

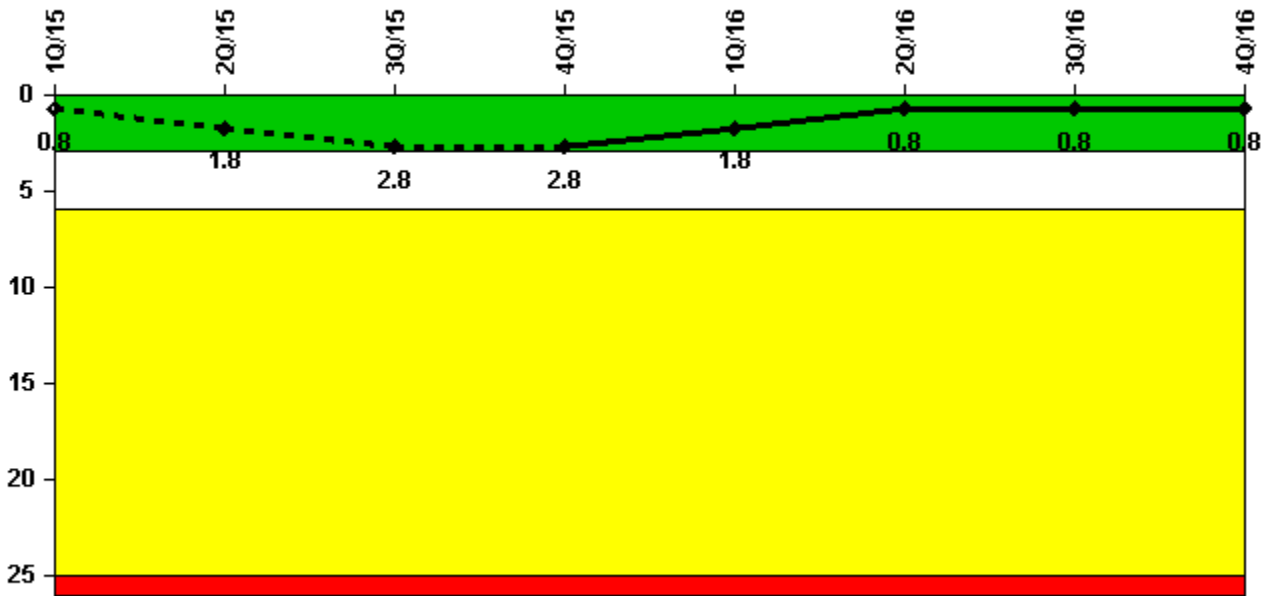
Pilgrim 1

4Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



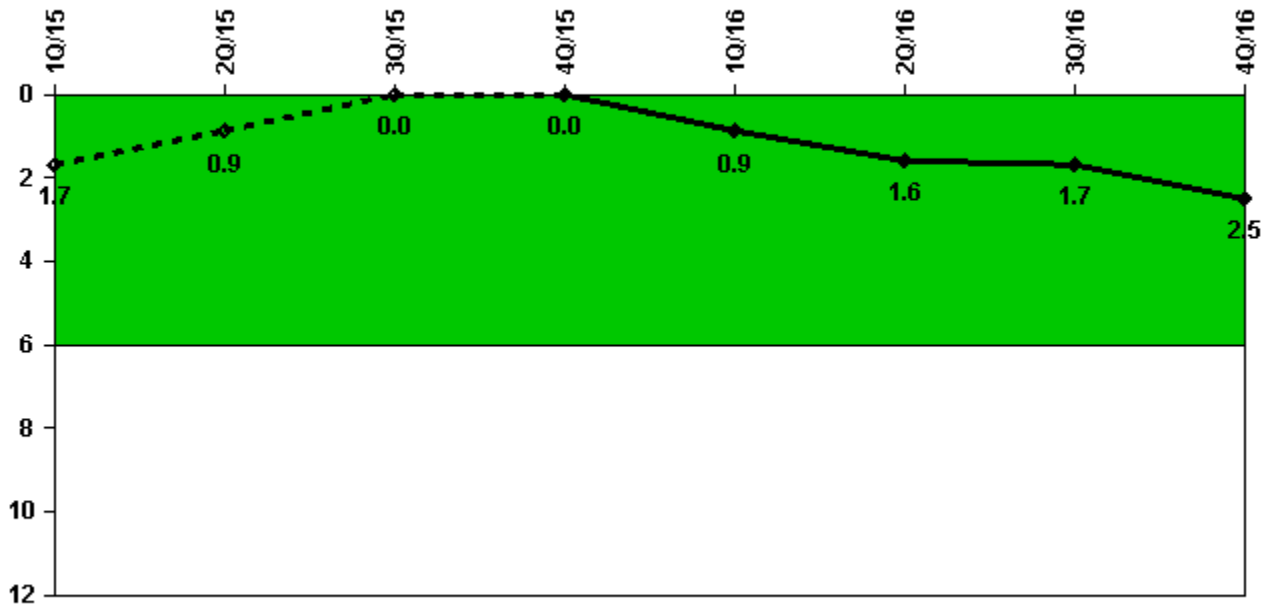
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

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	1.0	1.0	1.0	0	0	0	1.0	0
Critical hours	1830.3	1424.1	2151.7	2209.0	2137.9	2184.0	1918.2	2080.2
Indicator value	0.8	1.8	2.8	2.8	1.8	0.8	0.8	0.8

