

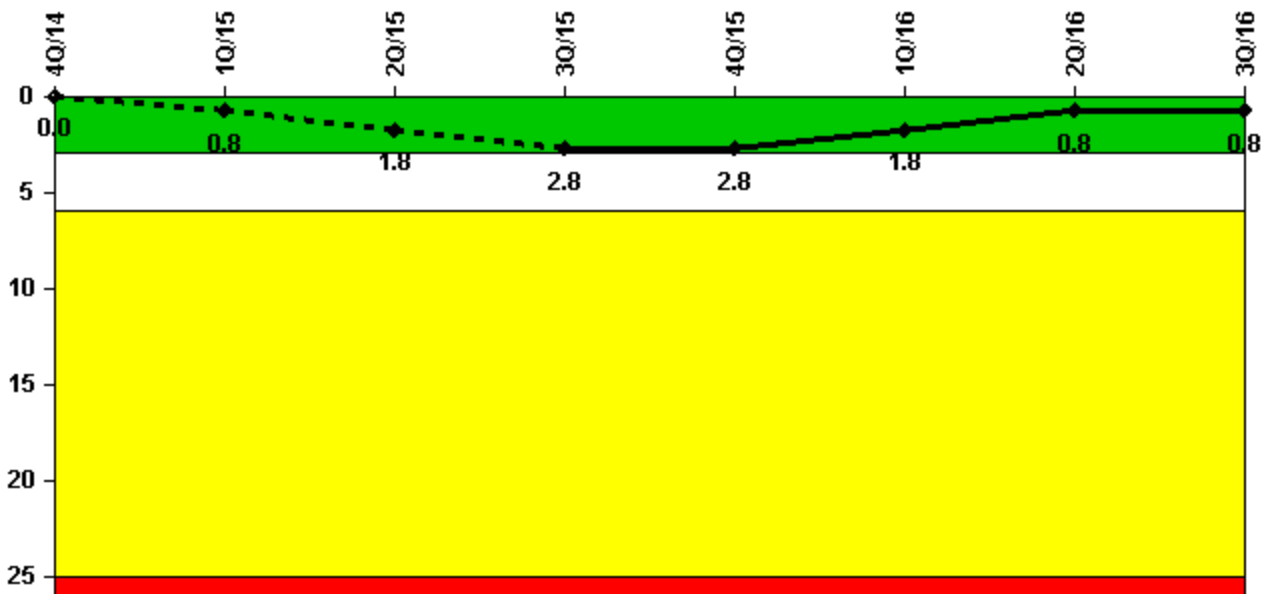
# Pilgrim 1

## 3Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



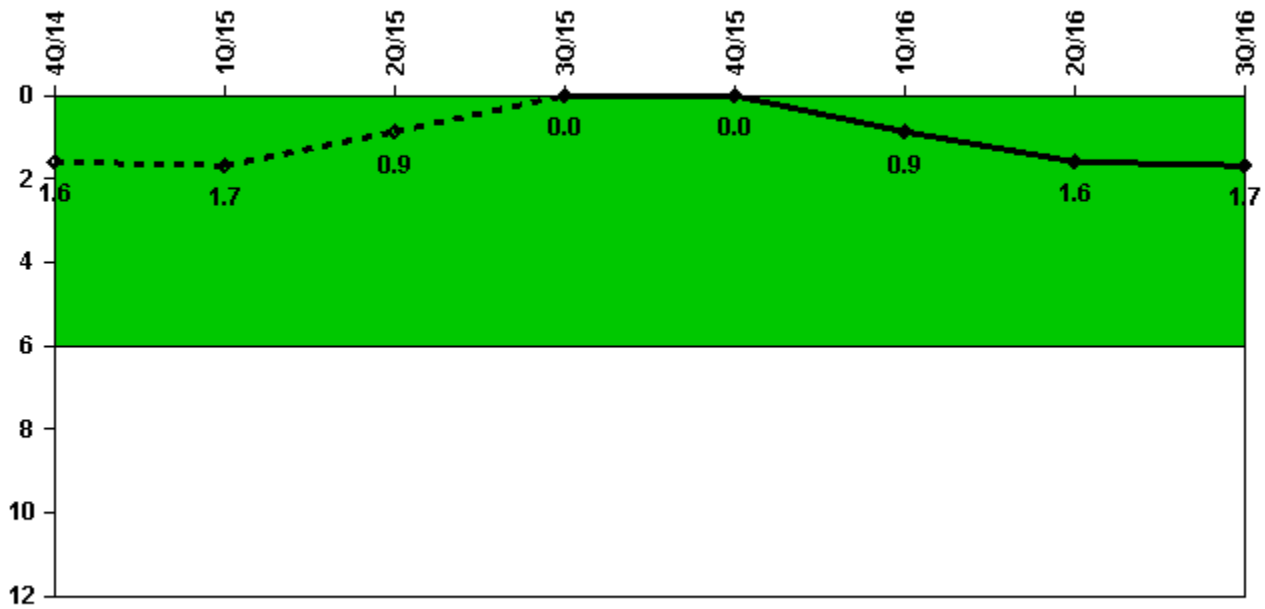
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Unplanned scrams	0	1.0	1.0	1.0	0	0	0	1.0
Critical hours	2209.0	1830.3	1424.1	2151.7	2209.0	2137.9	2184.0	1918.2
Indicator value	<b>0</b>	<b>0.8</b>	<b>1.8</b>	<b>2.8</b>	<b>2.8</b>	<b>1.8</b>	<b>0.8</b>	<b>0.8</b>

