

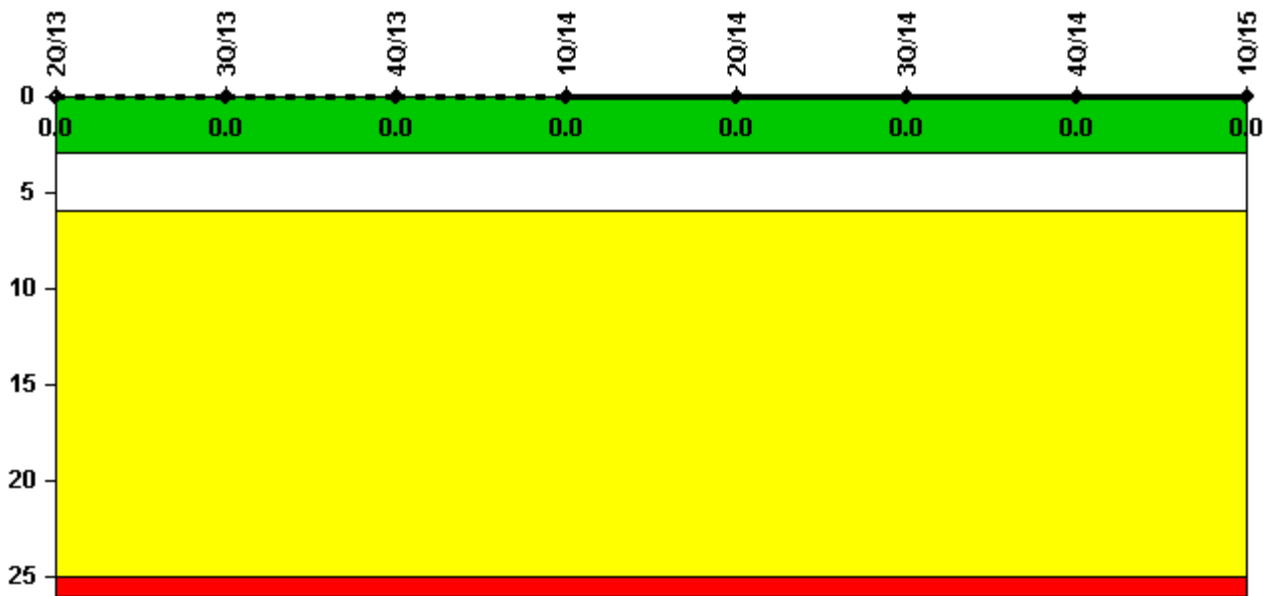
# Palo Verde 1

## 1Q/2015 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



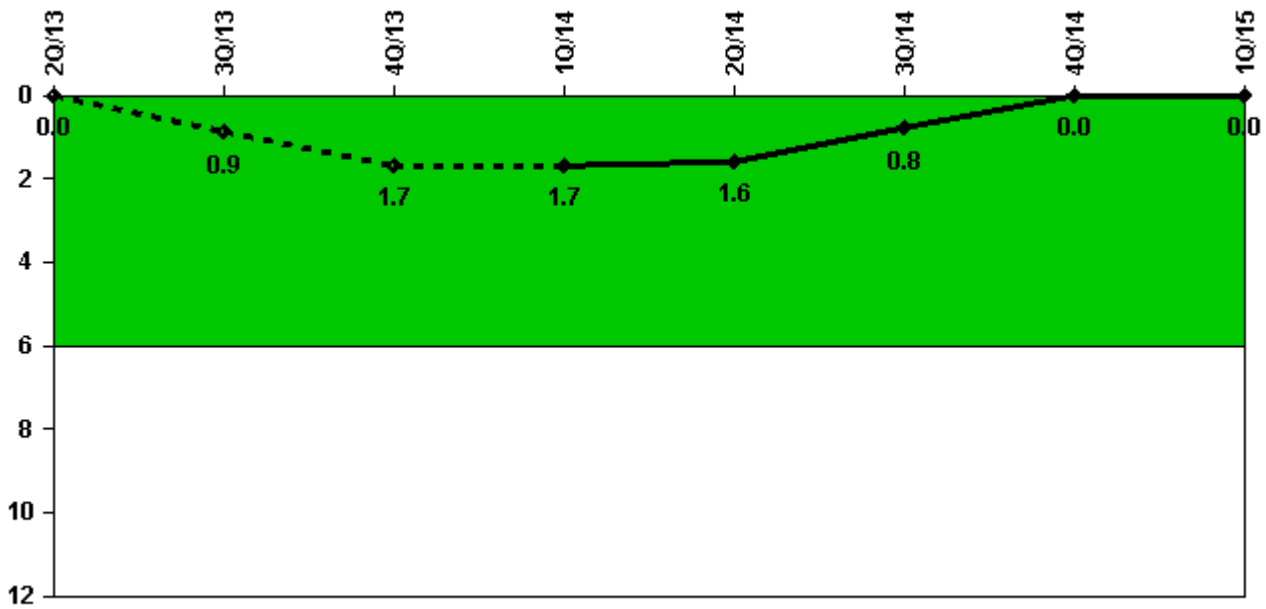
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	1546.2	2208.0	2208.0	2160.0	2184.0	2208.0	1475.5	2160.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



