

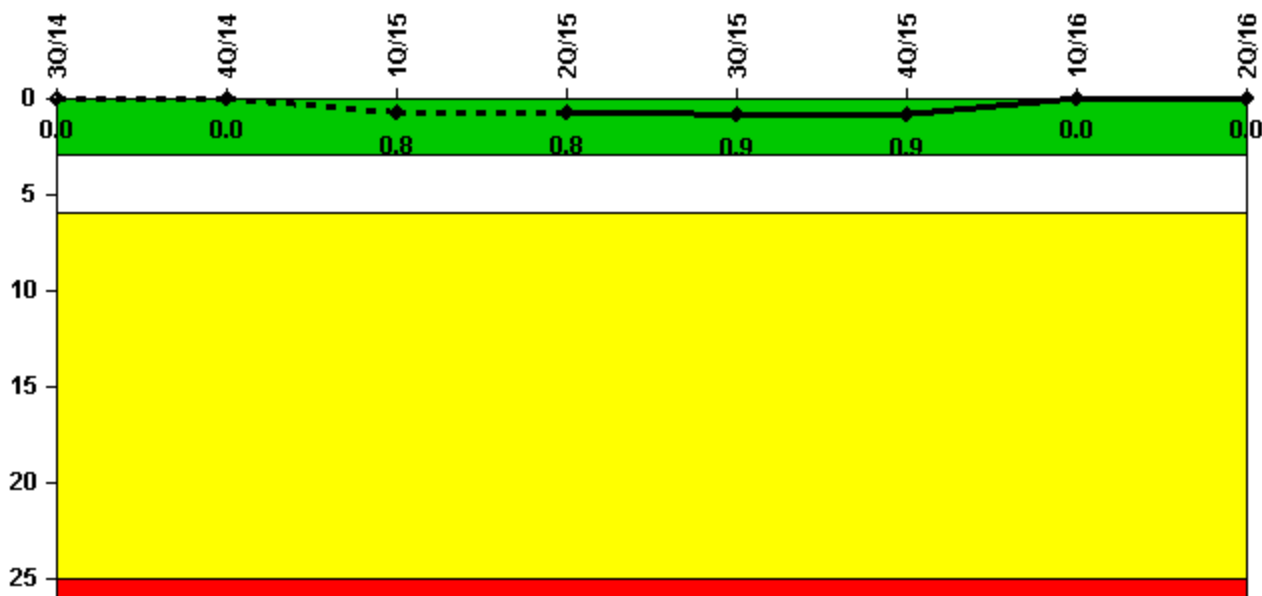
Byron 1

2Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: 2Q2016 Byron Station

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

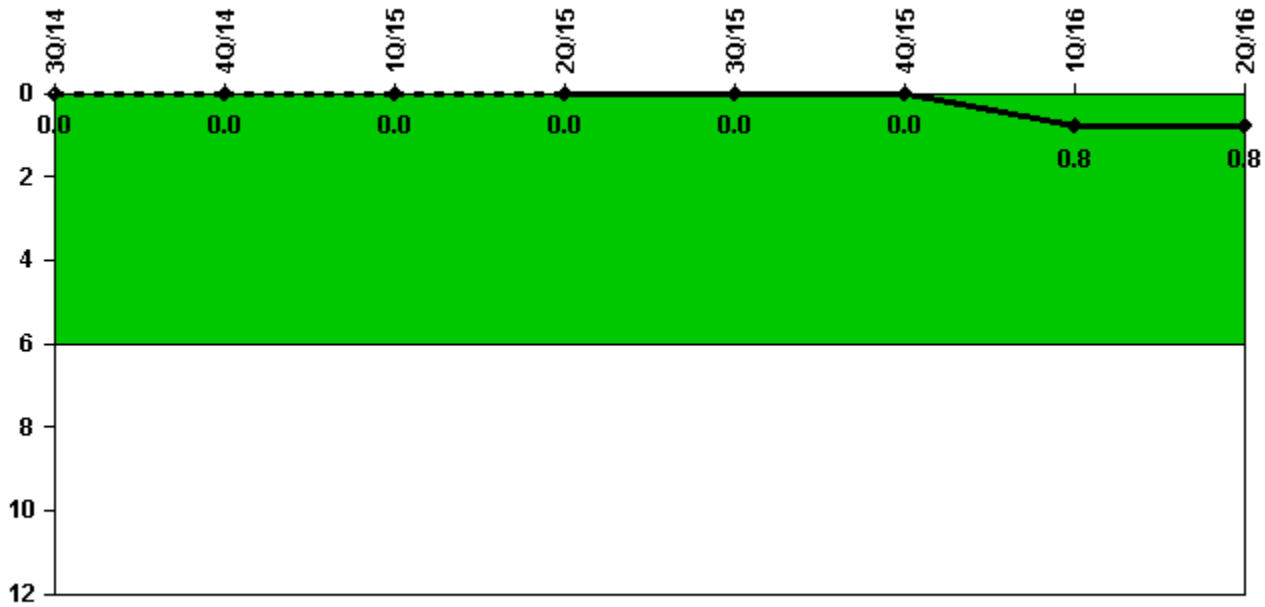
Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Unplanned scrams	0	0	1.0	0	0	0	0	0
Critical hours	2208.0	2209.0	2026.0	2184.0	1800.0	2184.2	2183.0	2184.0
Indicator value	0	0	0.8	0.8	0.9	0.9	0	0

Licensee Comments:

1Q/15: UNIT 1 AUTOMATICALLY TRIPPED AS A RESULT OF A WEATHER-RELATED EVENT THAT RESULTED IN A LOSS OF BUS 4. TRANSFORMERS AND BUSHINGS WERE INSPECTED AND REPAIRED.

