

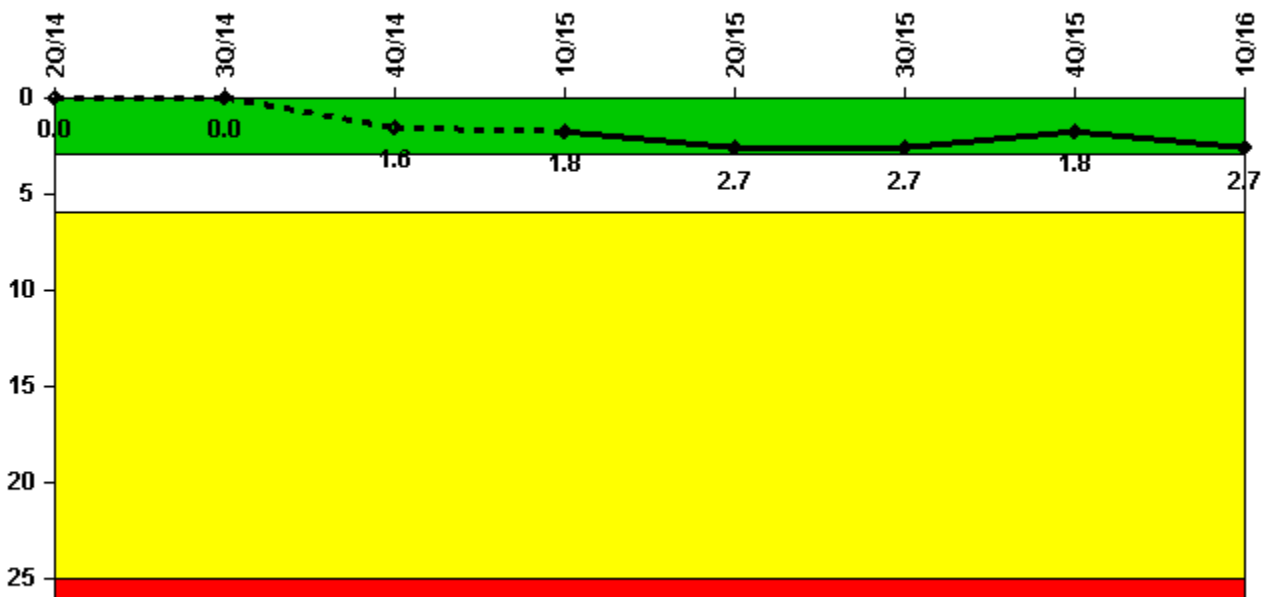
# River Bend 1

## 1Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: MS05, 1Q2016, Licensee Event Report 2016-001-00 Potential loss of the safety function of secondary containment due to the failure of the normal pressure control system of the Auxiliary building.

**Unplanned Scrams per 7000 Critical Hrs**



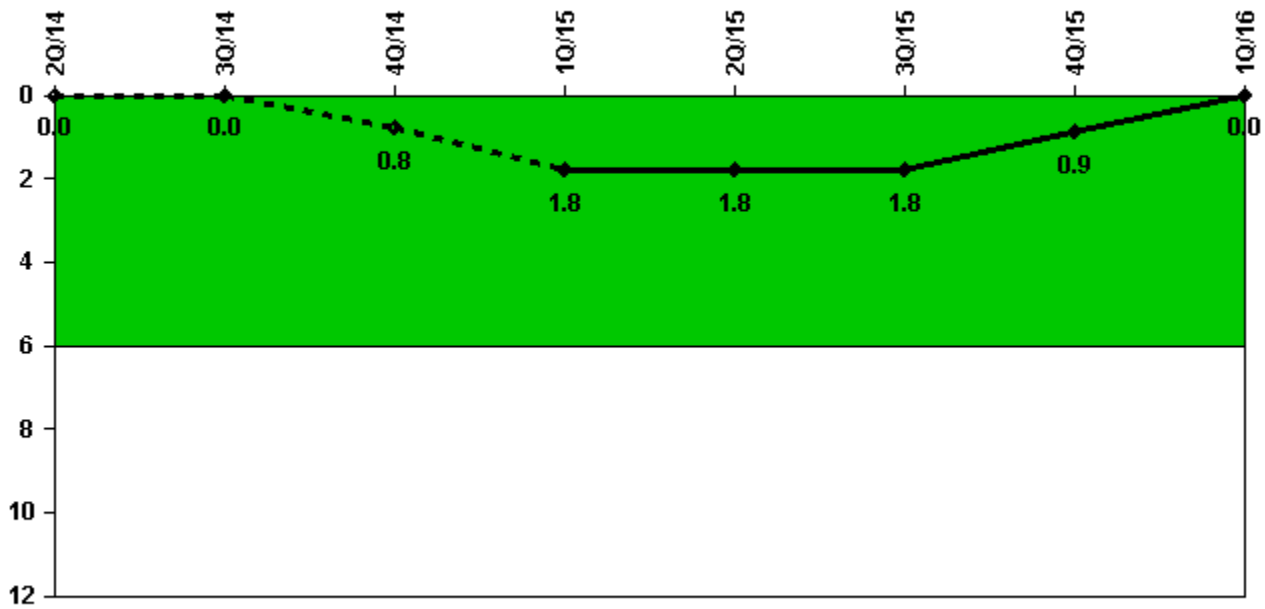
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

**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	2.0	0	1.0	0	1.0	1.0
Critical hours	2184.0	2208.0	2044.6	1360.7	2045.7	2208.0	2086.0	1320.4
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>1.6</b>	<b>1.8</b>	<b>2.7</b>	<b>2.7</b>	<b>1.8</b>	<b>2.7</b>

