

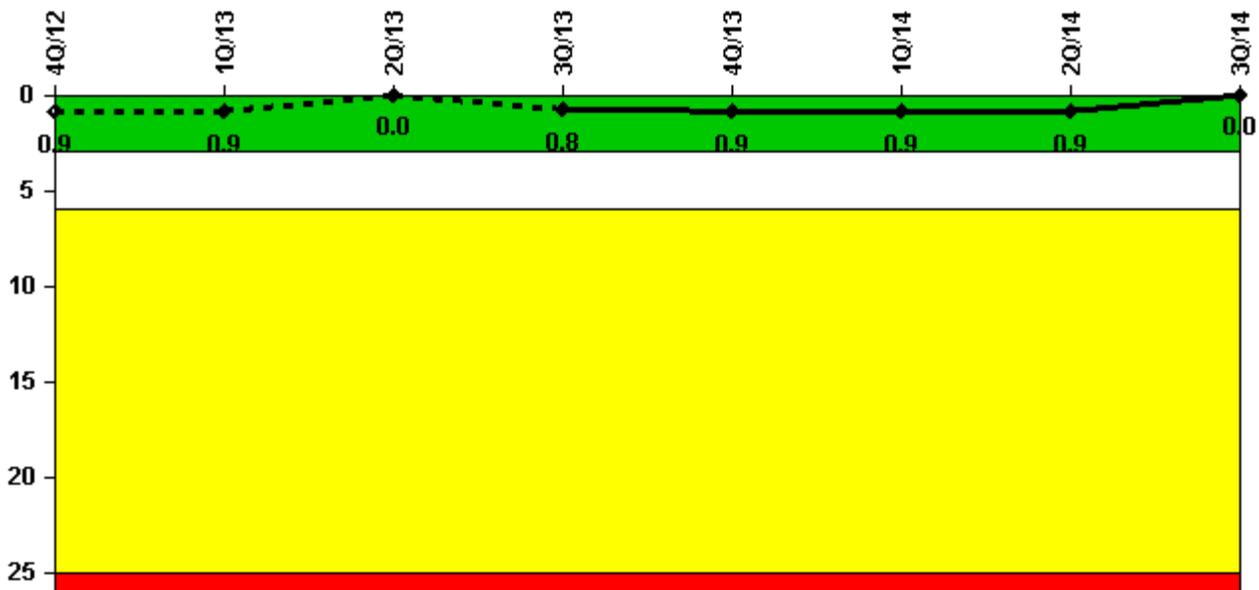
D.C. Cook 2

3Q/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

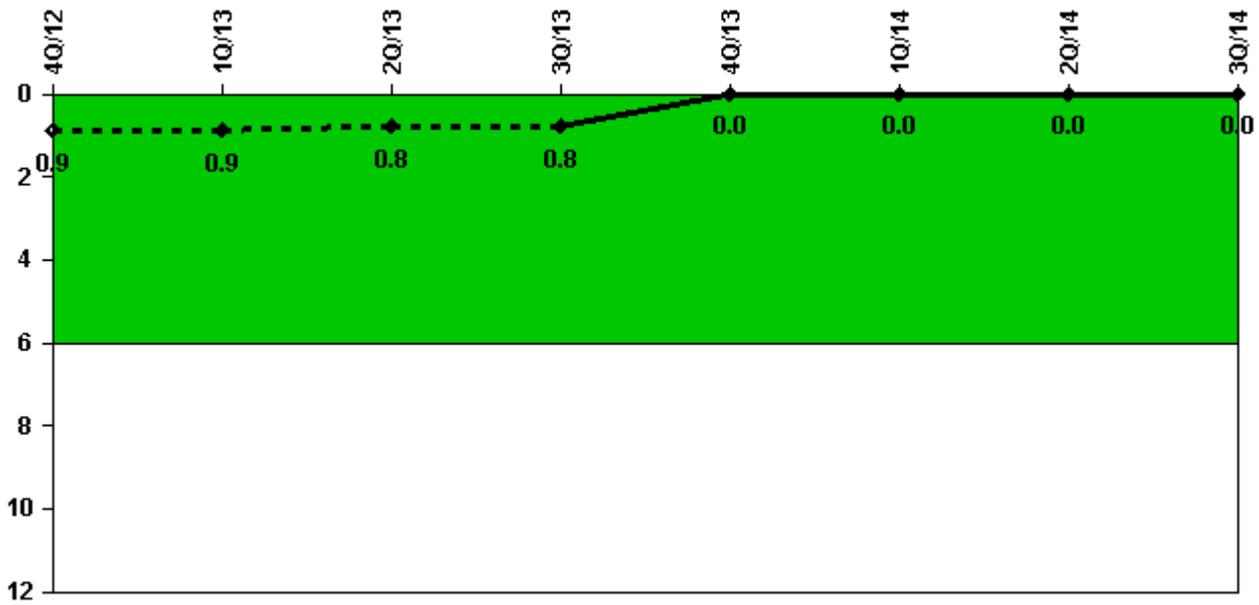
Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
Unplanned scrams	0	0	0	1.0	0	0	0	0
Critical hours	2209.0	2159.0	2184.0	2161.1	1238.6	2159.0	2184.0	2208.0
Indicator value	0.9	0.9	0	0.8	0.9	0.9	0.9	0

Licensee Comments:

3Q/13: A reactor trip due to a turbine generator trip occurred on 7/28/2013 at 1018 due to an incorrect controller setpoint on the Condensate Heater Bypass Control Valve. Subsequently, the reactor was taken critical on 7/30/2013 at 0914.

