

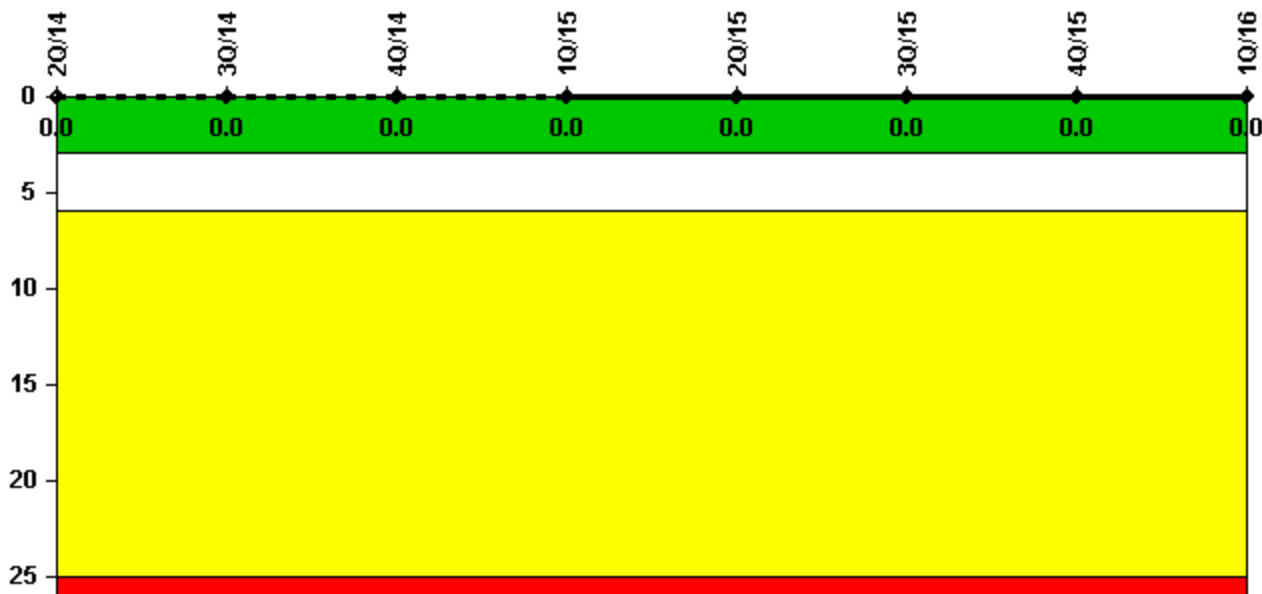
Duane Arnold

1Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: Duane Arnold 1Q2016

Unplanned Scrams per 7000 Critical Hrs



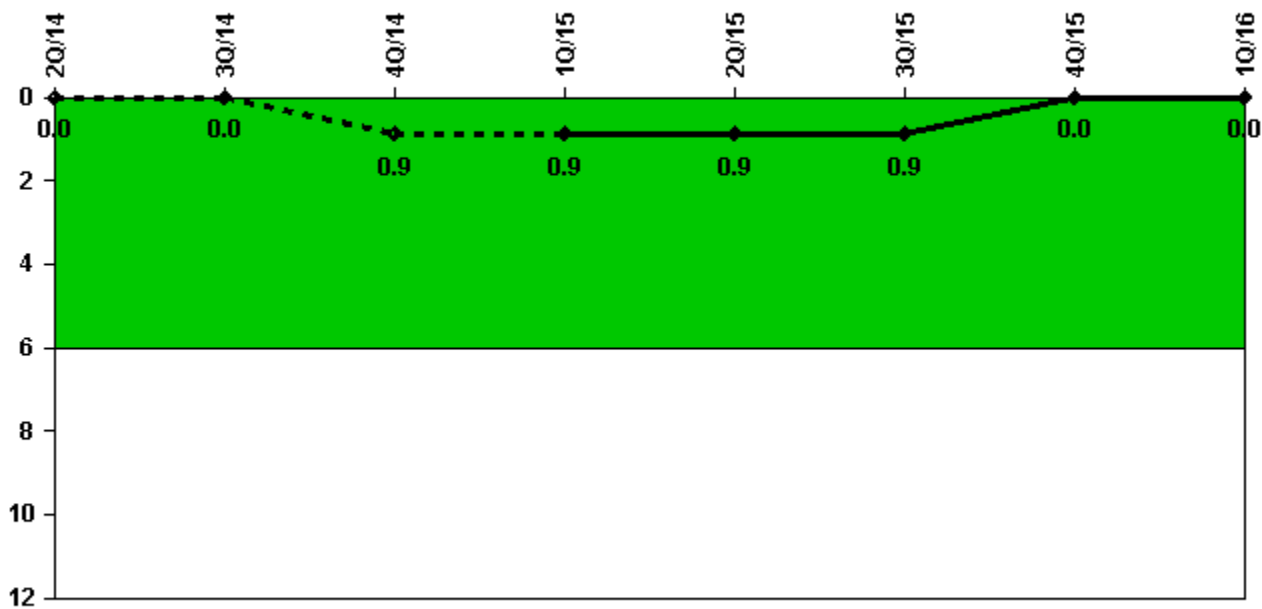
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2184.0	2208.0	984.7	2159.0	2184.0	2208.0	2209.0	2183.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Unplanned power changes	0	0	1.0	0	0	0	0	0
Critical hours	2184.0	2208.0	984.7	2159.0	2184.0	2208.0	2209.0	2183.0
Indicator value	0	0	0.9	0.9	0.9	0.9	0	0