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



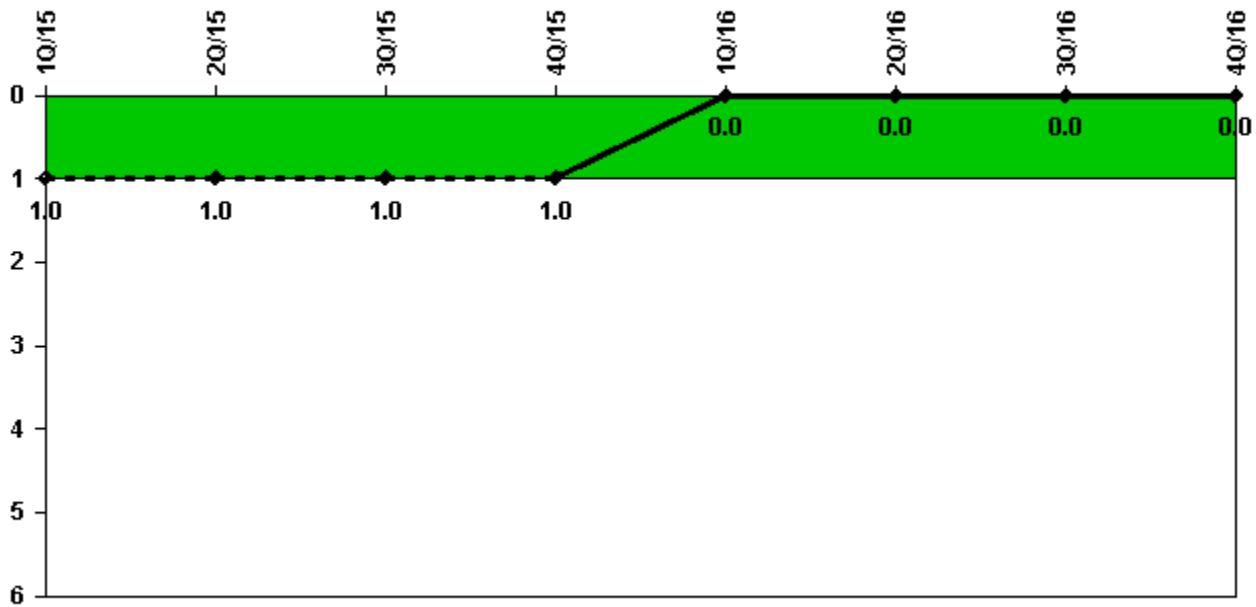
Thresholds: White > 6.0

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	1.0	1.0	0	1.0
Critical hours	1830.3	1424.1	2151.7	2209.0	2137.9	2184.0	1918.2	2080.2
Indicator value	1.7	0.9	0	0	0.9	1.6	1.7	2.5

Licensee Comments: none

Unplanned Scrams with Complications



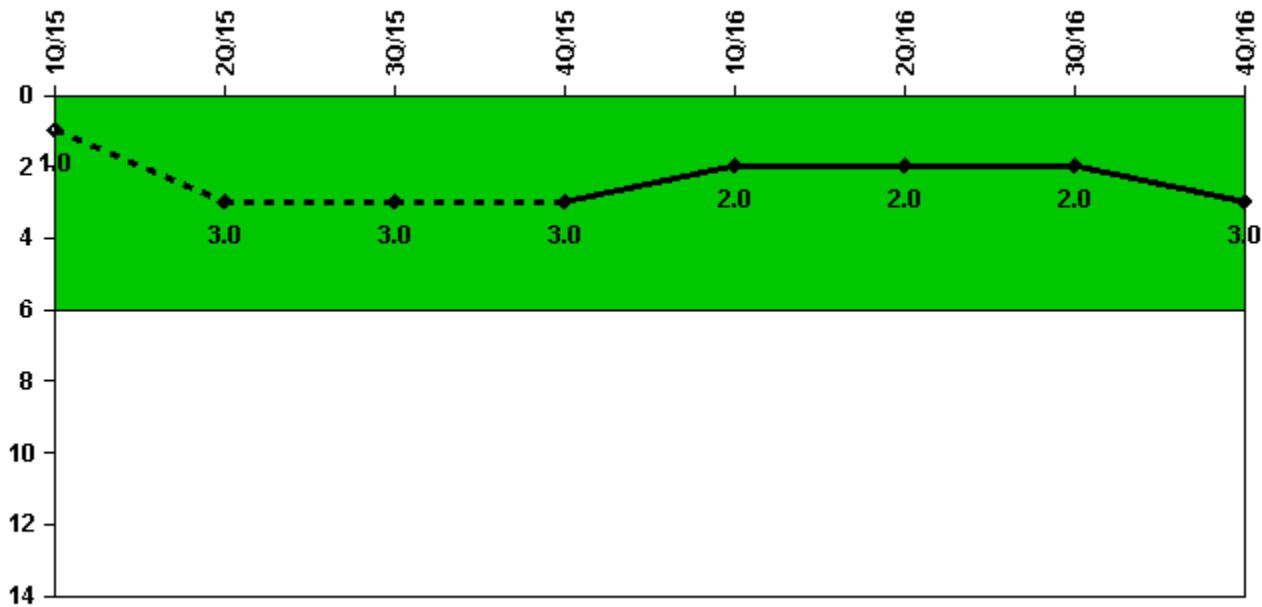
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Scrams with complications	1.0	0	0	0	0	0	0	0
Indicator value	1.0	1.0	1.0	1.0	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	1	2	0	0	0	2	0	1
Indicator value	1	3	3	3	2	2	2	3

Licensee Comments:

4Q/16: LER 2016-005-00 - Evaluated to not be a reportable SSFF per NEI 99-02. LER 2016-008-00 is a SSFF due to inoperability of both EDGs.

