

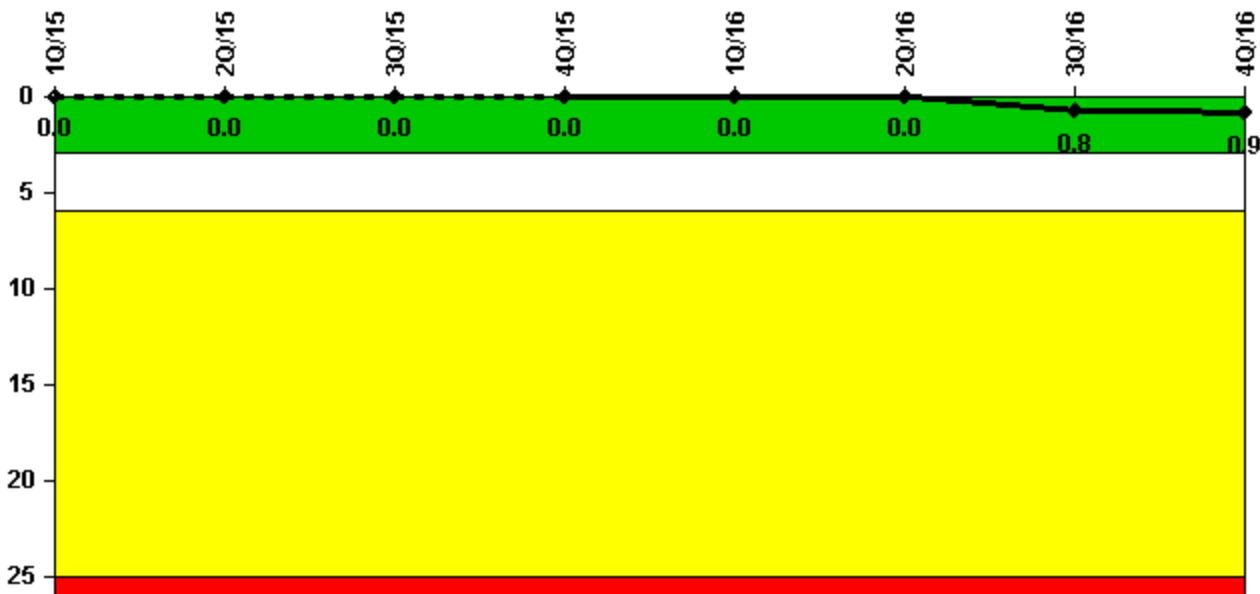
Palo Verde 3

4Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



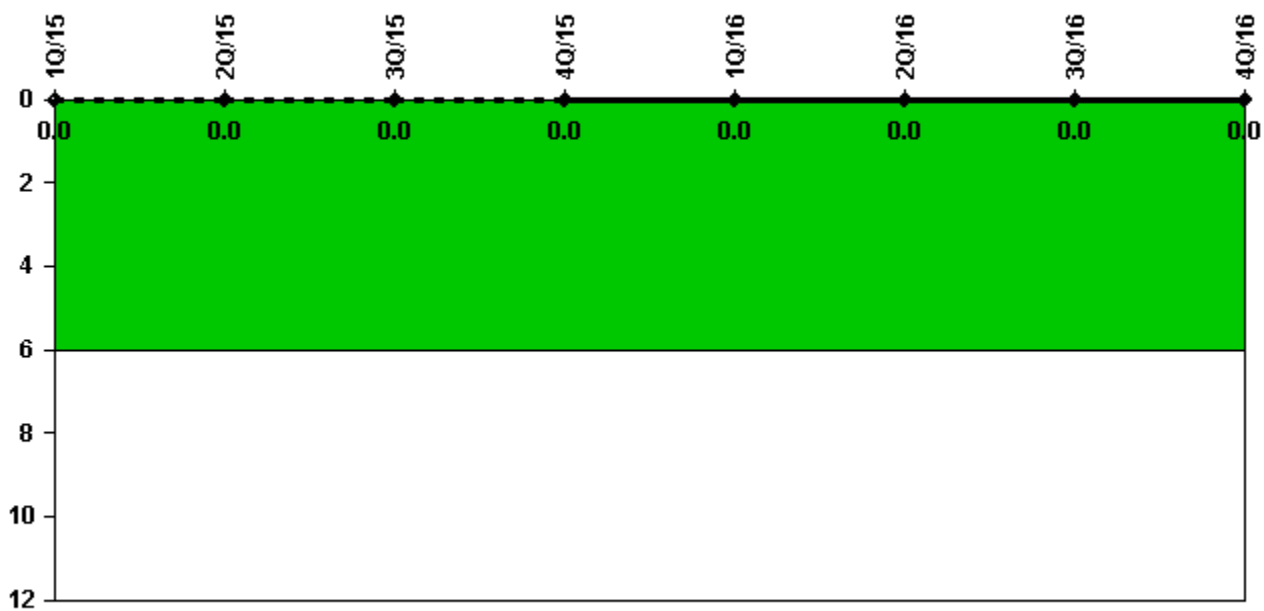
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

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	0	0	0	0	0	1.0	0
Critical hours	2160.0	1485.8	2208.0	2208.0	2184.0	2184.0	2142.0	1538.5
Indicator value	0	0	0	0	0	0	0.8	0.9

