

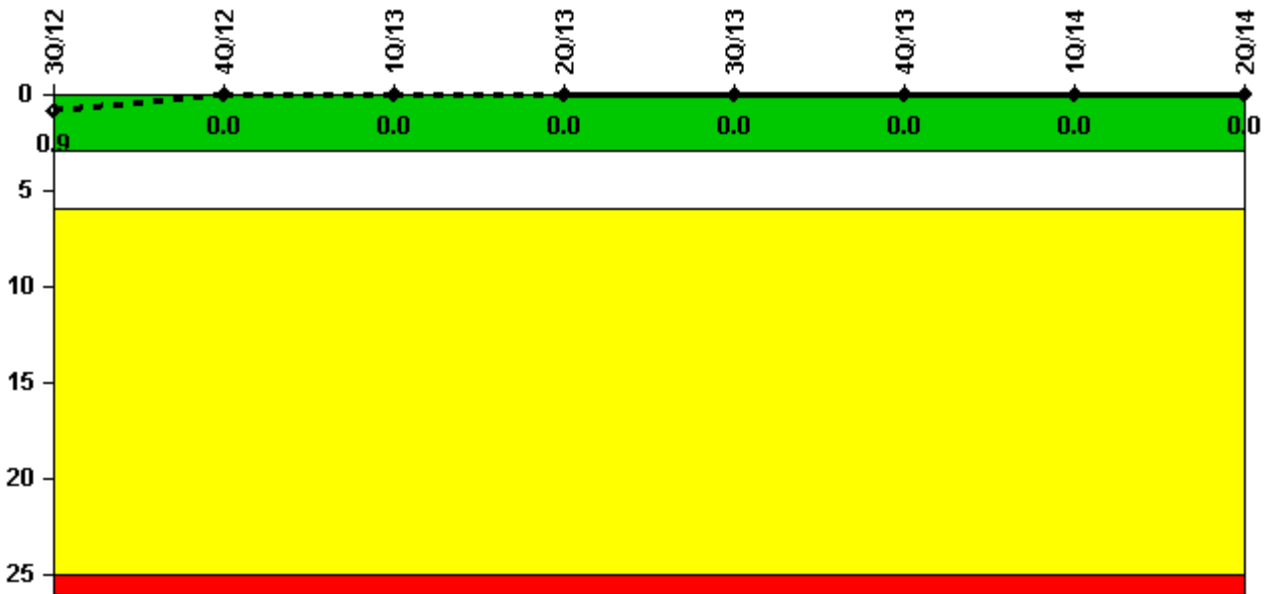
# Palo Verde 1

## 2Q/2014 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



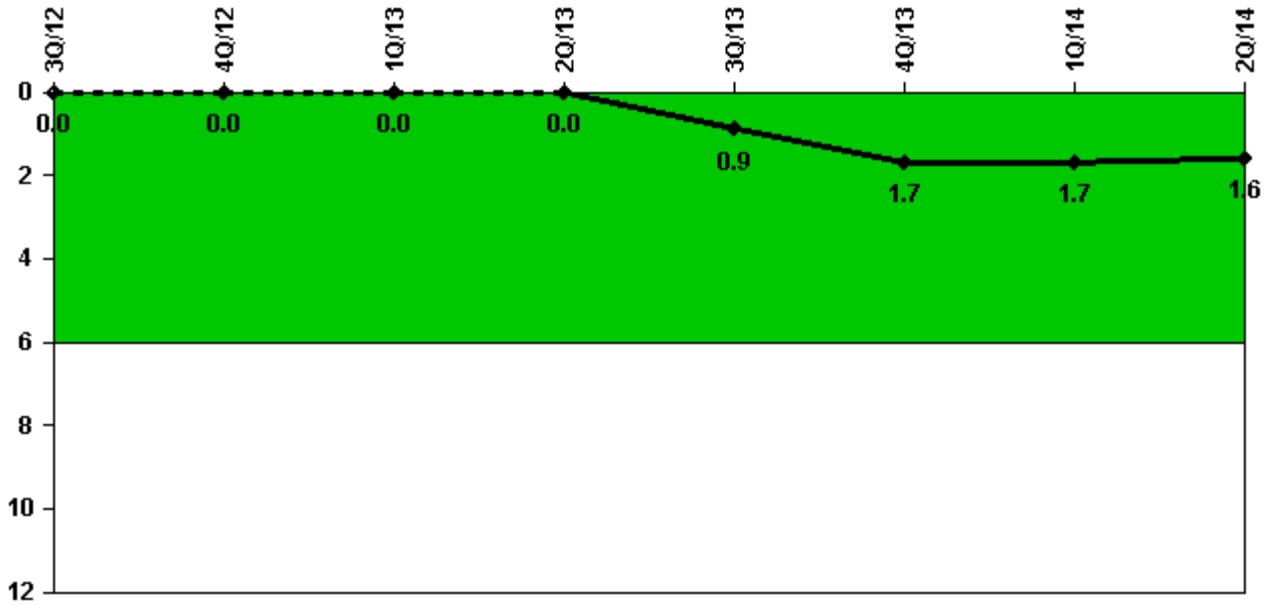
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2208.0	2208.0	2112.0	1546.2	2208.0	2208.0	2160.0	2184.0
Indicator value	0.9	0	0	0	0	0	0	0