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

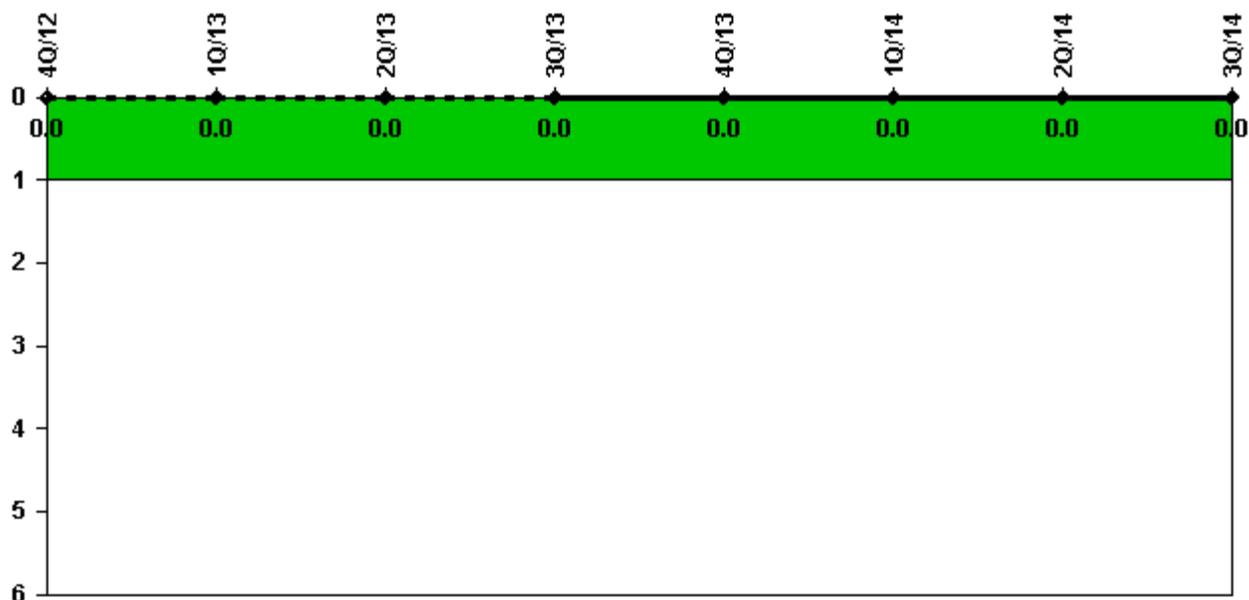
Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
Unplanned power changes	1.0	0	0	0	0	0	0	0
Critical hours	2209.0	2159.0	2184.0	2161.1	1238.6	2159.0	2184.0	2208.0
Indicator value	0.9	0.9	0.8	0.8	0	0	0	0

Licensee Comments:

4Q/12: Downpower to 19% due to 2-BLP-130, Steam Generator Narrow Range Level Transmitter, leak on 11/28/12.

Unplanned Scrams with Complications



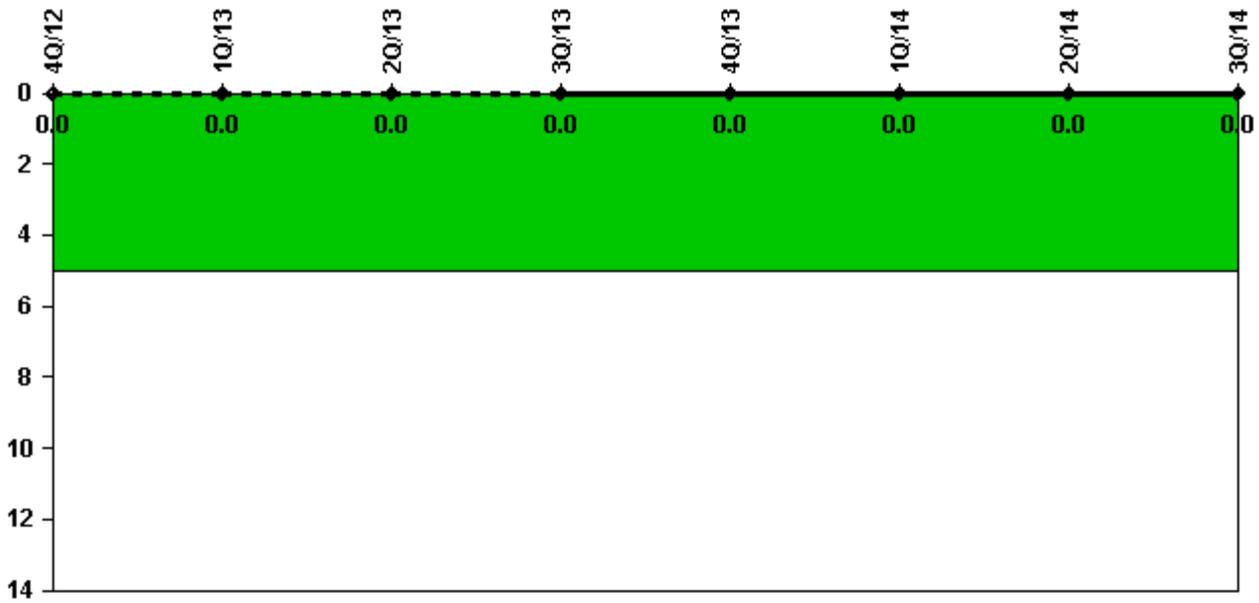
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0							

Licensee Comments: none

Safety System Functional Failures (PWR)



