

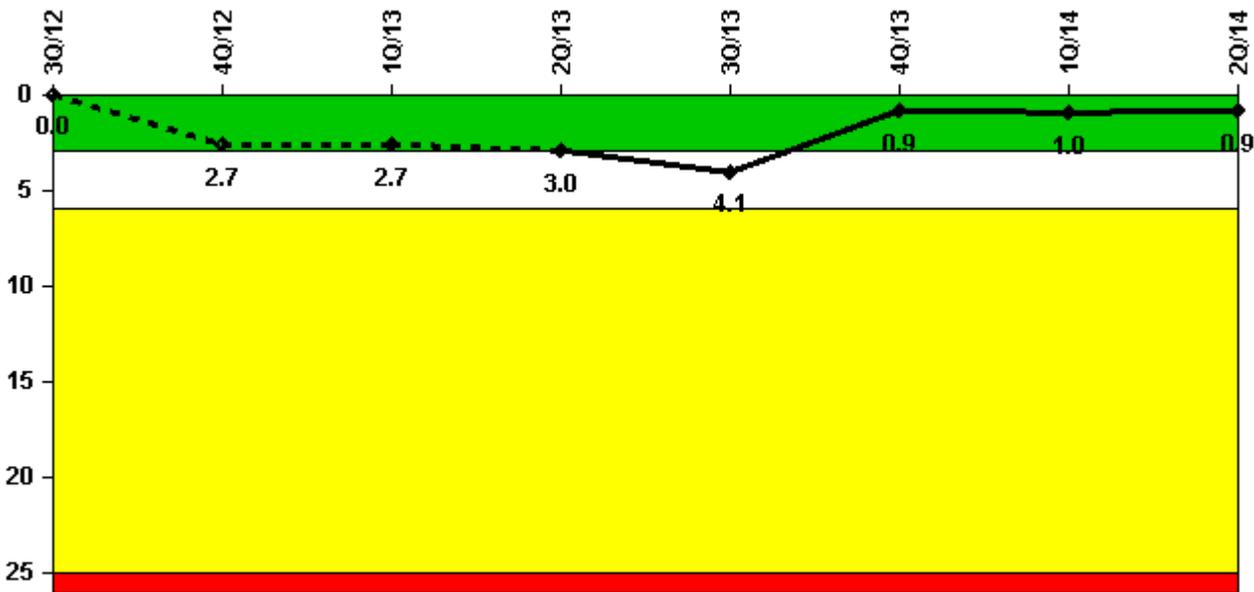
Susquehanna 2

2Q/2014 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: The SSES PRA Model was approved on January 20, 2014, which marks the release of the new PRA model of record. The corresponding MSPI Basis Document was approved on March 20, 2014. The PRA model revision was a full data update including data, events, HRA, and systems. As a result of the PRA model change, the CDF, Fussel-Vesely and Basic Event Probabilities for all monitored trains and components were revised. The revised values were incorporated into CDE effective as of Second Quarter, 2014. The values of all MSPI coefficients have been modified to coordinate with the results of the new PRA model.

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

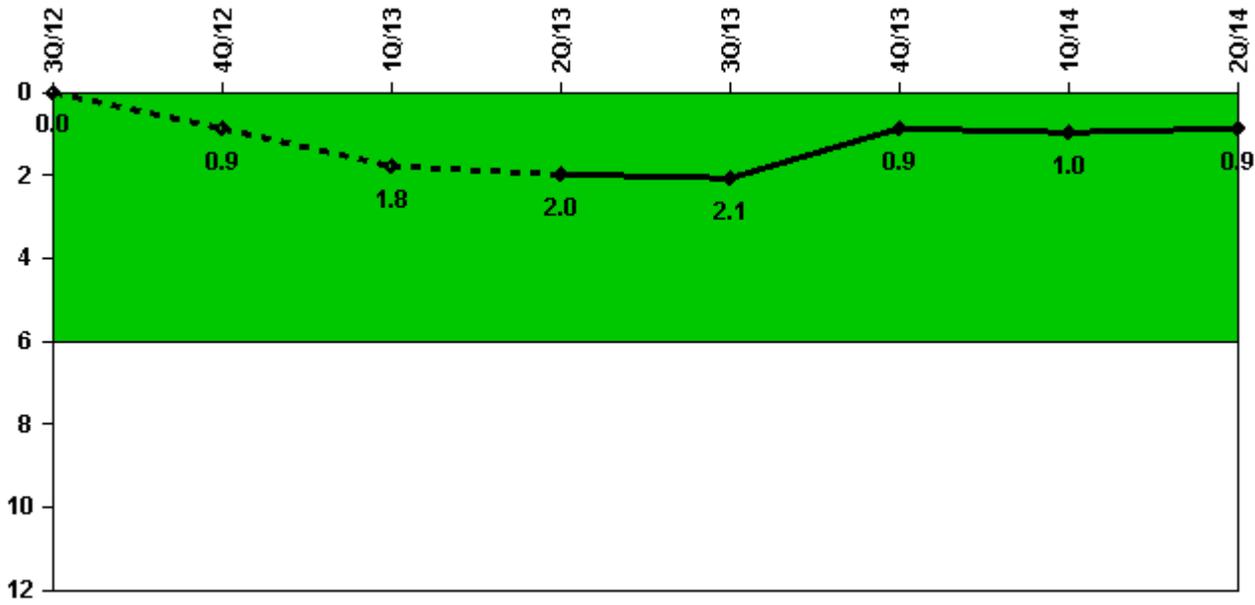
Unplanned Scrams per 7000 Critical Hrs	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Unplanned scrams	0	3.0	0	0	1.0	0	0	0
Critical hours	2208.0	1562.3	2159.0	1093.3	1996.6	2209.0	1714.3	2051.6
Indicator value	0	2.7	2.7	3.0	4.1	0.9	1.0	0.9

Licensee Comments:

3Q/13: Within the last four quarters, Susquehanna Unit 2 has experienced four reactor scrams. These events

cause the NRC IE01 Unplanned Scrams per 7000 Critical Hours PI to cross the GREEN/WHITE threshold. A White PI has low to moderate safety significance.

