

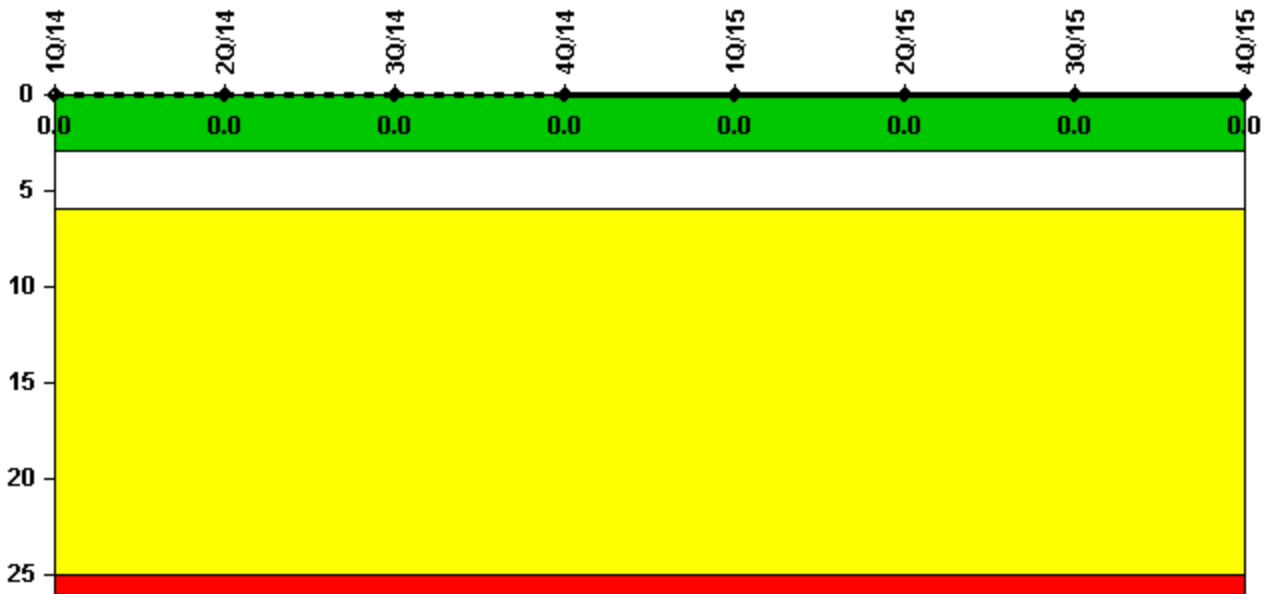
# FitzPatrick

## 4Q/2015 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



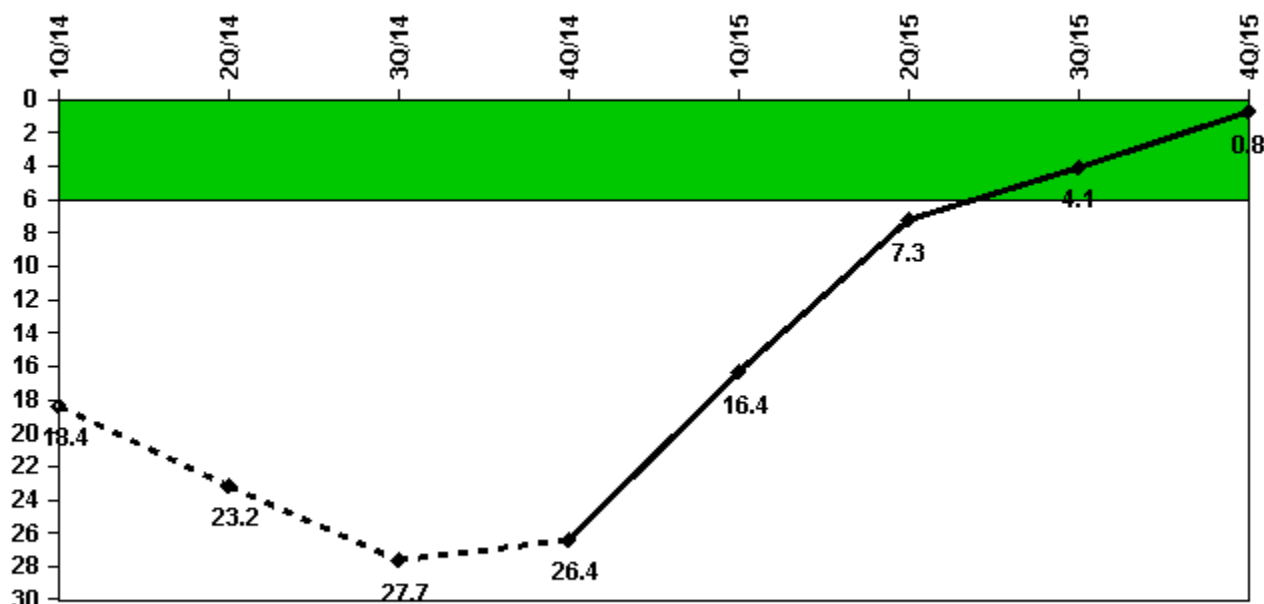
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2159.0	2155.7	1318.0	2060.1	2159.0	2184.0	2208.0	2209.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Unplanned power changes	11.0	10.0	4.0	4.0	0	0	1.0	0
Critical hours	2159.0	2155.7	1318.0	2060.1	2159.0	2184.0	2208.0	2209.0
<b>Indicator value</b>	<b>18.4</b>	<b>23.2</b>	<b>27.7</b>	<b>26.4</b>	<b>16.4</b>	<b>7.3</b>	<b>4.1</b>	<b>0.8</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.