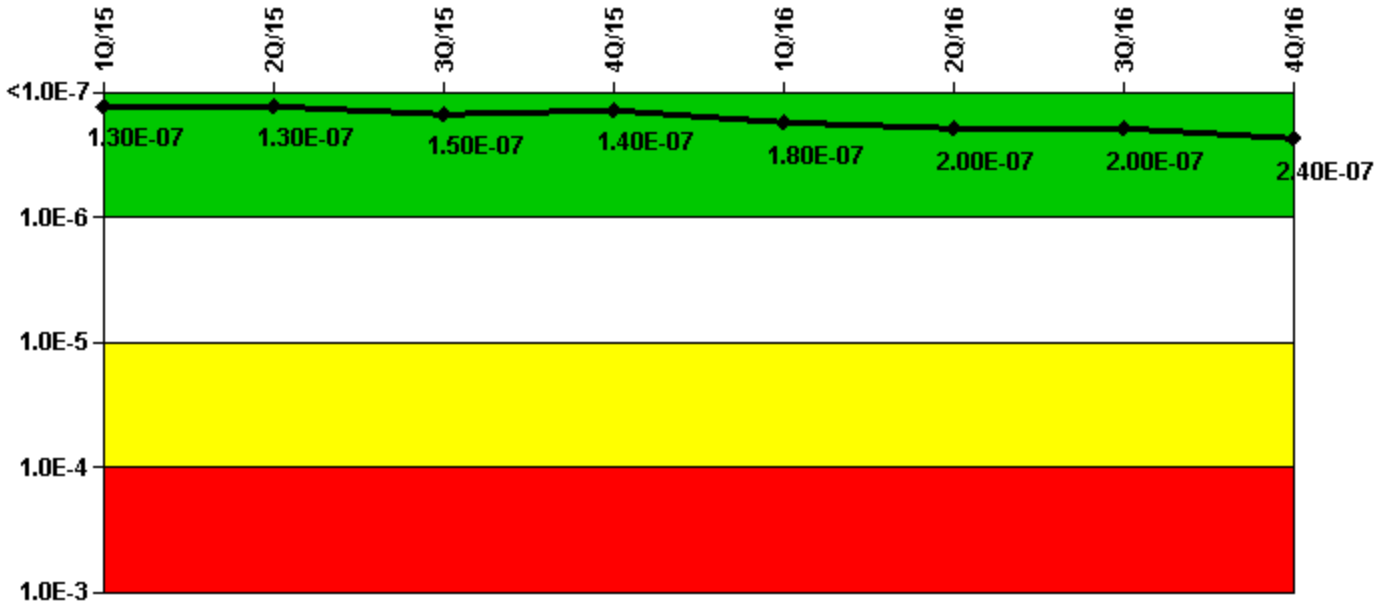
2Q/16: LER 2016-001-00 and LER 2016-002-00

4Q/15: Licensee Event Report (LER) 2015-006-00 documented the Ultimate Heat Sink (UHS) temperature exceeded the Technical Specification limit resulting in the UHS and the Salt Service Water (SSW) System being declared inoperable. The LER was submitted pursuant to 10 CFR 50.73(a) (2)(v)(B) and (D), any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to remove residual heat and mitigate the consequences of an accident, respectively. As documented in the LER, an evaluation of a similar 2013 event determined the safety function of the UHS and SSW System was satisfied when the temperature exceeded the Technical Specification limit for a longer duration and higher value. The 2015 temperature excursion is bounded by that evaluation based on the lower maximum temperature recorded and the shorter duration of this excursion. Thus, this event is not counted as a safety system functional failure per NEI 99-02, Section 2.2.

2Q/15: LER 2015-002-00 and LER 2015-004-00

1Q/15: LER 2015-001-00 documents HPCI Inoperability

Mitigating Systems Performance Index, Emergency AC Power System



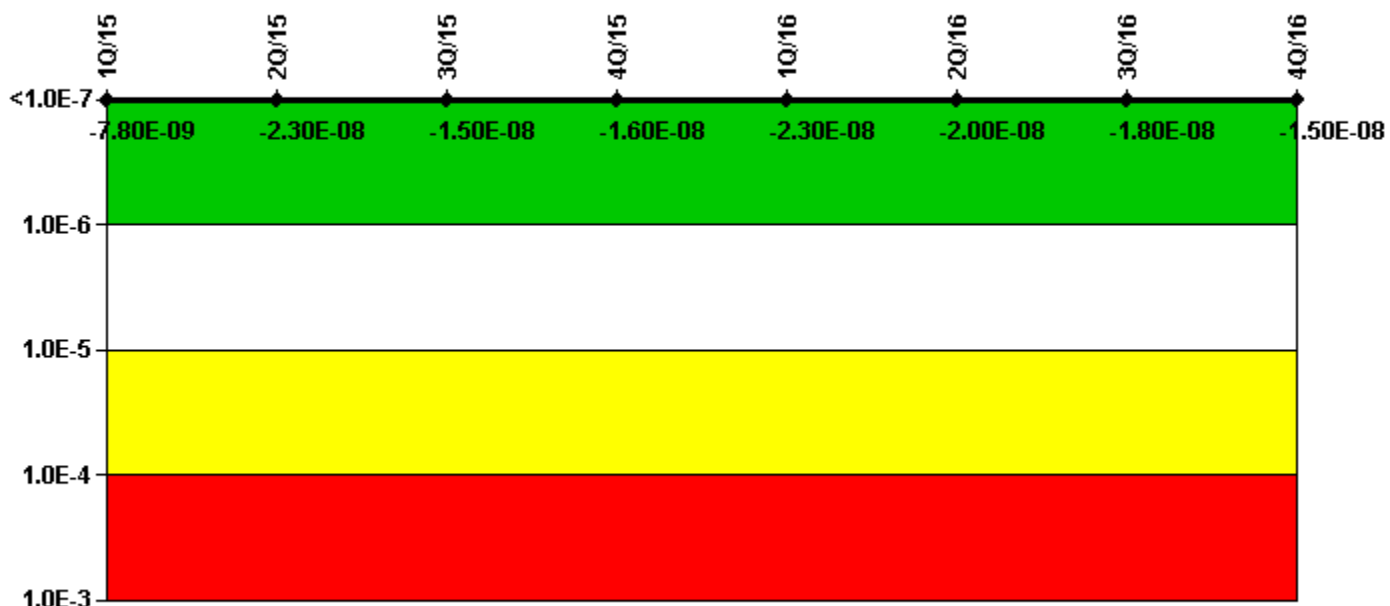
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