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



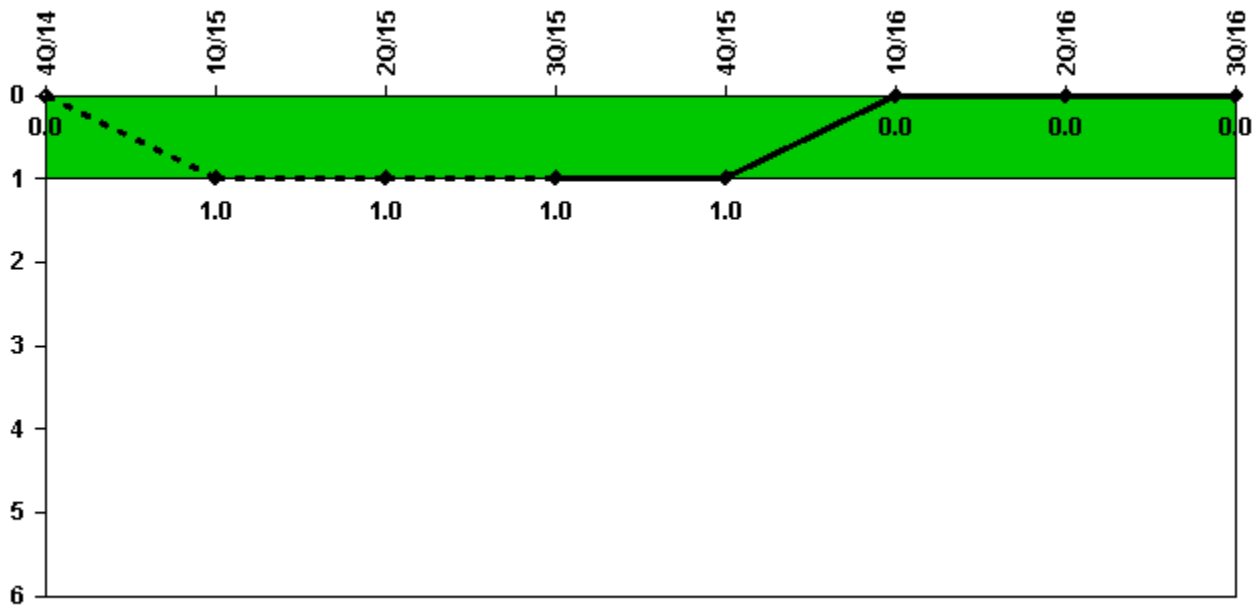
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Unplanned power changes	0	0	0	0	0	1.0	1.0	0
Critical hours	2209.0	1830.3	1424.1	2151.7	2209.0	2137.9	2184.0	1918.2
<b>Indicator value</b>	<b>1.6</b>	<b>1.7</b>	<b>0.9</b>	<b>0</b>	<b>0</b>	<b>0.9</b>	<b>1.6</b>	<b>1.7</b>

Licensee Comments: none

### Unplanned Scrams with Complications



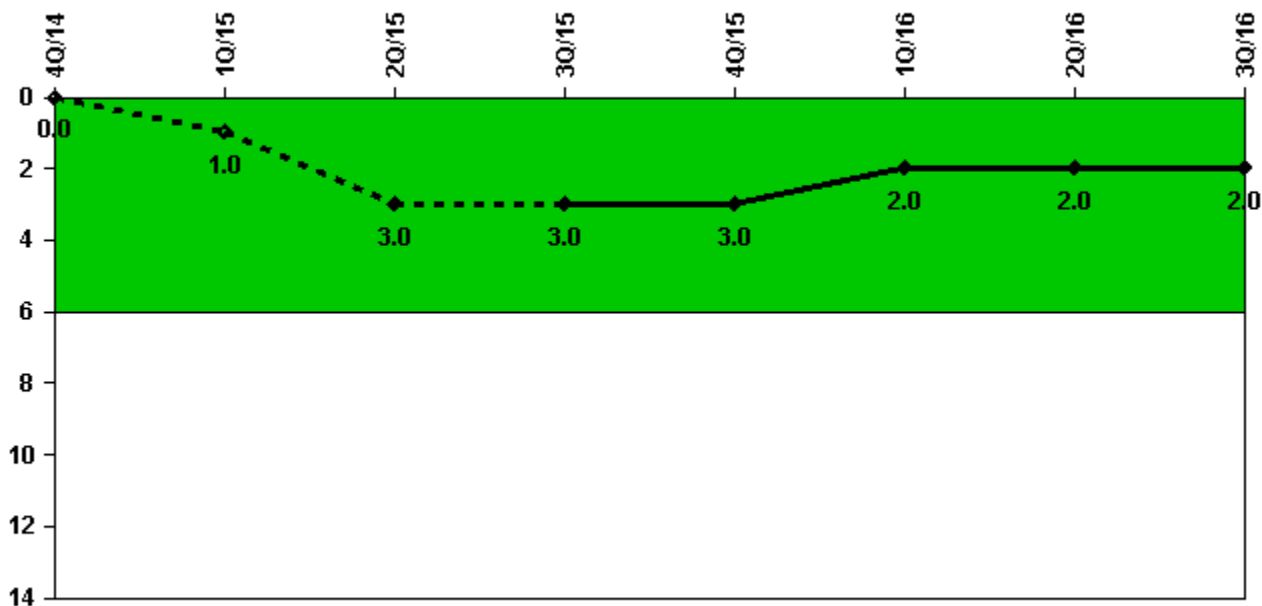
Thresholds: White > 1.0

#### Notes

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

Licensee Comments: none

### Safety System Functional Failures (BWR)



Thresholds: White > 6.0

#### Notes

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

Licensee Comments:

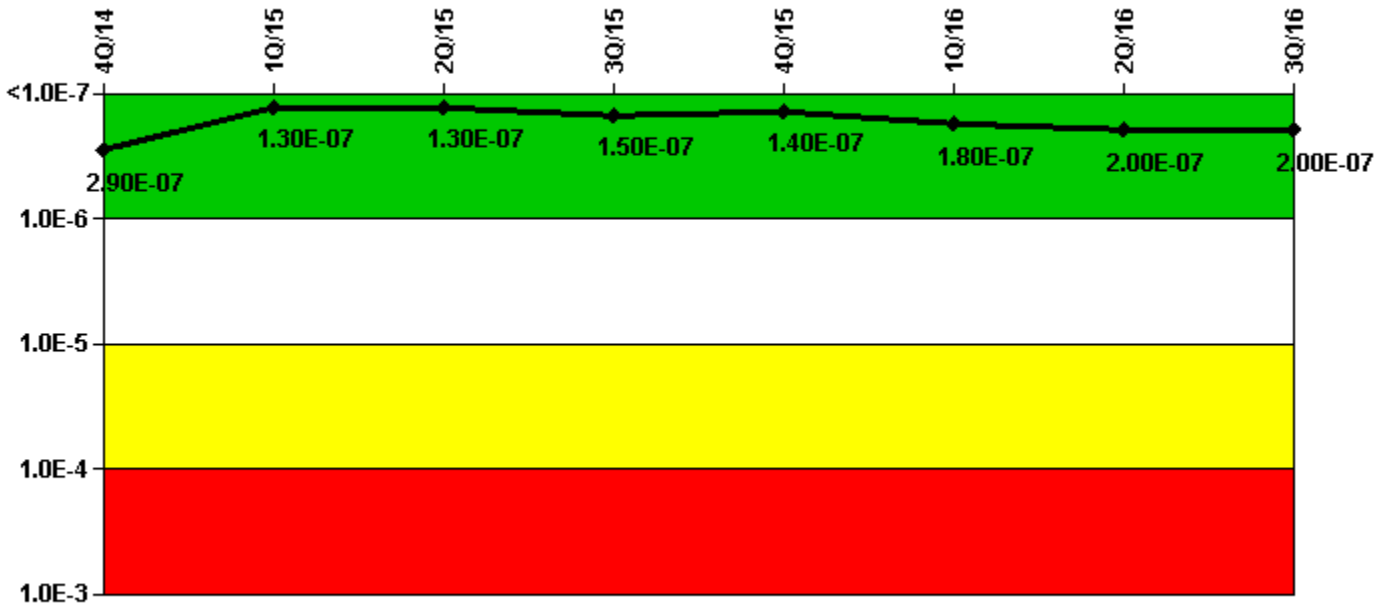
2Q/16: LER 2016-001-00 and LER 2016-002-00

4Q/15: Licensee Event Report (LER) 2015-006-00 documented the Ultimate Heat Sink (UHS) temperature exceeded the Technical Specification limit resulting in the UHS and the Salt Service Water (SSW) System being declared inoperable. The LER was submitted pursuant to 10 CFR 50.73(a)(2)(v)(B) and (D), any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to remove residual heat and mitigate the consequences of an accident, respectively. As documented in the LER, an evaluation of a similar 2013 event determined the safety function of the UHS and SSW System was satisfied when the temperature exceeded the Technical Specification limit for a longer duration and higher value. The 2015 temperature excursion is bounded by that evaluation based on the lower maximum temperature recorded and the shorter duration of this excursion. Thus, this event is not counted as a safety system functional failure per NEI 99-02, Section 2.2.

2Q/15: LER 2015-002-00 and LER 2015-004-00

1Q/15: LER 2015-001-00 documents HPCI Inoperability

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



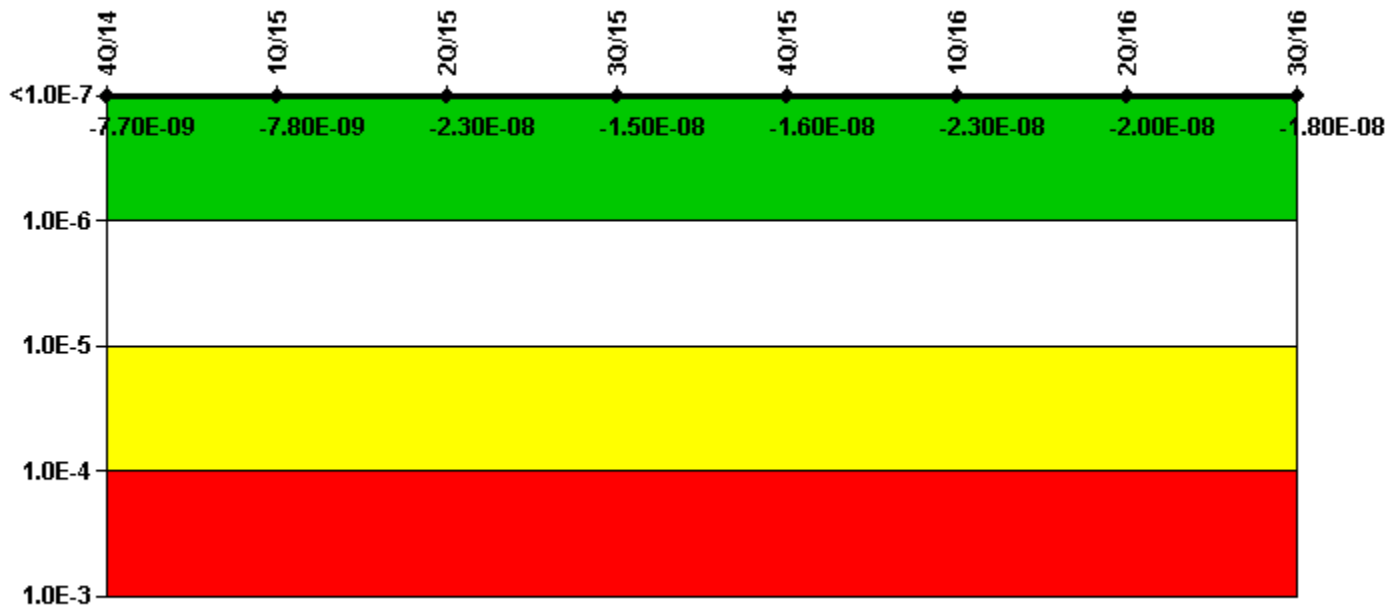
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Emergency AC Power System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI (ΔCDF)	1.73E-08	2.41E-08	2.47E-08	3.78E-08	2.57E-08	1.68E-08	3.72E-08	3.79E-08
URI (ΔCDF)	2.74E-07	1.10E-07	1.10E-07	1.10E-07	1.11E-07	1.64E-07	1.66E-07	1.66E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.90E-07	1.30E-07	1.30E-07	1.50E-07	1.40E-07	1.80E-07	2.00E-07	2.00E-07