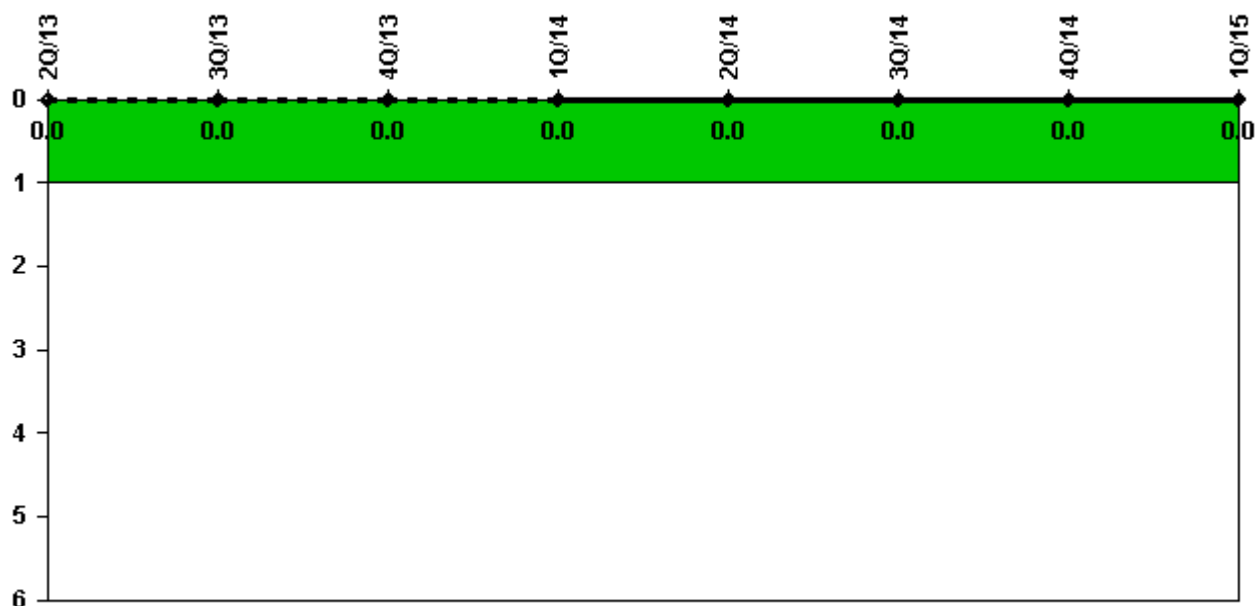
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Unplanned power changes	0	1.0	1.0	0	0	0	0	0
Critical hours	1546.2	2208.0	2208.0	2160.0	2184.0	2208.0	1475.5	2160.0
<b>Indicator value</b>	<b>0</b>	<b>0.9</b>	<b>1.7</b>	<b>1.7</b>	<b>1.6</b>	<b>0.8</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

### Unplanned Scrams with Complications



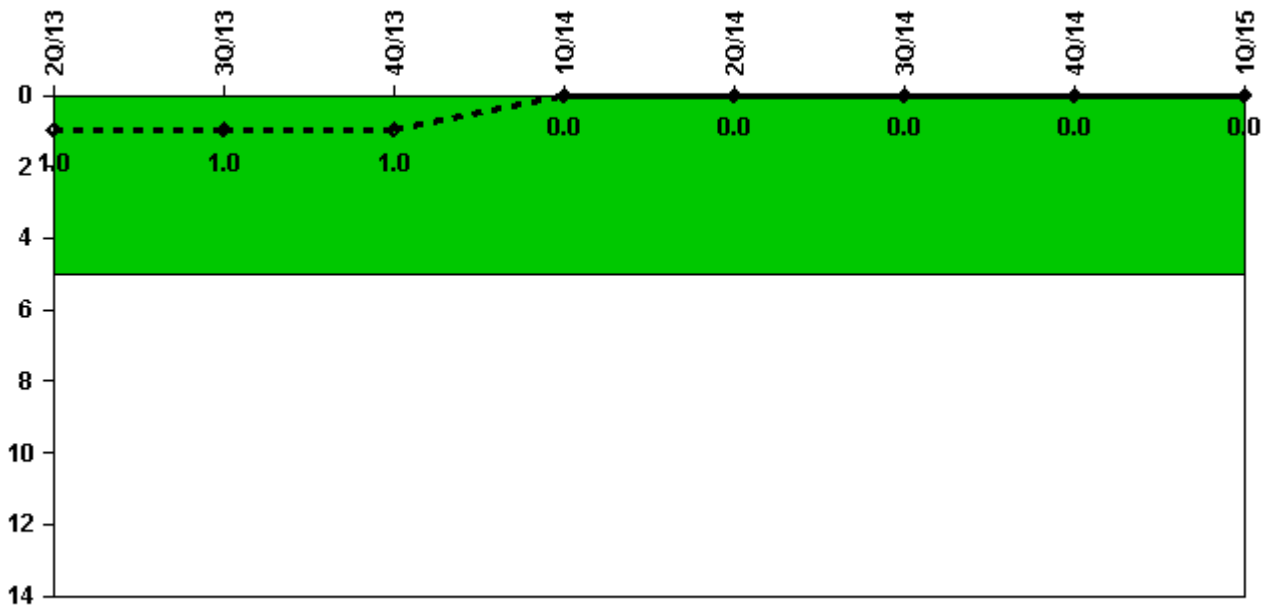
Thresholds: White > 1.0

#### Notes

Unplanned Scrams with Complications	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/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 (PWR)