Unplanned Power Changes per 7000 Critical Hrs



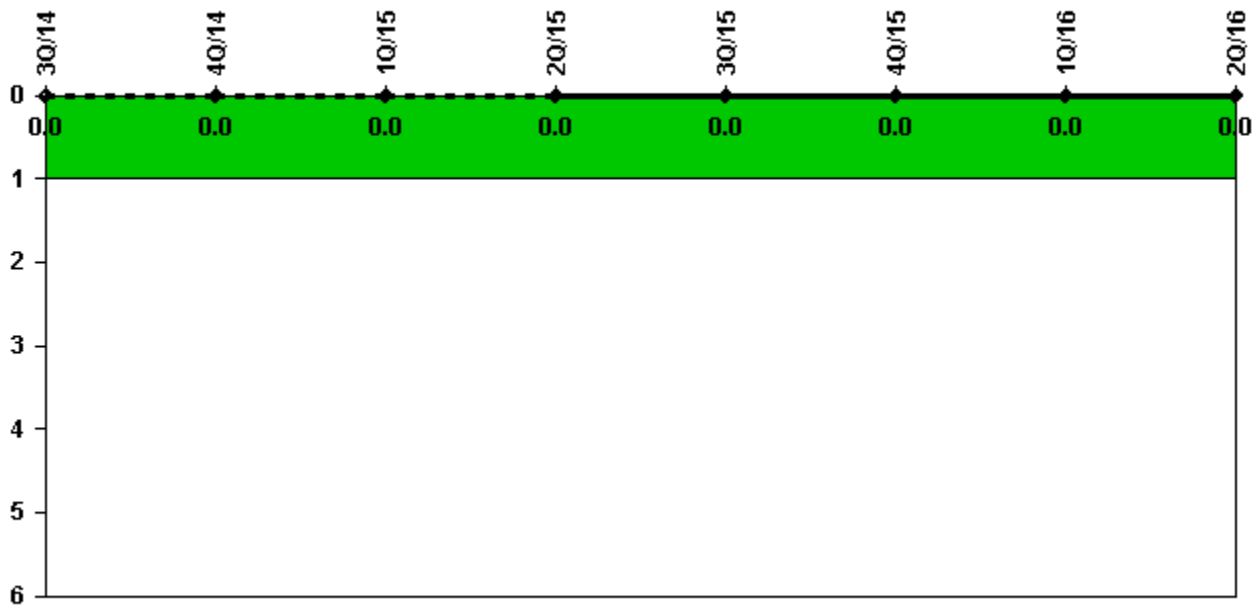
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Unplanned power changes	0	0	0	0	0	0	1.0	0
Critical hours	2208.0	2209.0	2026.0	2184.0	1800.0	2184.2	2183.0	2184.0
Indicator value	0	0	0	0	0	0	0.8	0.8

Licensee Comments: none

Unplanned Scrams with Complications



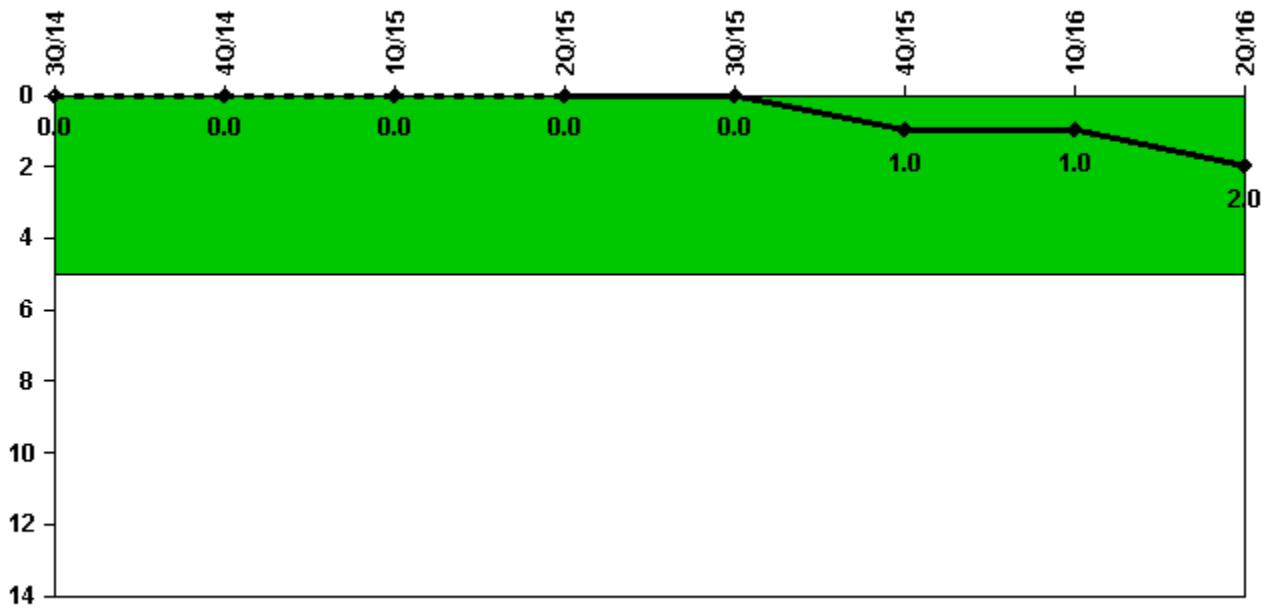
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/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

