

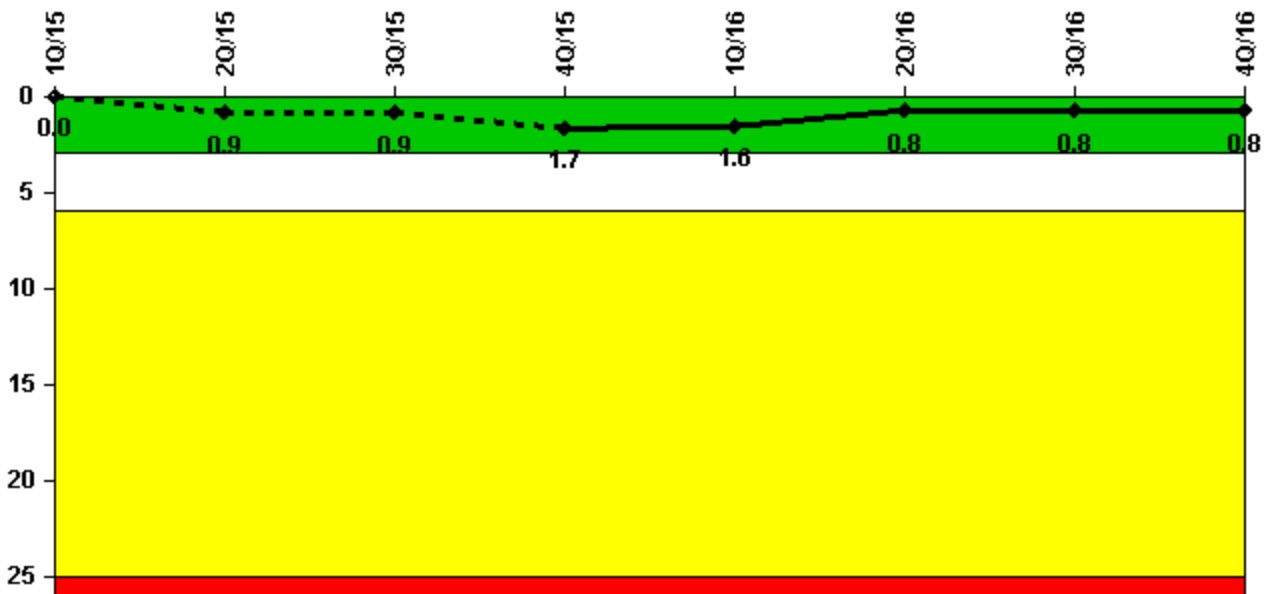
Calvert Cliffs 2

4Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



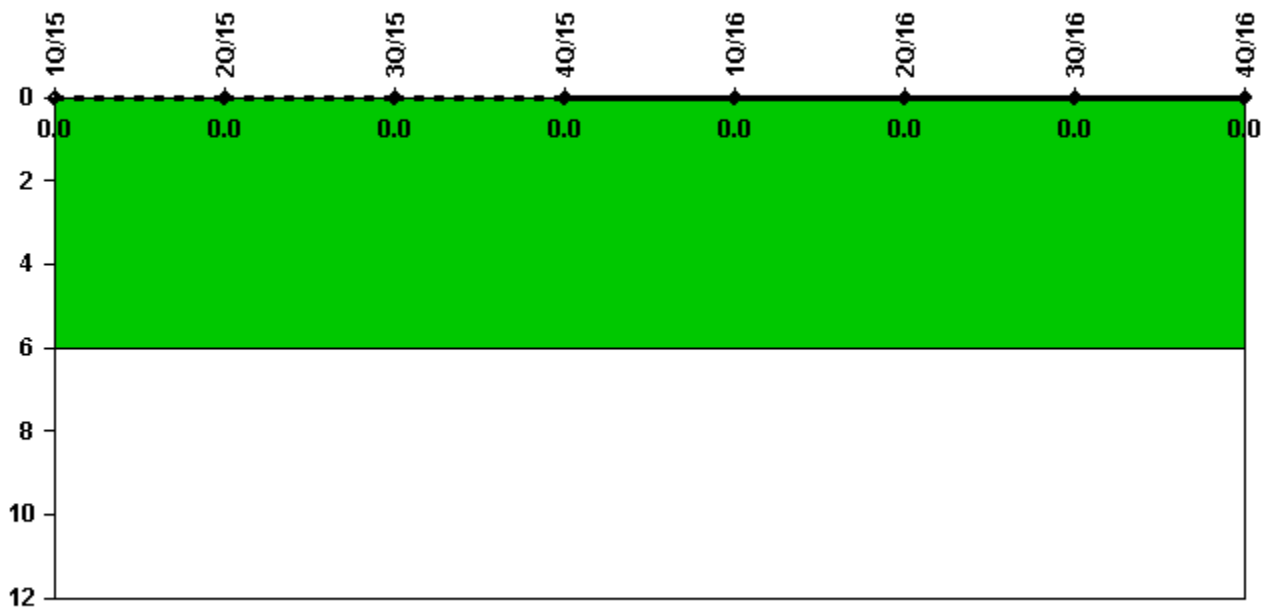
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

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	0	0	0	1.0
Critical hours	1593.3	2137.8	2208.0	2095.1	2183.0	2184.0	2208.0	2183.8
Indicator value	0	0.9	0.9	1.7	1.6	0.8	0.8	0.8