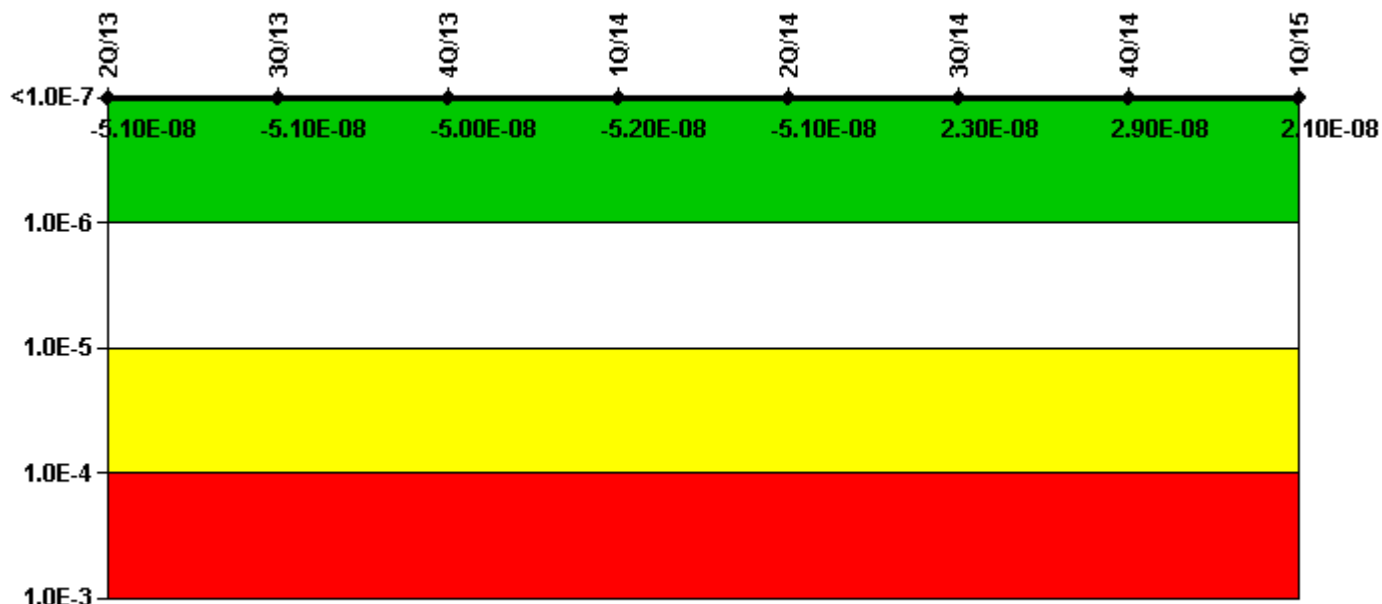
Thresholds: White > 5.0

#### Notes

Safety System Functional Failures (PWR)	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Safety System Functional Failures	0	0	0	0	0	0	0	0
<b>Indicator value</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

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



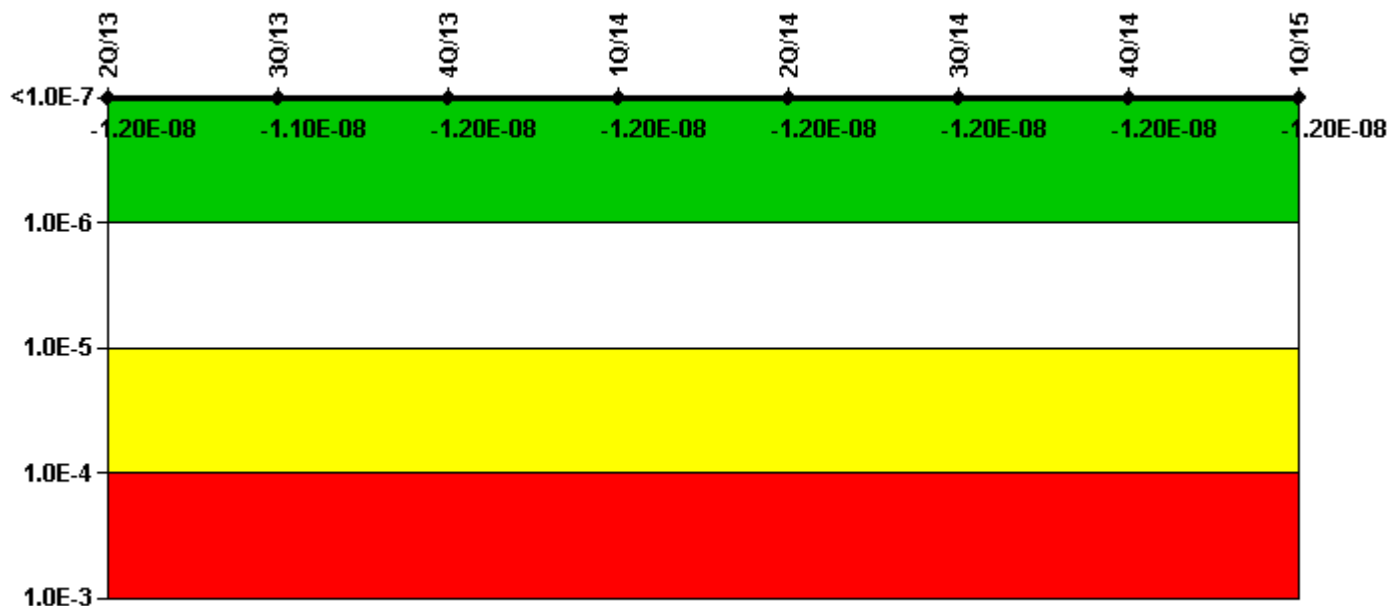
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Emergency AC Power System	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI ( $\Delta$ CDF)	1.01E-08	9.02E-09	8.49E-09	4.28E-09	4.20E-09	1.15E-08	1.33E-08	5.61E-09
URI ( $\Delta$ CDF)	-6.15E-08	-6.00E-08	-5.85E-08	-5.66E-08	-5.48E-08	1.19E-08	1.52E-08	1.52E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.10E-08	-5.10E-08	-5.00E-08	-5.20E-08	-5.10E-08	2.30E-08	2.90E-08	2.10E-08