Unplanned Power Changes per 7000 Critical Hrs



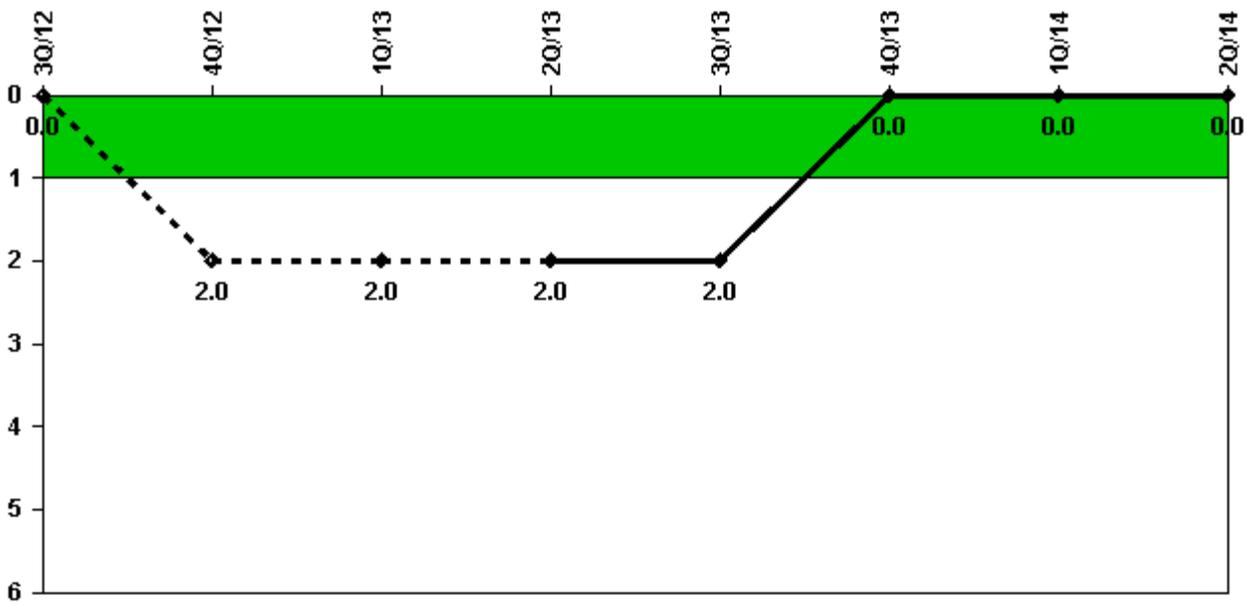
Thresholds: White > 6.0

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	1.0	1.0	0	0	0	1.0	0
Critical hours	2208.0	1562.3	2159.0	1093.3	1996.6	2209.0	1714.3	2051.6
Indicator value	0	0.9	1.8	2.0	2.1	0.9	1.0	0.9

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	2.0	0	0	0	0	0	0
Indicator value	0.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0

Licensee Comments:

3Q/13: The 4th quarter 2012 Unplanned Scrams with Complications PI (IE04) was changed by a mid-quarter report from one to two USwC. After further review, the December 16, 2012 Unit 2 scram was determined to be a USwC in accordance with the regulatory guidance documents because it required re-entry into an Emergency Operating Procedure (EOP) after the scram had occurred . This additional USwC during the current 12 month period caused the color of the USwC PI to change from Green to White. A White PI has low to moderate safety significance.

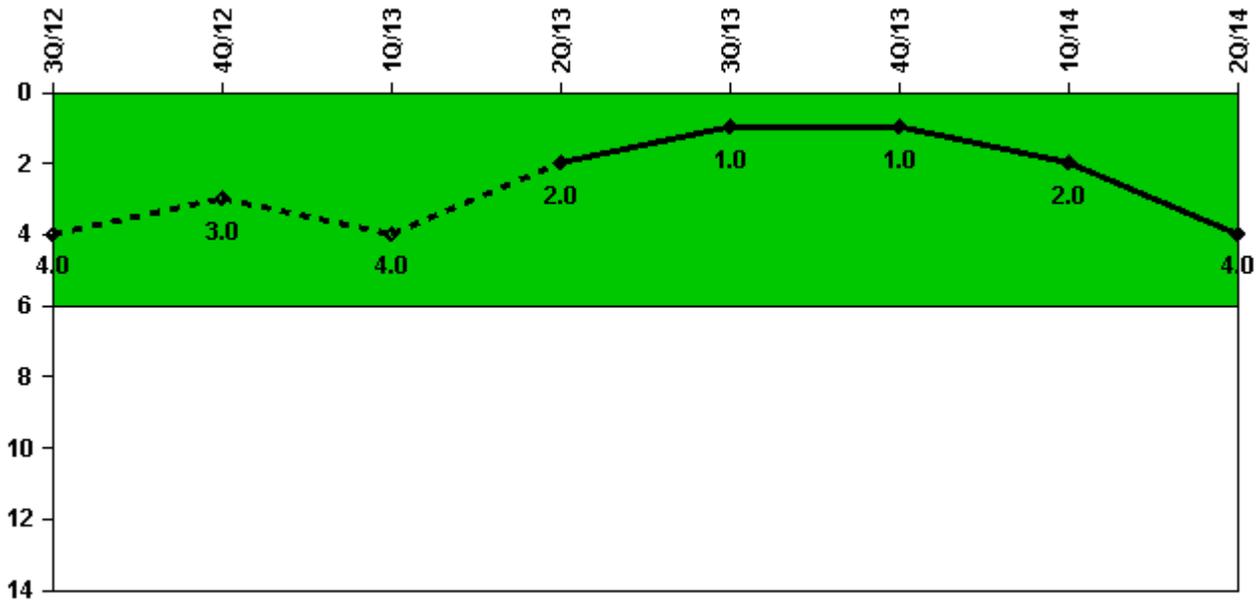
2Q/13: The 4th quarter 2012 Unplanned Scrams with Complications PI (IE04) was changed by a mid-quarter report from one to two USwC. After further review, the December 16, 2012 Unit 2 scram was determined to be a USwC in accordance with the regulatory guidance documents because it required re-entry into an Emergency Operating Procedure (EOP) after the scram had occurred . This additional USwC during the current 12 month period caused the color of the USwC PI to change from Green to White. A White PI has low to moderate safety significance.

1Q/13: The 4th quarter 2012 Unplanned Scrams with Complications PI (IE04) was changed by a mid-quarter report from one to two USwC. After further review, the December 16, 2012 Unit 2 scram was determined to be a USwC in accordance with the regulatory guidance documents because it required re-entry into an Emergency Operating Procedure (EOP) after the scram had occurred . This additional USwC during the current 12 month

period caused the color of the USwC PI to change from Green to White. A White PI has low to moderate safety significance.