Licensee Comments: none

Unplanned Scrams with Complications



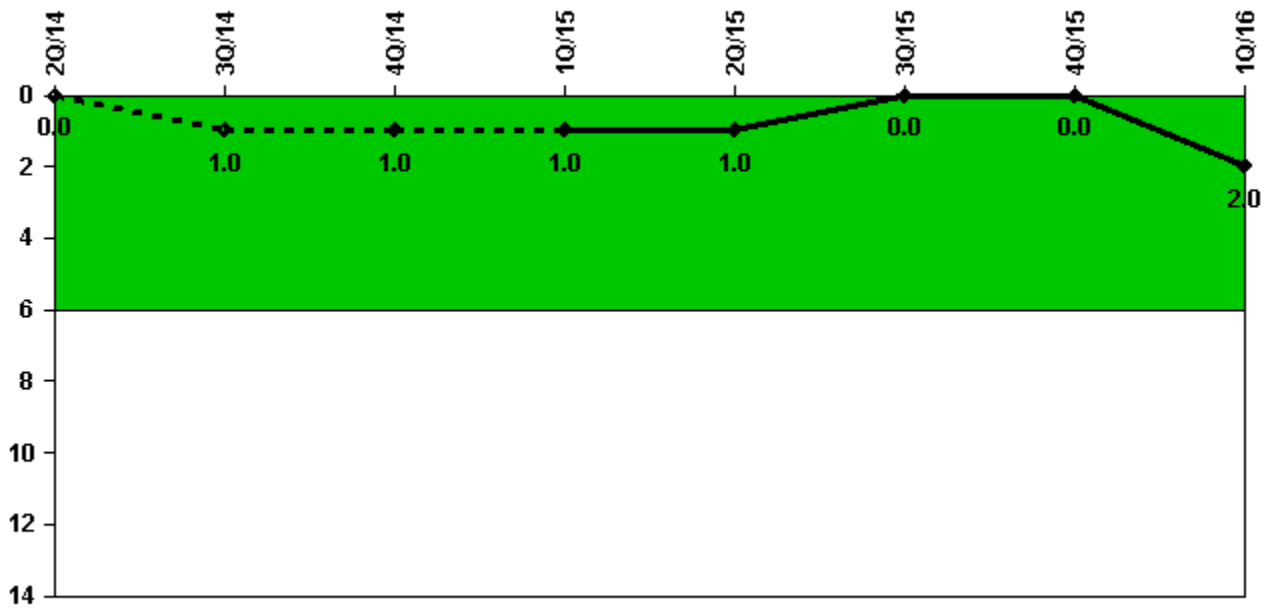
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/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 (BWR)



Thresholds: White > 6.0

Notes

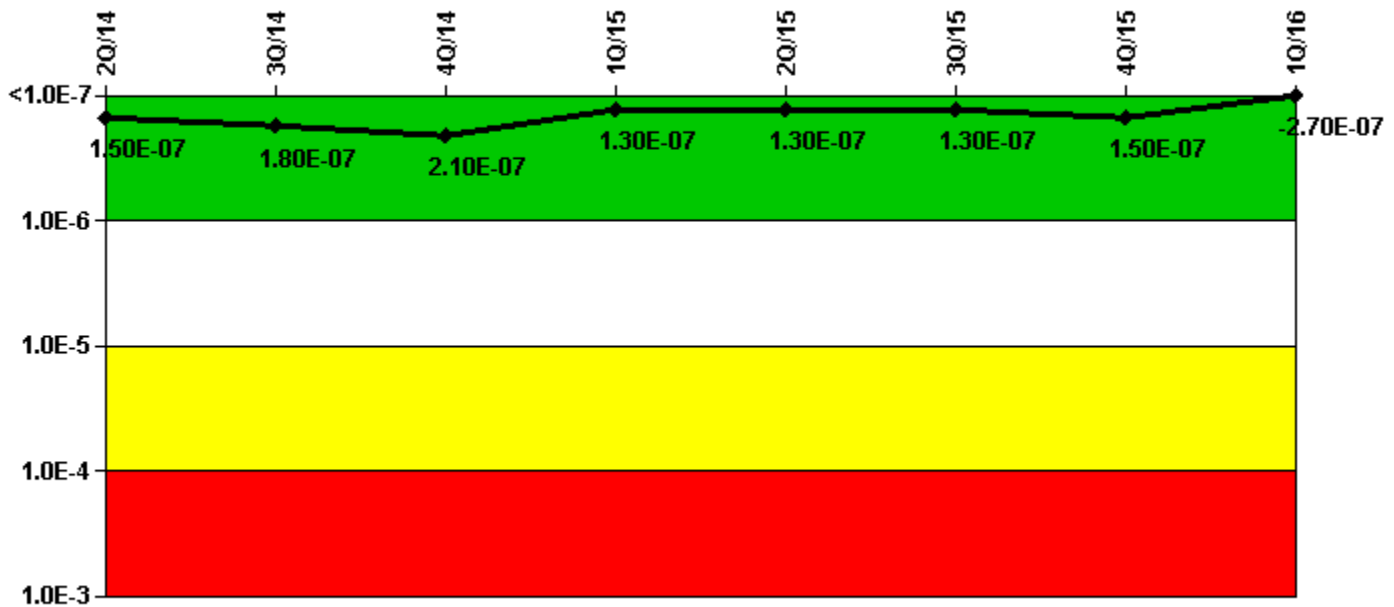
Safety System Functional Failures (BWR)	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Safety System Functional Failures	0	1	0	0	0	0	0	2
Indicator value	0	1	1	1	1	0	0	2

Licensee Comments:

1Q/16: Revised LER 2015-005 was submitted 1/28/16 for the affect on ECCS from the torus coating event. LER 2015-006, HPCI and RCIC CST Suction Transfer Inoperable.

3Q/14: One LER was submitted in July that was a SSFF. Reference LER 2014-004, Unplanned Inoperability HPCI.

