

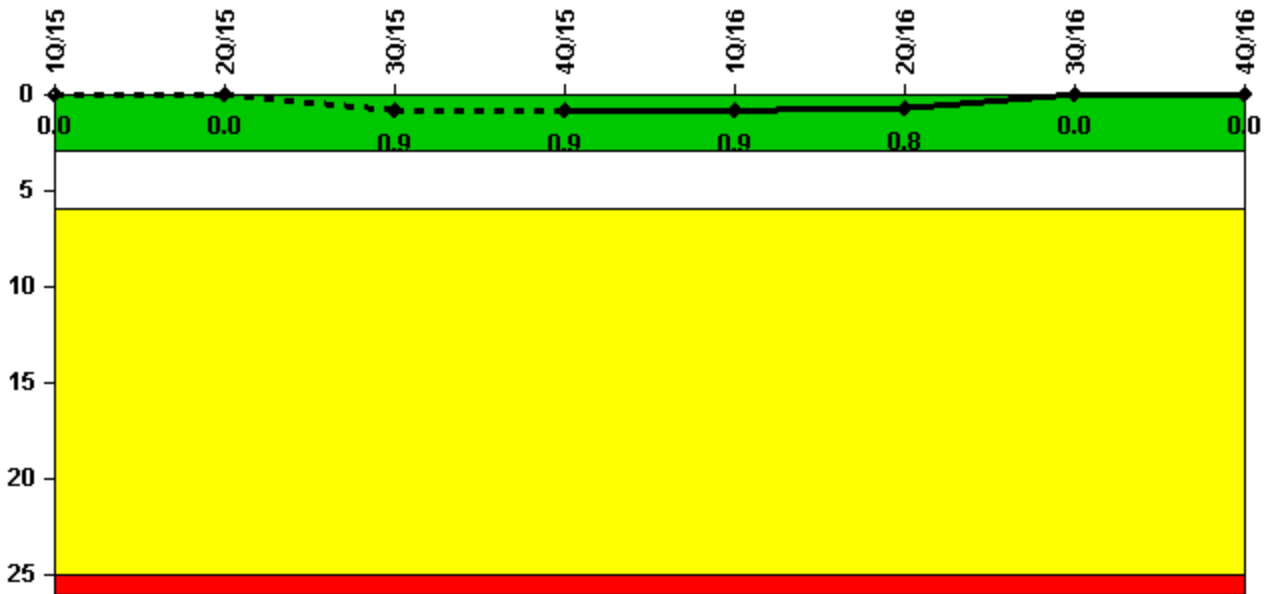
Hope Creek 1

4Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



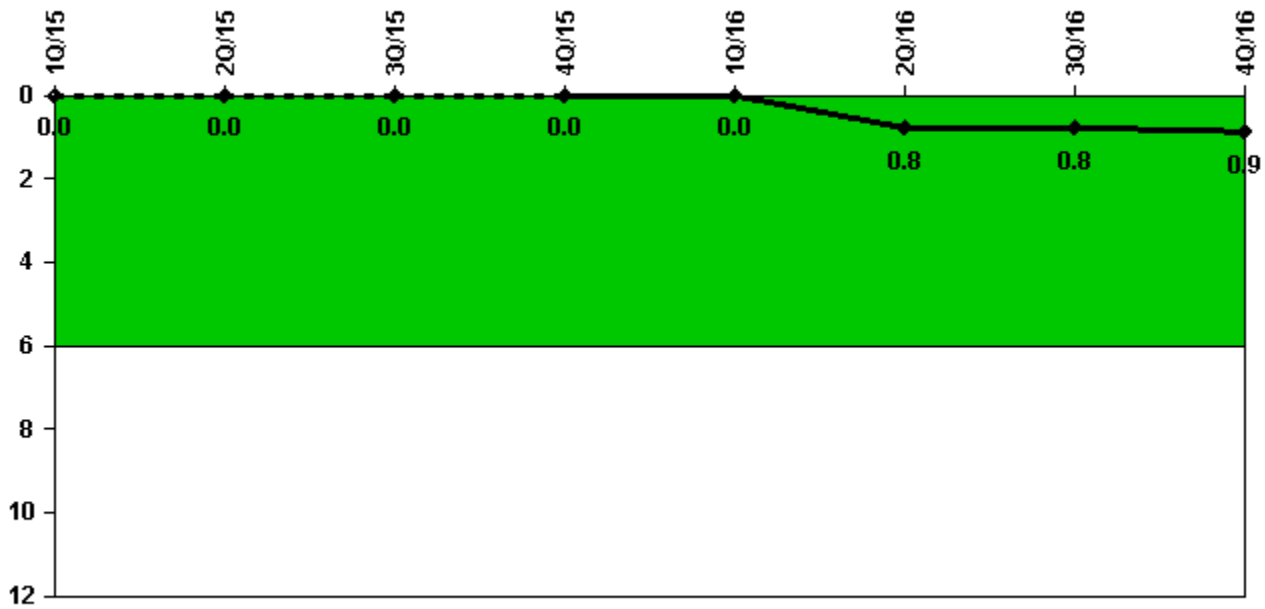
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

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	0	1.0	0	0	0	0	0
Critical hours	2159.0	1500.7	2167.1	2209.0	2183.0	2184.0	2208.0	1575.1
Indicator value	0	0	0.9	0.9	0.9	0.8	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