4Q/12: The Susquehanna Unit 2 Unplanned Scrams with Complications (USwC, IE-04) PI data previously reported for the 4th quarter 2012 is being changed by this mid-quarter report from one to two USwC. After further review, the December 16, 2012 Unit 2 scram was determined to be a USwC in accordance with the regulatory guidance documents because it required re-entry into an Emergency Operating Procedure (EOP) after the scram had occurred . This additional USwC during the current 12 month period caused the color of the USwC PI (IE-04) to change from Green to White. A White PI has low to moderate safety significance.

Safety System Functional Failures (BWR)



Thresholds: White > 6.0

Notes

Safety System Functional Failures (BWR)	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Safety System Functional Failures	1	0	1	0	0	0	2	2
Indicator value	4	3	4	2	1	1	2	4

Licensee Comments:

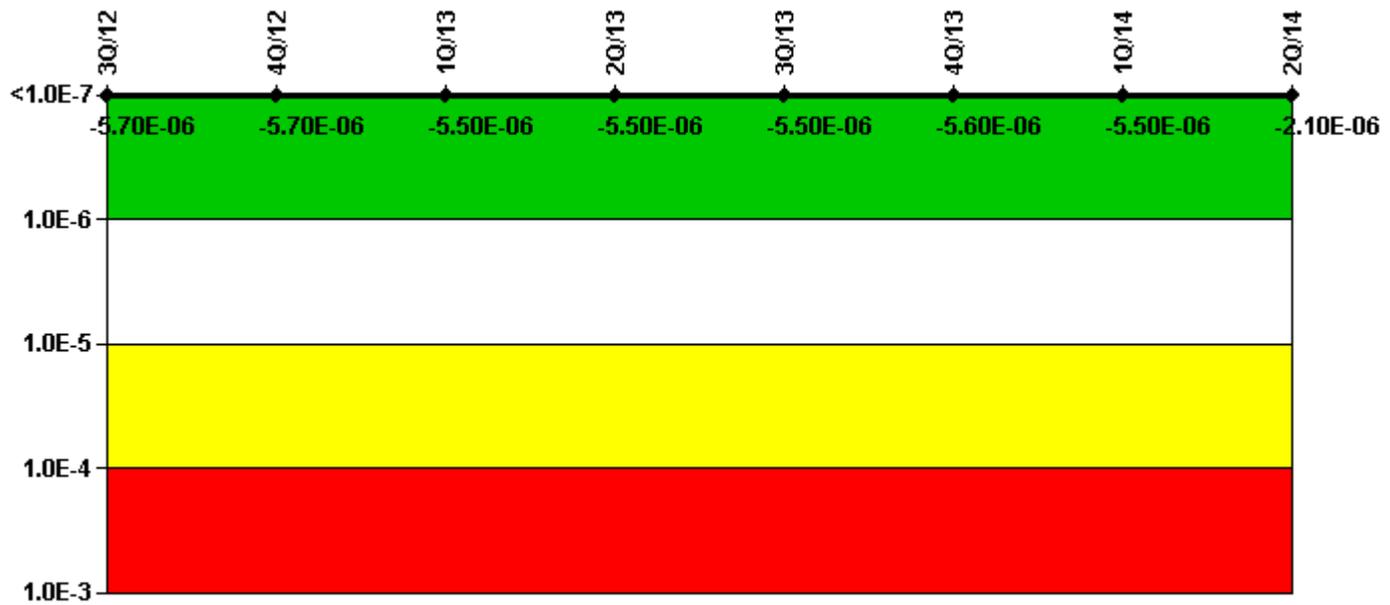
2Q/14: LER 387(388) 2014-002-00: Secondary Containment Door Found Ajar; Submitted on April 9, 2014
 LER387(388) 2014-003-00: Loss of Secondary Containment During TS SR 3.6.4.1.5 Drawdown Testing; Submitted on May 1, 2014

1Q/14: LER 387/2013-007-00:Loss of Secondary Containment due to drawdown test failure, submitted on January 21, 2014

1Q/13: LER 387/2012-010-00:Both Trains of Control Structure HVAC at Susquehanna Were Rendered Inoperable, submitted on February 12, 2013

3Q/12: LER 388/2012-001-00, "Two Control Room Floor Cooling Systems Inoperable" was submitted to the NRC on July 9, 2012.

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 (ΔCDF)	1.79E-07	1.83E-07	1.99E-07	2.09E-07	2.14E-07	2.14E-07	2.07E-07	4.80E-08
URI (ΔCDF)	-5.90E-06	-5.84E-06	-5.75E-06	-5.71E-06	-5.76E-06	-5.78E-06	-5.69E-06	-2.17E-06
PLE	NO							
Indicator value	-5.70E-06	-5.70E-06	-5.50E-06	-5.50E-06	-5.50E-06	-5.60E-06	-5.50E-06	-2.10E-06

Licensee Comments:

2Q/14: Risk Cap Invoked.

1Q/14: Risk Cap Invoked.

4Q/13: Risk Cap Invoked.

3Q/13: Risk Cap Invoked.

