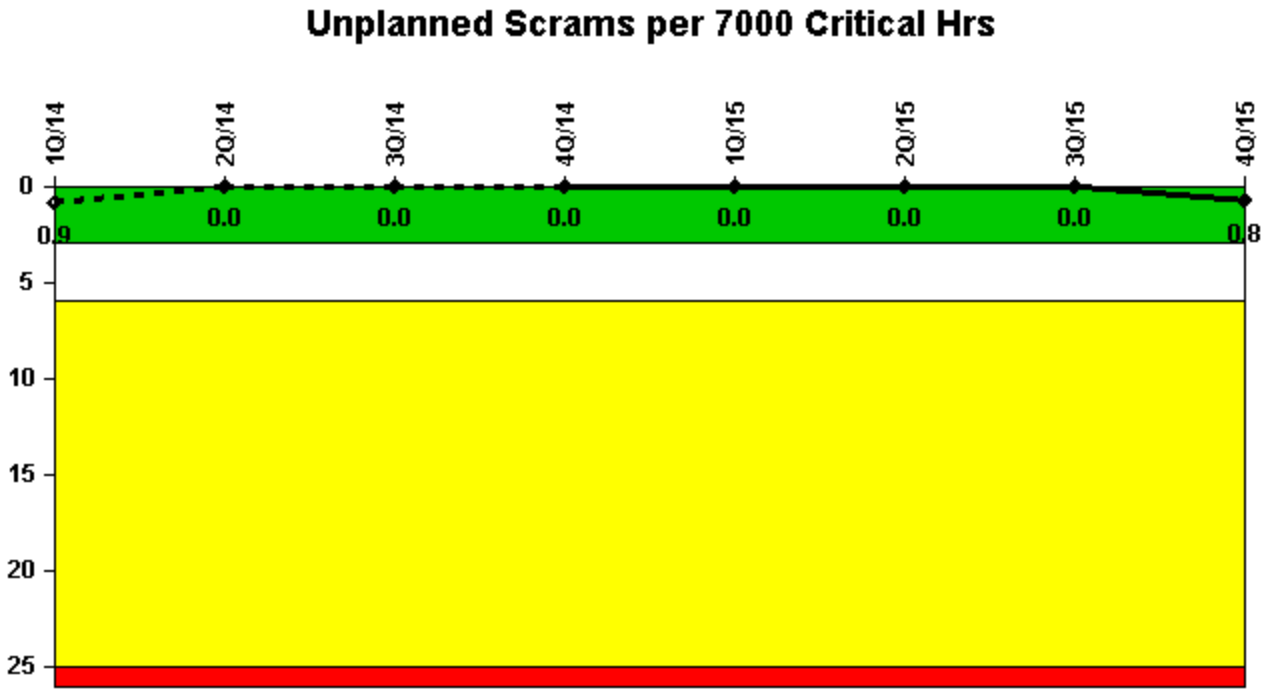
Susquehanna 1

4Q/2015 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

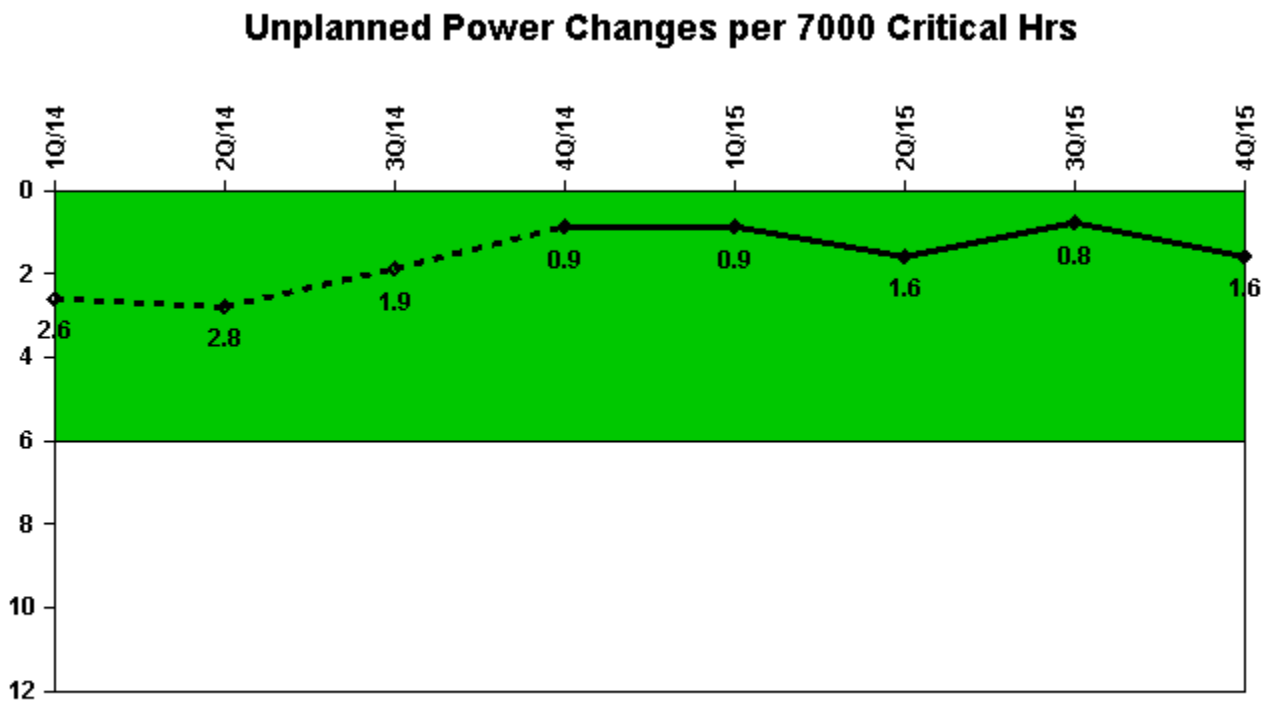


Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

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	1.0
Critical hours	2159.0	899.9	2208.0	2106.6	2159.0	2184.0	2208.0	2057.5
Indicator value	**0.9**	**0**	**0**	**0**	**0**	**0**	**0**	**0.8**

