

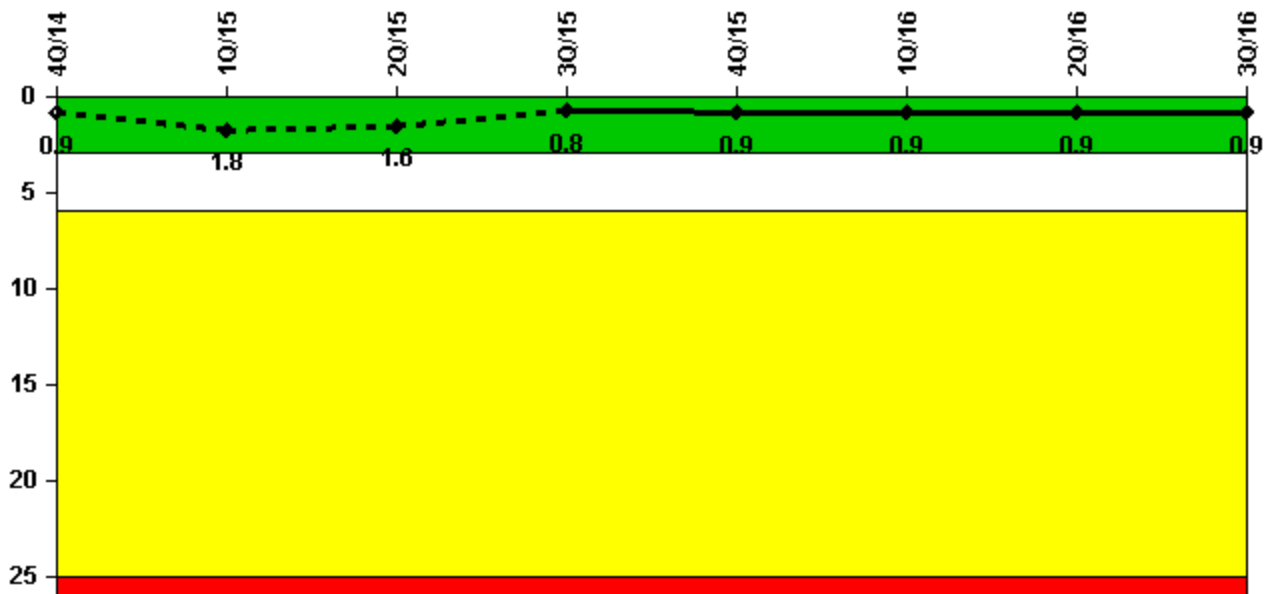
Watts Bar 1

3Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



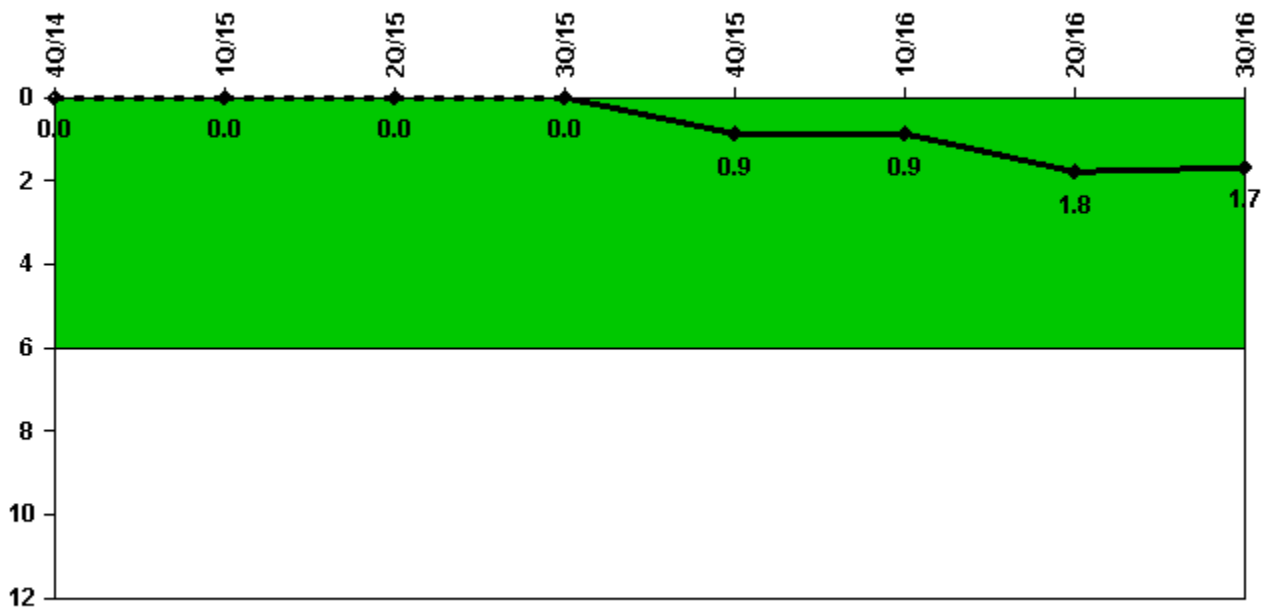
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Unplanned scrams	0	1.0	0	0	0	1.0	0	0
Critical hours	2209.0	1960.1	2184.0	1956.0	1565.9	2109.4	2184.0	2208.0
Indicator value	0.9	1.8	1.6	0.8	0.9	0.9	0.9	0.9