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



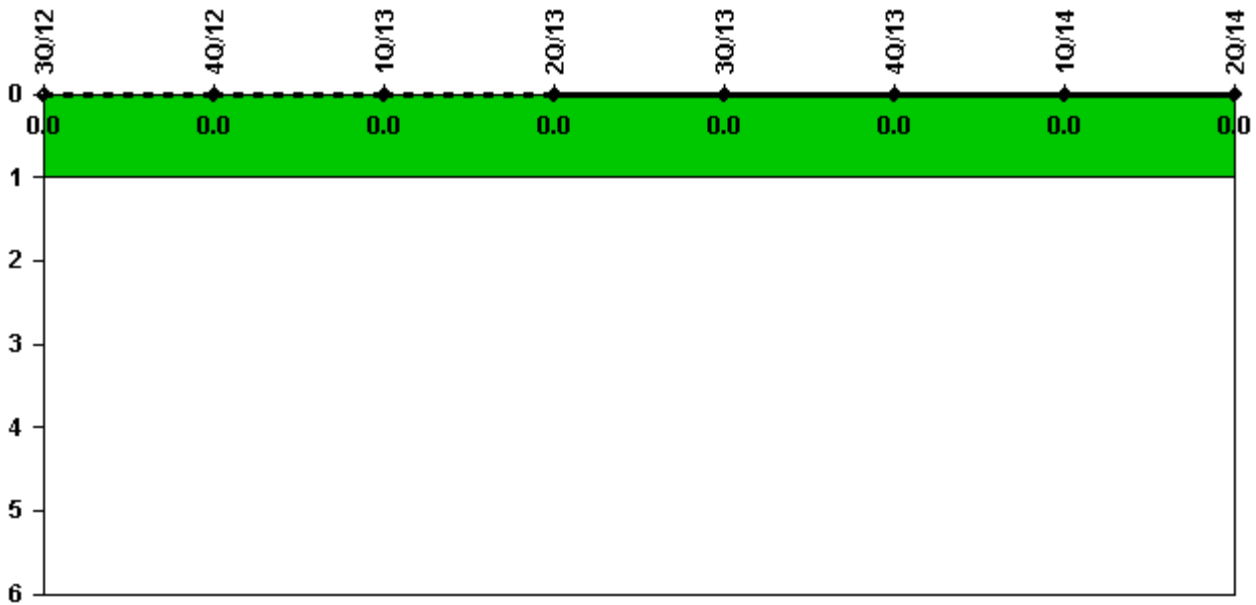
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Unplanned power changes	0	0	0	0	1.0	1.0	0	0
Critical hours	2208.0	2208.0	2112.0	1546.2	2208.0	2208.0	2160.0	2184.0
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.9</b>	<b>1.7</b>	<b>1.7</b>	<b>1.6</b>

Licensee Comments: none

### Unplanned Scrams with Complications



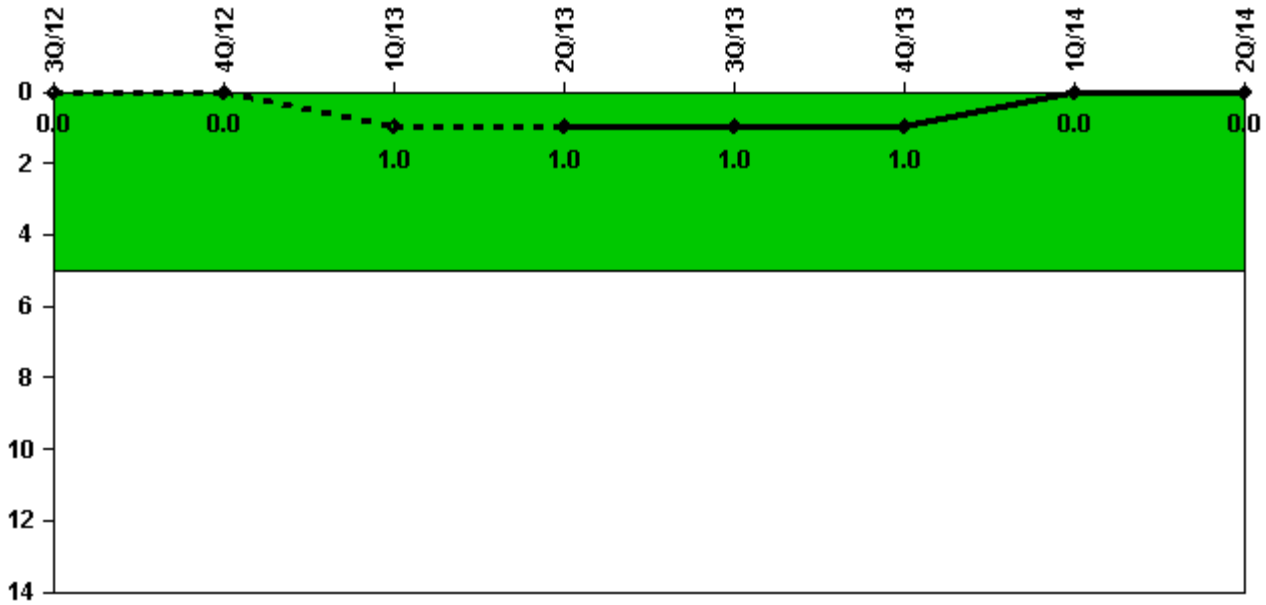
Thresholds: White > 1.0

#### Notes

Unplanned Scrams with Complications	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
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