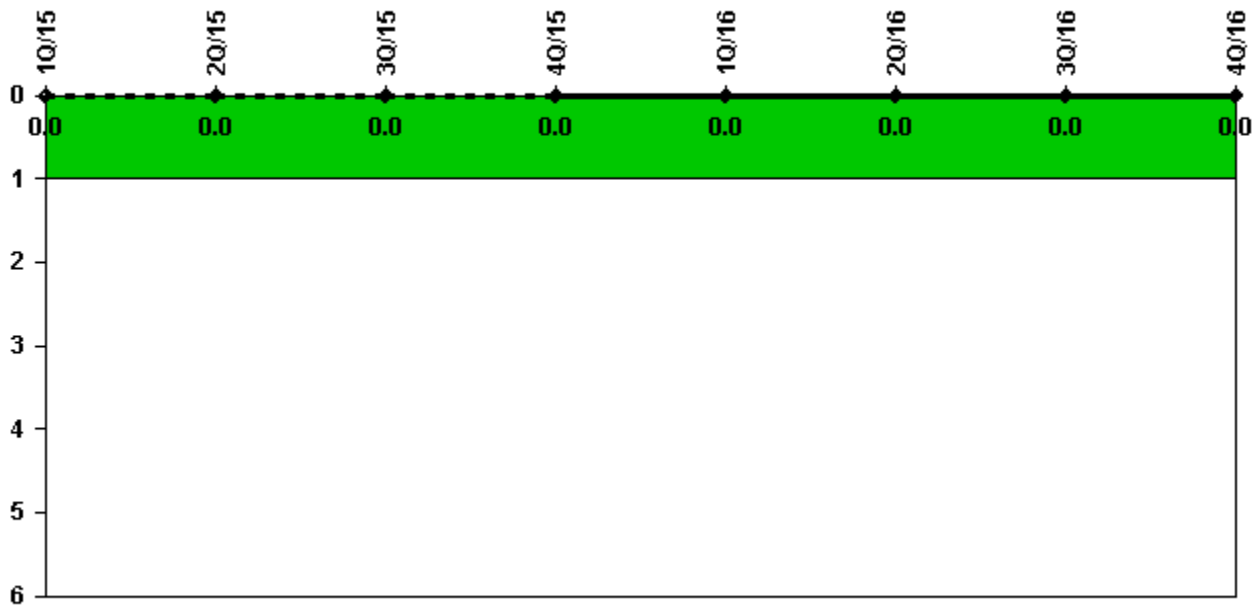
Thresholds: White > 6.0

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	1.0	0	0
Critical hours	2159.0	1500.7	2167.1	2209.0	2183.0	2184.0	2208.0	1575.1
Indicator value	0	0	0	0	0	0.8	0.8	0.9

Licensee Comments: none

Unplanned Scrams with Complications



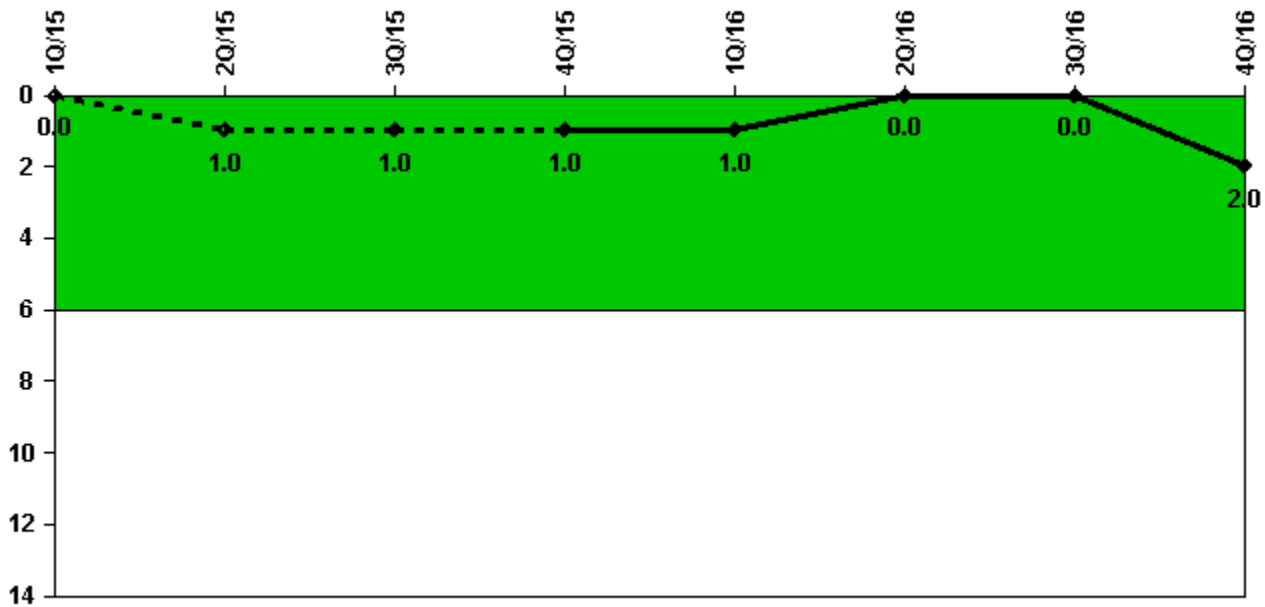
Thresholds: White > 1.0

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	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