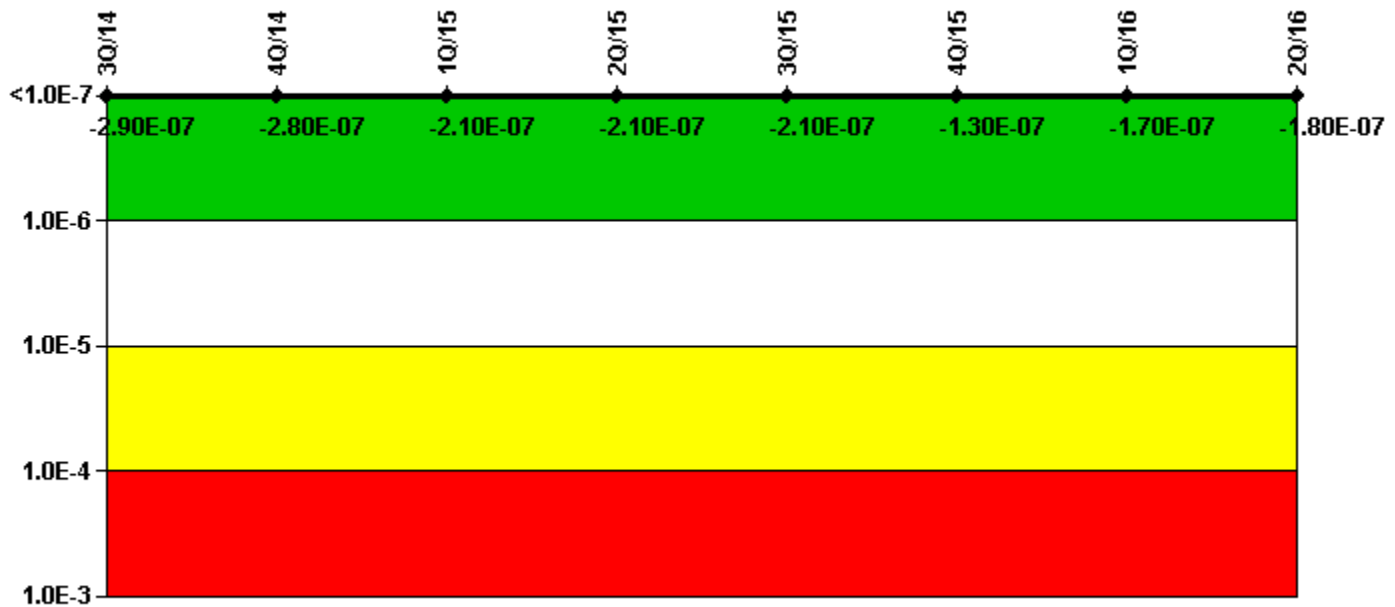
Notes

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

Licensee Comments:

4Q/15: LER 2015-006-00 was issued on 11/30/15 for Mode 3 entered with Turbine Trip safety Function disabled due to Safety Related Relay Leads lifted.

Mitigating Systems Performance Index, Emergency AC Power System



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

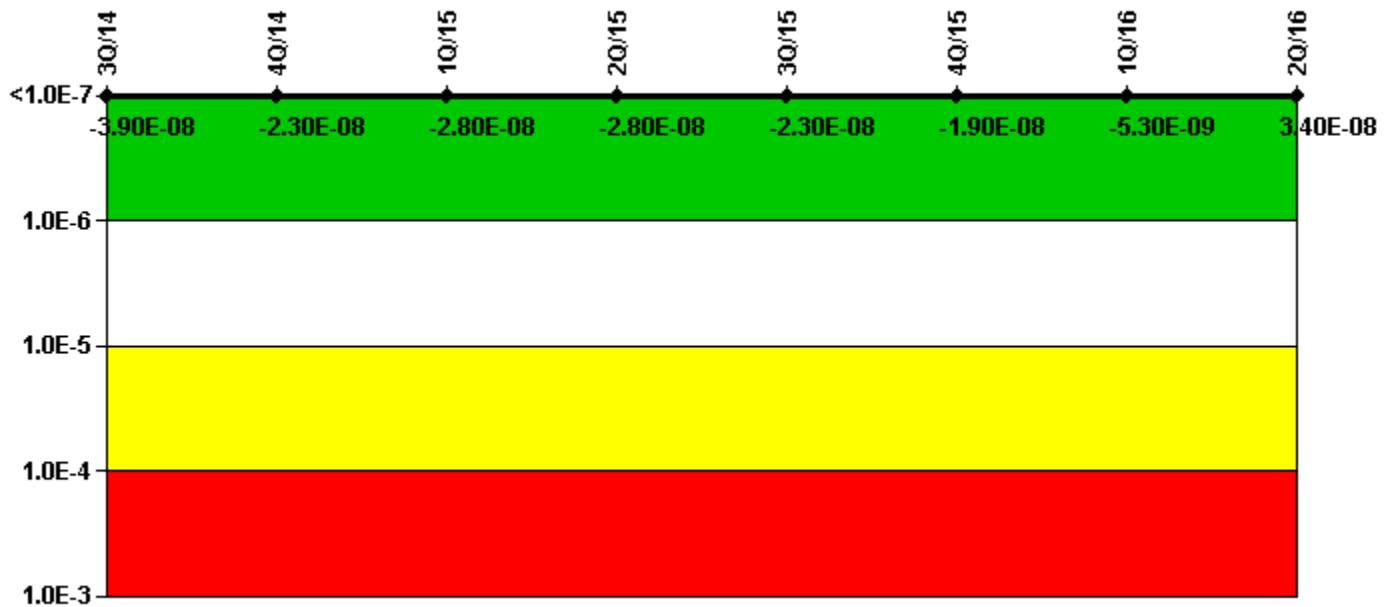
Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
UAI (Δ CDF)	8.03E-09	7.30E-09	6.26E-08	6.26E-08	6.20E-08	5.03E-08	1.15E-08	8.38E-09
URI (Δ CDF)	-3.02E-07	-2.92E-07	-2.71E-07	-2.71E-07	-2.71E-07	-1.84E-07	-1.84E-07	-1.84E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.90E-07	-2.80E-07	-2.10E-07	-2.10E-07	-2.10E-07	-1.30E-07	-1.70E-07	-1.80E-07

Licensee Comments:

4Q/15: Changed PRA Parameter(s).