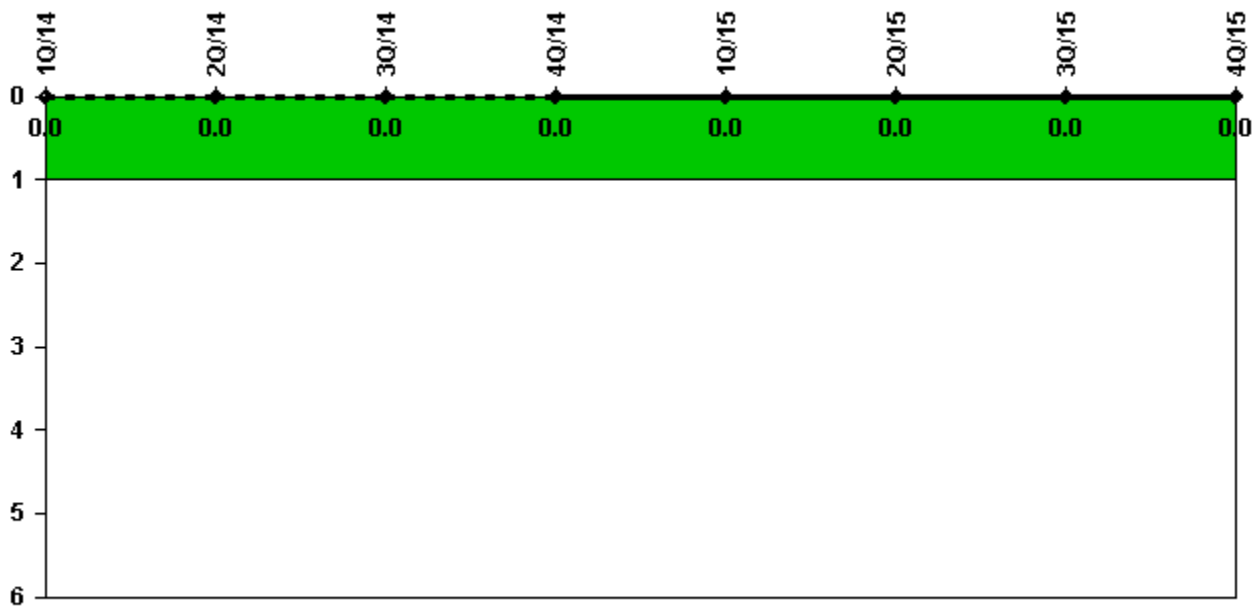
3Q/14: Multiple downpowers are due to Main Condenser tube leakage. Retubing project completed during Refuel Outage 21. Main Condenser degrading performance has been corrected and this PI is expected to improve. There is no effect on public or nuclear safety.

2Q/14: Multiple downpowers are due to repairs on the Main Condenser tube inleakage. This deficiency is a known issue but individual tube failures are not predictable. Compensatory measures, such as tube plugging and tube

sleeving, have been performed to mitigate Main Condenser performance. Full Tube replacement is scheduled for next refueling outage. There is no effect on public or nuclear safety.

1Q/14: Multiple downpowers are due to repairs on the Main Condenser tube inleakage. This deficiency is a known issue but individual tube failures are not predictable. Compensatory measures, such as tube plugging and tube sleeving, have been performed to mitigate Main Condenser performance. Full Tube replacement is scheduled for next refueling outage. There is no effect on public or nuclear safety.