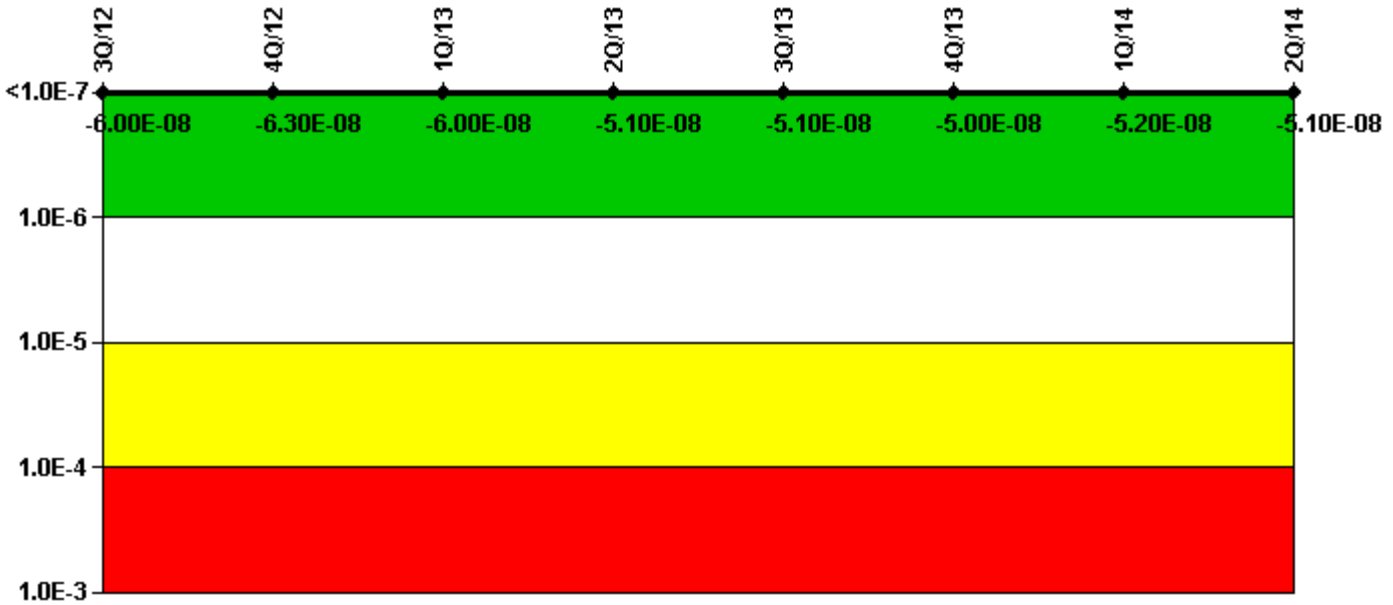
#### Notes

Safety System Functional Failures (PWR)	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Safety System Functional Failures	0	0	1	0	0	0	0	0
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>

Licensee Comments:

1Q/13: LER 0500528/0500529/0500530-2012-006-00 for SSFF reported in February 2013 in each of the three units.

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



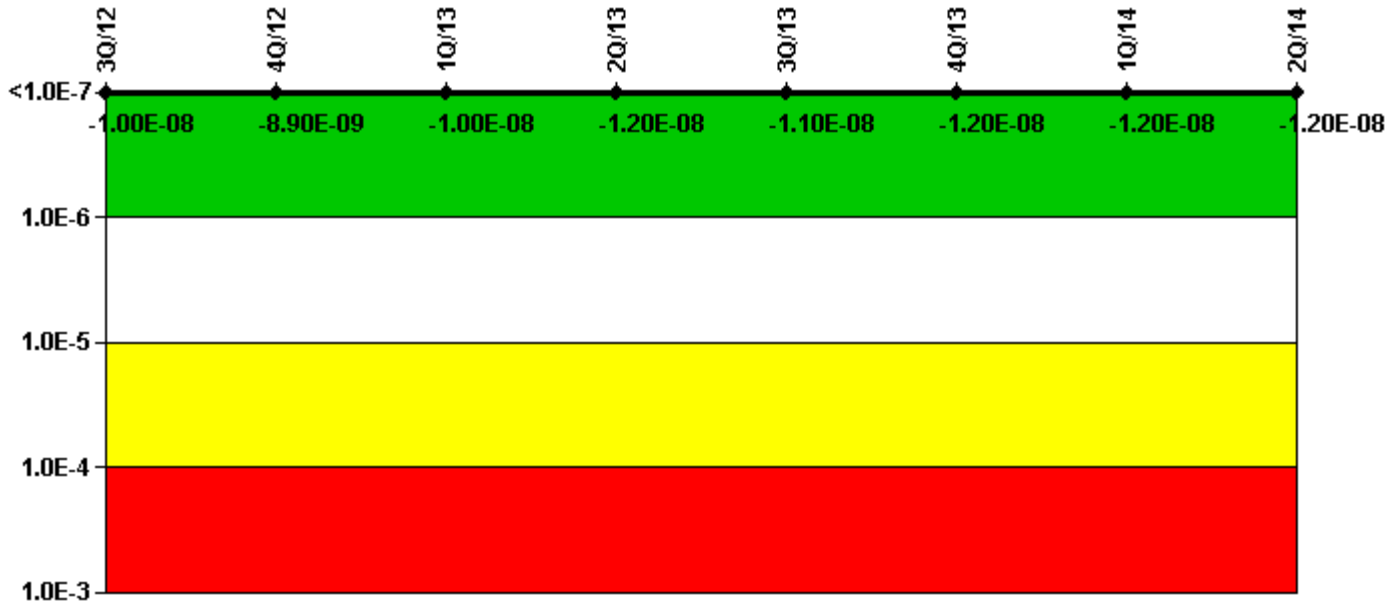
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
UAI ( $\Delta$ CDF)	5.13E-09	1.52E-09	2.45E-09	1.01E-08	9.02E-09	8.49E-09	4.28E-09	4.20E-09
URI ( $\Delta$ CDF)	-6.54E-08	-6.41E-08	-6.28E-08	-6.15E-08	-6.00E-08	-5.85E-08	-5.66E-08	-5.48E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-6.00E-08	-6.30E-08	-6.00E-08	-5.10E-08	-5.10E-08	-5.00E-08	-5.20E-08	-5.10E-08