Mitigating Systems Performance Index, Emergency AC Power System



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

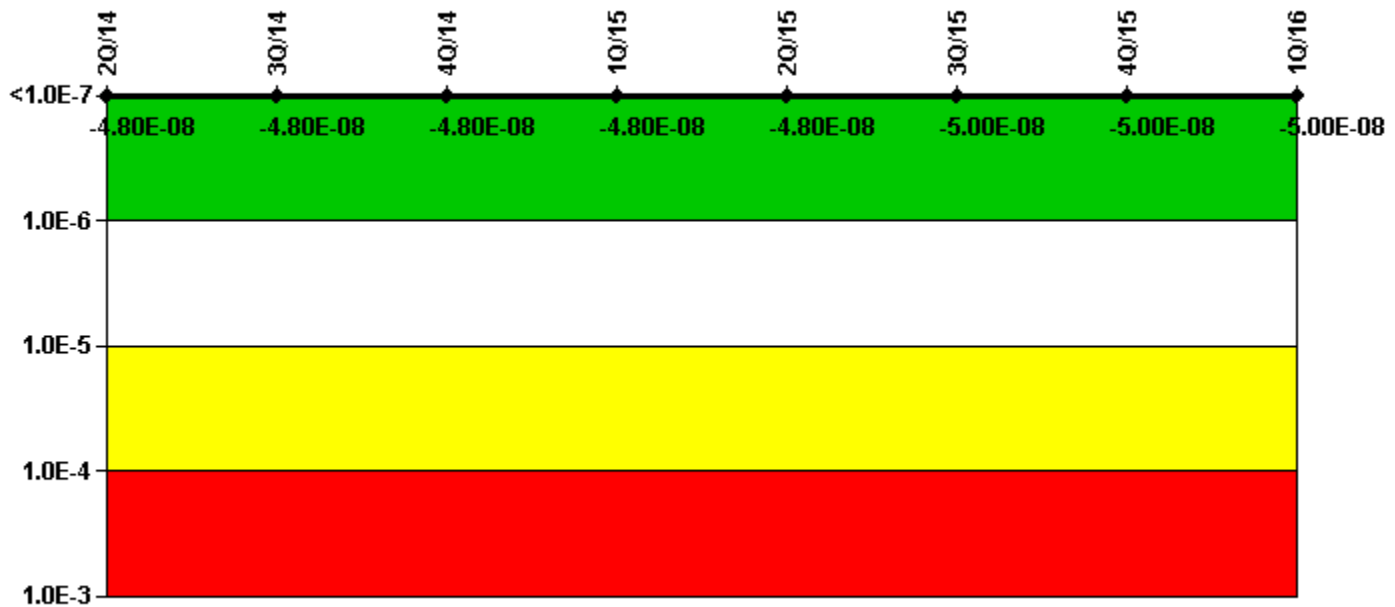
Notes

Mitigating Systems Performance Index, Emergency AC Power System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI (Δ CDF)	2.65E-07	2.90E-07	3.16E-07	2.41E-07	2.41E-07	2.41E-07	2.61E-07	-2.11E-09
URI (Δ CDF)	-1.10E-07	-1.10E-07	-1.10E-07	-1.10E-07	-1.10E-07	-1.10E-07	-1.10E-07	-2.70E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.50E-07	1.80E-07	2.10E-07	1.30E-07	1.30E-07	1.30E-07	1.50E-07	-2.70E-07

Licensee Comments:

2Q/14: Preplanned Maintenance Inspection Heat Exchangers STP A B Core Spray STP

Mitigating Systems Performance Index, High Pressure Injection System



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

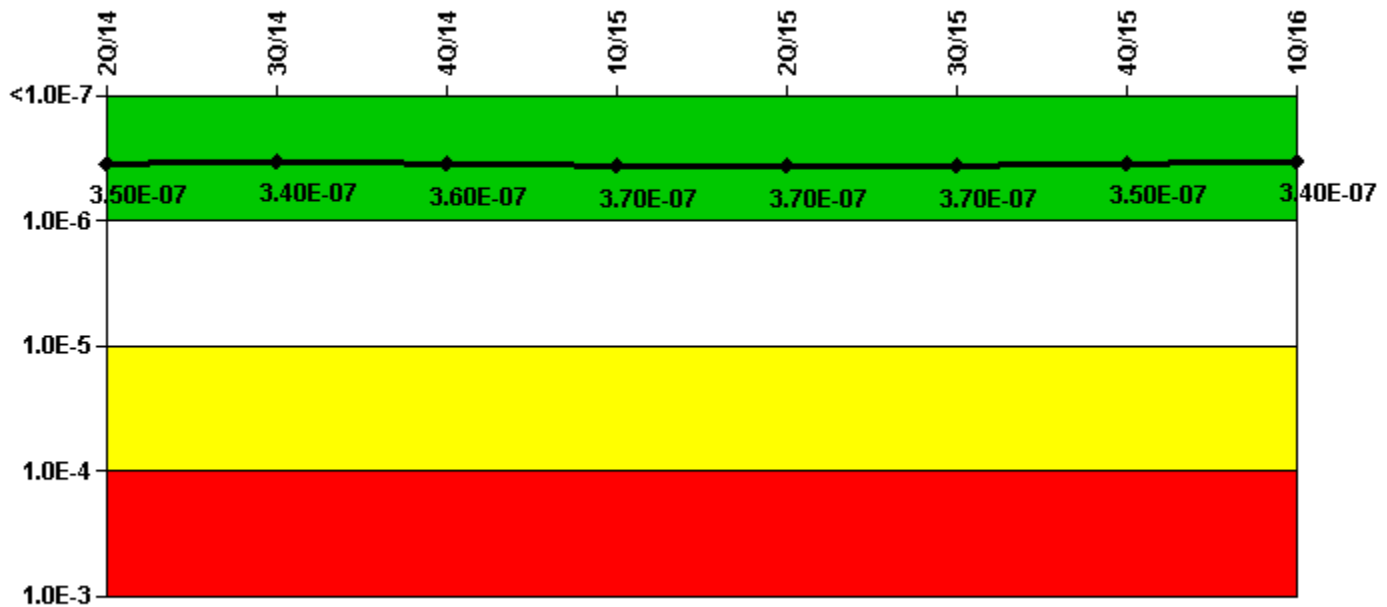
Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI (Δ CDF)	-1.47E-08	-1.47E-08	-1.46E-08	-1.46E-08	-1.46E-08	-1.65E-08	-1.65E-08	-1.65E-08
URI (Δ CDF)	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.80E-08	-4.80E-08	-4.80E-08	-4.80E-08	-4.80E-08	-5.00E-08	-5.00E-08	-5.00E-08