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

Notes

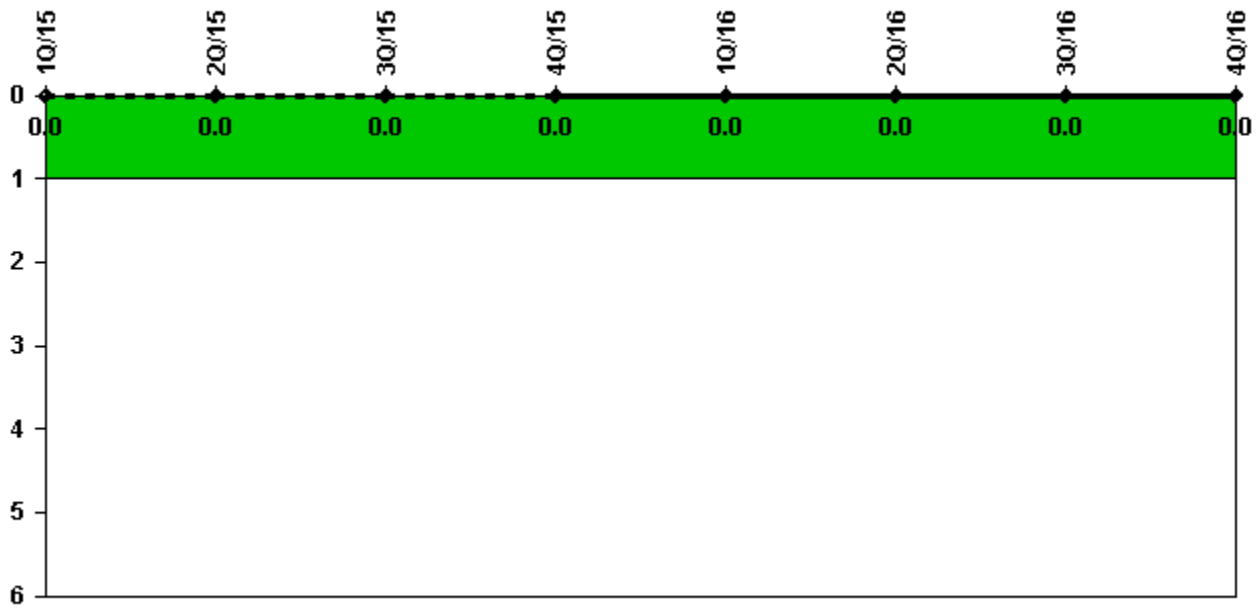
Unplanned Power Changes per 7000 Critical Hrs	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2160.0	1485.8	2208.0	2208.0	2184.0	2184.0	2142.0	1538.5
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments:

4Q/16: License Amendment No. 199 was approved on December 23, 2016 on a one-time basis to revise Technical Specification Limiting Condition for Operation 3.8.1.B.4 to allow a Completion Time of 21 days related to the Unit 3 Train B Diesel Generator failure that occurred on December 15, 2016 (ENS 52435).

2Q/15: The NRC granted a 24 hour Notification of Enforcement Discretion on May 29, 2015, for inoperable High Pressure Safety Injection Pump A to preclude a shutdown required by Technical Specification 3.5.3. Reference ADAMS Accession number ML15155B798.

Unplanned Scrams with Complications



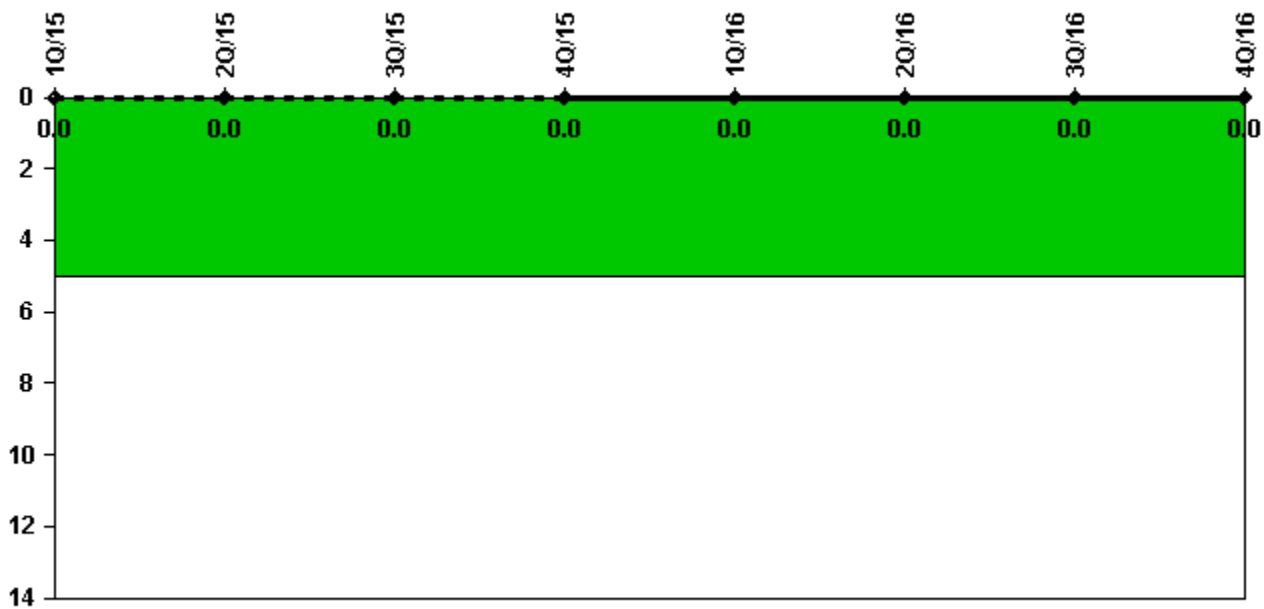
Thresholds: White > 1.0

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	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)