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)	2.41E-08	2.47E-08	3.78E-08	2.57E-08	1.68E-08	3.72E-08	3.79E-08	3.96E-08
URI (ΔCDF)	1.10E-07	1.10E-07	1.10E-07	1.11E-07	1.64E-07	1.66E-07	1.66E-07	1.97E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.30E-07	1.30E-07	1.50E-07	1.40E-07	1.80E-07	2.00E-07	2.00E-07	2.40E-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	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
UAI (Δ CDF)	1.25E-08	-2.97E-09	5.48E-09	4.15E-09	-3.45E-09	-2.25E-09	-7.87E-10	2.60E-09
URI (Δ CDF)	-2.03E-08	-2.03E-08	-2.03E-08	-2.00E-08	-1.95E-08	-1.77E-08	-1.68E-08	-1.75E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-7.80E-09	-2.30E-08	-1.50E-08	-1.60E-08	-2.30E-08	-2.00E-08	-1.80E-08	-1.50E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



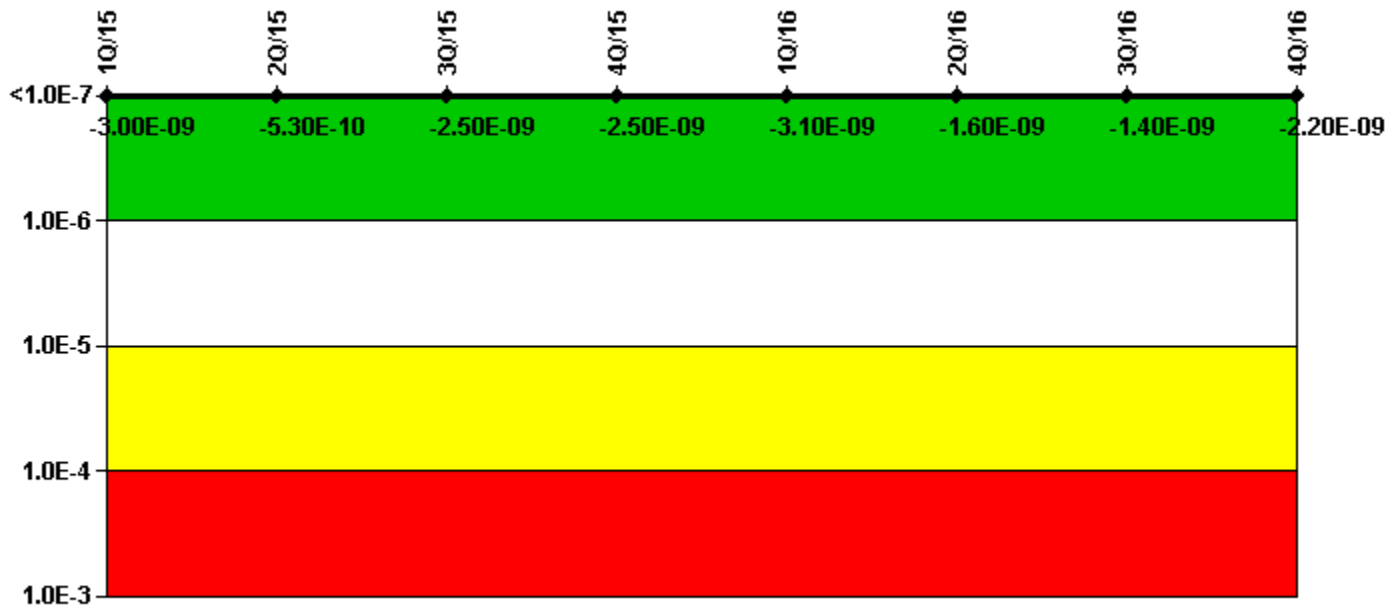
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

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)	7.13E-09	4.20E-09	9.76E-09	5.10E-09	4.90E-09	3.66E-09	1.03E-08	8.69E-09
URI (Δ CDF)	-1.51E-08	-1.52E-08	-1.55E-08	-1.54E-08	-1.52E-08	-1.46E-08	-1.31E-08	-1.25E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-7.90E-09	-1.10E-08	-5.80E-09	-1.00E-08	-1.00E-08	-1.10E-08	-2.90E-09	-3.80E-09