Mitigating Systems Performance Index, High Pressure Injection System



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

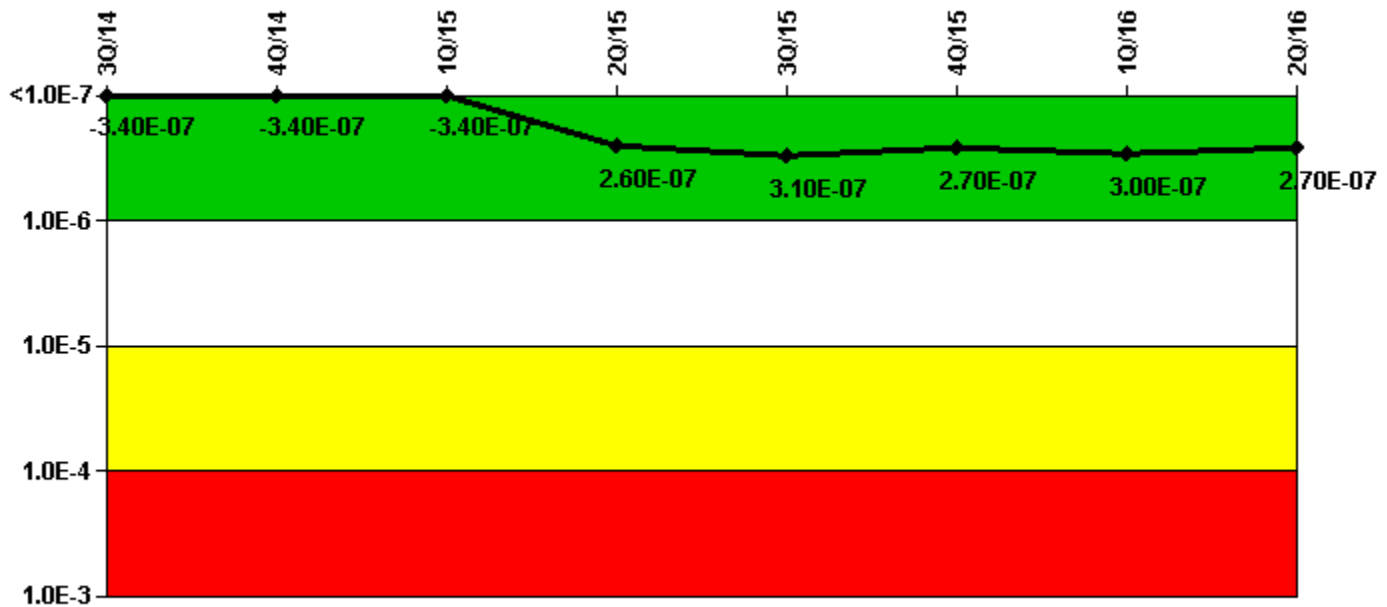
Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
UAI (Δ CDF)	-2.95E-08	-1.38E-08	-1.89E-08	-1.89E-08	-1.41E-08	-1.25E-08	1.10E-09	4.03E-08
URI (Δ CDF)	-9.27E-09	-9.27E-09	-9.21E-09	-9.21E-09	-9.21E-09	-6.37E-09	-6.37E-09	-6.37E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.90E-08	-2.30E-08	-2.80E-08	-2.80E-08	-2.30E-08	-1.90E-08	-5.30E-09	3.40E-08

Licensee Comments:

4Q/15: Changed PRA Parameter(s).

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	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
UAI (ΔCDF)	3.04E-08	3.54E-08	3.66E-08	1.49E-07	2.24E-07	1.75E-07	2.18E-07	1.88E-07
URI (ΔCDF)	-3.68E-07	-3.74E-07	-3.74E-07	1.07E-07	8.13E-08	9.22E-08	8.68E-08	8.69E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.40E-07	-3.40E-07	-3.40E-07	2.60E-07	3.10E-07	2.70E-07	3.00E-07	2.70E-07

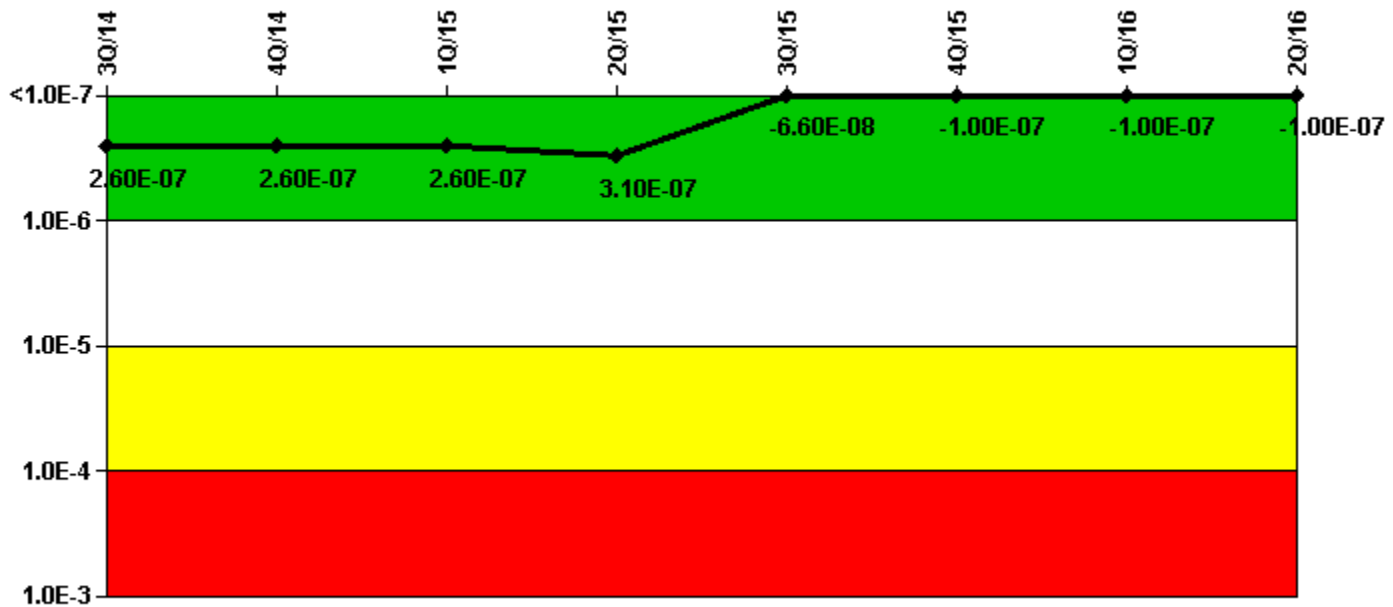
Licensee Comments:

2Q/16: Risk Cap Invoked.