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



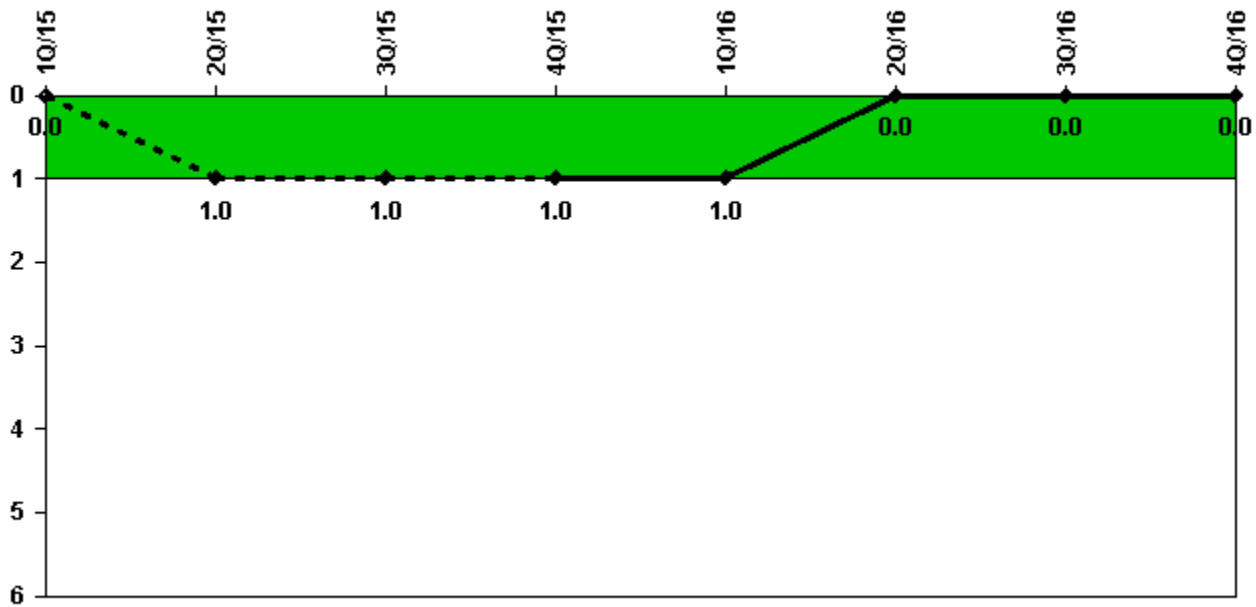
Thresholds: White > 6.0

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	0	0	0	0	0	0	0	0
Critical hours	1593.3	2137.8	2208.0	2095.1	2183.0	2184.0	2208.0	2183.8
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Scrams with Complications



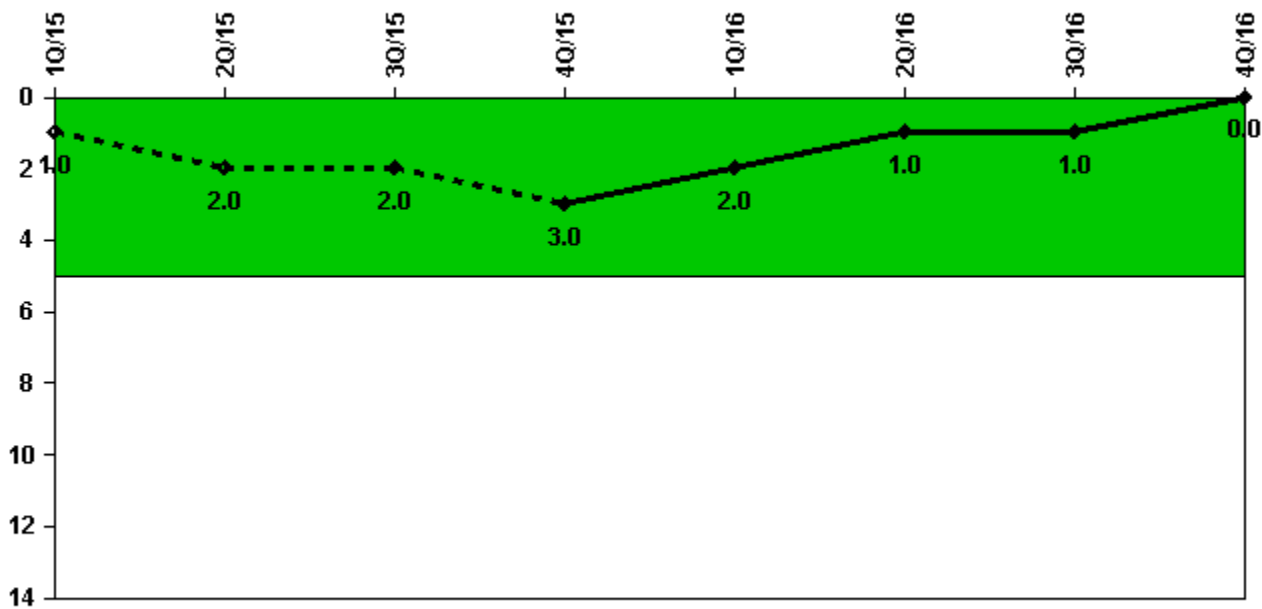
Thresholds: White > 1.0

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	1.0	0	0	0	0	0	0
Indicator value	0.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