Licensee Comments: none

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



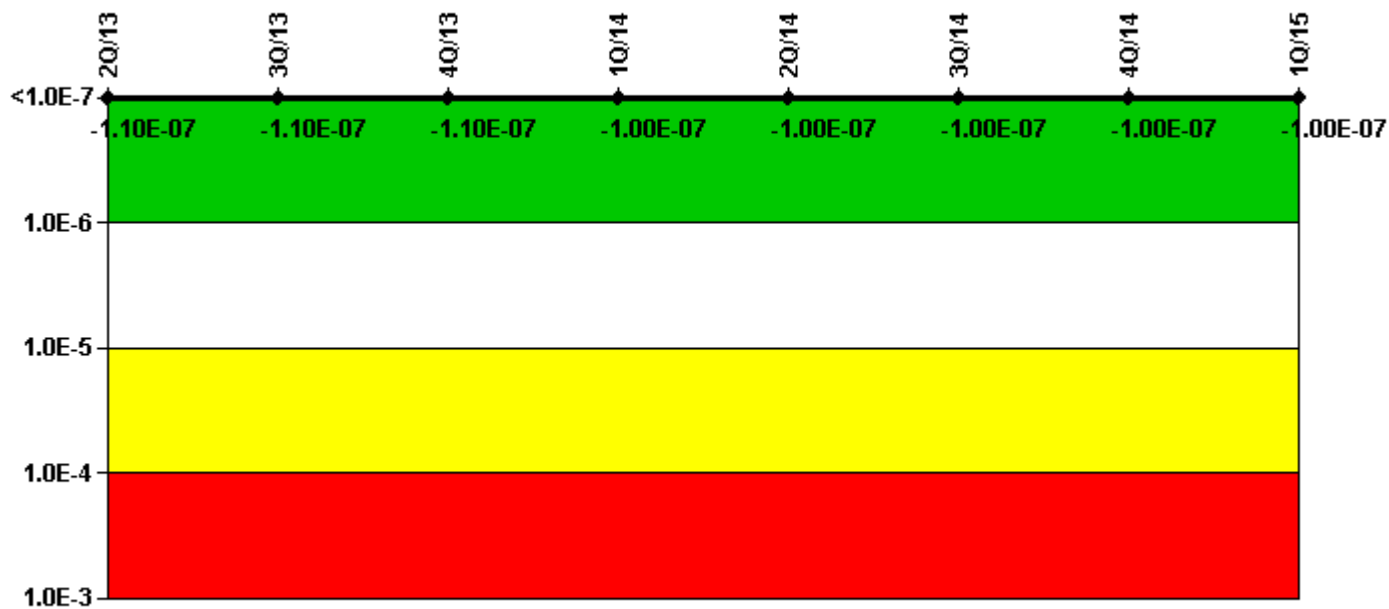
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI ( $\Delta$ CDF)	-1.24E-09	-5.88E-10	-1.28E-09	-1.44E-09	-1.50E-09	-1.52E-09	-1.52E-09	-1.52E-09
URI ( $\Delta$ CDF)	-1.08E-08	-1.07E-08	-1.06E-08	-1.05E-08	-1.04E-08	-1.03E-08	-1.03E-08	-1.03E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.20E-08	-1.10E-08	-1.20E-08	-1.20E-08	-1.20E-08	-1.20E-08	-1.20E-08	-1.20E-08

Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



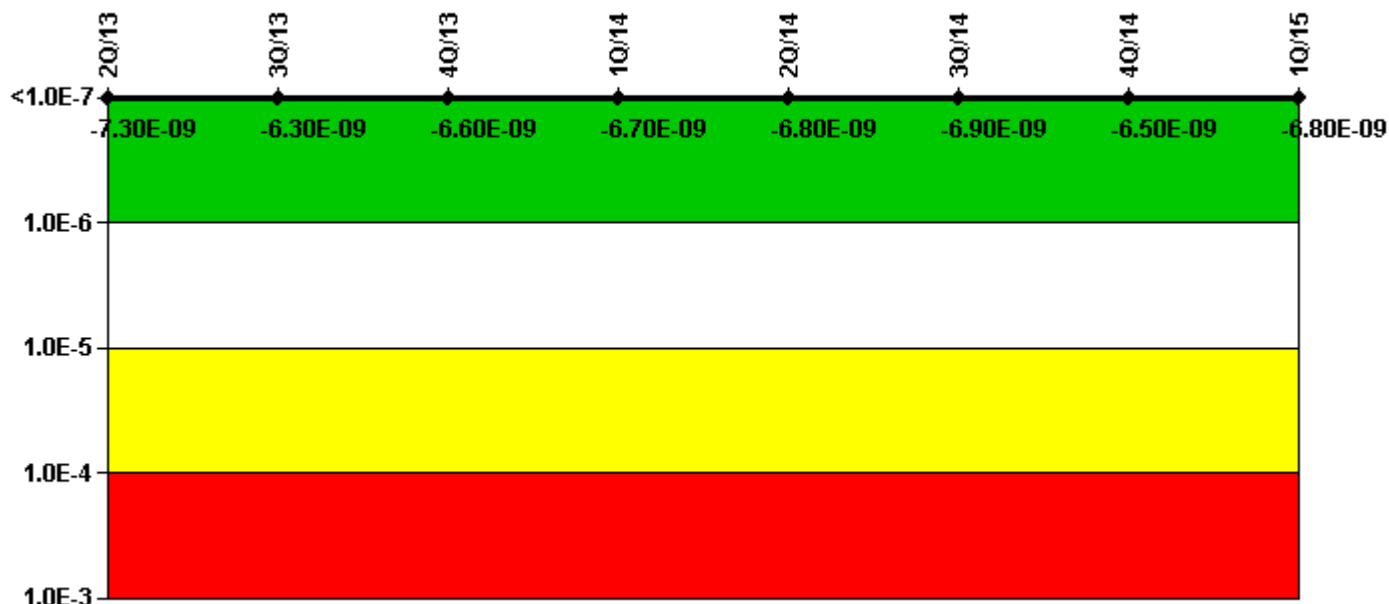
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI ( $\Delta$ CDF)	-4.84E-08	-4.84E-08	-4.84E-08	-4.84E-08	-4.84E-08	-4.84E-08	-4.84E-08	-4.84E-08
URI ( $\Delta$ CDF)	-6.12E-08	-5.97E-08	-5.82E-08	-5.63E-08	-5.47E-08	-5.31E-08	-5.15E-08	-5.15E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.10E-07	-1.10E-07	-1.10E-07	-1.00E-07	-1.00E-07	-1.00E-07	-1.00E-07	-1.00E-07