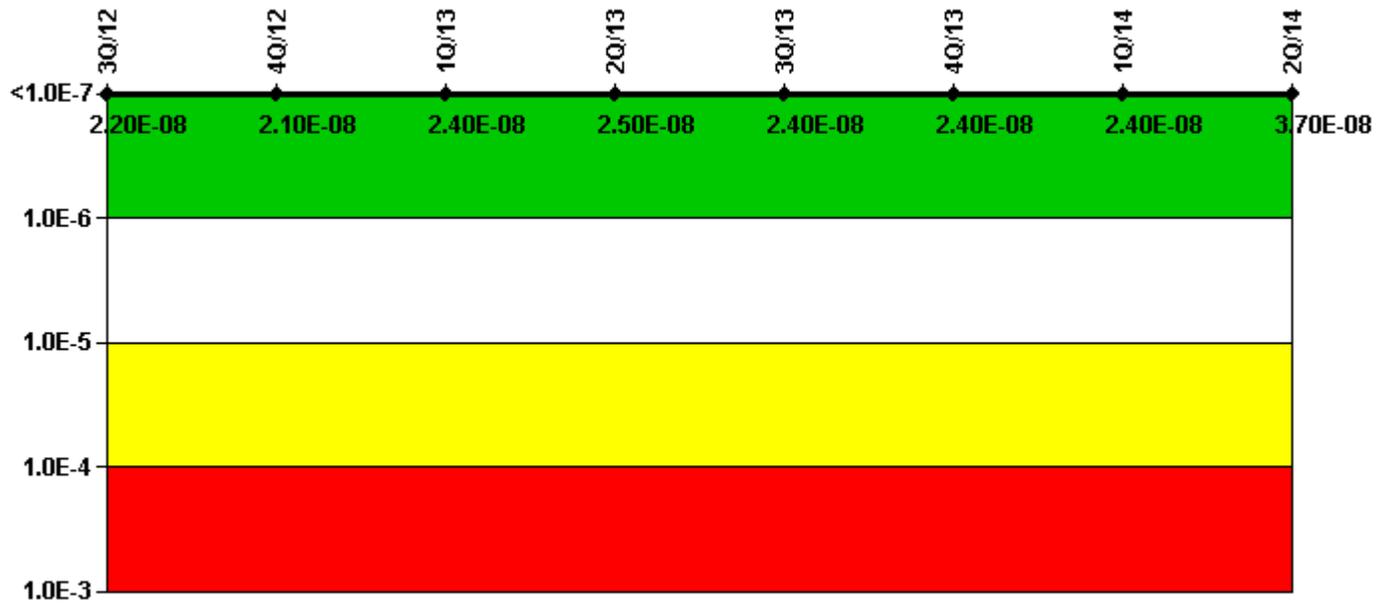
2Q/13: Risk Cap Invoked.

1Q/13: Risk Cap Invoked.

4Q/12: Risk Cap Invoked.

3Q/12: Risk Cap Invoked.

Mitigating Systems Performance Index, High Pressure Injection System



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

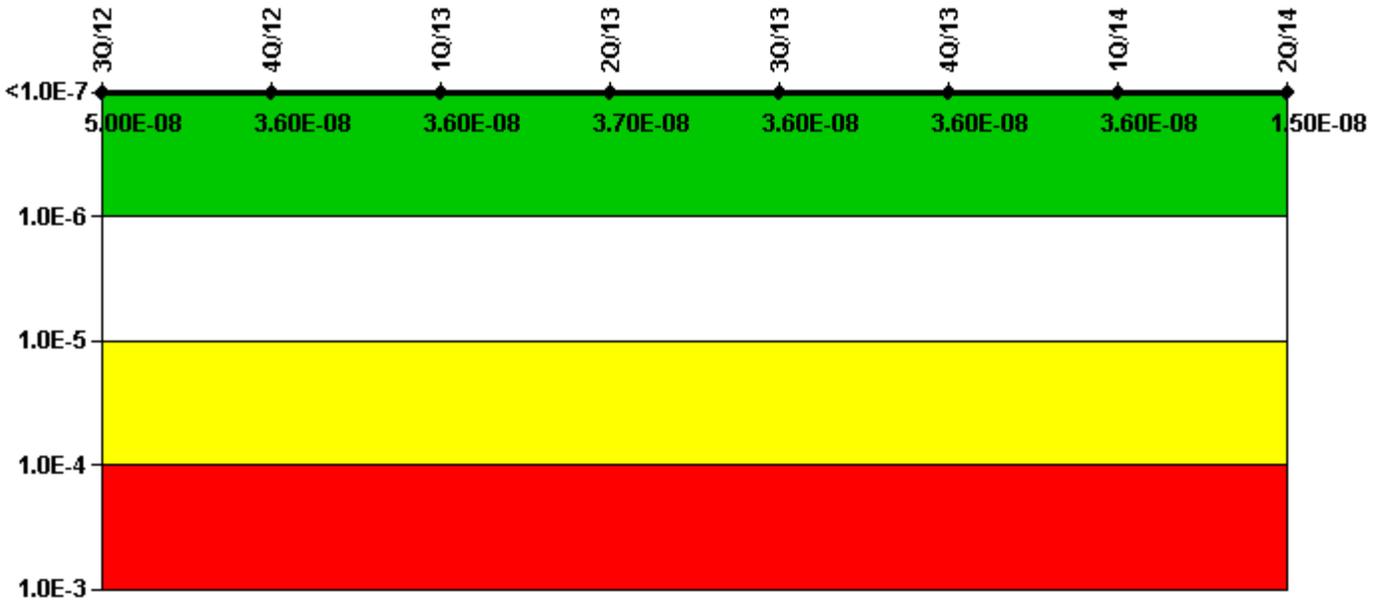
Notes

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 (ΔCDF)	1.52E-09	1.68E-09	5.02E-09	5.45E-09	5.54E-09	5.54E-09	5.74E-09	7.02E-09
URI (ΔCDF)	2.07E-08	1.91E-08	1.91E-08	1.91E-08	1.83E-08	1.83E-08	1.84E-08	3.03E-08
PLE	NO							

Indicator value	2.20E-08	2.10E-08	2.40E-08	2.50E-08	2.40E-08	2.40E-08	2.40E-08	3.70E-08
-----------------	----------	----------	----------	----------	----------	----------	----------	----------