Licensee Comments: none

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



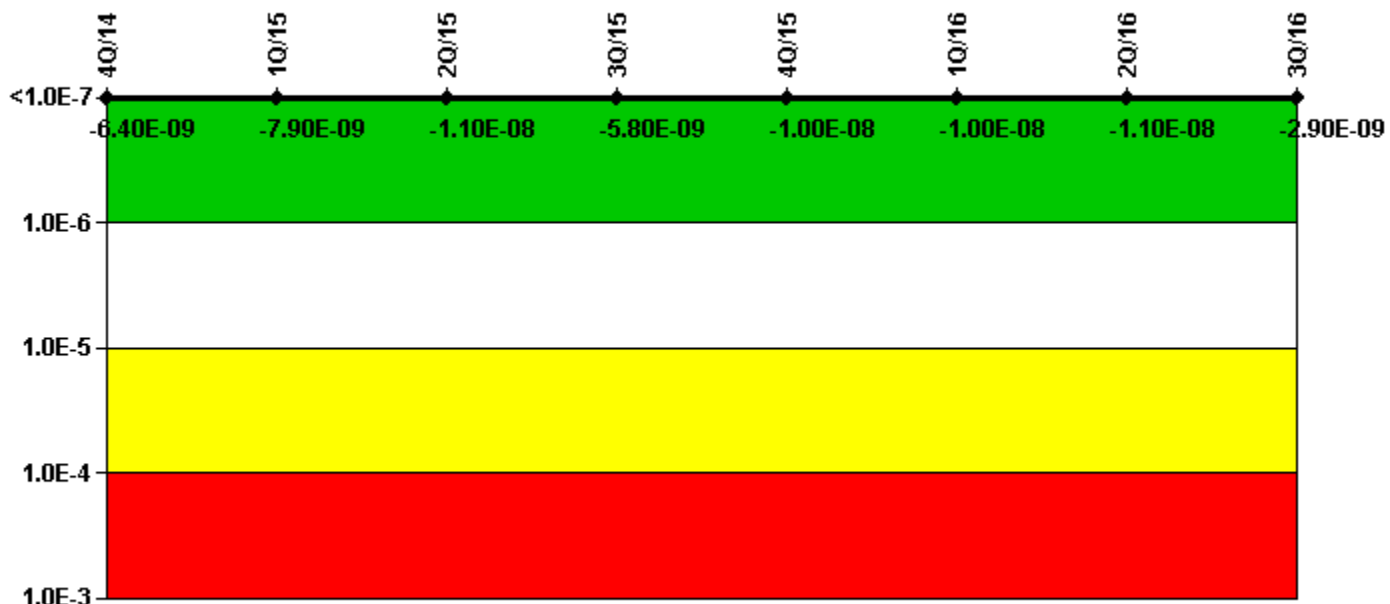
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, High Pressure Injection System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI ( $\Delta$ CDF)	1.19E-08	1.25E-08	-2.97E-09	5.48E-09	4.15E-09	-3.45E-09	-2.25E-09	-7.87E-10
URI ( $\Delta$ CDF)	-1.96E-08	-2.03E-08	-2.03E-08	-2.03E-08	-2.00E-08	-1.95E-08	-1.77E-08	-1.68E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-7.70E-09	-7.80E-09	-2.30E-08	-1.50E-08	-1.60E-08	-2.30E-08	-2.00E-08	-1.80E-08

Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



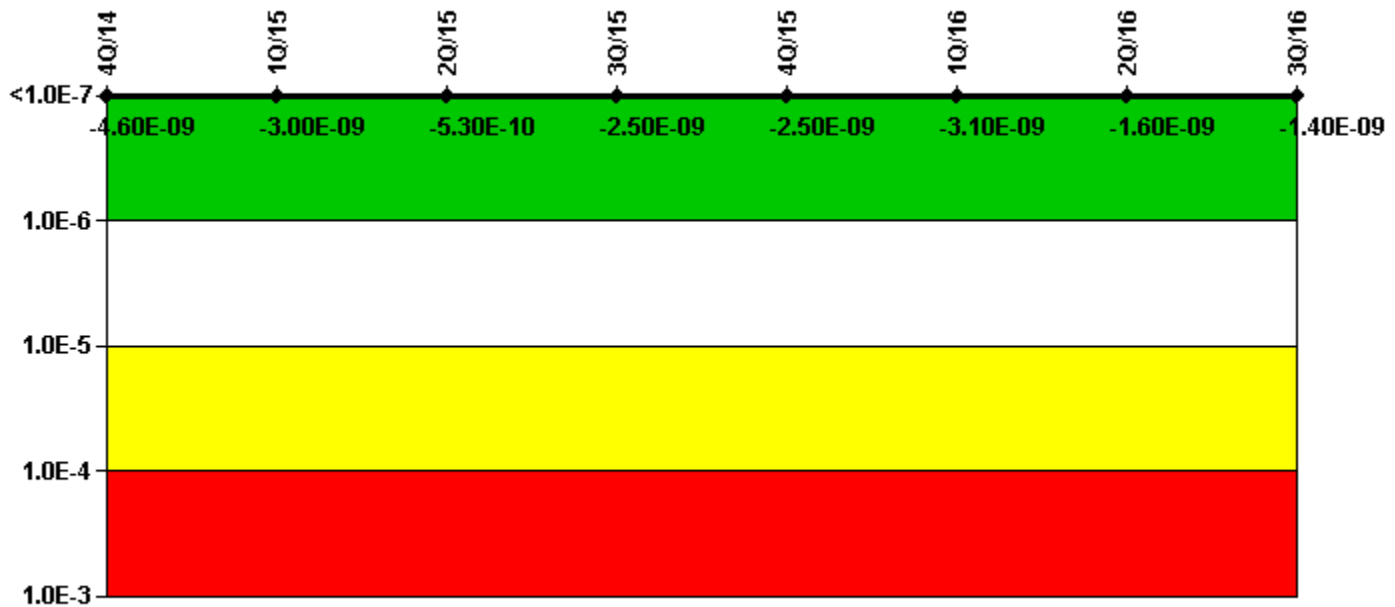
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Heat Removal System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI ( $\Delta$ CDF)	6.23E-09	7.13E-09	4.20E-09	9.76E-09	5.10E-09	4.90E-09	3.66E-09	1.03E-08
URI ( $\Delta$ CDF)	-1.26E-08	-1.51E-08	-1.52E-08	-1.55E-08	-1.54E-08	-1.52E-08	-1.46E-08	-1.31E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-6.40E-09	-7.90E-09	-1.10E-08	-5.80E-09	-1.00E-08	-1.00E-08	-1.10E-08	-2.90E-09