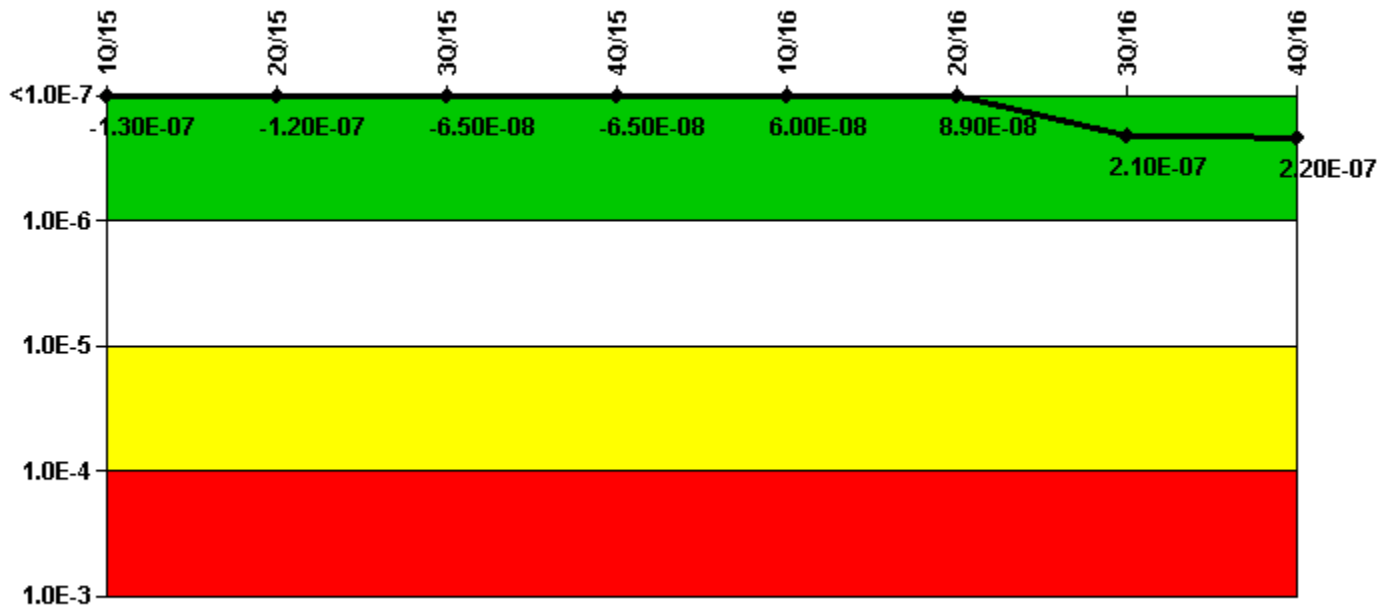
Safety System Functional Failures (BWR)	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Safety System Functional Failures	0	1	0	0	0	0	0	2
Indicator value	0	1	1	1	1	0	0	2

Licensee Comments:

4Q/16: Two LERs were submitted in October 2016. LER 2016-001-00, High Pressure Coolant Injection System Found to be Inoperable During Testing (HPCI Overspeed Tappet) and LER 2016-002-00, High Pressure Coolant Injection System Inoperable (HPCI Governor).

2Q/15: LER 2015-001-00 "Conditions Prohibited by Technical Specifications Due to Core Spray Inoperabilities" submitted on 5/29/15 reported a SSFF.

Mitigating Systems Performance Index, Emergency AC Power System



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

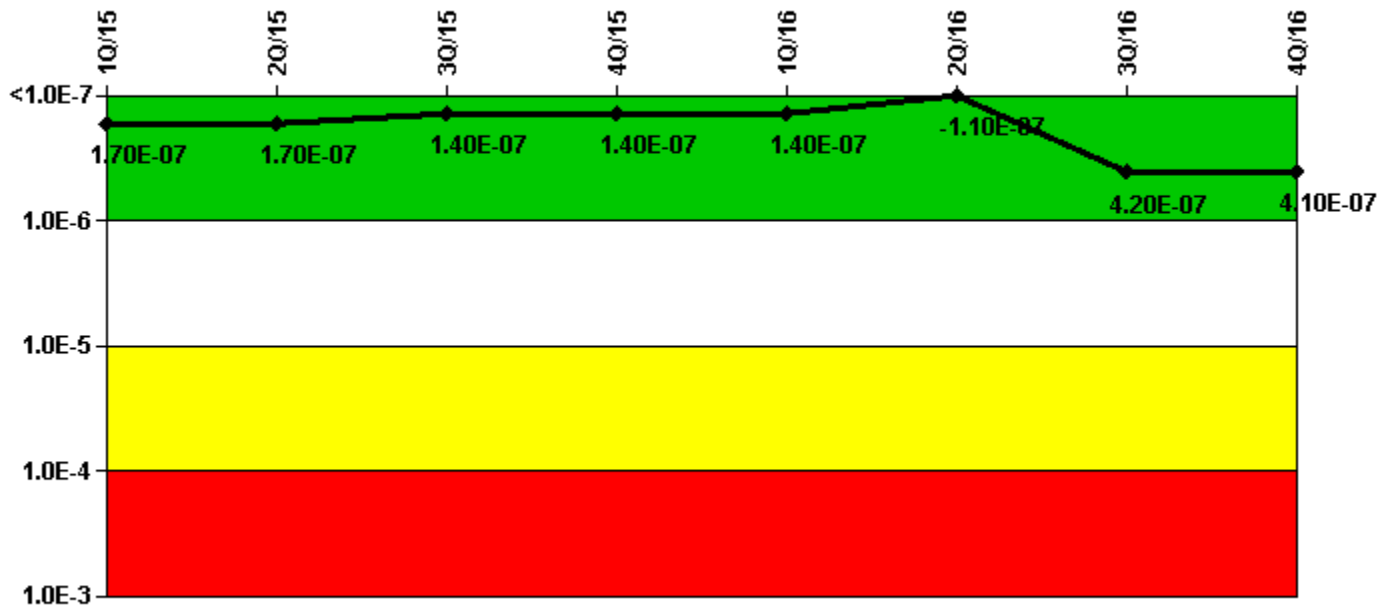
Notes

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)	6.36E-09	1.59E-08	5.88E-10	5.88E-10	-4.66E-09	2.42E-08	2.53E-08	2.19E-08
URI (ΔCDF)	-1.37E-07	-1.37E-07	-6.58E-08	-6.52E-08	6.47E-08	6.50E-08	1.89E-07	1.95E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-07	-1.20E-07	-6.50E-08	-6.50E-08	6.00E-08	8.90E-08	2.10E-07	2.20E-07

Licensee Comments:

2Q/16: The failure of the C EDG Jacket Water Hose on January 2016 was noted not to be reflected in CDE data. A manufacturing defect combined with high vibration in the line resulted in a leak on the EDG that impacted its ability to complete its mission time. This resulted in an MSPI failure to run of the machine. The hose was replaced and the station continue to troubleshoot to correct the vibration condition. This resulted in 5.35 unplanned unavailable hours for the C EDG in January 2016. It was determined to be a negligible increase in MSPI Emergency AC power values. The revised values were incorporated into CDE effective the second quarter 2016.