Licensee Comments: none

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



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

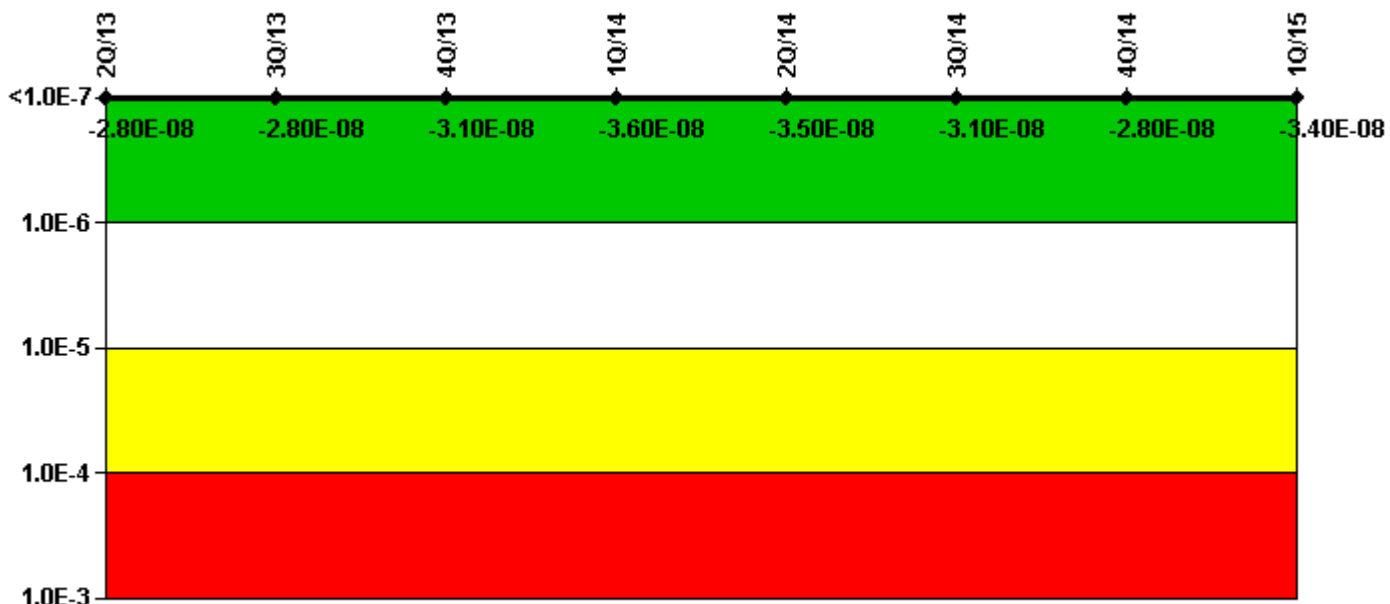
#### Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI ( $\Delta$ CDF)	-9.69E-10	1.17E-10	-2.38E-10	-2.83E-10	-4.52E-10	-5.53E-10	-1.67E-10	-4.19E-10
URI ( $\Delta$ CDF)	-6.37E-09	-6.37E-09	-6.37E-09	-6.37E-09	-6.37E-09	-6.37E-09	-6.37E-09	-6.37E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-7.30E-09	-6.30E-09	-6.60E-09	-6.70E-09	-6.80E-09	-6.90E-09	-6.50E-09	-6.80E-09

Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



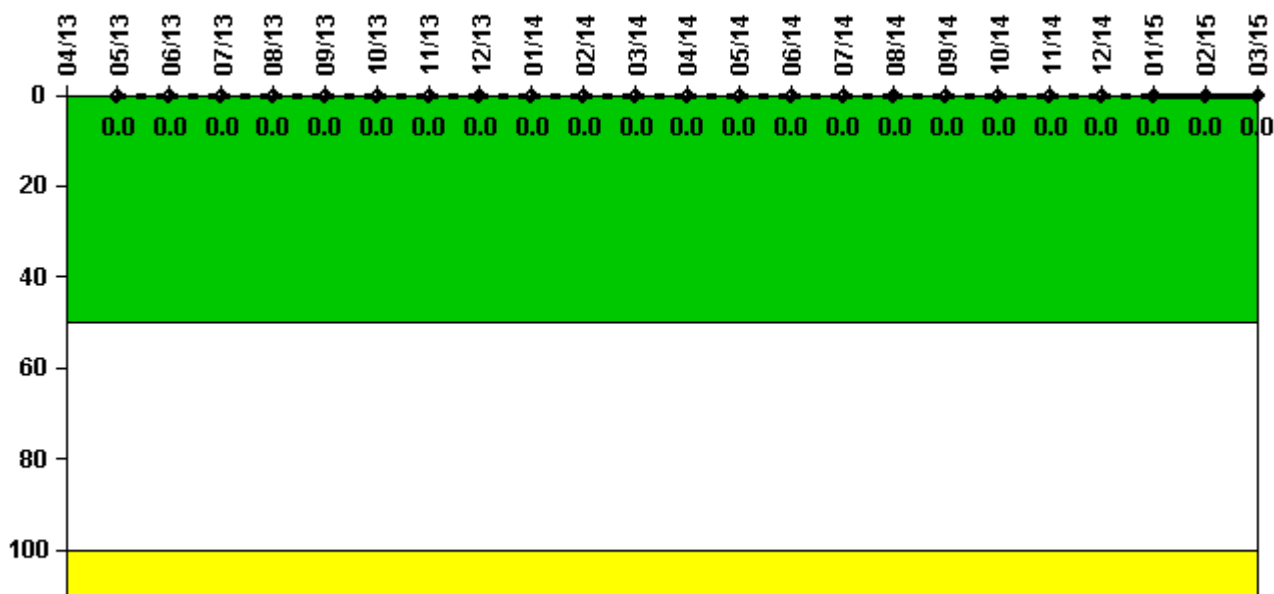
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI ( $\Delta$ CDF)	1.78E-08	1.75E-08	1.51E-08	9.35E-09	1.11E-08	1.46E-08	1.74E-08	1.16E-08
URI ( $\Delta$ CDF)	-4.57E-08	-4.57E-08	-4.57E-08	-4.57E-08	-4.57E-08	-4.57E-08	-4.57E-08	-4.57E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.80E-08	-2.80E-08	-3.10E-08	-3.60E-08	-3.50E-08	-3.10E-08	-2.80E-08	-3.40E-08

Licensee Comments: none

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

### Notes

Reactor Coolant System Activity	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14
Maximum activity	N/A	0.000177	0.000194	0.000209	0.000209	0.000219	0.000236	0.000217	0.000230	0.000250	0.000255	0.000257
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	N/A	0	0	0	0	0	0	0	0	0	0	0