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



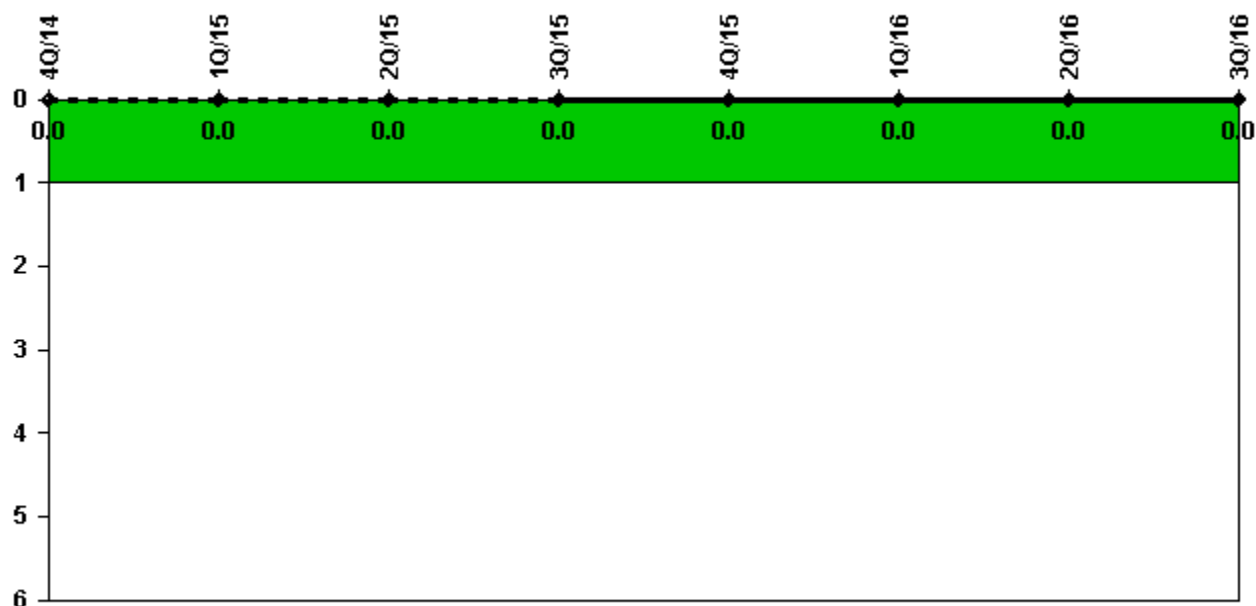
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Unplanned power changes	0	0	0	0	1.0	0	1.0	0
Critical hours	2209.0	1960.1	2184.0	1956.0	1565.9	2109.4	2184.0	2208.0
Indicator value	0	0	0	0	0.9	0.9	1.8	1.7

Licensee Comments: none

Unplanned Scrams with Complications



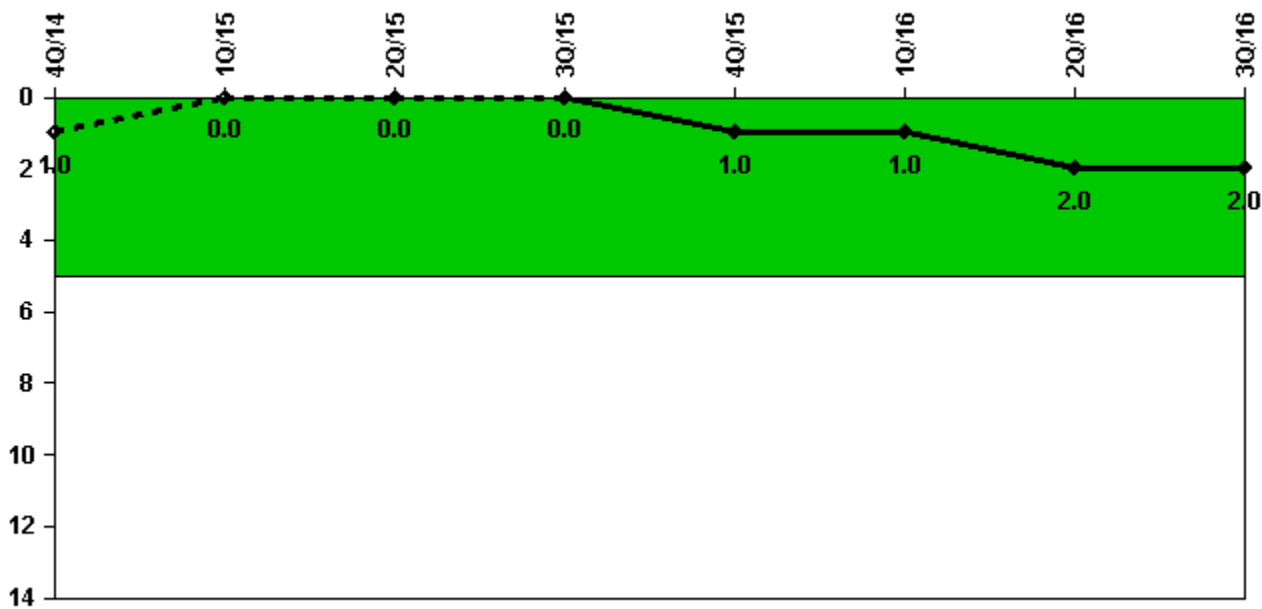
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
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

Safety System Functional Failures (PWR)