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



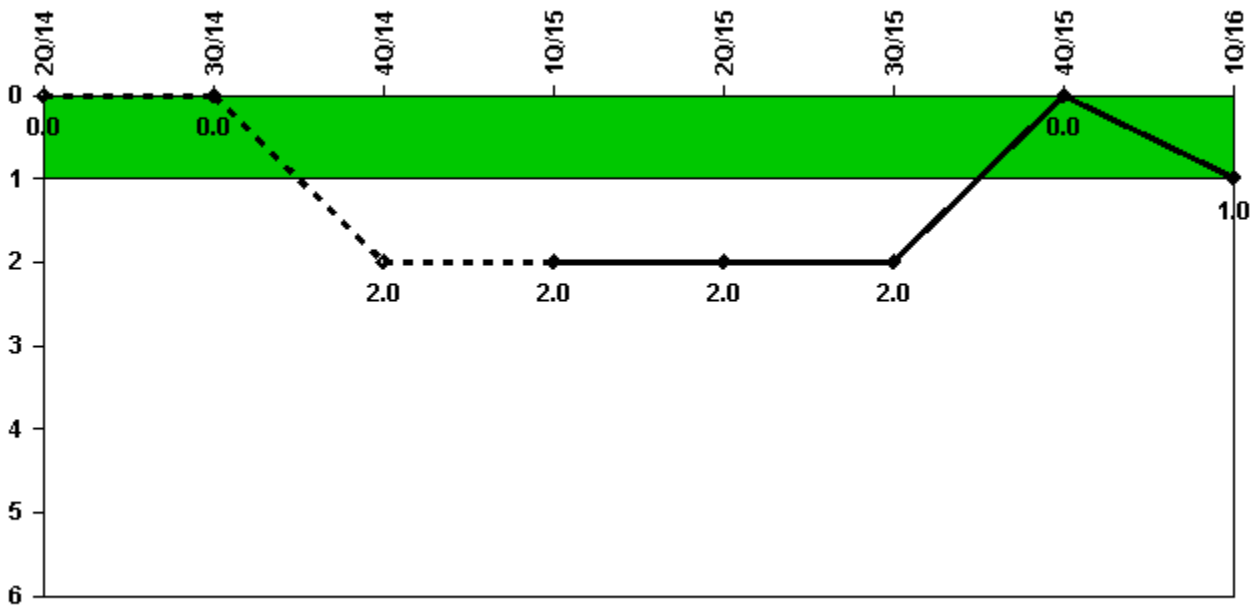
Thresholds: White > 6.0

#### 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	1.0	1.0	0	0	0	0
Critical hours	2184.0	2208.0	2044.6	1360.7	2045.7	2208.0	2086.0	1320.4
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0.8</b>	<b>1.8</b>	<b>1.8</b>	<b>1.8</b>	<b>0.9</b>	<b>0</b>

Licensee Comments: none

### Unplanned Scrams with Complications



Thresholds: White > 1.0

#### Notes

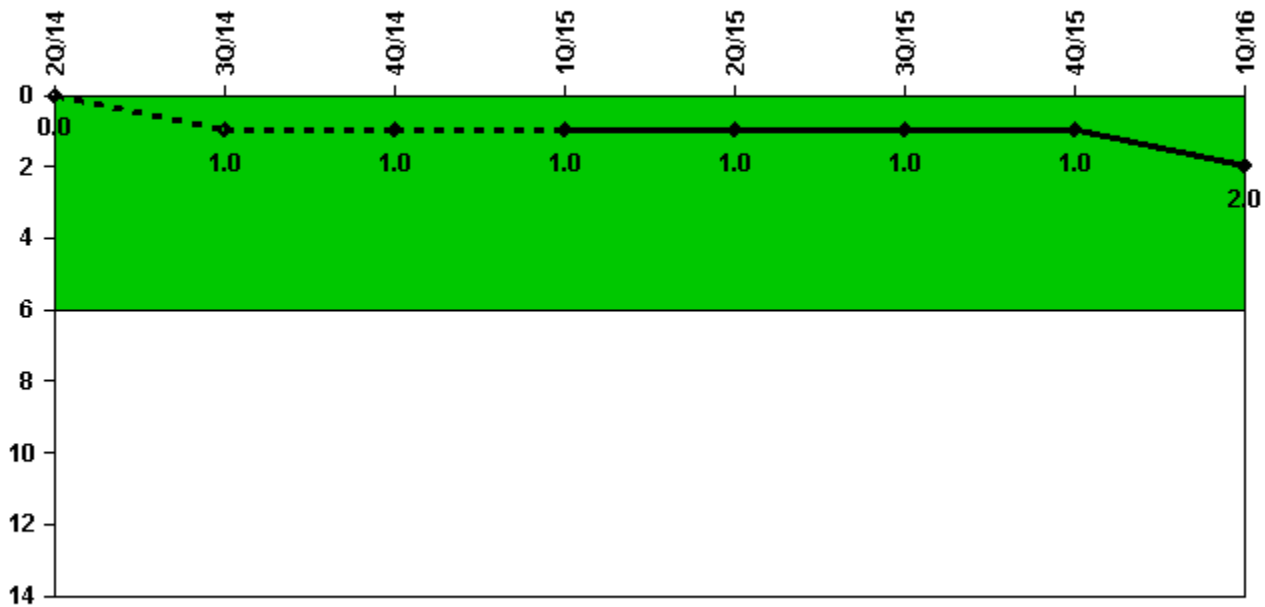
Unplanned Scrams with Complications	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Scrams with complications	0	0	2.0	0	0	0	0	1.0
Indicator value	0.0	0.0	2.0	2.0	2.0	2.0	0.0	1.0

Licensee Comments:

3Q/15: 4Q2014 As the result of the October and December 2014 unplanned scrams with complications, the NRC Unplanned Scrams with Complications Indicator is now in the white band at two. The green band is one scram per year.

4Q/14: As the result of the October and December 2014 unplanned scrams with complications, the NRC Unplanned Scrams with Complications Indicator is now in the white band at two. The green band is one scram per year. The indicator is now white and will return to green at the end of the 4th quarter of 2015.

