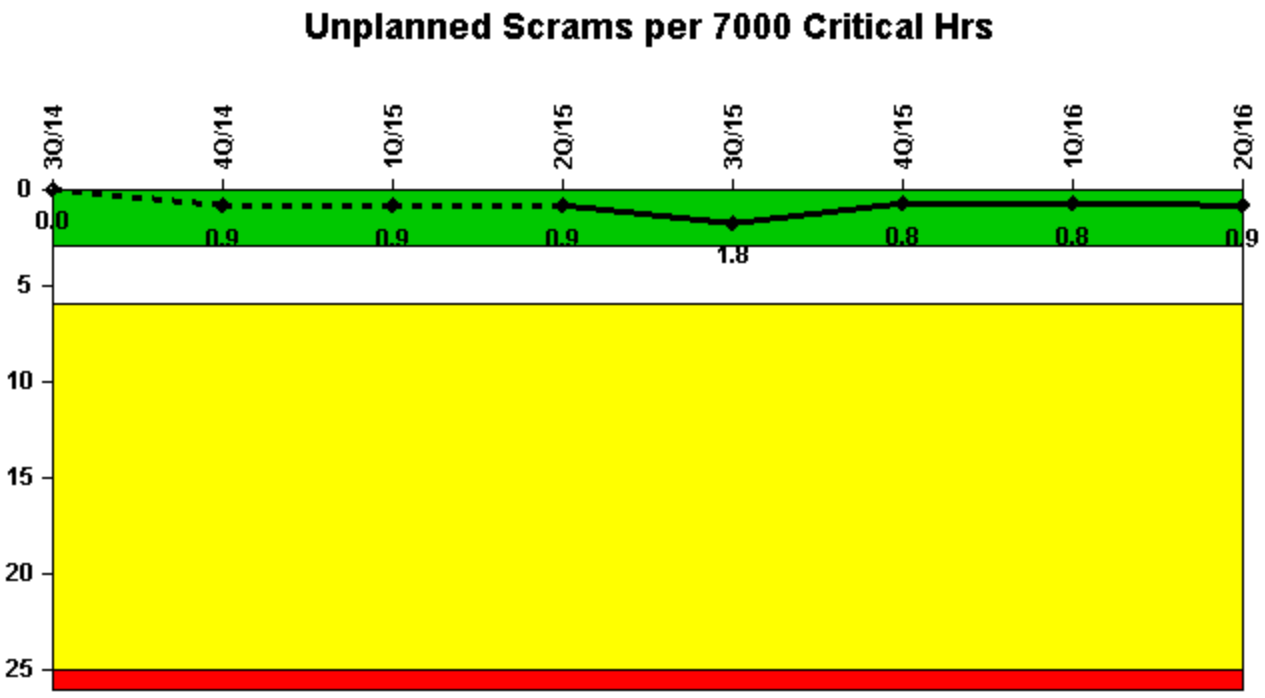
Callaway

2Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none



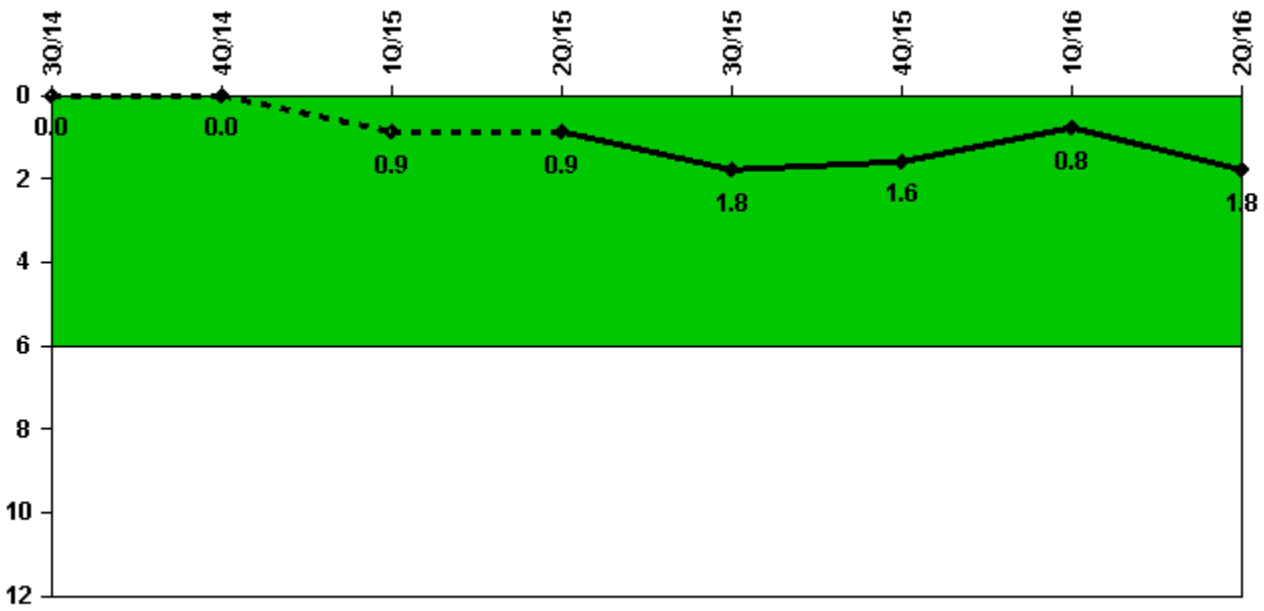
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