### Unplanned Scrams with Complications



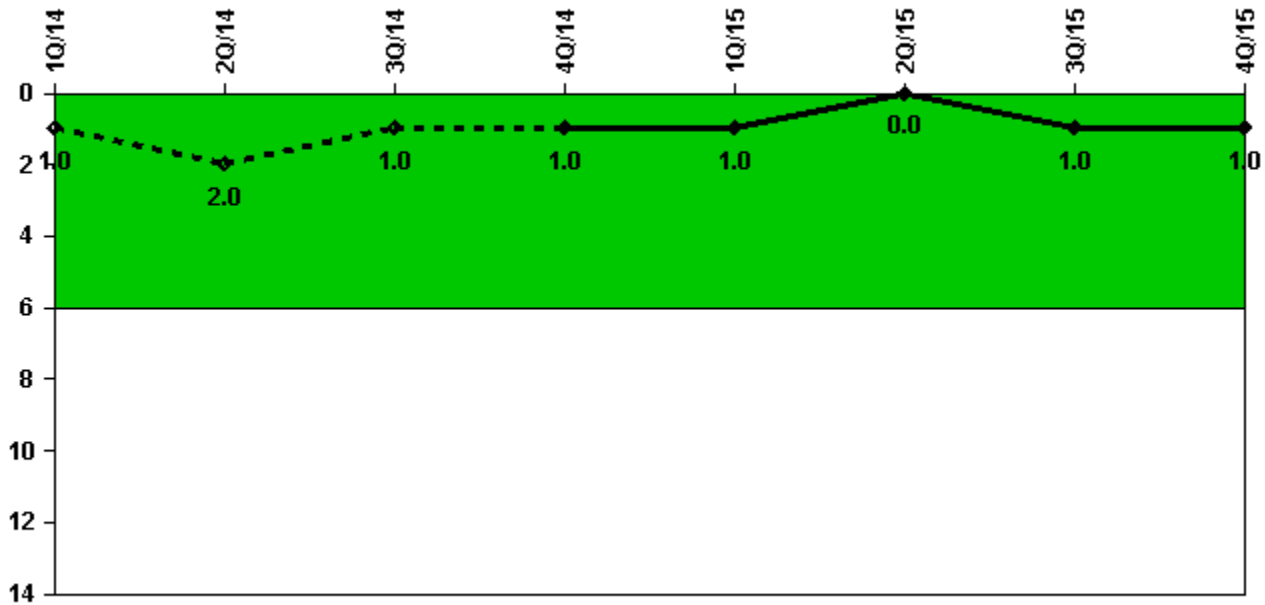
Thresholds: White > 1.0

### Notes

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

Licensee Comments: none

### Safety System Functional Failures (BWR)



Thresholds: White > 6.0

#### Notes

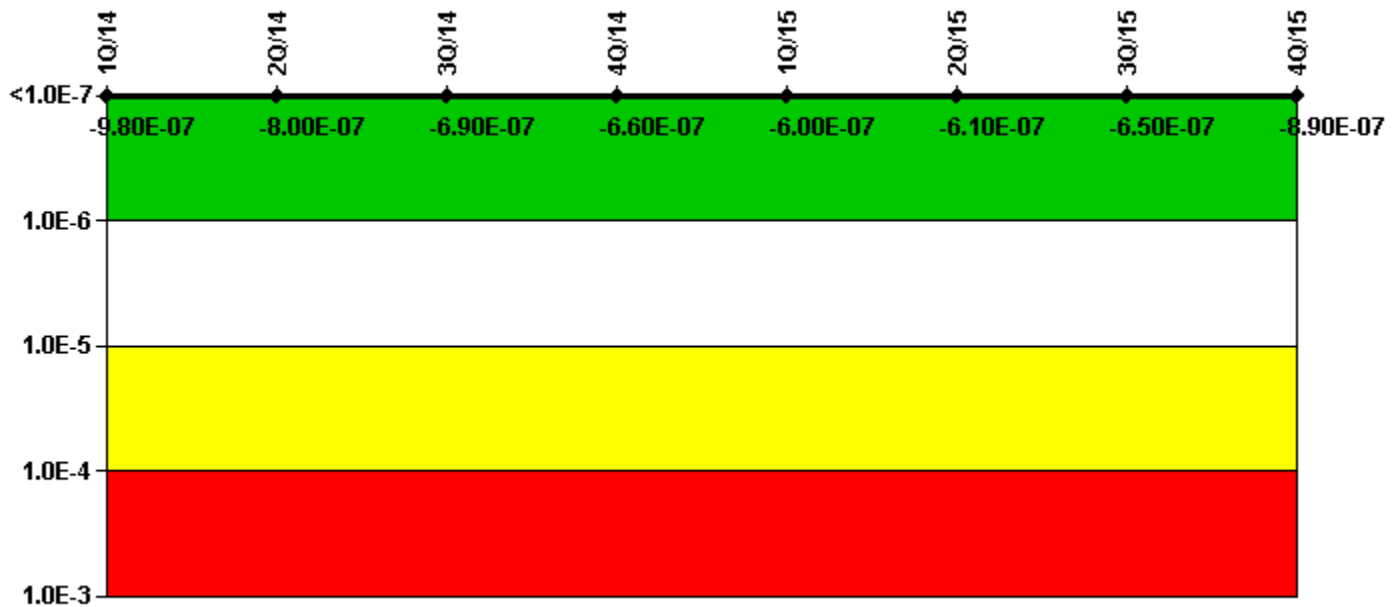
Safety System Functional Failures (BWR)	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Safety System Functional Failures	0	1	0	0	0	0	1	0
<b>Indicator value</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>

Licensee Comments:

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

2Q/14: LER-14-001

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



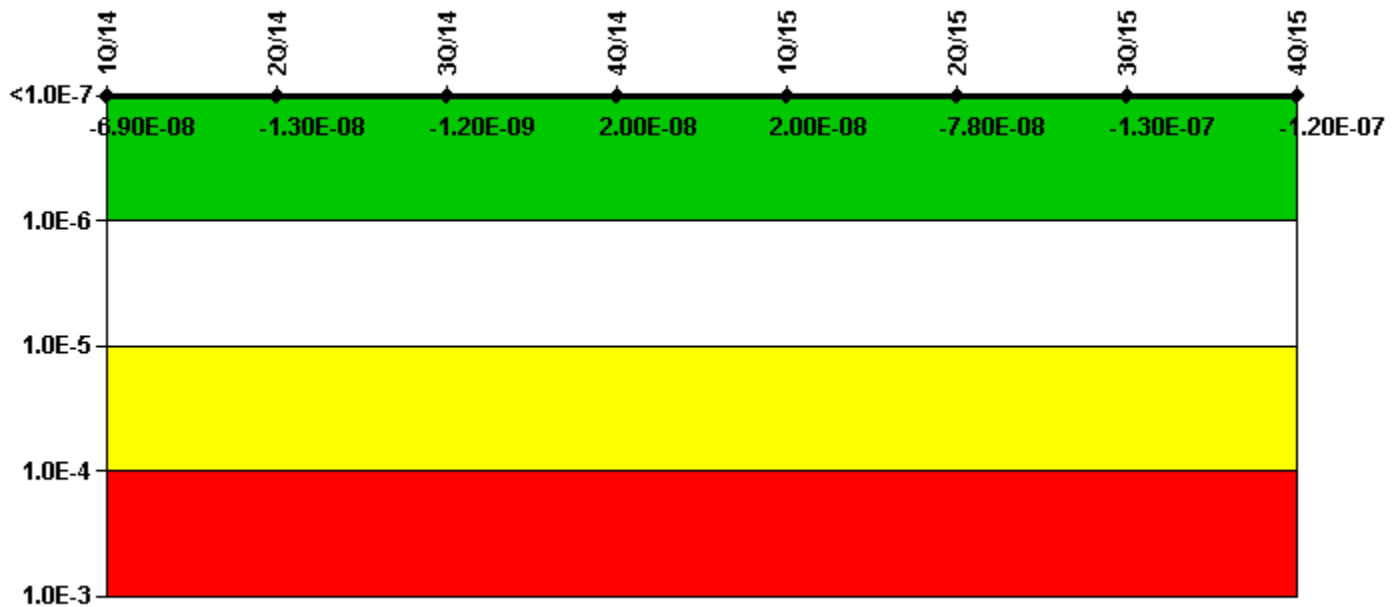
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
UAI ( $\Delta$ CDF)	9.53E-09	7.89E-09	8.30E-09	5.04E-09	2.79E-09	5.78E-09	4.70E-09	6.10E-09
URI ( $\Delta$ CDF)	-9.94E-07	-8.13E-07	-7.03E-07	-6.64E-07	-5.99E-07	-6.19E-07	-6.57E-07	-8.93E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.80E-07	-8.00E-07	-6.90E-07	-6.60E-07	-6.00E-07	-6.10E-07	-6.50E-07	-8.90E-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