Mitigating Systems Performance Index, High Pressure Injection System



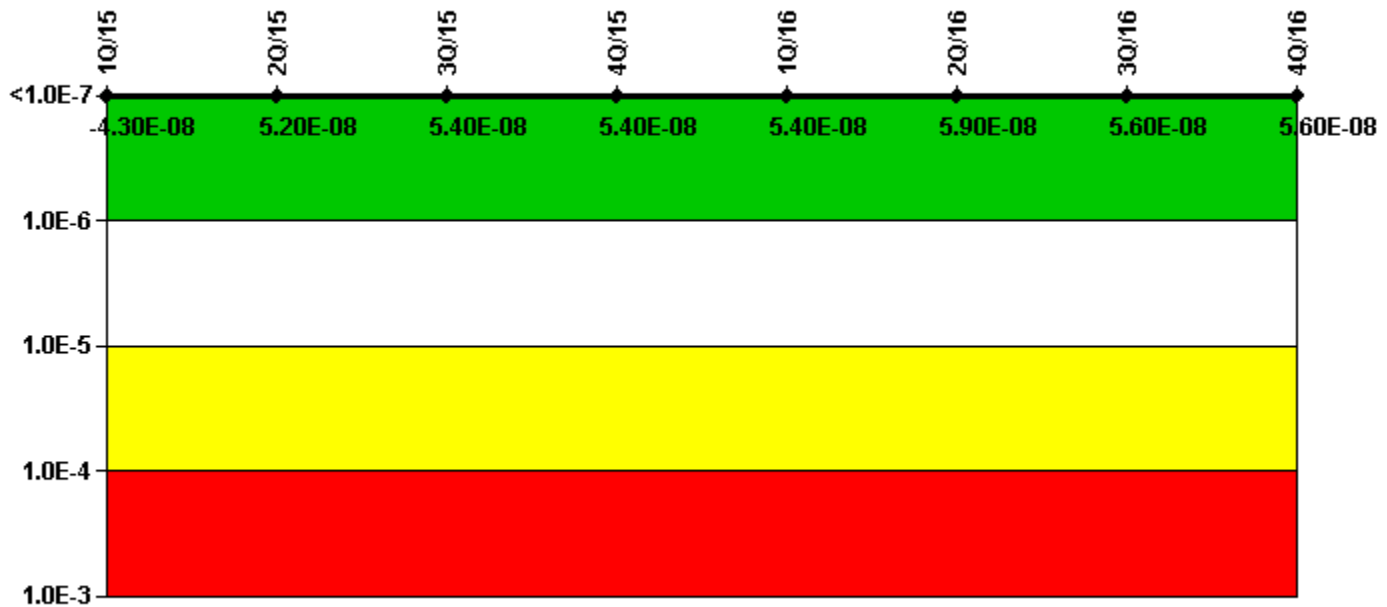
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

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)	-3.03E-08	-3.02E-08	-3.36E-08	-3.36E-08	-3.36E-08	-3.36E-08	1.50E-08	1.46E-08
URI (Δ CDF)	2.03E-07	2.03E-07	1.69E-07	1.75E-07	1.75E-07	-7.42E-08	4.10E-07	4.00E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.70E-07	1.70E-07	1.40E-07	1.40E-07	1.40E-07	-1.10E-07	4.20E-07	4.10E-07

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)	-8.22E-09	-8.05E-09	-8.04E-09	-8.04E-09	-8.05E-09	-8.06E-09	-8.06E-09	-8.09E-09
URI (Δ CDF)	-3.44E-08	6.01E-08	6.23E-08	6.23E-08	6.22E-08	6.69E-08	6.44E-08	6.44E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.30E-08	5.20E-08	5.40E-08	5.40E-08	5.40E-08	5.90E-08	5.60E-08	5.60E-08

