

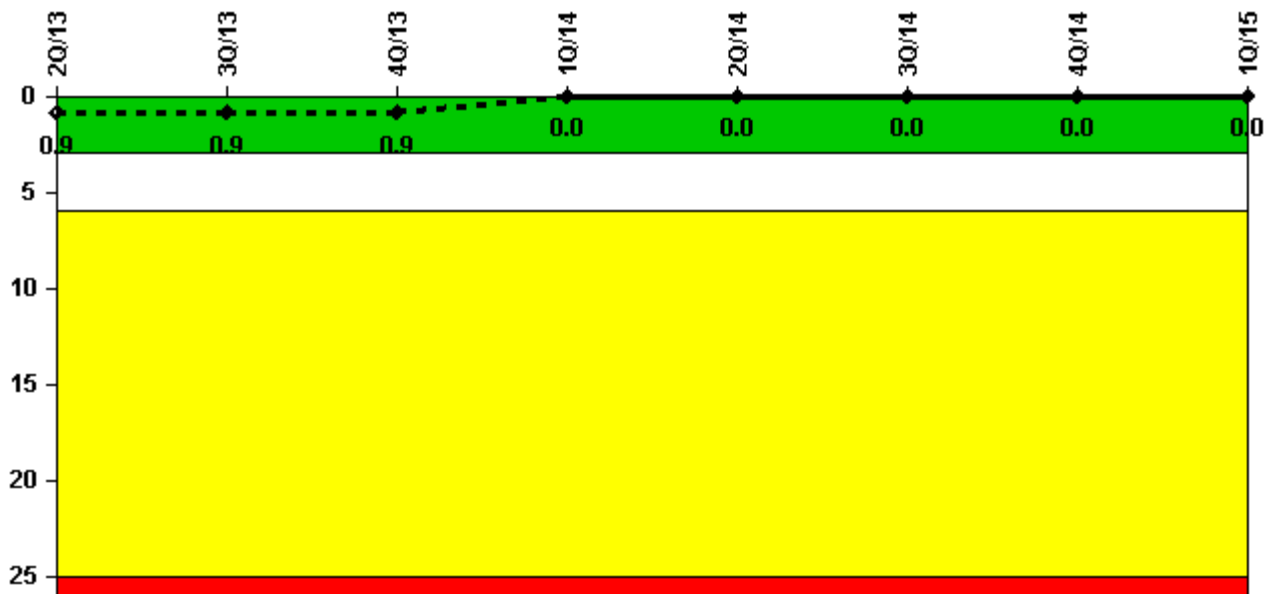
Byron 2

1Q/2015 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: 1Q2015 Byron Station Unit 2

Unplanned Scrams per 7000 Critical Hrs



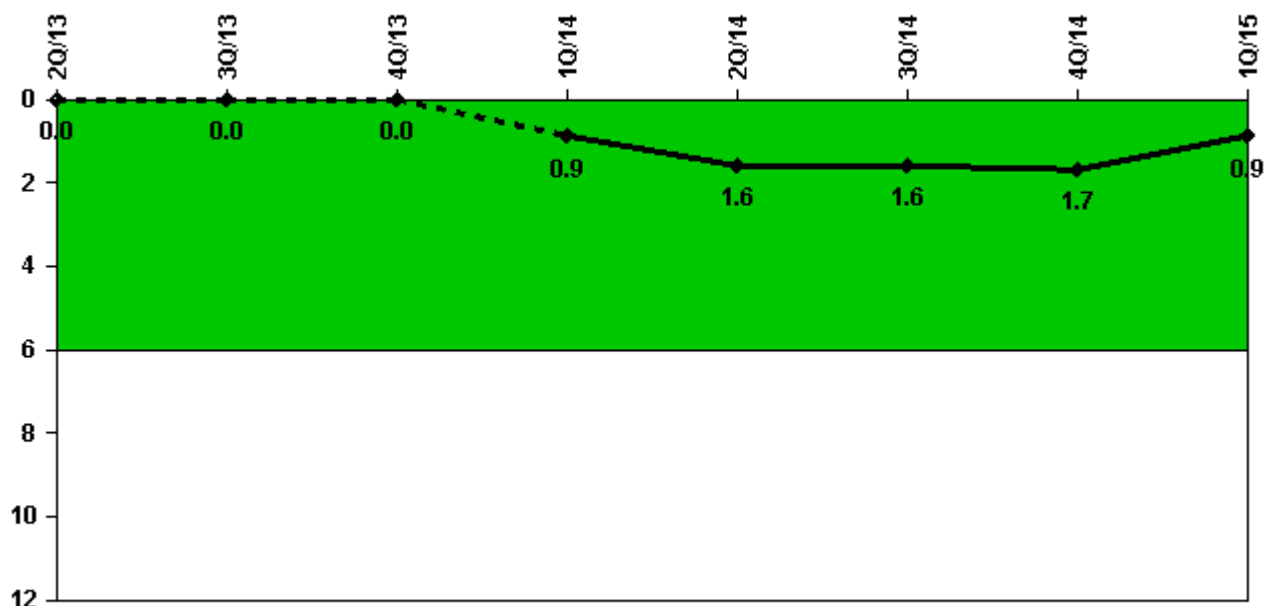
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	1653.7	2208.0	2209.0	2159.0	2184.0	2160.0	1664.2	2159.0
Indicator value	0.9	0.9	0.9	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