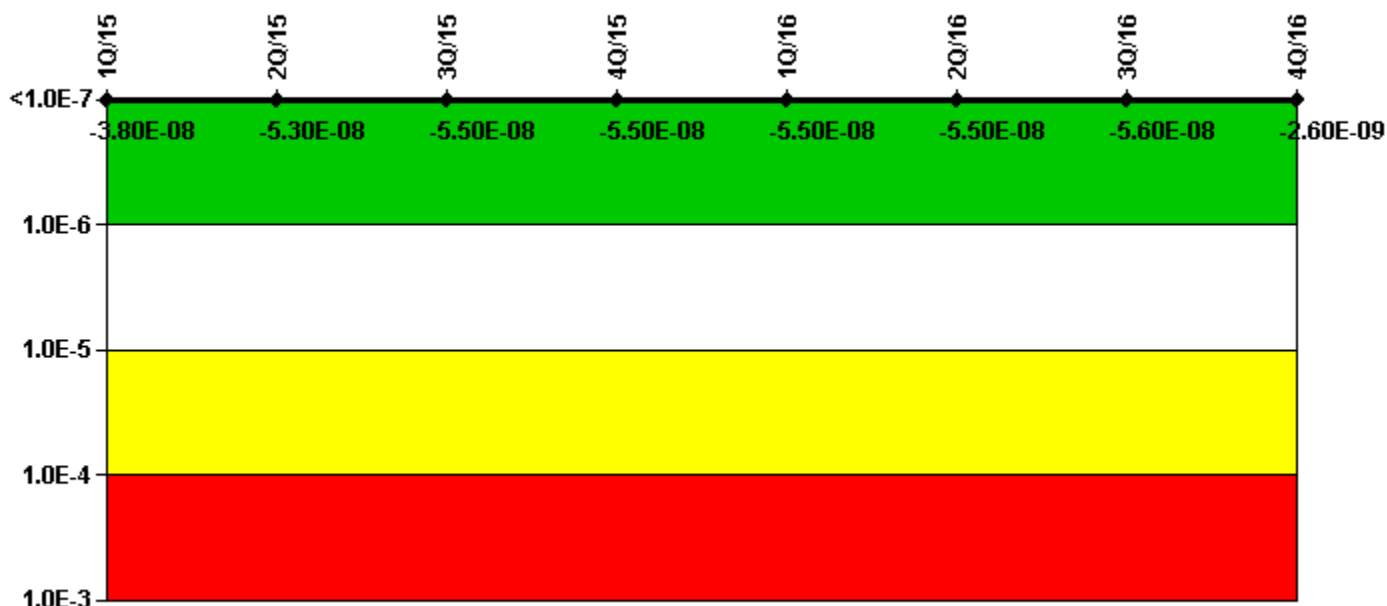
Thresholds: White > 5.0

Notes

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

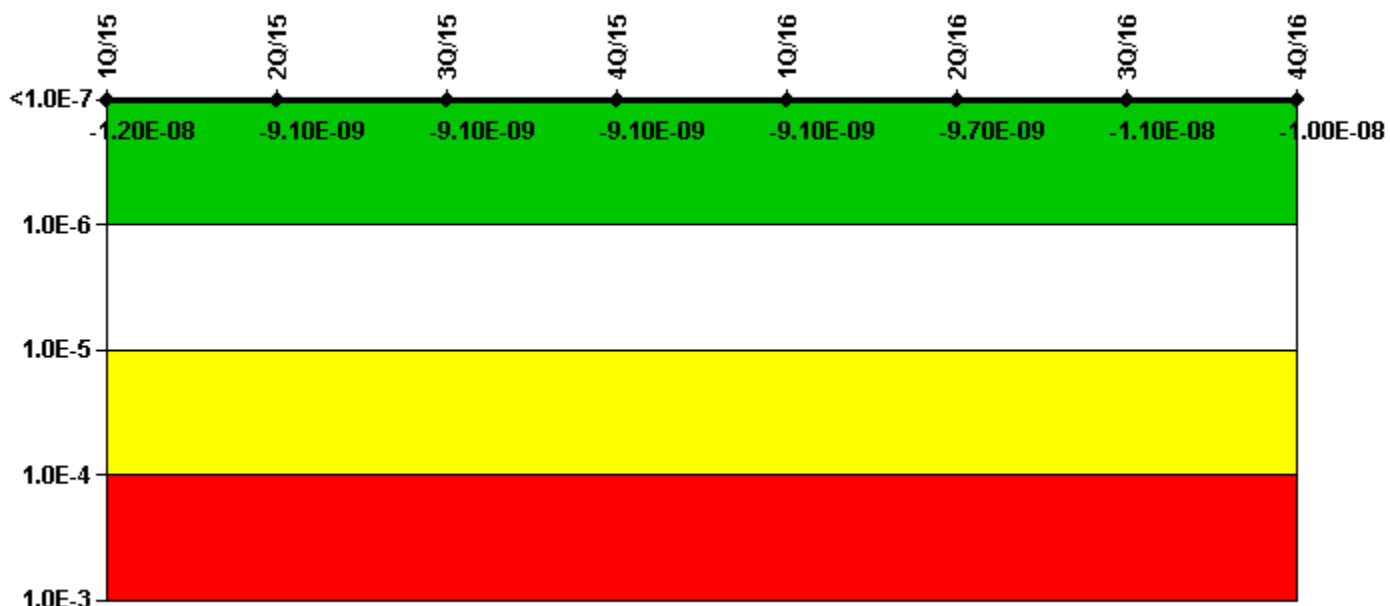
Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI (Δ CDF)	1.28E-08	-2.41E-09	-3.85E-09	-4.29E-09	-4.31E-09	-4.31E-09	-5.49E-09	1.95E-08
URI (Δ CDF)	-5.09E-08	-5.09E-08	-5.09E-08	-5.09E-08	-5.09E-08	-5.09E-08	-5.09E-08	-2.20E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-08	-5.30E-08	-5.50E-08	-5.50E-08	-5.50E-08	-5.50E-08	-5.60E-08	-2.60E-09

Licensee Comments:

2Q/15: In May 2015, planned unavailability hours from August and September 2013, February 2014 were adjusted resulting in a net decrease of 10.37 planned unavailability hours for the 3 year period ending in June 2015. The adjustments were made to account for hours unavailable vs. hours inoperable, previously recorded and not have resulted in a color change.