Licensee Comments: none



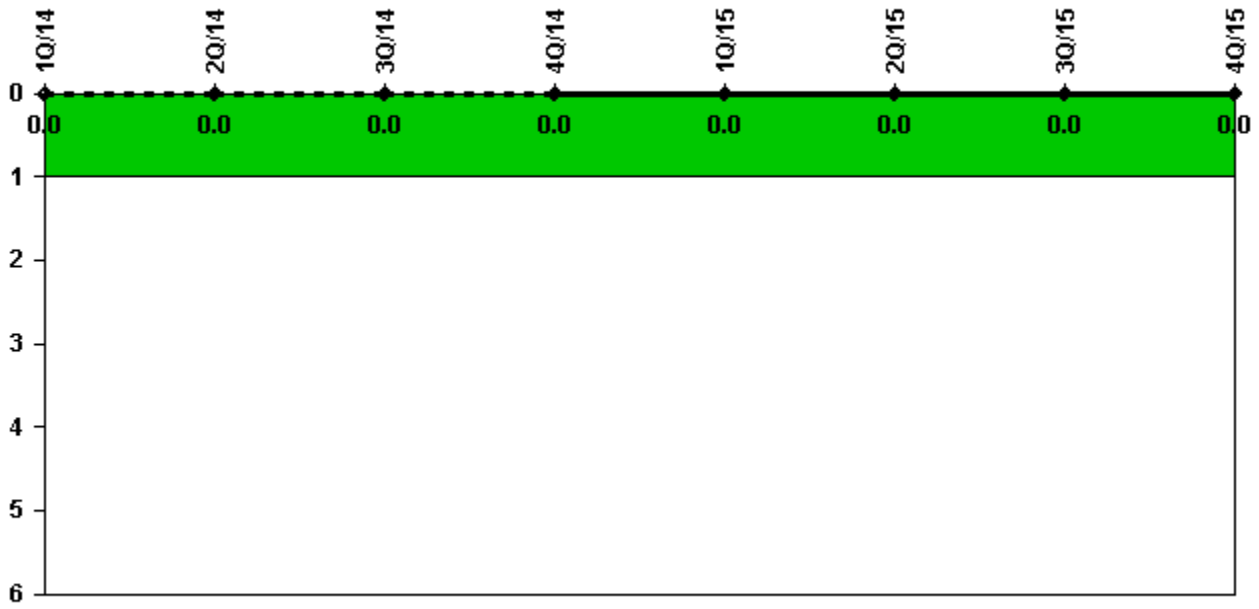
Thresholds: White > 6.0

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	0	0	1.0	0	0	1.0	0	1.0
Critical hours	2159.0	899.9	2208.0	2106.6	2159.0	2184.0	2208.0	2057.5
Indicator value	**2.6**	**2.8**	**1.9**	**0.9**	**0.9**	**1.6**	**0.8**	**1.6**

Licensee Comments: none

Unplanned Scrams with Complications

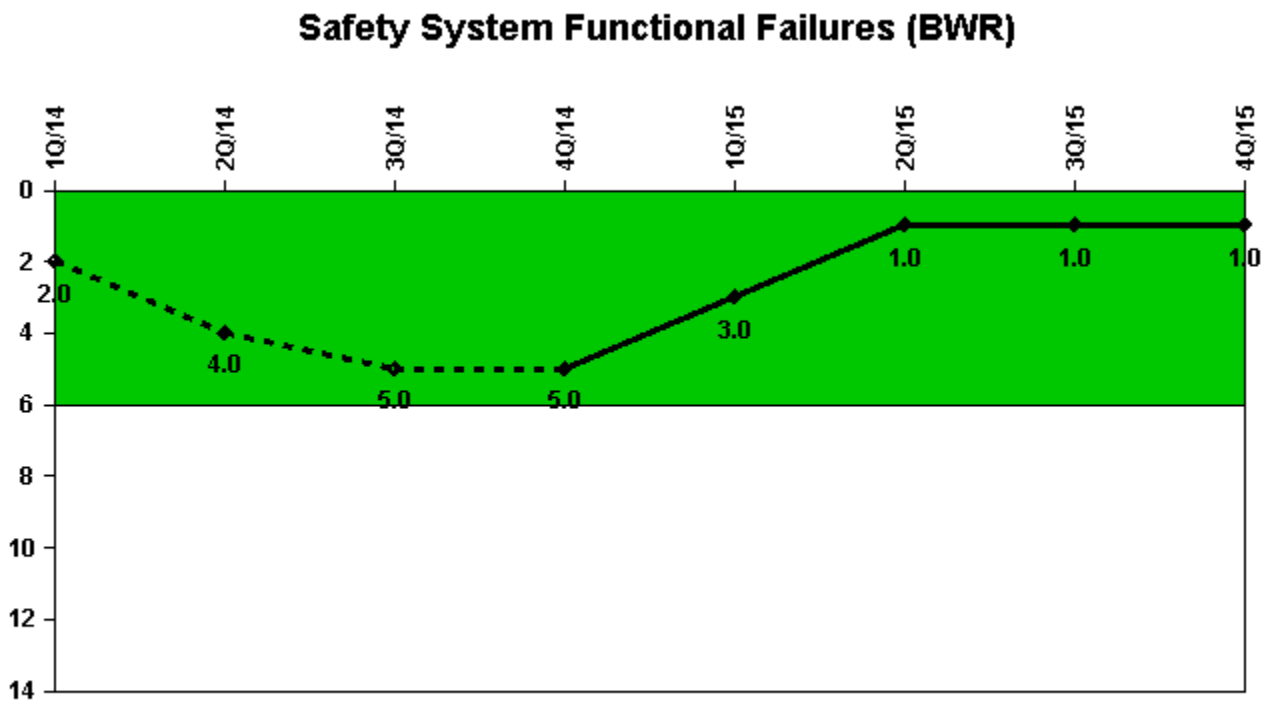


Thresholds: White > 1.0

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
Indicator value	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Licensee Comments: none



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	2	2	1	0	0	0	1	0
Indicator value	**2**	**4**	**5**	**5**	**3**	**1**	**1**	**1**

