

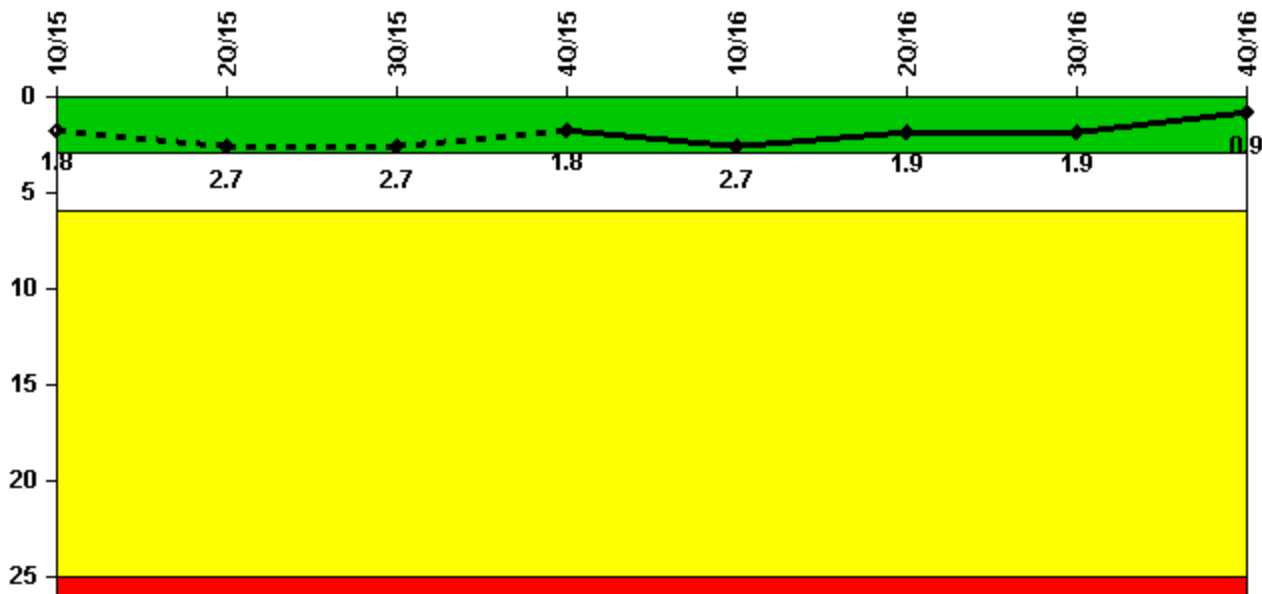
River Bend 1

4Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



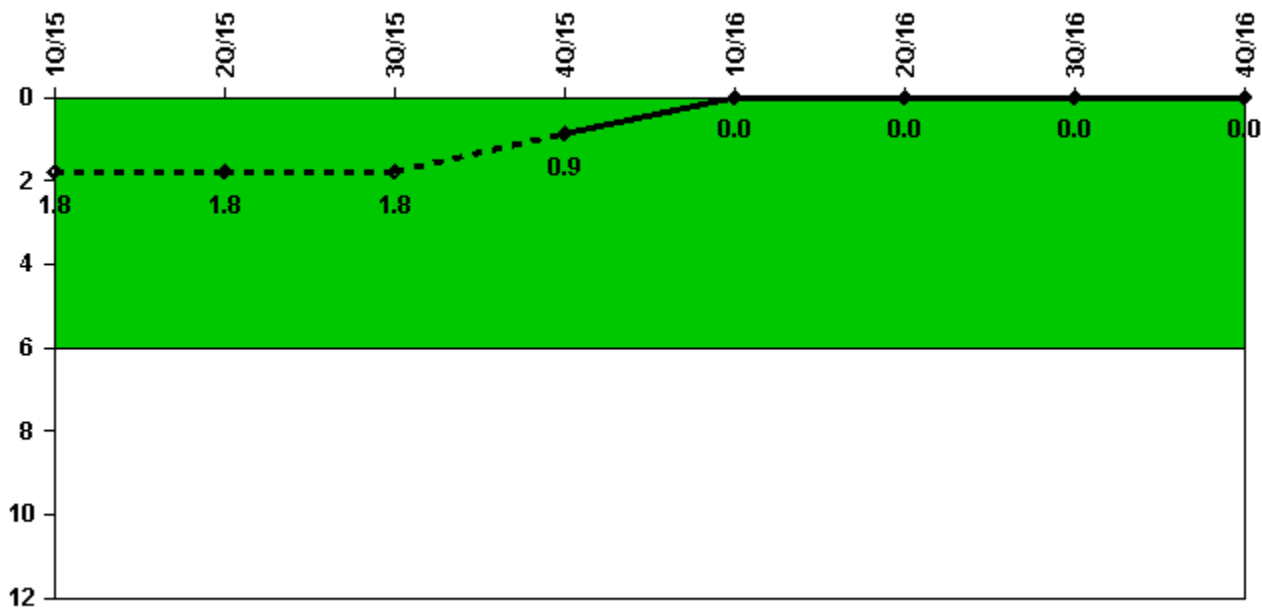
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Unplanned scrams	0	1.0	0	1.0	1.0	0	0	0
Critical hours	1360.7	2045.7	2208.0	2086.0	1320.4	1867.5	2208.0	2209.0
Indicator value	1.8	2.7	2.7	1.8	2.7	1.9	1.9	0.9