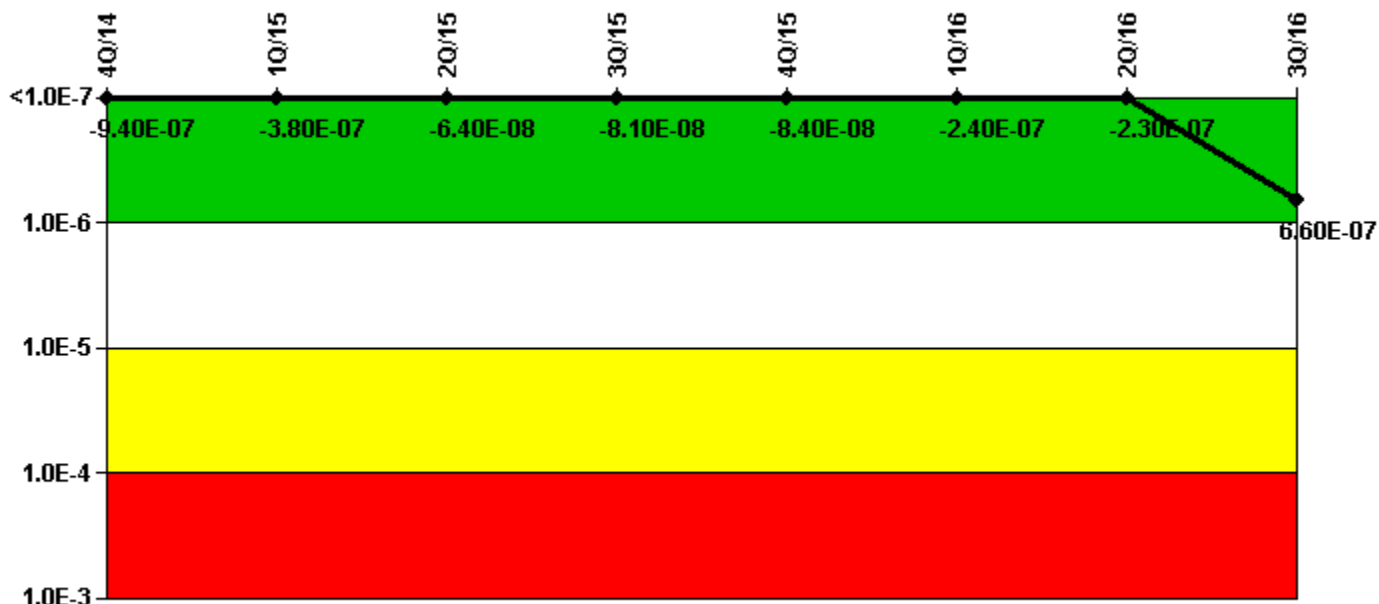
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Safety System Functional Failures	0	0	0	0	1	0	1	0
Indicator value	1	0	0	0	1	1	2	2

Licensee Comments: none

Mitigating Systems Performance Index, Emergency AC Power System



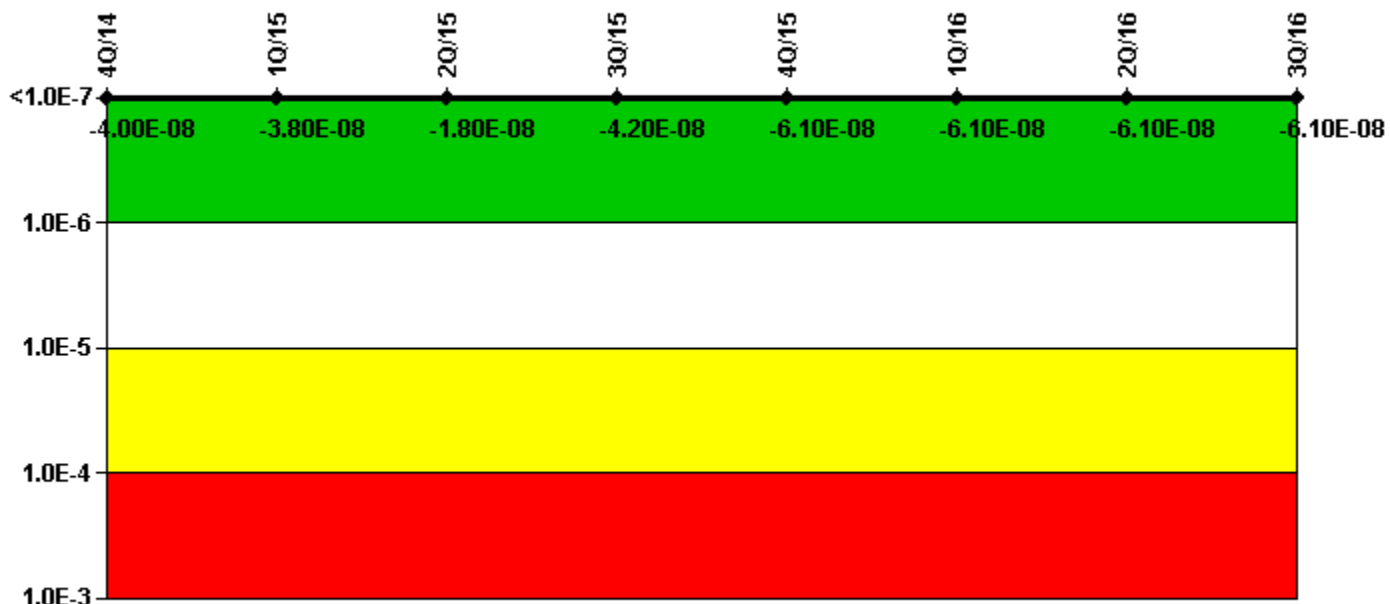
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI (Δ CDF)	5.97E-07	7.69E-07	6.96E-07	6.80E-07	6.66E-07	5.07E-07	5.20E-07	5.75E-07
URI (Δ CDF)	-1.54E-06	-1.15E-06	-7.60E-07	-7.60E-07	-7.50E-07	-7.50E-07	-7.53E-07	8.98E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.40E-07	-3.80E-07	-6.40E-08	-8.10E-08	-8.40E-08	-2.40E-07	-2.30E-07	6.60E-07