### Safety System Functional Failures (BWR)



Thresholds: White > 6.0

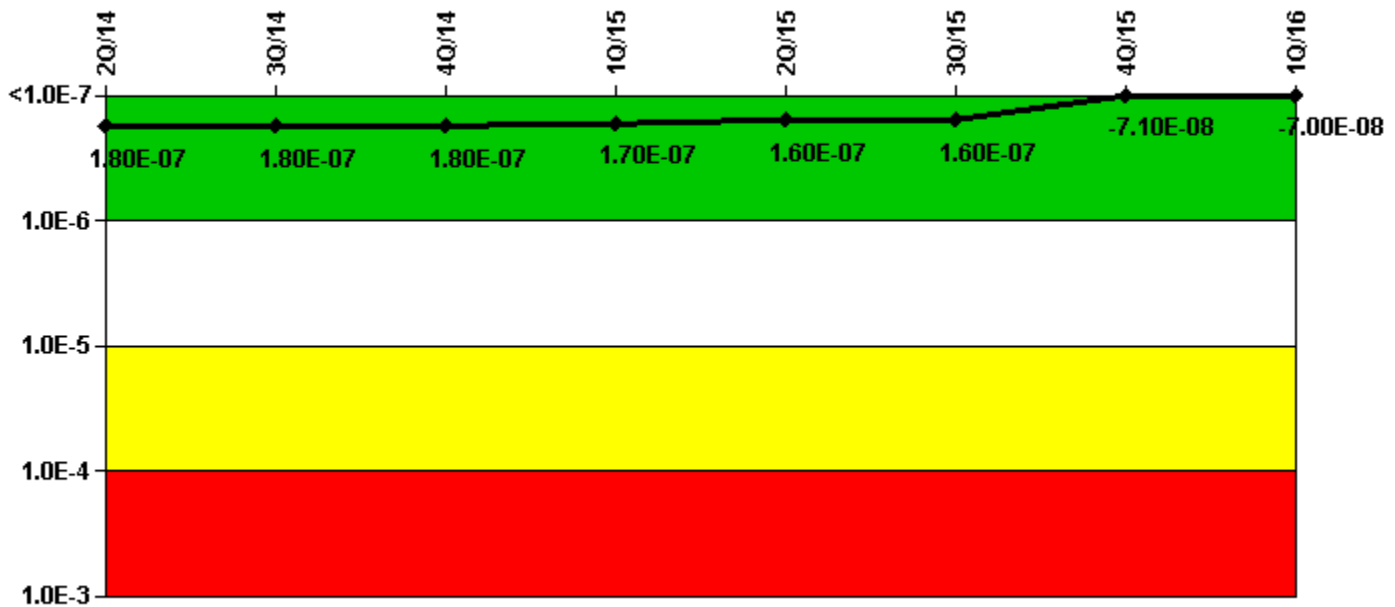
#### Notes

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

Licensee Comments:

3Q/14: 3Q/14: September 2014 - Licensee Event Report 2014-005-00 Loss of High Pressure Core Spray / Suppression Pool Safety Functions and Operations Prohibited by Technical Specifications due to Leakage Through Pump Test Return Line.

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



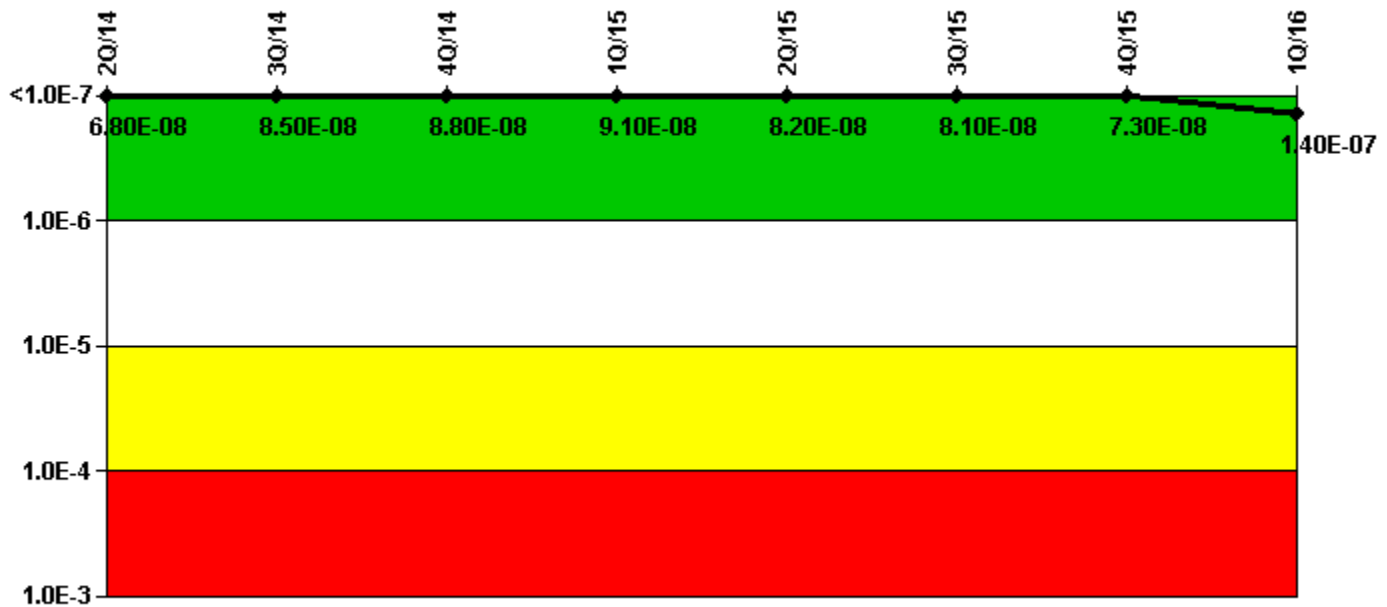
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### 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 ( $\Delta$ CDF)	2.51E-09	2.53E-09	2.50E-09	4.42E-09	5.81E-09	5.66E-09	2.48E-09	1.47E-09
URI ( $\Delta$ CDF)	1.76E-07	1.79E-07	1.82E-07	1.67E-07	1.58E-07	1.58E-07	-7.30E-08	-7.14E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.80E-07	1.80E-07	1.80E-07	1.70E-07	1.60E-07	1.60E-07	-7.10E-08	-7.00E-08