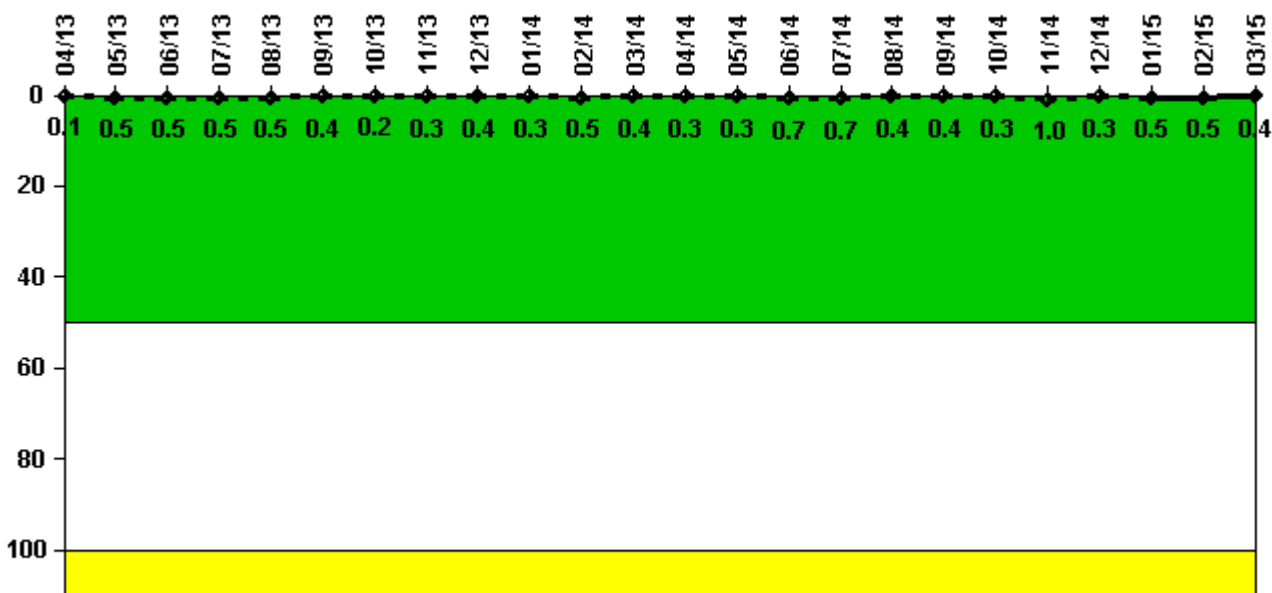
  

Reactor Coolant System Activity	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15
Maximum activity	0.000263	0.000277	0.000274	0.000495	0.000278	0.000304	0.000313	0.000166	0.000179	0.000180	0.000187	0.000188
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments:

6/13: No Unit 1 reactor coolant system activity was reported for April 2013 because the analysis was not performed during the April 2013 Unit 1 refueling outage.

### Reactor Coolant System Leakage



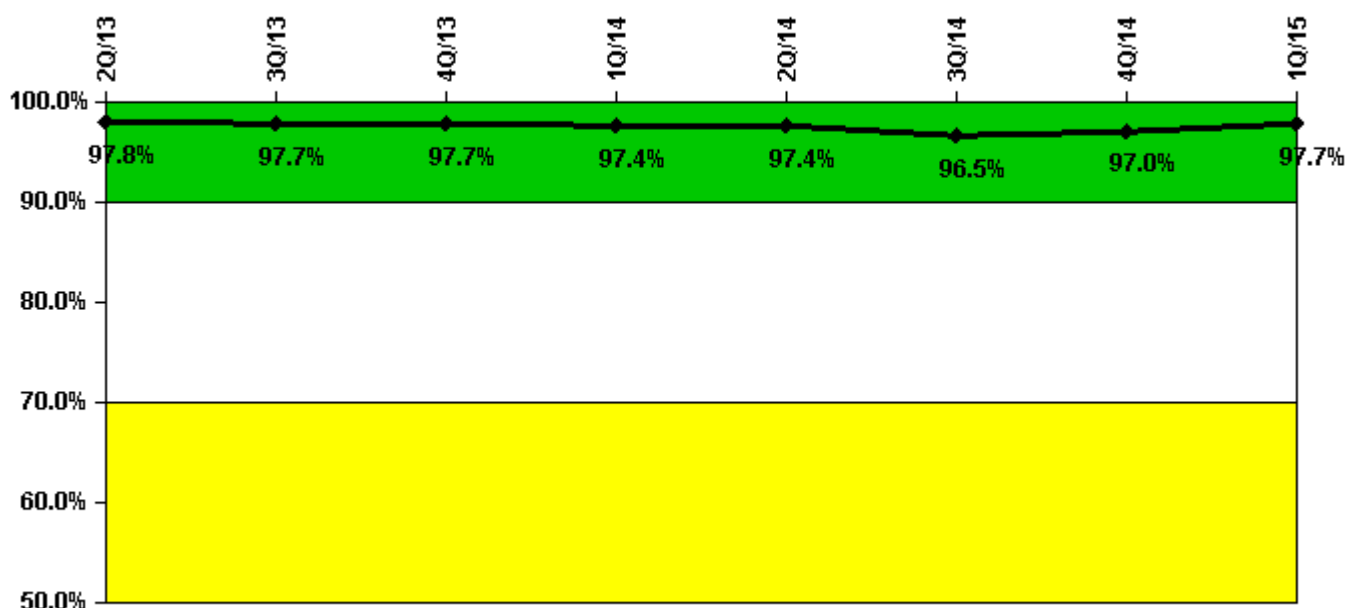
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Leakage	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14
Maximum leakage	0.006	0.047	0.050	0.048	0.050	0.040	0.022	0.029	0.037	0.025	0.051	0.042
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
Indicator value	<b>0.1</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.4</b>	<b>0.2</b>	<b>0.3</b>	<b>0.4</b>	<b>0.3</b>	<b>0.5</b>	<b>0.4</b>
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	0.028	0.033	0.065	0.066	0.038	0.037	0.027	0.096	0.028	0.050	0.050	0.043
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
Indicator value	<b>0.3</b>	<b>0.3</b>	<b>0.7</b>	<b>0.7</b>	<b>0.4</b>	<b>0.4</b>	<b>0.3</b>	<b>1.0</b>	<b>0.3</b>	<b>0.5</b>	<b>0.5</b>	<b>0.4</b>