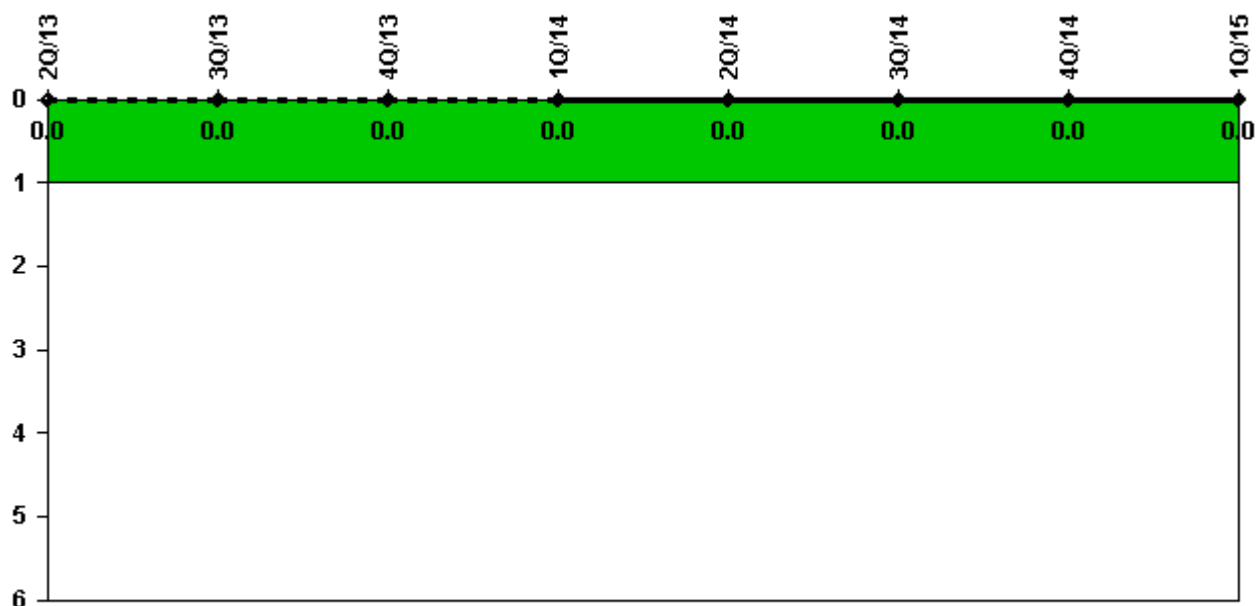
Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Unplanned power changes	0	0	0	1.0	1.0	0	0	0
Critical hours	1653.7	2208.0	2209.0	2159.0	2184.0	2160.0	1664.2	2159.0
Indicator value	0	0	0	0.9	1.6	1.6	1.7	0.9

Licensee Comments:

1Q/14: Power was lowered from 100% to 49% within 4 hours from when the shutdown rods mis-positioned. To recover the two shutdown rods. power was lowered from 49% to 38.4%. ICES # 302697, IR 1607715.

Unplanned Scrams with Complications



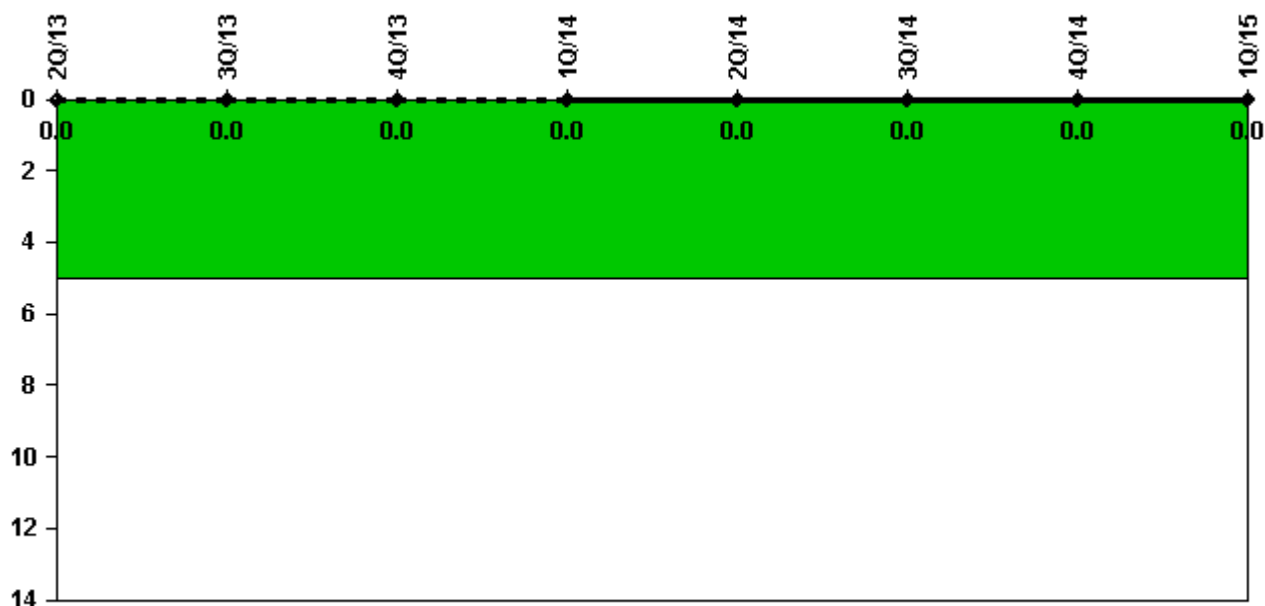
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
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