Licensee Comments: none

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



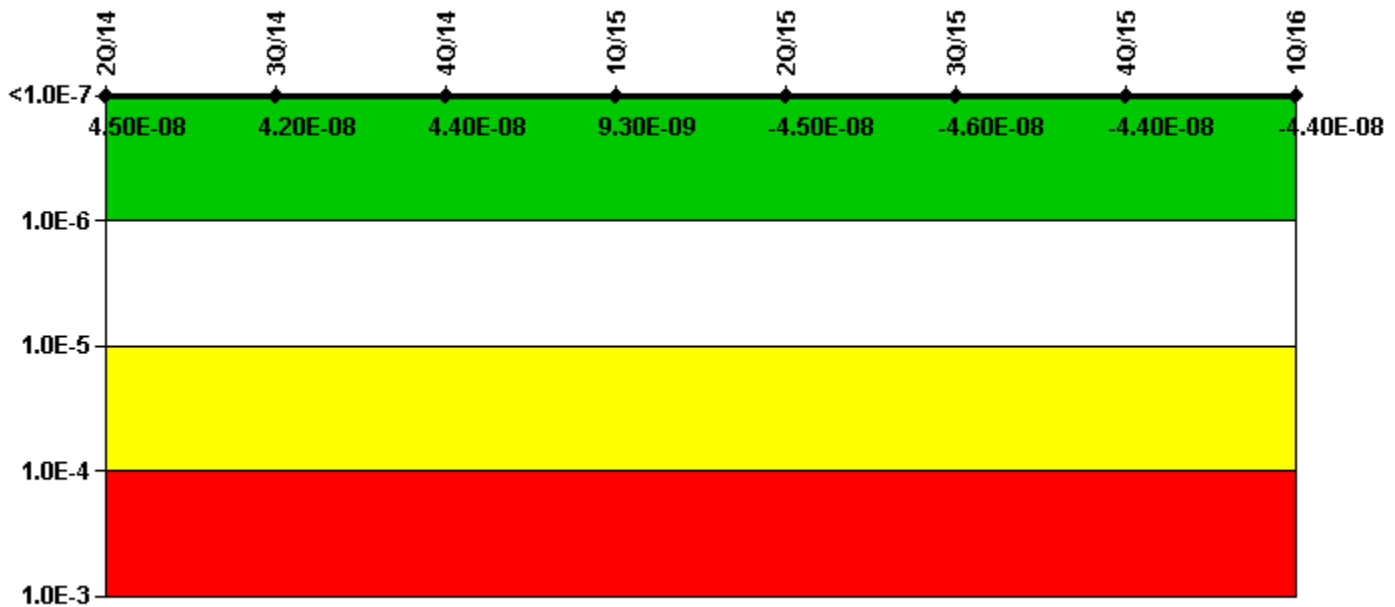
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### 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)	2.01E-08	2.36E-08	2.13E-08	2.43E-08	1.75E-08	1.72E-08	1.33E-08	1.34E-08
URI ( $\Delta$ CDF)	4.81E-08	6.14E-08	6.66E-08	6.68E-08	6.43E-08	6.41E-08	5.99E-08	1.25E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	6.80E-08	8.50E-08	8.80E-08	9.10E-08	8.20E-08	8.10E-08	7.30E-08	1.40E-07

Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



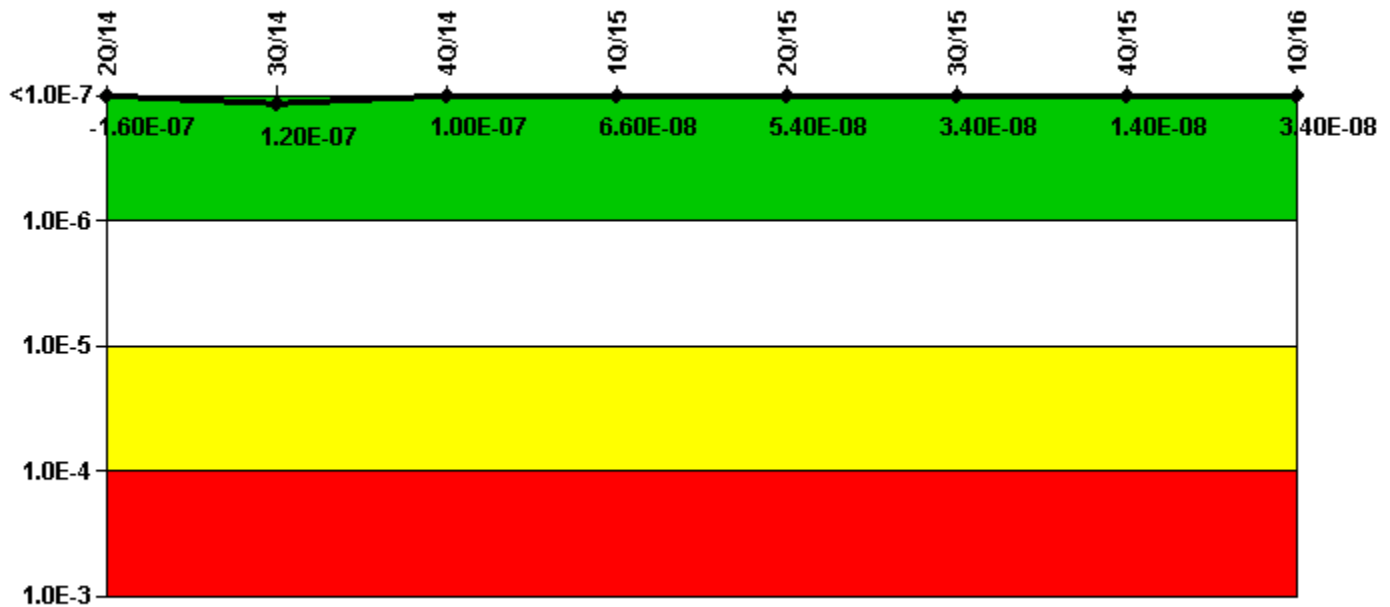
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### 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)	-9.63E-10	-1.96E-09	-1.93E-09	-8.77E-09	-8.75E-09	-8.75E-09	-8.74E-09	-1.05E-08
URI ( $\Delta$ CDF)	4.59E-08	4.37E-08	4.61E-08	1.80E-08	-3.58E-08	-3.71E-08	-3.57E-08	-3.34E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	4.50E-08	4.20E-08	4.40E-08	9.30E-09	-4.50E-08	-4.60E-08	-4.40E-08	-4.40E-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