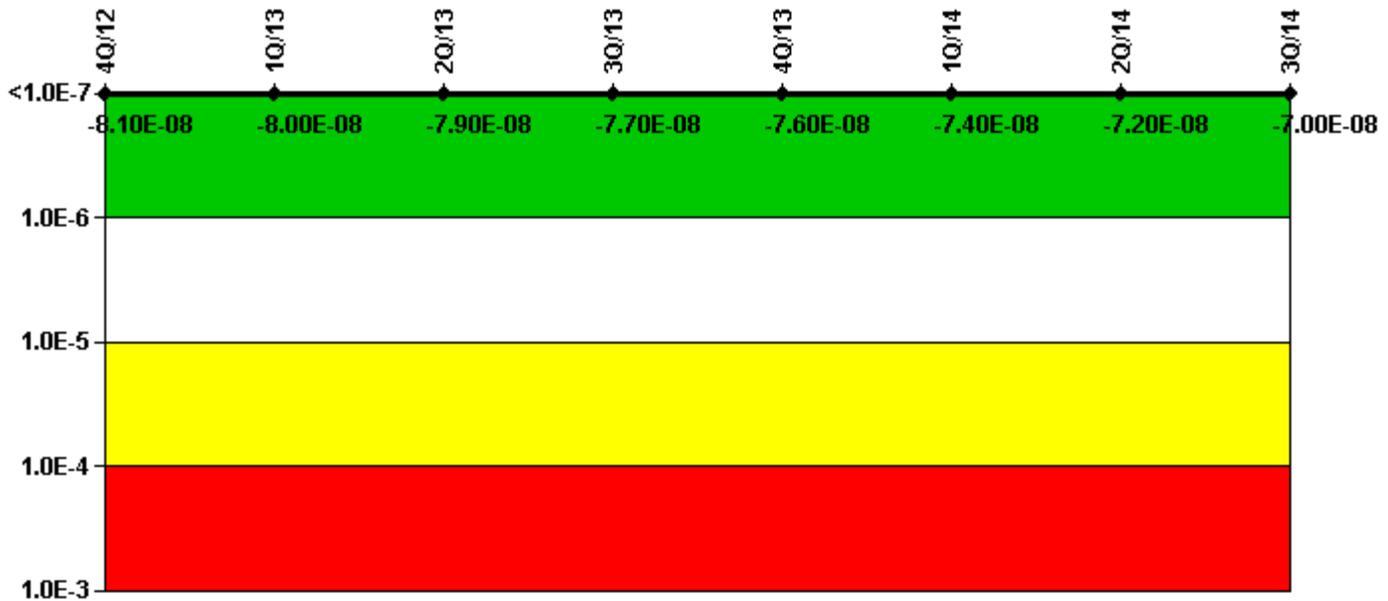
Thresholds: White > 5.0

Notes

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

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	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
UAI (Δ CDF)	-6.18E-11	-4.62E-11	-4.69E-11	-2.43E-10	-2.54E-10	-2.69E-10	2.45E-10	3.29E-10
URI (Δ CDF)	-8.14E-08	-8.00E-08	-7.86E-08	-7.71E-08	-7.56E-08	-7.41E-08	-7.25E-08	-7.00E-08
PLE	NO							
Indicator value	-8.10E-08	-8.00E-08	-7.90E-08	-7.70E-08	-7.60E-08	-7.40E-08	-7.20E-08	-7.00E-08

Licensee Comments:

1Q/14: Revised MSPI Basis Document to update Emergency Diesel Generator Load Run Test Demand estimates.

4Q/13: Revised MSPI basis document to update Emergency Diesel Generator run hour estimates to exclude the run hours associated with (1) the first hour of run time after breaker closure and (2) unloaded run hours. This change does not affect the "color" of this indicator from 1st Quarter 2012 to present.

3Q/13: Revised MSPI basis document to update Emergency Diesel Generator run hour estimates to exclude the run hours associated with (1) the first hour of run time after breaker closure and (2) unloaded run hours. This change does not affect the "color" of this indicator from 1st Quarter 2012 to present.

2Q/13: Revised MSPI basis document to update Emergency Diesel Generator run hour estimates to exclude the run hours associated with (1) the first hour of run time after breaker closure and (2) unloaded run hours. This change does not affect the "color" of this indicator from 1st Quarter 2012 to present.

1Q/13: Revised MSPI basis document to update Emergency Diesel Generator run hour estimates to exclude the run hours associated with (1) the first hour of run time after breaker closure and (2) unloaded run hours. This change does not affect the "color" of this indicator from 1st Quarter 2012 to present.

4Q/12: Revised MSPI basis document to update Emergency Diesel Generator run hour estimates to exclude the run hours associated with (1) the first hour of run time after breaker closure and (2) unloaded run hours. This change does not affect the "color" of this indicator from 1st Quarter 2012 to present.

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/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
UAI (ΔCDF)	-2.49E-11	-2.44E-11	-2.44E-11	-2.66E-11	-2.66E-11	-2.66E-11	-2.66E-11	-2.12E-11
URI (ΔCDF)	-3.82E-09	-3.82E-09	-3.82E-09	-3.82E-09	-2.54E-08	-2.54E-08	-2.54E-08	-2.39E-08
PLE	NO							
Indicator value	-3.80E-09	-3.80E-09	-3.80E-09	-3.90E-09	-2.50E-08	-2.50E-08	-2.50E-08	-2.40E-08

Licensee Comments:

2Q/14: The High Pressure Injection System MS07 data has been corrected to include an additional 16.62 hours

of unavailability for Unit 2 A East CCP Train that were not reported in the 2Q14 submittal. This data change did not result in a change to the indicator color.

3Q/13: Revised the MSPI scope of monitored components for High Pressure Safety Injection HPSI to remove two injection pathway boundary valves, which was effective 2nd Quarter 2008. MSPI Basis document excludes these valves from the MSPI scope based on Birnbaum value $< 1.0 \text{ E-06}$. The MSPI basis document was revised to make this change in the 1st Quarter 2008. This change does not affect "color" of the indicator from 2nd Quarter 2008 to present.

2Q/13: Revised the MSPI scope of monitored components for High Pressure Safety Injection HPSI to remove two injection pathway boundary valves, which was effective 2nd Quarter 2008. MSPI Basis document excludes these valves from the MSPI scope based on Birnbaum value $< 1.0 \text{ E-06}$. The MSPI basis document was revised to make this change in the 1st Quarter 2008. This change does not affect "color" of the indicator from 2nd Quarter 2008 to present.

2Q/13: Revised the MSPI scope of monitored components for High Pressure Safety Injection HPSI to remove two injection pathway boundary valves, which was effective 2nd Quarter 2008. MSPI Basis document excludes these valves from the MSPI scope based on Birnbaum value $< 1.0 \text{ E-06}$. The MSPI basis document was revised to make this change in the 1st Quarter 2008. This change does not affect "color" of the indicator from 2nd Quarter 2008 to present.