Licensee Comments: none

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



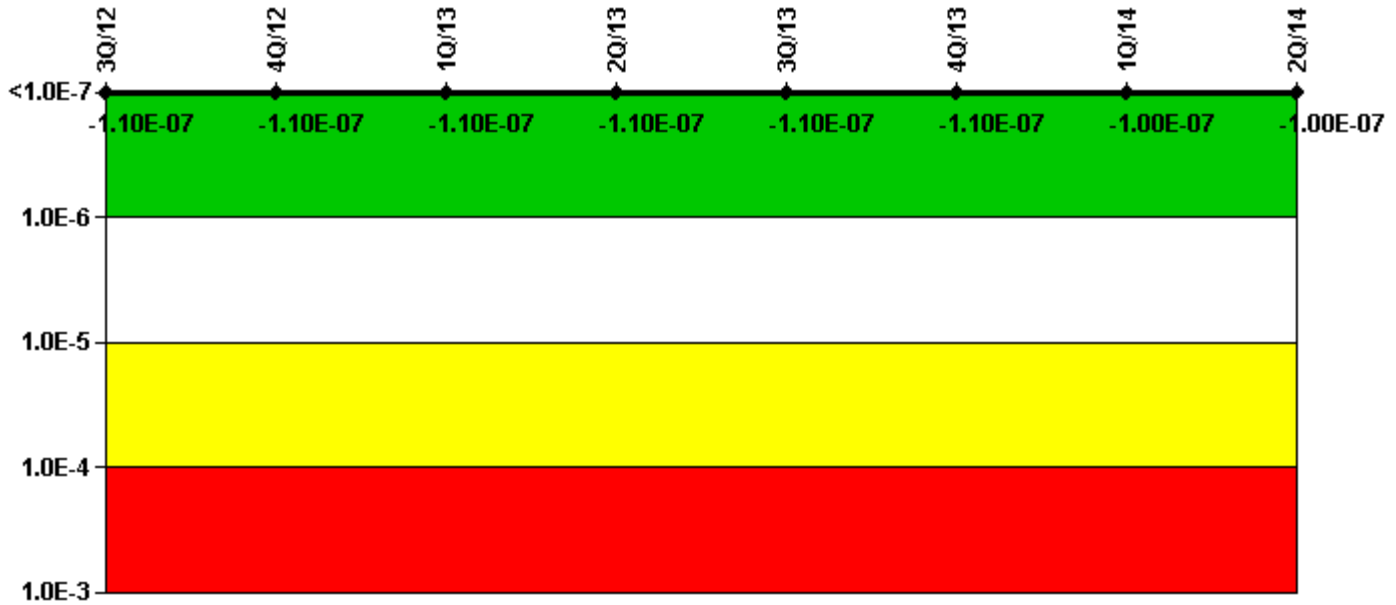
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
UAI ( $\Delta$ CDF)	9.93E-10	2.06E-09	4.99E-10	-1.24E-09	-5.88E-10	-1.28E-09	-1.44E-09	-1.50E-09
URI ( $\Delta$ CDF)	-1.10E-08	-1.10E-08	-1.09E-08	-1.08E-08	-1.07E-08	-1.06E-08	-1.05E-08	-1.04E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.00E-08	-8.90E-09	-1.00E-08	-1.20E-08	-1.10E-08	-1.20E-08	-1.20E-08	-1.20E-08

Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



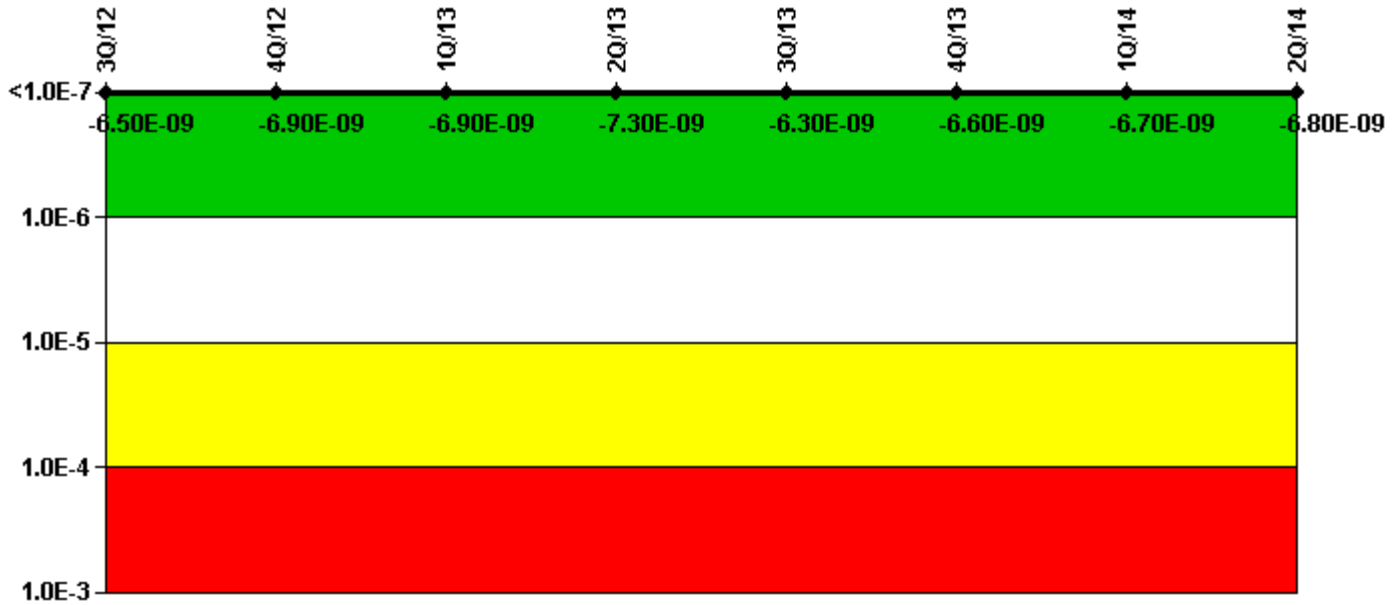
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
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)	-6.56E-08	-6.41E-08	-6.27E-08	-6.12E-08	-5.97E-08	-5.82E-08	-5.63E-08	-5.47E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.10E-07	-1.10E-07	-1.10E-07	-1.10E-07	-1.10E-07	-1.10E-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