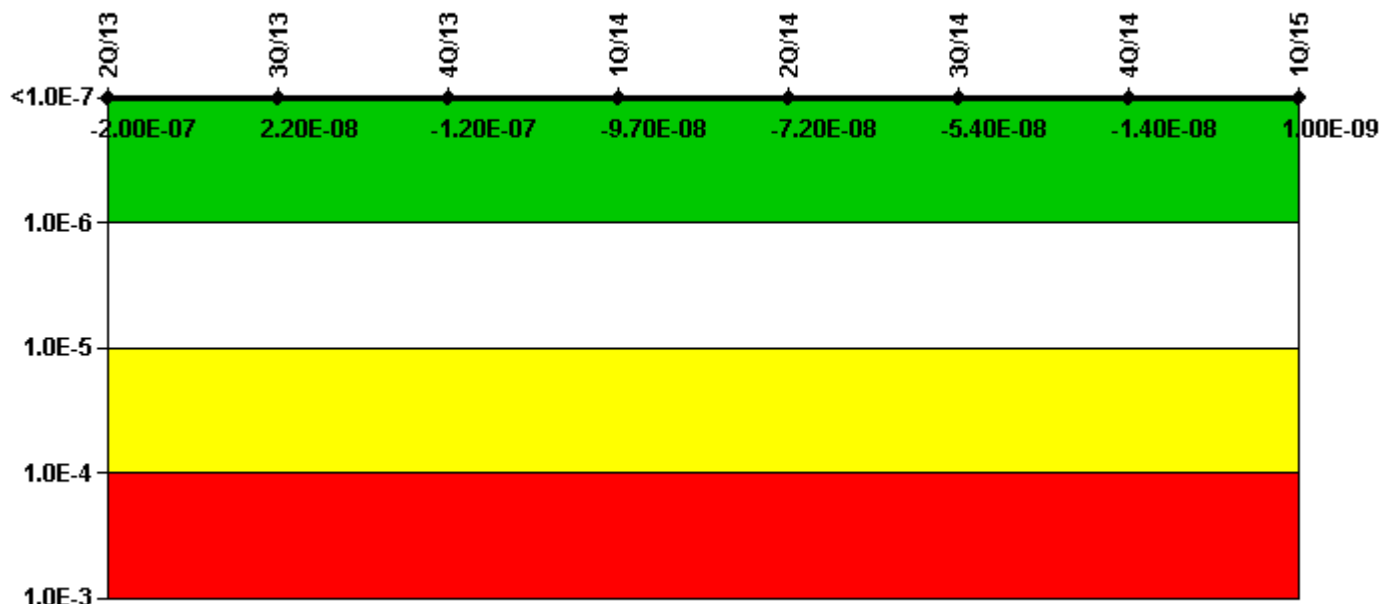
Safety System Functional Failures (PWR)	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments:

2Q/13: LER 454-2012-001, Unit 2 Manual Reactor Trip Due to Loss of Main Generator Stator Cooling Water was originally counted as an SSFF, but was retracted based on the definition of an SSFF in LS-AA-2080 on 5/13/14.

2Q/13: LER 454-2012-001, Unit 2 Manual Reactor Trip Due to Loss of Main Generator Stator Cooling Water

Mitigating Systems Performance Index, Emergency AC Power System



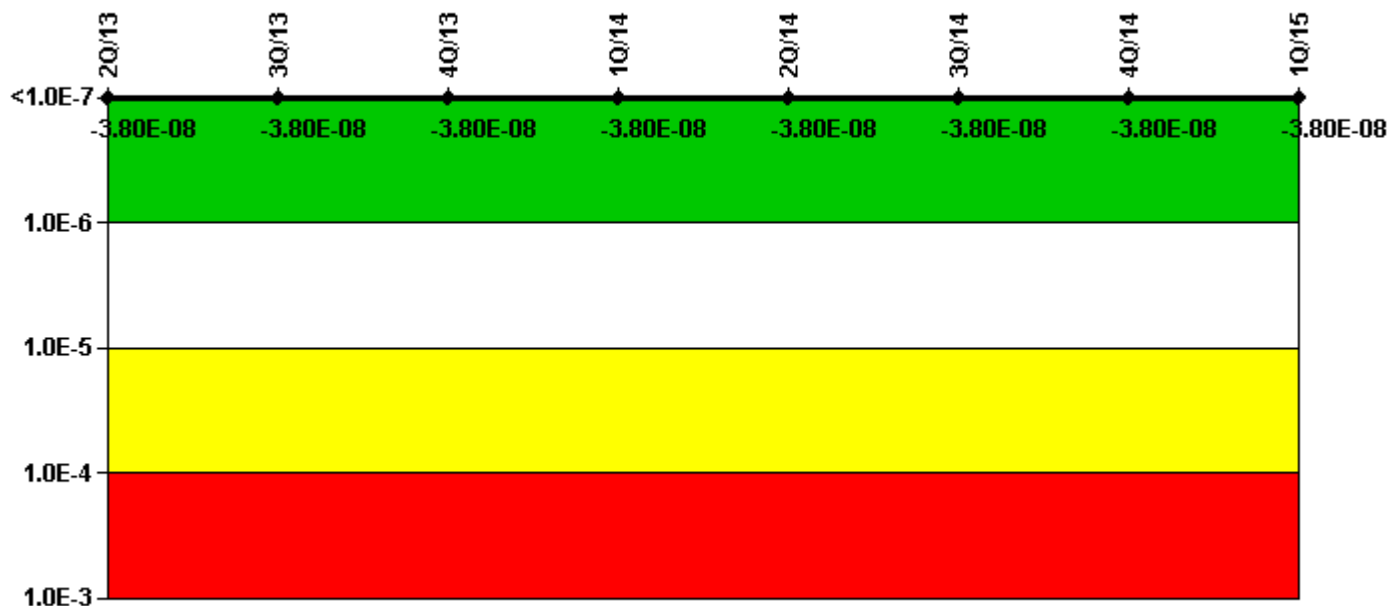
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Emergency AC Power System	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI (Δ CDF)	9.68E-09	1.52E-08	-1.56E-08	-7.87E-09	3.98E-09	6.35E-09	3.04E-08	3.77E-09
URI (Δ CDF)	-2.14E-07	7.27E-09	-1.03E-07	-8.96E-08	-7.56E-08	-6.07E-08	-4.47E-08	-2.75E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.00E-07	2.20E-08	-1.20E-07	-9.70E-08	-7.20E-08	-5.40E-08	-1.40E-08	1.00E-09