Licensee Comments:

2Q/14: HPCI Maintenance LCO HPCI steam supply isolation valves closed due to a relay being bumped during the performance of STP

Mitigating Systems Performance Index, Heat Removal System



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

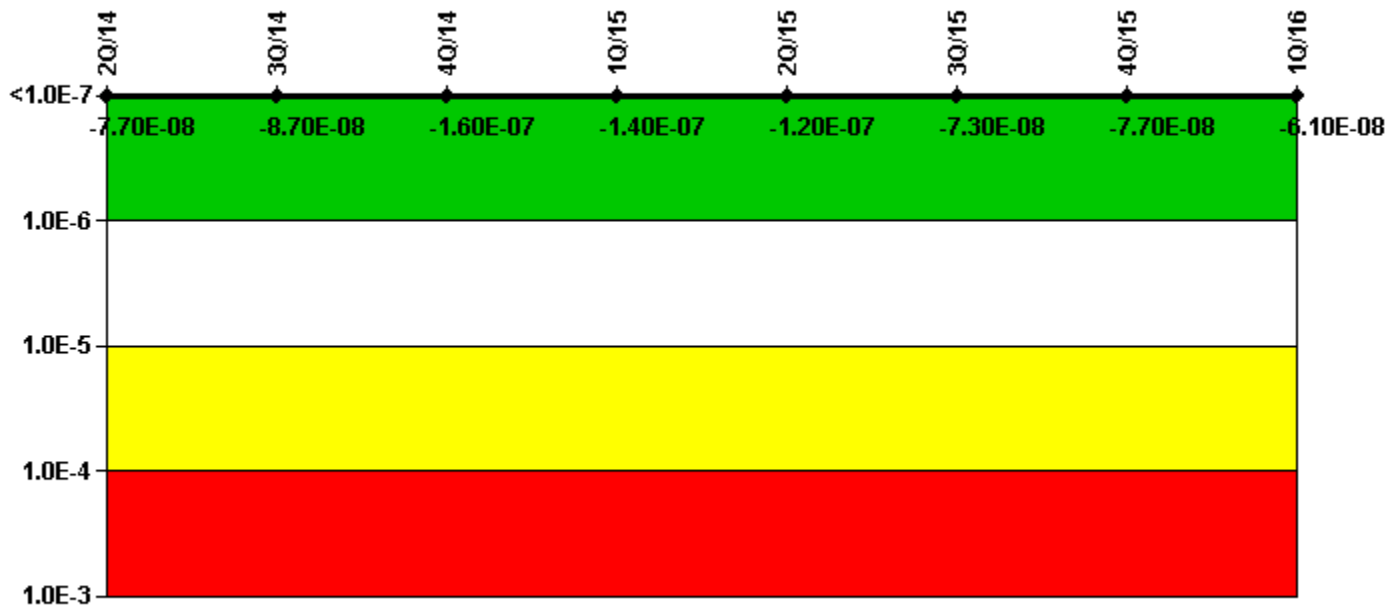
Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI (Δ CDF)	3.33E-07	3.31E-07	3.49E-07	3.59E-07	3.57E-07	3.57E-07	3.34E-07	3.30E-07
URI (Δ CDF)	1.35E-08	1.35E-08	1.35E-08	1.35E-08	1.35E-08	1.35E-08	1.35E-08	1.35E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	3.50E-07	3.40E-07	3.60E-07	3.70E-07	3.70E-07	3.70E-07	3.50E-07	3.40E-07

Licensee Comments:

2Q/14: Maintenance LCO to install the modification on the RCIC governor power supply dropping resistor

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	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI (ΔCDF)	1.58E-07	1.49E-07	7.95E-08	1.00E-07	1.20E-07	1.64E-07	1.59E-07	1.75E-07
URI (ΔCDF)	-2.34E-07	-2.36E-07	-2.36E-07	-2.36E-07	-2.36E-07	-2.36E-07	-2.36E-07	-2.36E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-7.70E-08	-8.70E-08	-1.60E-07	-1.40E-07	-1.20E-07	-7.30E-08	-7.70E-08	-6.10E-08