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



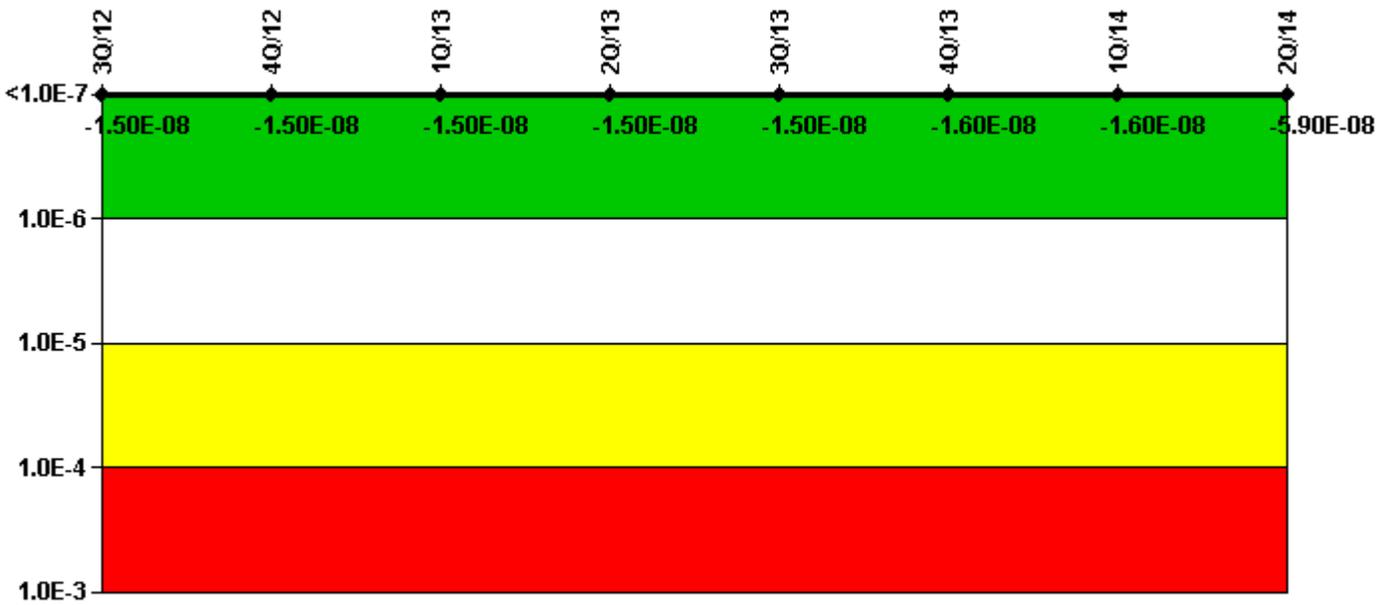
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

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 (Δ CDF)	3.04E-09	3.23E-09	3.23E-09	3.57E-09	3.64E-09	3.64E-09	3.79E-09	-1.82E-09
URI (Δ CDF)	4.71E-08	3.32E-08	3.32E-08	3.32E-08	3.24E-08	3.24E-08	3.24E-08	1.68E-08
PLE	NO							
Indicator value	5.00E-08	3.60E-08	3.60E-08	3.70E-08	3.60E-08	3.60E-08	3.60E-08	1.50E-08

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



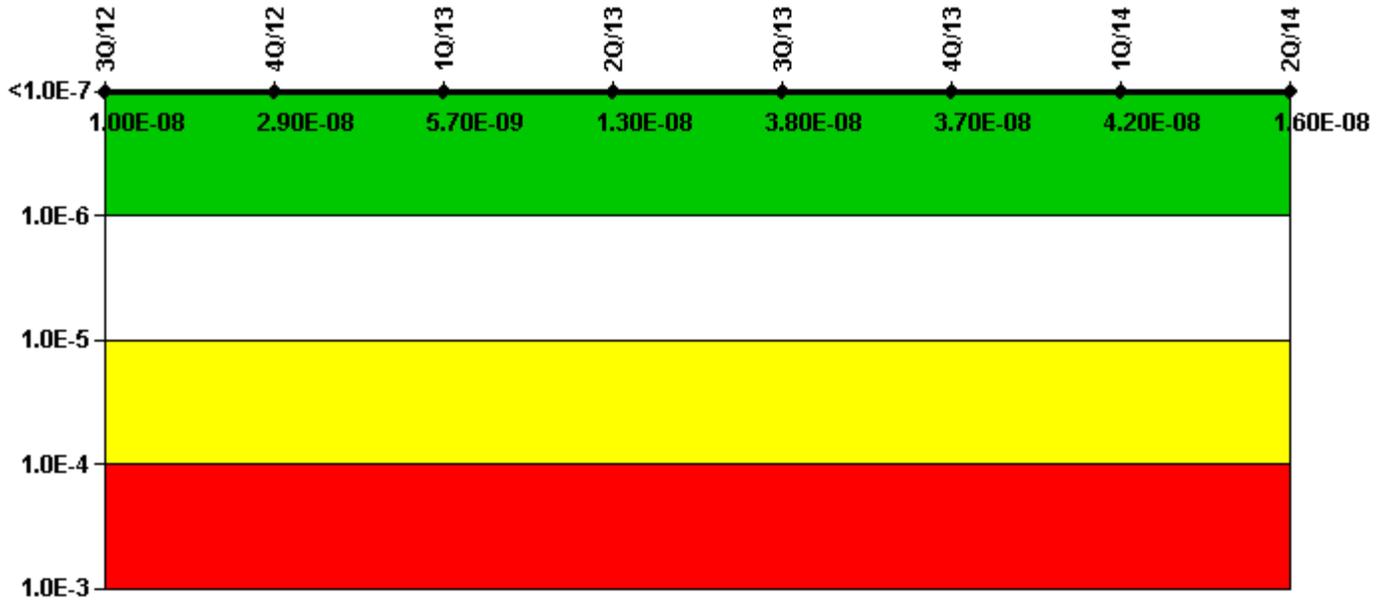
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
UAI (Δ CDF)	3.73E-10	1.25E-09	1.75E-09	1.93E-09	1.67E-09	1.38E-09	1.02E-09	5.05E-09
URI (Δ CDF)	-1.56E-08	-1.64E-08	-1.65E-08	-1.72E-08	-1.71E-08	-1.69E-08	-1.72E-08	-6.40E-08
PLE	NO							
Indicator value	-1.50E-08	-1.50E-08	-1.50E-08	-1.50E-08	-1.50E-08	-1.60E-08	-1.60E-08	-5.90E-08