Licensee Comments: none

Mitigating Systems Performance Index, High Pressure Injection System



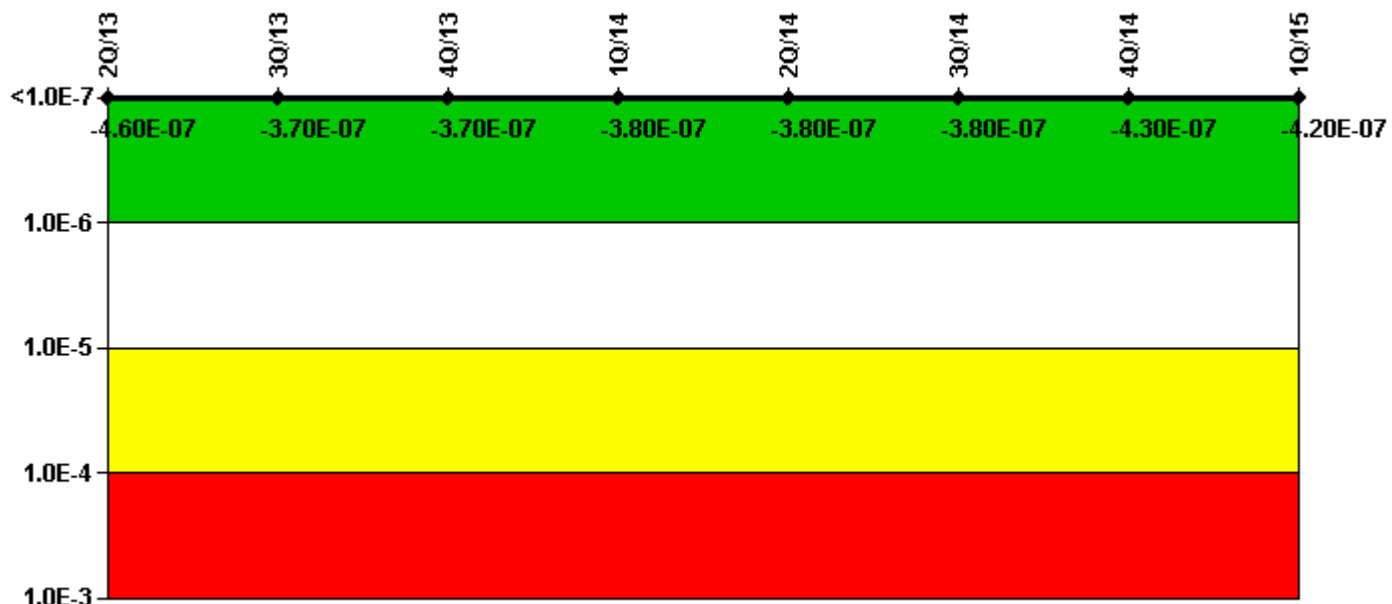
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI (Δ CDF)	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08	-2.89E-08
URI (Δ CDF)	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.70E-09	-8.61E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08	-3.80E-08

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



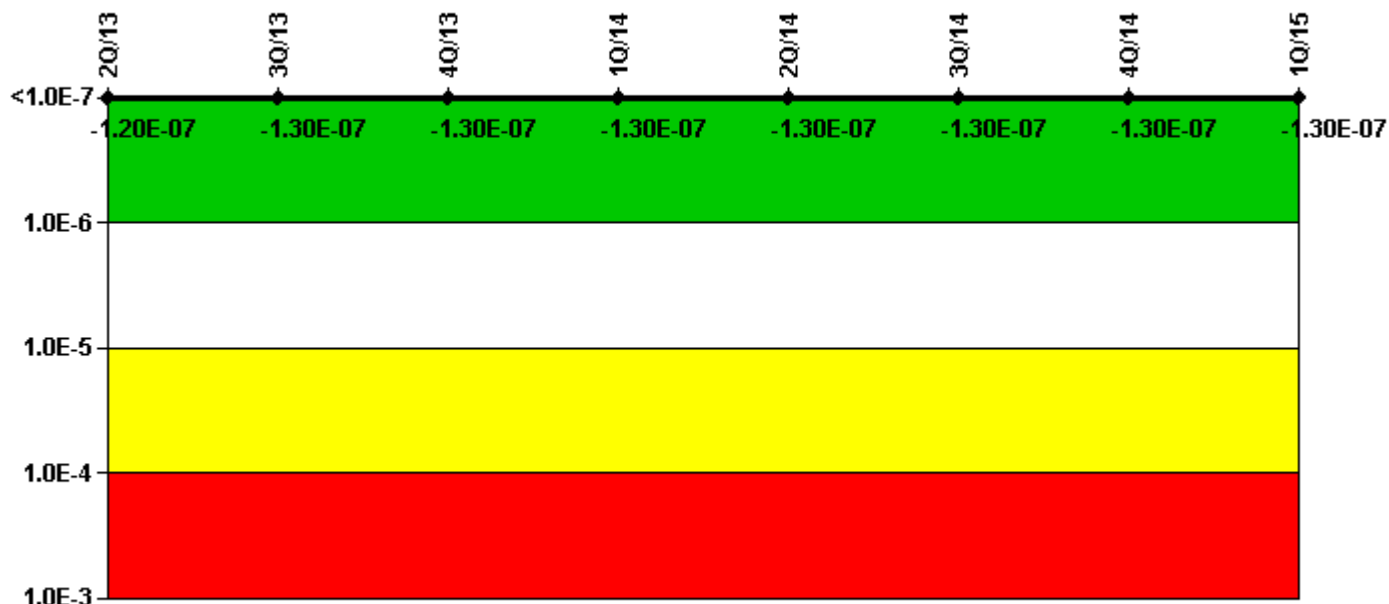
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI (Δ CDF)	-7.81E-08	1.36E-08	1.28E-08	9.26E-09	6.48E-09	4.63E-09	-6.01E-08	-5.79E-08
URI (Δ CDF)	-3.87E-07	-3.85E-07	-3.85E-07	-3.85E-07	-3.85E-07	-3.87E-07	-3.73E-07	-3.60E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.60E-07	-3.70E-07	-3.70E-07	-3.80E-07	-3.80E-07	-3.80E-07	-4.30E-07	-4.20E-07

