

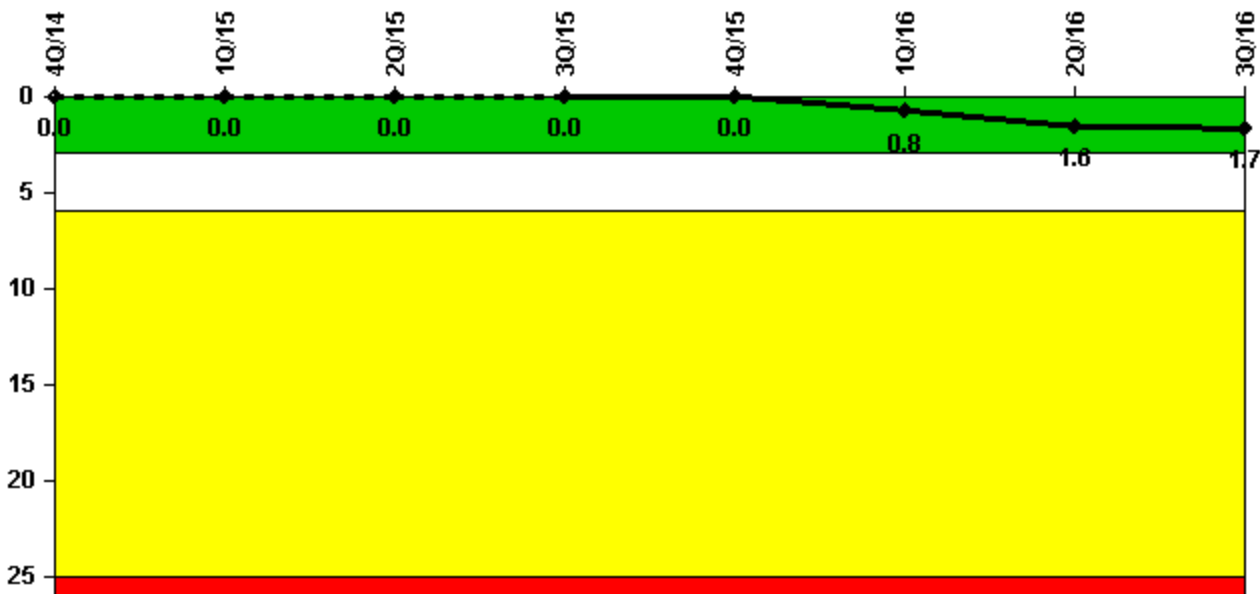
# FitzPatrick

## 3Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



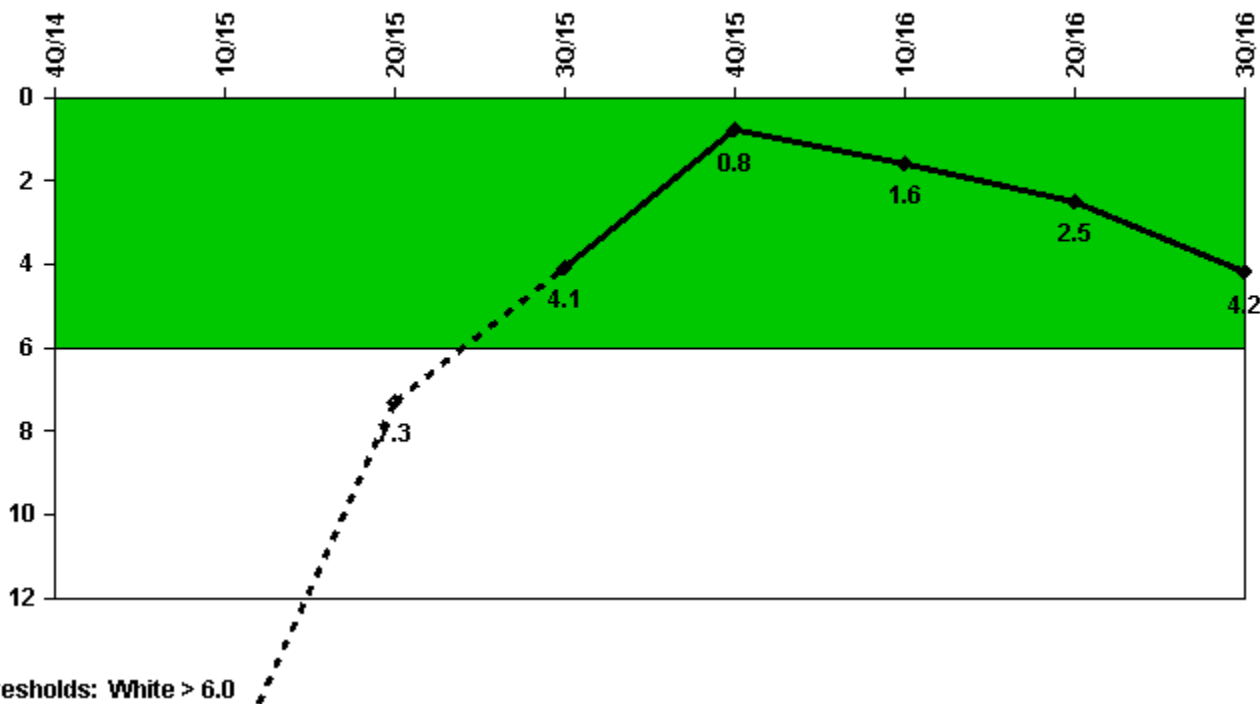
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### 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	0	0	0	0	1.0	1.0	0
Critical hours	2060.1	2159.0	2184.0	2208.0	2209.0	2058.8	2028.6	2080.5
Indicator value	0	0	0	0	0	0.8	1.6	1.7

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



#### 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	4.0	0	0	1.0	0	1.0	1.0	3.0
Critical hours	2060.1	2159.0	2184.0	2208.0	2209.0	2058.8	2028.6	2080.5
<b>Indicator value</b>	<b>26.4</b>	<b>16.4</b>	<b>7.3</b>	<b>4.1</b>	<b>0.8</b>	<b>1.6</b>	<b>2.5</b>	<b>4.2</b>