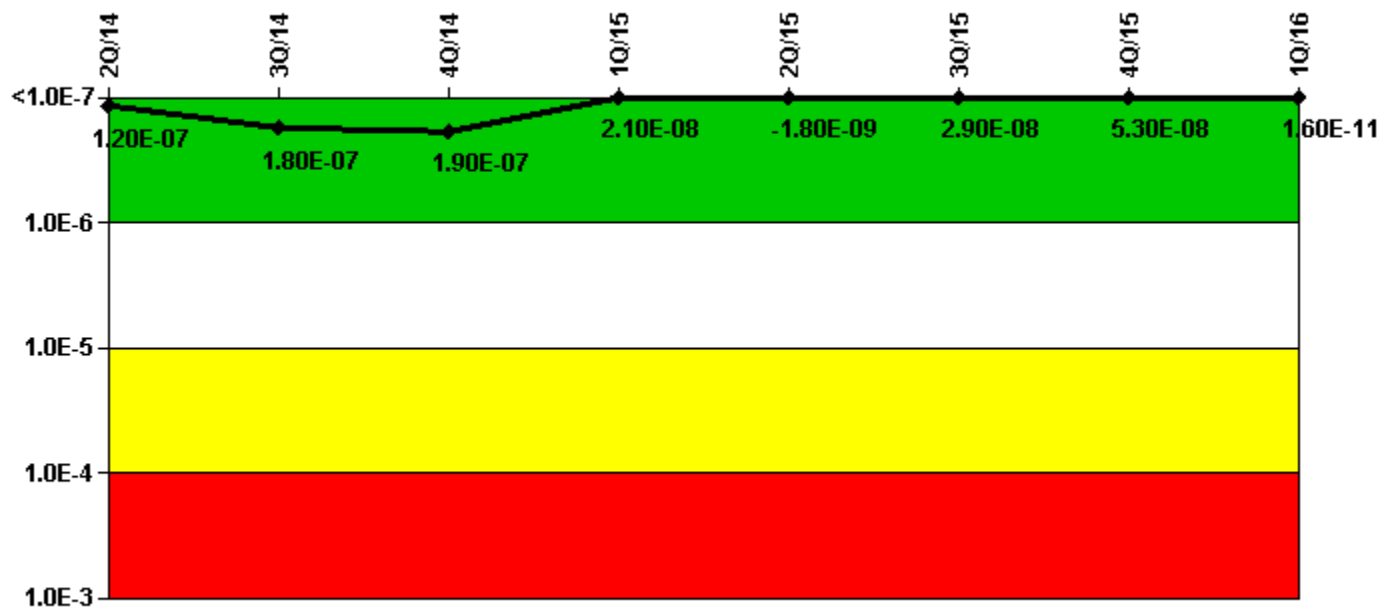
Licensee Comments:

2Q/15: The A RHRSW changed from 10.75 to 0.00 hours. The hours were adjusted based on MSPI DBD 46/102 Rev 3 which includes the RHRSW A/B RHR heat exchanger discharge valves MO2046/MO1947 in the RHR System.

1Q/15: A RHR in February 2015 changed from 0.00 hours to 11.00 hours. The hours were adjusted based on the MSPI DBD 46/102 Rev 3 which includes the RHRSW A/B RHR heat exchanger discharge valves MO2046/MO1947 in the RHR System.

2Q/14: Pit Diving RHRSW motor cooling from ESW HBD022 MOD

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	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI (ΔCDF)	4.04E-07	4.62E-07	4.67E-07	3.02E-07	2.79E-07	3.10E-07	3.34E-07	2.81E-07
URI (ΔCDF)	-2.81E-07	-2.81E-07	-2.81E-07	-2.81E-07	-2.81E-07	-2.81E-07	-2.81E-07	-2.81E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.20E-07	1.80E-07	1.90E-07	2.10E-08	-1.80E-09	2.90E-08	5.30E-08	1.60E-11

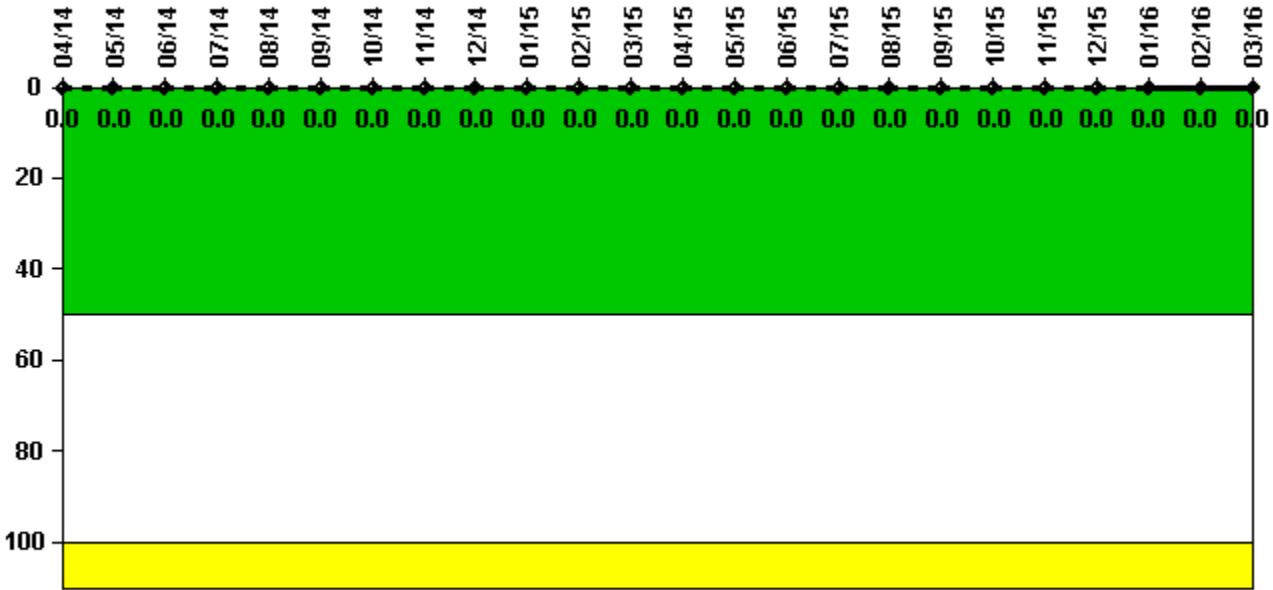
Licensee Comments:

2Q/15: The B RHRSW changed from 16.5 hours to 5.7 hours. The hours were adjusted based on MSPI DBD 46/102 Rev 3 which includes the RHRSW A/B RHR heat exchanger discharge valves MO2046/MO1947 in the RHR System.

1Q/15: B RHR in February 2015 changed from 22.00 hours to 44.00 hours. The hours were adjusted based on MSPI DBD 46/102 Rev 3 which includes the RHRSW A/B RHR heat exchanger discharge valves MO2046/MO1947 in the RHR System.