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



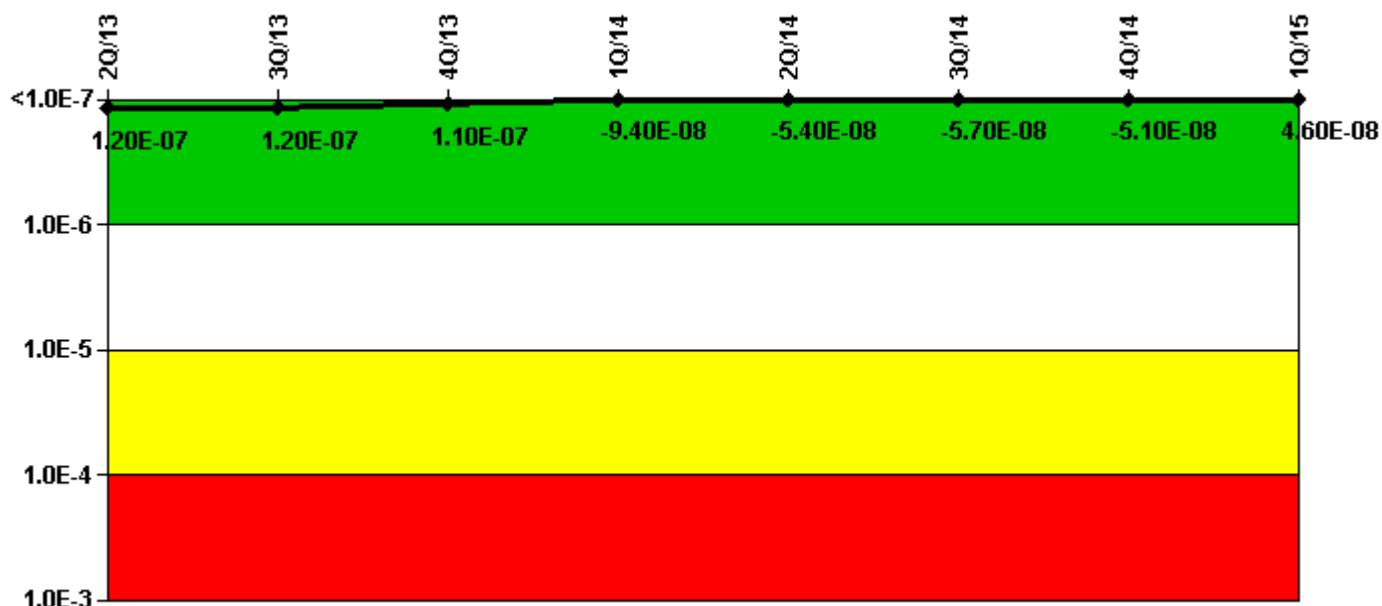
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI (Δ CDF)	-2.41E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08	-3.33E-08
URI (Δ CDF)	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08	-9.77E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.20E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.30E-07