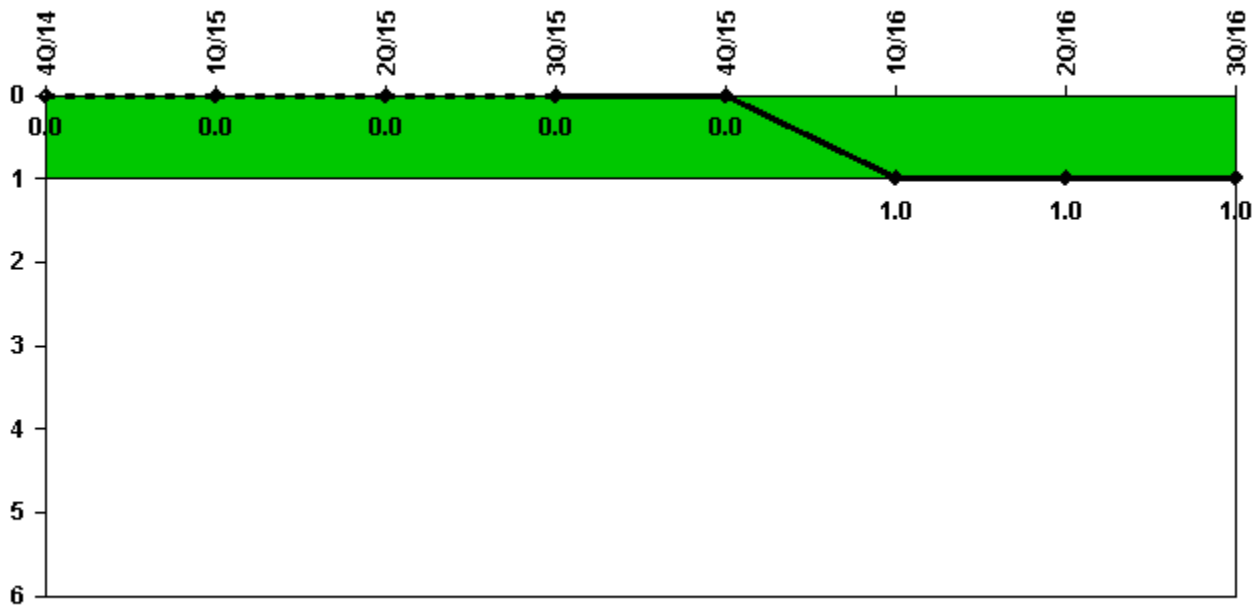
#### Licensee Comments:

2Q/15: Multiple downpowers were due to Main Condenser tube leakage. Retubing project completed during Refuel Outage 21. Main Condenser degrading performance has been corrected and this PI is improving. There is no effect on public or nuclear safety.

1Q/15: Multiple downpowers were due to Main Condenser tube leakage. Retubing project completed during Refuel Outage 21. Main Condenser degrading performance has been corrected and this PI is improving. There is no effect on public or nuclear safety.

4Q/14: Multiple downpowers are due to Main Condenser tube leakage. Retubing project completed during Refuel Outage 21. Main Condenser degrading performance has been corrected and this PI is expected to improve. There is no effect on public or nuclear safety.

### Unplanned Scrams with Complications



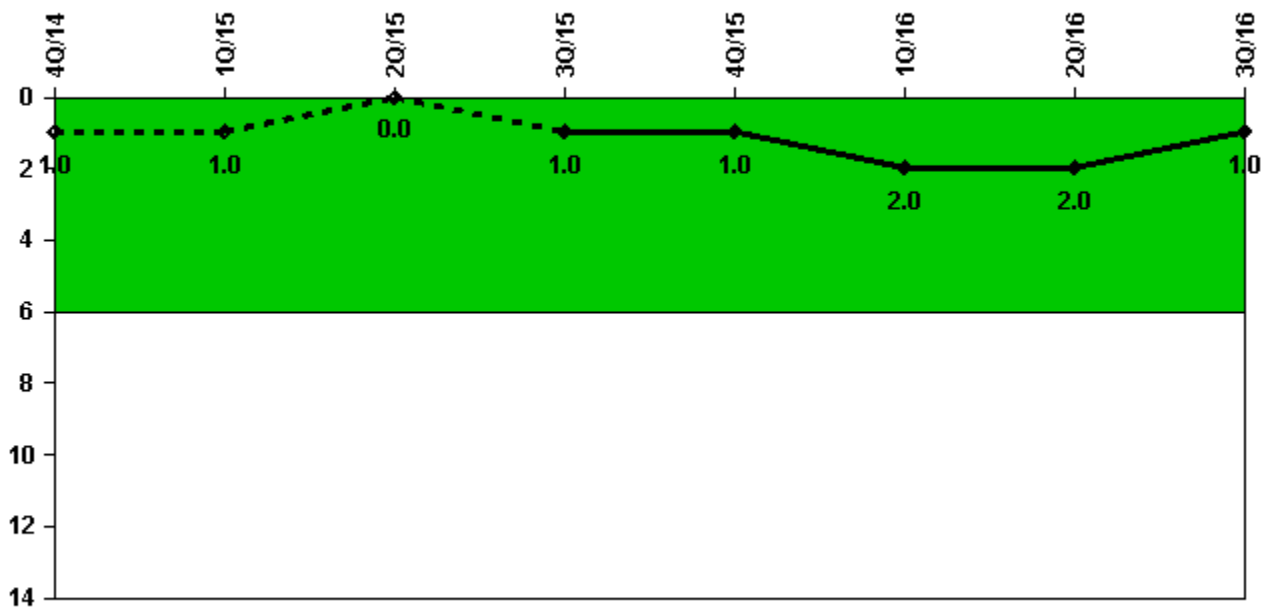
Thresholds: White > 1.0

#### 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	0	0	0	0	1.0	0	0
<b>Indicator value</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>