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



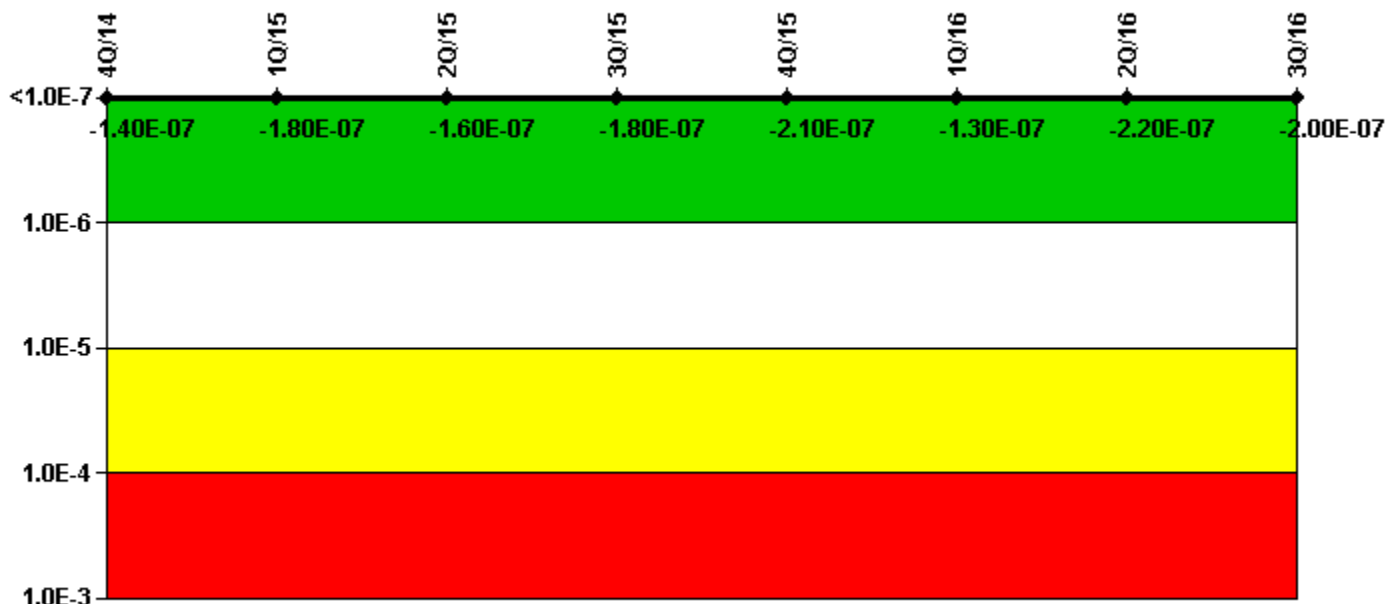
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI (Δ CDF)	-3.15E-08	-2.95E-08	-9.82E-09	-3.34E-08	-5.28E-08	-5.24E-08	-5.26E-08	-5.28E-08
URI (Δ CDF)	-8.35E-09	-8.35E-09	-8.35E-09	-8.35E-09	-8.35E-09	-8.35E-09	-8.35E-09	-8.35E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.00E-08	-3.80E-08	-1.80E-08	-4.20E-08	-6.10E-08	-6.10E-08	-6.10E-08	-6.10E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



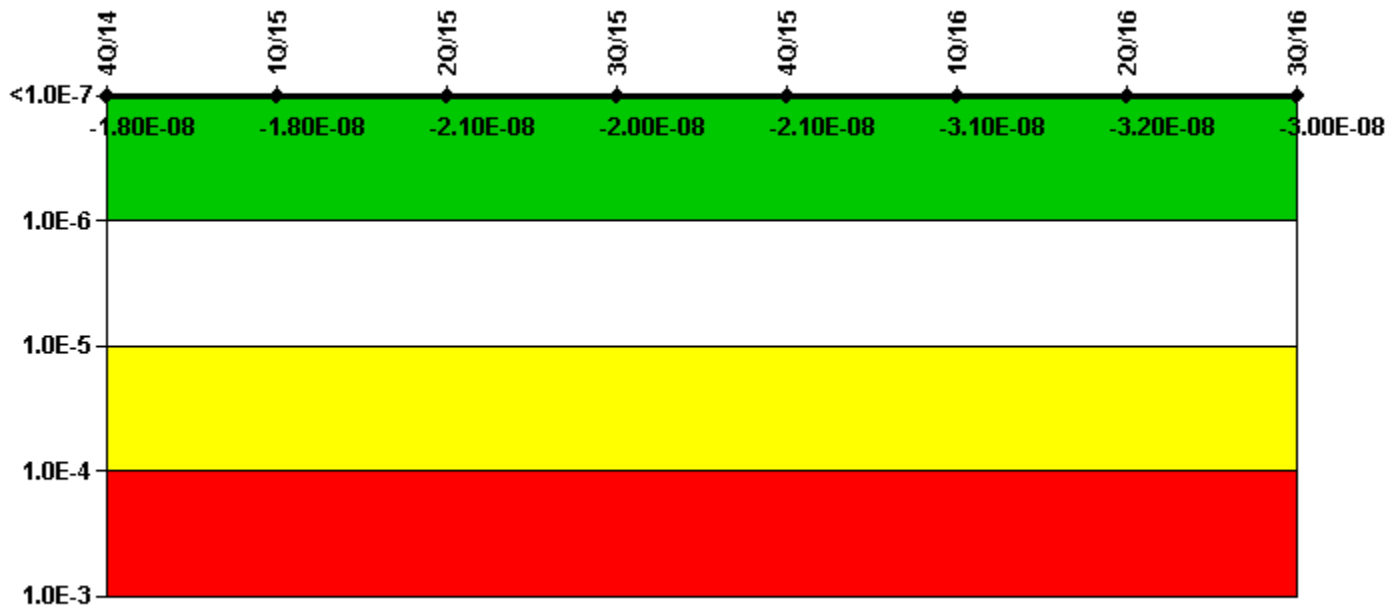
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI (Δ CDF)	1.59E-07	1.38E-07	1.60E-07	1.39E-07	1.08E-07	1.19E-07	1.91E-08	3.97E-08
URI (Δ CDF)	-2.98E-07	-3.18E-07	-3.18E-07	-3.17E-07	-3.17E-07	-2.45E-07	-2.42E-07	-2.43E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.40E-07	-1.80E-07	-1.60E-07	-1.80E-07	-2.10E-07	-1.30E-07	-2.20E-07	-2.00E-07

