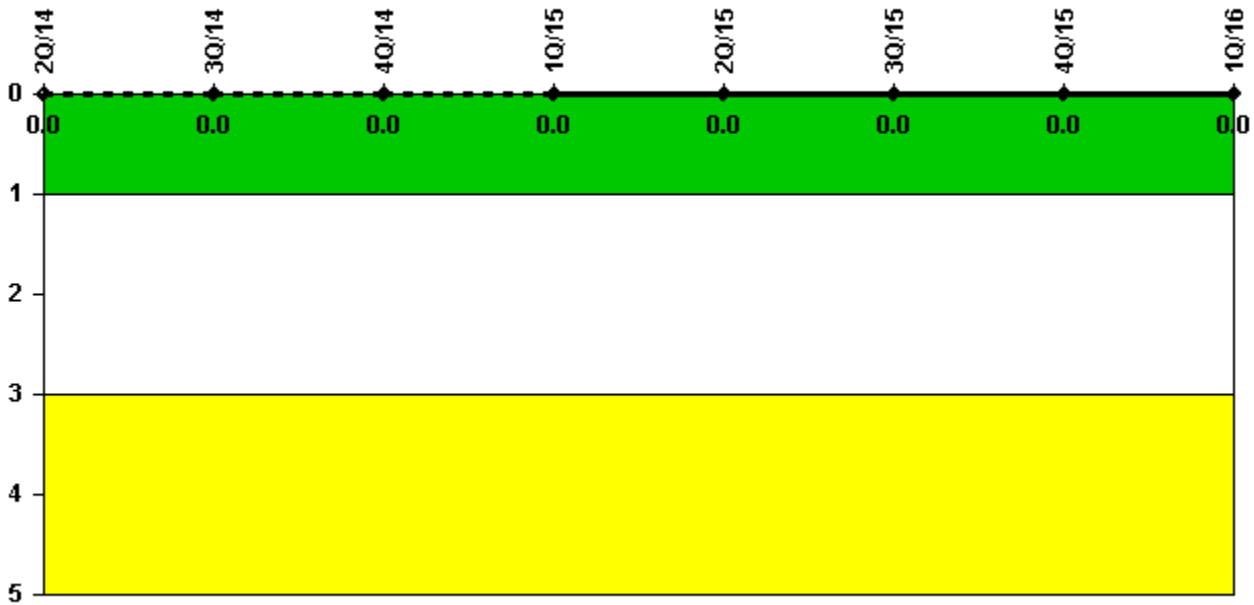
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
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/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

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, 2016*