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



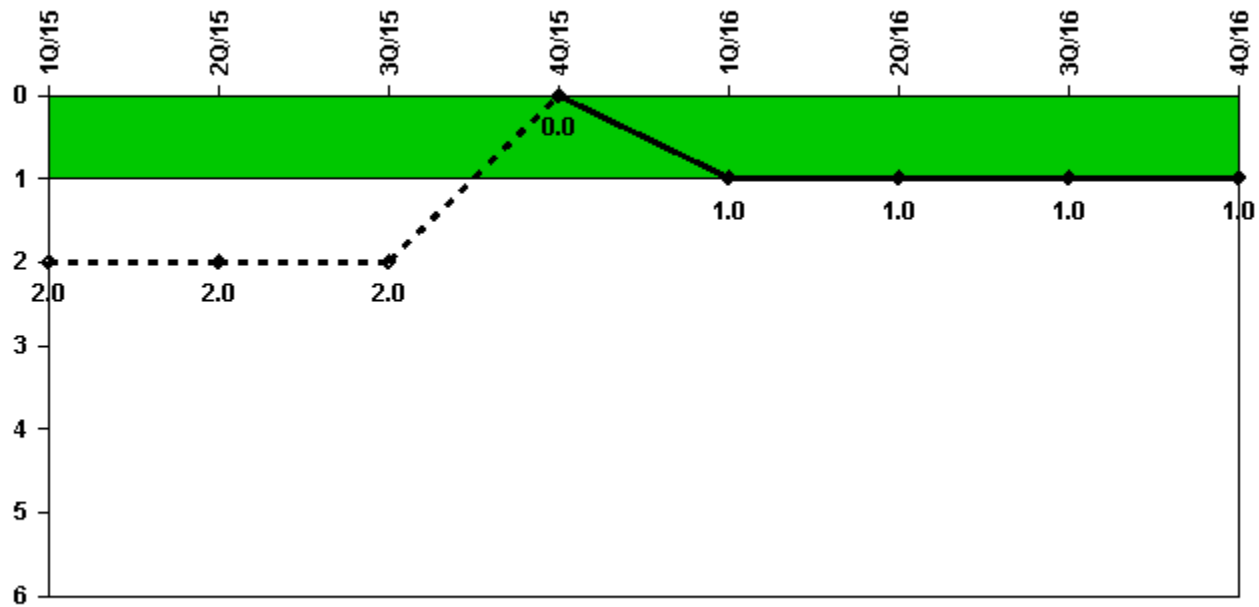
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Unplanned power changes	1.0	0	0	0	0	0	0	0
Critical hours	1360.7	2045.7	2208.0	2086.0	1320.4	1867.5	2208.0	2209.0
Indicator value	1.8	1.8	1.8	0.9	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



Thresholds: White > 1.0

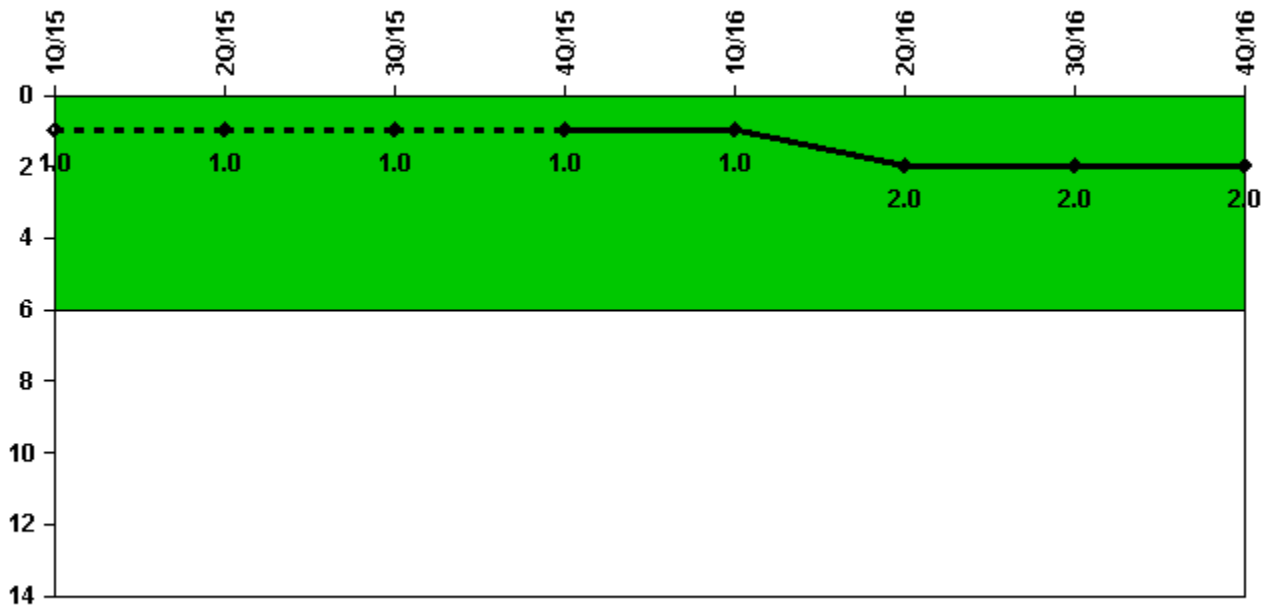
Notes

Unplanned Scrams with Complications	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Scrams with complications	0	0	0	0	1.0	0	0	0
Indicator value	2.0	2.0	2.0	0.0	1.0	1.0	1.0	1.0

Licensee Comments:

3Q/15: 4Q2014 As the result of the October and December 2014 unplanned scrams with complications, the NRC Unplanned Scrams with Complications Indicator is now in the white band at two. The green band is one scram per year.

Safety System Functional Failures (BWR)



Thresholds: White > 6.0

Notes

Safety System Functional Failures (BWR)	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Safety System Functional Failures	0	0	1	0	0	1	1	0
Indicator value	1	1	1	1	1	2	2	2

Licensee Comments:

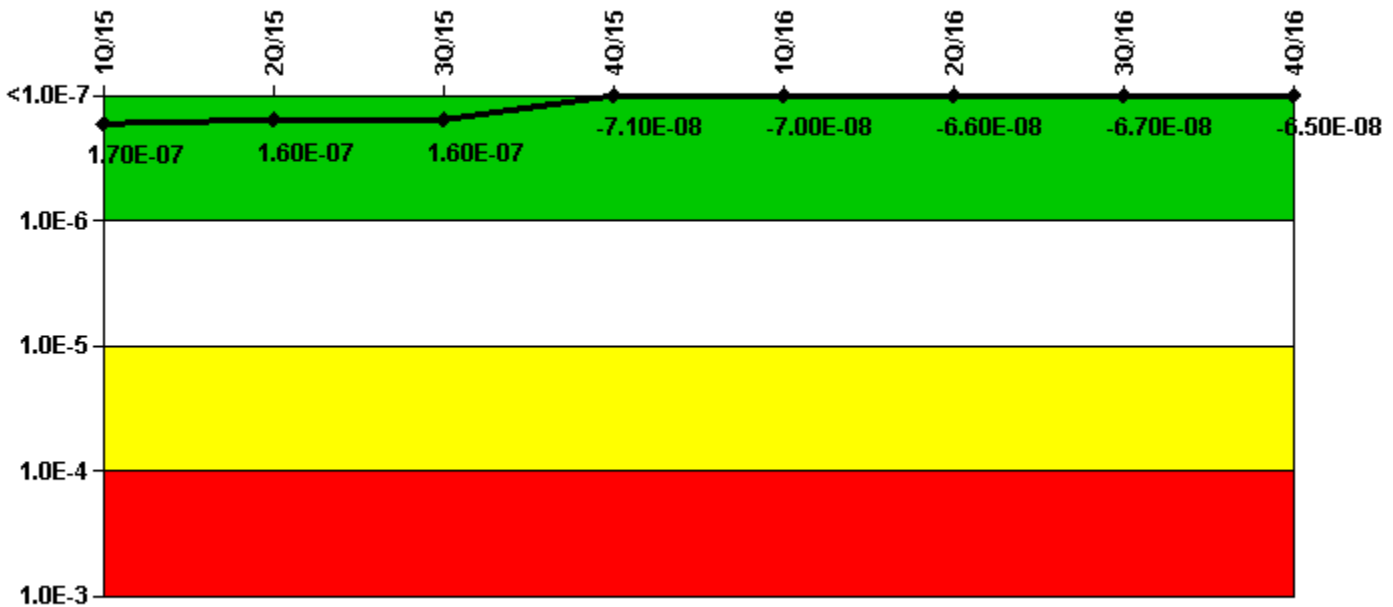
3Q/16: 3Q/16: July 2016 - Licensee Event Report 2016-006-00. Potential loss of safety function of multiple systems due to a design deficiency in 480-volt circuit breakers.

2Q/16: 2Q2016, Licensee Event Report 2016-005. A potential loss of safety function of onsite AC sources due to a Part 21 notification from the vendor for Masterpact breakers.

1Q/16: 1Q2016, Licensee Event Report 2016-001-00 Safety System Functional Failure reported in error. The initial ENS for this event reported a potential loss of the safety function of secondary containment due to the failure of the normal pressure control system of the Auxiliary building. A follow up evaluation determined that no actual loss of safety function occurred as reported in the LER.

3Q/15: 3Q2015, Licensee Event Report 2015-004, Loss of safety function of DC distribution system in postulated event involving loss of HVK chillers.

Mitigating Systems Performance Index, Emergency AC Power System



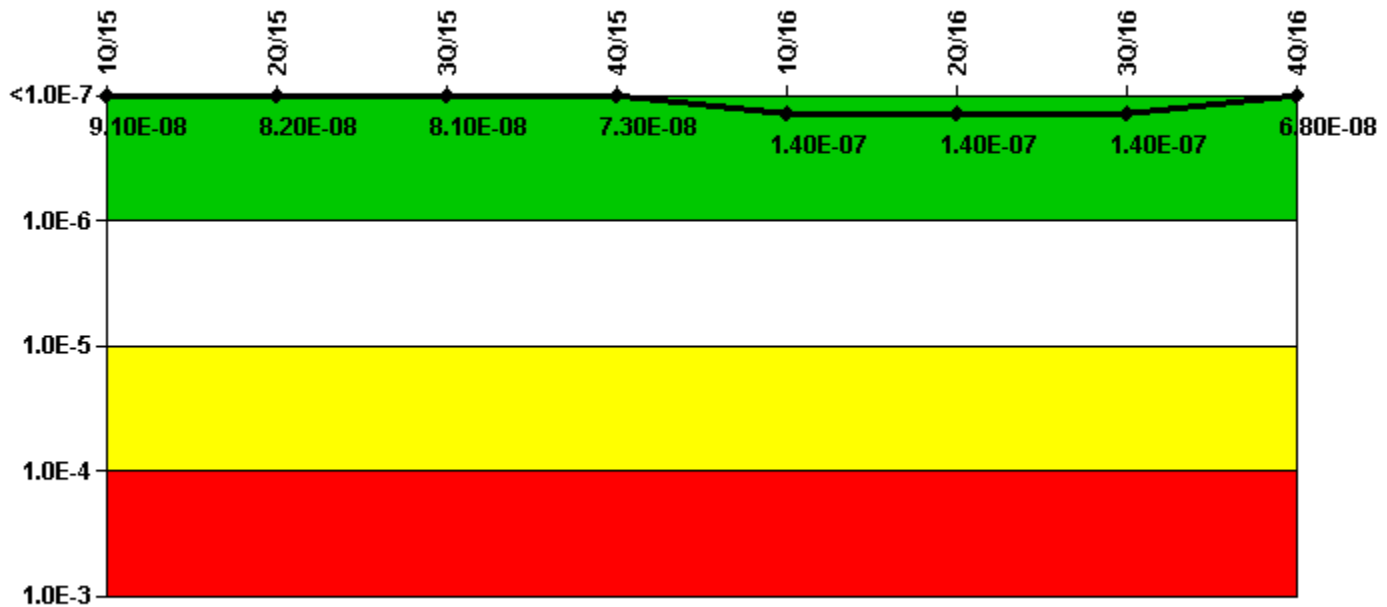
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI (ΔCDF)	4.42E-09	5.81E-09	5.66E-09	2.48E-09	1.47E-09	2.90E-09	1.16E-09	2.16E-09
URI (ΔCDF)	1.67E-07	1.58E-07	1.58E-07	-7.30E-08	-7.14E-08	-6.90E-08	-6.85E-08	-6.70E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.70E-07	1.60E-07	1.60E-07	-7.10E-08	-7.00E-08	-6.60E-08	-6.70E-08	-6.50E-08