Notes

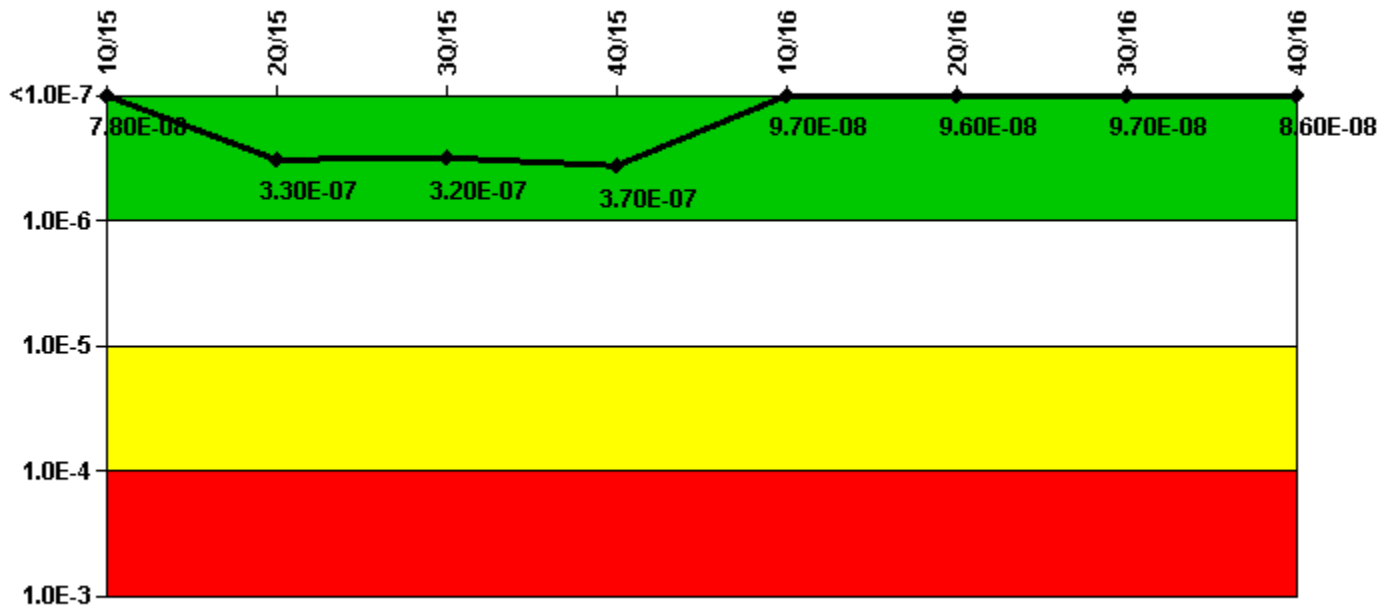
Safety System Functional Failures (PWR)	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Safety System Functional Failures	1	1	0	1	0	0	0	0
Indicator value	1	2	2	3	2	1	1	0

Licensee Comments:

2Q/15: 6/5/2015: LER 318/2015-002-00

1Q/15: 3/22/2015: LER 2015-001-00 05000317/05000318

Mitigating Systems Performance Index, Emergency AC Power System



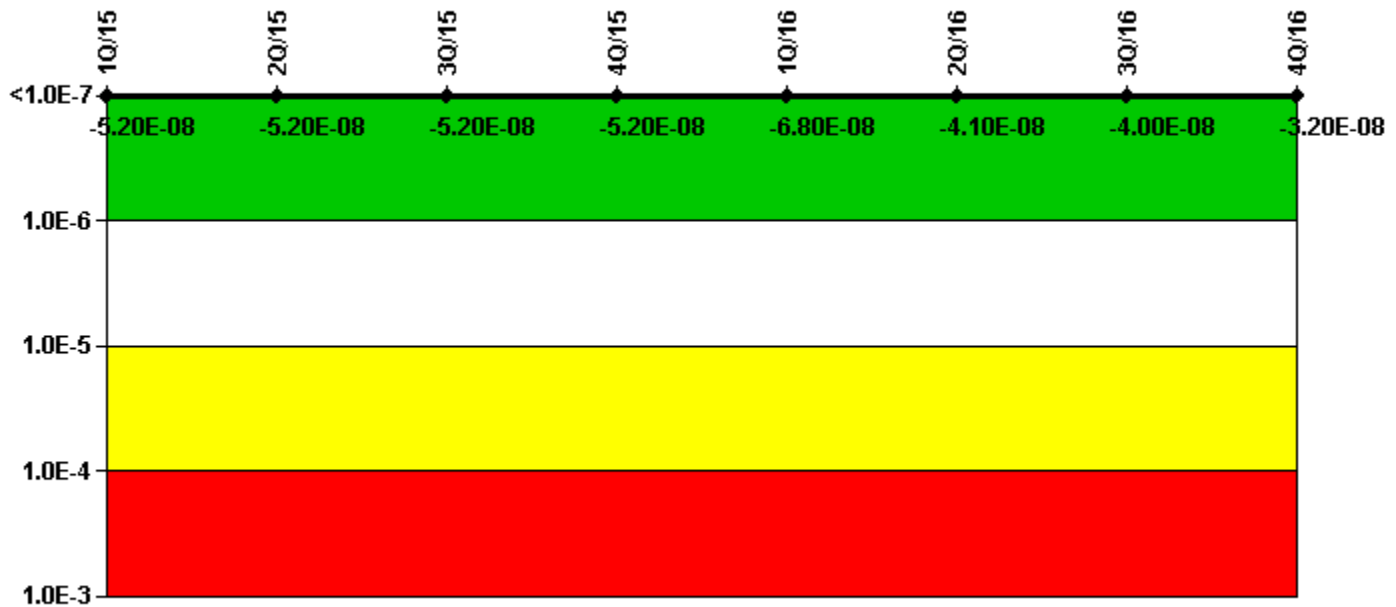
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

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)	-9.69E-11	6.56E-10	6.56E-10	5.93E-08	8.00E-09	5.97E-09	5.64E-09	-4.09E-09
URI (ΔCDF)	7.77E-08	3.25E-07	3.23E-07	3.14E-07	8.91E-08	8.98E-08	9.15E-08	8.99E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	7.80E-08	3.30E-07	3.20E-07	3.70E-07	9.70E-08	9.60E-08	9.70E-08	8.60E-08