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



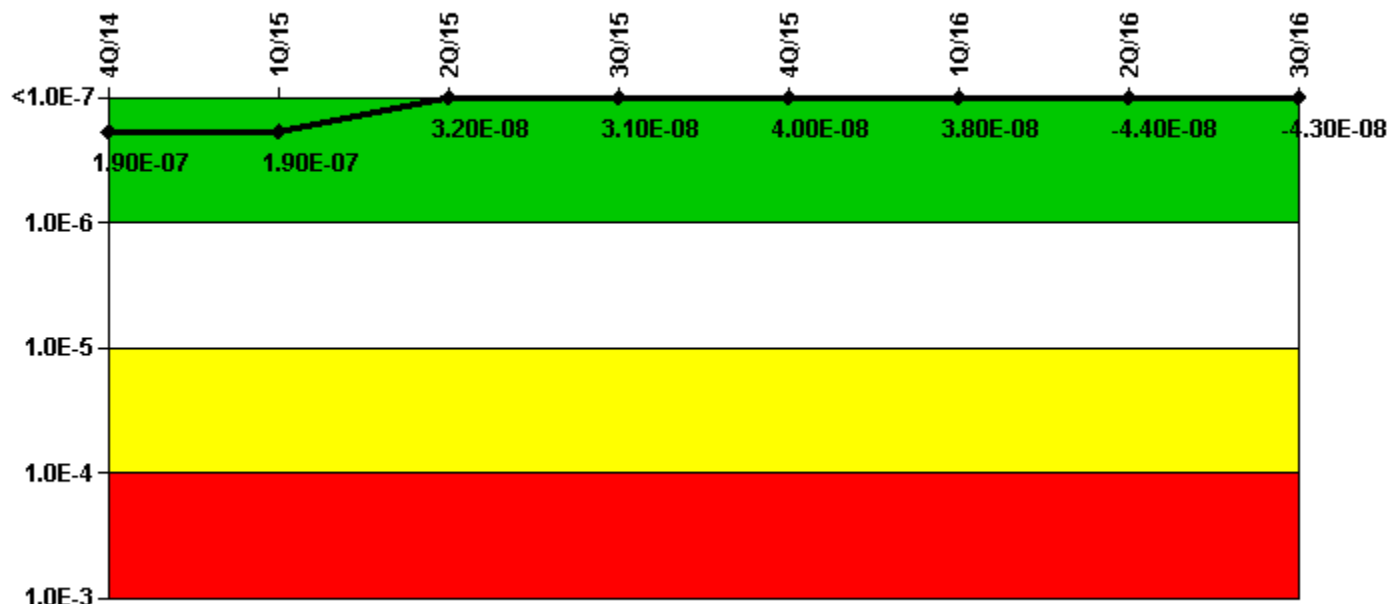
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI (Δ CDF)	6.11E-09	6.21E-09	3.87E-09	6.10E-09	5.24E-09	-4.47E-09	-4.47E-09	-2.45E-09
URI (Δ CDF)	-2.38E-08	-2.44E-08	-2.50E-08	-2.56E-08	-2.62E-08	-2.68E-08	-2.73E-08	-2.78E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.80E-08	-1.80E-08	-2.10E-08	-2.00E-08	-2.10E-08	-3.10E-08	-3.20E-08	-3.00E-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/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
UAI (ΔCDF)	1.91E-07	1.94E-07	3.06E-08	3.00E-08	3.86E-08	3.69E-08	1.98E-08	2.04E-08
URI (ΔCDF)	1.14E-09	1.14E-09	1.14E-09	1.14E-09	1.14E-09	1.14E-09	-6.35E-08	-6.35E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.90E-07	1.90E-07	3.20E-08	3.10E-08	4.00E-08	3.80E-08	-4.40E-08	-4.30E-08

Licensee Comments:

2Q/16: Changed PRA Parameter(s). A MSPI basis document revision R9 and INPO CDE were update to add a cooling water unavailability segment for 2nd Quarter 2016. Before this change the segment was excluded from unavailability monitoring because the basis document concluded that it could not be taken out of service without plant shutdown as specified in NEI 99-02. During a review this quarter the header was determined to be able to be removed. The new segment was added to the Component Cooling Water as 1B header and appropriate data added. The effect of MSPI values in the past are insignificant because this header is not removed from service for planned maintenance due to the high on line risk (making multiple B train ECCS equipment unavailable). No unavailable was entered for the last 36 months. CJW

1Q/16: Changed PRA Parameter(s).

4Q/15: Changed PRA Parameter(s).

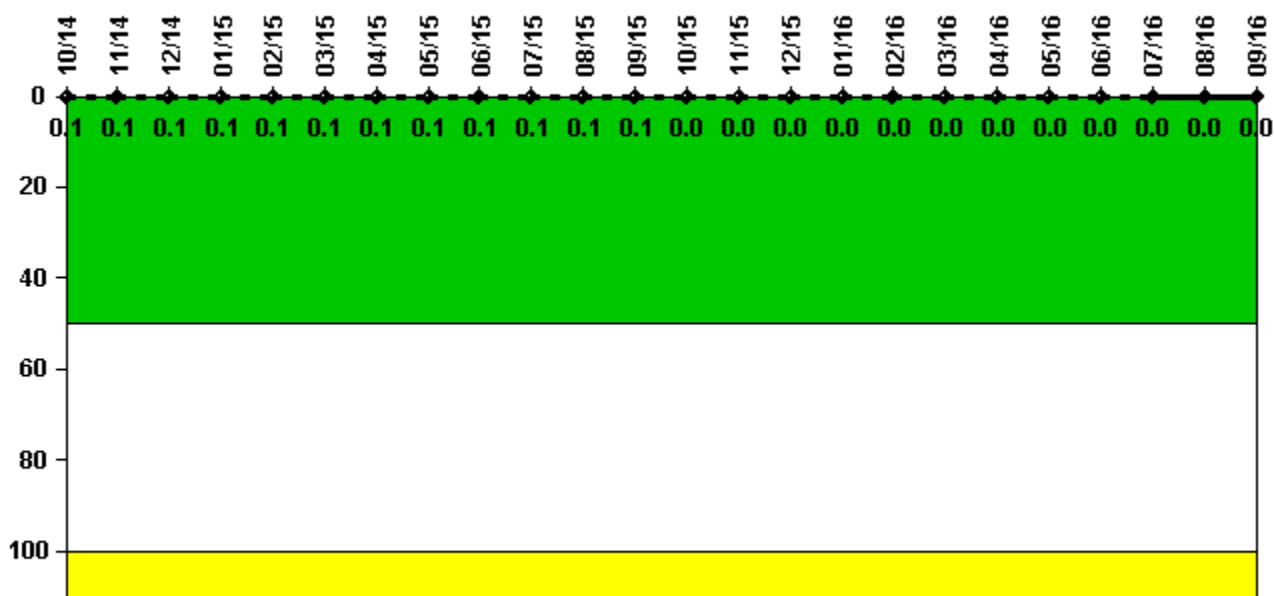
3Q/15: Changed PRA Parameter(s).