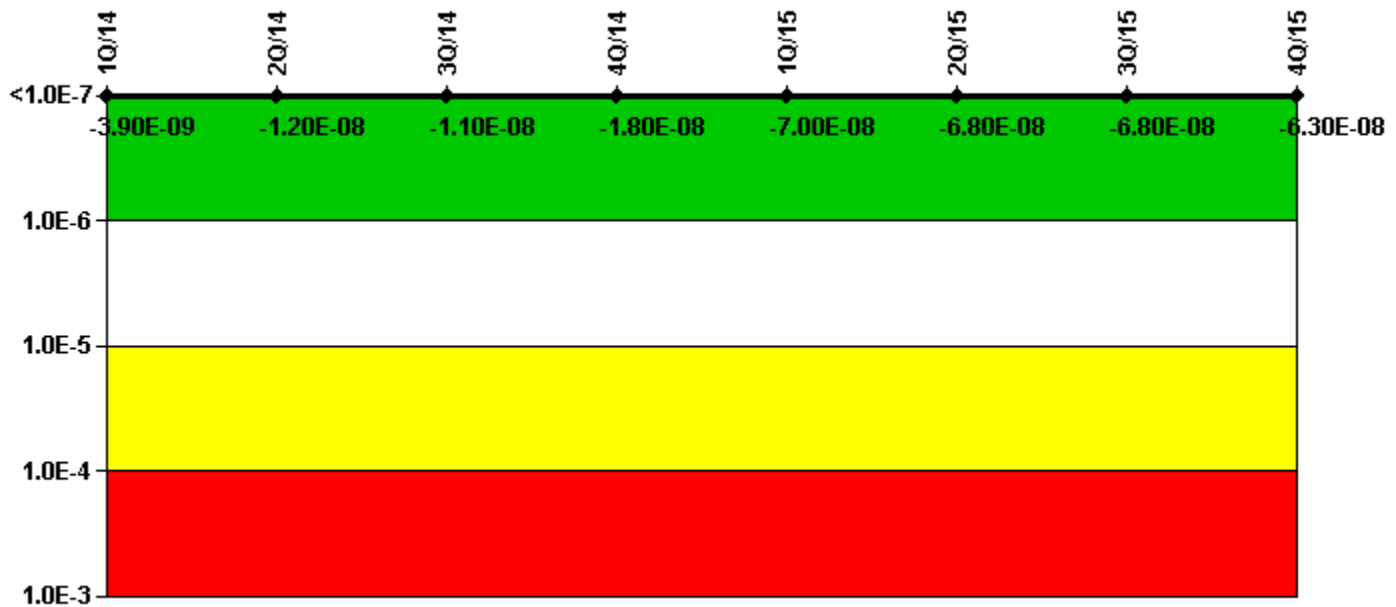
#### Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
UAI ( $\Delta$ CDF)	7.02E-09	6.56E-08	7.50E-08	1.03E-07	1.03E-07	9.35E-09	-4.43E-08	-4.43E-08
URI ( $\Delta$ CDF)	-7.62E-08	-7.86E-08	-7.63E-08	-8.30E-08	-8.32E-08	-8.70E-08	-8.28E-08	-7.61E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-6.90E-08	-1.30E-08	-1.20E-09	2.00E-08	2.00E-08	-7.80E-08	-1.30E-07	-1.20E-07

Licensee Comments:

2Q/14: MSPI Basis Document Rev 4: Revise HPCI and RCIC to remove the Pressure Control Mode. Remove 10SOV-101A through D