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



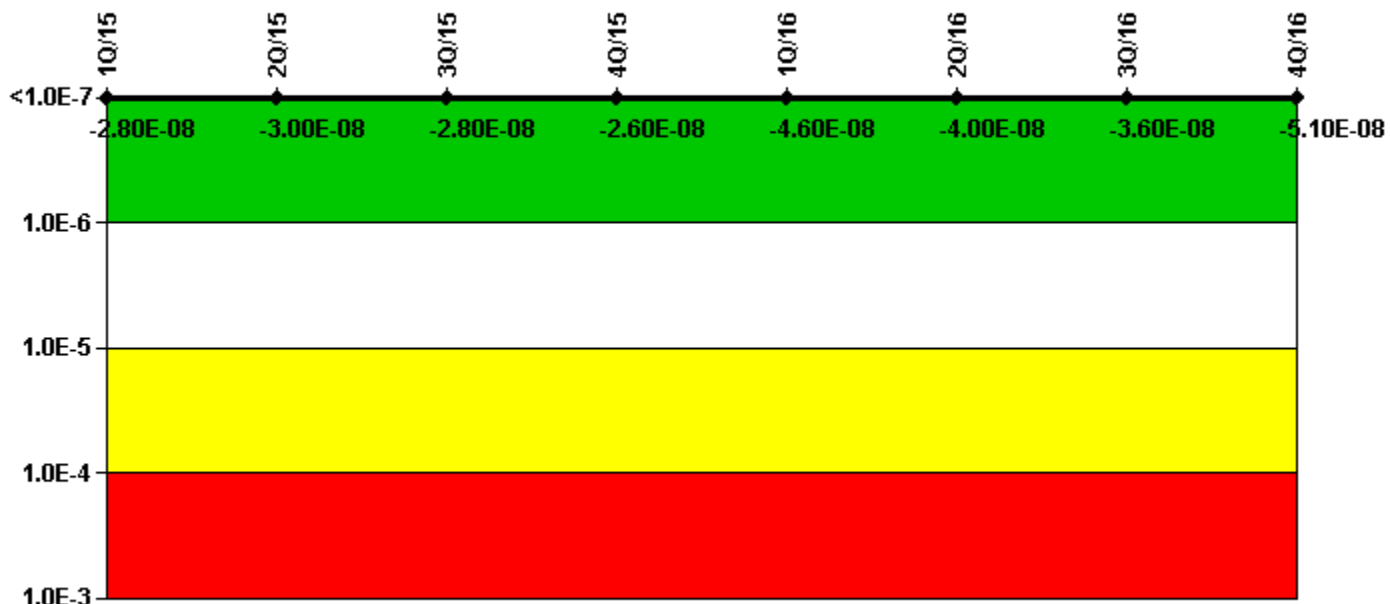
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

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)	-5.89E-09	-5.54E-09	-5.54E-09	-6.18E-09	-2.67E-08	1.55E-09	2.16E-09	9.05E-09
URI (Δ CDF)	-4.62E-08	-4.62E-08	-4.64E-08	-4.62E-08	-4.13E-08	-4.27E-08	-4.20E-08	-4.13E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.20E-08	-5.20E-08	-5.20E-08	-5.20E-08	-6.80E-08	-4.10E-08	-4.00E-08	-3.20E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



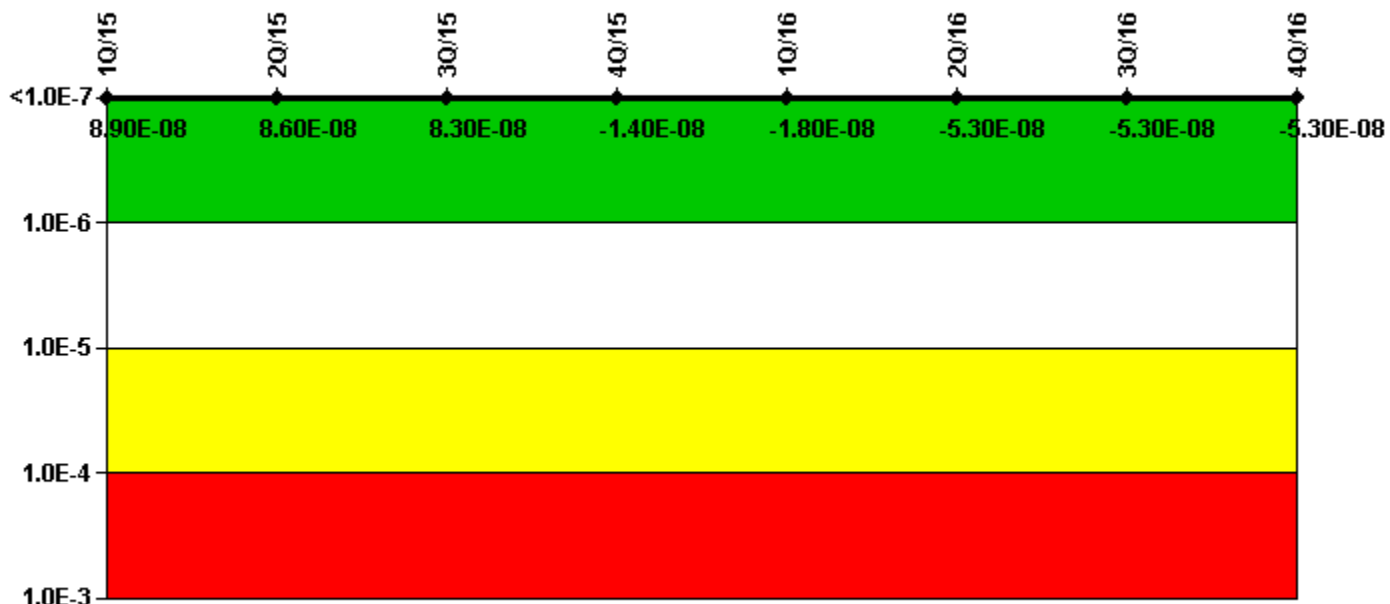
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

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)	-3.55E-09	-5.15E-09	-3.03E-09	-1.02E-09	-8.56E-09	-1.89E-09	2.72E-09	-1.20E-08
URI (Δ CDF)	-2.40E-08	-2.51E-08	-2.51E-08	-2.51E-08	-3.71E-08	-3.78E-08	-3.88E-08	-3.86E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.80E-08	-3.00E-08	-2.80E-08	-2.60E-08	-4.60E-08	-4.00E-08	-3.60E-08	-5.10E-08