1Q/16: Risk Cap Invoked.

4Q/15: Risk Cap Invoked. Changed PRA Parameter(s).

Mitigating Systems Performance Index, Residual Heat Removal System



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

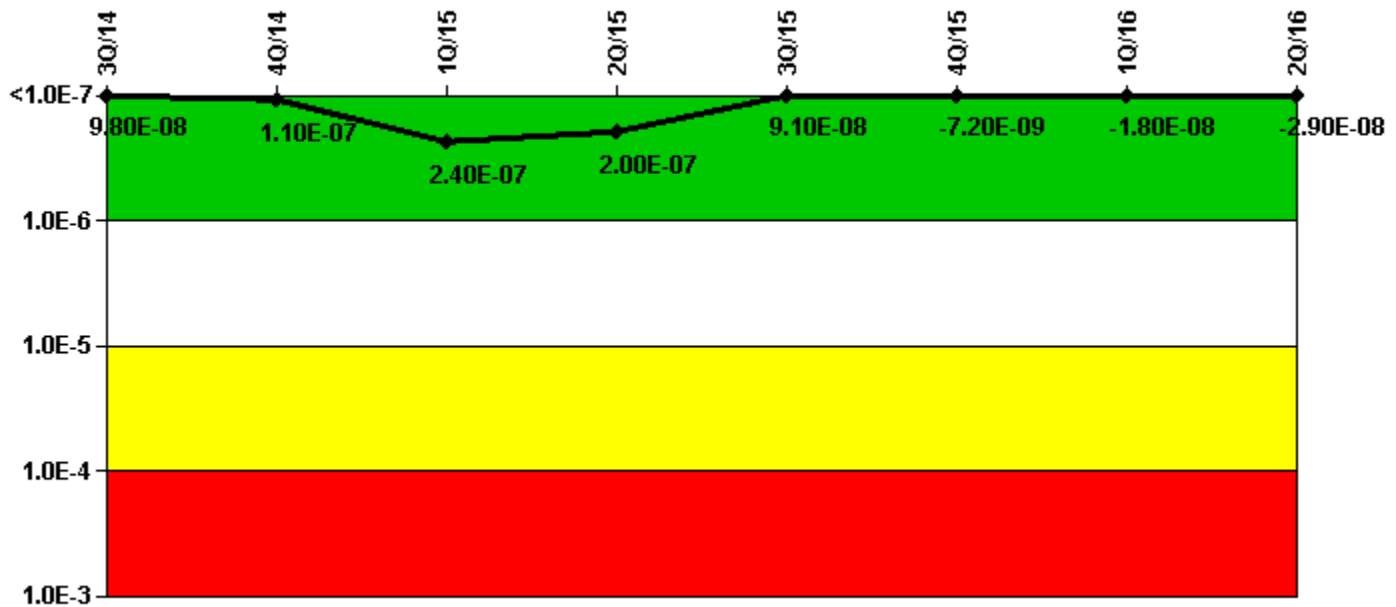
Notes

Mitigating Systems Performance Index, Residual Heat Removal System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
UAI (Δ CDF)	-1.19E-08	-1.19E-08	-1.11E-08	4.34E-08	4.18E-08	-2.39E-08	-2.39E-08	-2.39E-08
URI (Δ CDF)	2.69E-07	2.69E-07	2.69E-07	2.69E-07	-1.08E-07	-7.64E-08	-7.64E-08	-7.64E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.60E-07	2.60E-07	2.60E-07	3.10E-07	-6.60E-08	-1.00E-07	-1.00E-07	-1.00E-07

Licensee Comments:

4Q/15: Changed PRA Parameter(s).

Mitigating Systems Performance Index, Cooling Water Systems



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

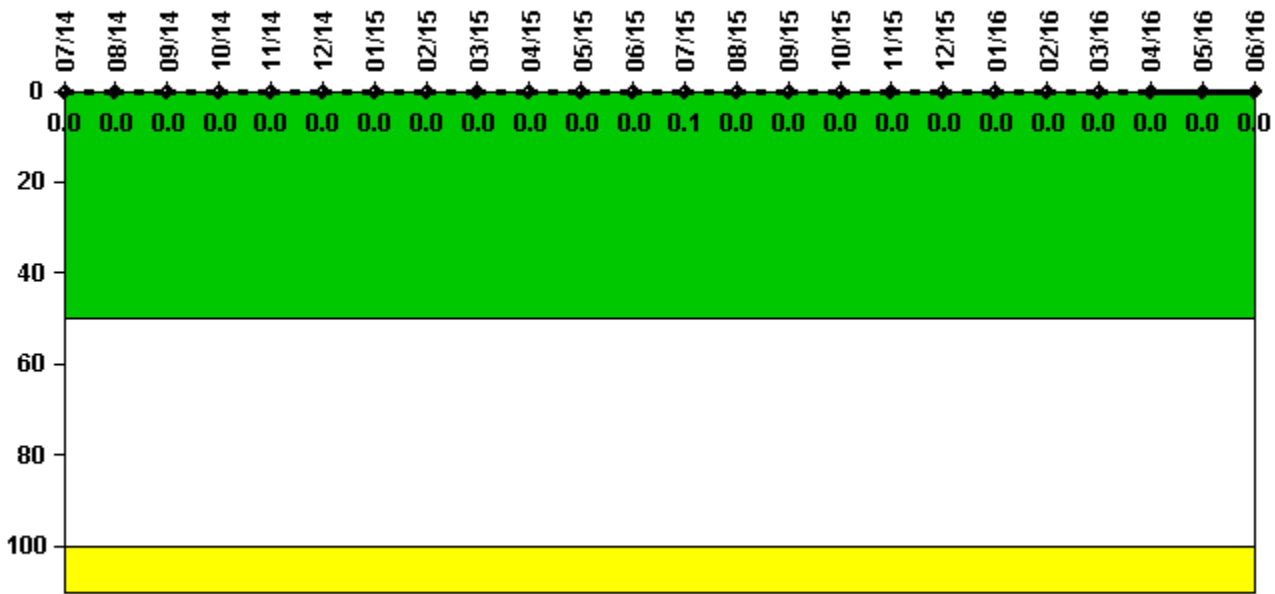
Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
UAI (ΔCDF)	9.58E-08	9.73E-08	2.27E-07	1.86E-07	1.85E-07	4.78E-08	3.74E-08	2.63E-08
URI (ΔCDF)	2.50E-09	9.01E-09	1.69E-08	1.69E-08	-9.41E-08	-5.50E-08	-5.50E-08	-5.50E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	9.80E-08	1.10E-07	2.40E-07	2.00E-07	9.10E-08	-7.20E-09	-1.80E-08	-2.90E-08

Licensee Comments:

4Q/15: Changed PRA Parameter(s).