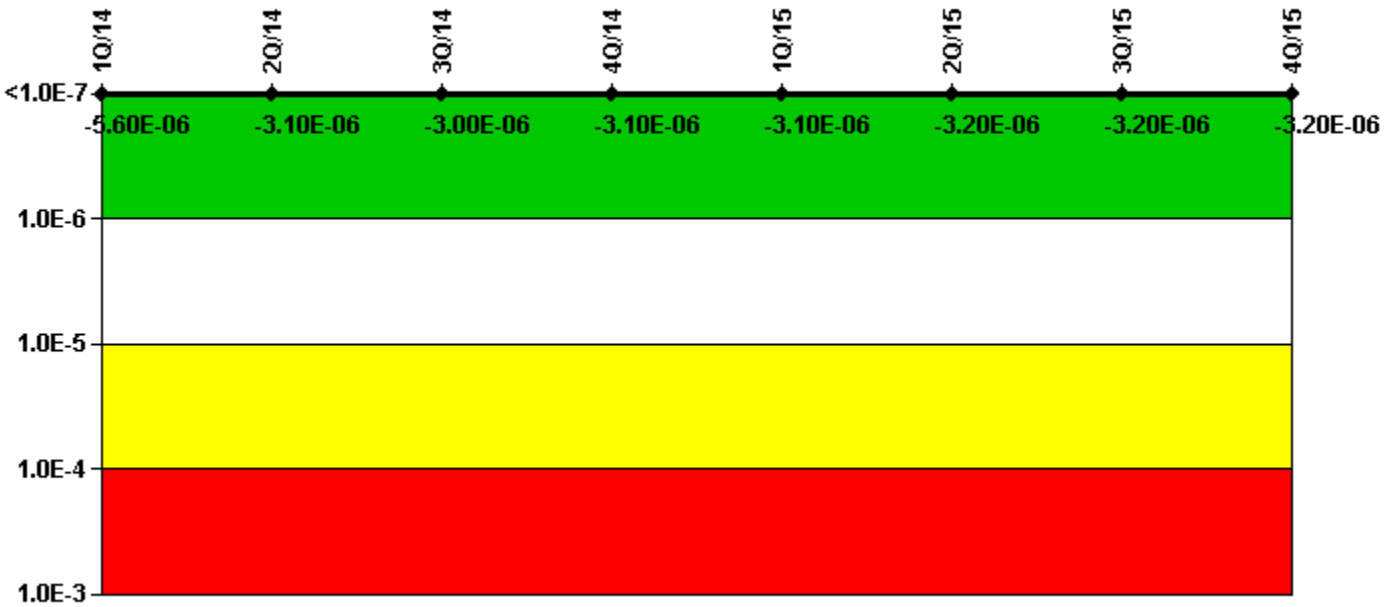
Licensee Comments:

3Q/14: LER 50-387/2013-009-00: RPS EPA Logic Card Underfrequency Trip Setpoints Out of Calibration, submitted on July 18, 2014.

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

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 (ΔCDF)	1.99E-07	1.27E-07	1.10E-07	-8.94E-09	-8.80E-09	-9.33E-09	-9.97E-09	-1.08E-08
URI (ΔCDF)	-5.81E-06	-3.26E-06	-3.15E-06	-3.14E-06	-3.07E-06	-3.15E-06	-3.16E-06	-3.15E-06
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-5.60E-06**	**-3.10E-06**	**-3.00E-06**	**-3.10E-06**	**-3.10E-06**	**-3.20E-06**	**-3.20E-06**	**-3.20E-06**

Licensee Comments:

4Q/15: Risk Cap Invoked.

3Q/15: Risk Cap Invoked.

2Q/15: Risk Cap Invoked.

1Q/15: Risk Cap Invoked.

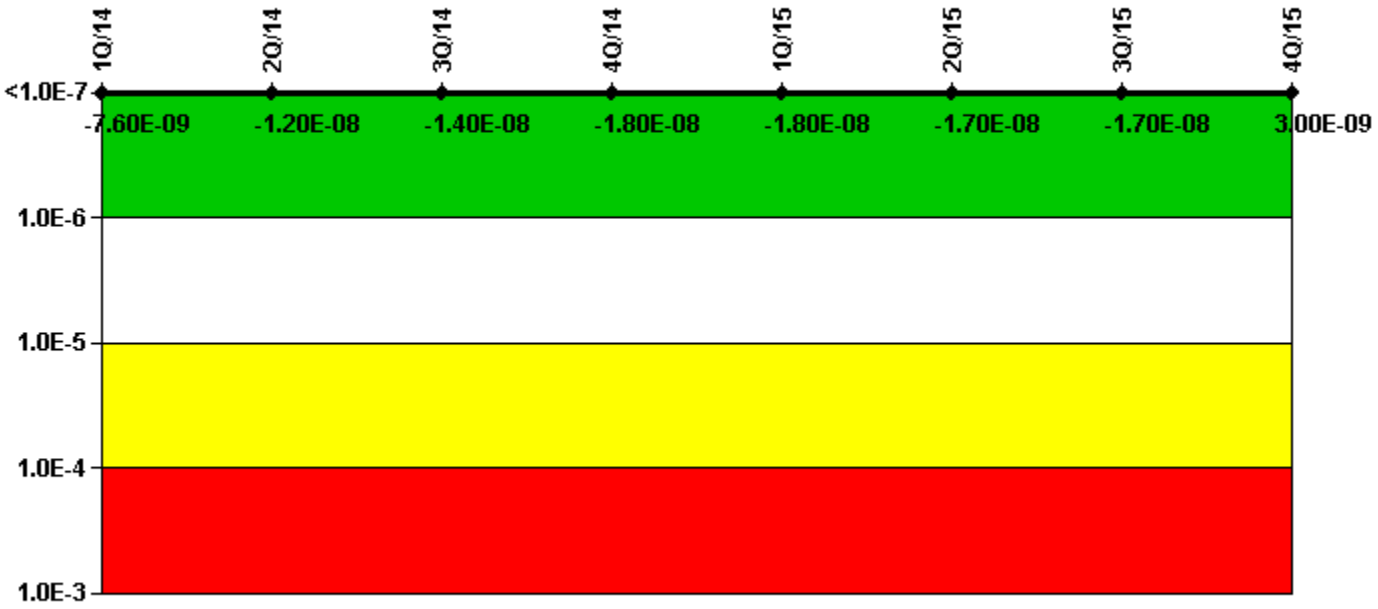
4Q/14: Risk Cap Invoked.

3Q/14: Risk Cap Invoked.

2Q/14: Risk Cap Invoked.

1Q/14: Risk Cap Invoked.