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



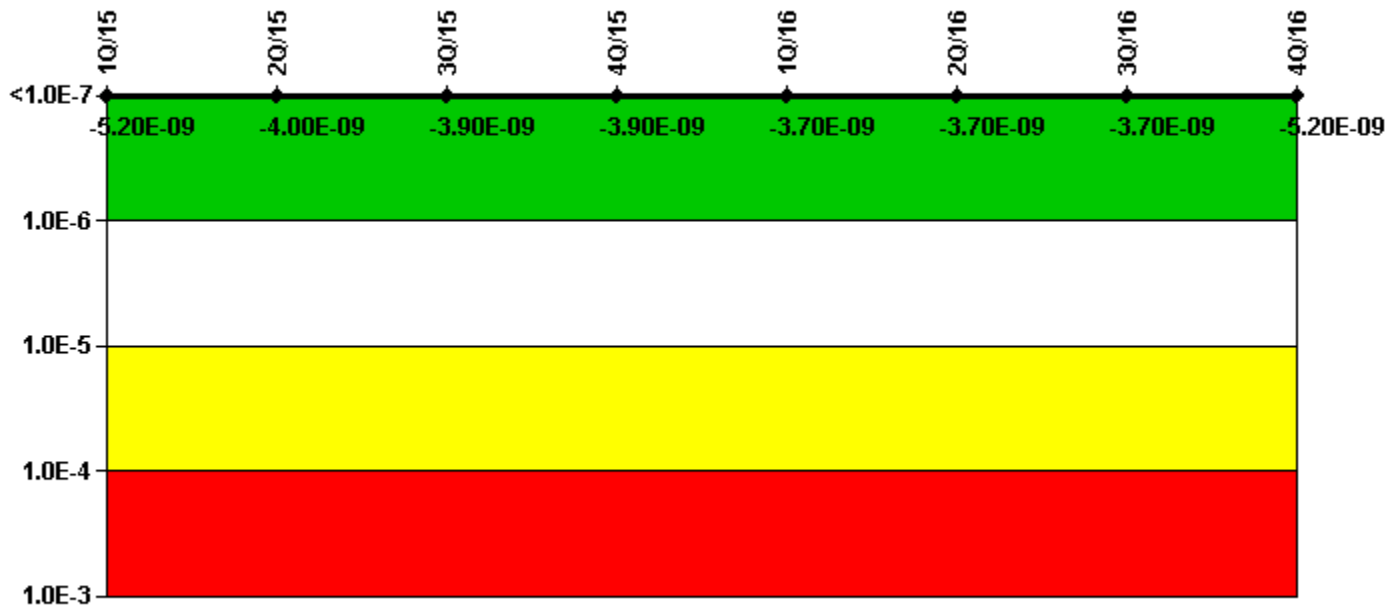
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

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)	-3.43E-09	-5.36E-10	3.32E-10	8.44E-10	3.56E-09	4.58E-09	1.94E-09	2.20E-10
URI (Δ CDF)	-1.47E-08	-1.50E-08	-1.57E-08	-1.62E-08	-1.64E-08	-1.64E-08	-1.74E-08	-2.65E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.80E-08	-1.60E-08	-1.50E-08	-1.50E-08	-1.30E-08	-1.20E-08	-1.50E-08	-2.60E-08

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



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

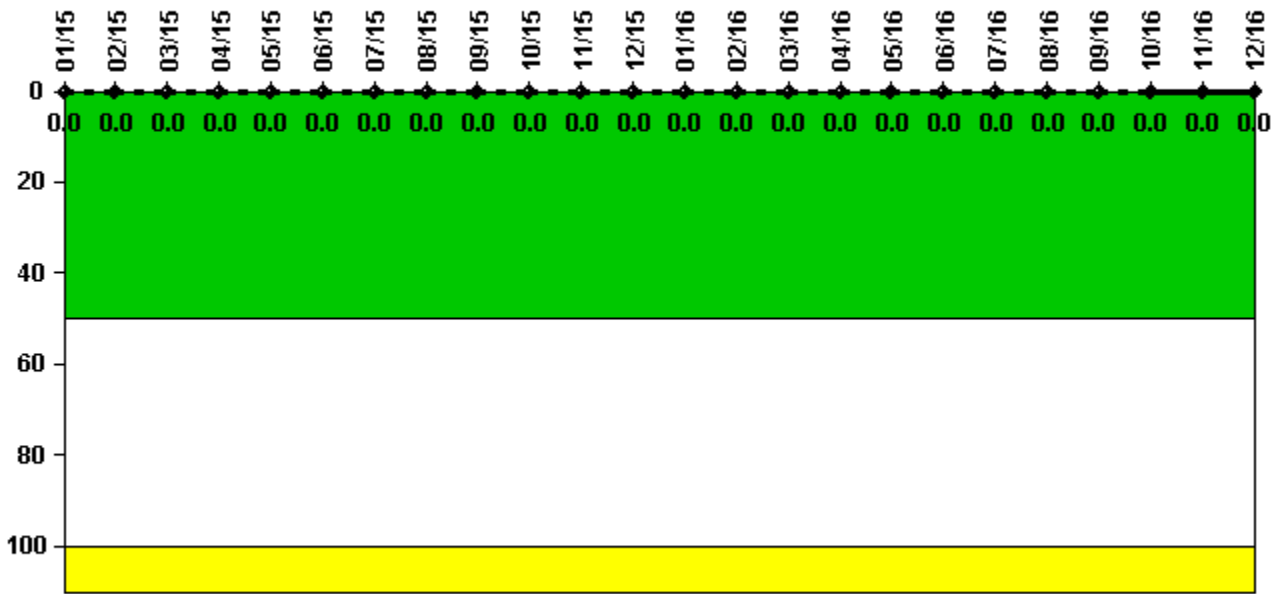
Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI (ΔCDF)	-3.84E-09	-2.58E-09	-2.44E-09	-2.45E-09	-2.33E-09	-2.35E-09	-2.35E-09	-2.37E-09
URI (ΔCDF)	-1.39E-09	-1.40E-09	-1.42E-09	-1.40E-09	-1.38E-09	-1.37E-09	-1.32E-09	-2.79E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.20E-09	-4.00E-09	-3.90E-09	-3.90E-09	-3.70E-09	-3.70E-09	-3.70E-09	-5.20E-09

Licensee Comments:

3Q/15: A change was made to September 2015 (3Q15) data. Previously 9.65 hours were counted as unavailability for the BSSWS train. This would only have the potential to make the B2 SACS HX unavailable, so the 9.65 hours of unavailability was moved from B SSWS to B2 SACS HX. There was no effect on the ??? color??? of the indicator