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	1.0	0	0	1.0	0	0	0
Critical hours	2208.0	1159.6	2159.0	2184.0	2126.8	2209.0	2183.0	1289.1
Indicator value	**0**	**0.9**	**0.9**	**0.9**	**1.8**	**0.8**	**0.8**	**0.9**

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

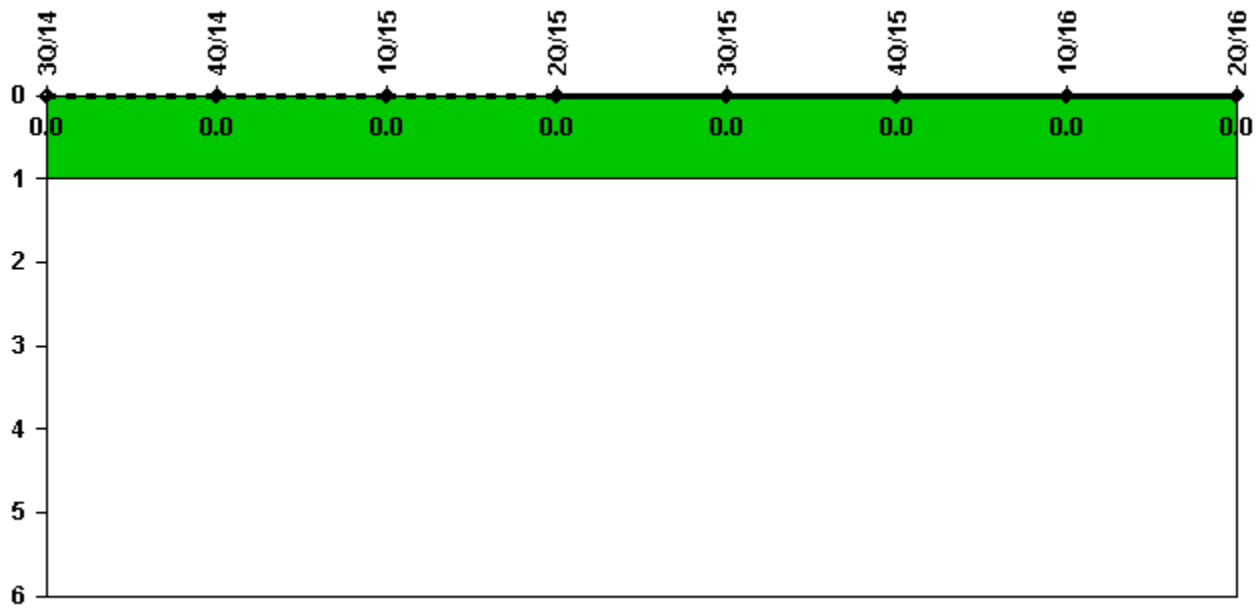
Notes

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	1.0	0	1.0	0	0	1.0
Critical hours	2208.0	1159.6	2159.0	2184.0	2126.8	2209.0	2183.0	1289.1
Indicator value	**0**	**0**	**0.9**	**0.9**	**1.8**	**1.6**	**0.8**	**1.8**

Licensee Comments:

1Q/15: The unplanned power change was due to an issue with the main turbine digital controls, which caused a load rejection from 99% power to 57% power at 0257 on 01/31/2015. Power was subsequently reduced to 46%, beginning at 1046 on 02/01/2015, for troubleshooting and repairs. Full power was restored at 0310 on 02/06/2015.