2Q/15: Changed PRA Parameter(s).

1Q/15: Changed PRA Parameter(s).

4Q/14: Changed PRA Parameter(s).

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

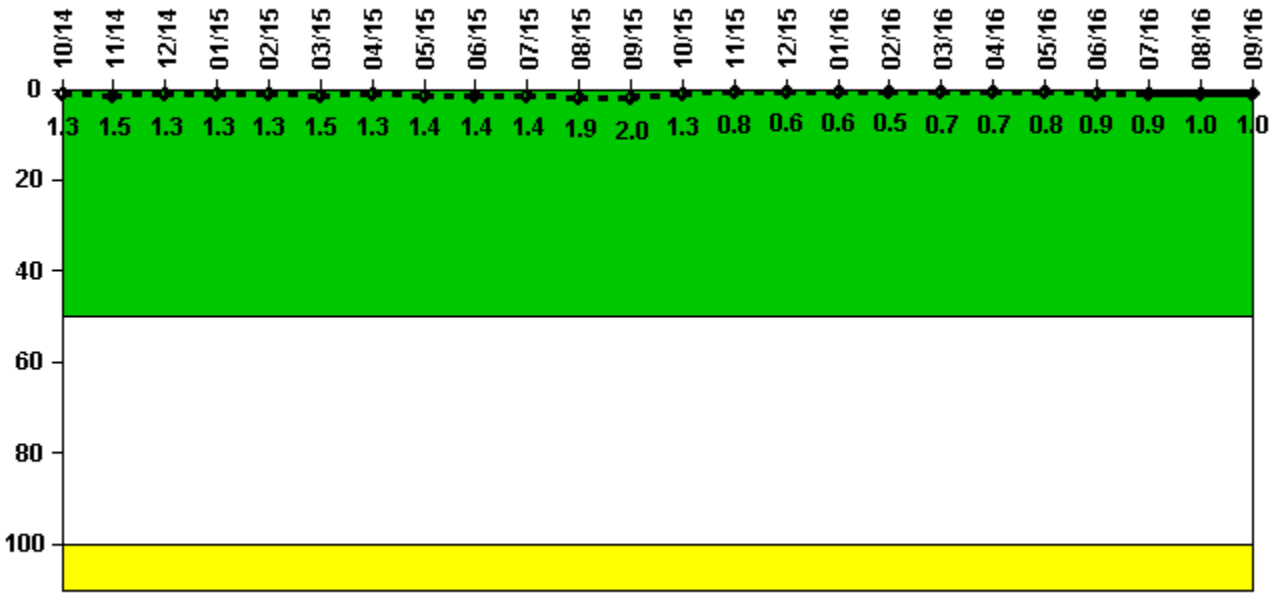
Notes

Reactor Coolant System Activity	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15
Maximum activity	0.000137	0.000149	0.000154	0.000158	0.000154	0.000168	0.000168	0.000172	0.000177	0.000188	0.000191	0.000182
Technical specification limit	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Indicator value	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Reactor Coolant System Activity	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16
Maximum activity	0.000079	0.000088	0.000088	0.000094	0.000098	0.000106	0.000109	0.000115	0.000112	0.000111	0.000116	0.000127

Technical specification limit	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
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

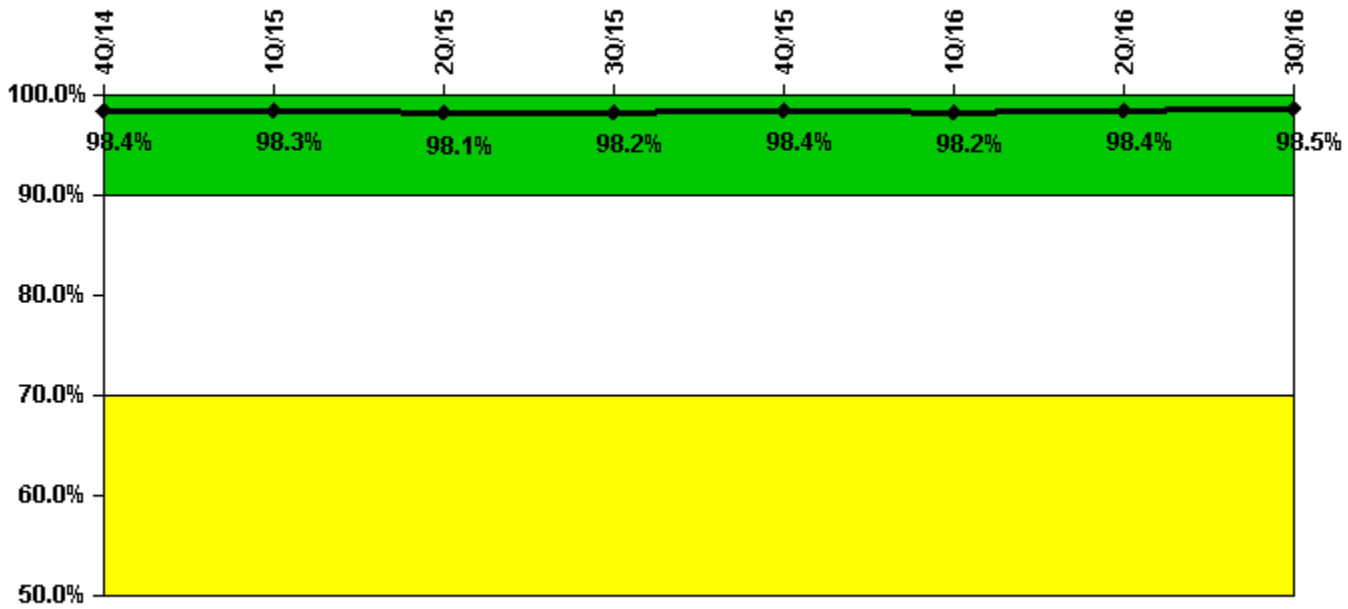
Notes

Reactor Coolant System Leakage	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15
Maximum leakage	0.130	0.150	0.130	0.130	0.130	0.150	0.130	0.140	0.140	0.140	0.190	0.200
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	1.3	1.5	1.3	1.3	1.3	1.5	1.3	1.4	1.4	1.4	1.9	2.0