Mitigating Systems Performance Index, High Pressure Injection System



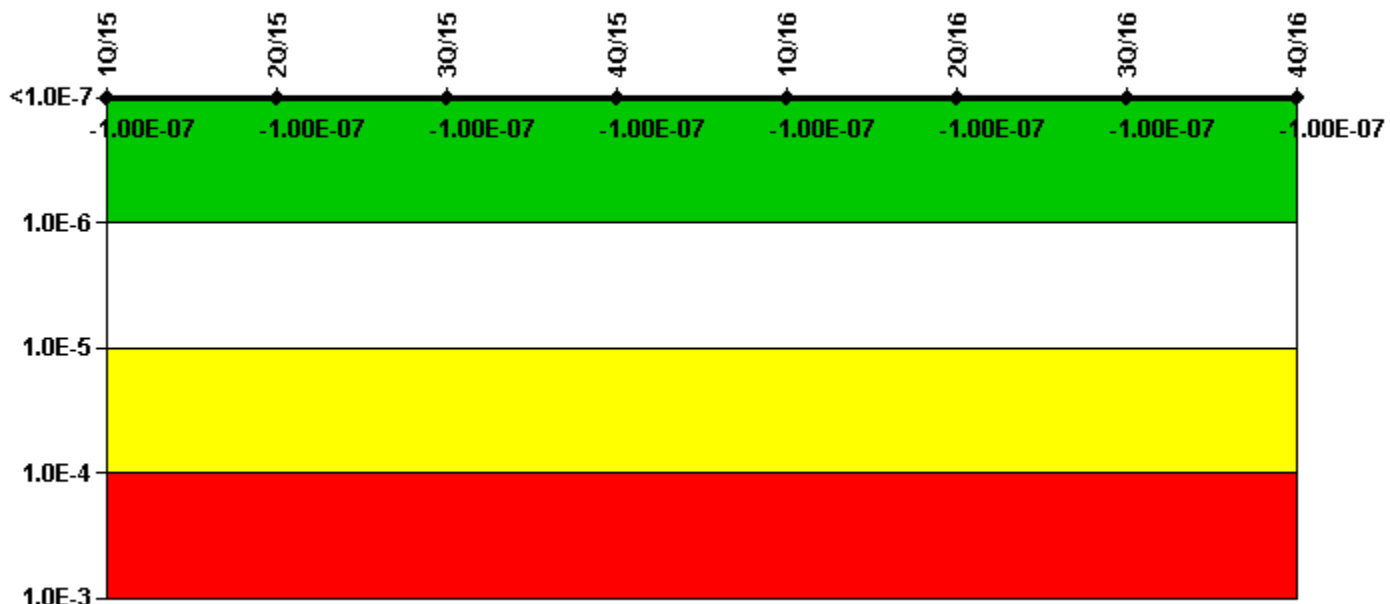
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

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)	-1.52E-09	1.20E-09	1.20E-09	1.11E-09	1.10E-09	5.69E-10	-3.12E-10	1.28E-10
URI (Δ CDF)	-1.03E-08	-1.03E-08	-1.03E-08	-1.03E-08	-1.03E-08	-1.03E-08	-1.03E-08	-1.03E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.20E-08	-9.10E-09	-9.10E-09	-9.10E-09	-9.10E-09	-9.70E-09	-1.10E-08	-1.00E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



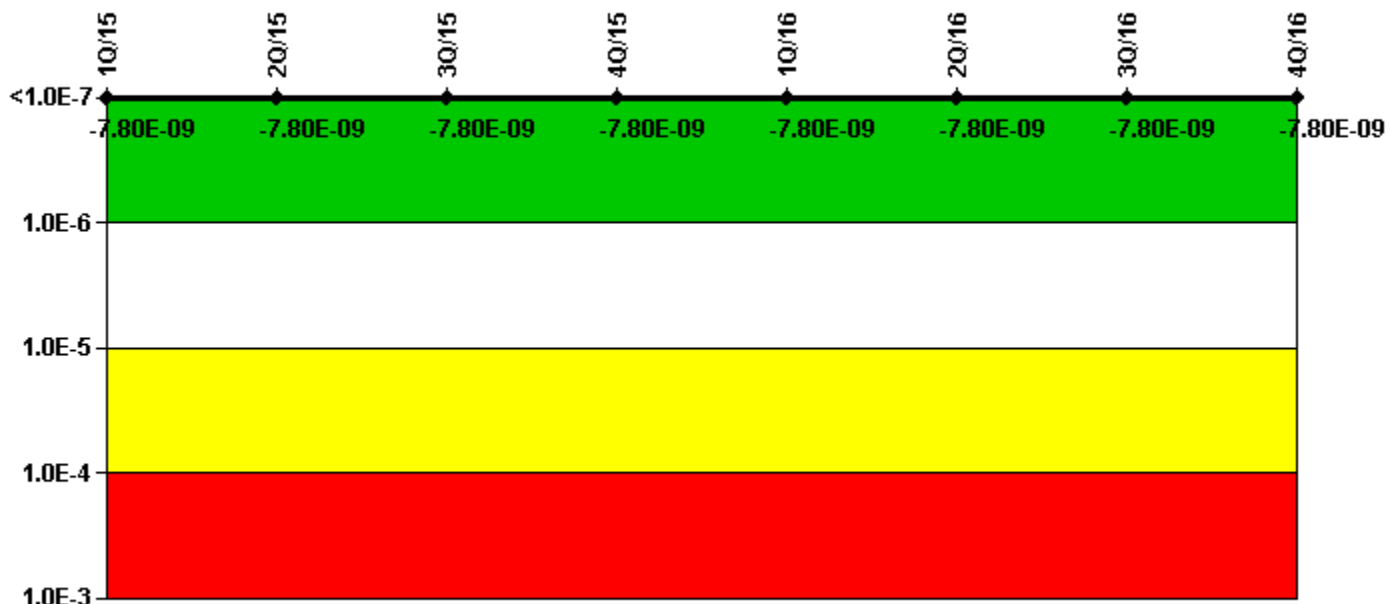
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

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)	-4.84E-08	-4.84E-08	-4.84E-08	-4.84E-08	-4.84E-08	-4.84E-08	-4.84E-08	-4.84E-08
URI (Δ CDF)	-5.15E-08	-5.15E-08	-5.15E-08	-5.15E-08	-5.15E-08	-5.15E-08	-5.15E-08	-5.15E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.00E-07	-1.00E-07	-1.00E-07	-1.00E-07	-1.00E-07	-1.00E-07	-1.00E-07	-1.00E-07