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



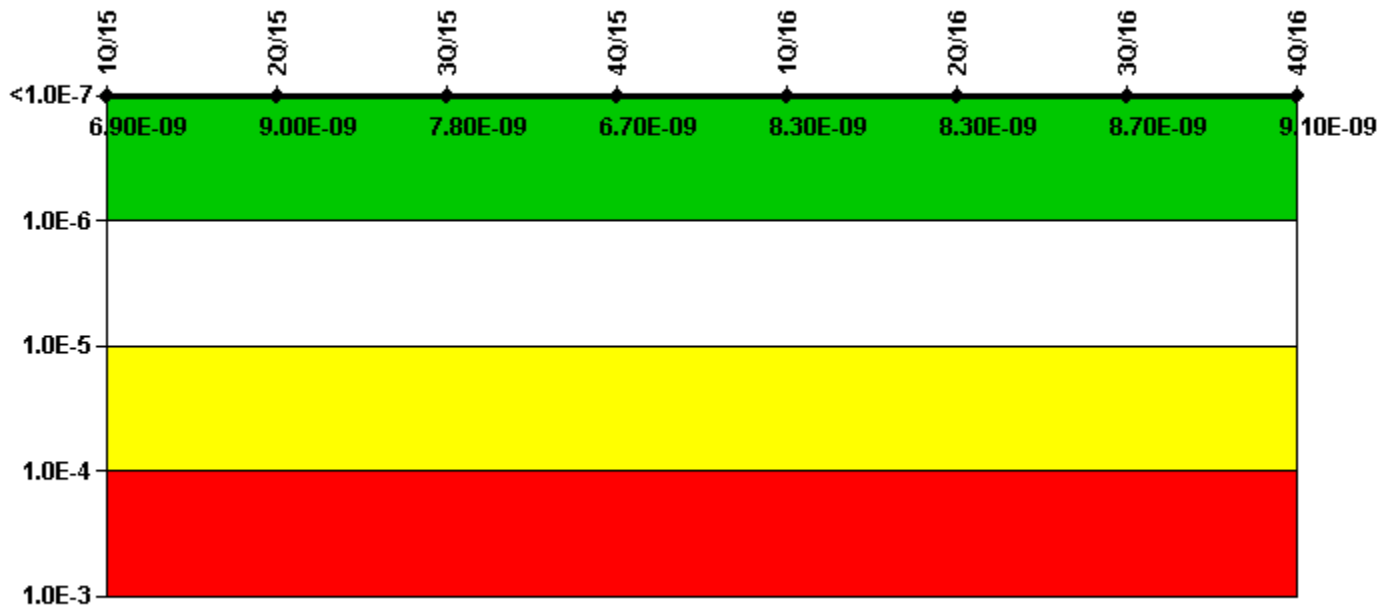
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

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)	2.57E-09	3.31E-09	1.60E-09	1.75E-09	9.94E-10	2.36E-09	2.61E-09	1.83E-09
URI (Δ CDF)	-5.58E-09	-3.84E-09	-4.10E-09	-4.26E-09	-4.14E-09	-3.92E-09	-4.00E-09	-4.01E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.00E-09	-5.30E-10	-2.50E-09	-2.50E-09	-3.10E-09	-1.60E-09	-1.40E-09	-2.20E-09

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



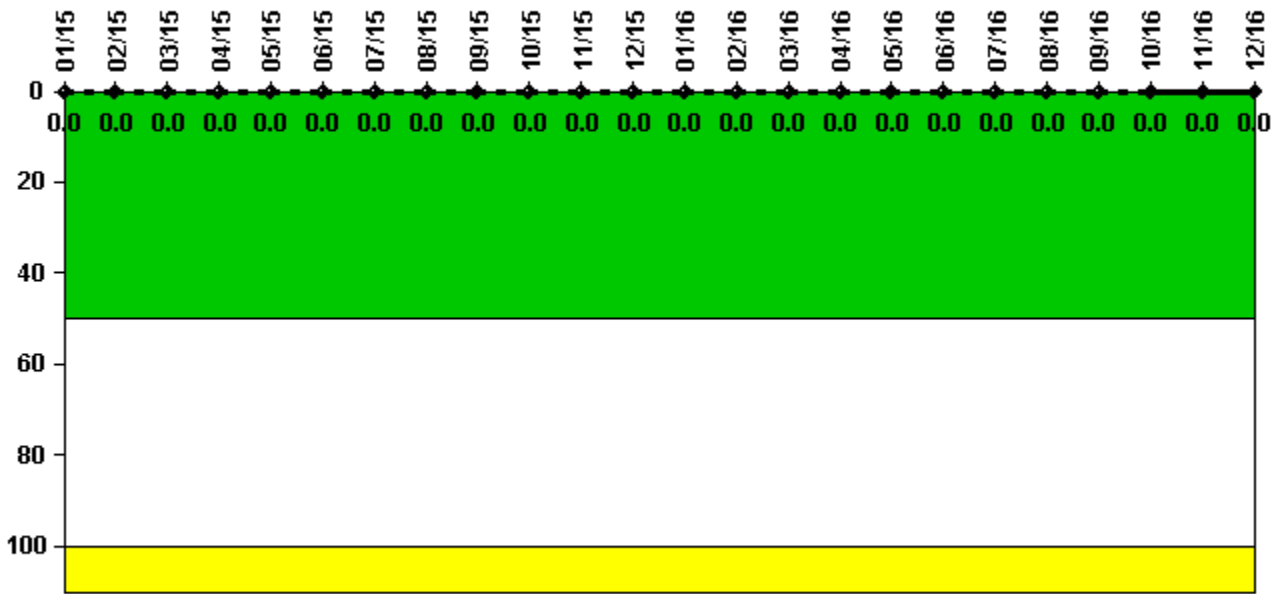
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

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)	6.58E-09	8.64E-09	7.42E-09	7.68E-09	9.24E-09	9.10E-09	9.52E-09	9.98E-09
URI (Δ CDF)	3.33E-10	3.67E-10	3.48E-10	-9.67E-10	-9.74E-10	-8.46E-10	-8.38E-10	-8.44E-10
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	6.90E-09	9.00E-09	7.80E-09	6.70E-09	8.30E-09	8.30E-09	8.70E-09	9.10E-09