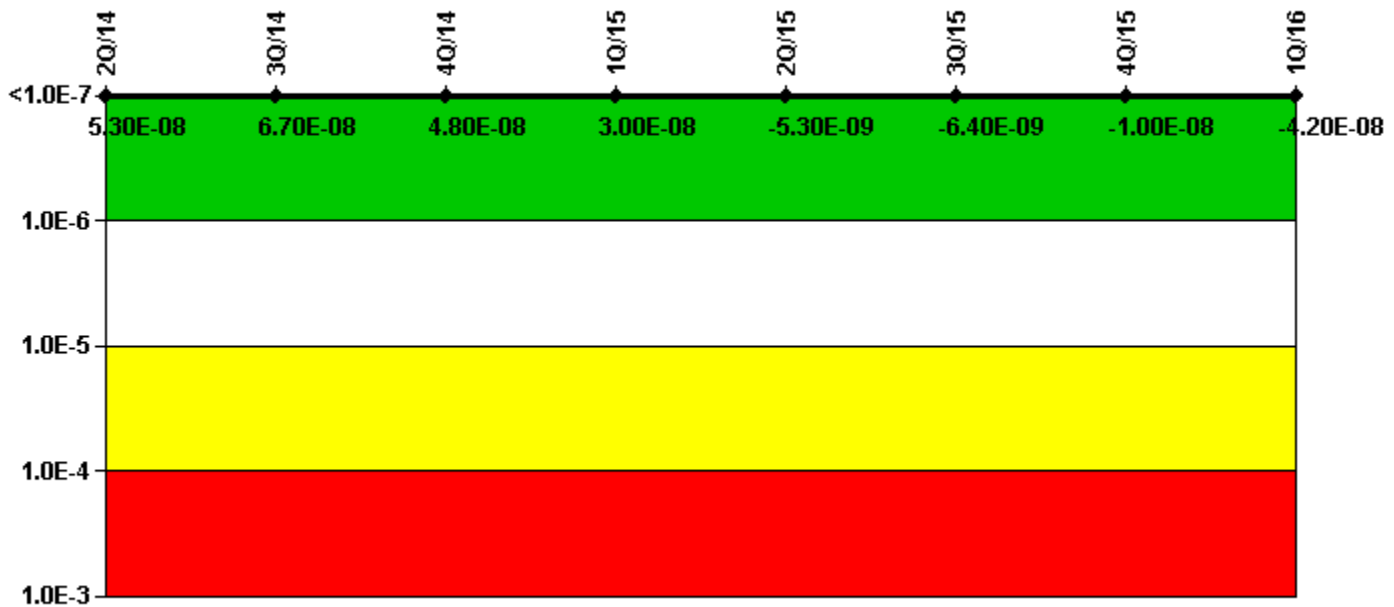
#### Notes

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)	-1.94E-08	1.11E-08	-3.89E-09	-4.25E-09	-5.48E-09	-8.37E-09	-1.72E-08	-1.20E-08
URI ( $\Delta$ CDF)	-1.46E-07	1.11E-07	1.03E-07	7.04E-08	5.99E-08	4.24E-08	3.14E-08	4.56E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.60E-07	1.20E-07	1.00E-07	6.60E-08	5.40E-08	3.40E-08	1.40E-08	3.40E-08

Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



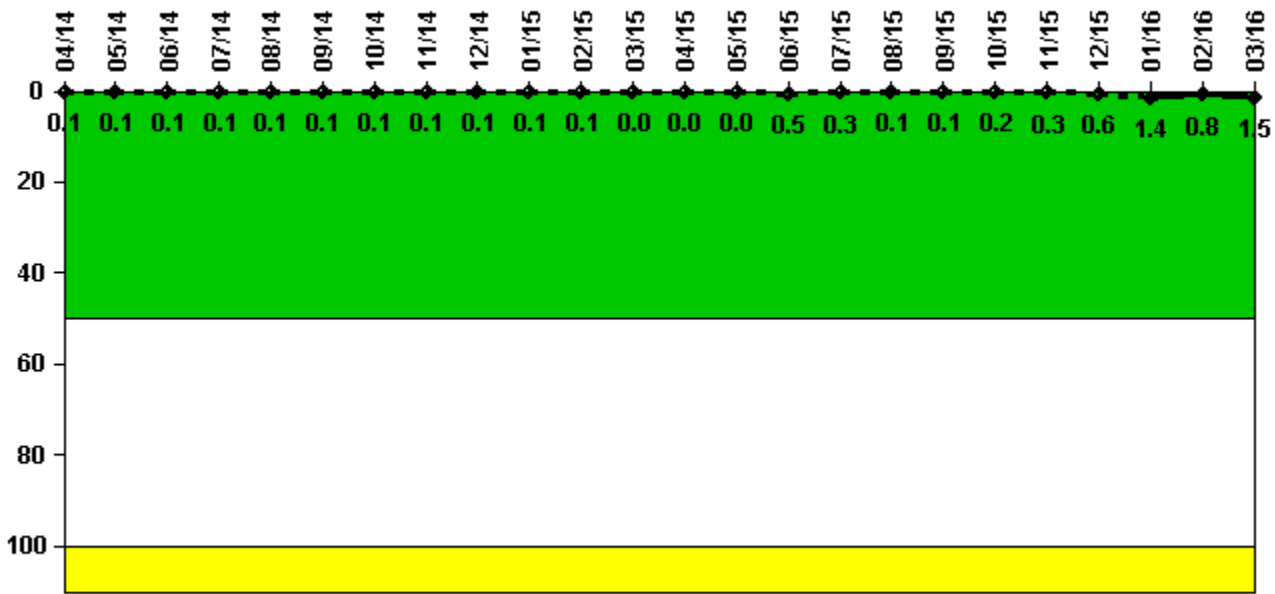
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### 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)	9.04E-08	1.04E-07	8.46E-08	6.72E-08	2.92E-08	2.92E-08	2.94E-08	-2.31E-09
URI ( $\Delta$ CDF)	-3.69E-08	-3.69E-08	-3.69E-08	-3.69E-08	-3.46E-08	-3.56E-08	-3.96E-08	-3.96E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	5.30E-08	6.70E-08	4.80E-08	3.00E-08	-5.30E-09	-6.40E-09	-1.00E-08	-4.20E-08