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



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

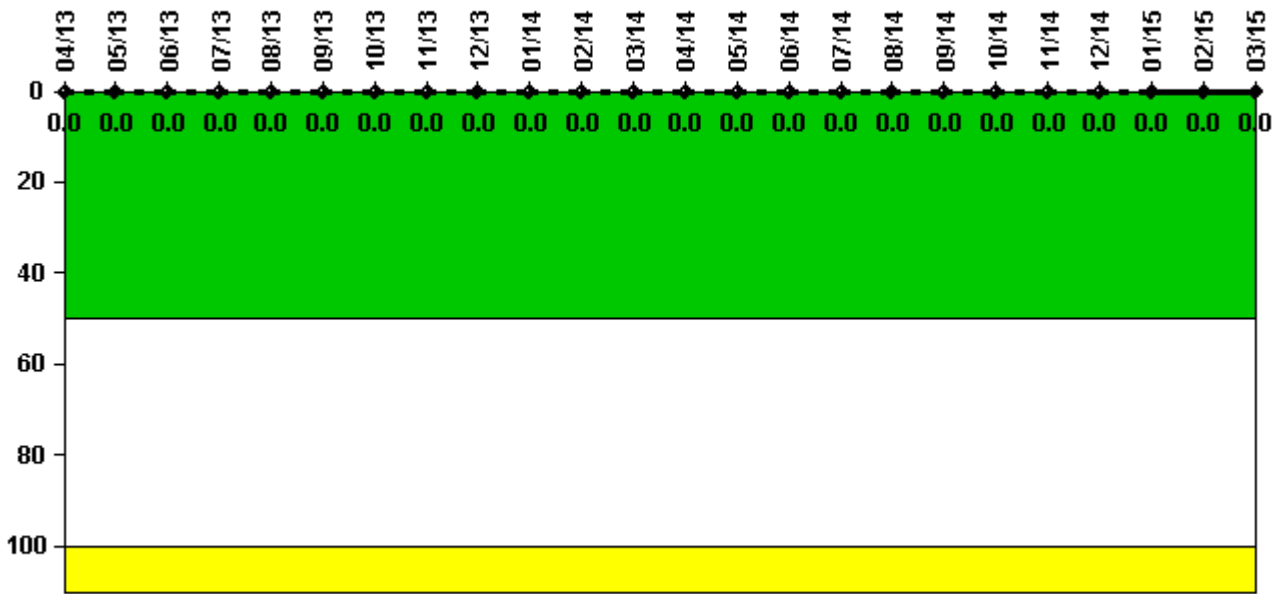
Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
UAI (Δ CDF)	2.44E-07	2.45E-07	2.28E-07	1.79E-08	5.32E-08	4.59E-08	4.73E-08	1.38E-07
URI (Δ CDF)	-1.24E-07	-1.20E-07	-1.16E-07	-1.12E-07	-1.07E-07	-1.03E-07	-9.81E-08	-9.23E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.20E-07	1.20E-07	1.10E-07	-9.40E-08	-5.40E-08	-5.70E-08	-5.10E-08	4.60E-08

Licensee Comments:

2Q/13: Changed PRA Parameter(s).

Reactor Coolant System Activity



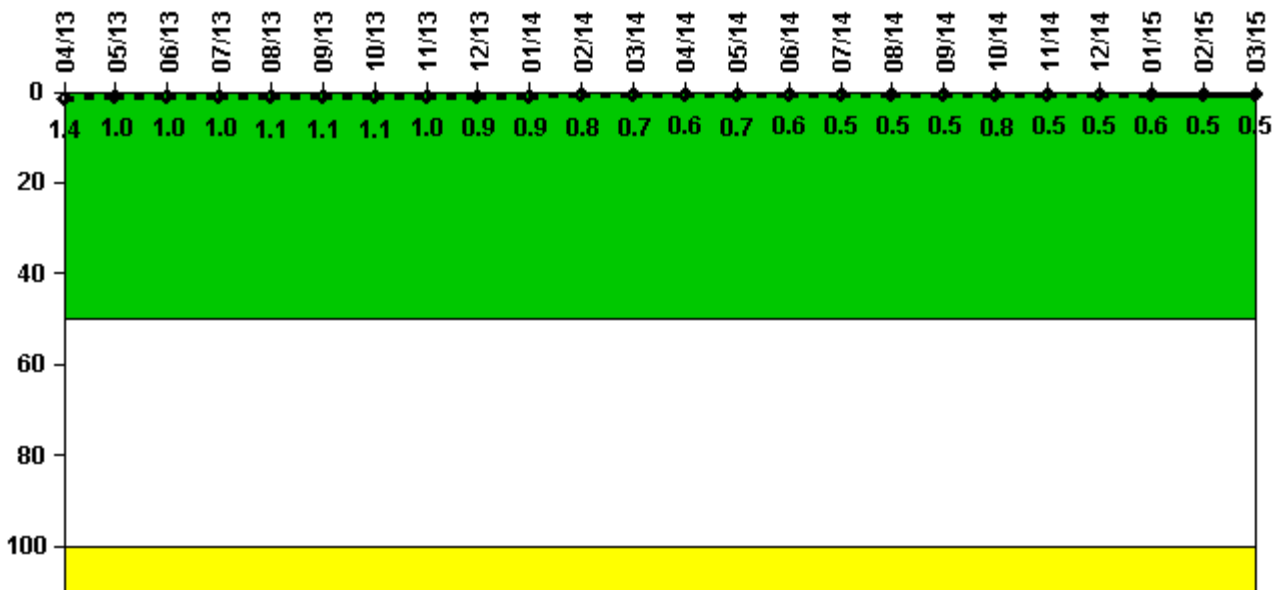
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14
Maximum activity	0.000176	0.000049	0.000049	0.000049	0.000053	0.000054	0.000062	0.000061	0.000069	0.000069	0.000072	0.000073
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	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	0.000076	0.000087	0.000078	0.000082	0.000085	0.000084	0.000045	0.000050	0.000054	0.000056	0.000056	0.000063
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