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



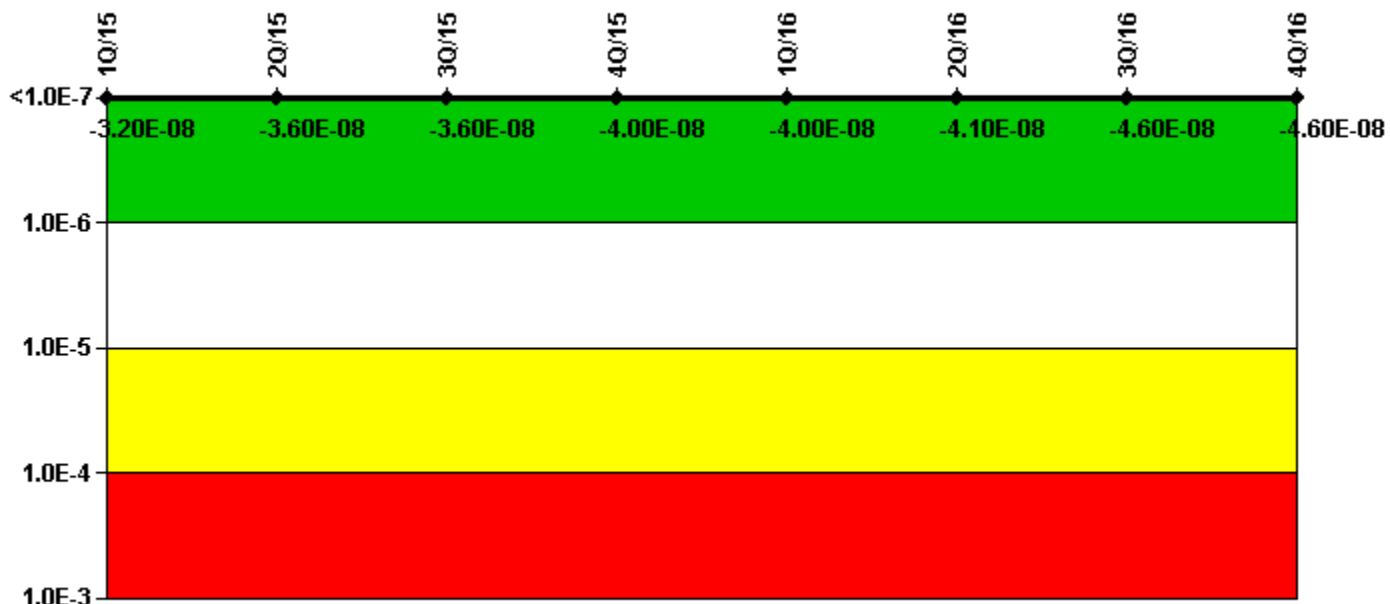
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI (Δ CDF)	-1.46E-09	-1.46E-09	-1.46E-09	-1.46E-09	-1.46E-09	-1.46E-09	-1.46E-09	-1.46E-09
URI (Δ CDF)	-6.37E-09	-6.37E-09	-6.37E-09	-6.37E-09	-6.37E-09	-6.37E-09	-6.37E-09	-6.37E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-7.80E-09	-7.80E-09	-7.80E-09	-7.80E-09	-7.80E-09	-7.80E-09	-7.80E-09	-7.80E-09

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



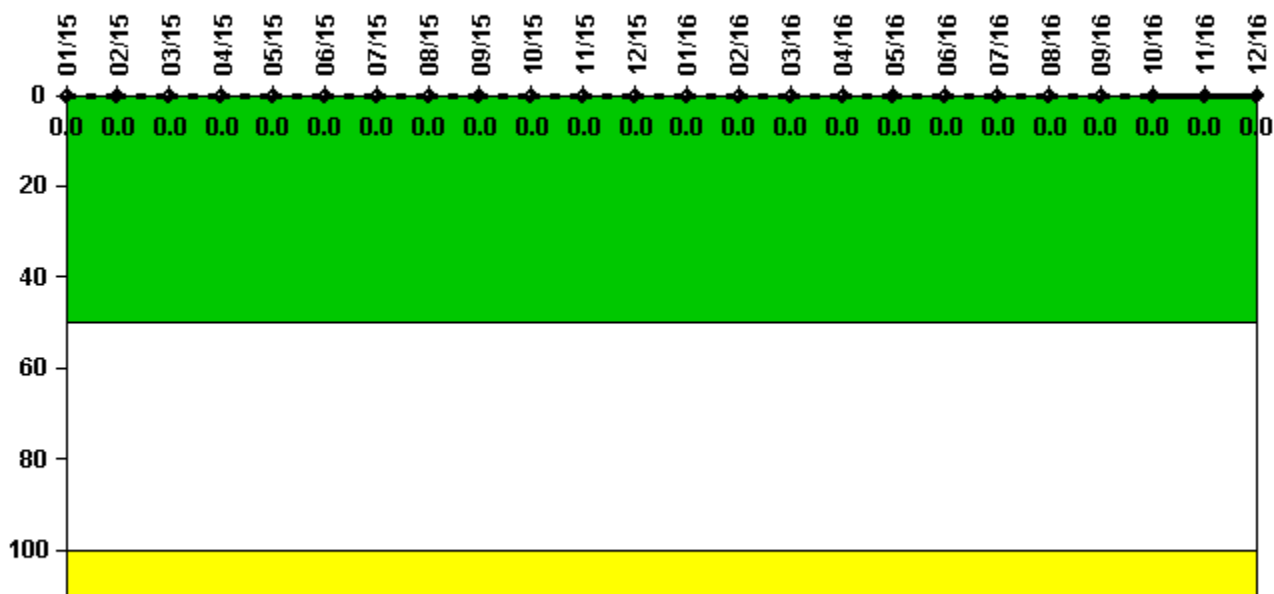
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

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)	1.35E-08	9.95E-09	9.85E-09	5.29E-09	5.22E-09	5.17E-09	0.00E+00	0.00E+00
URI (Δ CDF)	-4.57E-08	-4.57E-08	-4.57E-08	-4.57E-08	-4.57E-08	-4.57E-08	-4.57E-08	-4.57E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.20E-08	-3.60E-08	-3.60E-08	-4.00E-08	-4.00E-08	-4.10E-08	-4.60E-08	-4.60E-08