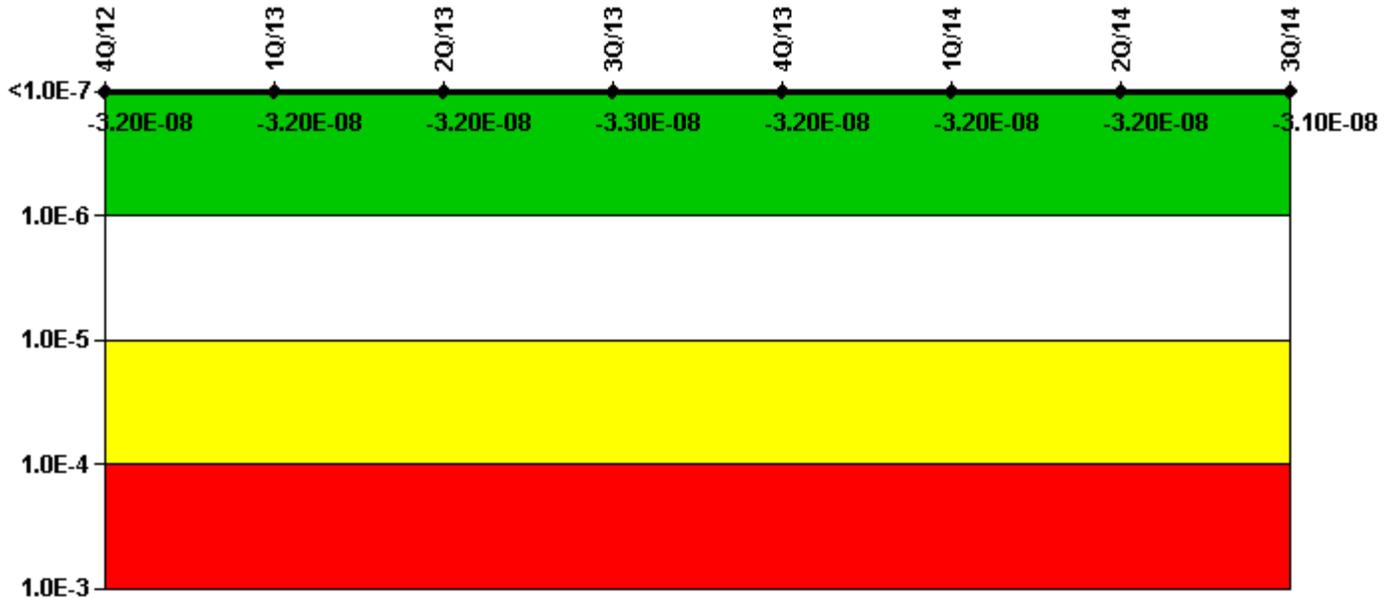
1Q/13: The High Pressure Injection System MS07 data has been corrected to include additional unavailability hours that were not reported in the 1Q13 submittal. An additional 2.07 hours of unavailability in February 2013 were counted for Unit 2 A North SI Train and B West CCP Train. These changes did not result in a change in indicator color.

1Q/13: Revised the MSPI scope of monitored components for High Pressure Safety Injection HPSI to remove two injection pathway boundary valves, which was effective 2nd Quarter 2008. MSPI Basis document excludes these valves from the MSPI scope based on Birnbaum value $< 1.0 \text{ E-06}$. The MSPI basis document was revised to make this change in the 1st Quarter 2008. This change does not affect "color" of the indicator from 2nd Quarter 2008 to present.

4Q/12: Revised the MSPI scope of monitored components for High Pressure Safety Injection HPSI to remove two injection pathway boundary valves, which was effective 2nd Quarter 2008. MSPI Basis document excludes these valves from the MSPI scope based on Birnbaum value $< 1.0 \text{ E-06}$. The MSPI basis document was revised to make this change in the 1st Quarter 2008. This change does not affect "color" of the indicator from 2nd Quarter 2008 to present.

4Q/12: Revised the MSPI scope of monitored components for High Pressure Safety Injection HPSI to remove two injection pathway boundary valves, which was effective 2nd Quarter 2008. MSPI Basis document excludes these valves from the MSPI scope based on Birnbaum value $< 1.0 \text{ E-06}$. The MSPI basis document was revised to make this change in the 1st Quarter 2008. This change does not affect "color" of the indicator from 2nd Quarter 2008 to present.

Mitigating Systems Performance Index, Heat Removal System



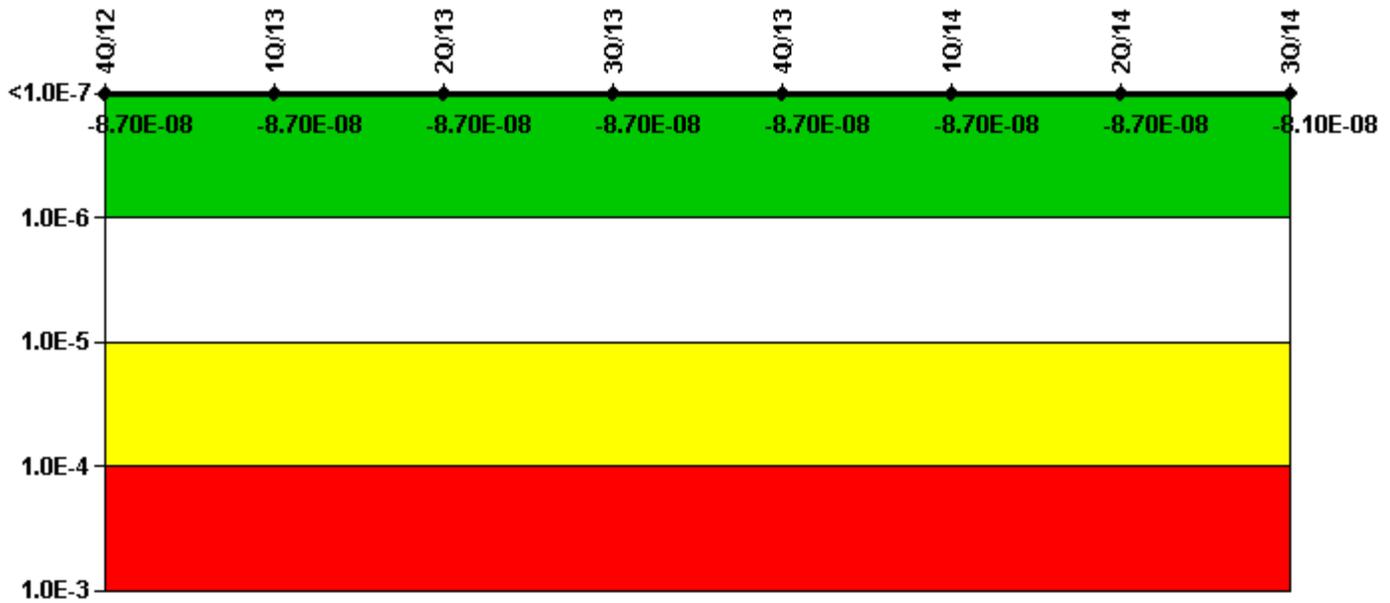
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
UAI (Δ CDF)	-7.22E-12	-9.86E-12	-9.86E-12	-1.28E-11	-1.34E-11	-1.34E-11	8.06E-12	1.64E-11
URI (Δ CDF)	-3.20E-08	-3.20E-08	-3.20E-08	-3.30E-08	-3.23E-08	-3.23E-08	-3.23E-08	-3.15E-08
PLE	NO							
Indicator value	-3.20E-08	-3.20E-08	-3.20E-08	-3.30E-08	-3.20E-08	-3.20E-08	-3.20E-08	-3.10E-08