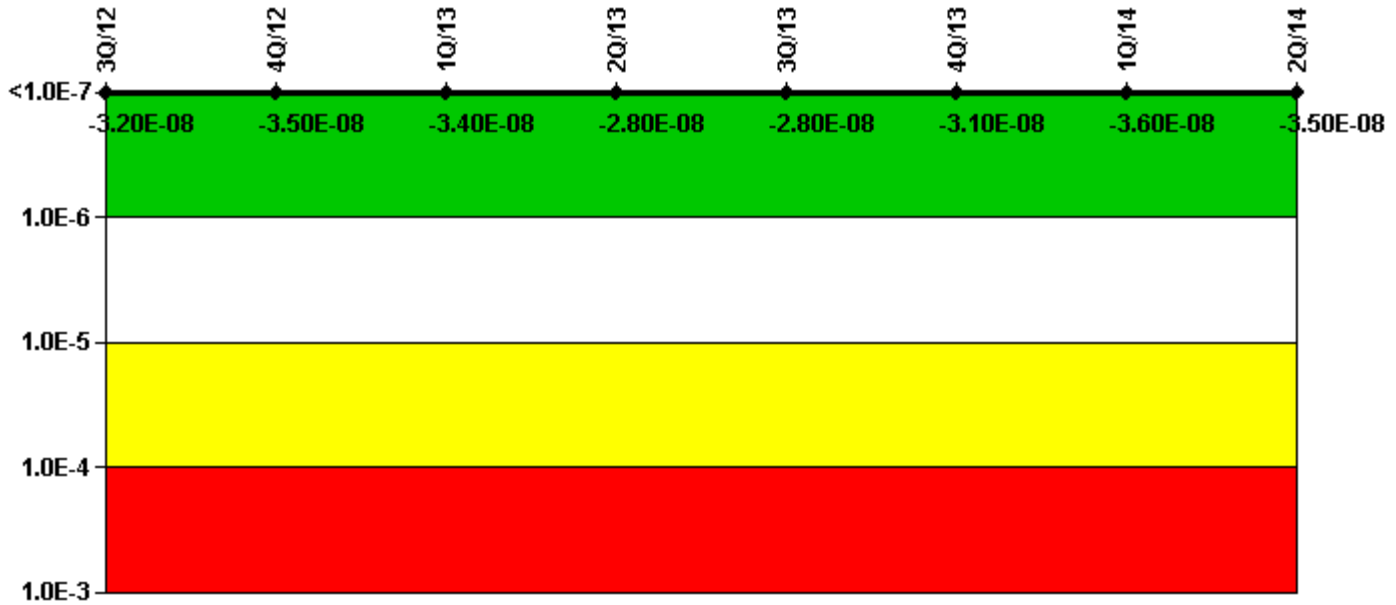
#### Notes

Mitigating Systems Performance Index, Residual Heat Removal System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
UAI ( $\Delta$ CDF)	-8.38E-11	-5.42E-10	-5.35E-10	-9.69E-10	1.17E-10	-2.38E-10	-2.83E-10	-4.52E-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	-6.50E-09	-6.90E-09	-6.90E-09	-7.30E-09	-6.30E-09	-6.60E-09	-6.70E-09	-6.80E-09

Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



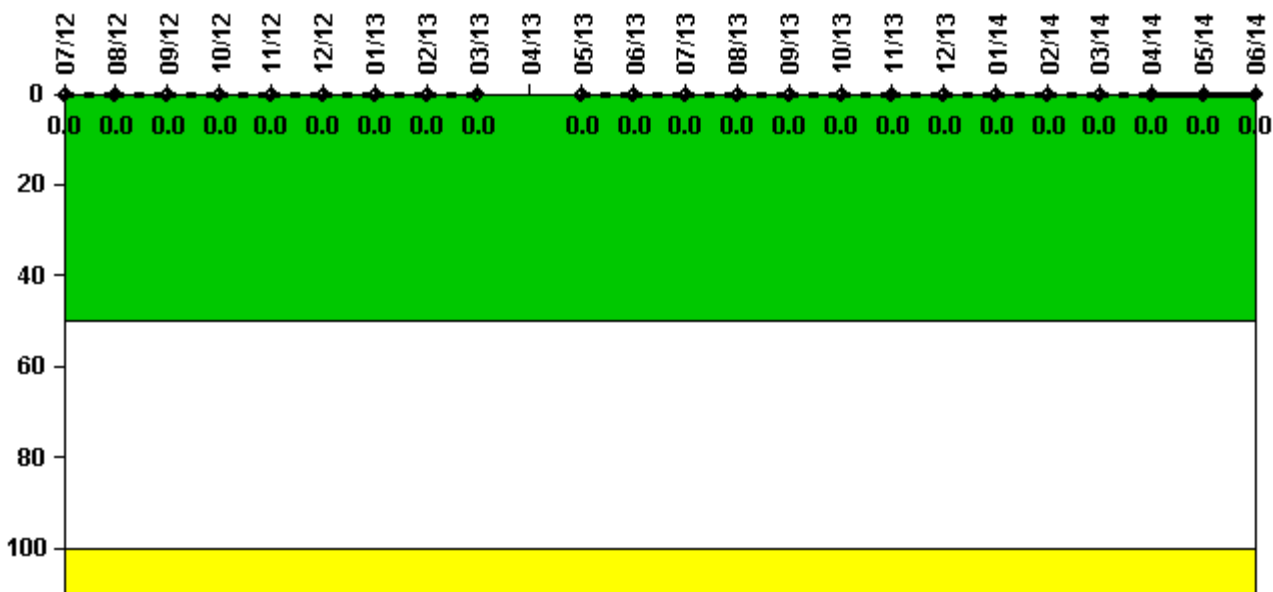
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
UAI ( $\Delta$ CDF)	1.42E-08	1.09E-08	1.22E-08	1.78E-08	1.75E-08	1.51E-08	9.35E-09	1.11E-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	-3.20E-08	-3.50E-08	-3.40E-08	-2.80E-08	-2.80E-08	-3.10E-08	-3.60E-08	-3.50E-08

Licensee Comments: none

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Activity	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13
Maximum activity	0.000270	0.000257	0.000272	0.000289	0.000287	0.000291	0.000298	0.000320	0.000312	N/A	0.000177	0.000194
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	N/A	0	0