Licensee Comments: none

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



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

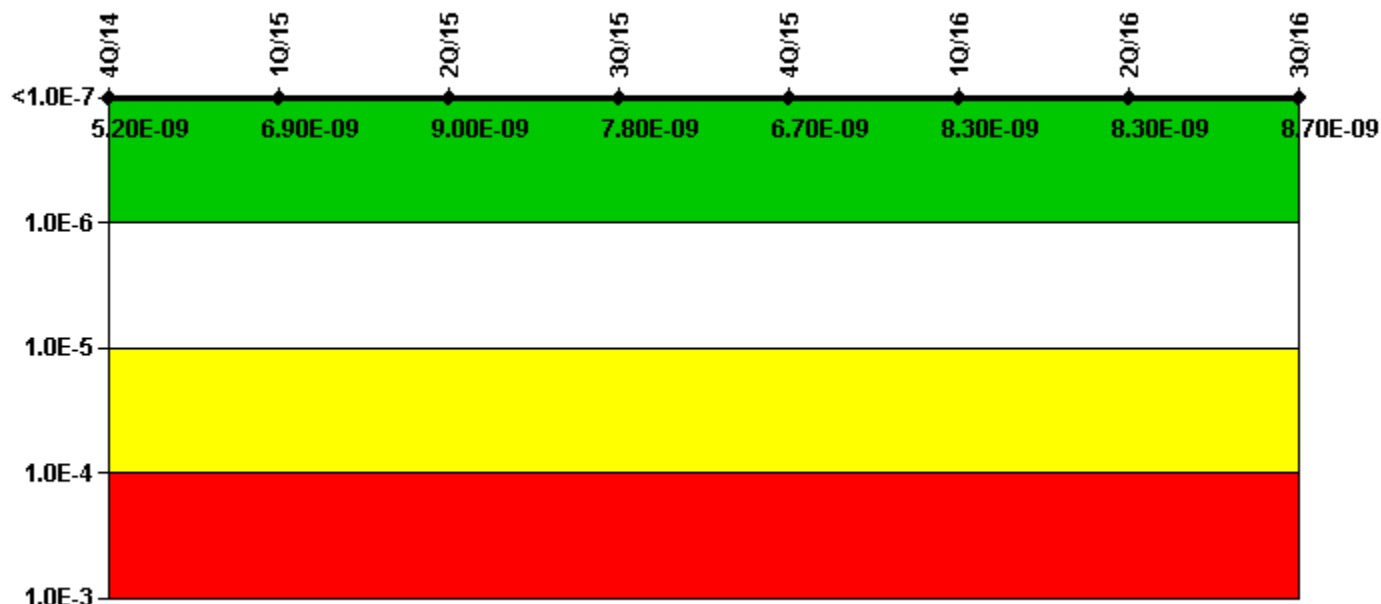
#### Notes

Mitigating Systems Performance Index, Residual Heat Removal System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI ( $\Delta$ CDF)	8.38E-10	2.57E-09	3.31E-09	1.60E-09	1.75E-09	9.94E-10	2.36E-09	2.61E-09
URI ( $\Delta$ CDF)	-5.45E-09	-5.58E-09	-3.84E-09	-4.10E-09	-4.26E-09	-4.14E-09	-3.92E-09	-4.00E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.60E-09	-3.00E-09	-5.30E-10	-2.50E-09	-2.50E-09	-3.10E-09	-1.60E-09	-1.40E-09

Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



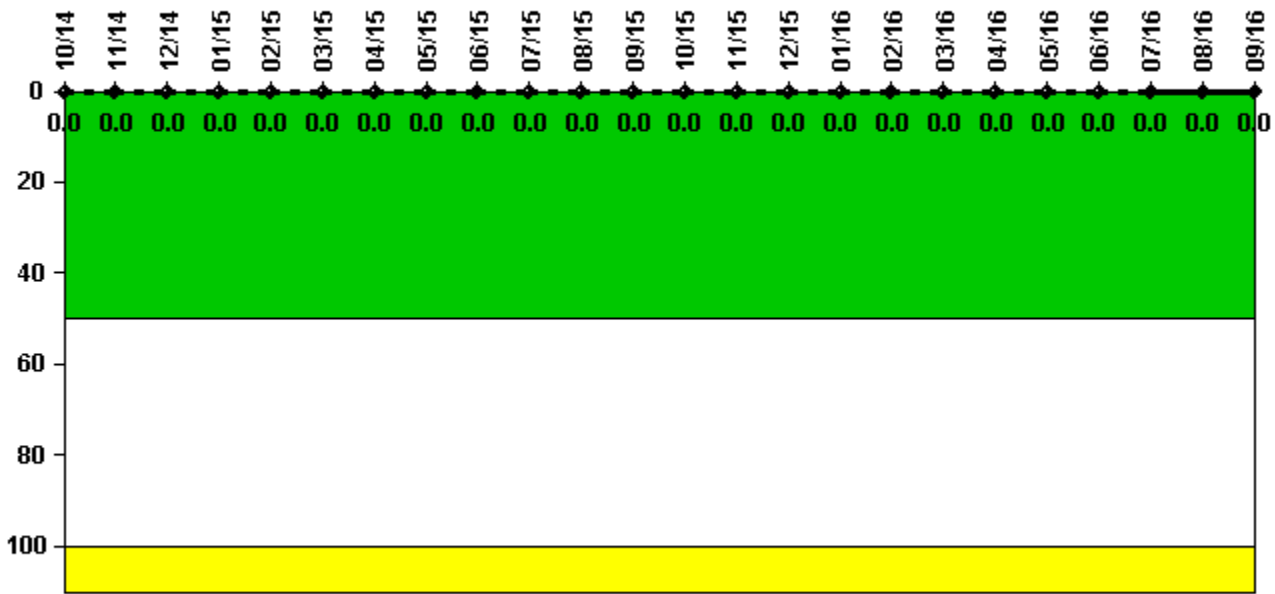
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI ( $\Delta$ CDF)	4.87E-09	6.58E-09	8.64E-09	7.42E-09	7.68E-09	9.24E-09	9.10E-09	9.52E-09
URI ( $\Delta$ CDF)	2.83E-10	3.33E-10	3.67E-10	3.48E-10	-9.67E-10	-9.74E-10	-8.46E-10	-8.38E-10
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	5.20E-09	6.90E-09	9.00E-09	7.80E-09	6.70E-09	8.30E-09	8.30E-09	8.70E-09