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



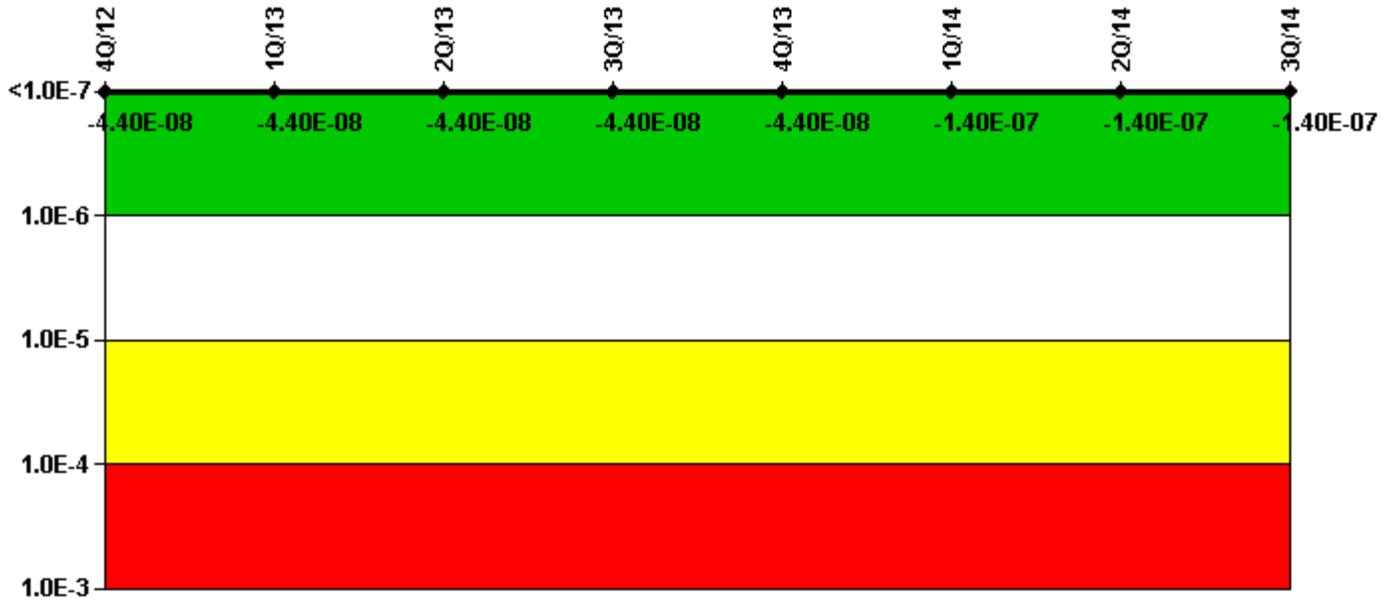
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
UAI (Δ CDF)	-2.07E-13	-2.07E-13	-3.23E-13	-3.23E-13	-3.23E-13	-3.23E-13	-2.16E-13	7.55E-13
URI (Δ CDF)	-8.69E-08	-8.12E-08						
PLE	NO							
Indicator value	-8.70E-08	-8.10E-08						

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



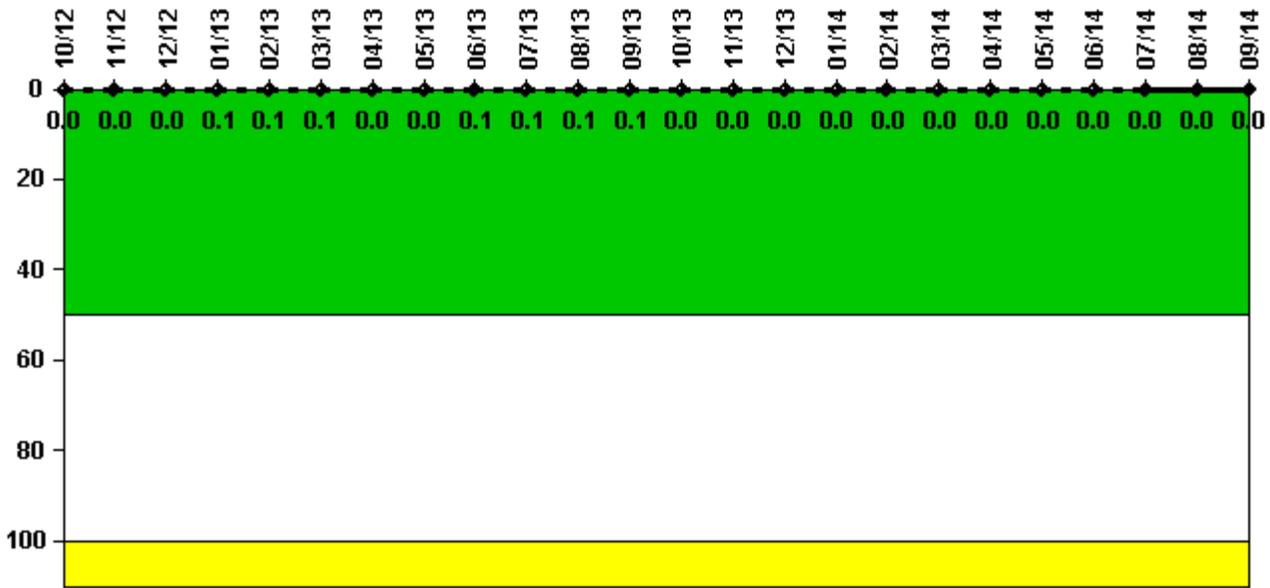
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
UAI (Δ CDF)	6.99E-11	-2.61E-12	-2.61E-12	-2.33E-12	1.17E-12	-3.82E-11	-3.82E-11	-3.78E-11
URI (Δ CDF)	-4.36E-08	-4.36E-08	-4.36E-08	-4.36E-08	-4.36E-08	-1.40E-07	-1.40E-07	-1.39E-07
PLE	NO							
Indicator value	-4.40E-08	-4.40E-08	-4.40E-08	-4.40E-08	-4.40E-08	-1.40E-07	-1.40E-07	-1.40E-07