### Mitigating Systems Performance Index, Heat Removal System



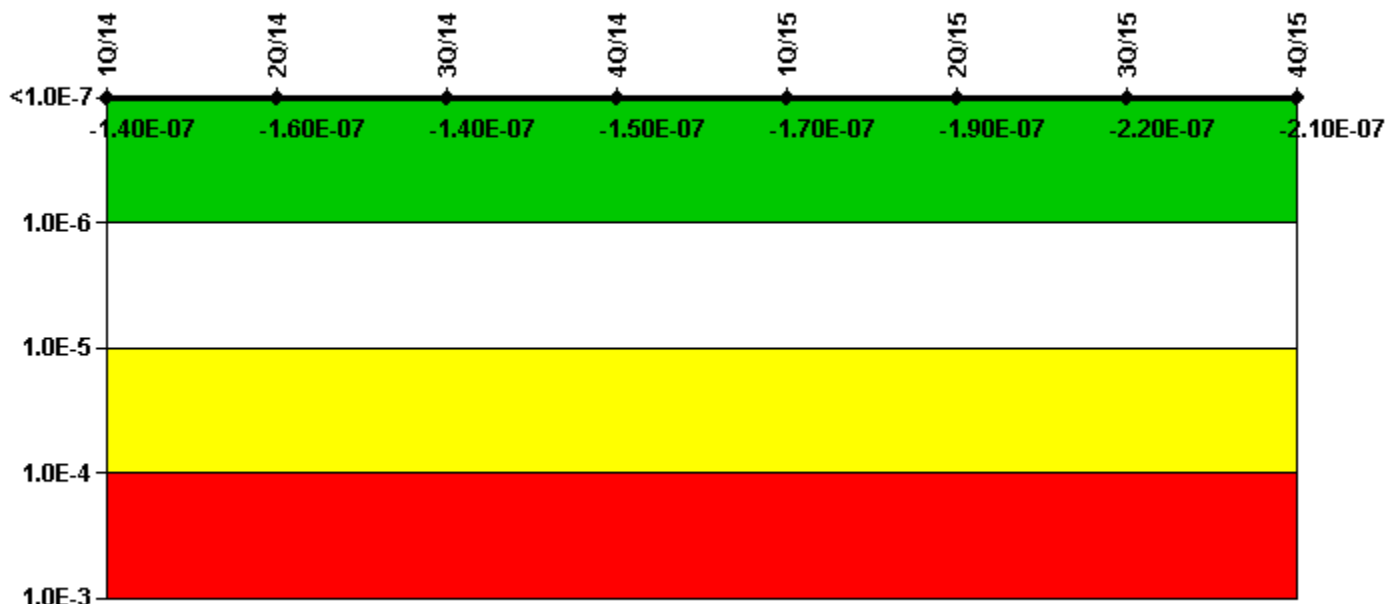
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
UAI ( $\Delta$ CDF)	5.09E-08	4.32E-08	4.16E-08	3.90E-08	-1.27E-08	-1.14E-08	-1.32E-08	-1.53E-08
URI ( $\Delta$ CDF)	-5.48E-08	-5.48E-08	-5.26E-08	-5.71E-08	-5.70E-08	-5.70E-08	-5.45E-08	-4.74E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.90E-09	-1.20E-08	-1.10E-08	-1.80E-08	-7.00E-08	-6.80E-08	-6.80E-08	-6.30E-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

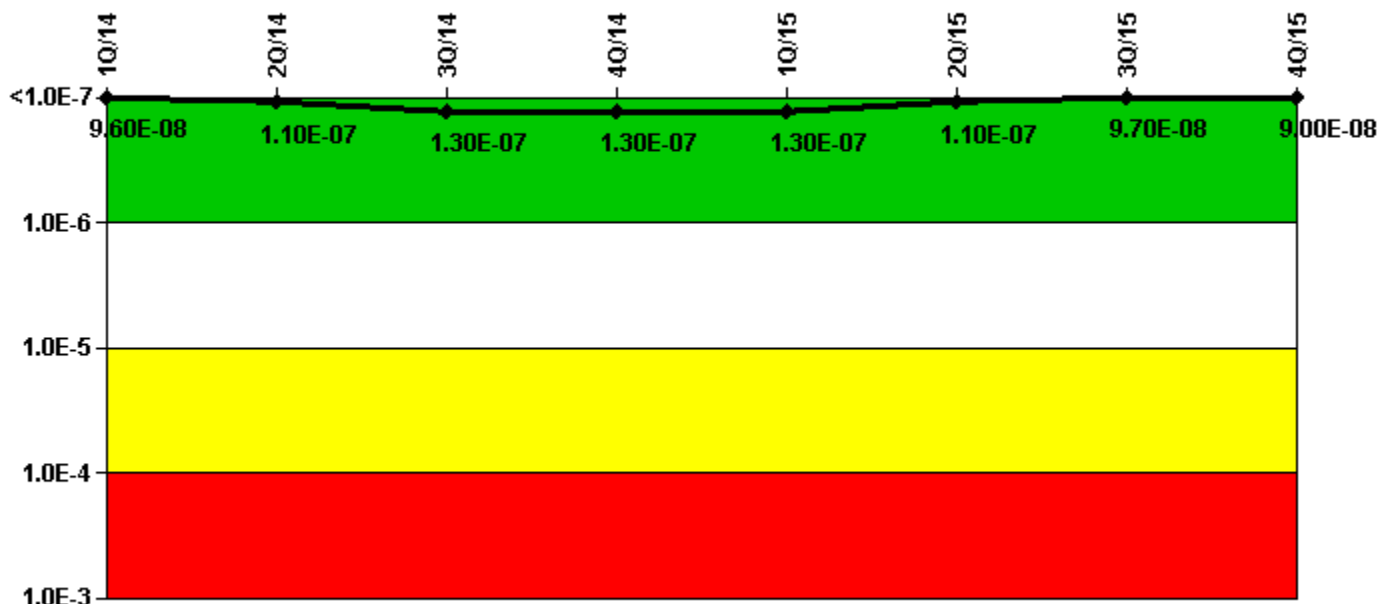
#### Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
UAI ( $\Delta$ CDF)	1.00E-07	9.04E-08	1.17E-07	1.20E-07	8.97E-08	7.15E-08	2.83E-08	1.81E-08
URI ( $\Delta$ CDF)	-2.44E-07	-2.47E-07	-2.60E-07	-2.65E-07	-2.63E-07	-2.63E-07	-2.50E-07	-2.31E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.40E-07	-1.60E-07	-1.40E-07	-1.50E-07	-1.70E-07	-1.90E-07	-2.20E-07	-2.10E-07

Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



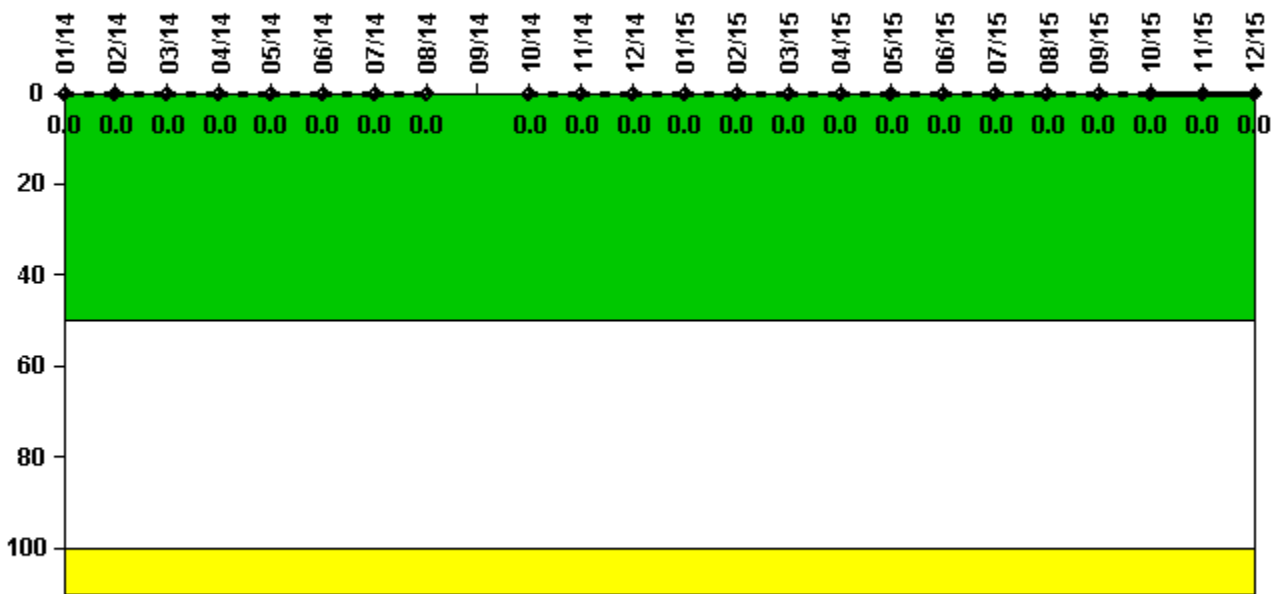
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
UAI ( $\Delta$ CDF)	1.07E-07	1.25E-07	1.38E-07	1.40E-07	1.39E-07	1.20E-07	1.10E-07	1.03E-07
URI ( $\Delta$ CDF)	-1.13E-08	-1.15E-08	-1.22E-08	-1.23E-08	-1.23E-08	-1.26E-08	-1.26E-08	-1.26E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	9.60E-08	1.10E-07	1.30E-07	1.30E-07	1.30E-07	1.10E-07	9.70E-08	9.00E-08

Licensee Comments: none

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

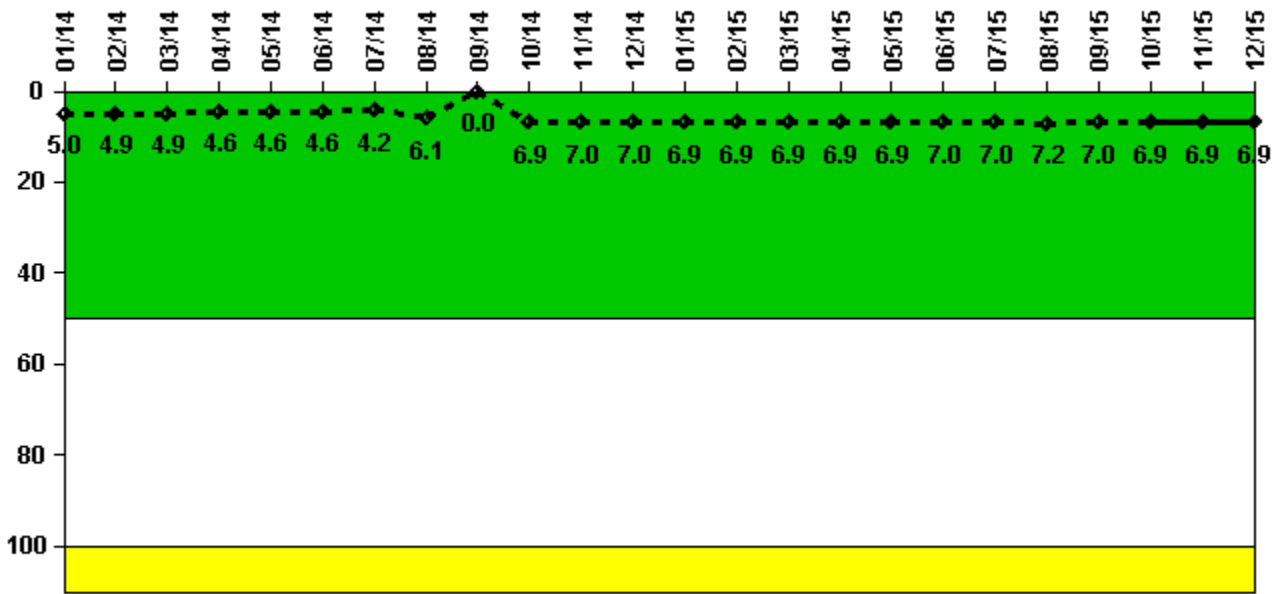
Reactor Coolant System Activity	1/14	2/14	3/14	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14
Maximum activity	0.000015	0.000015	0.000013	0.000009	0.000012	0.000006	0.000018	0.000017	N/A	0.000008	0.000008	0.000010
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	0	0	0	0	0	0	N/A	0	0	0