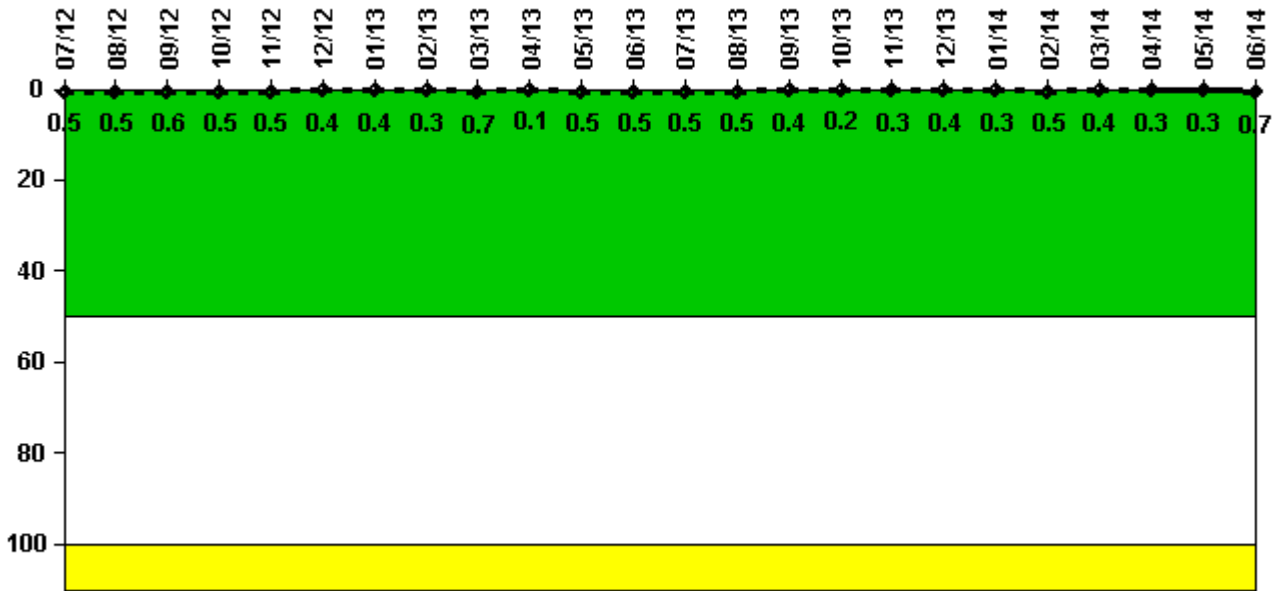
  

Reactor Coolant System Activity	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14	4/14	5/14	6/14
Maximum activity	0.000209	0.000209	0.000219	0.000236	0.000217	0.000230	0.000250	0.000255	0.000257	0.000263	0.000277	0.000274
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator 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



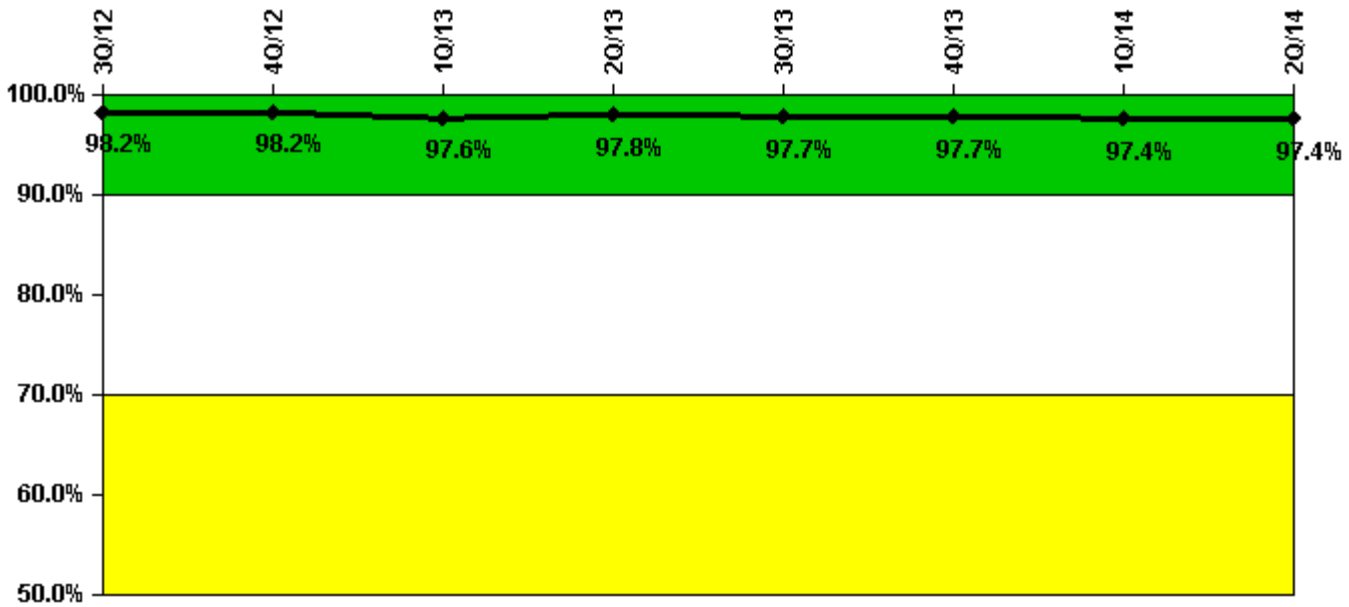
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Leakage	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13
Maximum leakage	0.049	0.050	0.057	0.046	0.049	0.040	0.041	0.029	0.067	0.006	0.047	0.050
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	0.5	0.5	0.6	0.5	0.5	0.4	0.4	0.3	0.7	0.1	0.5	0.5
Reactor Coolant System Leakage	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14	4/14	5/14	6/14
Maximum leakage	0.048	0.050	0.040	0.022	0.029	0.037	0.025	0.051	0.042	0.028	0.033	0.065
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	0.5	0.5	0.4	0.2	0.3	0.4	0.3	0.5	0.4	0.3	0.3	0.7