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



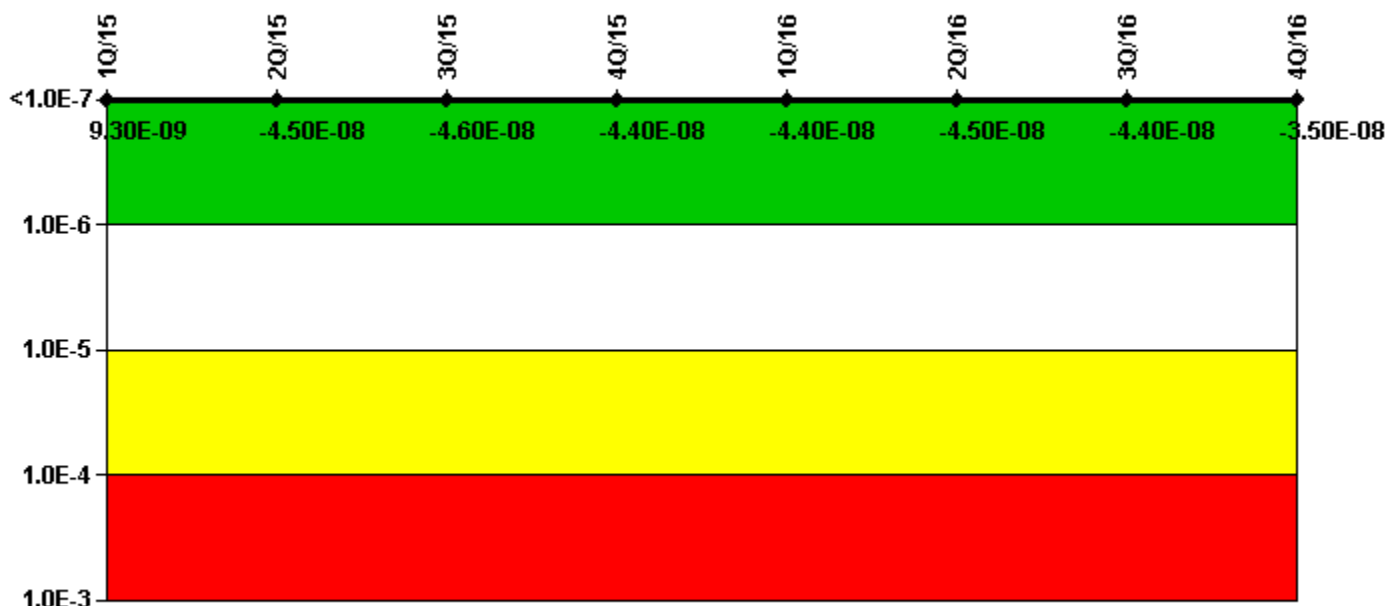
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI (Δ CDF)	2.43E-08	1.75E-08	1.72E-08	1.33E-08	1.34E-08	1.11E-08	8.57E-09	2.56E-09
URI (Δ CDF)	6.68E-08	6.43E-08	6.41E-08	5.99E-08	1.25E-07	1.33E-07	1.33E-07	6.56E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	9.10E-08	8.20E-08	8.10E-08	7.30E-08	1.40E-07	1.40E-07	1.40E-07	6.80E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



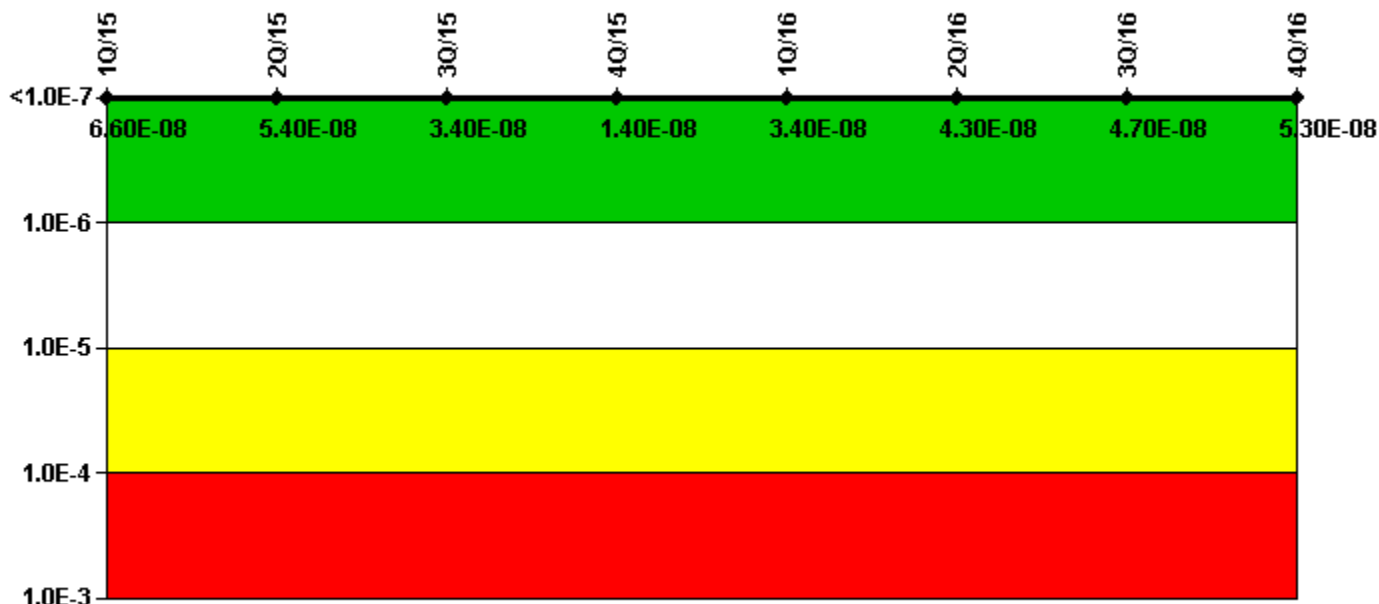
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI (Δ CDF)	-8.77E-09	-8.75E-09	-8.75E-09	-8.74E-09	-1.05E-08	-1.05E-08	-1.05E-08	-1.34E-09
URI (Δ CDF)	1.80E-08	-3.58E-08	-3.71E-08	-3.57E-08	-3.34E-08	-3.50E-08	-3.31E-08	-3.39E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	9.30E-09	-4.50E-08	-4.60E-08	-4.40E-08	-4.40E-08	-4.50E-08	-4.40E-08	-3.50E-08