Mitigating Systems Performance Index, High Pressure Injection System



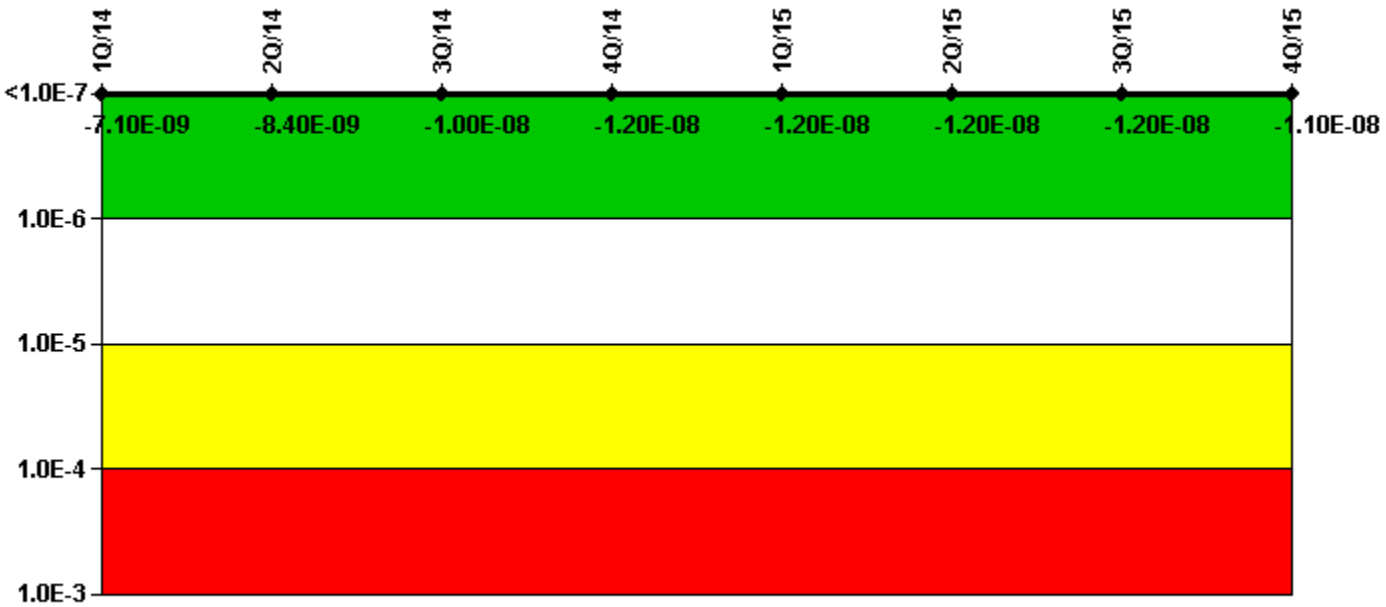
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	**1Q/14**	**2Q/14**	**3Q/14**	**4Q/14**	**1Q/15**	**2Q/15**	**3Q/15**	**4Q/15**
UAI (ΔCDF)	-1.67E-09	-3.00E-09	-4.56E-09	-9.32E-09	-9.32E-09	-8.31E-09	-8.33E-09	1.24E-08
URI (ΔCDF)	-5.94E-09	-8.96E-09	-8.96E-09	-8.51E-09	-8.44E-09	-8.44E-09	-8.44E-09	-9.33E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-7.60E-09**	**-1.20E-08**	**-1.40E-08**	**-1.80E-08**	**-1.80E-08**	**-1.70E-08**	**-1.70E-08**	**3.00E-09**

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



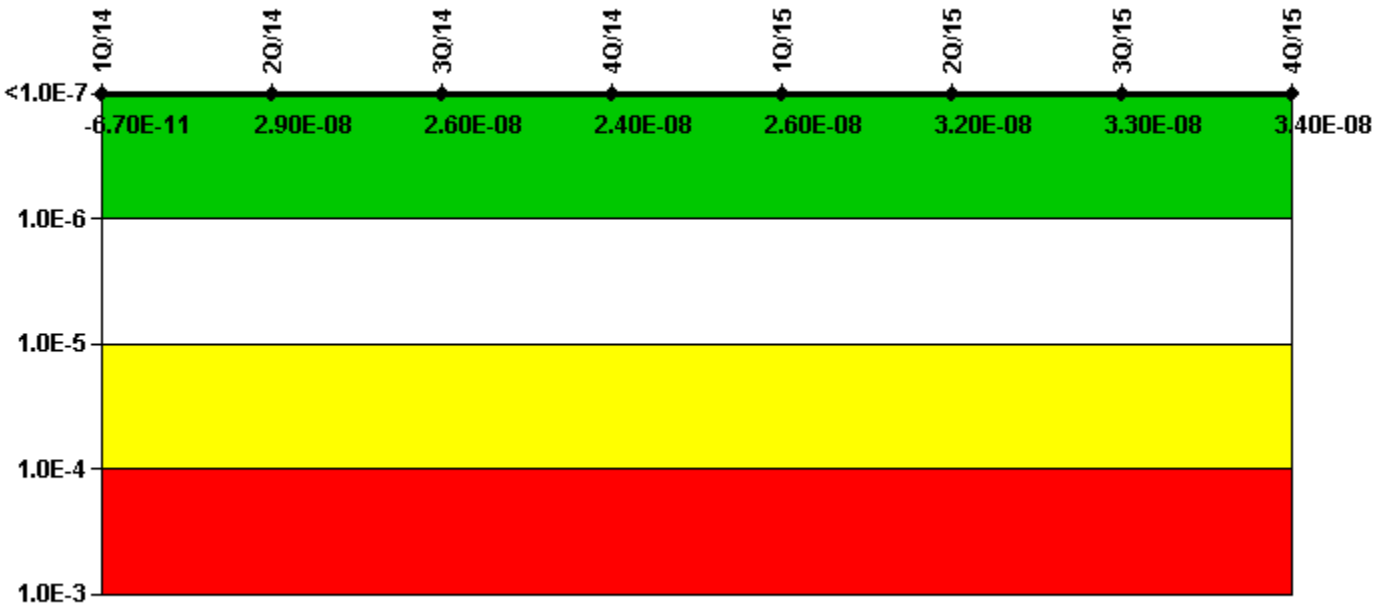
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	**1Q/14**	**2Q/14**	**3Q/14**	**4Q/14**	**1Q/15**	**2Q/15**	**3Q/15**	**4Q/15**
UAI (ΔCDF)	-2.61E-10	3.39E-10	-1.61E-09	-2.63E-09	-2.63E-09	-2.76E-09	-2.76E-09	-9.98E-10
URI (ΔCDF)	-6.85E-09	-8.78E-09	-8.41E-09	-8.89E-09	-9.37E-09	-9.41E-09	-9.46E-09	-9.93E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-7.10E-09**	**-8.40E-09**	**-1.00E-08**	**-1.20E-08**	**-1.20E-08**	**-1.20E-08**	**-1.20E-08**	**-1.10E-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