Licensee Comments: none

Reactor Coolant System Activity



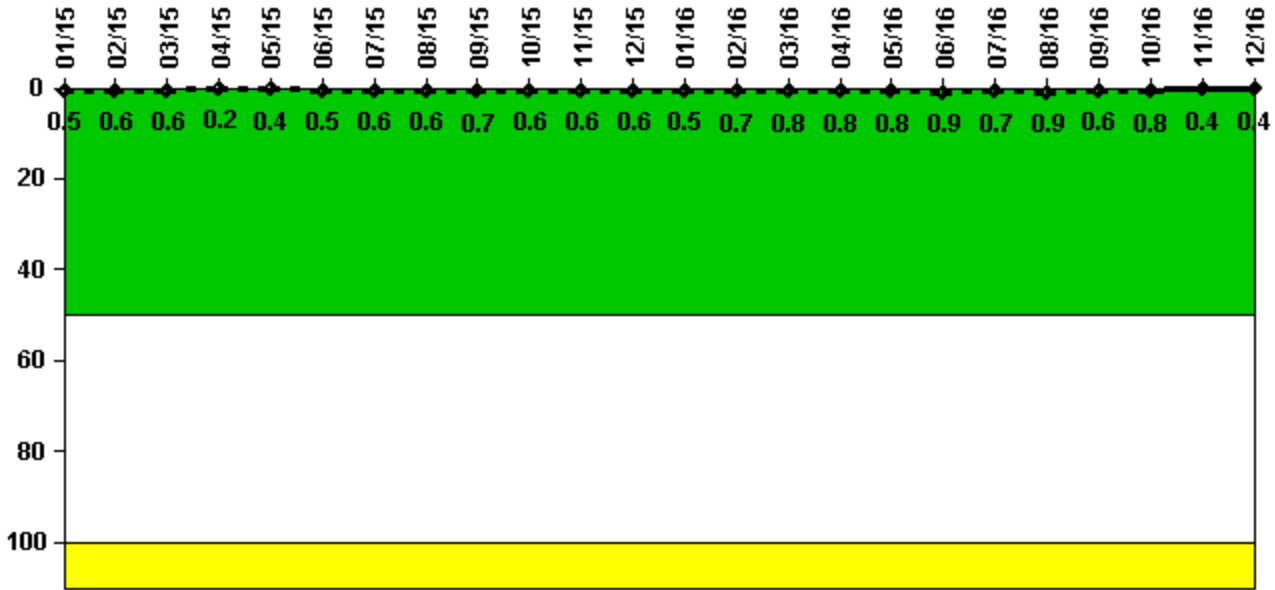
Thresholds: White > 50.0 Yellow > 100.0

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	0.000177	0.000171	0.000176	0.000171	0.000137	0.000157	0.000134	0.000144	0.000225	0.000180	0.000181	0.000183
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
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	0.000189	0.000186	0.000203	0.000192	0.000192	0.000194	0.000194	0.000193	0.000200	0.000200	0.000245	0.000175
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



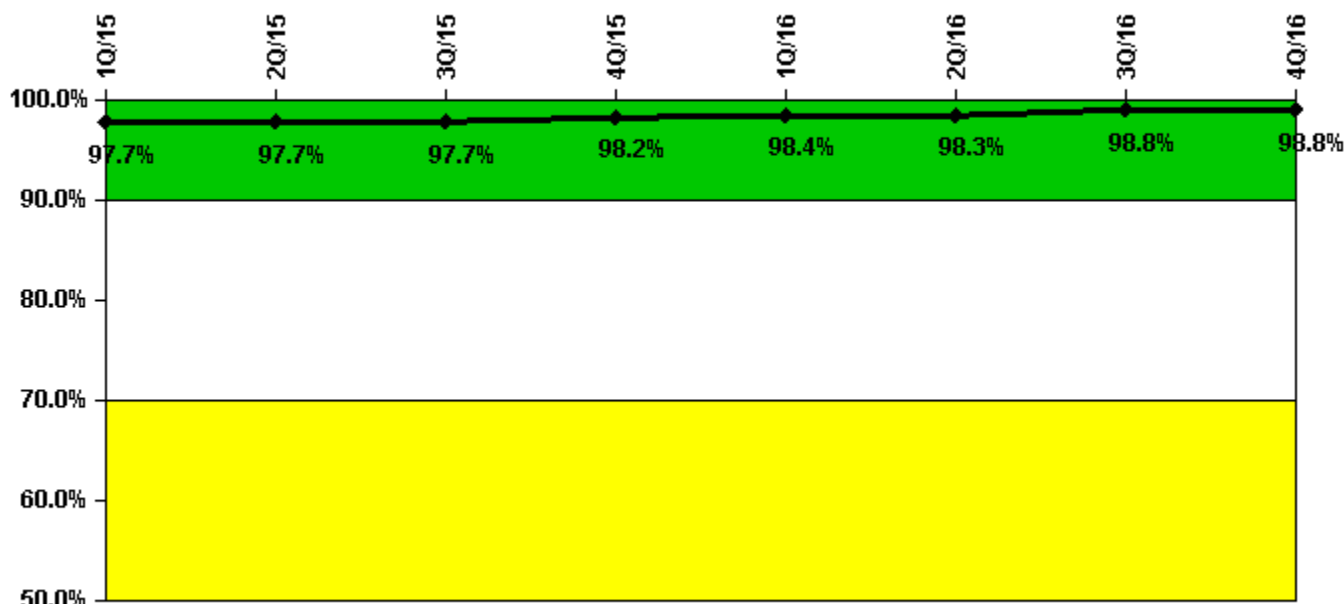
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	1/15	2/15	3/15	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15
Maximum leakage	0.054	0.059	0.059	0.016	0.040	0.049	0.060	0.058	0.073	0.057	0.058	0.059
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	0.5	0.6	0.6	0.2	0.4	0.5	0.6	0.6	0.7	0.6	0.6	0.6
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	0.054	0.067	0.076	0.081	0.079	0.086	0.066	0.093	0.062	0.076	0.044	0.043
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	0.5	0.7	0.8	0.8	0.8	0.9	0.7	0.9	0.6	0.8	0.4	0.4