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



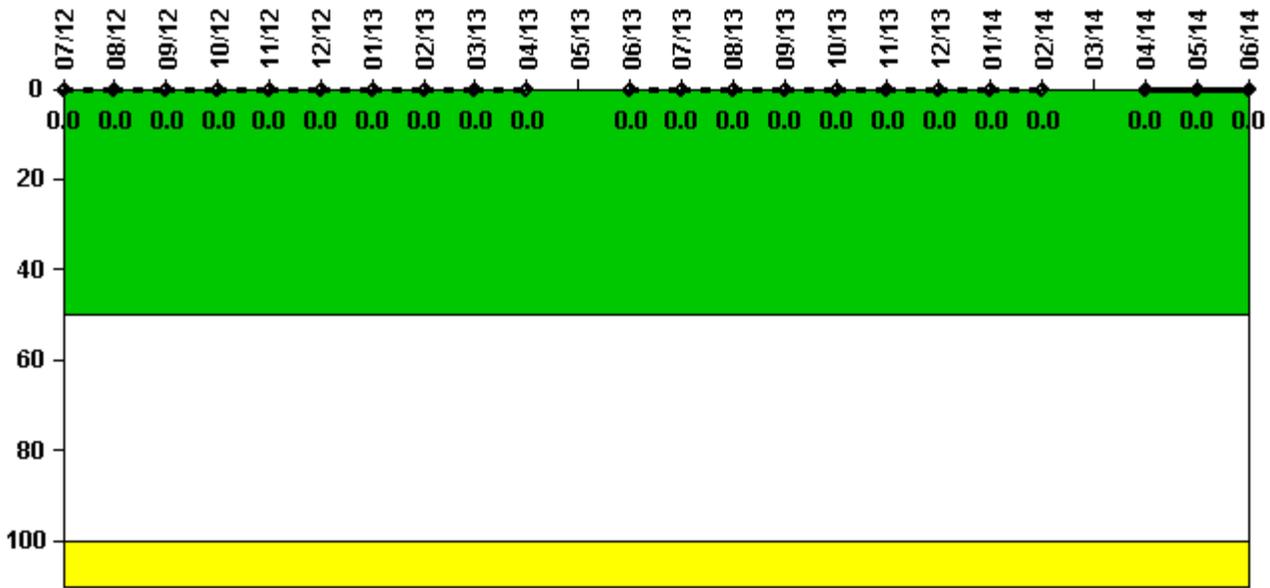
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

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 (Δ CDF)	4.01E-08	5.98E-08	3.61E-08	4.39E-08	6.92E-08	6.79E-08	7.31E-08	5.31E-08
URI (Δ CDF)	-2.99E-08	-3.04E-08	-3.04E-08	-3.07E-08	-3.10E-08	-3.11E-08	-3.12E-08	-3.72E-08
PLE	NO							
Indicator value	1.00E-08	2.90E-08	5.70E-09	1.30E-08	3.80E-08	3.70E-08	4.20E-08	1.60E-08

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

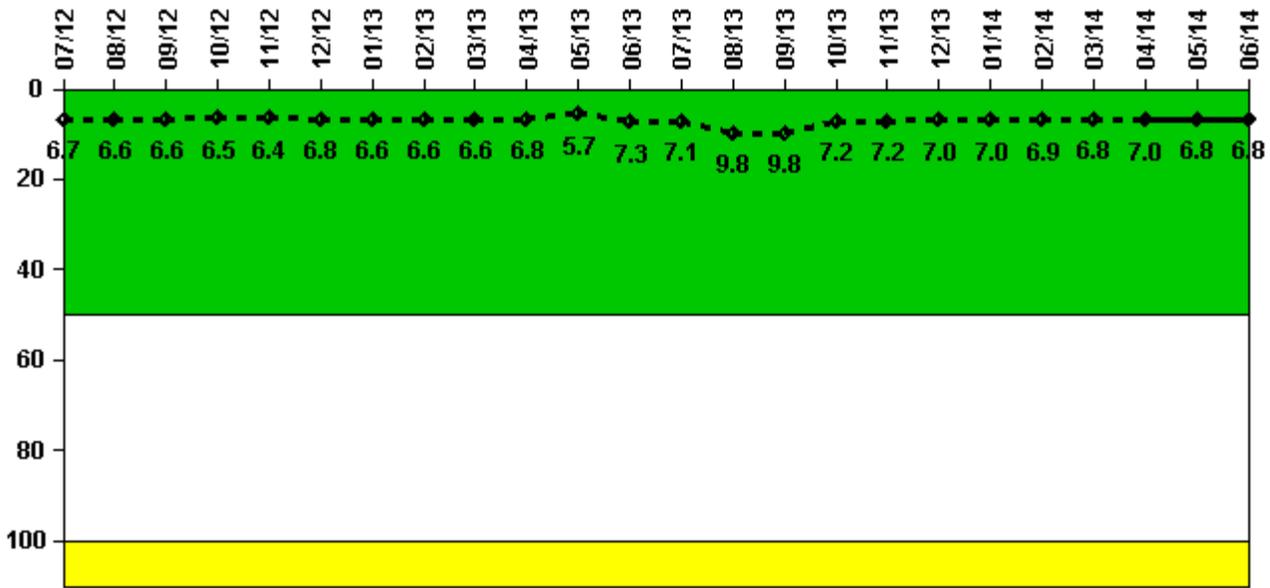
Notes

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	0.000004	0.000005	0.000006	0.000004	0.000004	0.000005	0.000005	0.000006	0.000006	0.000006	N/A	0.000004
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	N/A	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	0.000004	0.000005	0.000004	0.000005	0.000006	0.000007	0.000006	0.000007	N/A	0.000005	0.000006	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	N/A	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