Licensee Comments: none

### Reactor Coolant System Activity



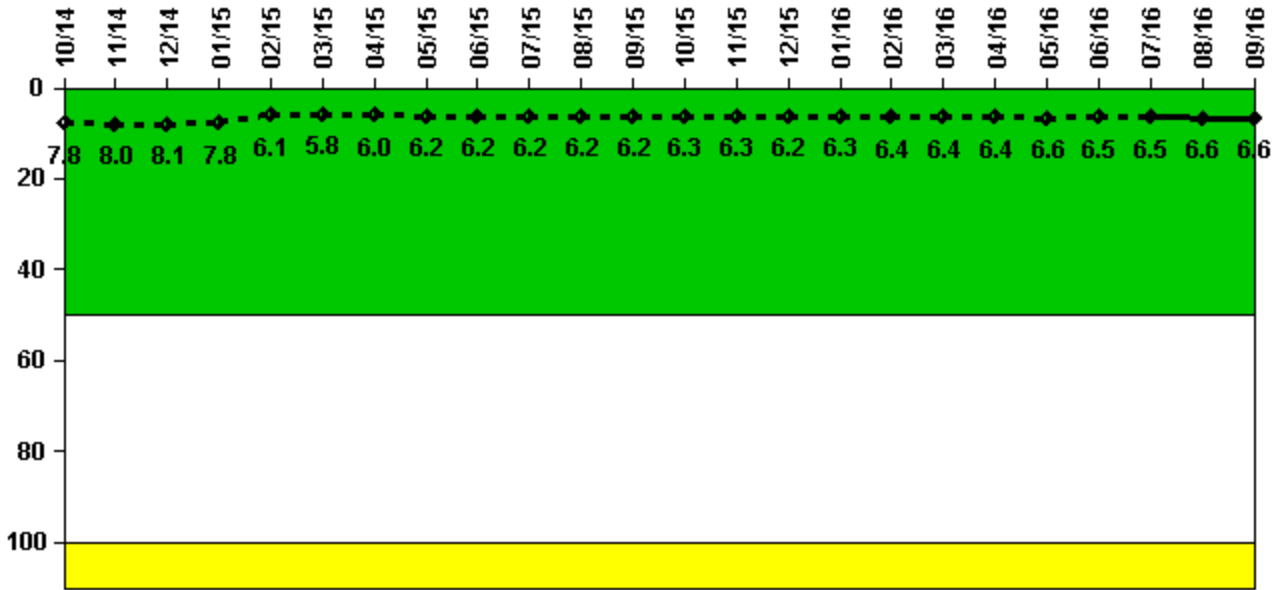
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Activity	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15
Maximum activity	0.000150	0.000179	0.000156	0.000178	0.000083	0.000079	0.000062	0.000002	0.000076	0.000067	0.000067	0.000117
Technical specification limit	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16
Maximum activity	0.000133	0.000096	0.000091	0.000122	0.000118	0.000113	0.000111	0.000162	0.000143	0.000151	0.000198	0.000214
Technical specification limit	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

### Reactor Coolant System Leakage



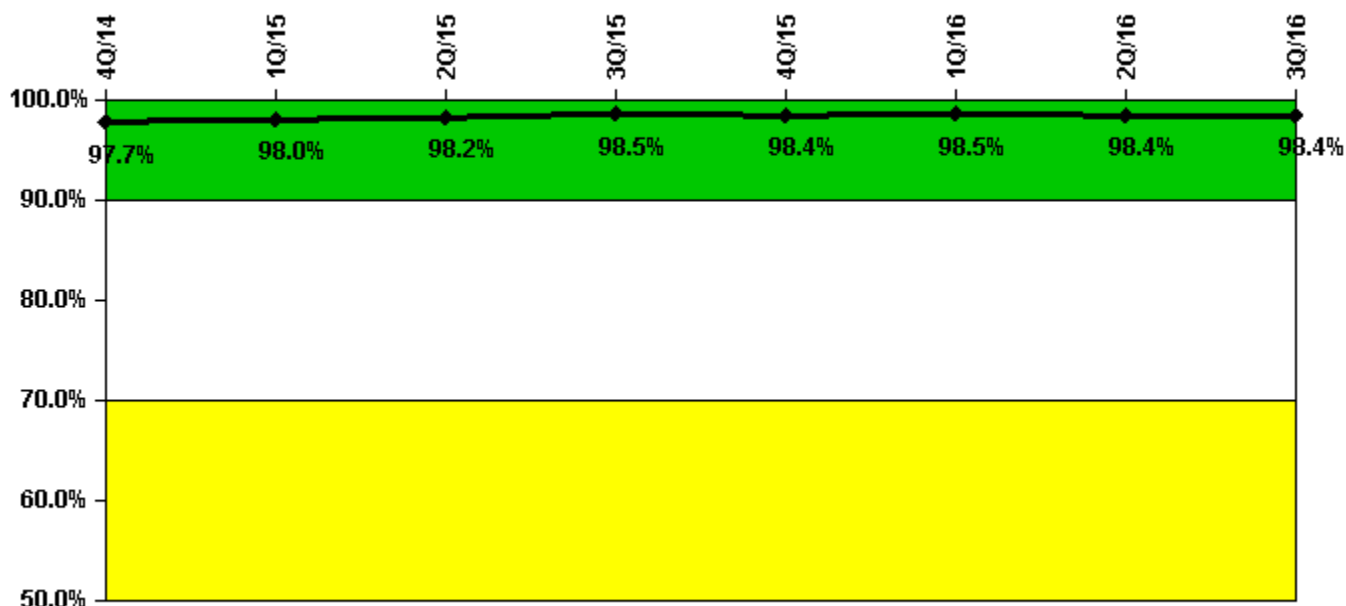
Thresholds: White > 50.0 Yellow > 100.0

**Notes**

Reactor Coolant System Leakage	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15
Maximum leakage	1.960	2.000	2.020	1.960	1.530	1.460	1.490	1.550	1.560	1.550	1.540	1.560
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
<b>Indicator value</b>	<b>7.8</b>	<b>8.0</b>	<b>8.1</b>	<b>7.8</b>	<b>6.1</b>	<b>5.8</b>	<b>6.0</b>	<b>6.2</b>	<b>6.2</b>	<b>6.2</b>	<b>6.2</b>	<b>6.2</b>
Reactor Coolant System Leakage	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16
Maximum leakage	1.580	1.570	1.550	1.570	1.590	1.590	1.600	1.650	1.630	1.620	1.660	1.660
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
<b>Indicator value</b>	<b>6.3</b>	<b>6.3</b>	<b>6.2</b>	<b>6.3</b>	<b>6.4</b>	<b>6.4</b>	<b>6.4</b>	<b>6.6</b>	<b>6.5</b>	<b>6.5</b>	<b>6.6</b>	<b>6.6</b>