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	42.0	38.0	50.0	163.0	203.0	3.0	46.0	51.0
Total opportunities	42.0	38.0	50.0	164.0	206.0	3.0	48.0	52.0
Indicator value	97.7%	97.7%	97.7%	98.2%	98.4%	98.3%	98.8%	98.8%

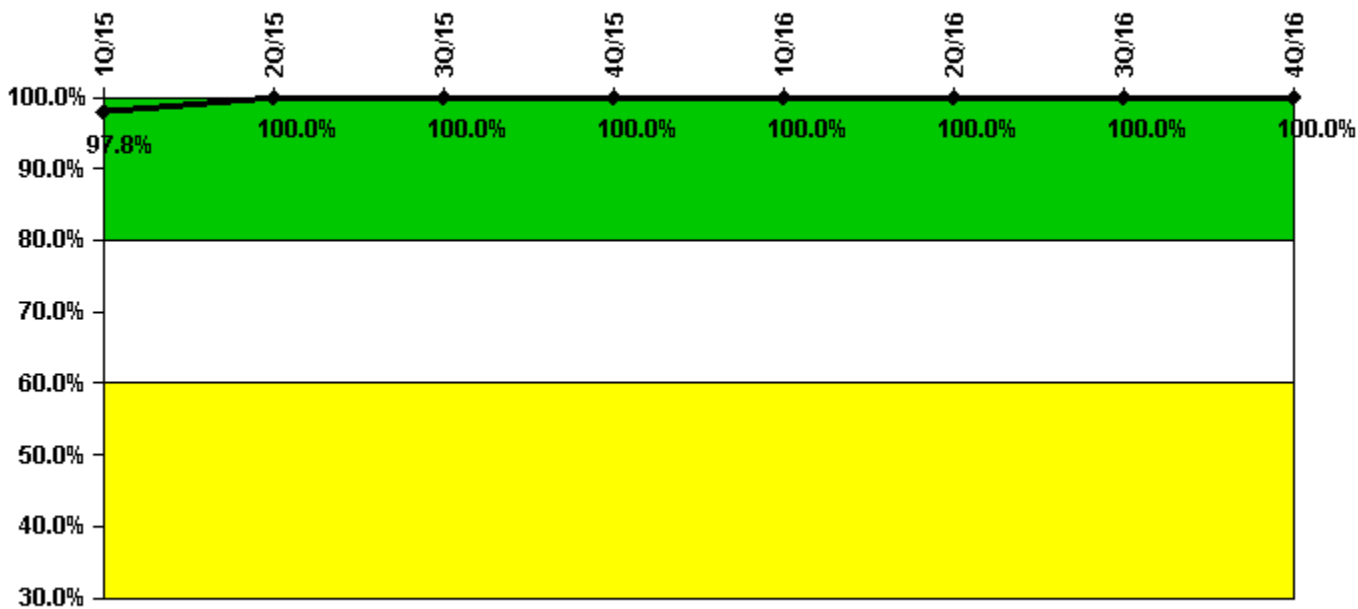
Licensee Comments:

1Q/16: On March 29, 2016, a new shift manager became qualified in two key ERO positions and completed two opportunities and successes which were not included in the previously submitted data. No color change.

4Q/15: The total number of drill / exercise opportunities and successes was revised from 87 to 86 each (no additional failures). No color change resulted.

1Q/15: Corrected March 2014 EP01 drill success and total opportunities that included one item that should not have been counted. Discovered in March 2015. No color change as a result.

ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

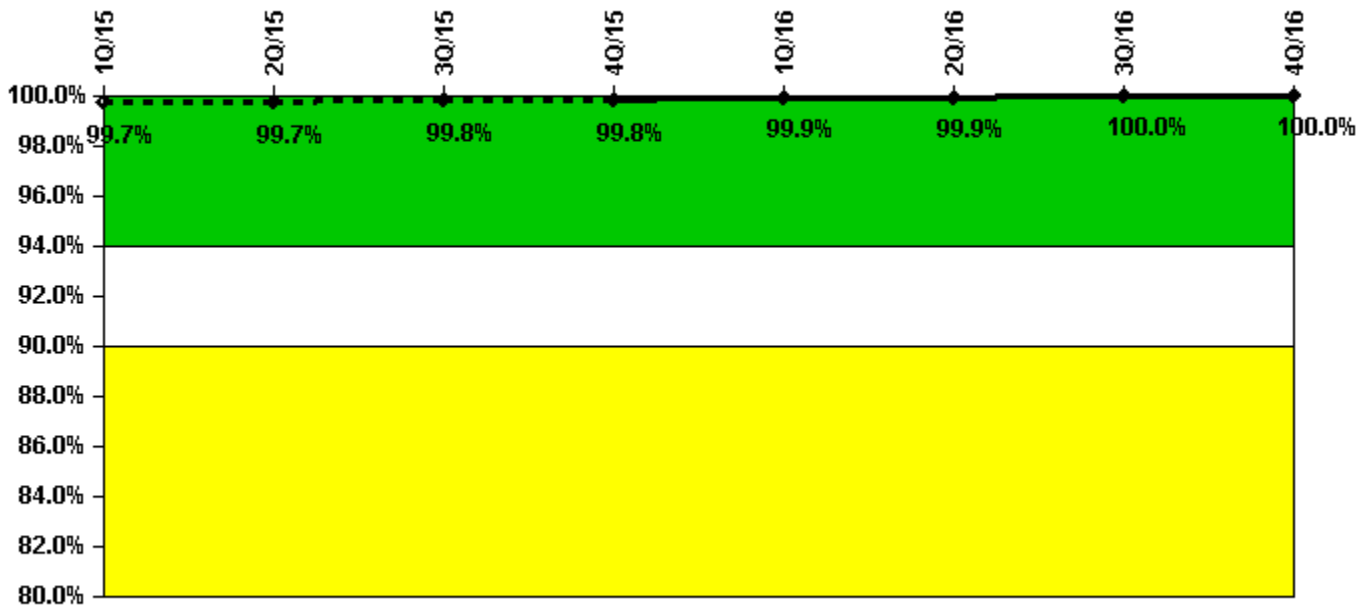
Notes

ERO Drill Participation	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Participating Key personnel	91.0	91.0	95.0	91.0	91.0	95.0	93.0	94.0
Total Key personnel	93.0	91.0	95.0	91.0	91.0	95.0	93.0	94.0
Indicator value	97.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments:

1Q/16: On March 29, 2016, a new shift manager became qualified in two key ERO positions which were not included in the previously submitted data. No color change.