Licensee Comments: none

### Reactor Coolant System Activity



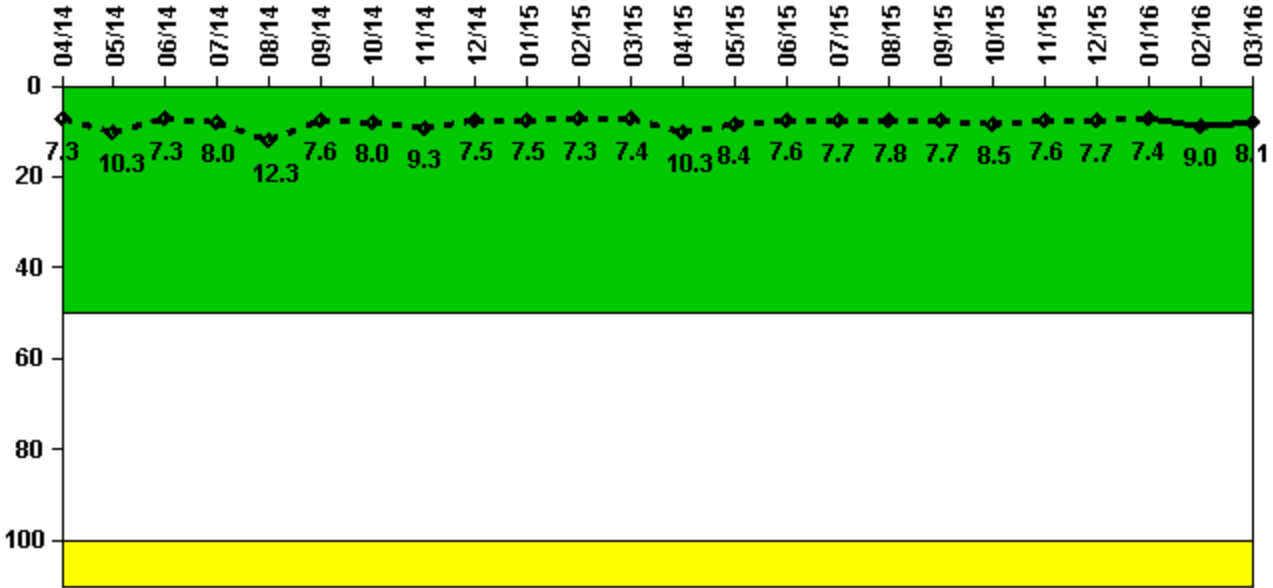
Thresholds: White > 50.0 Yellow > 100.0

#### 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	0.000135	0.000136	0.000148	0.000137	0.000133	0.000131	0.000136	0.000176	0.000263	0.000186	0.000186	0.000047
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
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	0.000068	0.000075	0.001076	0.000651	0.000248	0.000135	0.000496	0.000628	0.001242	0.002747	0.001582	0.002948
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	0.5	0.3	0.1	0.1	0.2	0.3	0.6	1.4	0.8	1.5

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

**Notes**

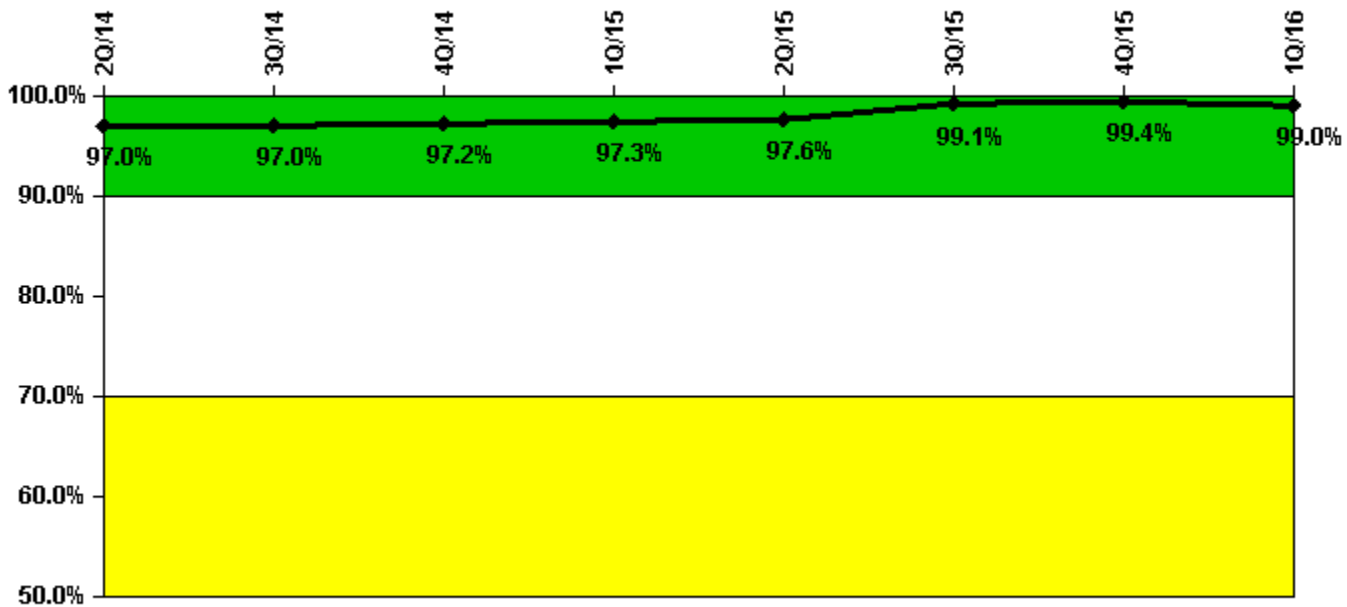
Reactor Coolant System Leakage	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15
Maximum leakage	2.190	3.090	2.200	2.410	3.680	2.270	2.400	2.780	2.250	2.240	2.200	2.220
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Indicator value	<b>7.3</b>	<b>10.3</b>	<b>7.3</b>	<b>8.0</b>	<b>12.3</b>	<b>7.6</b>	<b>8.0</b>	<b>9.3</b>	<b>7.5</b>	<b>7.5</b>	<b>7.3</b>	<b>7.4</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	3.090	2.510	2.270	2.310	2.330	2.320	2.550	2.280	2.300	2.230	2.700	2.420
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Indicator value	<b>10.3</b>	<b>8.4</b>	<b>7.6</b>	<b>7.7</b>	<b>7.8</b>	<b>7.7</b>	<b>8.5</b>	<b>7.6</b>	<b>7.7</b>	<b>7.4</b>	<b>9.0</b>	<b>8.1</b>