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



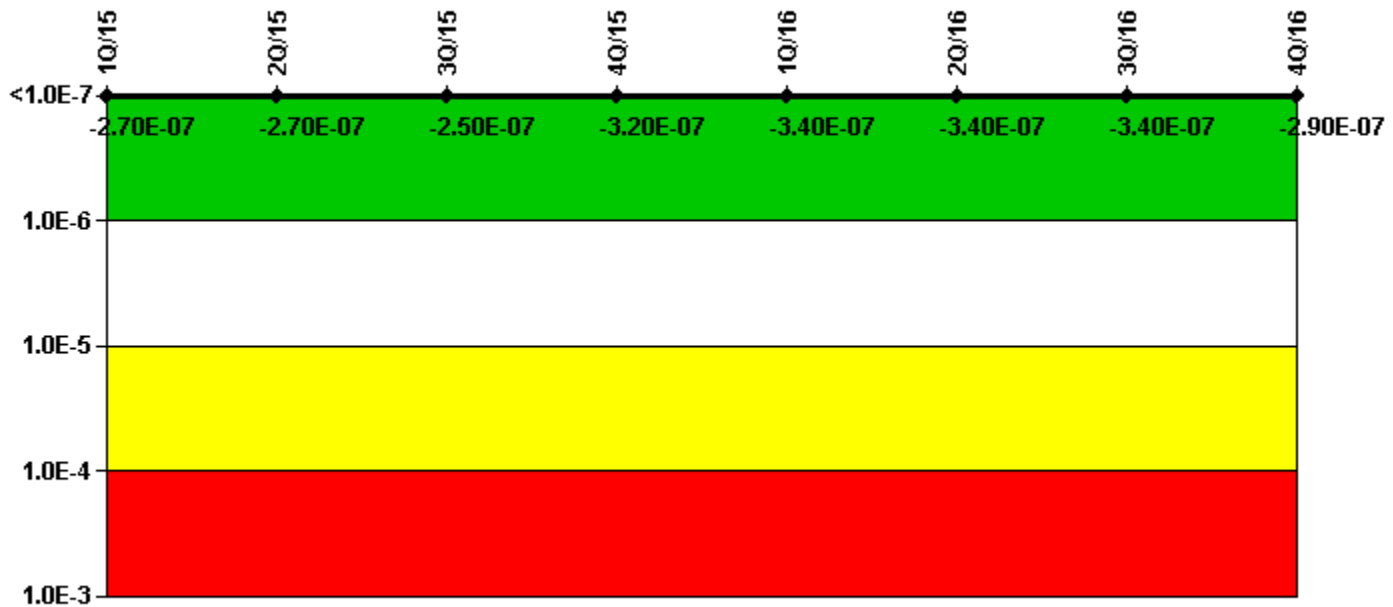
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI (Δ CDF)	8.93E-08	8.65E-08	8.34E-08	-8.96E-09	-1.31E-08	-4.82E-08	-4.82E-08	-4.82E-08
URI (Δ CDF)	-4.83E-10	-3.33E-10	-4.45E-10	-4.65E-09	-4.78E-09	-5.03E-09	-4.92E-09	-4.92E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	8.90E-08	8.60E-08	8.30E-08	-1.40E-08	-1.80E-08	-5.30E-08	-5.30E-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)	-4.91E-08	-4.25E-08	-2.91E-08	-1.00E-07	-8.91E-08	-8.97E-08	-9.03E-08	-4.53E-08
URI (Δ CDF)	-2.24E-07	-2.24E-07	-2.23E-07	-2.23E-07	-2.50E-07	-2.50E-07	-2.50E-07	-2.50E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.70E-07	-2.70E-07	-2.50E-07	-3.20E-07	-3.40E-07	-3.40E-07	-3.40E-07	-2.90E-07

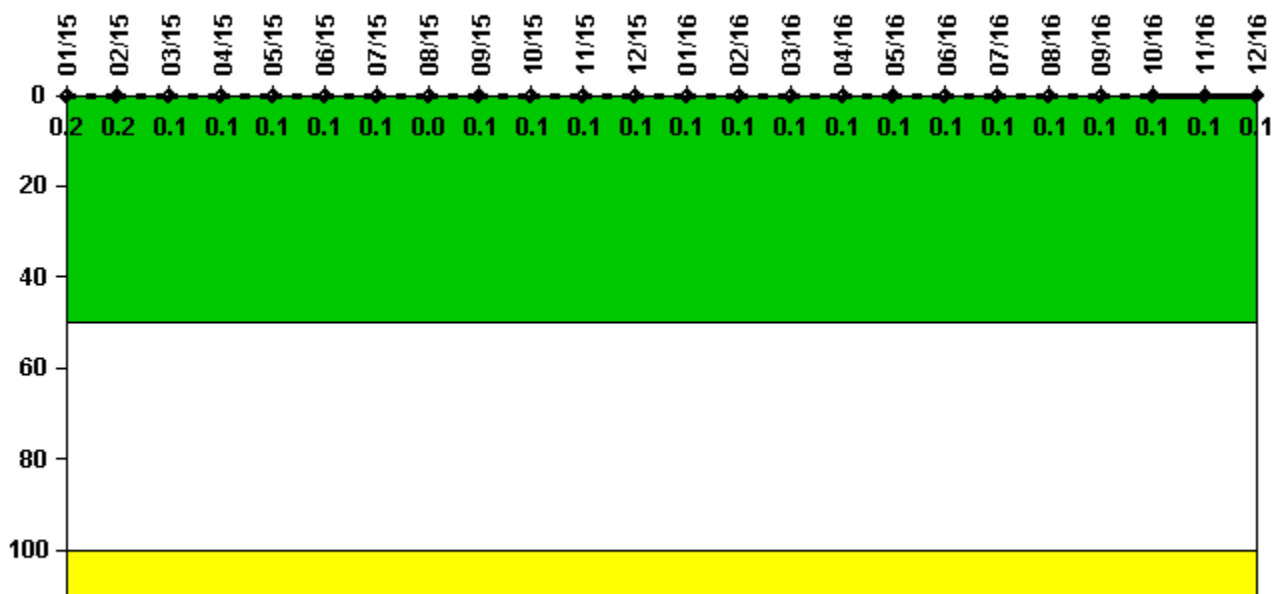
Licensee Comments:

3Q/15: 21 SW Train unavailability was incorrectly reported in October 2014 as 46 hours. Data identified and corrected on 10/15/2015. Correct hours are 6.4. IR 2571219

2Q/15: 21 SW Train unavailability was incorrectly reported in October 2014 as 46 hours. Data identified and corrected on 10/15/2015. Correct hours are 6.4. IR 2571219

1Q/15: 21 SW Train unavailability was incorrectly reported in October 2014 as 46 hours. Data identified and corrected on 10/15/2015. Correct hours are 6.4. IR 2571219

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

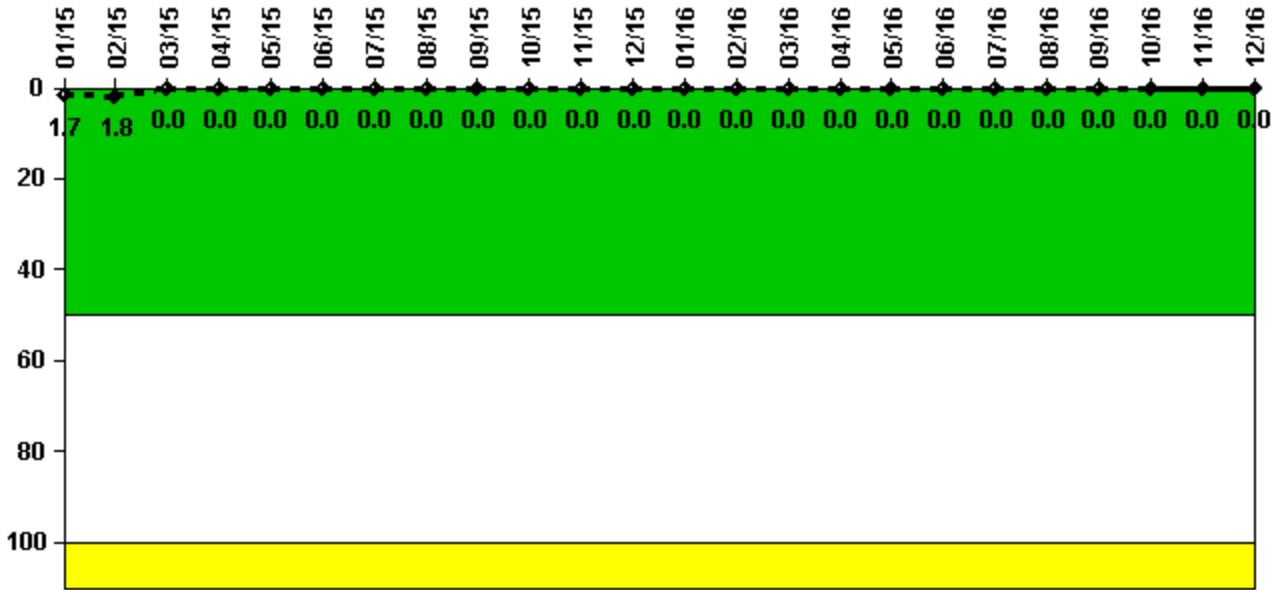
Notes

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	0.000903	0.001170	0.000279	0.000511	0.000288	0.000310	0.000301	0.000249	0.000332	0.000394	0.000406	0.000431
Technical specification limit	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Indicator value	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1

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	0.000415	0.000444	0.000417	0.000303	0.000322	0.000484	0.000531	0.000540	0.000535	0.000598	0.000592	0.000369
Technical specification limit	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

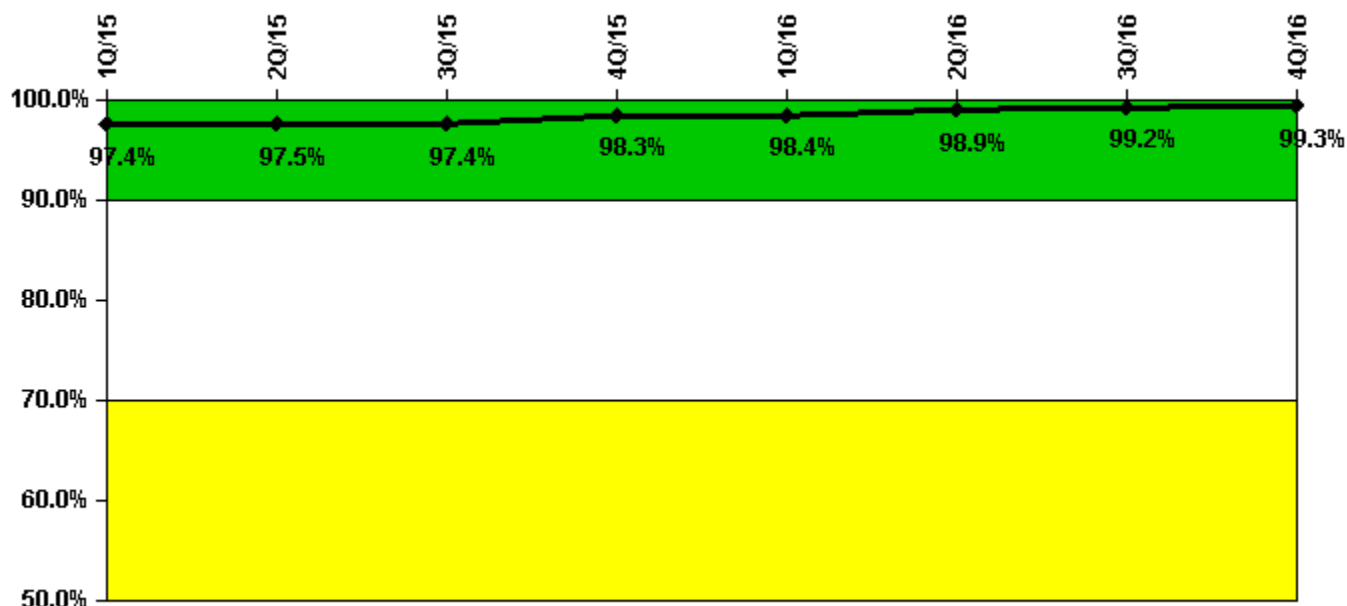
Notes

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	0.170	0.180	0	0	0	0	0	0	0	0	0	0
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	1.7	1.8	0	0	0	0	0	0	0	0	0	0