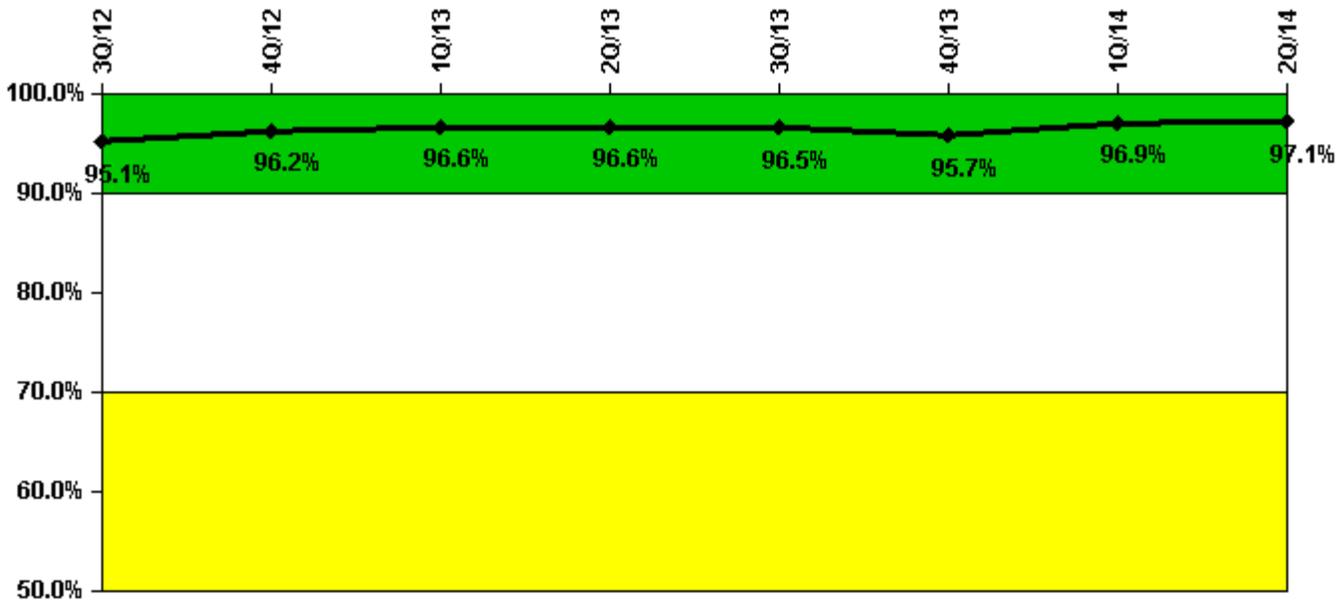
Notes

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	1.680	1.660	1.650	1.620	1.600	1.700	1.650	1.650	1.660	1.710	1.430	1.820
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	6.7	6.6	6.6	6.5	6.4	6.8	6.6	6.6	6.6	6.8	5.7	7.3
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	1.770	2.450	2.440	1.790	1.800	1.740	1.740	1.720	1.710	1.760	1.710	1.710
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	7.1	9.8	9.8	7.2	7.2	7.0	7.0	6.9	6.8	7.0	6.8	6.8

Licensee Comments:

6/13: Previously reported data for Reactor Coolant System Leakage for the months of May 2012, July 2012 and October 2012 is revised due to data entry errors. There is no safety significance associated with these changes. The PI color was green before the data revision and it remains green after the changes.

Drill/Exercise Performance



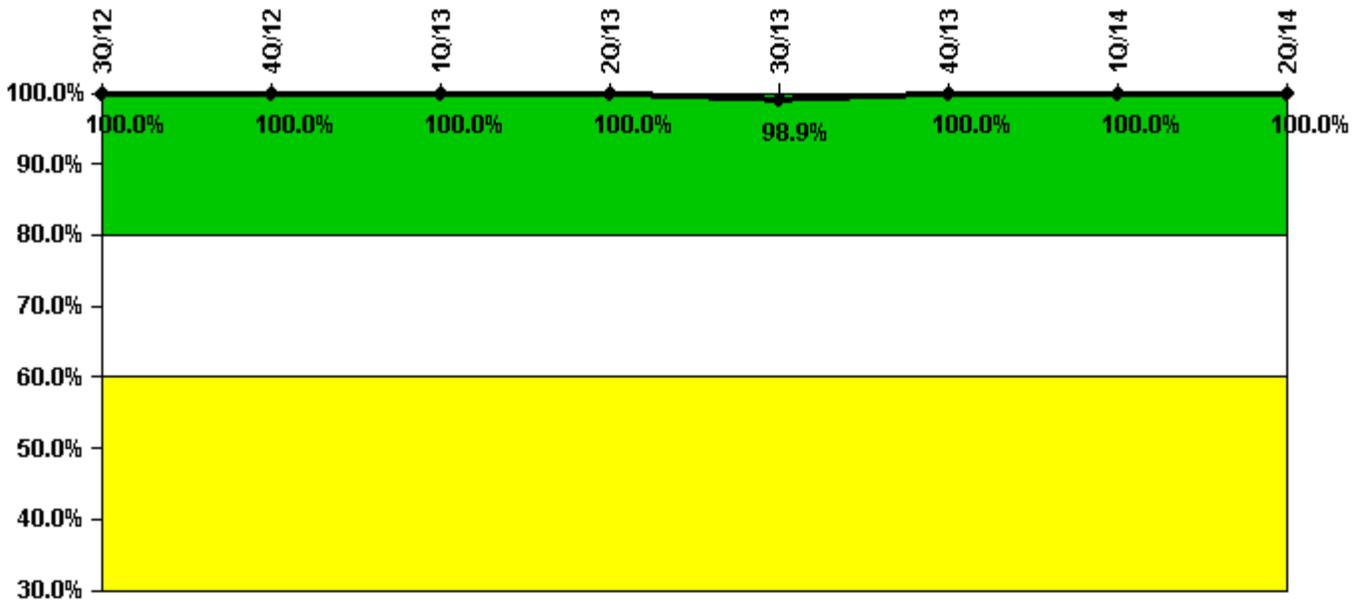
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Successful opportunities	32.0	7.0	18.0	18.0	19.0	26.0	58.0	26.0
Total opportunities	33.0	8.0	18.0	18.0	20.0	28.0	59.0	26.0
Indicator value	95.1%	96.2%	96.6%	96.6%	96.5%	95.7%	96.9%	97.1%

Licensee Comments: none

ERO Drill Participation



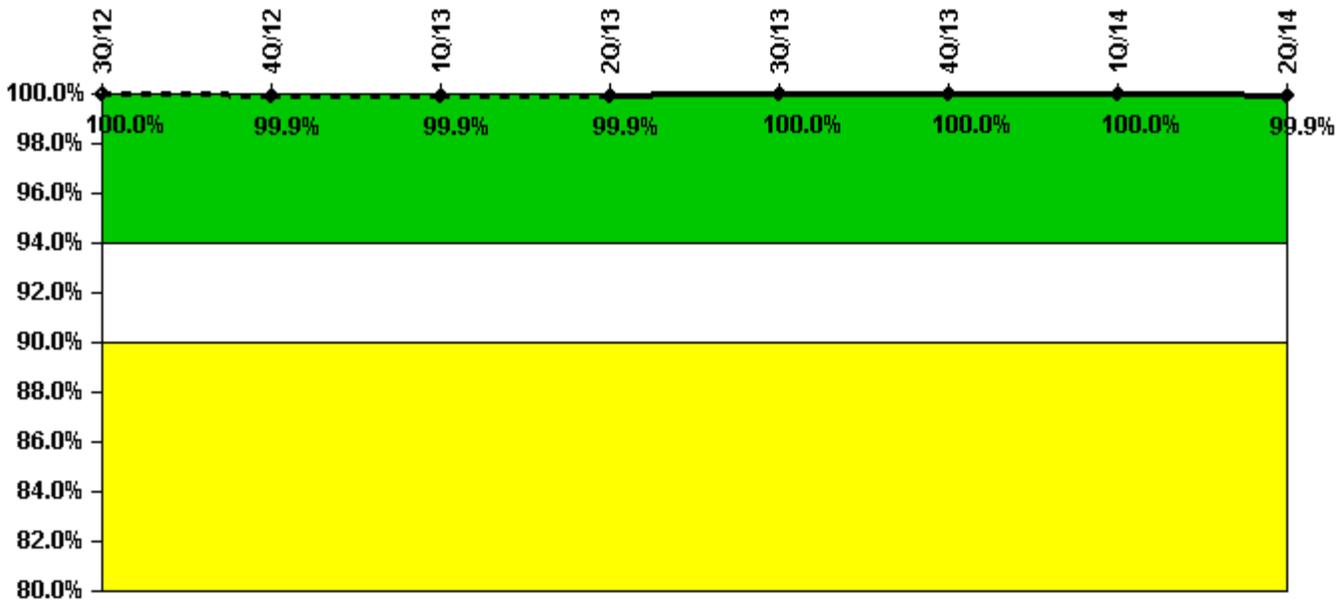
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Participating Key personnel	74.0	77.0	80.0	82.0	86.0	91.0	94.0	90.0
Total Key personnel	74.0	77.0	80.0	82.0	87.0	91.0	94.0	90.0
Indicator value	100.0%	100.0%	100.0%	100.0%	98.9%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