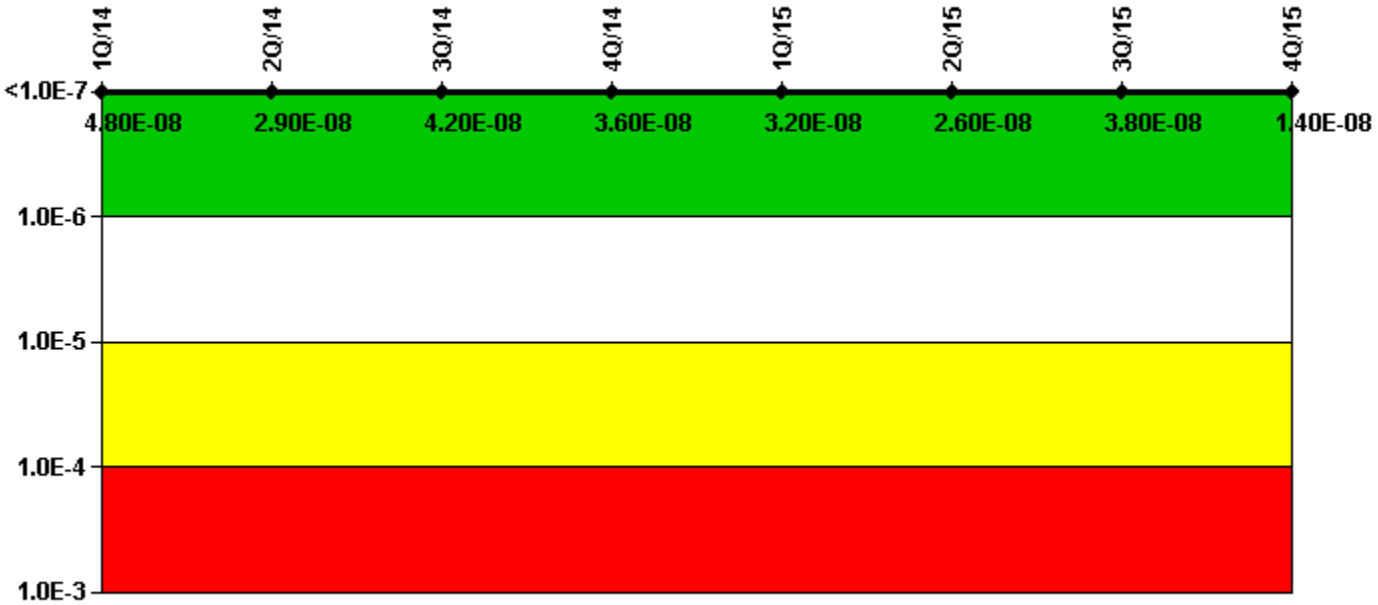
Notes

Mitigating Systems Performance Index, Residual Heat Removal System	**1Q/14**	**2Q/14**	**3Q/14**	**4Q/14**	**1Q/15**	**2Q/15**	**3Q/15**	**4Q/15**
UAI (ΔCDF)	6.09E-09	1.22E-08	3.85E-09	3.90E-09	3.90E-09	3.14E-09	3.14E-09	5.42E-09
URI (ΔCDF)	-6.15E-09	1.71E-08	2.22E-08	2.04E-08	2.25E-08	2.91E-08	2.95E-08	2.82E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-6.70E-11**	**2.90E-08**	**2.60E-08**	**2.40E-08**	**2.60E-08**	**3.20E-08**	**3.30E-08**	**3.40E-08**

Licensee Comments:

1Q/14: Previously reported data for Residual Heat Removal Mitigating Systems Performance Index for the months of November and December, 2013 are revised due to an Anti-Rotation Device failure. 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.

Mitigating Systems Performance Index, Cooling Water Systems

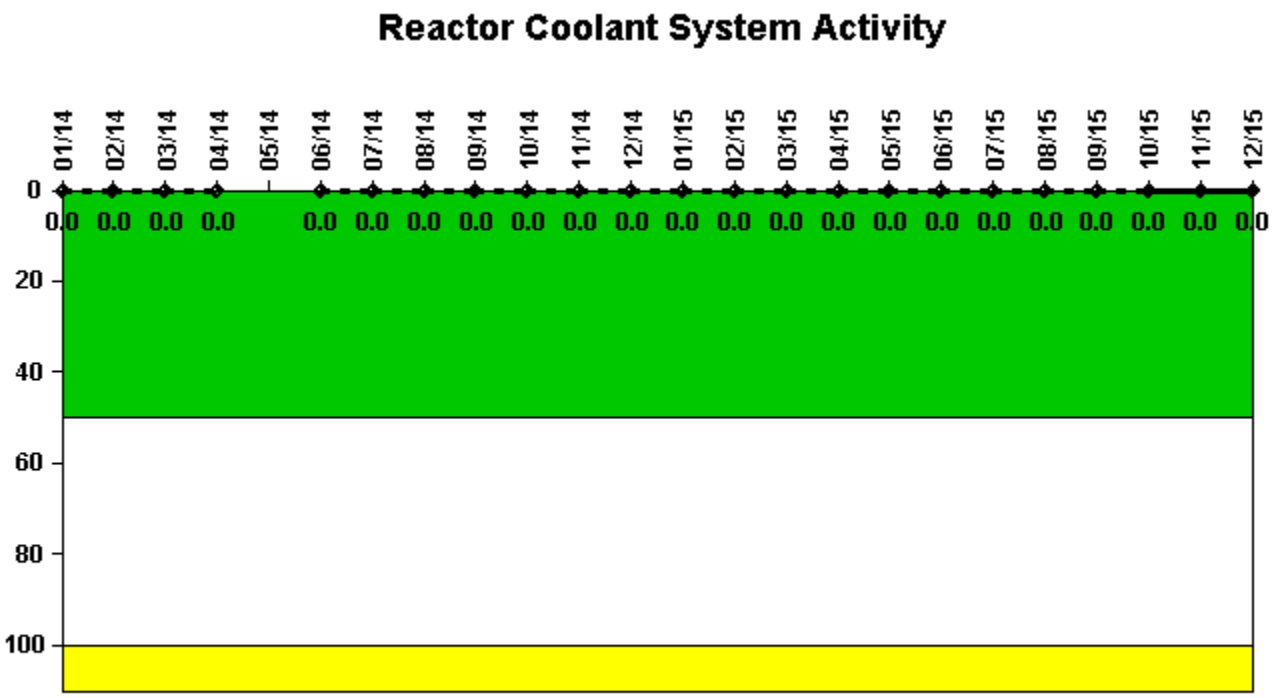


Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

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 (ΔCDF)	8.28E-08	7.14E-08	8.58E-08	8.02E-08	7.68E-08	7.20E-08	8.47E-08	6.05E-08
URI (ΔCDF)	-3.51E-08	-4.28E-08	-4.37E-08	-4.46E-08	-4.51E-08	-4.57E-08	-4.65E-08	-4.67E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**4.80E-08**	**2.90E-08**	**4.20E-08**	**3.60E-08**	**3.20E-08**	**2.60E-08**	**3.80E-08**	**1.40E-08**