Licensee Comments: none

Reactor Coolant System Activity



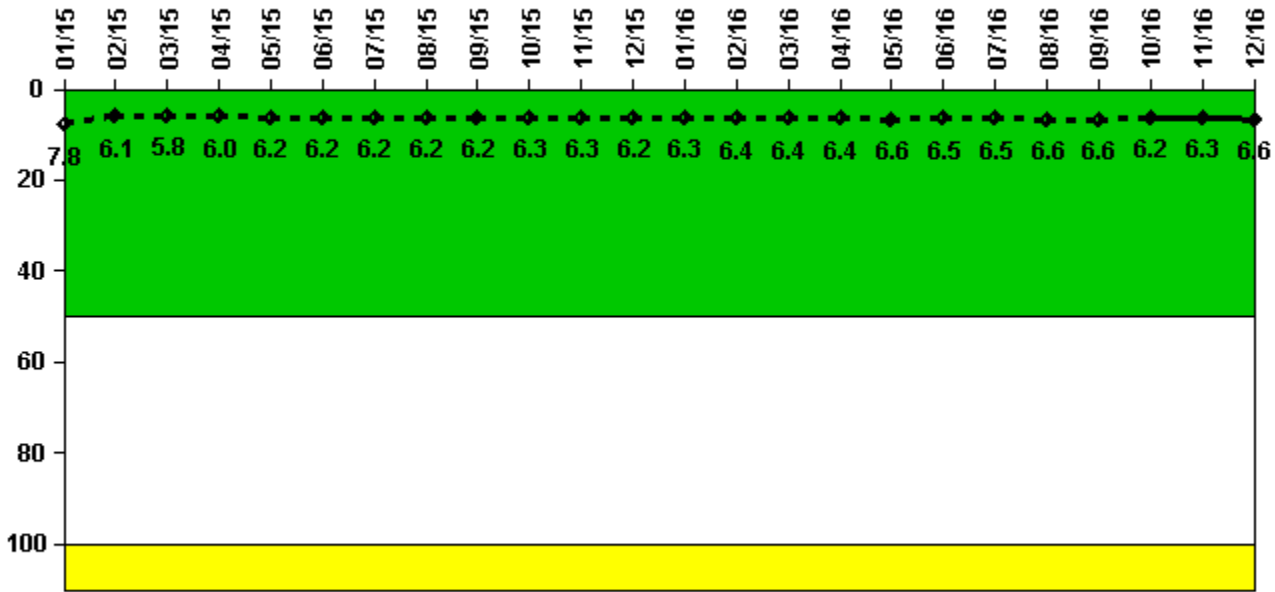
Thresholds: White > 50.0 Yellow > 100.0

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	0.000178	0.000083	0.000079	0.000062	0.000002	0.000076	0.000067	0.000067	0.000117	0.000133	0.000096	0.000091
Technical specification limit	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
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	0.000122	0.000118	0.000113	0.000111	0.000162	0.000143	0.000151	0.000198	0.000214	0.000137	0.000171	0.000174
Technical specification limit	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
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

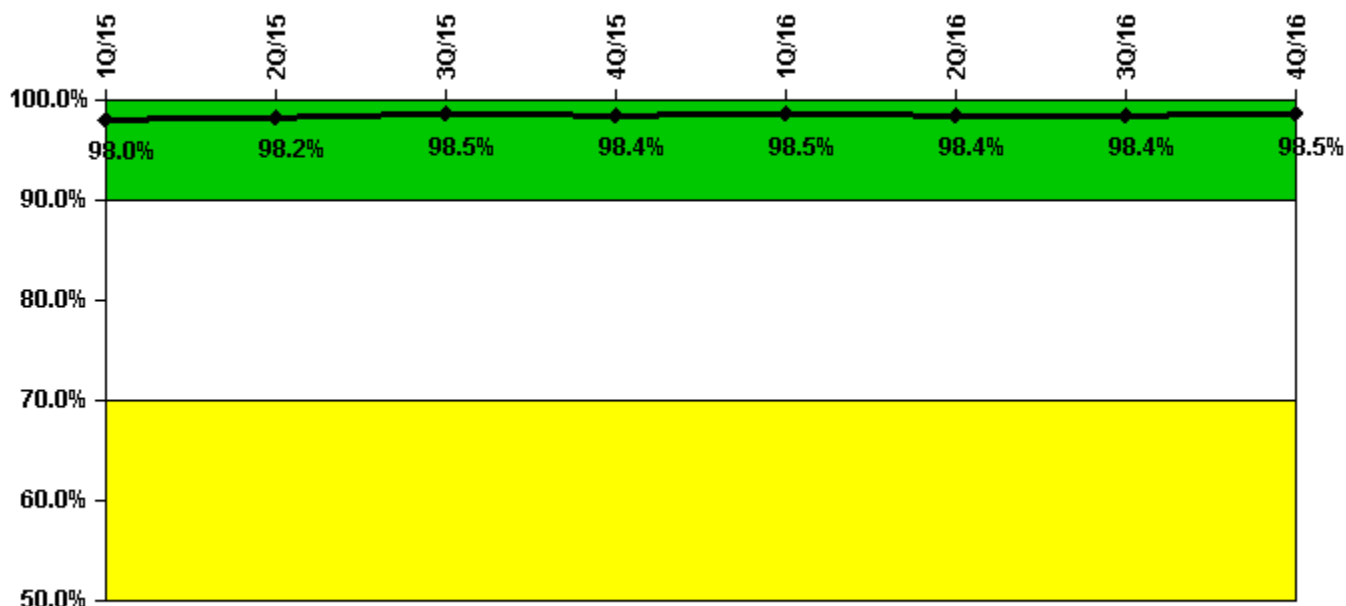
Notes

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	1.960	1.530	1.460	1.490	1.550	1.560	1.550	1.540	1.560	1.580	1.570	1.550
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	6.1	5.8	6.0	6.2	6.2	6.2	6.2	6.2	6.3	6.3	6.2

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	1.570	1.590	1.590	1.600	1.650	1.630	1.620	1.660	1.660	1.550	1.580	1.650
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	6.6	6.5	6.5	6.6	6.6	6.2	6.3	6.6