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



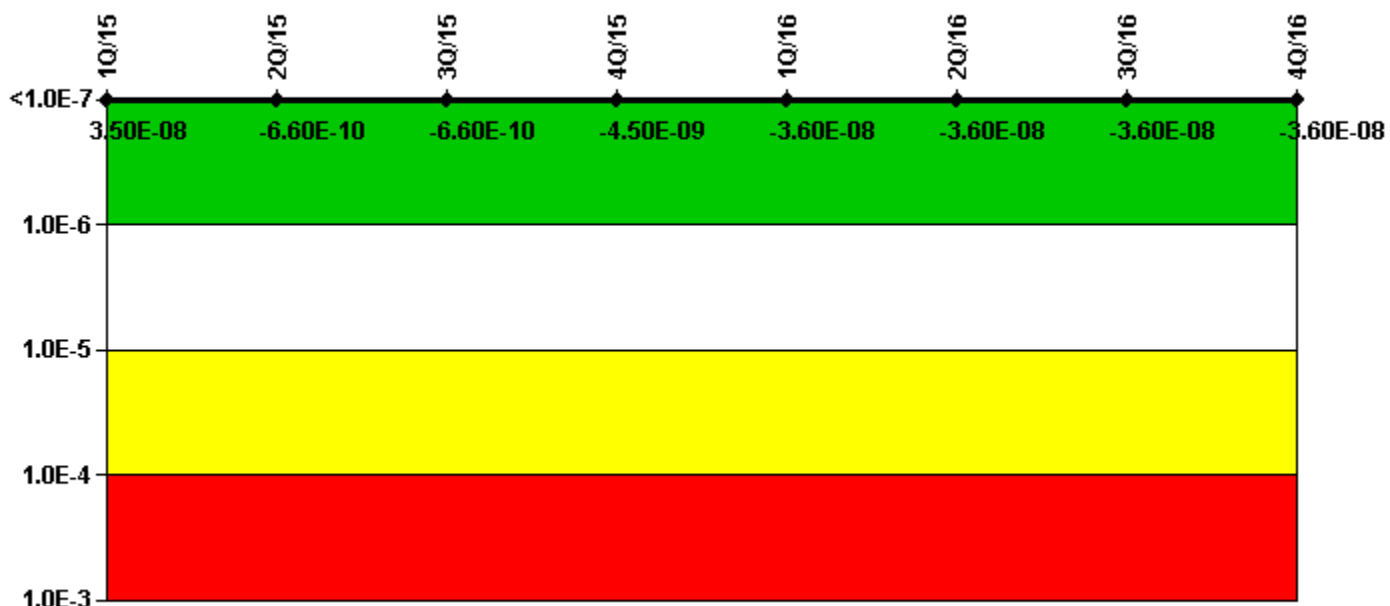
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI (ΔCDF)	-4.25E-09	-5.48E-09	-8.37E-09	-1.72E-08	-1.20E-08	-1.61E-09	8.05E-10	8.59E-09
URI (ΔCDF)	7.04E-08	5.99E-08	4.24E-08	3.14E-08	4.56E-08	4.41E-08	4.58E-08	4.48E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	6.60E-08	5.40E-08	3.40E-08	1.40E-08	3.40E-08	4.30E-08	4.70E-08	5.30E-08

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



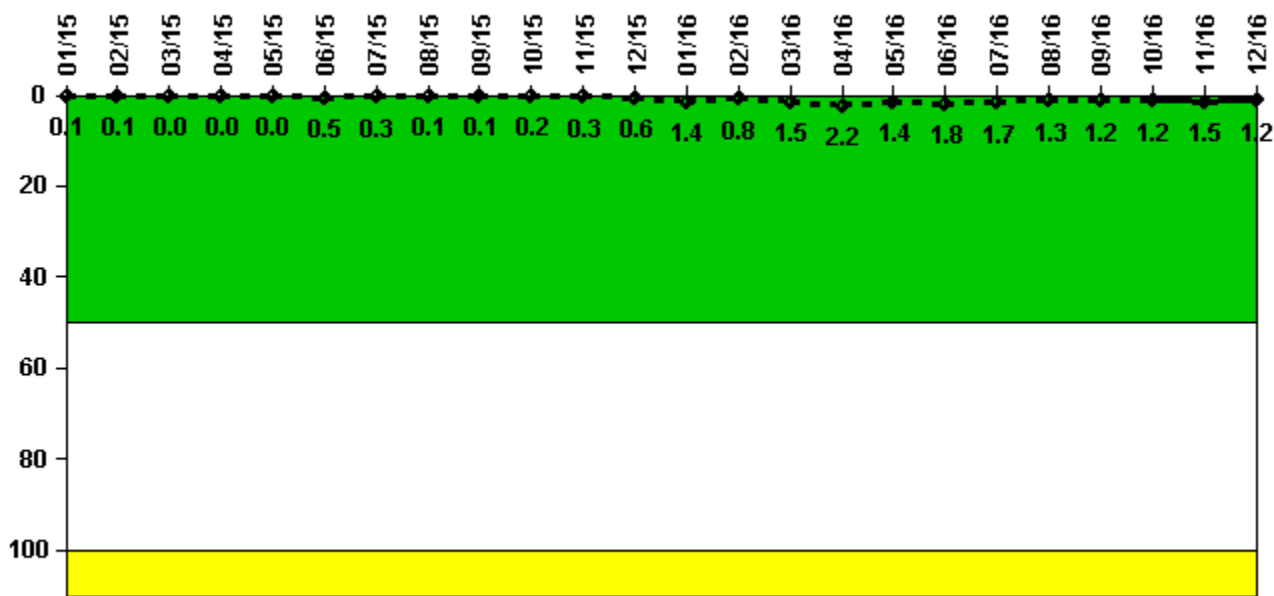
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI (Δ CDF)	6.72E-08	2.92E-08	2.92E-08	2.94E-08	-2.31E-09	-2.31E-09	-2.31E-09	-2.31E-09
URI (Δ CDF)	-3.22E-08	-2.99E-08	-2.99E-08	-3.39E-08	-3.39E-08	-3.39E-08	-3.39E-08	-3.39E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	3.50E-08	-6.60E-10	-6.60E-10	-4.50E-09	-3.60E-08	-3.60E-08	-3.60E-08	-3.60E-08