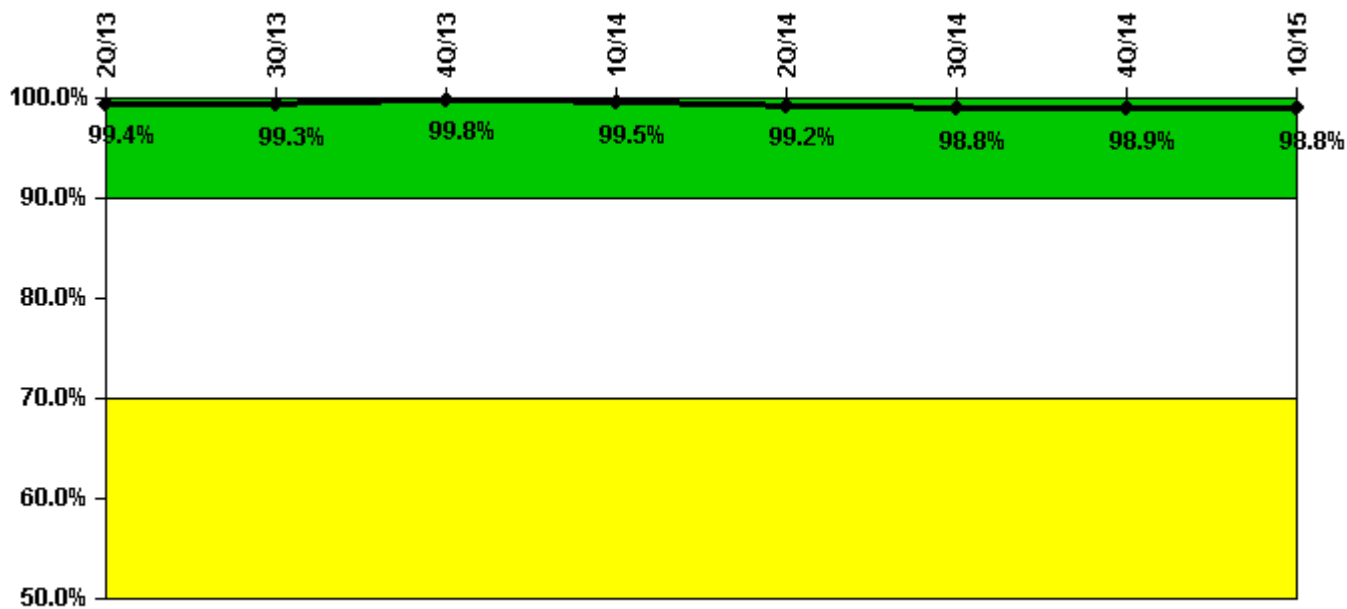
Notes

Reactor Coolant System Leakage	4/13	5/13	6/13	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14
Maximum leakage	0.140	0.100	0.100	0.100	0.110	0.110	0.110	0.100	0.090	0.090	0.080	0.070
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	1.4	1.0	1.0	1.0	1.1	1.1	1.1	1.0	0.9	0.9	0.8	0.7

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	0.060	0.070	0.060	0.050	0.050	0.050	0.080	0.050	0.050	0.060	0.050	0.050
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	0.6	0.7	0.6	0.5	0.5	0.5	0.8	0.5	0.5	0.6	0.5	0.5

Licensee Comments: none

Drill/Exercise Performance



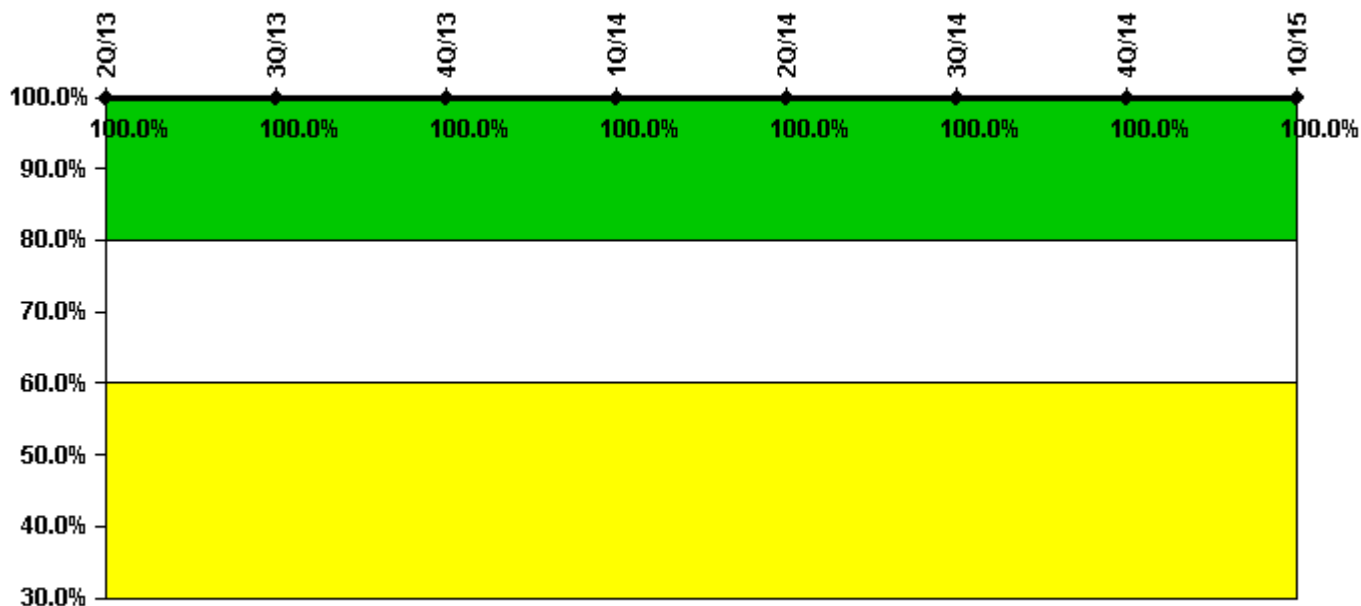
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Successful opportunities	12.0	55.0	32.0	62.0	70.0	90.0	14.0	74.0
Total opportunities	12.0	55.0	32.0	64.0	71.0	92.0	14.0	74.0
Indicator value	99.4%	99.3%	99.8%	99.5%	99.2%	98.8%	98.9%	98.8%