Reactor Coolant System Activity	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15
Maximum activity	0.000012	0.000009	0.000011	0.000010	0.000008	0.000008	0.000007	0.000008	0.000006	0.000006	0.000007	0.000007
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

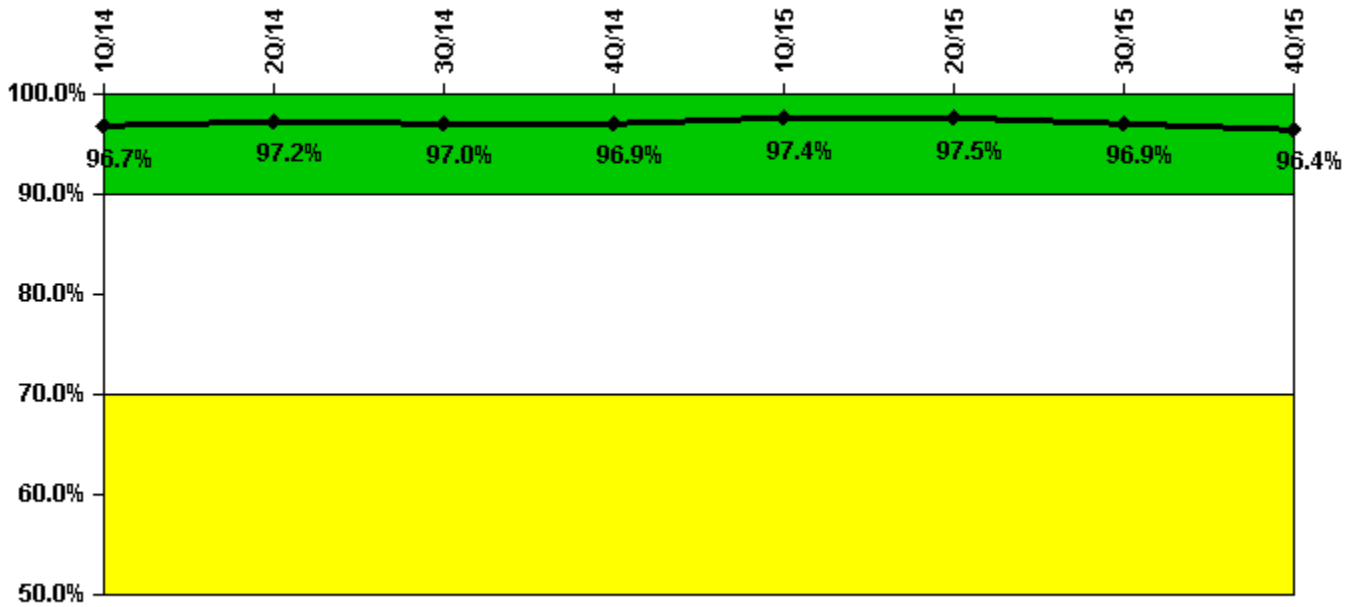
Reactor Coolant System Leakage	1/14	2/14	3/14	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14
Maximum leakage	1.250	1.230	1.220	1.160	1.140	1.150	1.060	1.530	0	1.720	1.740	1.760
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	5.0	4.9	4.9	4.6	4.6	4.6	4.2	6.1	0	6.9	7.0	7.0