Licensee Comments: none

### Safety System Functional Failures (BWR)



Thresholds: White > 6.0

#### Notes

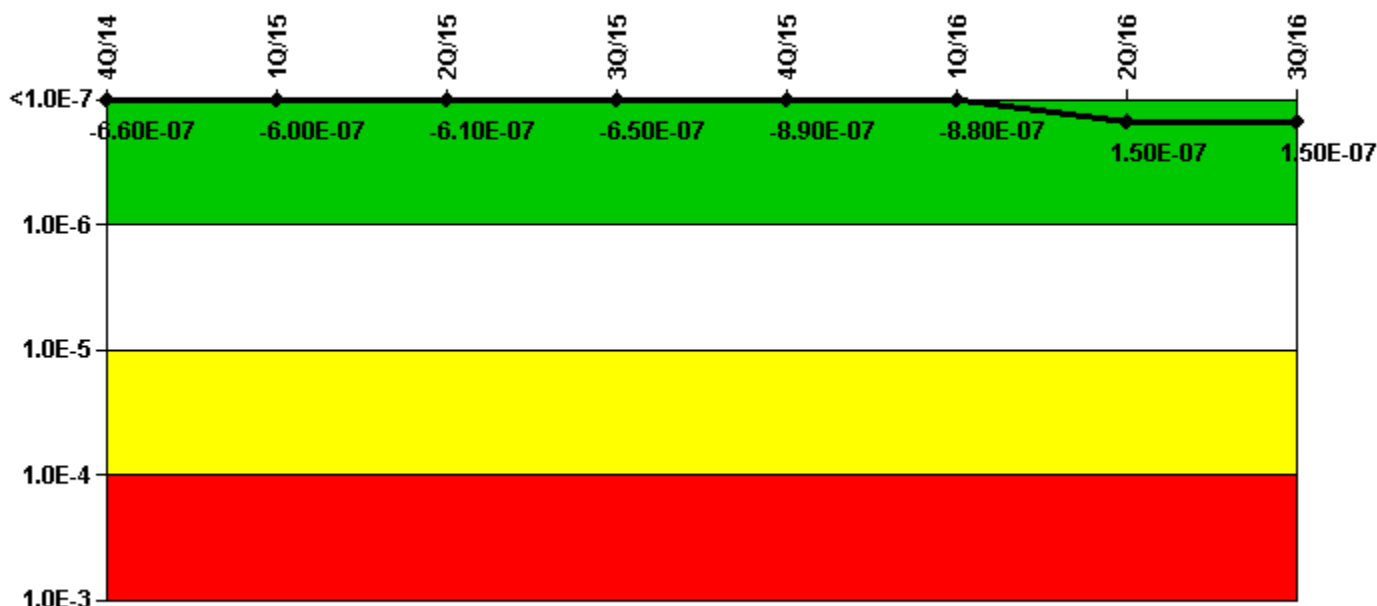
Safety System Functional Failures (BWR)	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Safety System Functional Failures	0	0	0	1	0	1	0	0
<b>Indicator value</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>

Licensee Comments:

1Q/16: LER-15-008, Containment Atmosphere Dilution System Reliability Degraded due to Manufacturer Defect in Temperature Transmitters

3Q/15: LER-2015-003, Roof Maintenance Results in Secondary Containment Vacuum Below Technical Specification Limit

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



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

#### Notes

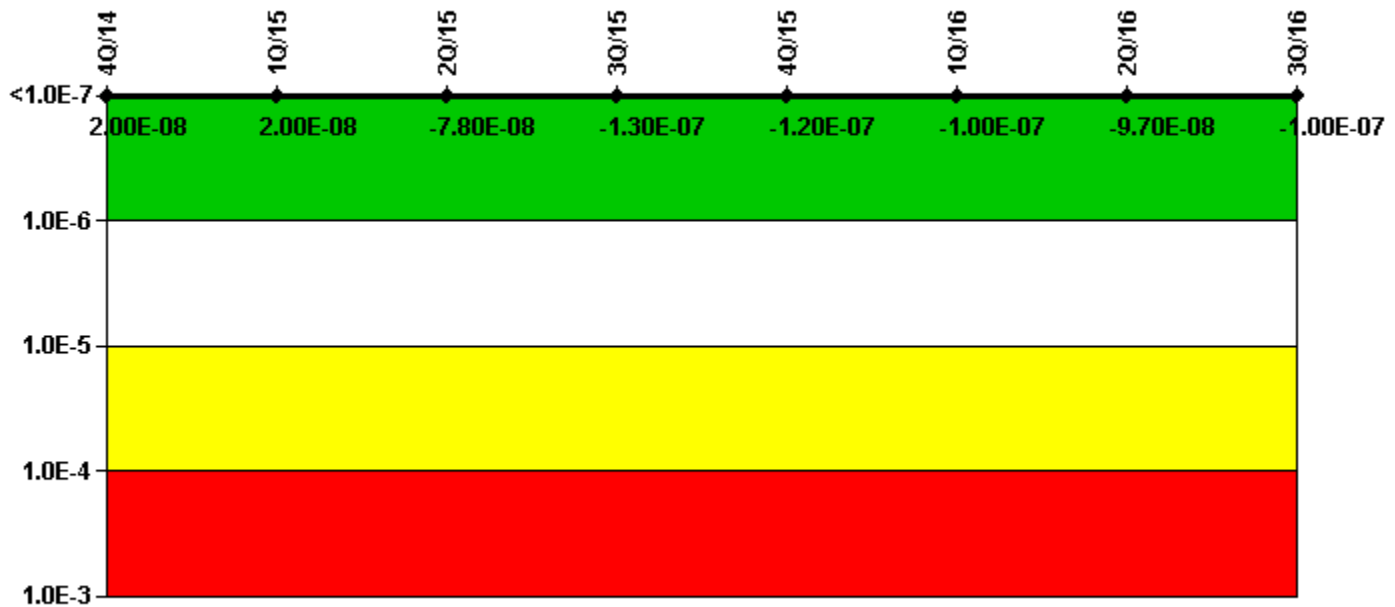
Mitigating Systems Performance Index, Emergency AC Power System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI ( $\Delta$ CDF)	5.04E-09	2.79E-09	5.78E-09	4.70E-09	6.10E-09	5.41E-09	1.34E-09	8.21E-11
URI ( $\Delta$ CDF)	-6.64E-07	-5.99E-07	-6.19E-07	-6.57E-07	-8.93E-07	-8.84E-07	1.49E-07	1.49E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-6.60E-07	-6.00E-07	-6.10E-07	-6.50E-07	-8.90E-07	-8.80E-07	1.50E-07	1.50E-07

Licensee Comments:

2Q/16: Starting in April 2016, MSPI value is affected by a change to EDG risk, in accordance with NEI 99-02. Previously the Risk utilized affected both trains of EDG per NEI 99.02 Section F1.1.1.