Reactor Coolant System Activity



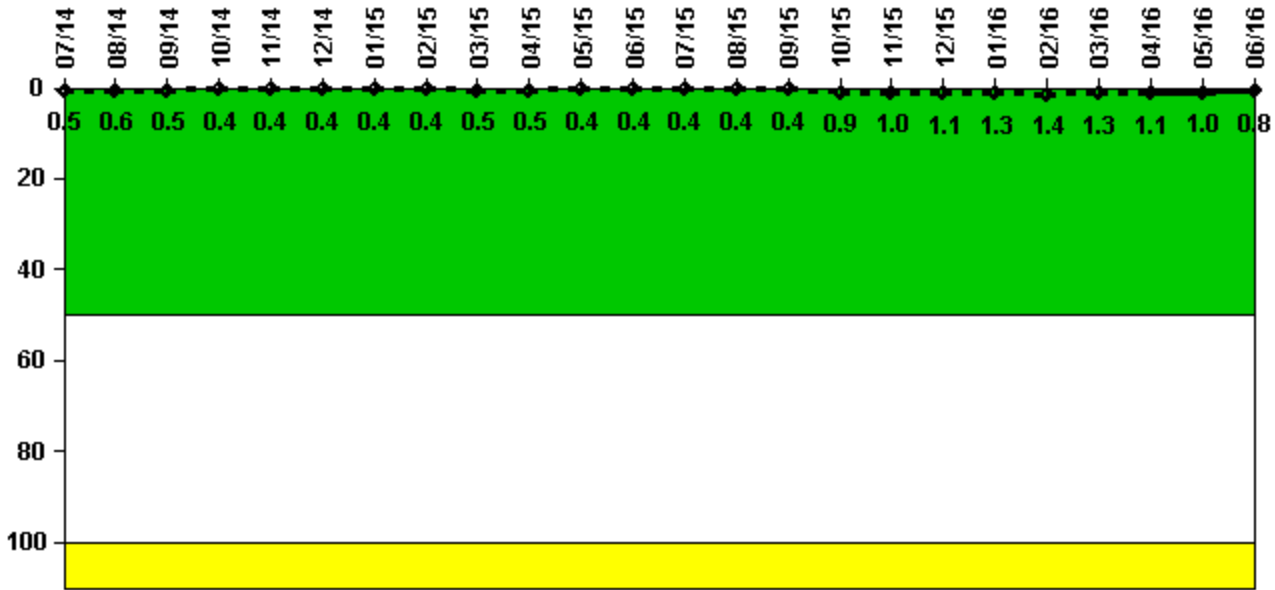
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15
Maximum activity	0.000211	0.000224	0.000243	0.000255	0.000262	0.000277	0.000296	0.000305	0.000308	0.000333	0.000343	0.000369
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	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16
Maximum activity	0.000500	0.000389	0.000383	0.000154	0.000156	0.000168	0.000173	0.000267	0.000191	0.000204	0.000214	0.000220
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	0.1	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

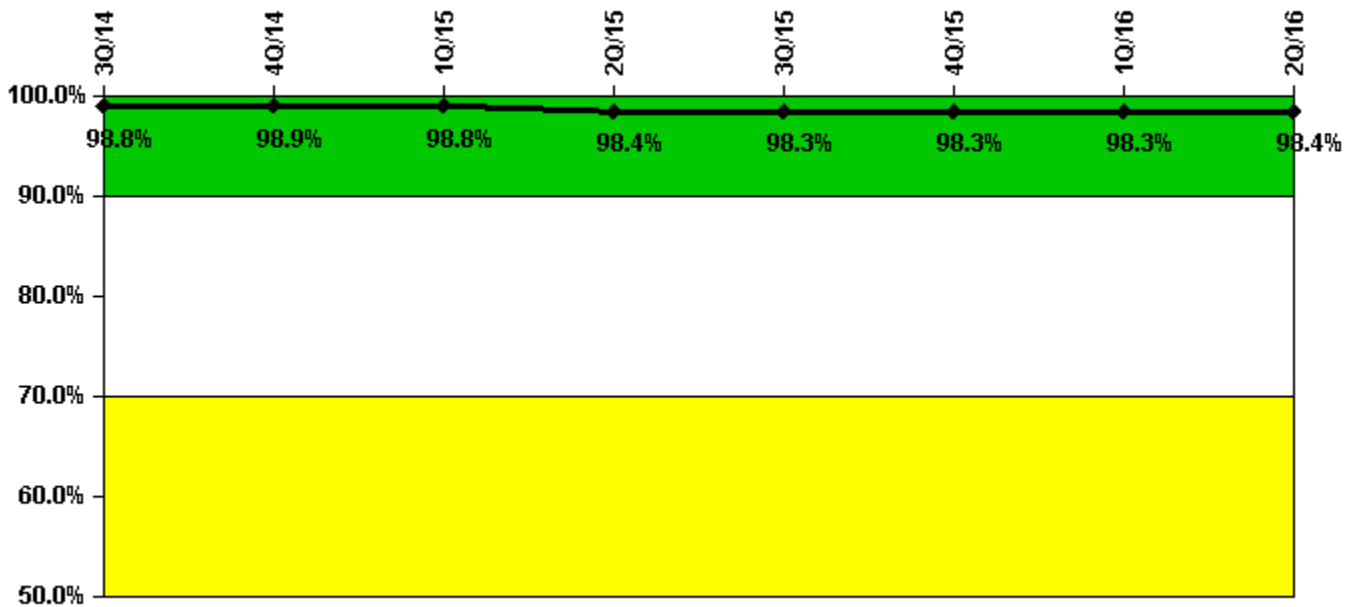
Notes

Reactor Coolant System Leakage	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15	4/15	5/15	6/15
Maximum leakage	0.050	0.060	0.050	0.040	0.040	0.040	0.040	0.040	0.050	0.047	0.040	0.040
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	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4