Licensee Comments: none

Reactor Coolant System Activity



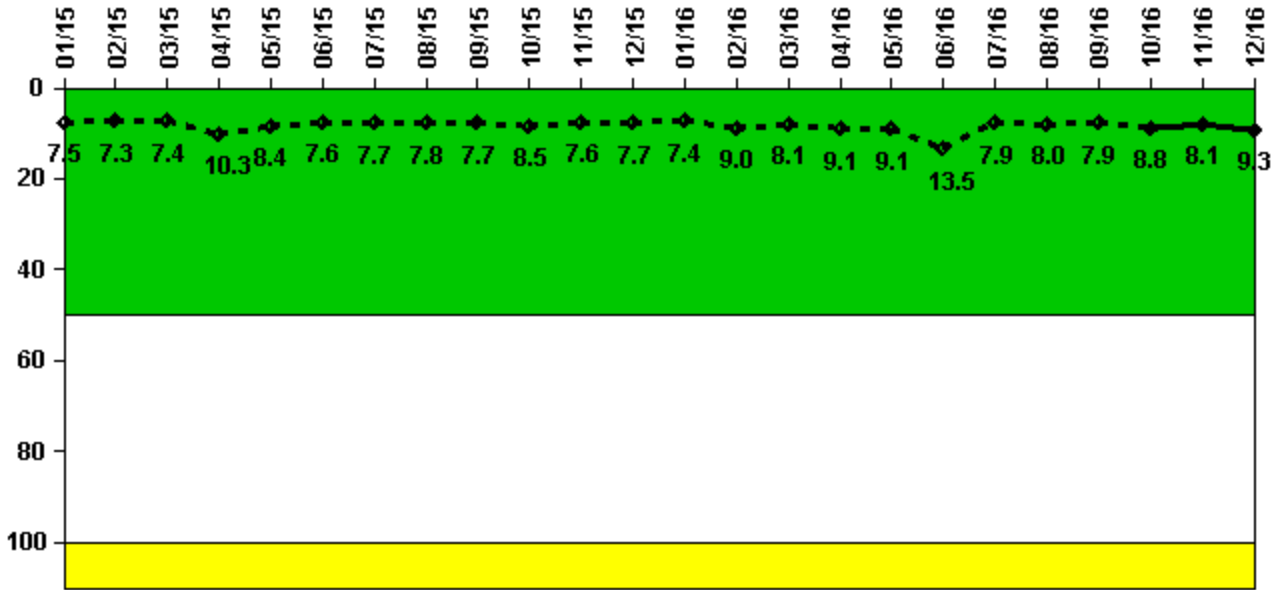
Thresholds: White > 50.0 Yellow > 100.0

Notes

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	0.000186	0.000186	0.000047	0.000068	0.000075	0.001076	0.000651	0.000248	0.000135	0.000496	0.000628	0.001242
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	0.1	0.1	0	0	0	0.5	0.3	0.1	0.1	0.2	0.3	0.6
Reactor Coolant System Activity	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16	10/16	11/16	12/16
Maximum activity	0.002747	0.001582	0.002948	0.004346	0.002886	0.003587	0.003331	0.002647	0.002376	0.002487	0.002930	0.002487
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	1.4	0.8	1.5	2.2	1.4	1.8	1.7	1.3	1.2	1.2	1.5	1.2

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

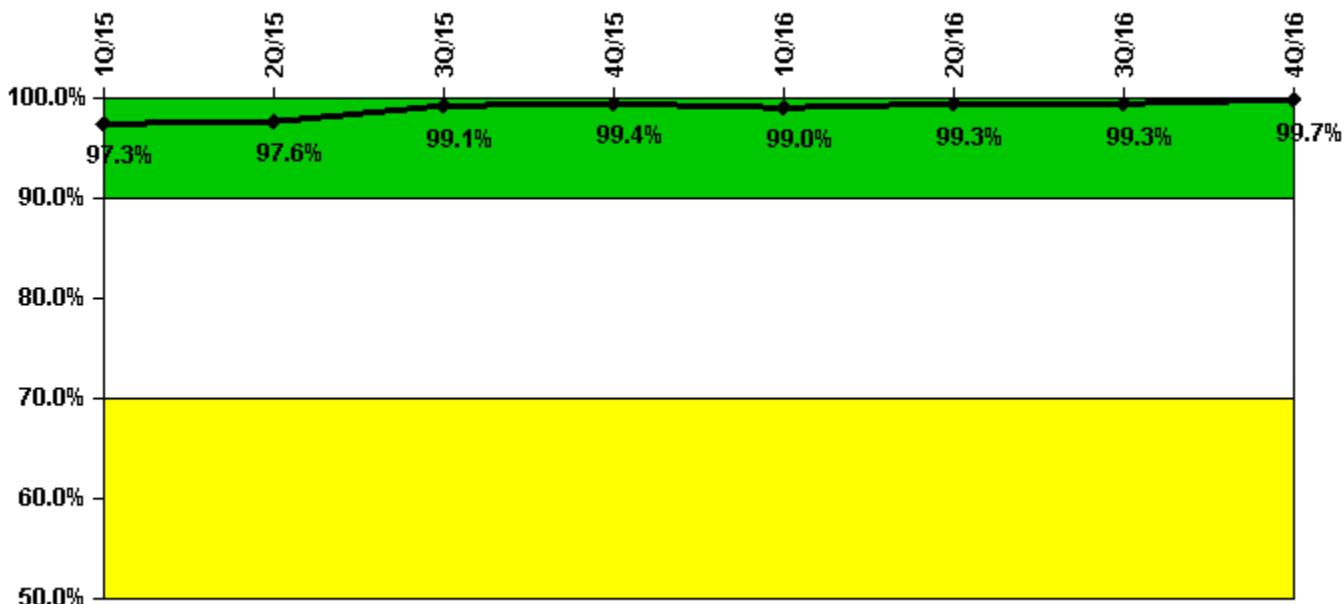
Notes

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	2.240	2.200	2.220	3.090	2.510	2.270	2.310	2.330	2.320	2.550	2.280	2.300
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Indicator value	7.5	7.3	7.4	10.3	8.4	7.6	7.7	7.8	7.7	8.5	7.6	7.7