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

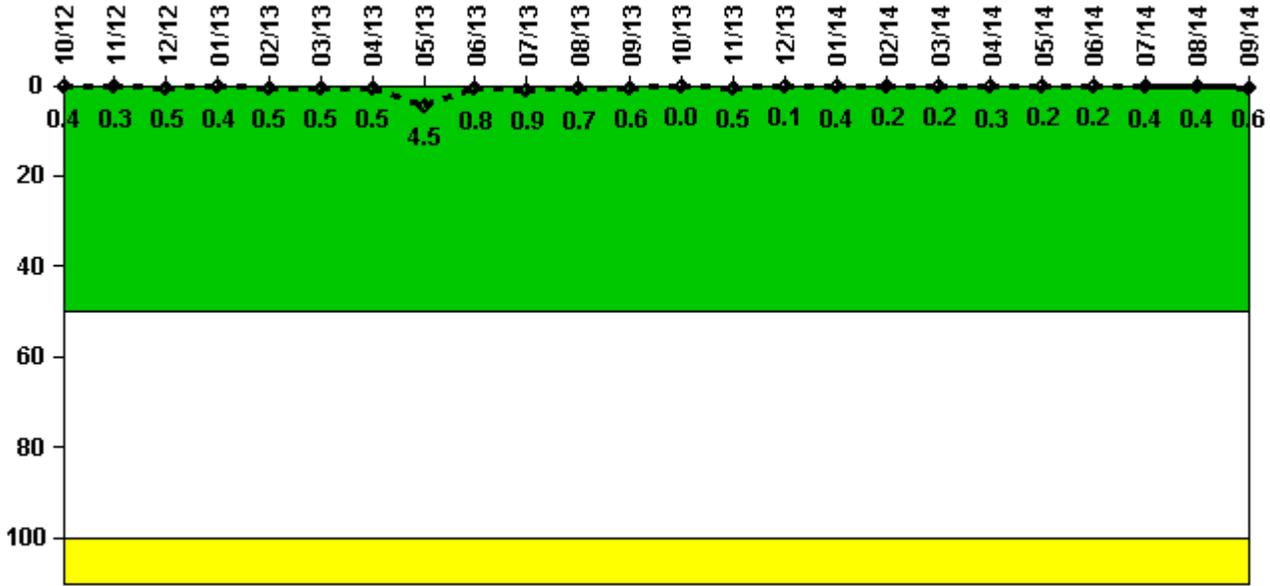
Notes

Reactor Coolant System Activity	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13	7/13	8/13	9/13
Maximum activity	0.000123	0.000160	0.000130	0.000213	0.000190	0.000176	0.000162	0.000168	0.000175	0.000183	0.000191	0.000382
Technical specification limit	1.0	1.0	1.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Indicator value	0	0	0	0.1	0.1	0.1	0	0	0.1	0.1	0.1	0.1

Reactor Coolant System Activity	10/13	11/13	12/13	1/14	2/14	3/14	4/14	5/14	6/14	7/14	8/14	9/14
Maximum activity	0.000164	0.000068	0.000090	0.000095	0.000099	0.000102	0.000115	0.000111	0.000114	0.000121	0.000125	0.000127
Technical specification limit	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



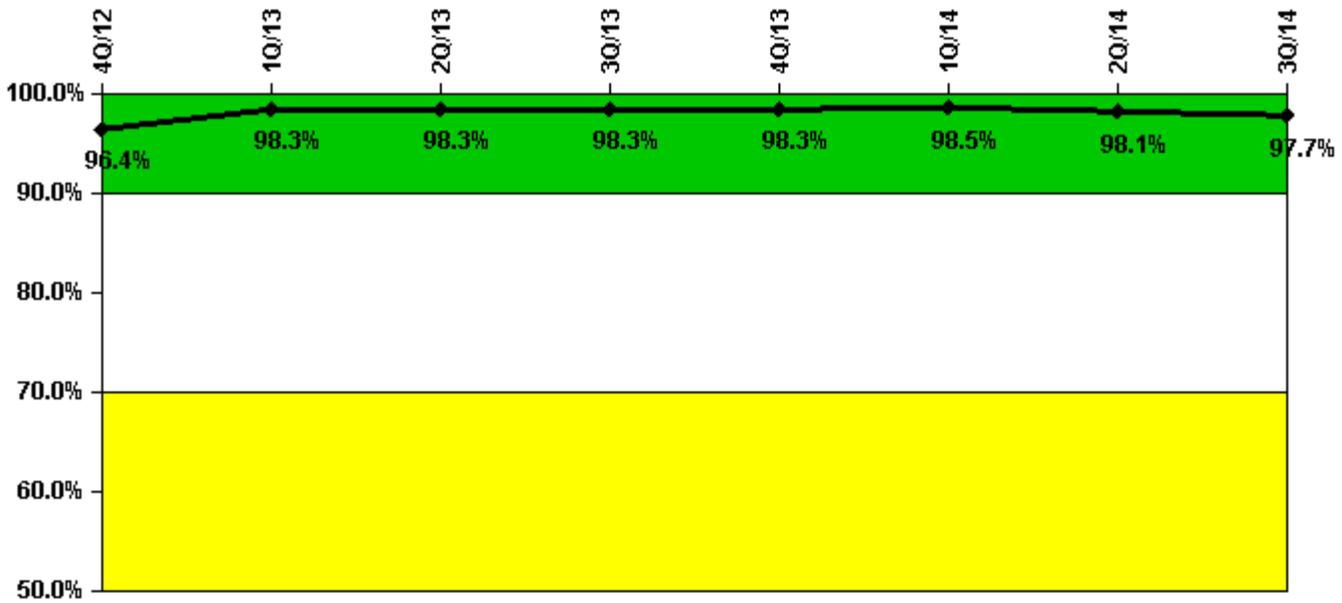
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13	7/13	8/13	9/13
Maximum leakage	0.040	0.034	0.057	0.039	0.054	0.056	0.050	0.490	0.085	0.096	0.073	0.067
Technical specification limit	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Indicator value	0.4	0.3	0.5	0.4	0.5	0.5	0.5	4.5	0.8	0.9	0.7	0.6
Reactor Coolant System Leakage	10/13	11/13	12/13	1/14	2/14	3/14	4/14	5/14	6/14	7/14	8/14	9/14
Maximum leakage	0	0.052	0.010	0.045	0.026	0.024	0.028	0.023	0.024	0.039	0.048	0.071
Technical specification limit	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Indicator value	0	0.5	0.1	0.4	0.2	0.2	0.3	0.2	0.2	0.4	0.4	0.6