Licensee Comments: none

### Drill/Exercise Performance



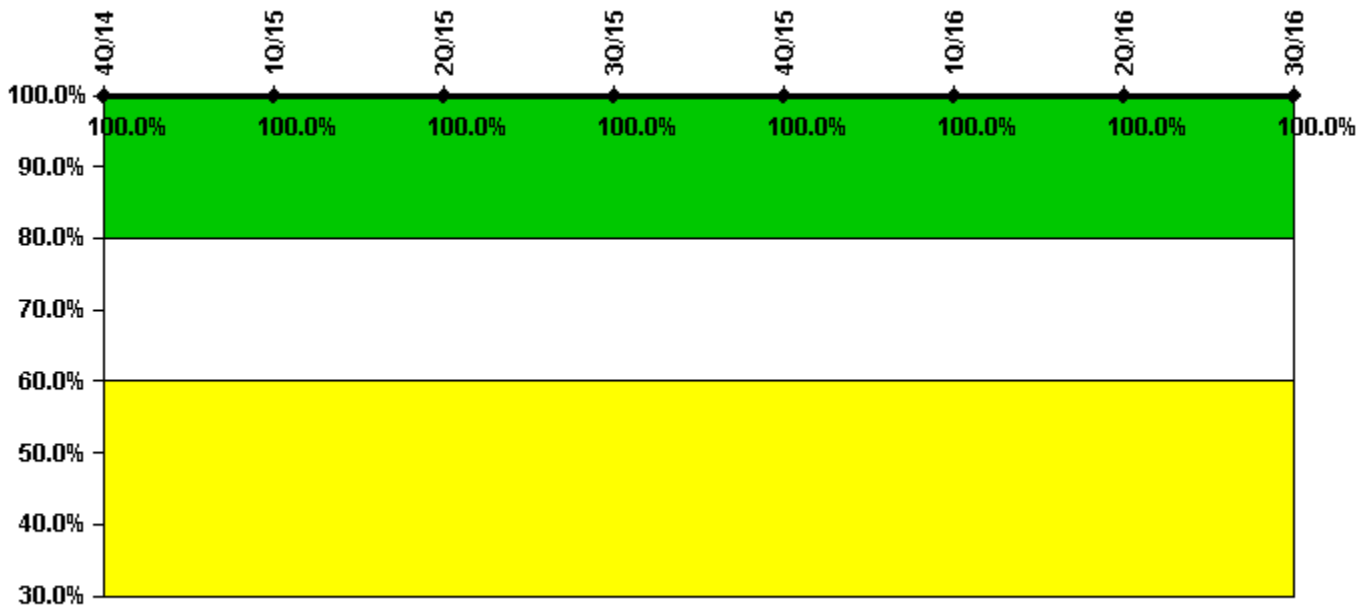
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Successful opportunities	132.0	163.0	48.0	122.0	35.0	22.0	40.0	46.0
Total opportunities	135.0	165.0	49.0	122.0	36.0	22.0	41.0	48.0
Indicator value	97.7%	98.0%	98.2%	98.5%	98.4%	98.5%	98.4%	98.4%

Licensee Comments: none

### ERO Drill Participation



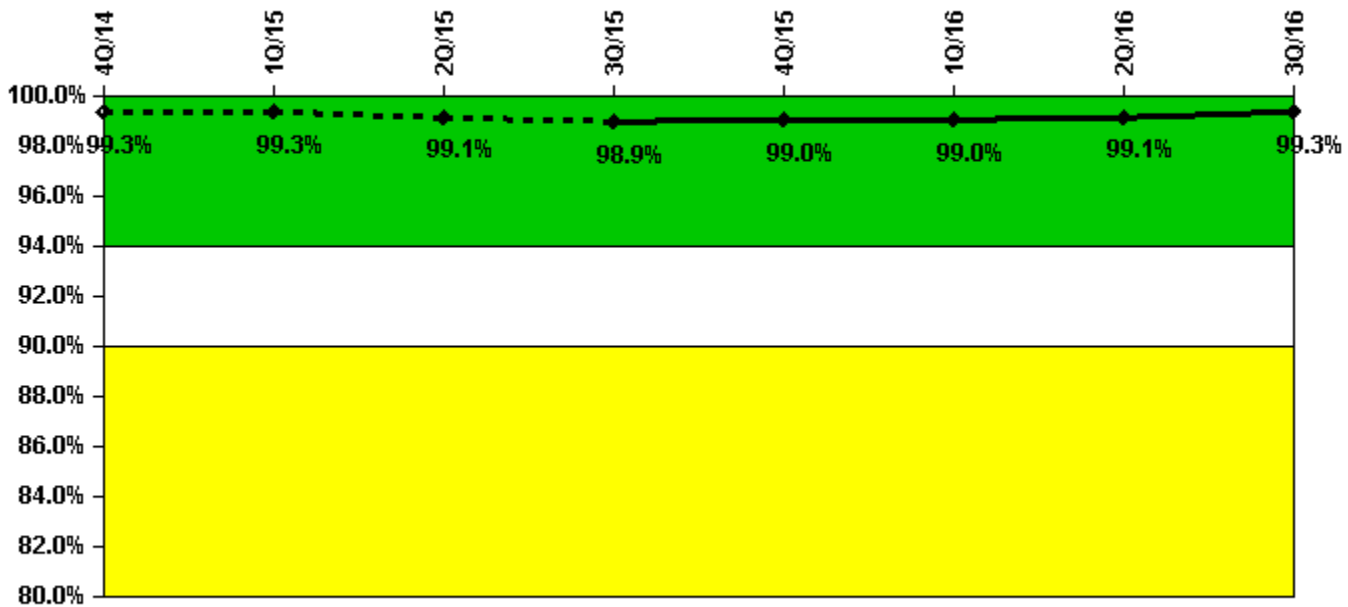
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Participating Key personnel	79.0	80.0	77.0	83.0	80.0	74.0	77.0	77.0
Total Key personnel	79.0	80.0	77.0	83.0	80.0	74.0	77.0	77.0
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%