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	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Drill/Exercise Performance



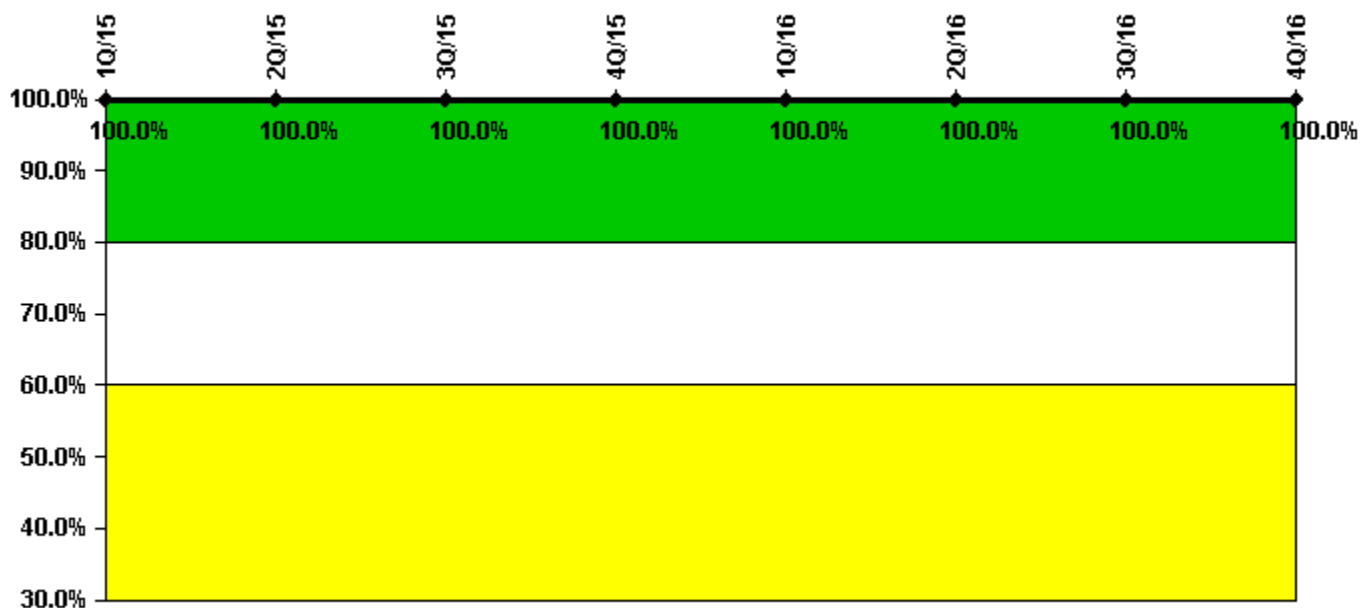
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Successful opportunities	9.0	75.0	44.0	60.0	42.0	30.0	74.0	71.0
Total opportunities	9.0	76.0	45.0	60.0	42.0	30.0	74.0	72.0
Indicator value	97.4%	97.5%	97.4%	98.3%	98.4%	98.9%	99.2%	99.3%

Licensee Comments: none

ERO Drill Participation



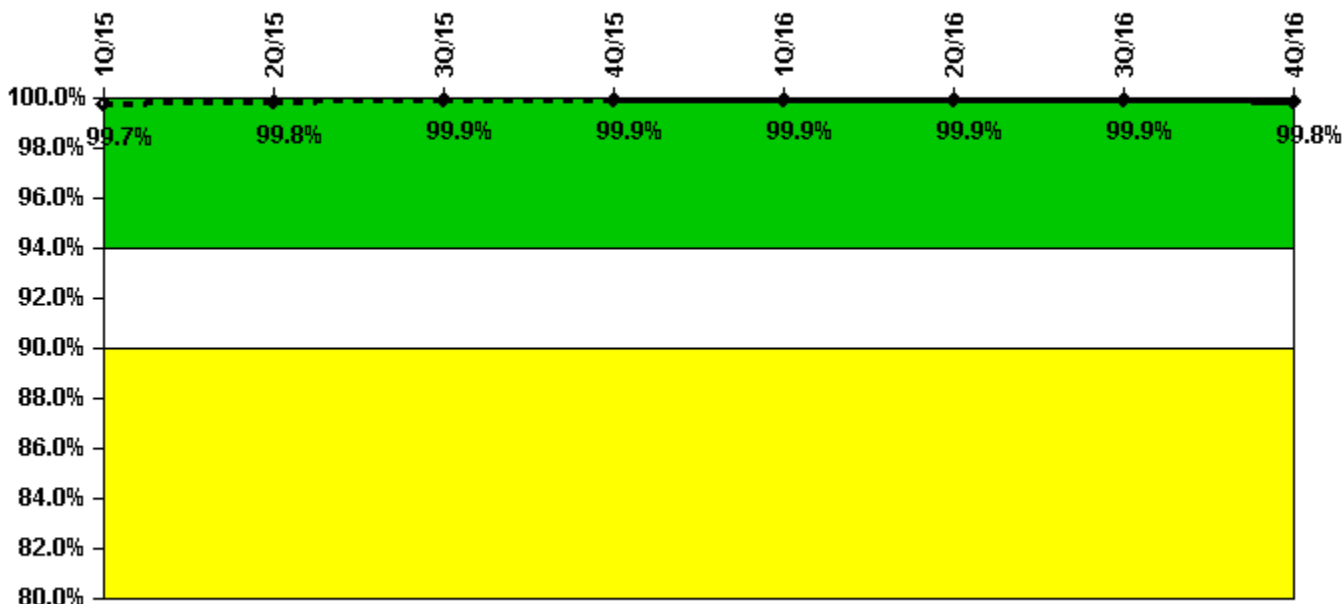
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Participating Key personnel	49.0	46.0	46.0	46.0	52.0	55.0	51.0	52.0
Total Key personnel	49.0	46.0	46.0	46.0	52.0	55.0	51.0	52.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