Licensee Comments: none

### Drill/Exercise Performance



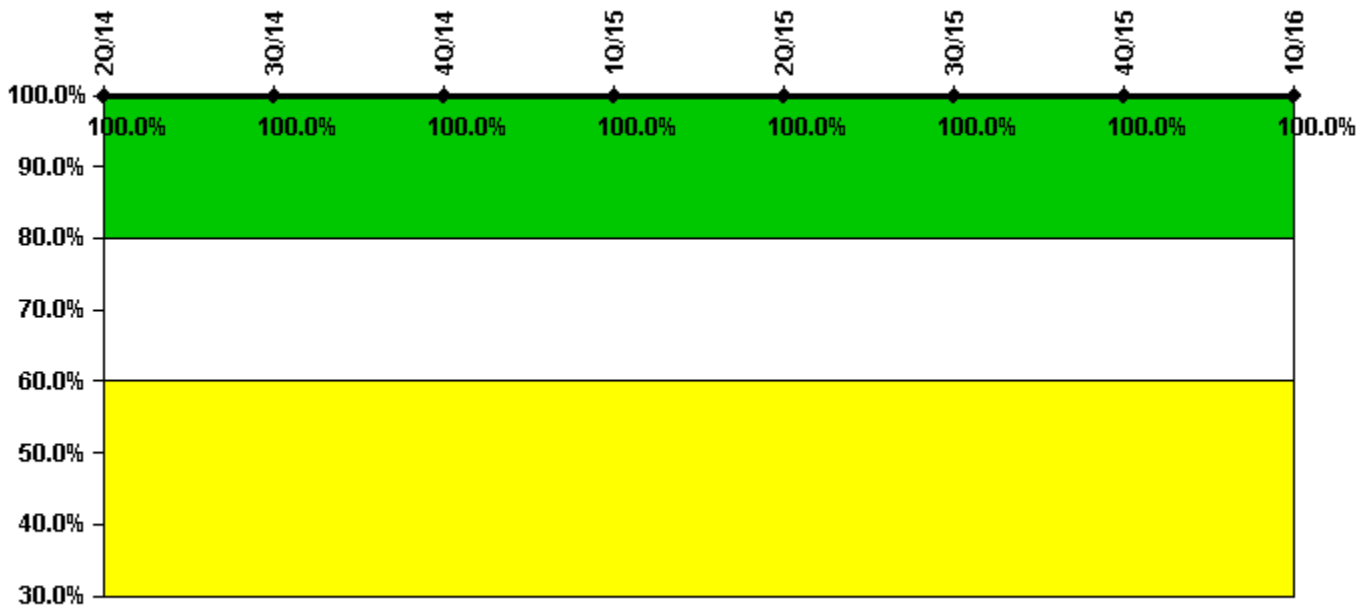
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Successful opportunities	32.0	52.0	36.0	22.0	40.0	40.0	58.0	12.0
Total opportunities	33.0	52.0	37.0	22.0	40.0	40.0	58.0	13.0
Indicator value	97.0%	97.0%	97.2%	97.3%	97.6%	99.1%	99.4%	99.0%

Licensee Comments: none

### ERO Drill Participation



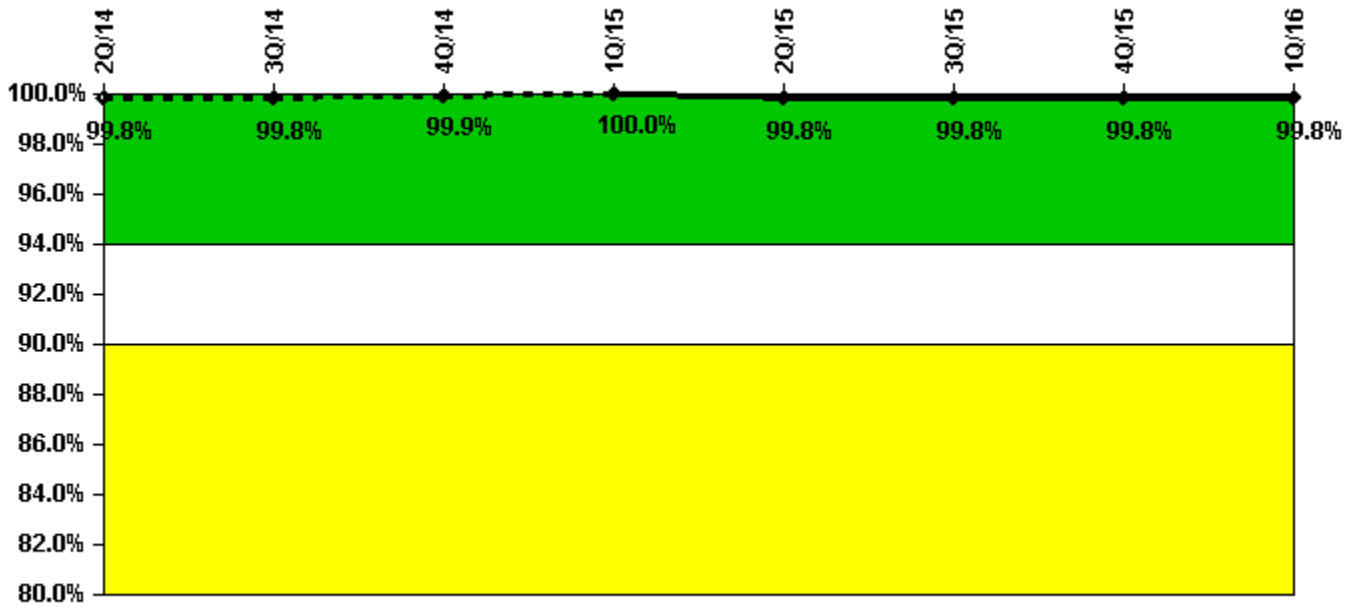
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Participating Key personnel	85.0	85.0	82.0	81.0	89.0	84.0	83.0	79.0
Total Key personnel	85.0	85.0	82.0	81.0	89.0	84.0	83.0	79.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