Licensee Comments: none

Drill/Exercise Performance



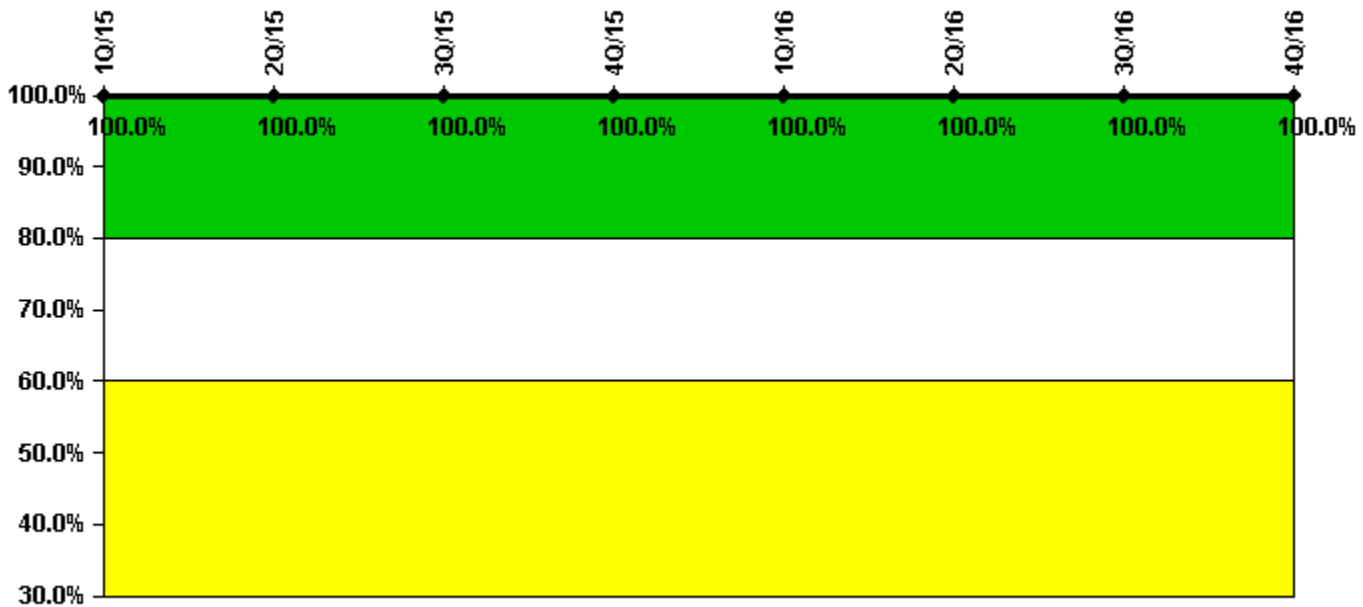
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Successful opportunities	163.0	48.0	122.0	35.0	22.0	40.0	46.0	38.0
Total opportunities	165.0	49.0	122.0	36.0	22.0	41.0	48.0	39.0
Indicator value	98.0%	98.2%	98.5%	98.4%	98.5%	98.4%	98.4%	98.5%

Licensee Comments: none

ERO Drill Participation



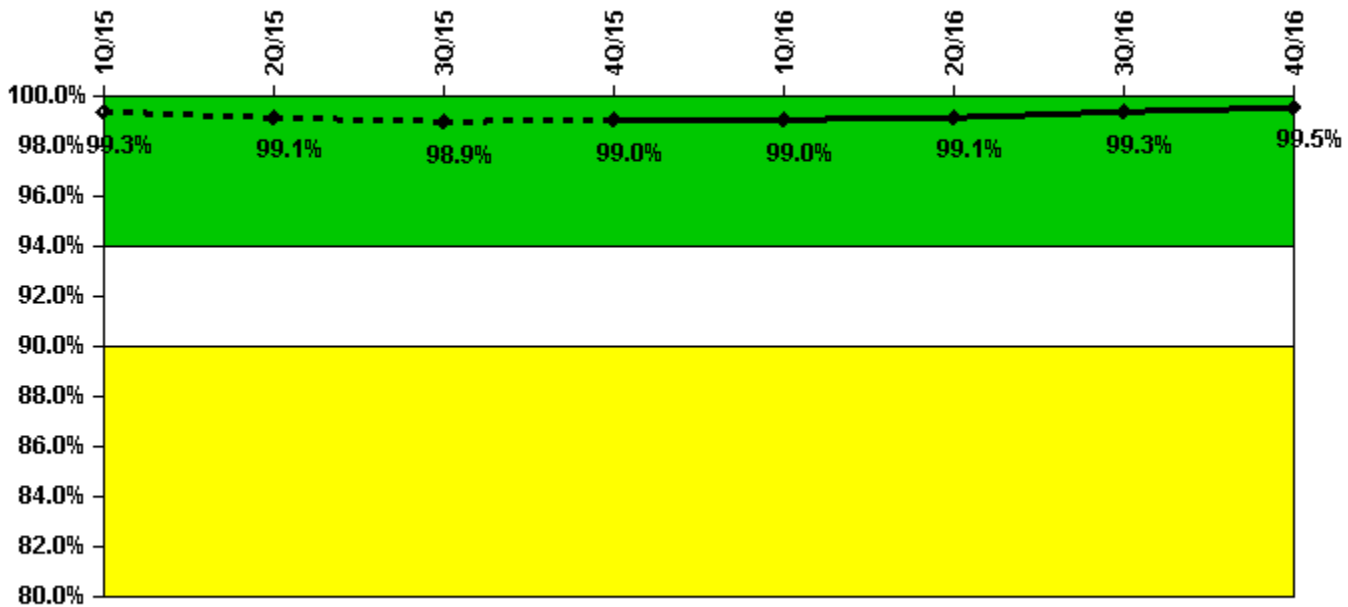
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
Participating Key personnel	80.0	77.0	83.0	80.0	74.0	77.0	77.0	78.0
Total Key personnel	80.0	77.0	83.0	80.0	74.0	77.0	77.0	78.0
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	335	335	335	449	336	336	337	452
Total sirens-tests	339	339	339	452	339	339	339	452
Indicator value	99.3%	99.1%	98.9%	99.0%	99.0%	99.1%	99.3%	99.5%