Licensee Comments: none

ERO Drill Participation



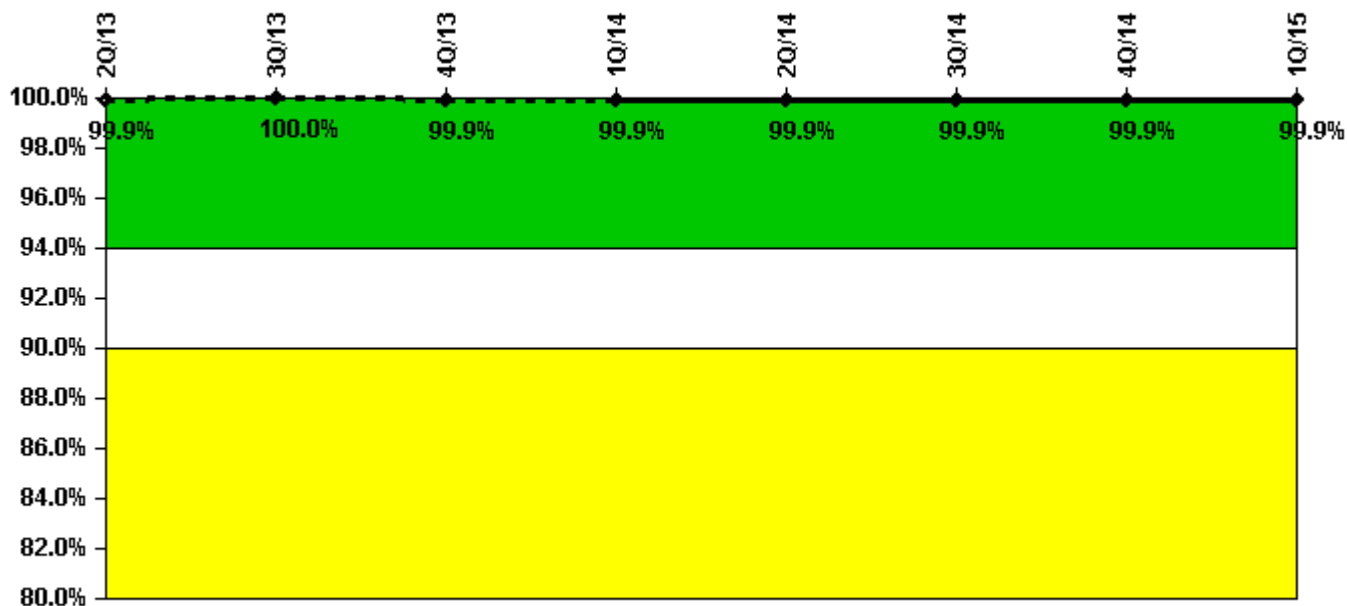
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Participating Key personnel	76.0	71.0	74.0	77.0	79.0	78.0	77.0	74.0
Total Key personnel	76.0	71.0	74.0	77.0	79.0	78.0	77.0	74.0
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/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
Successful siren-tests	3900	3903	3900	3841	3898	3896	3901	3834
Total sirens-tests	3904	3904	3904	3843	3904	3904	3904	3840
Indicator value	99.9%	100.0%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



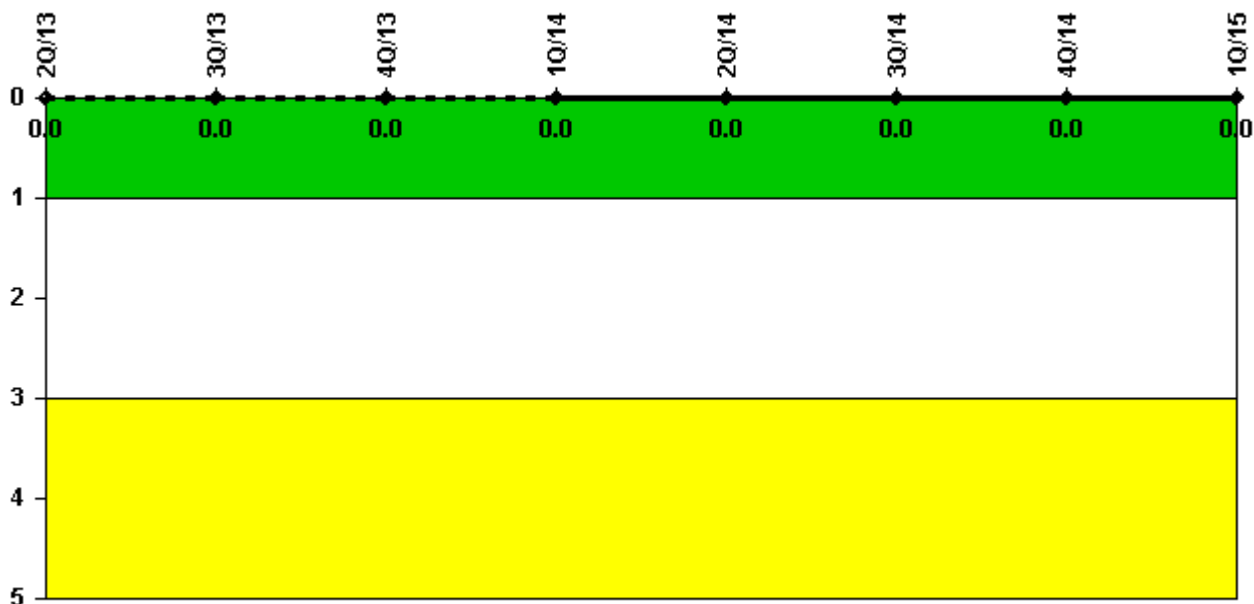
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
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	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14	4Q/14	1Q/15
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, 2015