### Alert & Notification System



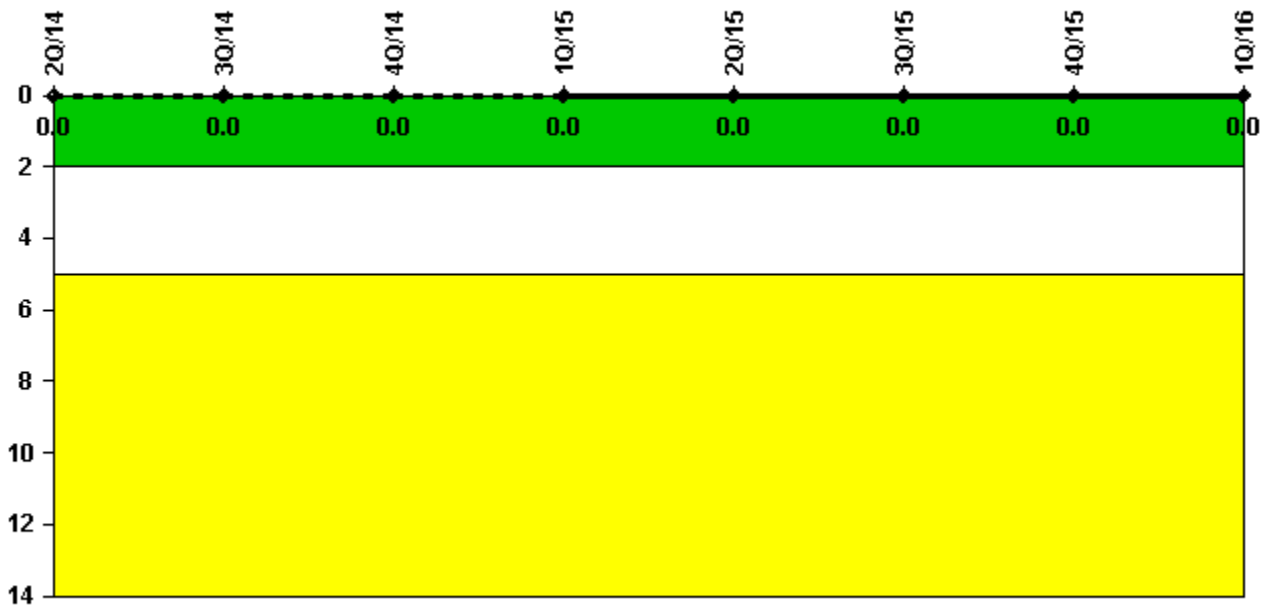
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Successful siren-tests	923	923	922	852	918	922	923	911
Total sirens-tests	923	923	923	852	923	923	923	911
Indicator value	99.8%	99.8%	99.9%	100.0%	99.8%	99.8%	99.8%	99.8%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



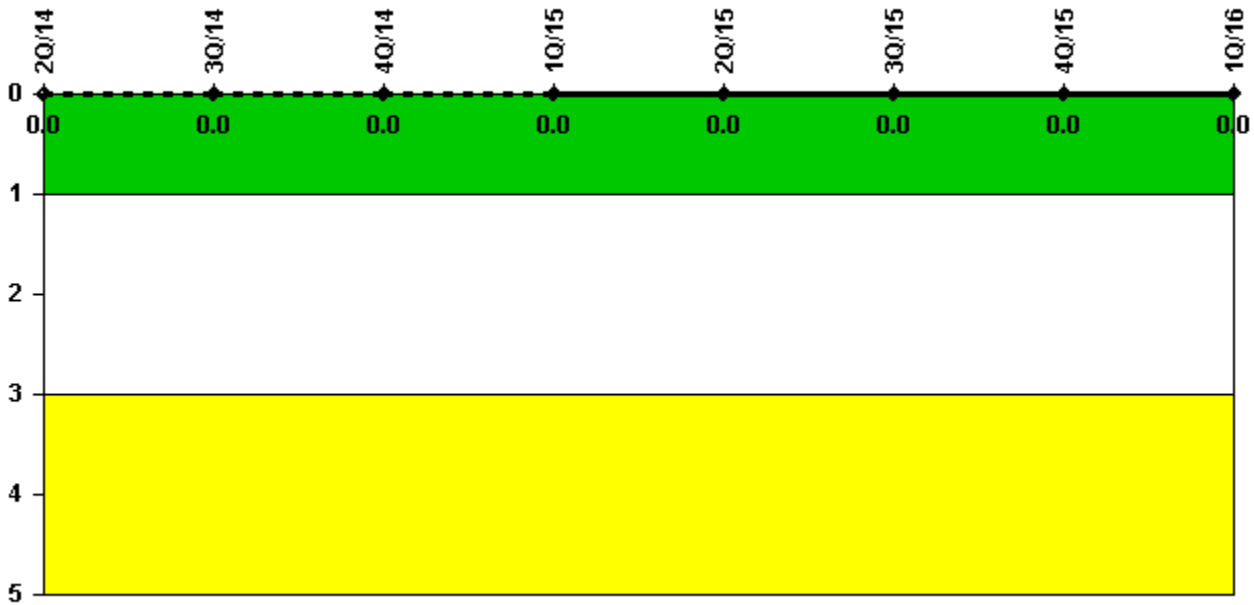
Thresholds: White > 2.0 Yellow > 5.0

#### 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*