2Q/14: Pit Diving

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

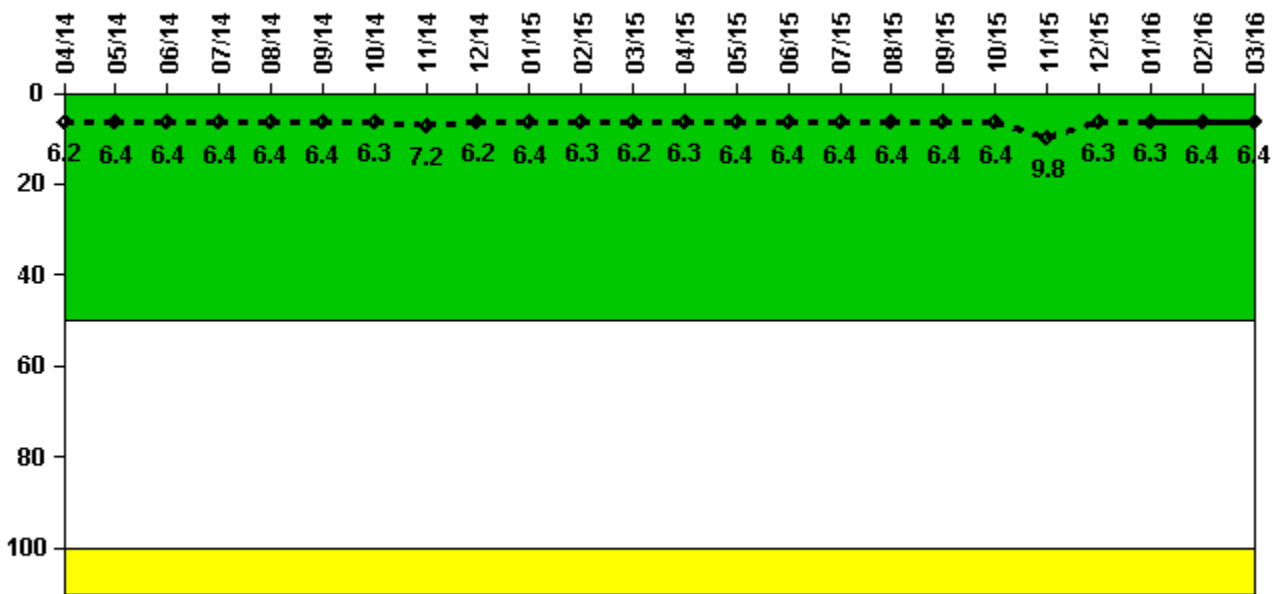
Notes

Reactor Coolant System Activity	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15
Maximum activity	0	0.000002	0	0	0	0	0	0	0	0	0.000002	0
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

Reactor Coolant System Activity	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16
Maximum activity	0	0	0	0	0	0	0	0	0	0	0	0
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

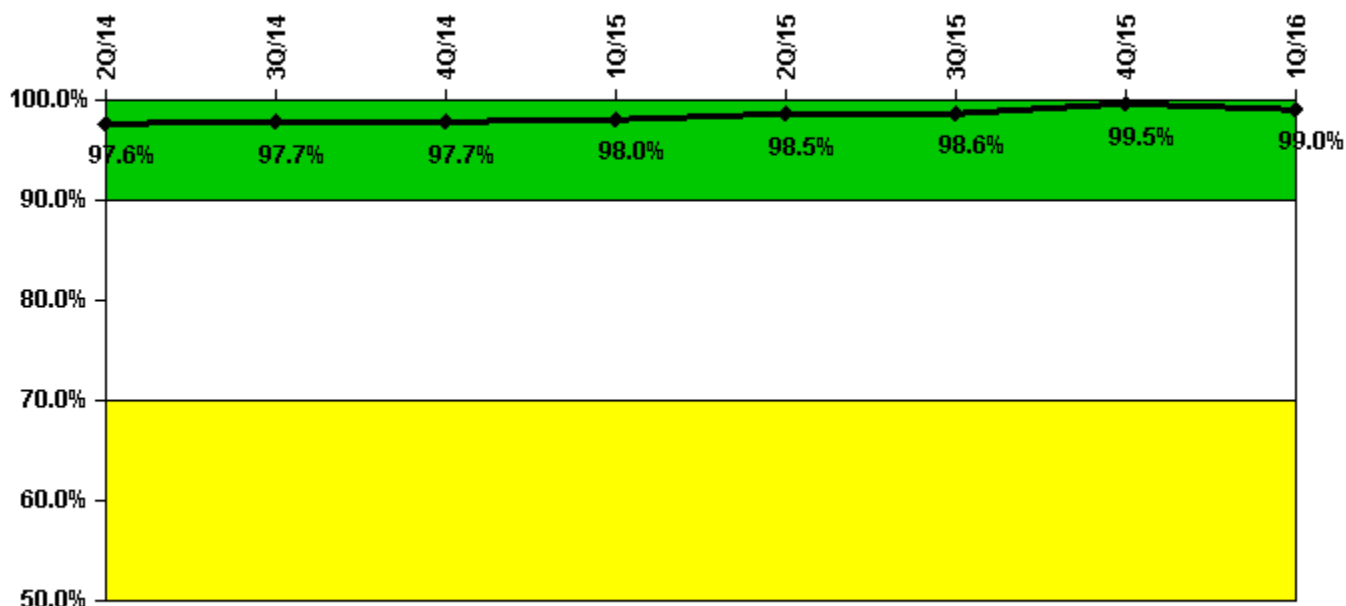
Notes

Reactor Coolant System Leakage	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15
Maximum leakage	1.560	1.590	1.600	1.600	1.600	1.590	1.570	1.800	1.540	1.600	1.570	1.560
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	6.2	6.4	6.4	6.4	6.4	6.4	6.3	7.2	6.2	6.4	6.3	6.2