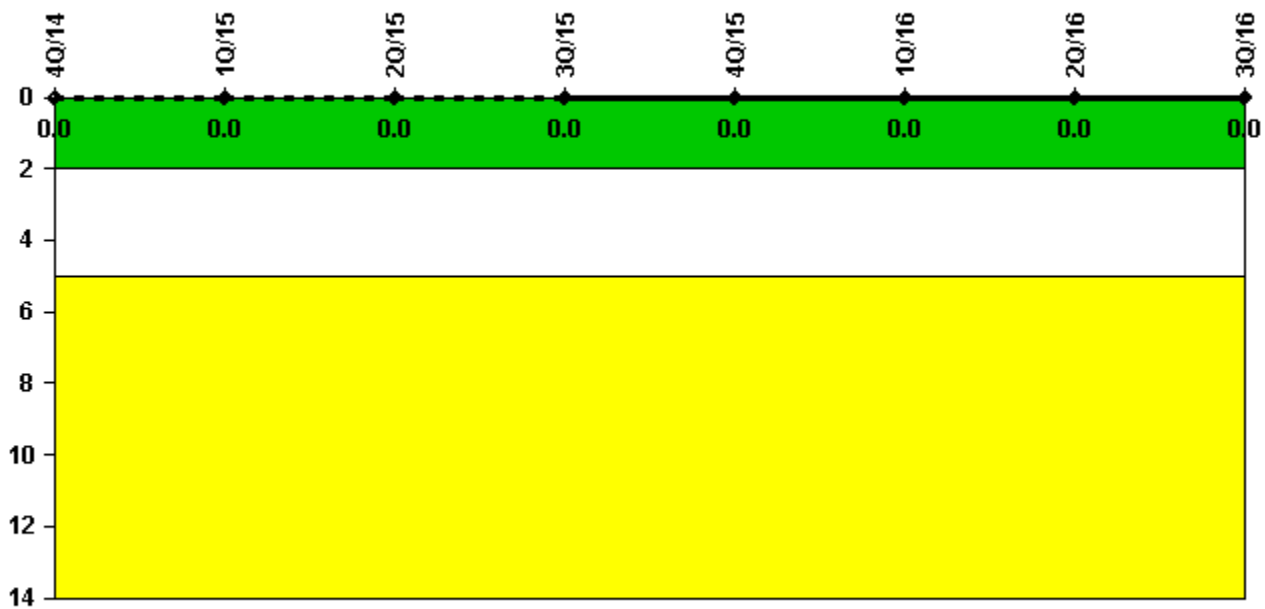
#### Notes

Alert & Notification System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Successful siren-tests	448	335	335	335	449	336	336	337
Total sirens-tests	452	339	339	339	452	339	339	339
Indicator value	99.3%	99.3%	99.1%	98.9%	99.0%	99.0%	99.1%	99.3%

Licensee Comments:

4Q/14: Failure of P32, C89, P38, and P39 in November 2014

### Occupational Exposure Control Effectiveness



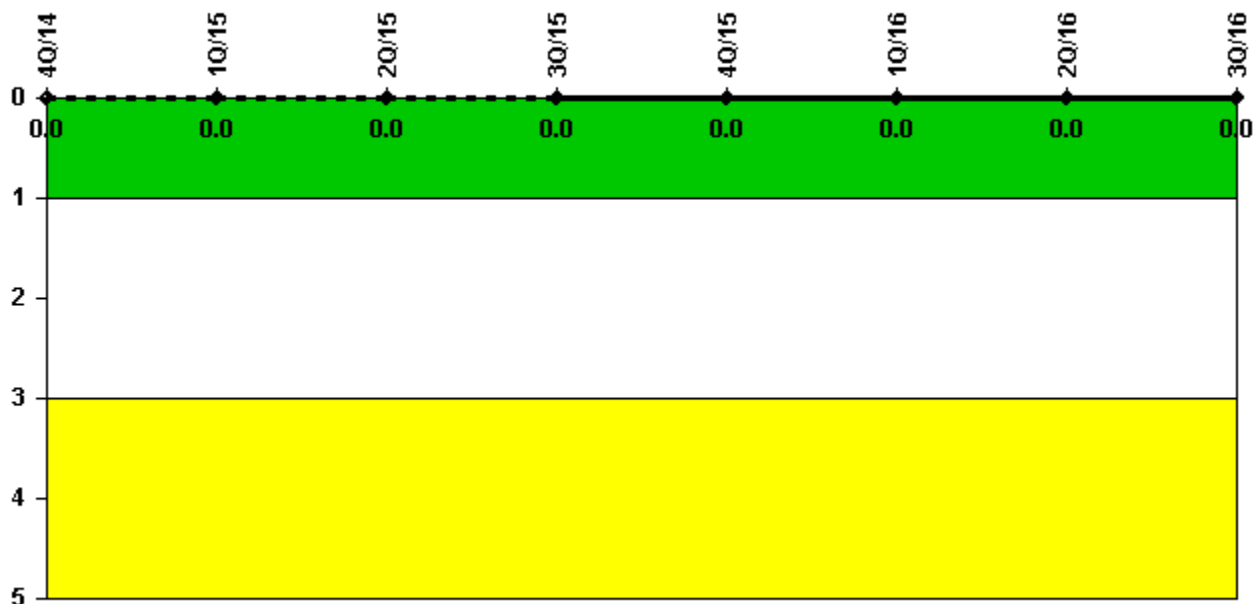
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/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	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/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: October 23, 2016*