Licensee Comments: none



Thresholds: White > 50.0 Yellow > 100.0

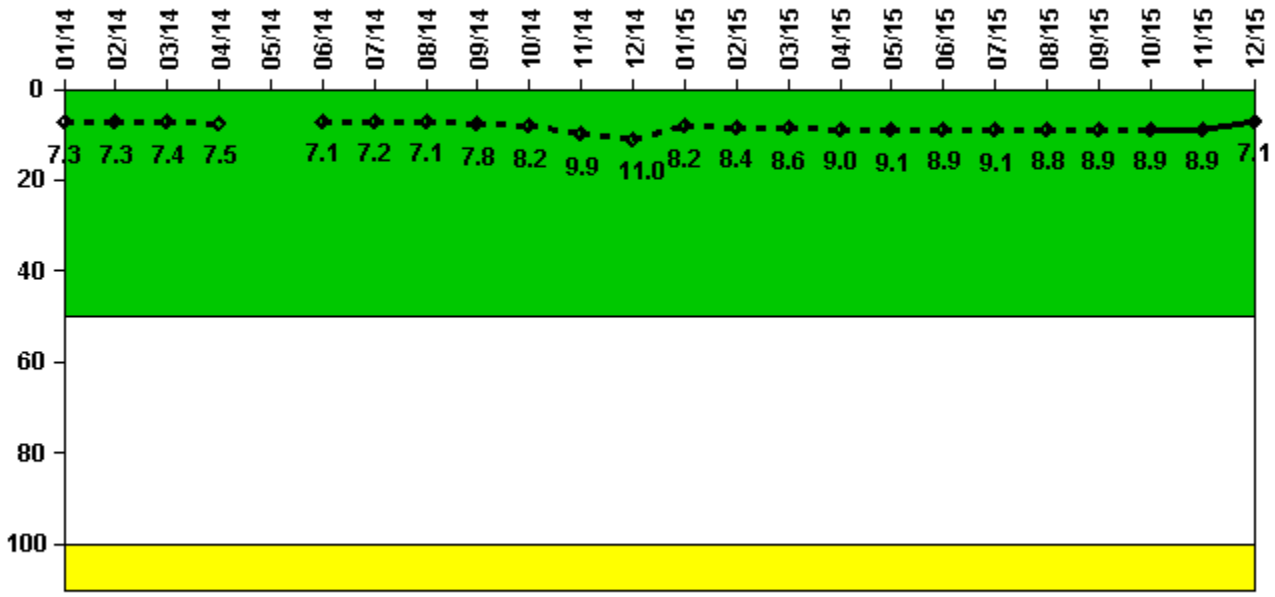
Notes

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	0.000009	0.000008	0.000010	0.000010	N/A	0.000005	0.000006	0.000007	0.000007	0.000010	0.000009	0.000008
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**	**N/A**	**0**	**0**	**0**	**0**	**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	0.000008	0.000008	0.000008	0.000009	0.000008	0.000010	0.000008	0.000008	0.000010	0.000009	0.000008	0.000008
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

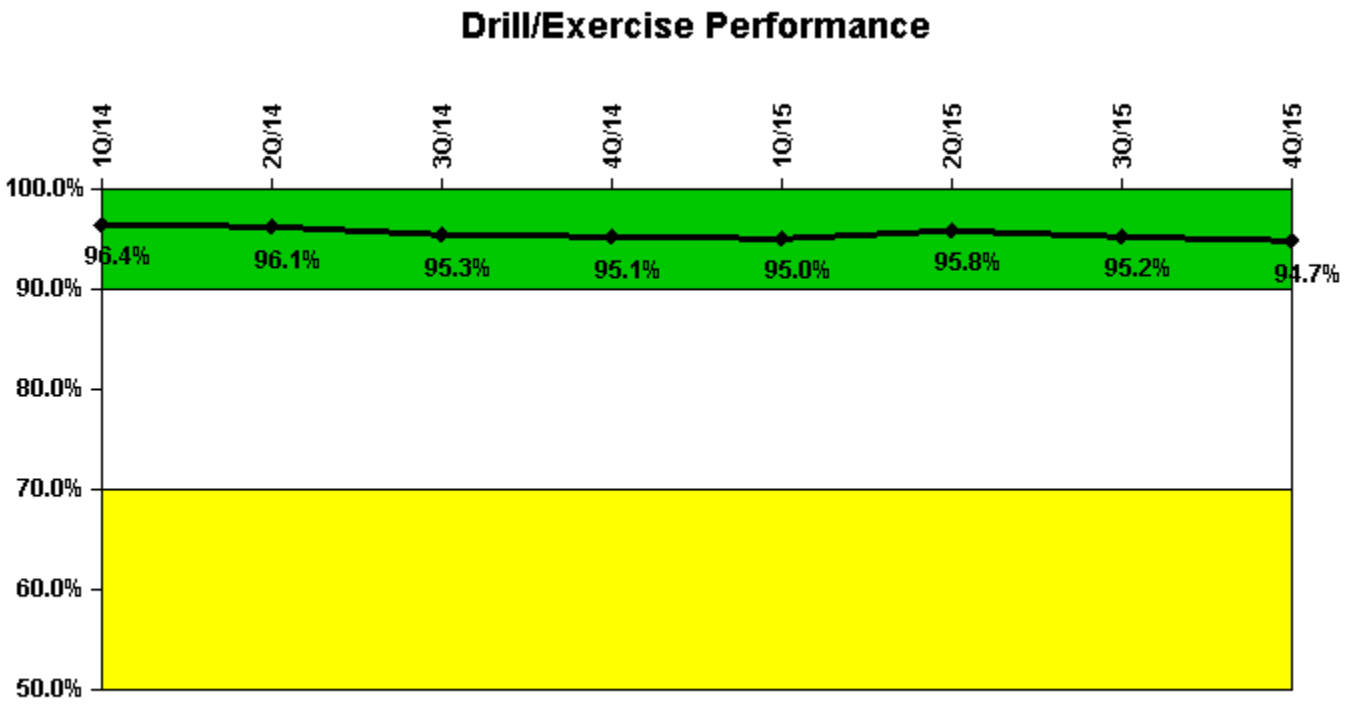


Thresholds: White > 50.0 Yellow > 100.0

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	1.820	1.830	1.850	1.880	N/A	1.780	1.810	1.780	1.960	2.060	2.470	2.760
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	**7.3**	**7.3**	**7.4**	**7.5**	**N/A**	**7.1**	**7.2**	**7.1**	**7.8**	**8.2**	**9.9**	**11.0**
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	2.060	2.110	2.150	2.260	2.280	2.230	2.270	2.200	2.220	2.230	2.220	1.770
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	**8.2**	**8.4**	**8.6**	**9.0**	**9.1**	**8.9**	**9.1**	**8.8**	**8.9**	**8.9**	**8.9**	**7.1**