Licensee Comments: none

Drill/Exercise Performance



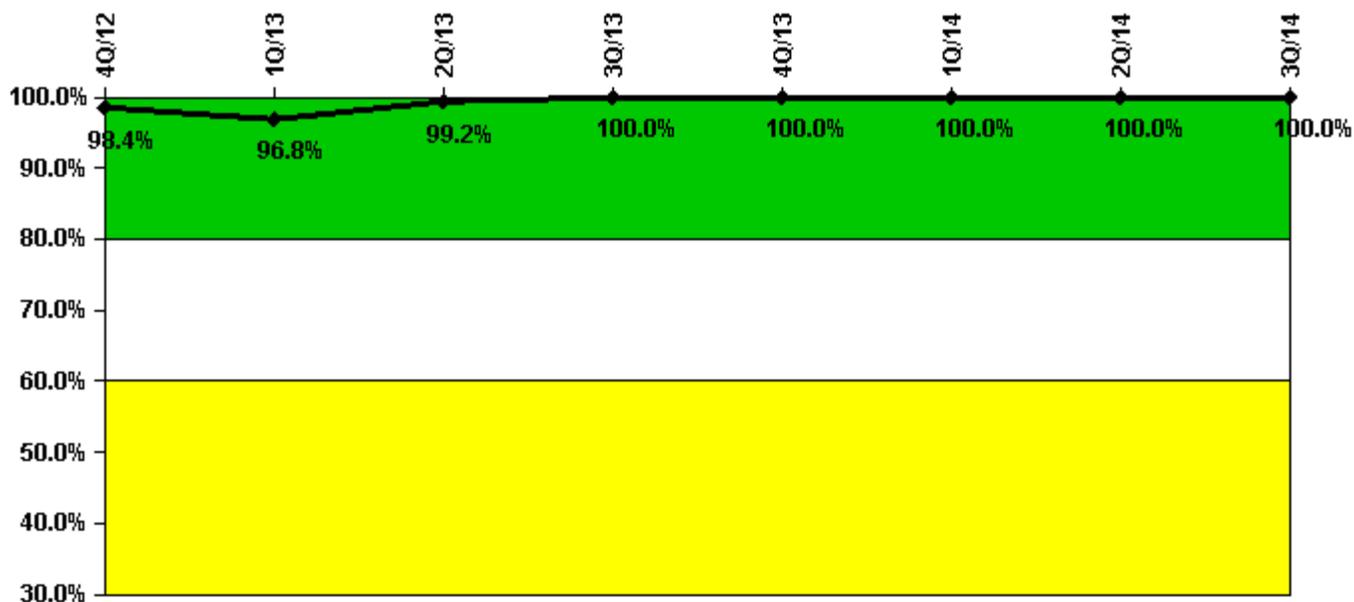
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
Successful opportunities	66.0	68.0	20.0	44.0	0	55.0	23.0	59.0
Total opportunities	67.0	70.0	20.0	44.0	0	56.0	25.0	61.0
Indicator value	96.4%	98.3%	98.3%	98.3%	98.3%	98.5%	98.1%	97.7%

Licensee Comments: none

ERO Drill Participation



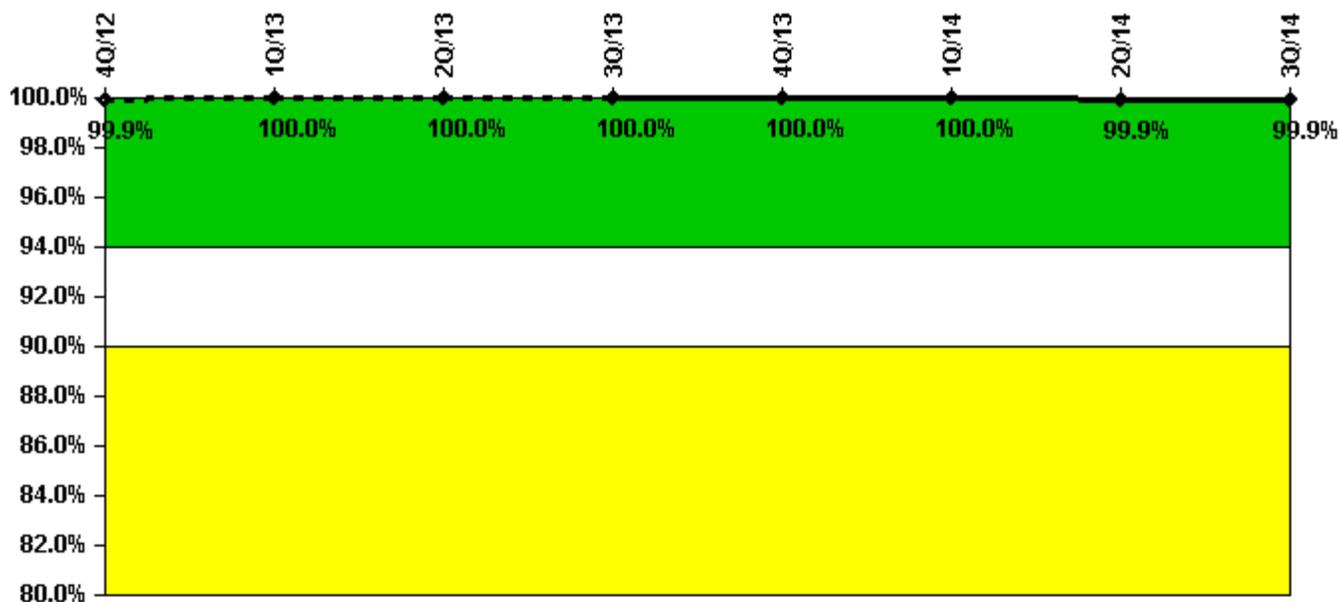
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
Participating Key personnel	126.0	120.0	121.0	118.0	118.0	120.0	118.0	123.0
Total Key personnel	128.0	124.0	122.0	118.0	118.0	120.0	118.0	123.0
Indicator value	98.4%	96.8%	99.2%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