Licensee Comments: none

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Successful opportunities	52.0	77.0	83.0	81.0	14.0	74.0	137.0	42.0
Total opportunities	52.0	78.0	85.0	83.0	14.0	80.0	139.0	42.0
Indicator value	97.8%	97.7%	97.7%	97.4%	97.4%	96.5%	97.0%	97.7%

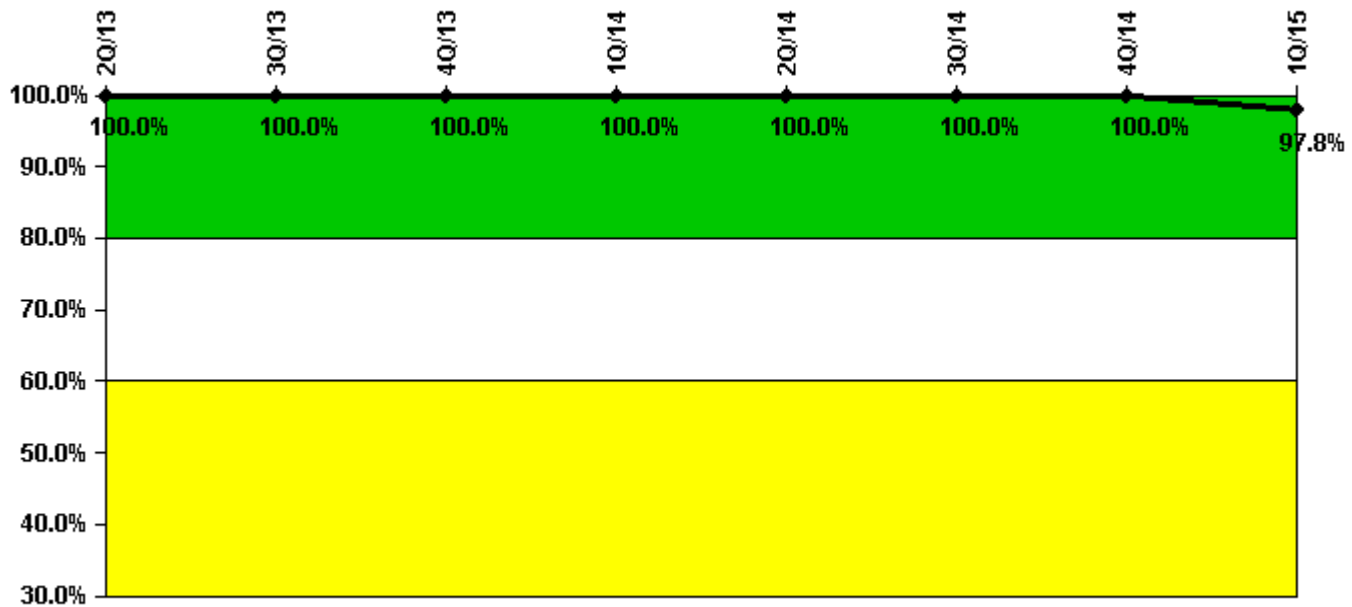
#### Licensee Comments:

1Q/15: Corrected March 2014 EP01 drill success and total opportunities that included one item that should not have been counted. Discovered in March 2015. No color change as a result.

1Q/14: Corrected March 2014 EP01 drill success and total opportunities that included one item that should not have been counted. Discovered in March 2015. No color change as a result.

4Q/13: A plant condition was discovered that resulted in a previously unidentified missed emergency action level classification in November 2013. No color change resulted.

### ERO Drill Participation



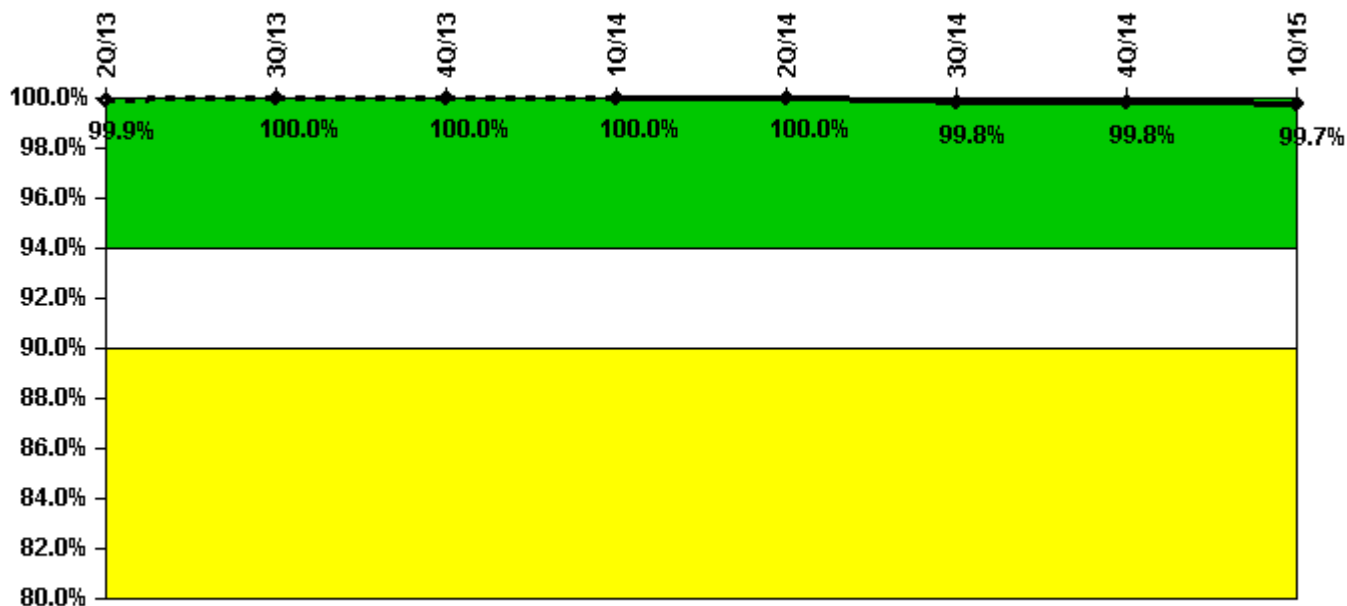
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Participating Key personnel	87.0	89.0	98.0	94.0	92.0	89.0	85.0	91.0
Total Key personnel	87.0	89.0	98.0	94.0	92.0	89.0	85.0	93.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	97.8%