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

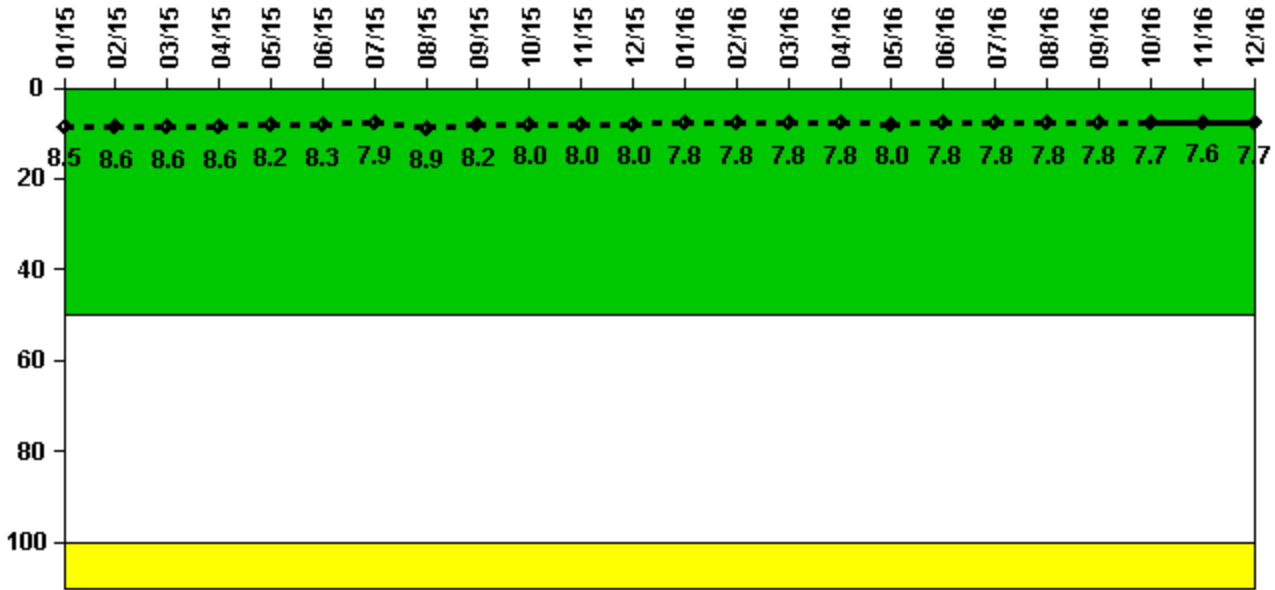
Notes

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	0.000062	0.000039	0.000052	0.000040	0.000025	0.000025	0.000029	0.000026	0.000028	0.000027	0.000027	0.000026
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	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	0.000026	0.000037	0.000025	0.000030	0.000026	0.000028	0.000027	0.000027	0.000027	0.000025	0.000064	0.000027
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

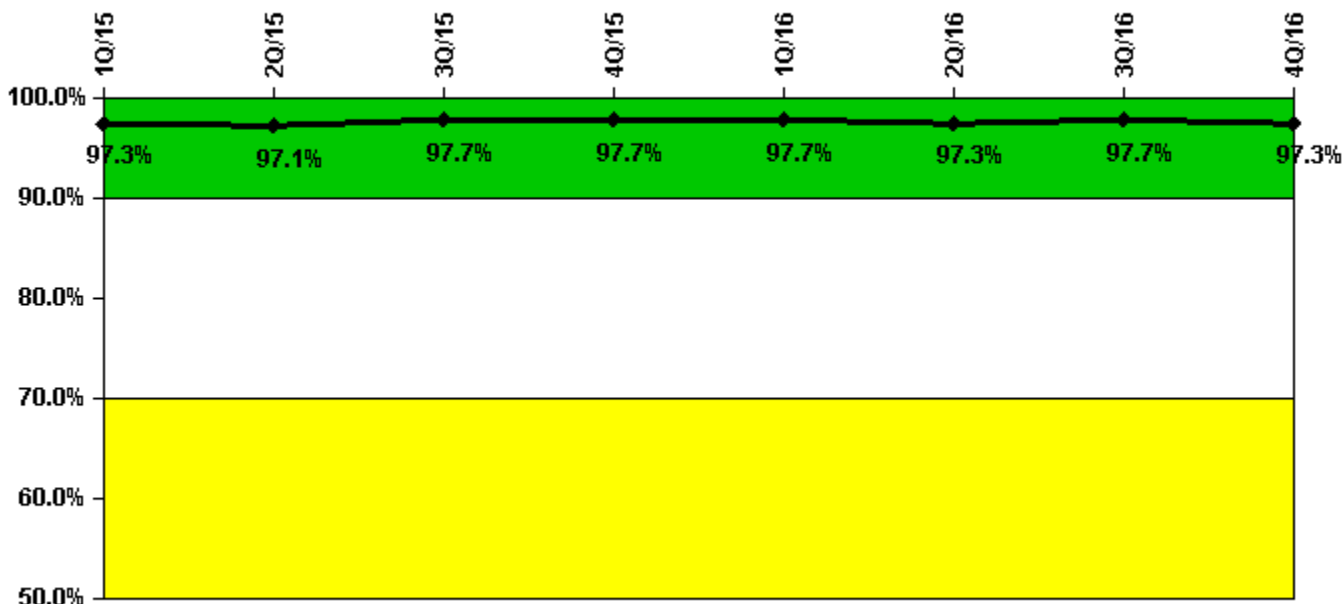
Notes

Reactor Coolant System Leakage	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	2.120	2.160	2.140	2.140	2.040	2.080	1.970	2.220	2.050	2.010	1.990	1.990
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	8.5	8.6	8.6	8.6	8.2	8.3	7.9	8.9	8.2	8.0	8.0	8.0

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	1.950	1.950	1.960	1.940	1.990	1.950	1.940	1.950	1.940	1.930	1.900	1.930
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	7.8	7.8	7.8	7.8	8.0	7.8	7.8	7.8	7.8	7.7	7.6	7.7