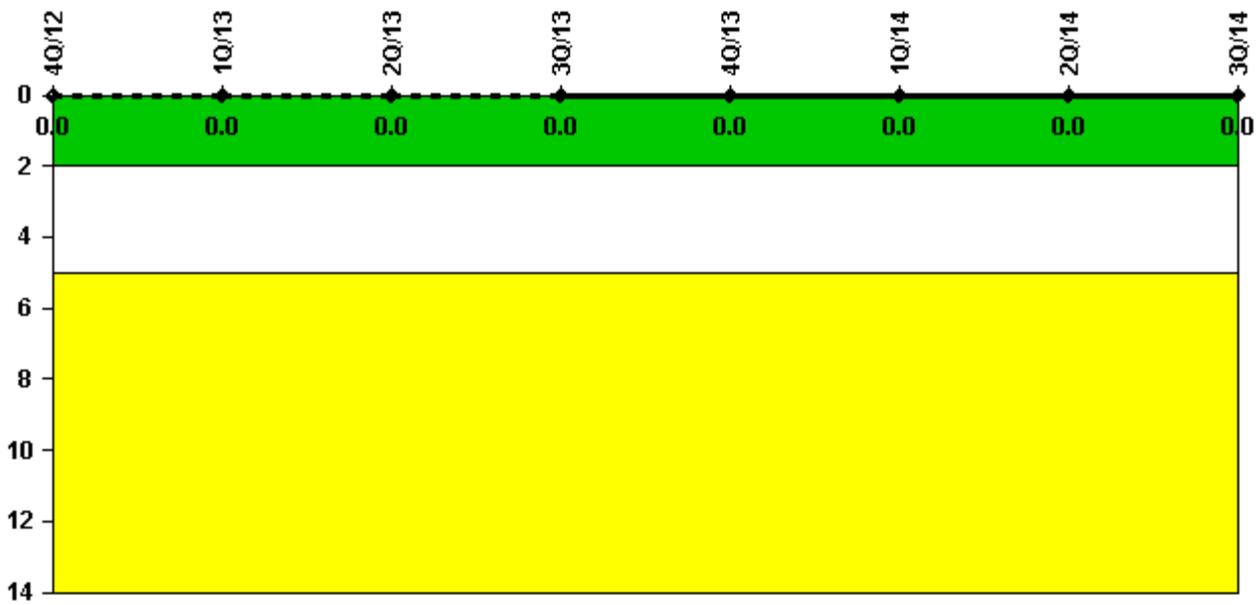
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
Successful siren-tests	1120	1120	1119	1120	1120	1119	1116	1119
Total sirens-tests	1120	1120	1119	1120	1120	1120	1119	1120
Indicator value	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



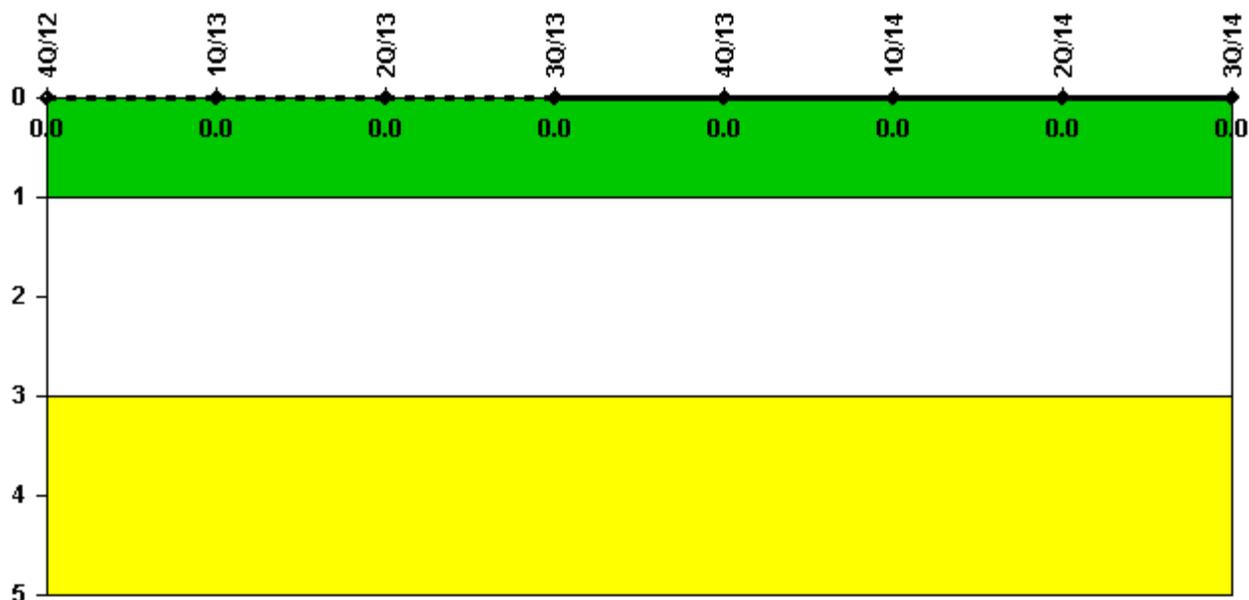
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/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	0							

Licensee Comments: none

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/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: November 3, 2014