Licensee Comments: none

### Alert & Notification System



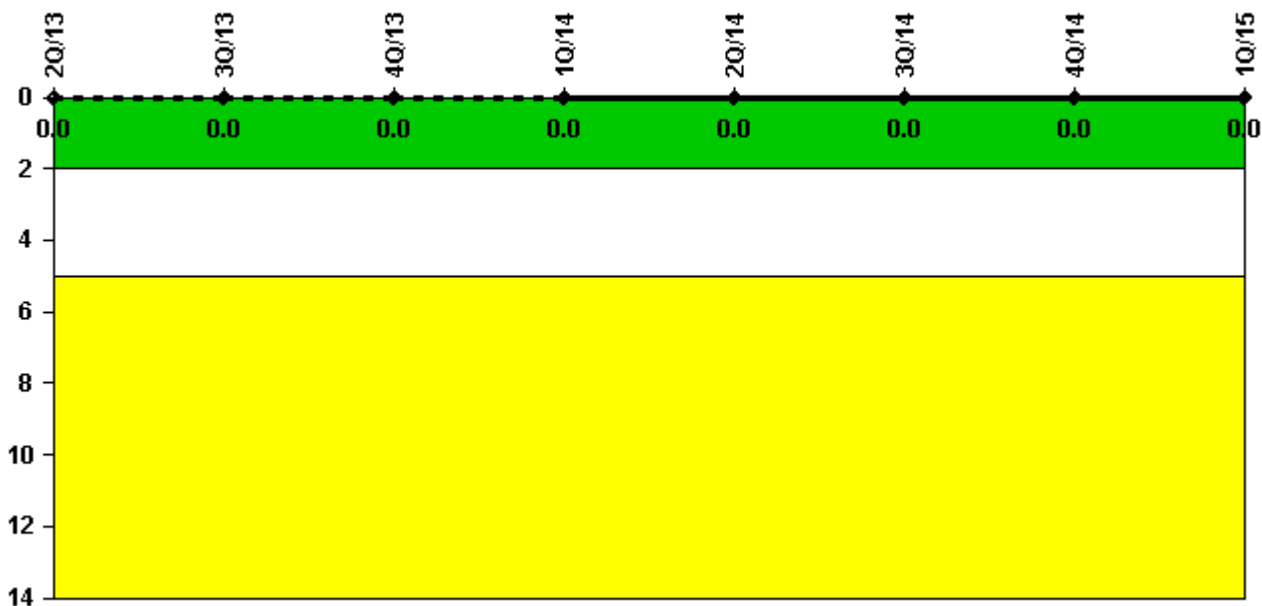
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Successful siren-tests	912	912	1008	912	912	858	960	908
Total sirens-tests	912	912	1008	912	912	864	960	912
Indicator value	99.9%	100.0%	100.0%	100.0%	100.0%	99.8%	99.8%	99.7%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



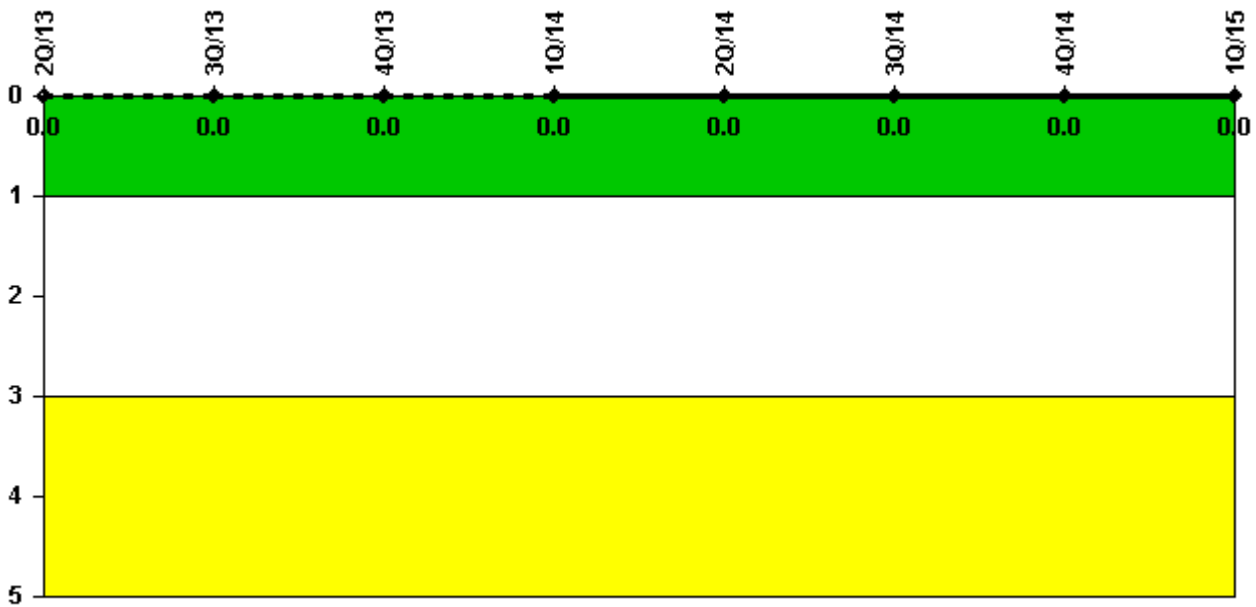
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/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	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
RETS/ODCM 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

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, 2015*