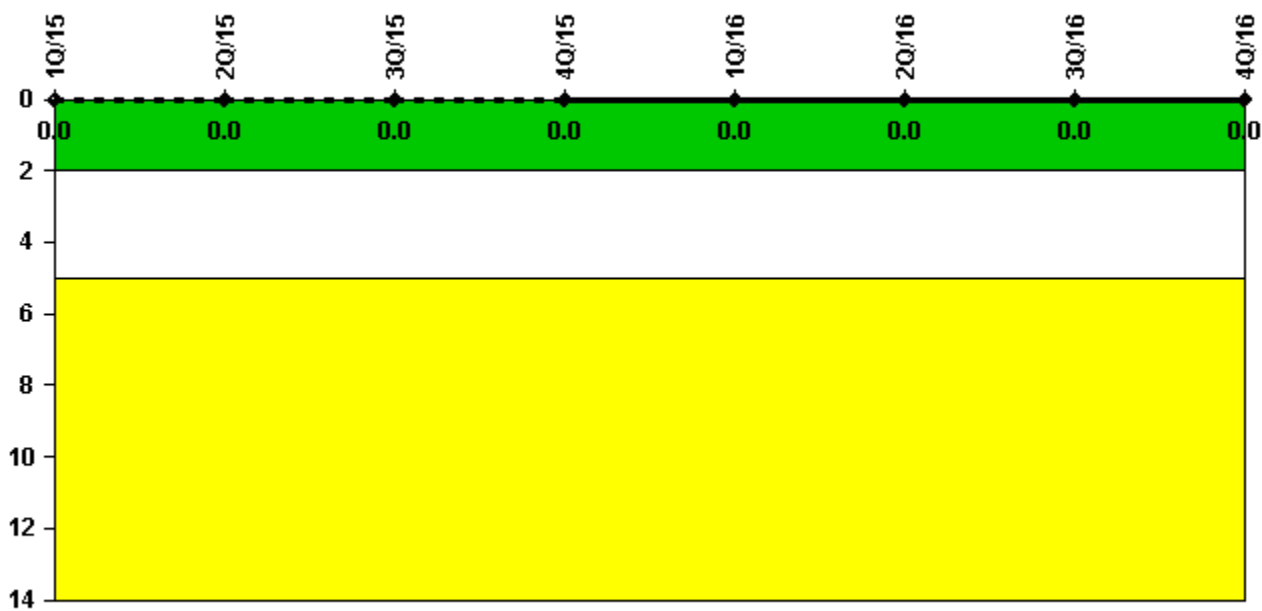
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Successful siren-tests	947	948	949	948	949	948	946	945
Total sirens-tests	949	949	949	949	949	949	949	949
Indicator value	99.7%	99.8%	99.9%	99.9%	99.9%	99.9%	99.9%	99.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



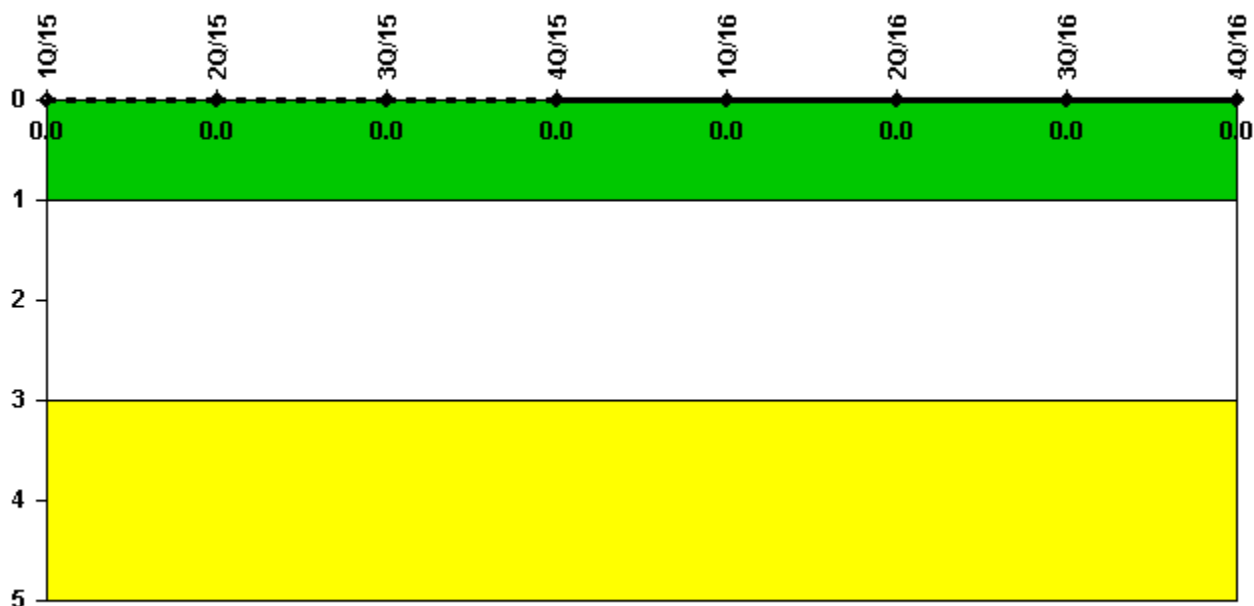
Thresholds: White > 2.0 Yellow > 5.0

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