Reactor Coolant System Leakage	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16
Maximum leakage	0.130	0.080	0.060	0.060	0.050	0.070	0.070	0.080	0.090	0.090	0.100	0.100
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	1.3	0.8	0.6	0.6	0.5	0.7	0.7	0.8	0.9	0.9	1.0	1.0

Licensee Comments: none

Drill/Exercise Performance



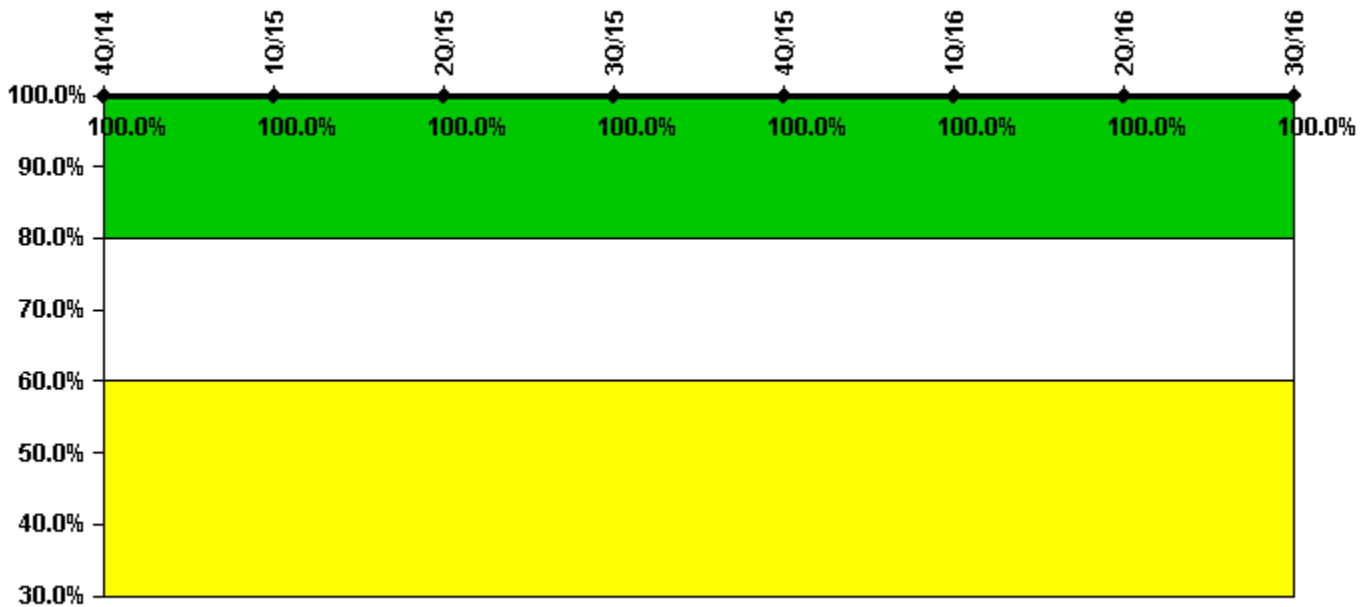
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Successful opportunities	77.0	61.0	11.0	22.0	64.0	36.0	52.0	14.0
Total opportunities	78.0	62.0	12.0	22.0	64.0	38.0	52.0	14.0
Indicator value	98.4%	98.3%	98.1%	98.2%	98.4%	98.2%	98.4%	98.5%

Licensee Comments: none

ERO Drill Participation



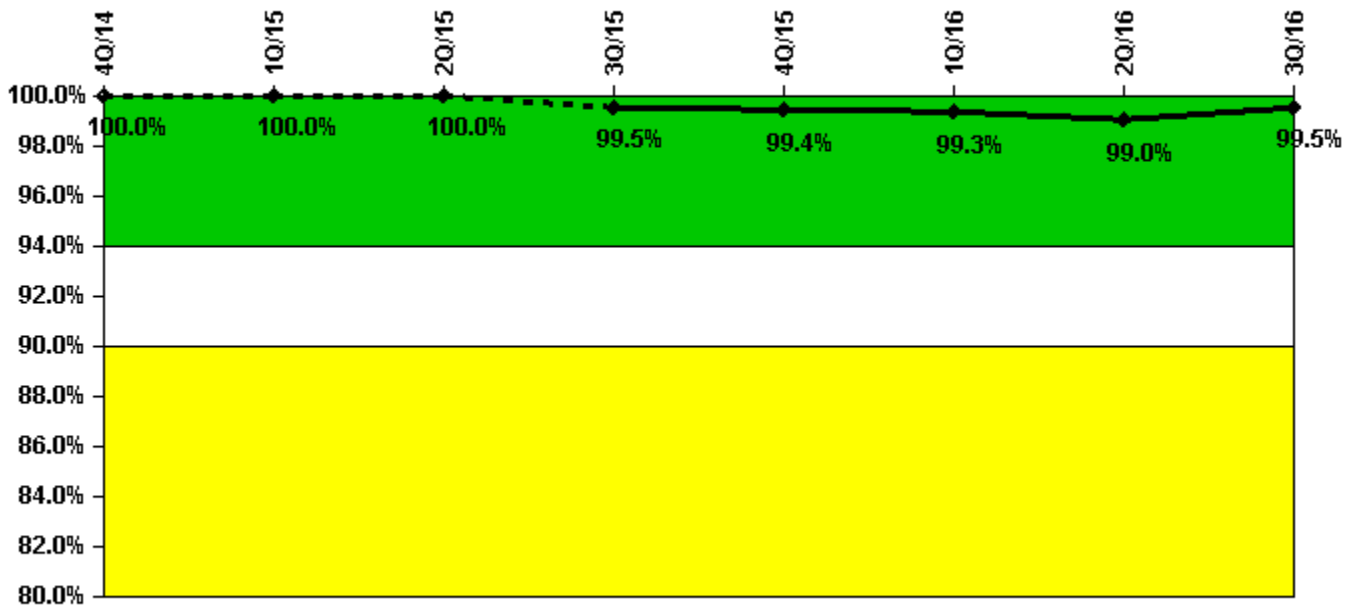
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Participating Key personnel	76.0	75.0	71.0	73.0	73.0	74.0	76.0	82.0
Total Key personnel	76.0	75.0	71.0	73.0	73.0	74.0	76.0	82.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