1Q/16: Revised the EDG risk in accordance with NEI 99-02. Previously the Risk utilized affected both trains of EDG per NEI 99.02 Section F1.1.1.

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



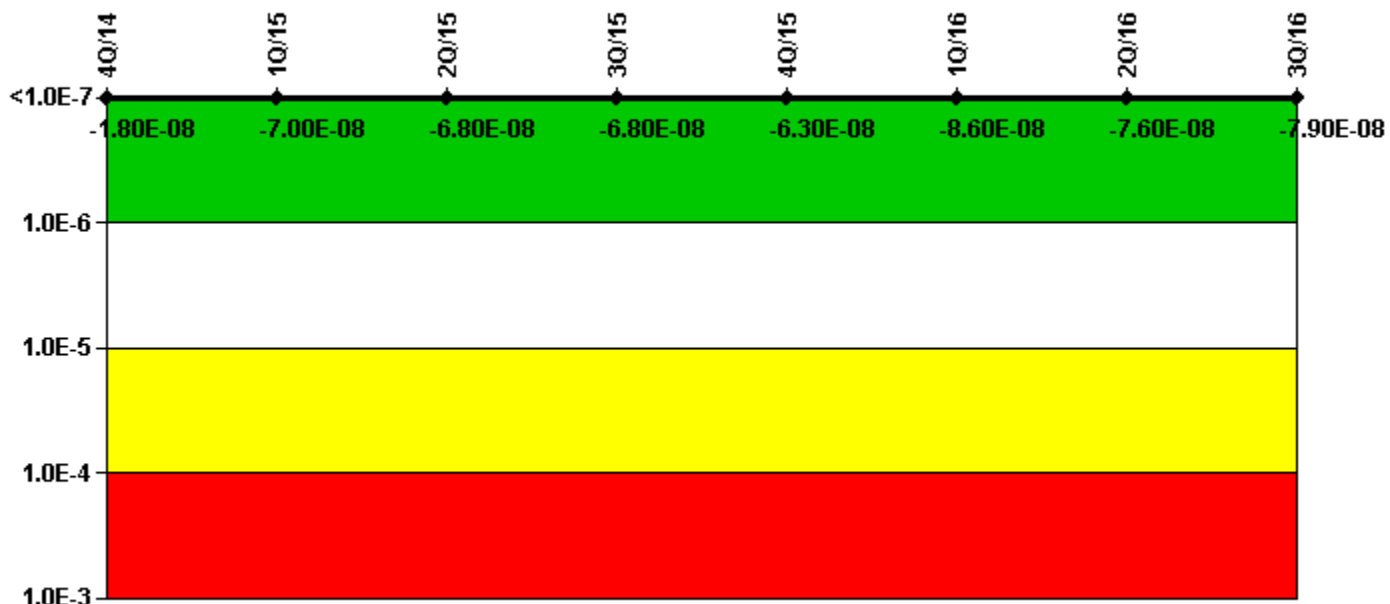
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### 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)	1.03E-07	1.03E-07	9.35E-09	-4.43E-08	-4.43E-08	-8.16E-09	-4.58E-09	-8.65E-09
URI ( $\Delta$ CDF)	-8.30E-08	-8.32E-08	-8.70E-08	-8.28E-08	-7.61E-08	-9.22E-08	-9.25E-08	-9.43E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.00E-08	2.00E-08	-7.80E-08	-1.30E-07	-1.20E-07	-1.00E-07	-9.70E-08	-1.00E-07

Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



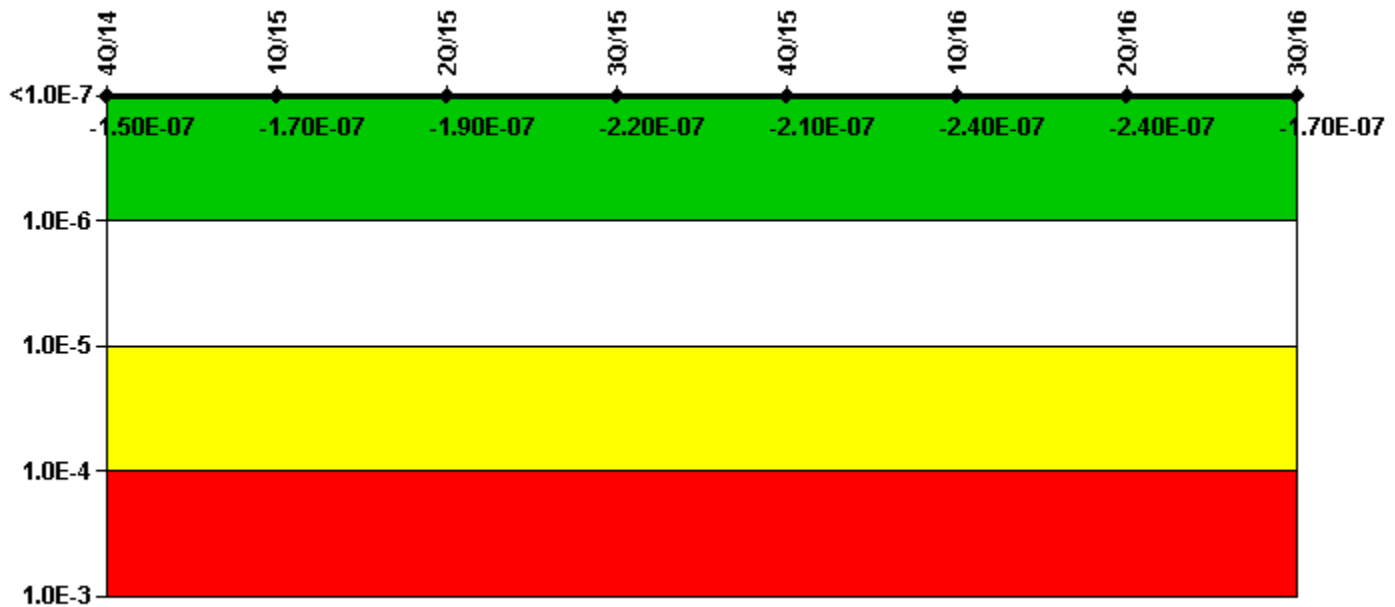
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Heat Removal System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI ( $\Delta$ CDF)	3.90E-08	-1.27E-08	-1.14E-08	-1.32E-08	-1.53E-08	-2.89E-09	9.48E-09	8.92E-09
URI ( $\Delta$ CDF)	-5.71E-08	-5.70E-08	-5.70E-08	-5.45E-08	-4.74E-08	-8.34E-08	-8.59E-08	-8.83E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.80E-08	-7.00E-08	-6.80E-08	-6.80E-08	-6.30E-08	-8.60E-08	-7.60E-08	-7.90E-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