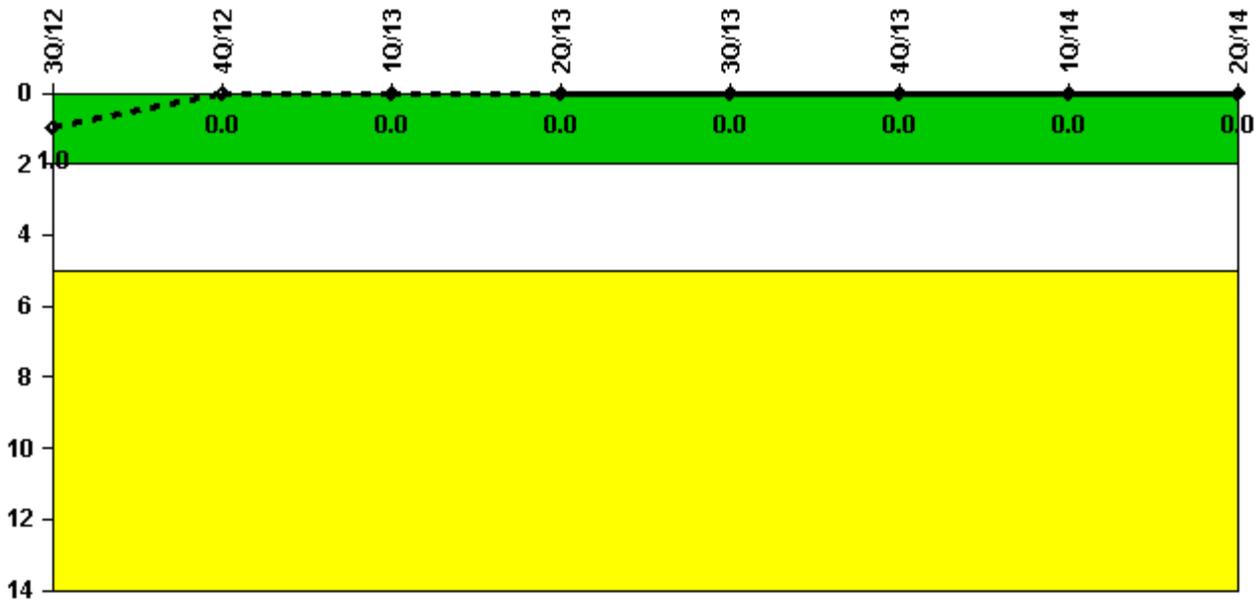
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Successful siren-tests	607	531	608	532	608	532	608	530
Total sirens-tests	608	532	608	532	608	532	608	532
Indicator value	100.0%	99.9%	99.9%	99.9%	100.0%	100.0%	100.0%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



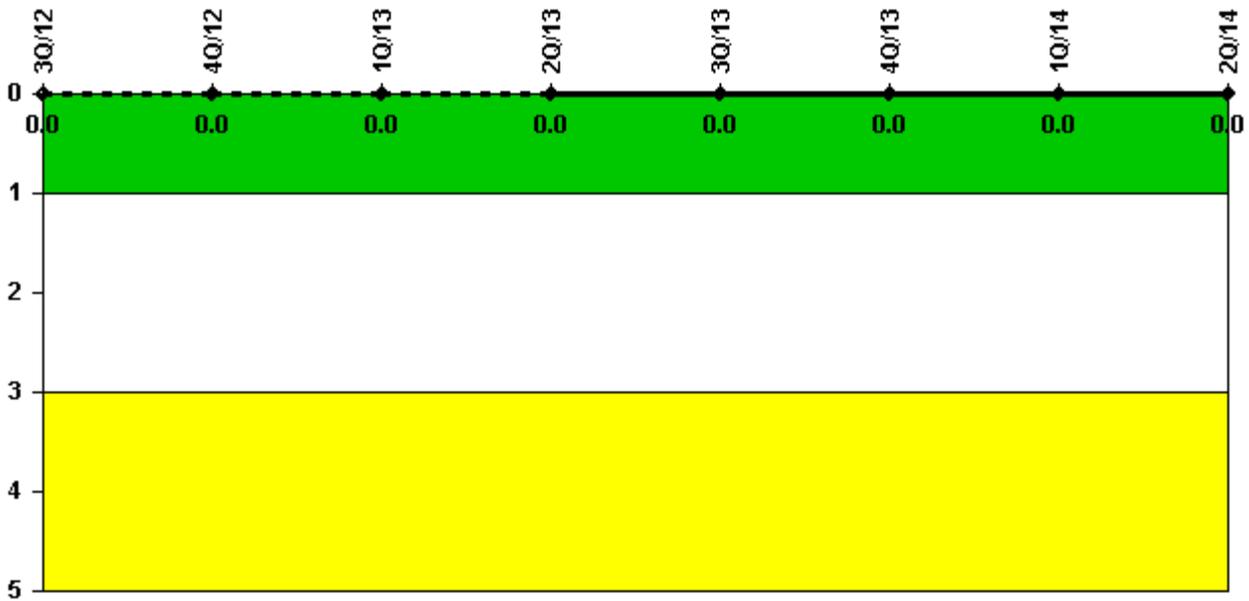
Thresholds: White > 2.0 Yellow > 5.0

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
Indicator value	1	0						

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
Indicator value	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: July 31, 2014