Licensee Comments: none



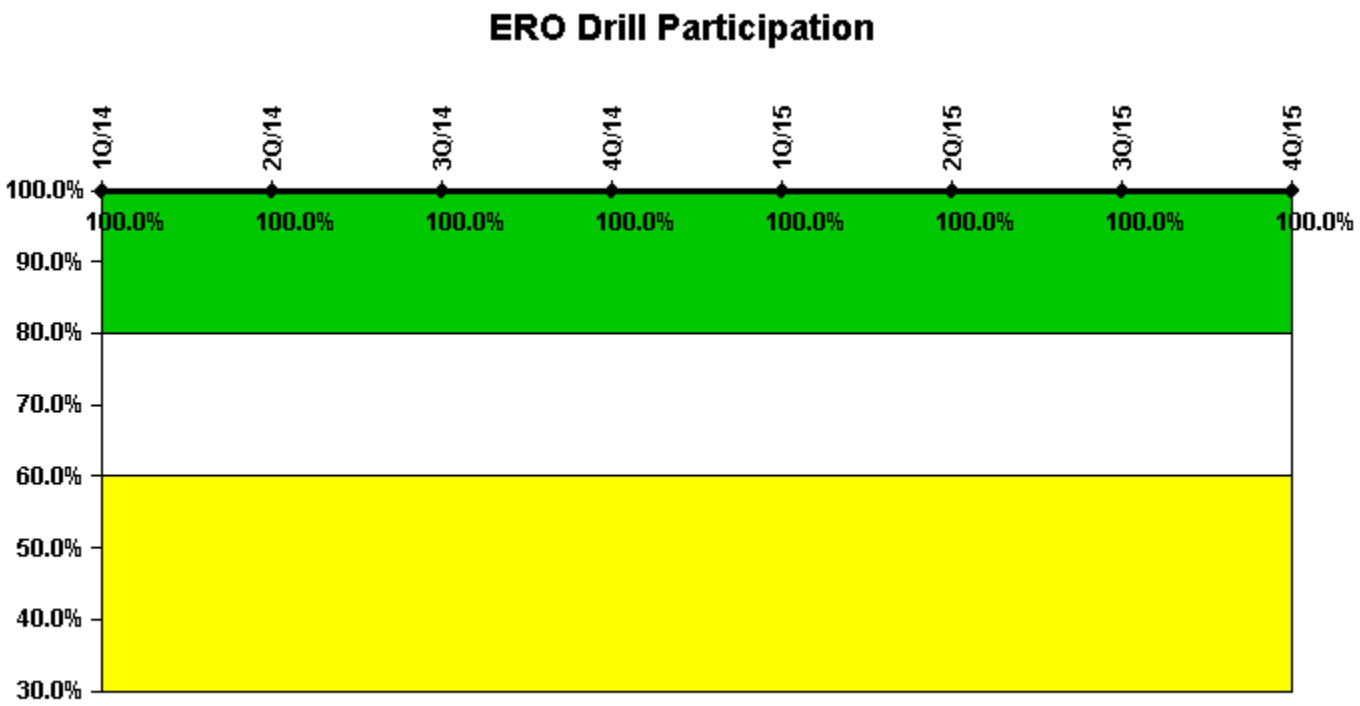
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Successful opportunities	56.0	25.0	36.0	20.0	29.0	40.0	49.0	32.0
Total opportunities	59.0	26.0	38.0	22.0	30.0	40.0	53.0	35.0
Indicator value	**96.4%**	**96.1%**	**95.3%**	**95.1%**	**95.0%**	**95.8%**	**95.2%**	**94.7%**

Licensee Comments:

3Q/14: Data for Drill / Exercise Performance was revised based on reevaluation of the data over the past two years. Specifically, data was revised for the following time periods: July 2012; April, Nov & Dec 2013; Feb, March & June 2014. The PI color was Green before the revisions and remains Green after the revisions for each of the time periods. There is no safety significance associated with these revisions.

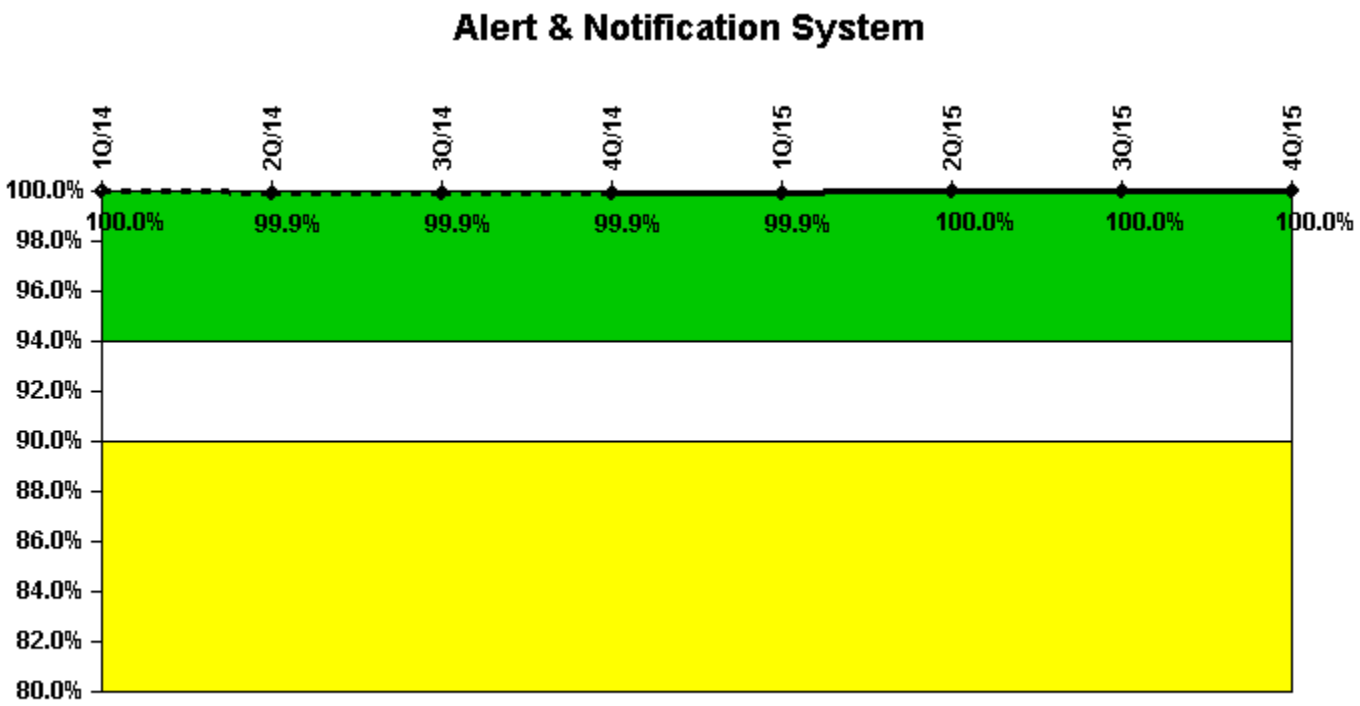


Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Participating Key personnel	94.0	90.0	86.0	82.0	78.0	80.0	80.0	87.0
Total Key personnel	94.0	90.0	86.0	82.0	78.0	80.0	80.0	87.0
Indicator value	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Licensee Comments: none