Licensee Comments: none

Occupational Exposure Control Effectiveness



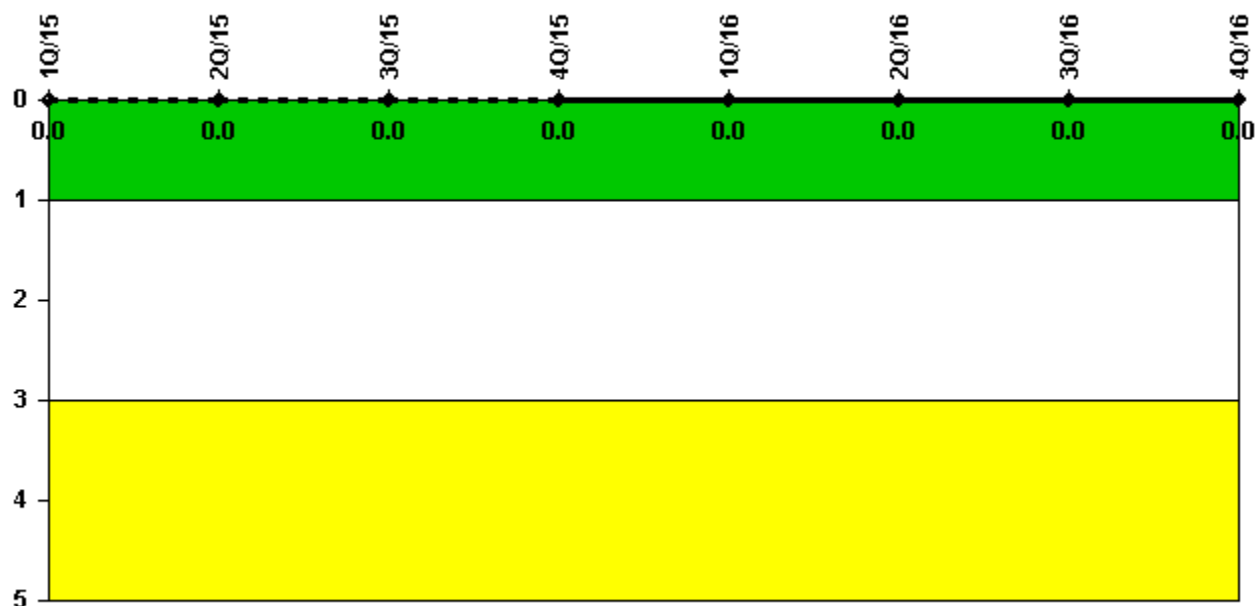
Thresholds: White > 2.0 Yellow > 5.0

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



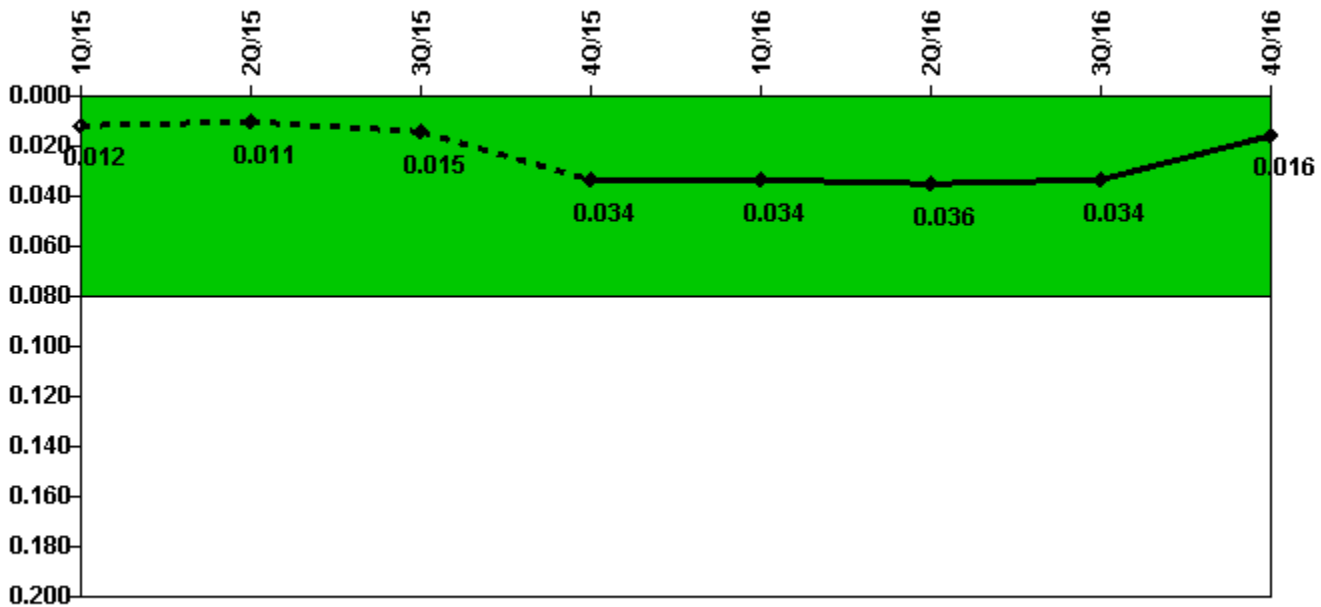
Thresholds: White > 1.0 Yellow > 3.0

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

Protected Area Security Performance Index



Thresholds: White > 0.080

Notes

Protected Area Security Performance Index	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16
IDS compensatory hours	137.27	83.88	170.64	112.56	88.20	30.40	90.70	0
CCTV compensatory hours	56.9	2.5	9.2	288.4	68.0	75.6	13.5	9.8
IDS normalization factor	2.05	2.05	2.05	2.05	2.05	2.05	2.05	1.85
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	0.012	0.011	0.015	0.034	0.034	0.036	0.034	0.016

Licensee Comments: none

▲ [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: January 24, 2017