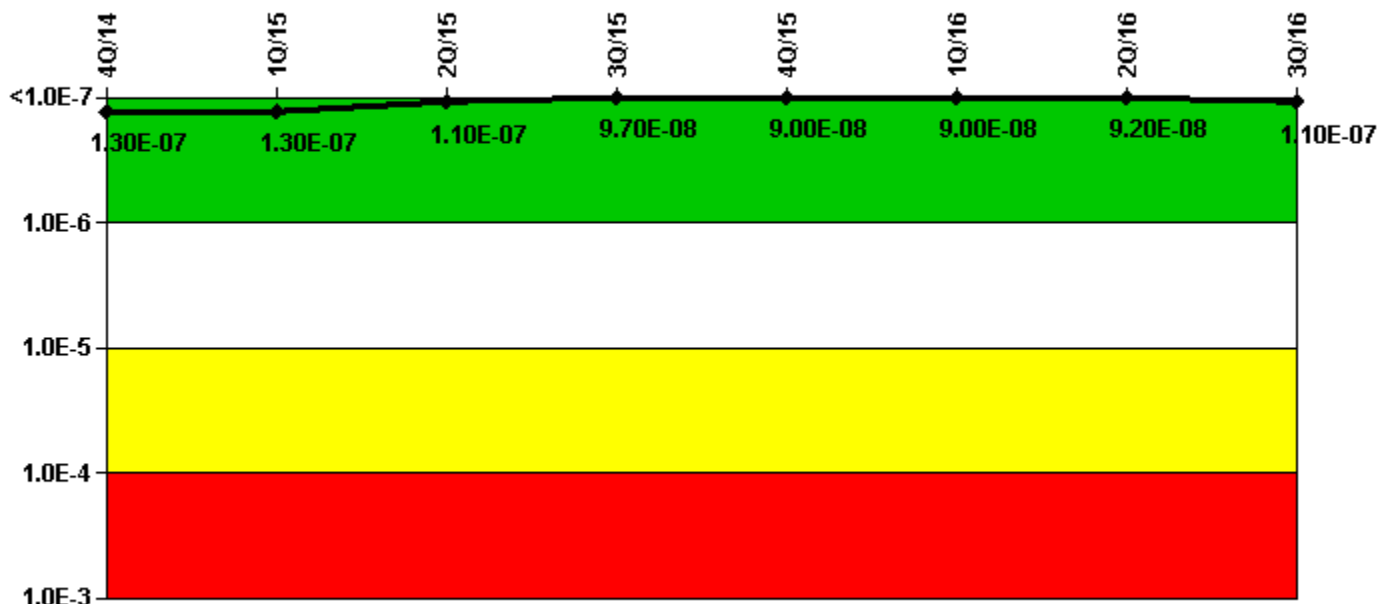
#### Notes

Mitigating Systems Performance Index, Residual Heat Removal System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI ( $\Delta$ CDF)	1.20E-07	8.97E-08	7.15E-08	2.83E-08	1.81E-08	-6.26E-09	-5.89E-09	7.18E-08
URI ( $\Delta$ CDF)	-2.65E-07	-2.63E-07	-2.63E-07	-2.50E-07	-2.31E-07	-2.37E-07	-2.38E-07	-2.43E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.50E-07	-1.70E-07	-1.90E-07	-2.20E-07	-2.10E-07	-2.40E-07	-2.40E-07	-1.70E-07

Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



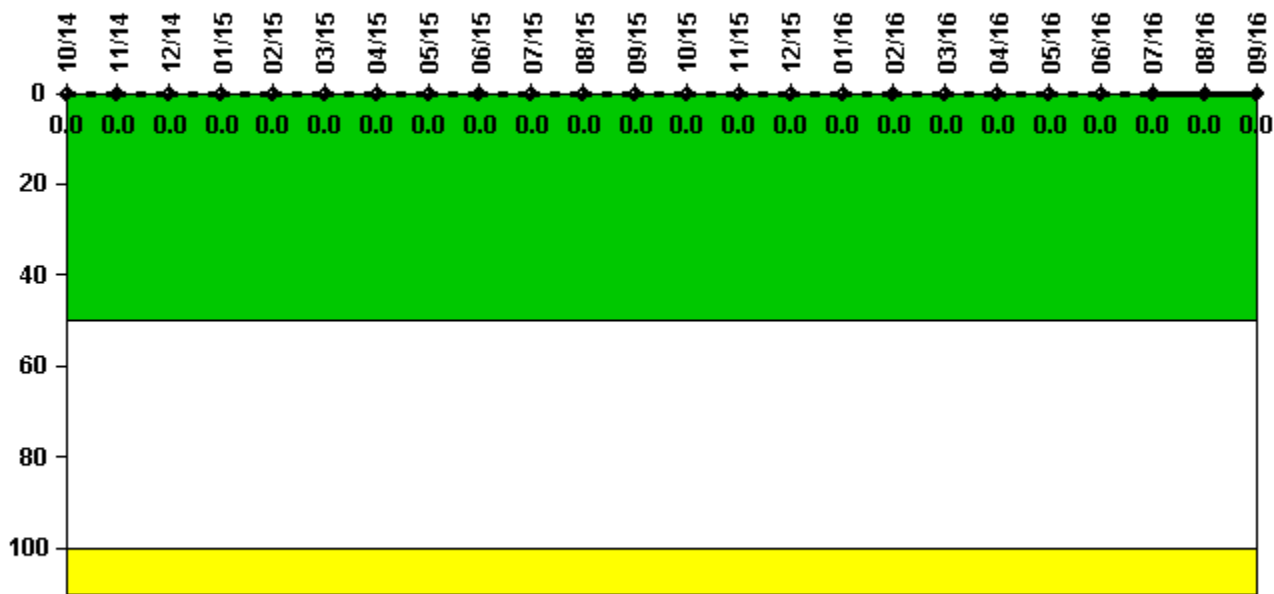
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### 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)	1.40E-07	1.39E-07	1.20E-07	1.10E-07	1.03E-07	1.02E-07	1.05E-07	1.19E-07
URI ( $\Delta$ CDF)	-1.23E-08	-1.23E-08	-1.26E-08	-1.26E-08	-1.26E-08	-1.27E-08	-1.30E-08	-1.24E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.30E-07	1.30E-07	1.10E-07	9.70E-08	9.00E-08	9.00E-08	9.20E-08	1.10E-07