Reactor Coolant System Leakage	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16
Maximum leakage	0.040	0.040	0.040	0.090	0.100	0.110	0.130	0.140	0.130	0.110	0.100	0.080
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	0.4	0.4	0.4	0.9	1.0	1.1	1.3	1.4	1.3	1.1	1.0	0.8

Licensee Comments: none

Drill/Exercise Performance



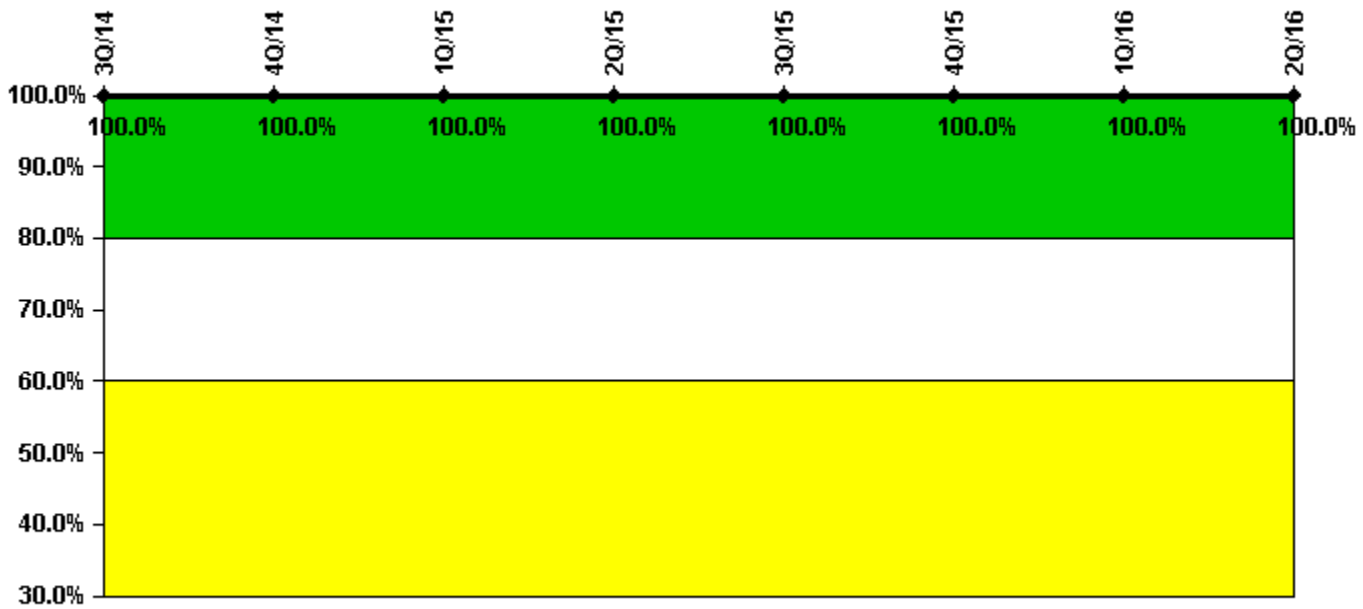
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Successful opportunities	90.0	14.0	74.0	41.0	27.0	32.0	106.0	44.0
Total opportunities	92.0	14.0	74.0	43.0	27.0	32.0	109.0	44.0
Indicator value	98.8%	98.9%	98.8%	98.4%	98.3%	98.3%	98.3%	98.4%

Licensee Comments: none

ERO Drill Participation



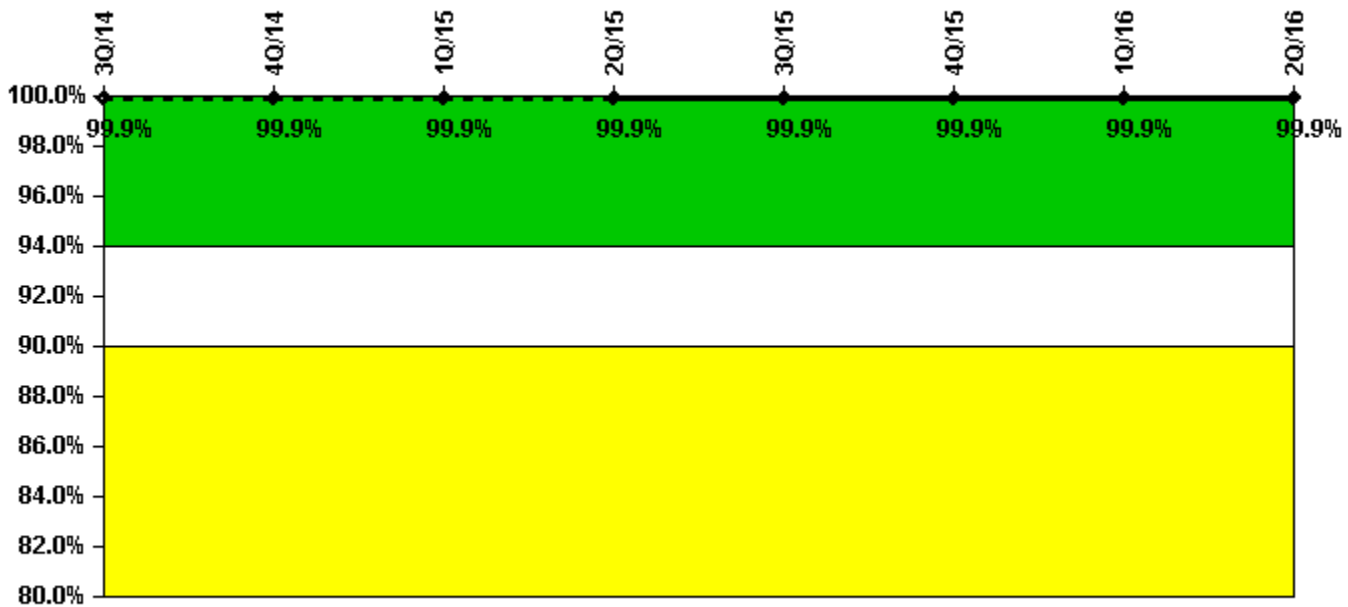
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Participating Key personnel	78.0	77.0	74.0	74.0	72.0	75.0	76.0	78.0
Total Key personnel	78.0	77.0	74.0	74.0	72.0	75.0	76.0	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