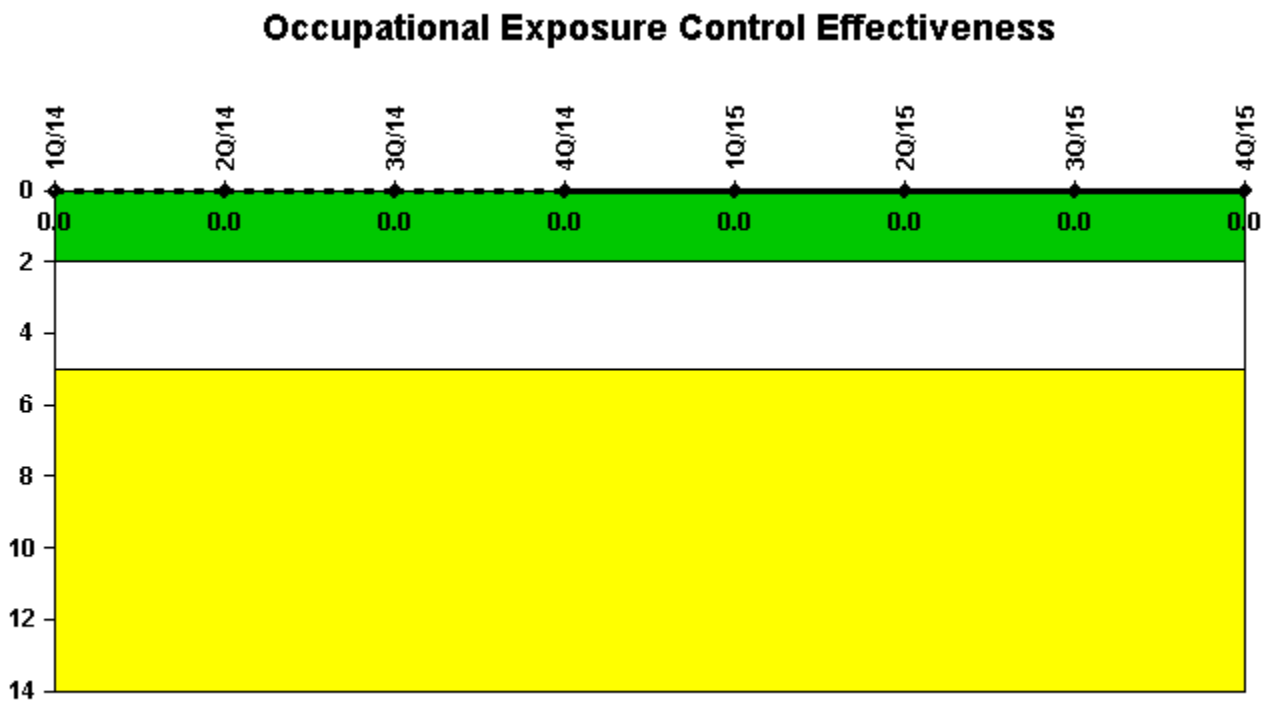


Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15
Successful siren-tests	608	530	684	532	532	532	608	608
Total sirens-tests	608	532	684	532	532	532	608	608
Indicator value	**100.0%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**100.0%**	**100.0%**	**100.0%**

Licensee Comments: none

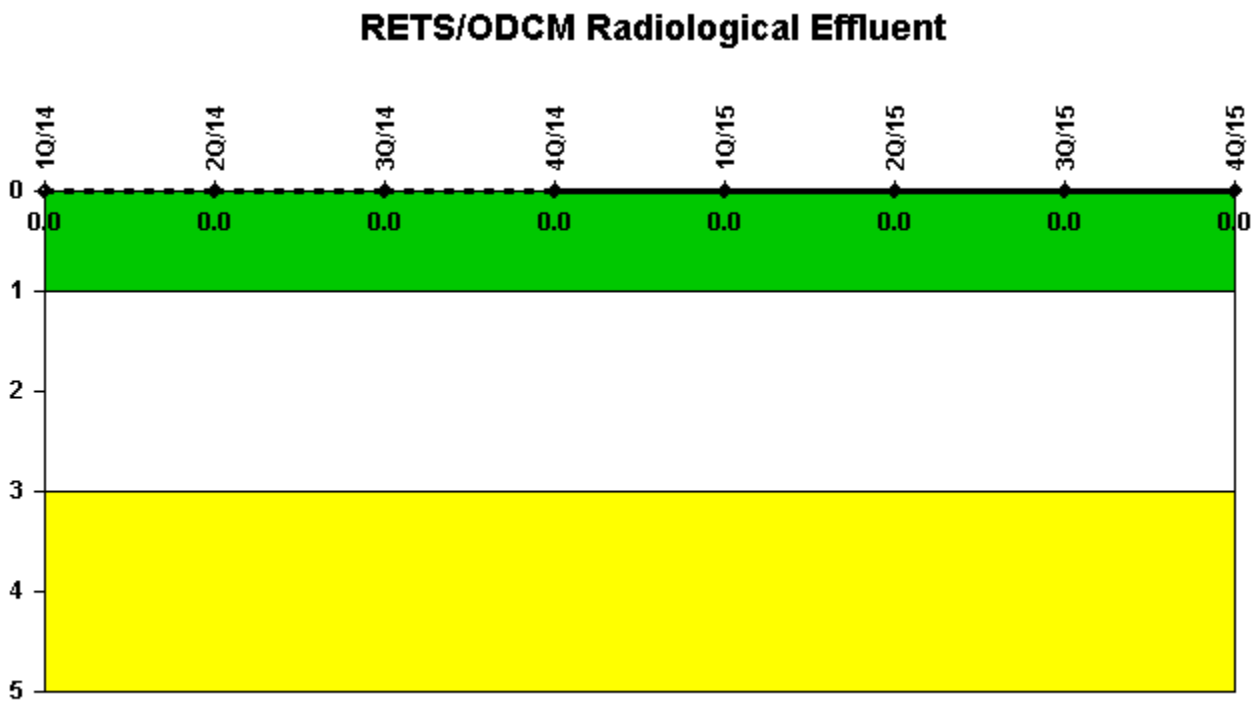


Thresholds: White > 2.0 Yellow > 5.0

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
Indicator value	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Licensee Comments: none



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