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

Licensee Comments: none

### Drill/Exercise Performance



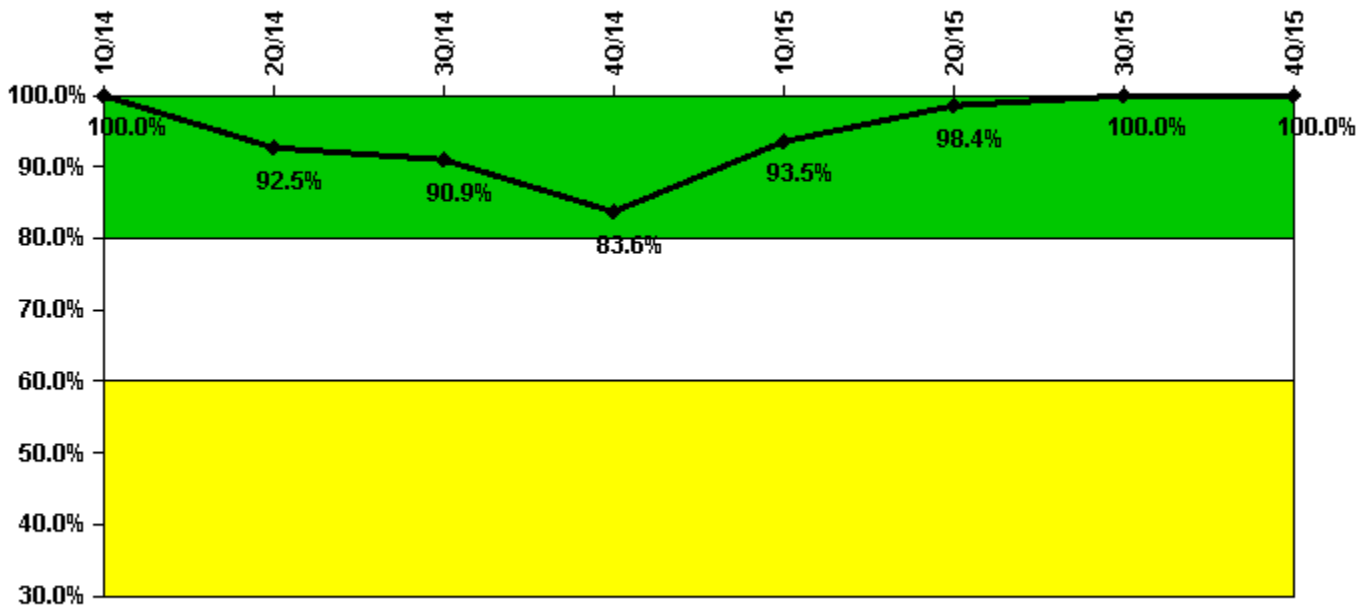
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Successful opportunities	51.0	50.0	0	0	24.0	69.0	16.0	6.0
Total opportunities	52.0	55.0	0	0	24.0	70.0	17.0	6.0
Indicator value	96.7%	97.2%	97.0%	96.9%	97.4%	97.5%	96.9%	96.4%

Licensee Comments: none

### ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Participating Key personnel	69.0	62.0	60.0	56.0	58.0	62.0	61.0	65.0
Total Key personnel	69.0	67.0	66.0	67.0	62.0	63.0	61.0	65.0
Indicator value	100.0%	92.5%	90.9%	83.6%	93.5%	98.4%	100.0%	100.0%

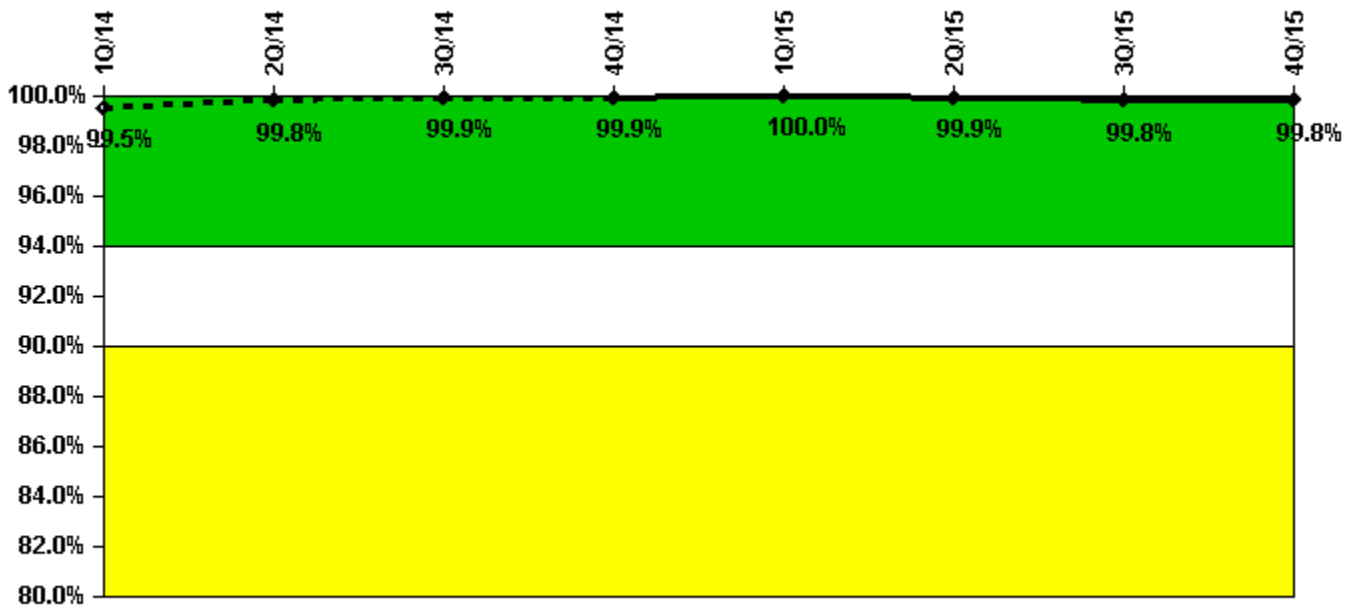
#### Licensee Comments:

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.

1Q/14: 4th quarter 2013 data was revised to reflect updated qualification status of one key individual. This change does not affect the indicator color.

### Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Successful siren-tests	221	296	259	296	259	258	258	296
Total sirens-tests	222	296	259	296	259	259	259	296
Indicator value	99.5%	99.8%	99.9%	99.9%	100.0%	99.9%	99.8%	99.8%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

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