Reactor Coolant System Leakage	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16
Maximum leakage	1.570	1.600	1.600	1.600	1.610	1.610	1.600	2.460	1.580	1.580	1.590	1.590
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	6.3	6.4	6.4	6.4	6.4	6.4	6.4	9.8	6.3	6.3	6.4	6.4

Licensee Comments: none

Drill/Exercise Performance



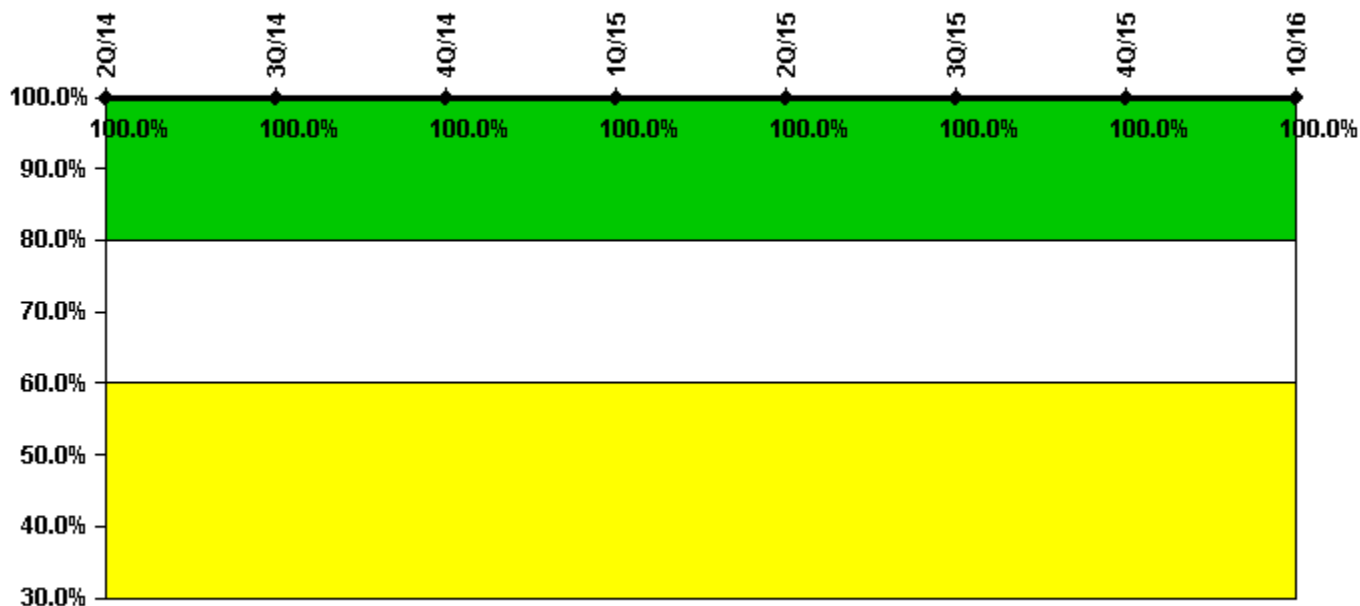
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Successful opportunities	25.0	38.0	0	24.0	35.0	26.0	18.0	39.0
Total opportunities	26.0	38.0	0	24.0	35.0	26.0	18.0	40.0
Indicator value	97.6%	97.7%	97.7%	98.0%	98.5%	98.6%	99.5%	99.0%

Licensee Comments: none

ERO Drill Participation



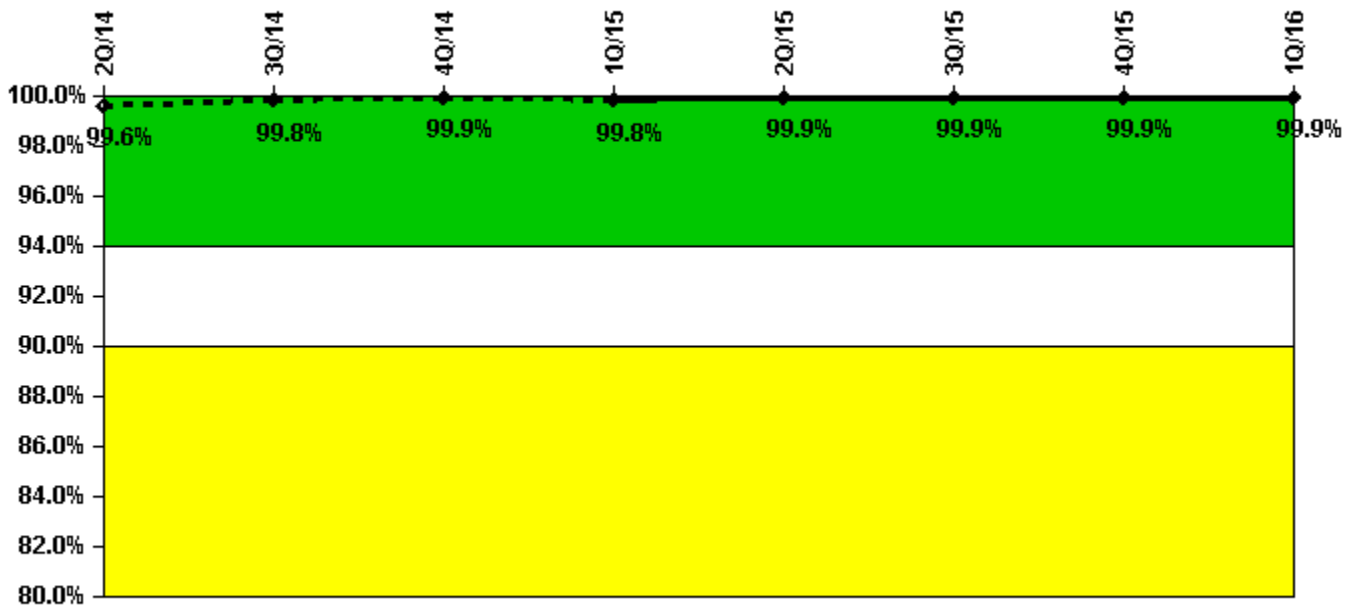
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Participating Key personnel	89.0	85.0	86.0	82.0	90.0	90.0	89.0	90.0
Total Key personnel	89.0	85.0	86.0	82.0	90.0	90.0	89.0	90.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