Licensee Comments: none

### Reactor Coolant System Activity



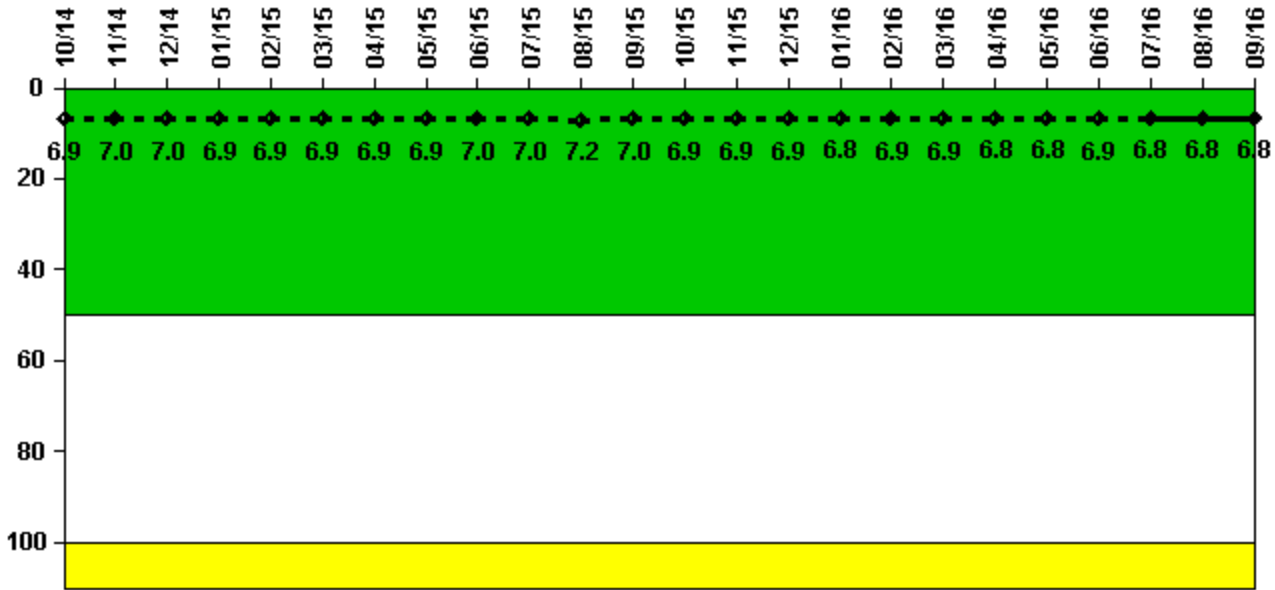
Thresholds: White > 50.0 Yellow > 100.0

#### 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	0.000008	0.000008	0.000010	0.000012	0.000009	0.000011	0.000010	0.000008	0.000008	0.000007	0.000008	0.000006
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	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	0.000006	0.000007	0.000007	0.000006	0.000019	0.000008	0.000005	0.000008	0.000007	0.000012	0.000009	0.000009
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	0	0	0	0	0	0	0	0	0

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

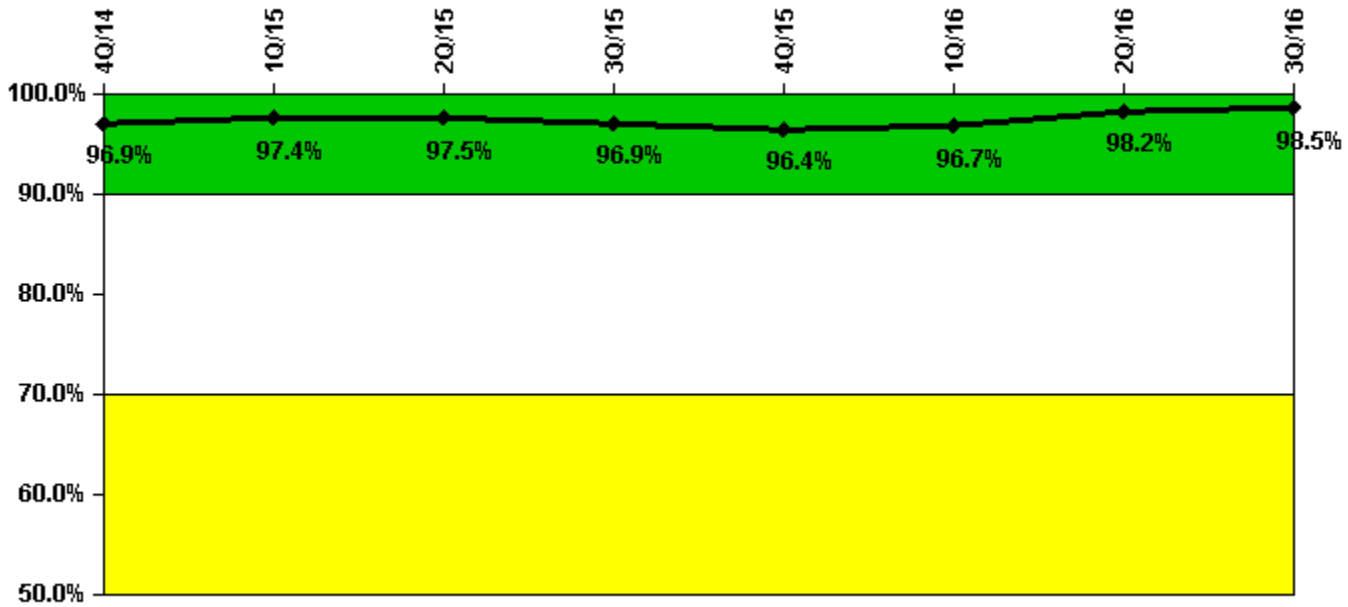
Reactor Coolant System Leakage	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15
Maximum leakage	1.720	1.740	1.760	1.730	1.730	1.730	1.730	1.730	1.740	1.740	1.790	1.760
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	6.9	7.0	7.0	6.9	6.9	6.9	6.9	6.9	7.0	7.0	7.2	7.0