Licensee Comments: none

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

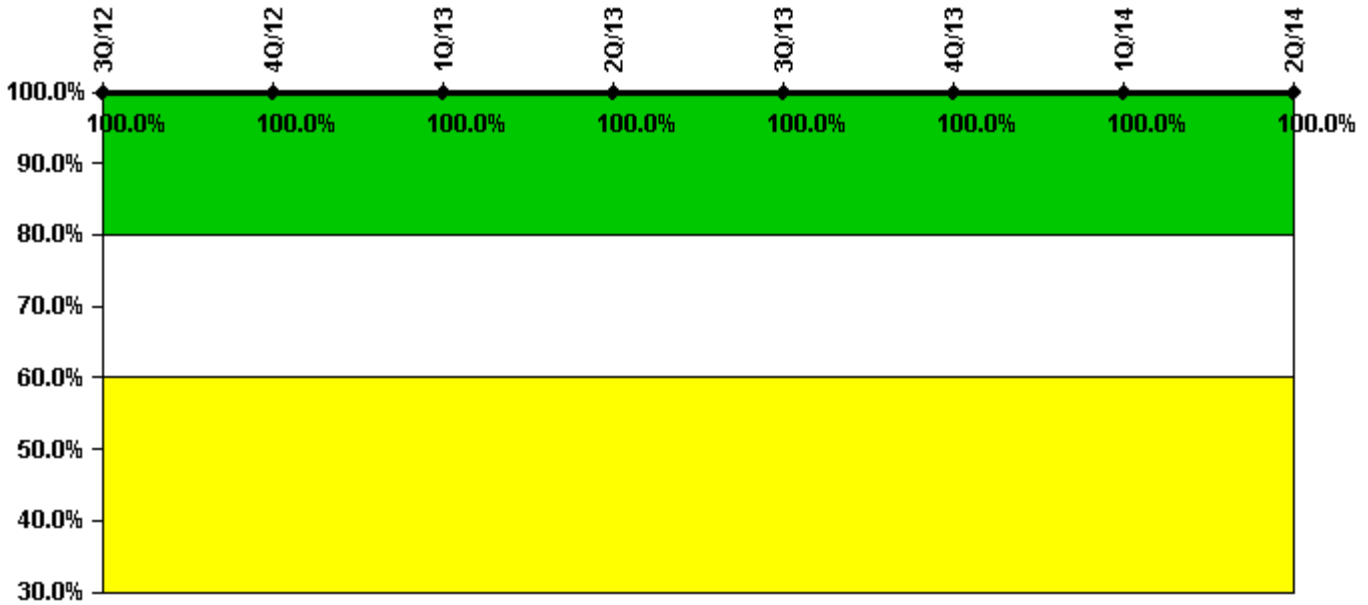
Drill/Exercise Performance	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Successful opportunities	182.0	2.0	35.0	52.0	77.0	83.0	83.0	14.0
Total opportunities	187.0	2.0	39.0	52.0	78.0	85.0	85.0	14.0
Indicator value	98.2%	98.2%	97.6%	97.8%	97.7%	97.7%	97.4%	97.4%

#### Licensee Comments:

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.

3Q/12: Drill and exercise successes and opportunities were corrected for September 2012. No color change resulted.

### ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

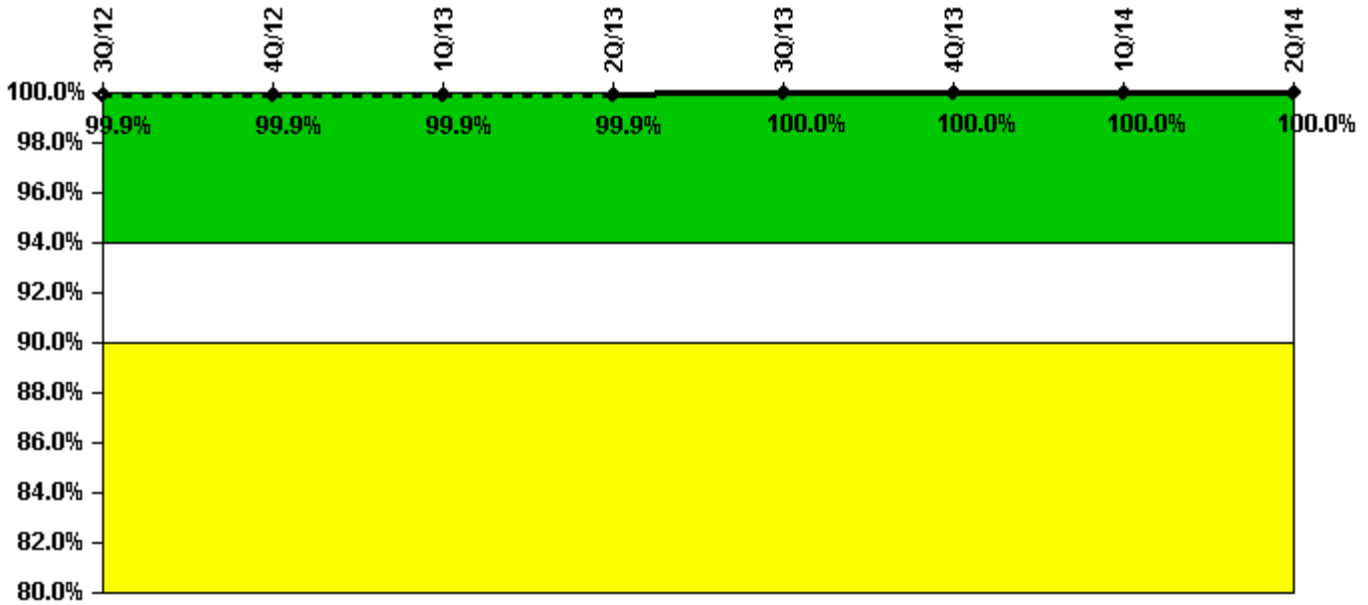
#### Notes

ERO Drill Participation	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Participating Key personnel	95.0	90.0	90.0	87.0	89.0	98.0	94.0	92.0
Total Key personnel	95.0	90.0	90.0	87.0	89.0	98.0	94.0	92.0
<b>Indicator value</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Licensee Comments:

1Q/13: Total number of key and participating personnel for March 2013 were corrected, no change in result or color.

### Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

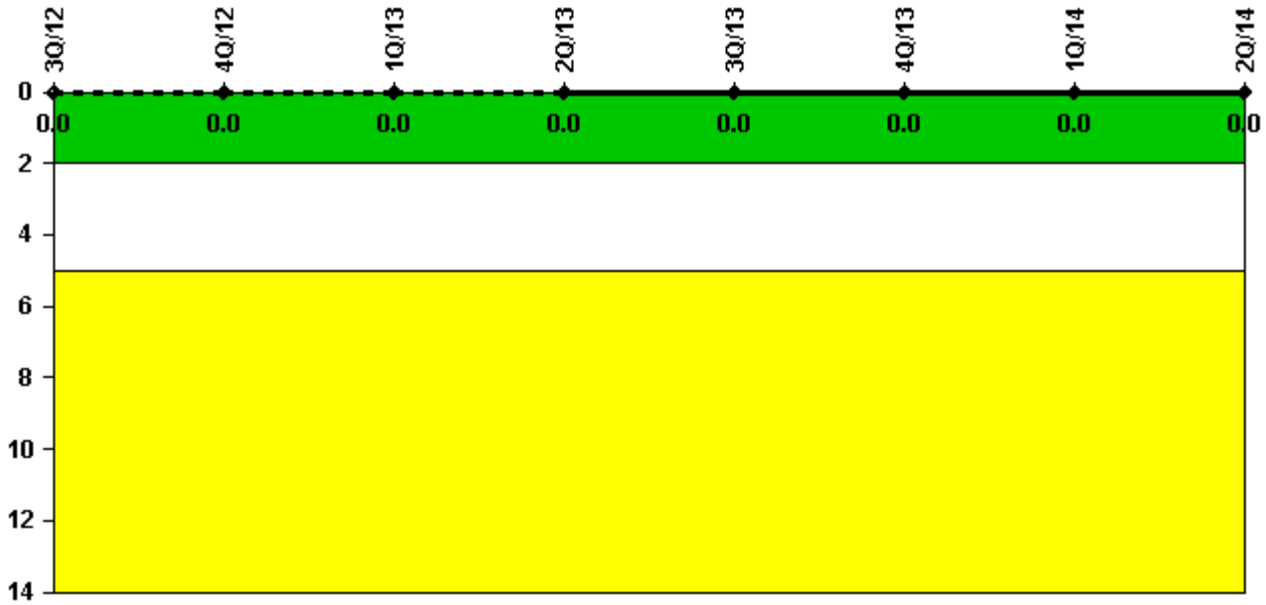
Alert & Notification System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Successful siren-tests	911	1007	864	912	912	1008	912	912
Total sirens-tests	912	1008	864	912	912	1008	912	912
Indicator value	99.9%	99.9%	99.9%	99.9%	100.0%	100.0%	100.0%	100.0%

Licensee Comments:

1Q/13: Comment and data correction: One scheduled test from the Maricopa County Sherriff's Office ANS station was not completed in February 2013 and data was incorrectly tabulated. No color change.

1Q/13: Two scheduled tests from the Maricopa County Sherriff's Office ANS station were not completed in February 2013.

### Occupational Exposure Control Effectiveness



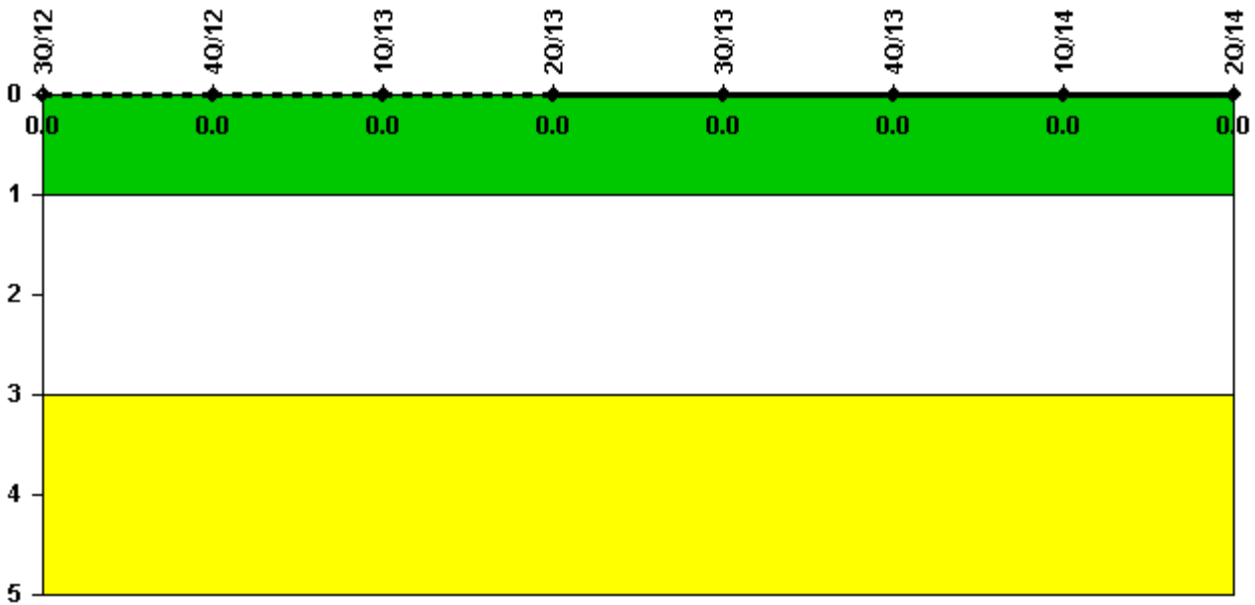
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
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	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
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: July 31, 2014*