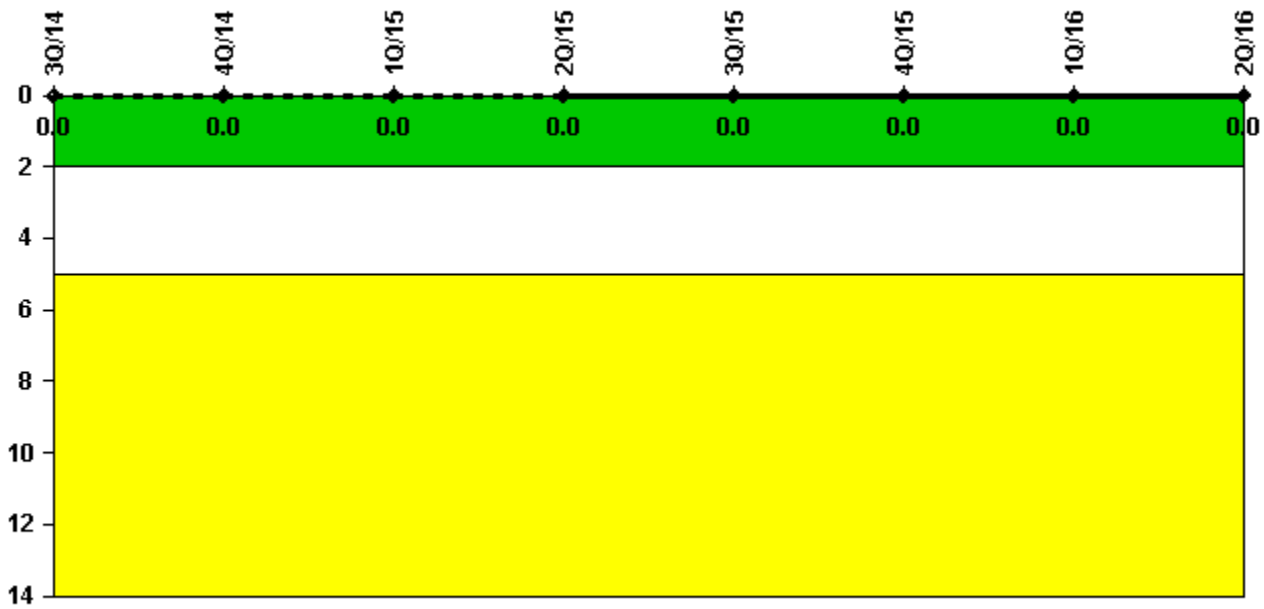
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Successful siren-tests	3896	3901	3834	3902	3962	3903	3897	3902
Total sirens-tests	3904	3904	3840	3904	3965	3904	3904	3904
Indicator value	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



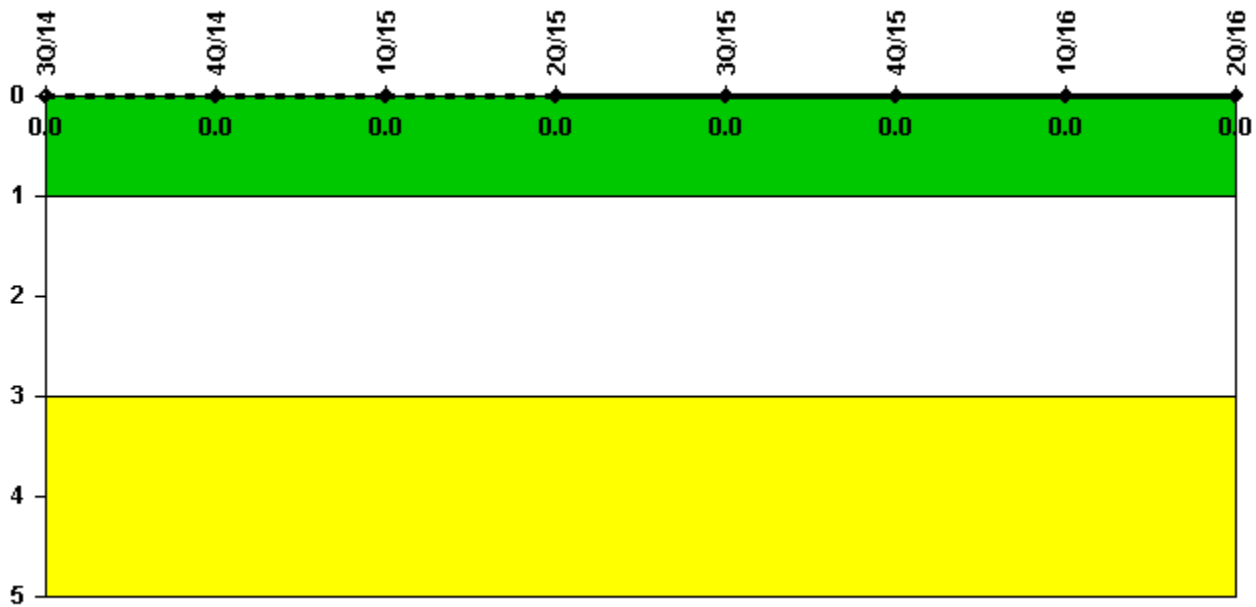
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/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	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/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: July 25, 2016