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	1.720	1.720	1.720	1.710	1.730	1.720	1.710	1.700	1.720	1.690	1.690	1.690
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
Indicator value	6.9	6.9	6.9	6.8	6.9	6.9	6.8	6.8	6.9	6.8	6.8	6.8

Licensee Comments: none

### Drill/Exercise Performance



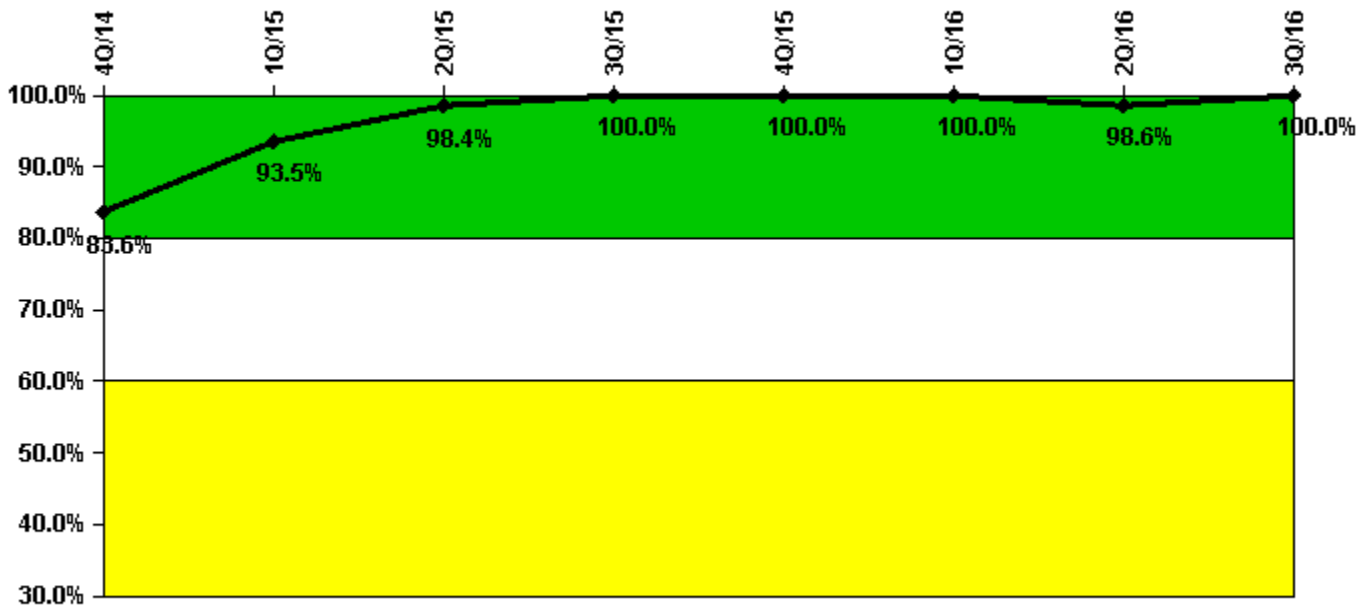
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Successful opportunities	0	24.0	69.0	16.0	6.0	67.0	41.0	36.0
Total opportunities	0	24.0	70.0	17.0	6.0	68.0	42.0	36.0
Indicator value	96.9%	97.4%	97.5%	96.9%	96.4%	96.7%	98.2%	98.5%

Licensee Comments: none

### ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

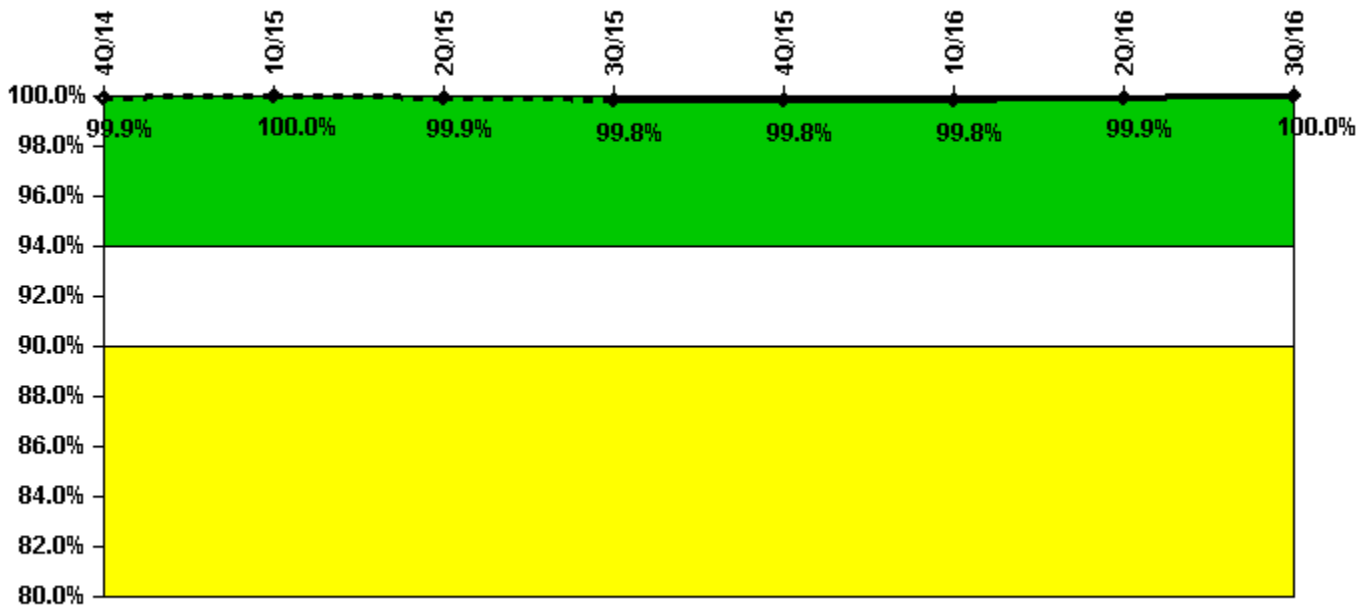
ERO Drill Participation	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Participating Key personnel	56.0	58.0	62.0	61.0	65.0	71.0	73.0	69.0
Total Key personnel	67.0	62.0	63.0	61.0	65.0	71.0	74.0	69.0
<b>Indicator value</b>	<b>83.6%</b>	<b>93.5%</b>	<b>98.4%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>98.6%</b>	<b>100.0%</b>

#### Licensee Comments:

2Q/15: December 2014 data is updated to correct a discrepancy in which an individual should have been counted for 2 separate positions. The change has a minor effect on the indicator value and it does not change the indicator color.