Reactor Coolant System Leakage	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16	10/16	11/16	12/16
Maximum leakage	2.230	2.700	2.420	2.740	2.720	4.040	2.370	2.410	2.360	2.630	2.420	2.800
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Indicator value	7.4	9.0	8.1	9.1	9.1	13.5	7.9	8.0	7.9	8.8	8.1	9.3

Licensee Comments: none

Drill/Exercise Performance



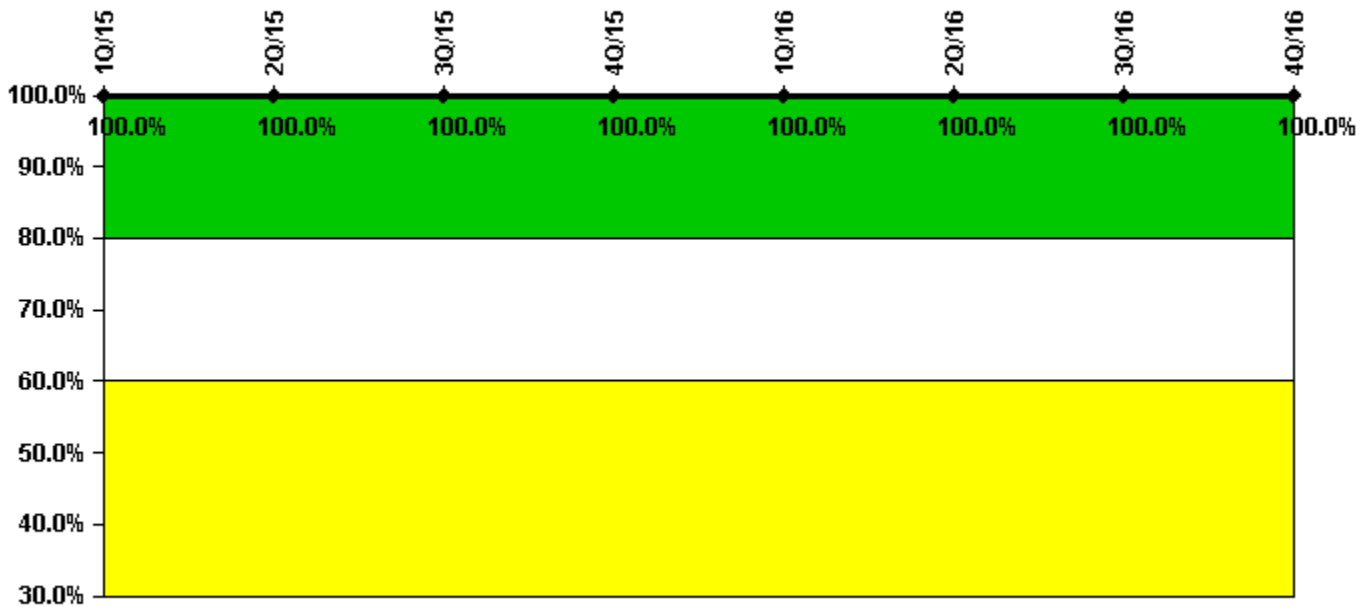
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Successful opportunities	22.0	40.0	40.0	58.0	12.0	34.0	45.0	44.0
Total opportunities	22.0	40.0	40.0	58.0	13.0	34.0	45.0	44.0
Indicator value	97.3%	97.6%	99.1%	99.4%	99.0%	99.3%	99.3%	99.7%

Licensee Comments: none

ERO Drill Participation



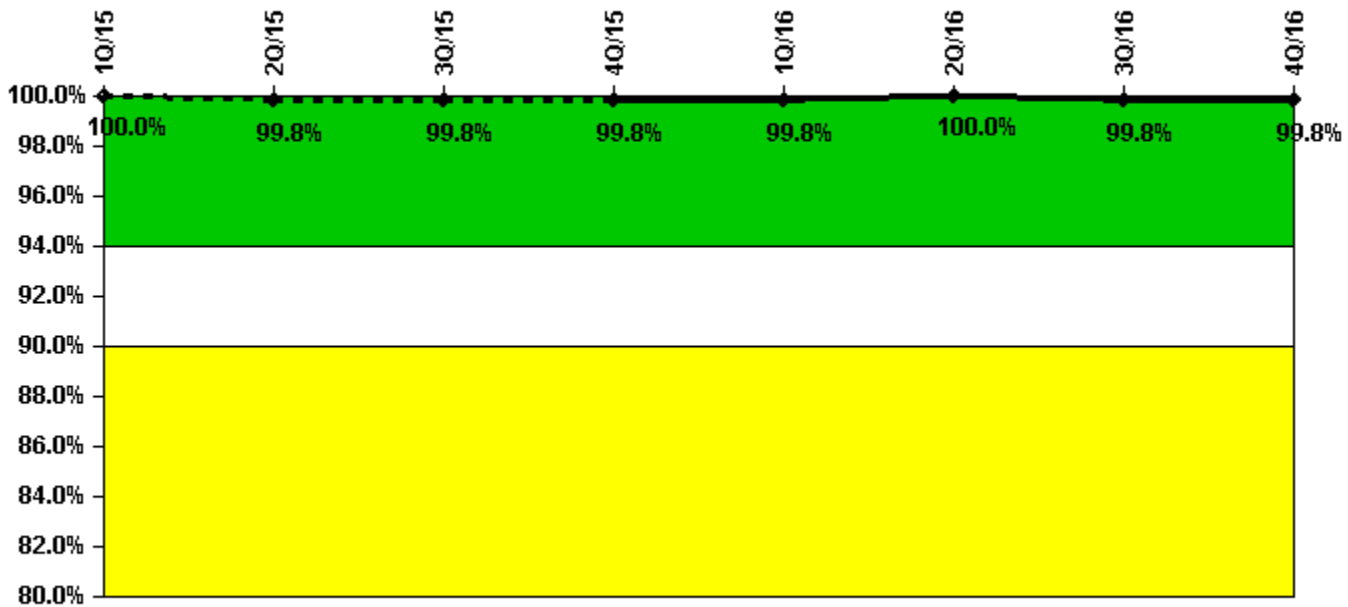
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Participating Key personnel	81.0	89.0	84.0	83.0	79.0	81.0	78.0	81.0
Total Key personnel	81.0	89.0	84.0	83.0	79.0	81.0	78.0	81.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