Licensee Comments: none

Drill/Exercise Performance



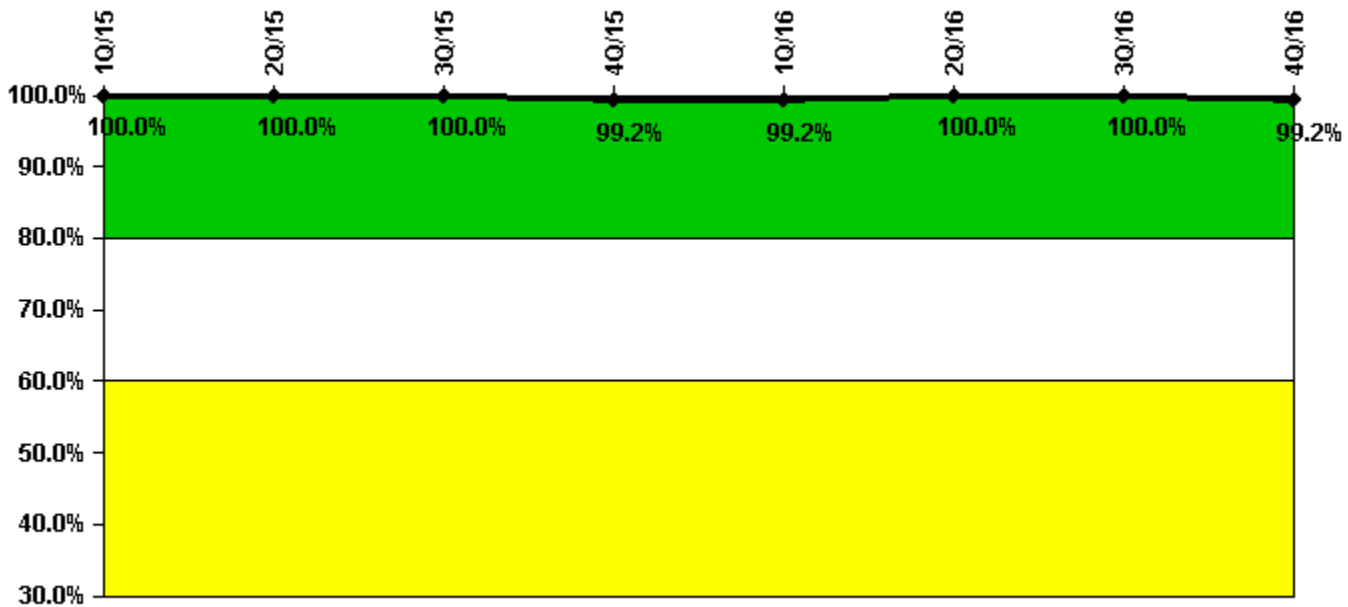
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Successful opportunities	34.0	29.0	41.0	31.0	38.0	34.0	64.0	16.0
Total opportunities	36.0	30.0	41.0	32.0	39.0	36.0	64.0	17.0
Indicator value	97.3%	97.1%	97.7%	97.7%	97.7%	97.3%	97.7%	97.3%

Licensee Comments: none

ERO Drill Participation



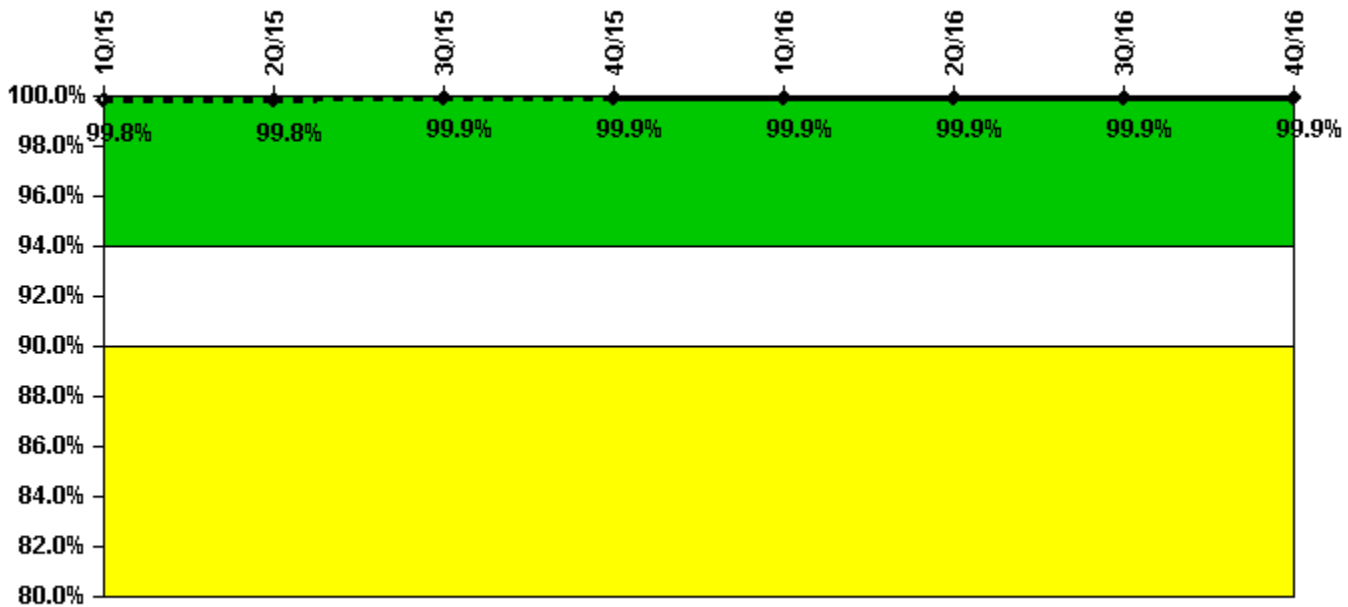
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Participating Key personnel	116.0	119.0	125.0	119.0	119.0	118.0	126.0	129.0
Total Key personnel	116.0	119.0	125.0	120.0	120.0	118.0	126.0	130.0
Indicator value	100.0%	100.0%	100.0%	99.2%	99.2%	100.0%	100.0%	99.2%