4Q/14: Data is updated to correct a discrepancy in which an individual should have been counted for 2 separate positions. The change has a minor effect on the indicator value and it does not change the indicator color.

### Alert & Notification System



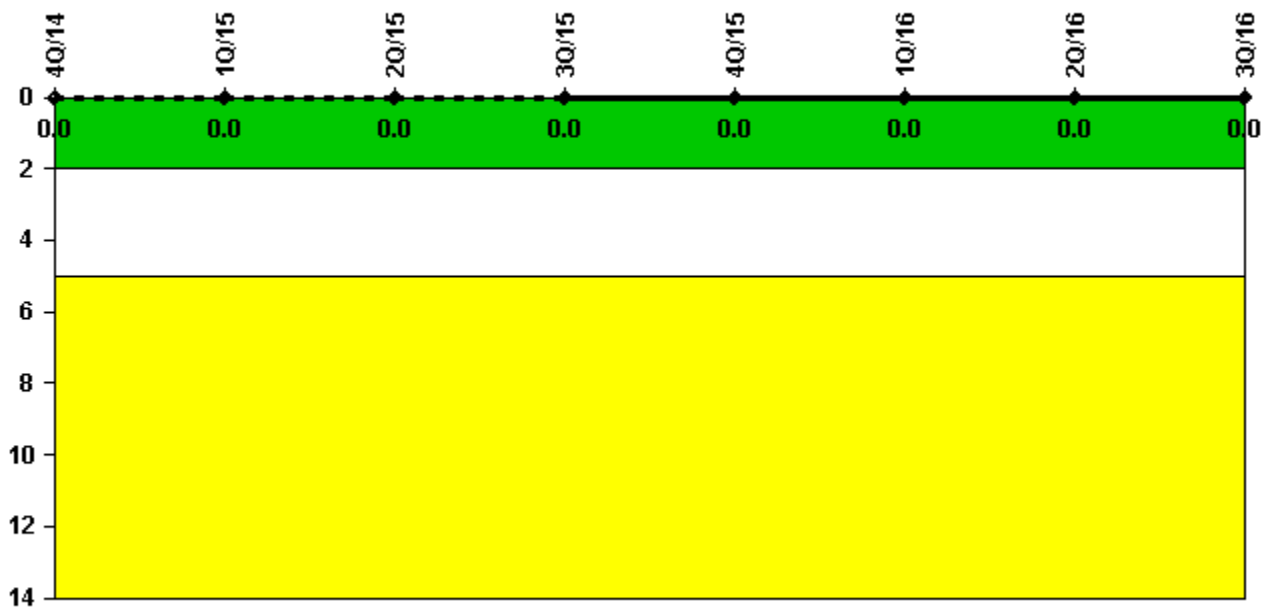
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Successful siren-tests	296	259	258	258	296	348	520	520
Total sirens-tests	296	259	259	259	296	348	520	520
Indicator value	99.9%	100.0%	99.9%	99.8%	99.8%	99.8%	99.9%	100.0%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



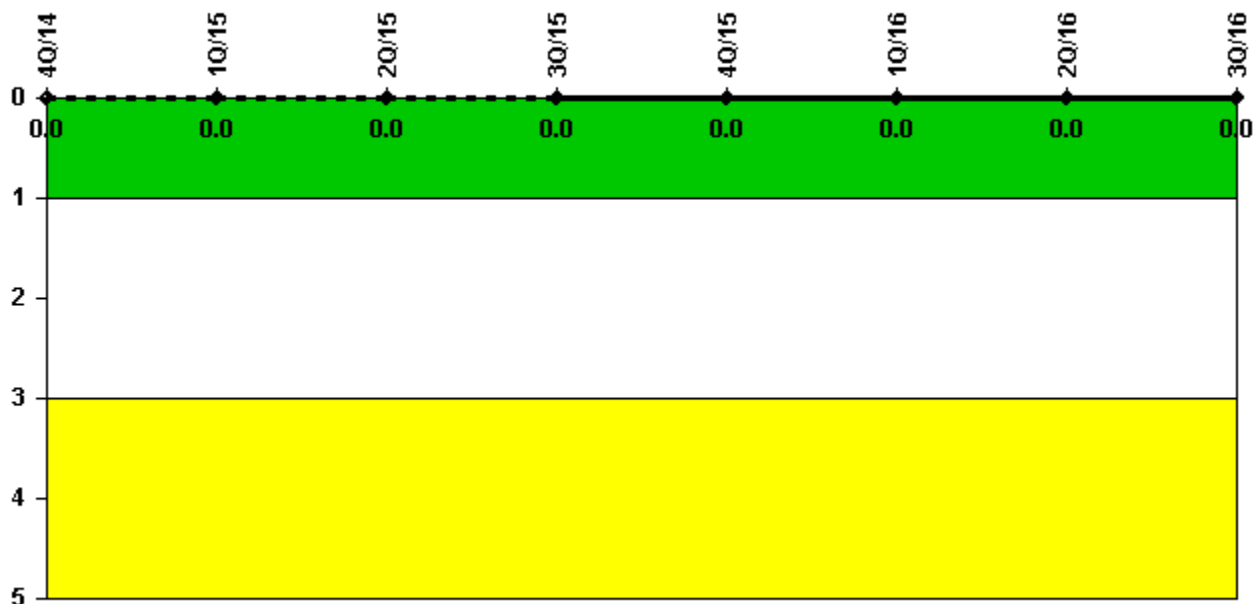
Thresholds: White > 2.0 Yellow > 5.0

#### 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*