Alert & Notification System



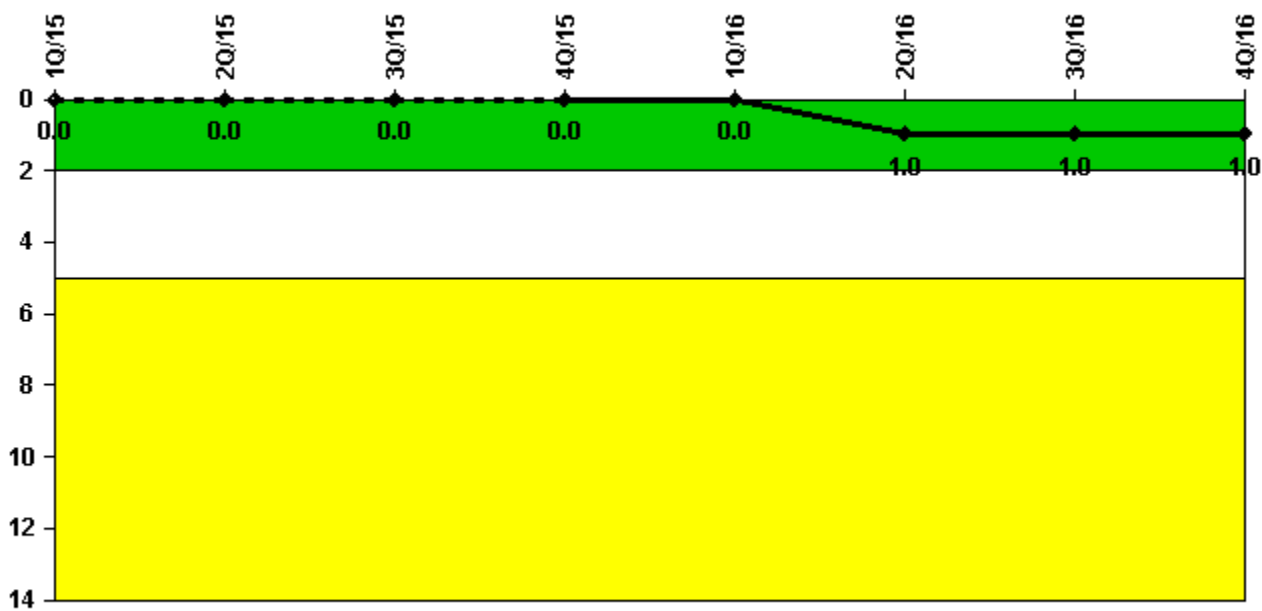
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Successful siren-tests	908	912	909	1008	1102	1044	1102	1218
Total sirens-tests	912	912	912	1008	1102	1044	1102	1218
Indicator value	99.7%	99.7%	99.8%	99.8%	99.9%	99.9%	100.0%	100.0%

Licensee Comments: none

Occupational Exposure Control Effectiveness



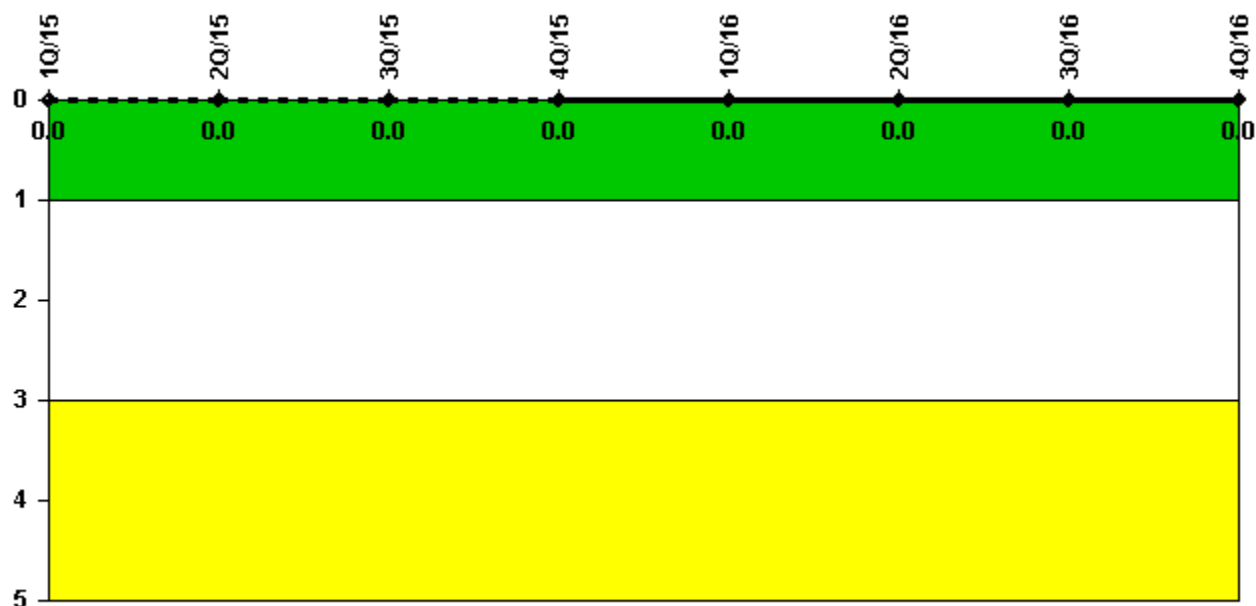
Thresholds: White > 2.0 Yellow > 5.0

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	1	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	1	1	1

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