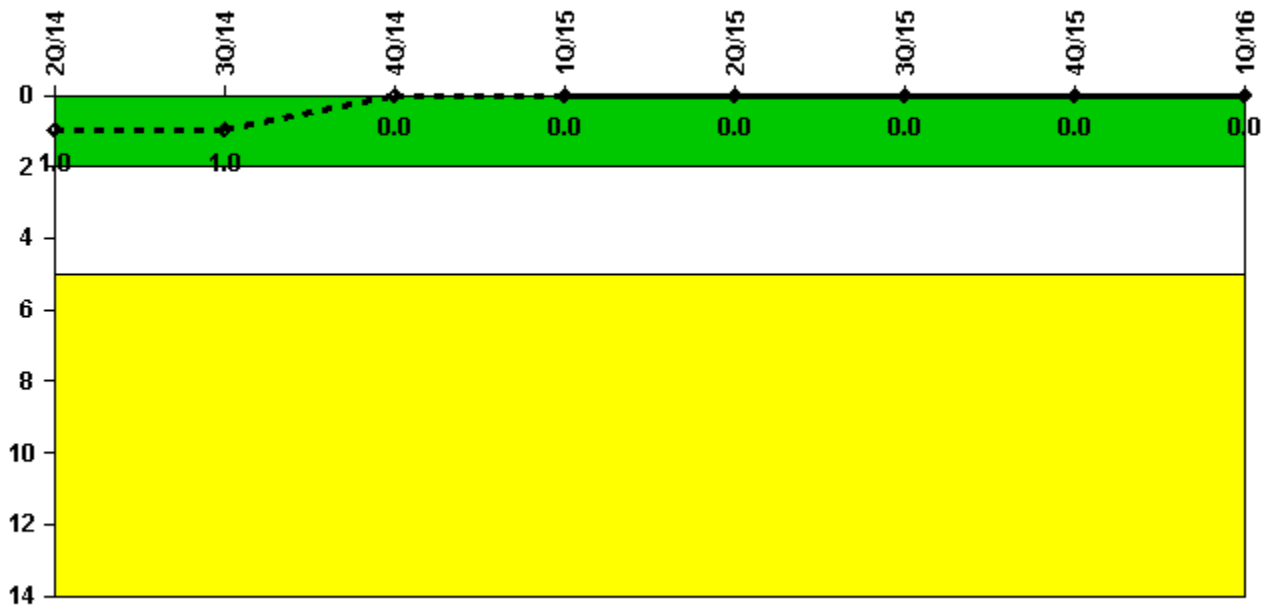
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Successful siren-tests	431	431	432	431	432	431	430	432
Total sirens-tests	432	432	432	432	432	432	430	432
Indicator value	99.6%	99.8%	99.9%	99.8%	99.9%	99.9%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



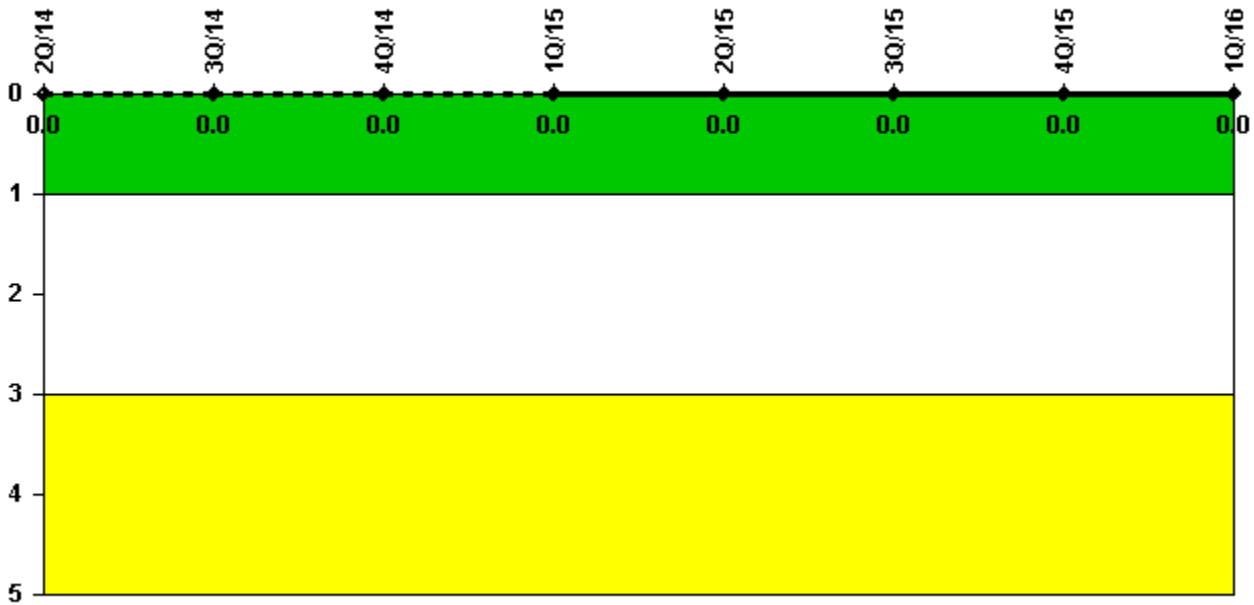
Thresholds: White > 2.0 Yellow > 5.0

Notes

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