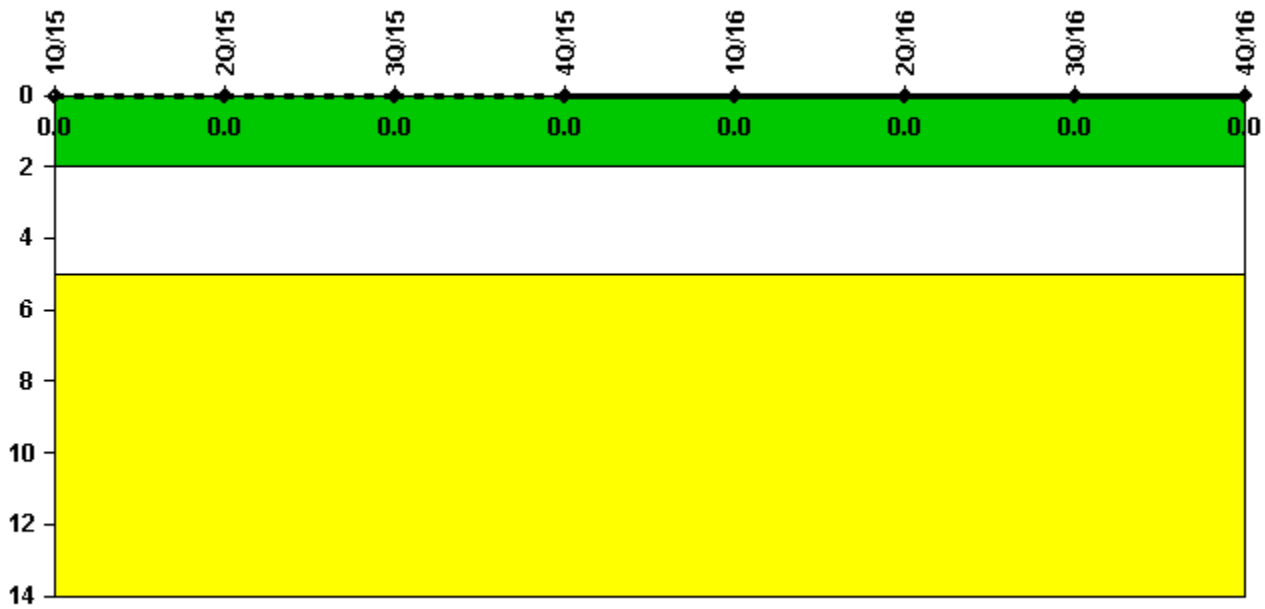
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Successful siren-tests	852	918	922	923	911	910	916	923
Total sirens-tests	852	923	923	923	911	910	922	923
Indicator value	100.0%	99.8%	99.8%	99.8%	99.8%	100.0%	99.8%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



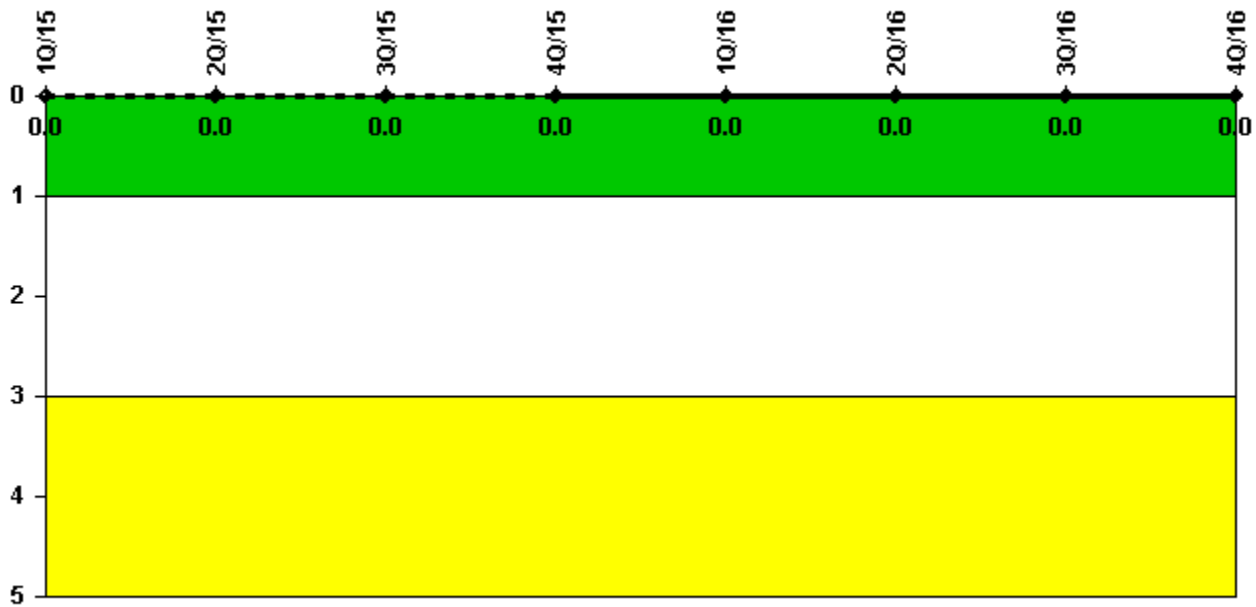
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
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

RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
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: January 24, 2017