Licensee Comments: none

Alert & Notification System



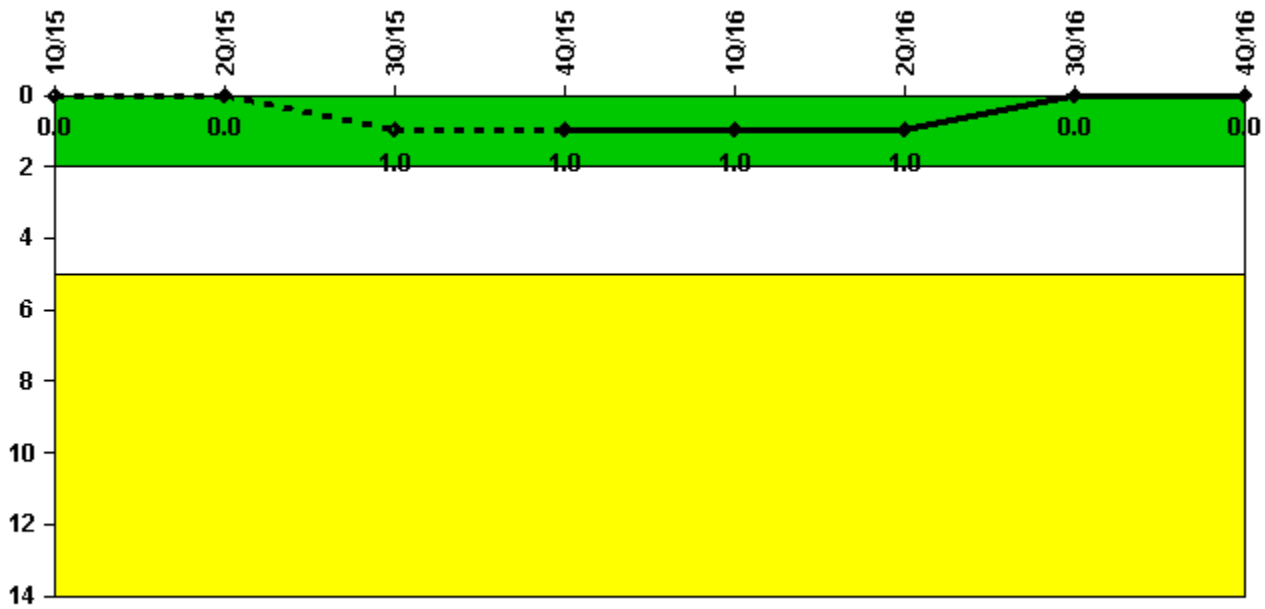
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Successful siren-tests	497	497	496	496	497	497	496	497
Total sirens-tests	497	497	497	497	497	497	497	497
Indicator value	99.8%	99.8%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

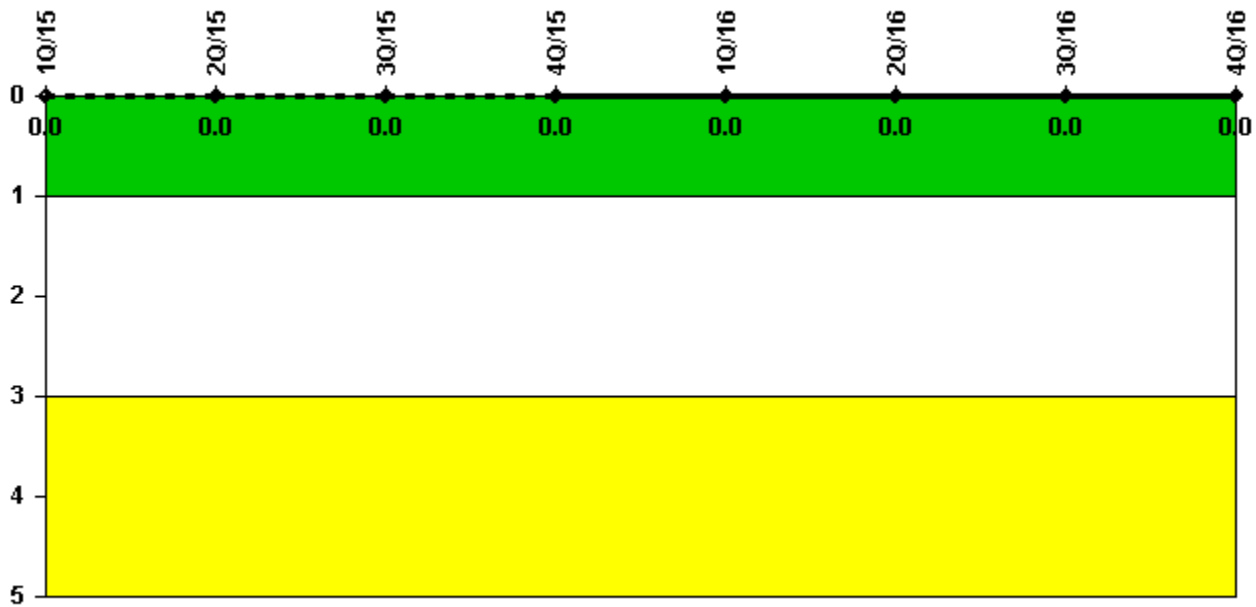
Notes

Occupational Exposure Control Effectiveness	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
High radiation area occurrences	0	0	1	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	1	1	1	1	0	0

Licensee Comments:

3Q/15: 2015-09 High Radiation Area Occurrence - An operator entered a high radiation area without signing on to the proper radiation work permit, without obtaining a proper radiation protection brief, and without the proper instrumentation.

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