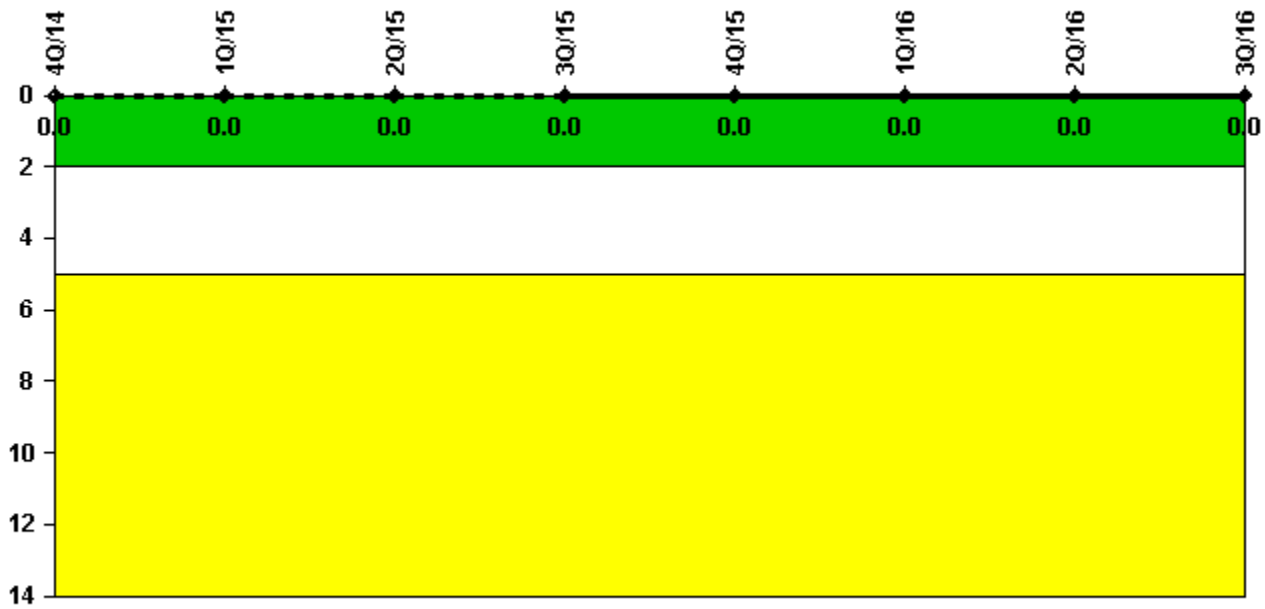
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16
Successful siren-tests	808	909	707	892	704	906	699	805
Total sirens-tests	808	909	707	909	707	909	707	808
Indicator value	100.0%	100.0%	100.0%	99.5%	99.4%	99.3%	99.0%	99.5%

Licensee Comments: none

Occupational Exposure Control Effectiveness



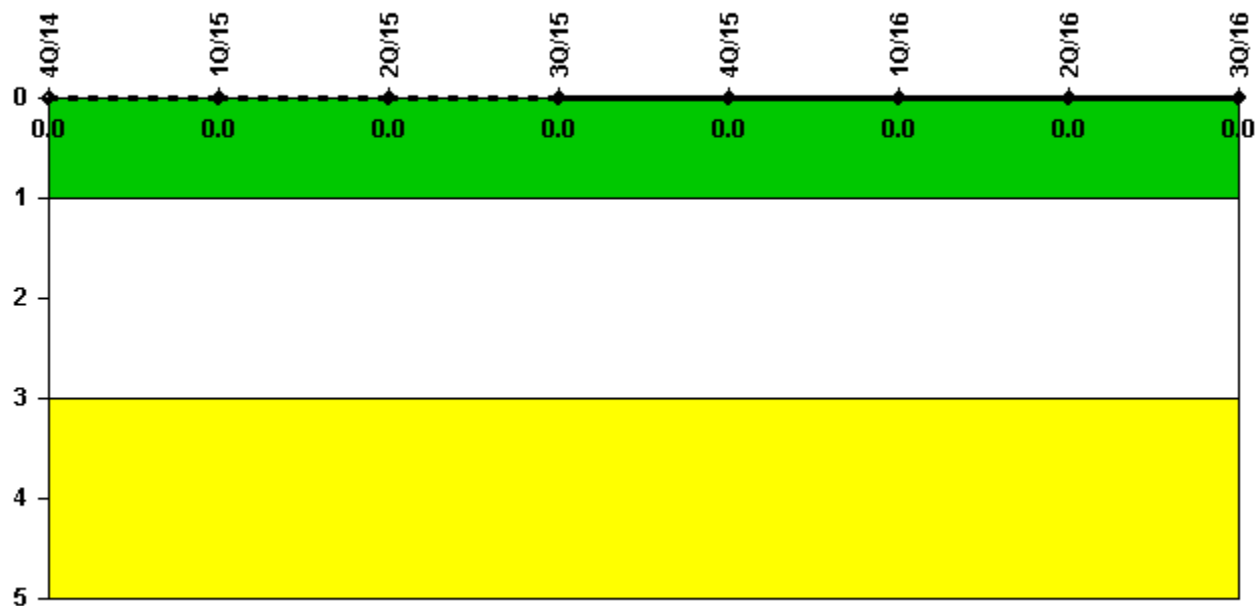
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/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	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/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: October 23, 2016