Unplanned Scrams with Complications



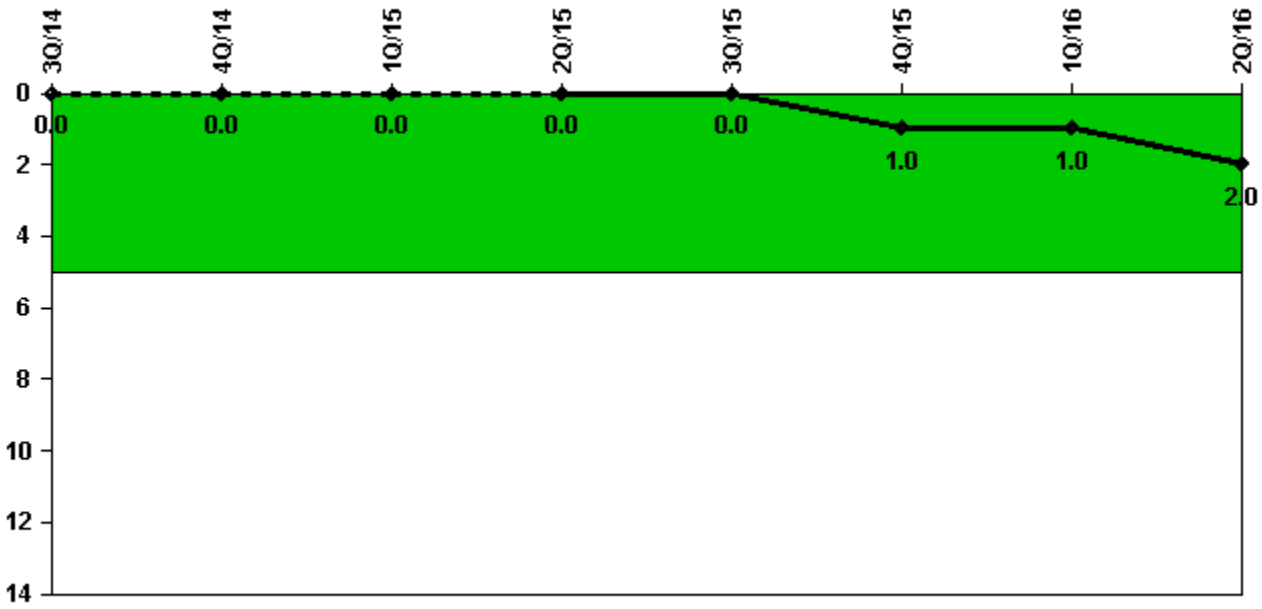
Thresholds: White > 1.0

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

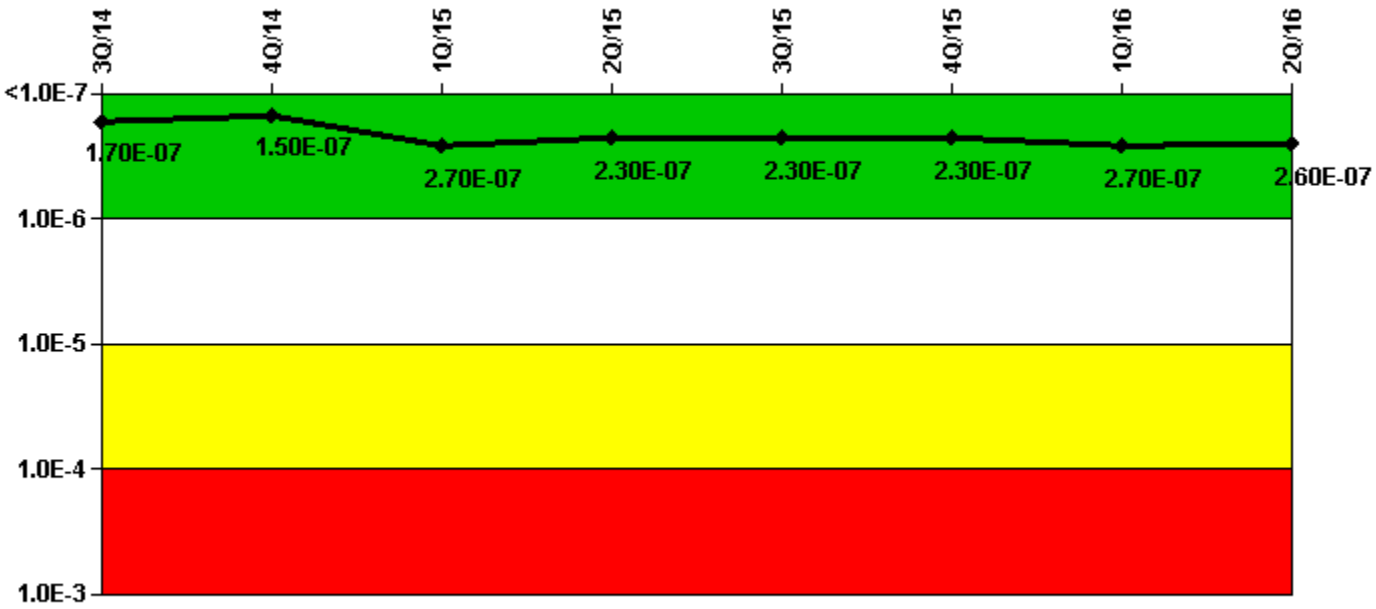
Safety System Functional Failures (PWR)	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Safety System Functional Failures	0	0	0	0	0	1	0	1
Indicator value	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**2**

Licensee Comments:

2Q/16: LER 2016-001-00 associated with the Control Room Air Conditioning system

4Q/15: One SSFF was reported in LER 2015-004-00 during the 4th quarter of 2015. It is also reported in this PI. An ongoing evaluation of the associated condition is being performed to determine whether it meets the NEI 99-02 section 2.2 criteria for reportability in the SSFF PI or if it may be withdrawn from the PI.

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 (ΔCDF)	-2.53E-08	-4.55E-08	-3.10E-08	-7.01E-08	-7.01E-08	-7.01E-08	-3.48E-08	-3.53E-08
URI (ΔCDF)	1.98E-07	1.98E-07	3.00E-07	3.00E-07	3.00E-07	3.00E-07	3.00E-07	3.00E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**1.70E-07**	**1.50E-07**	**2.70E-07**	**2.30E-07**	**2.30E-07**	**2.30E-07**	**2.70E-07**	**2.60E-07**

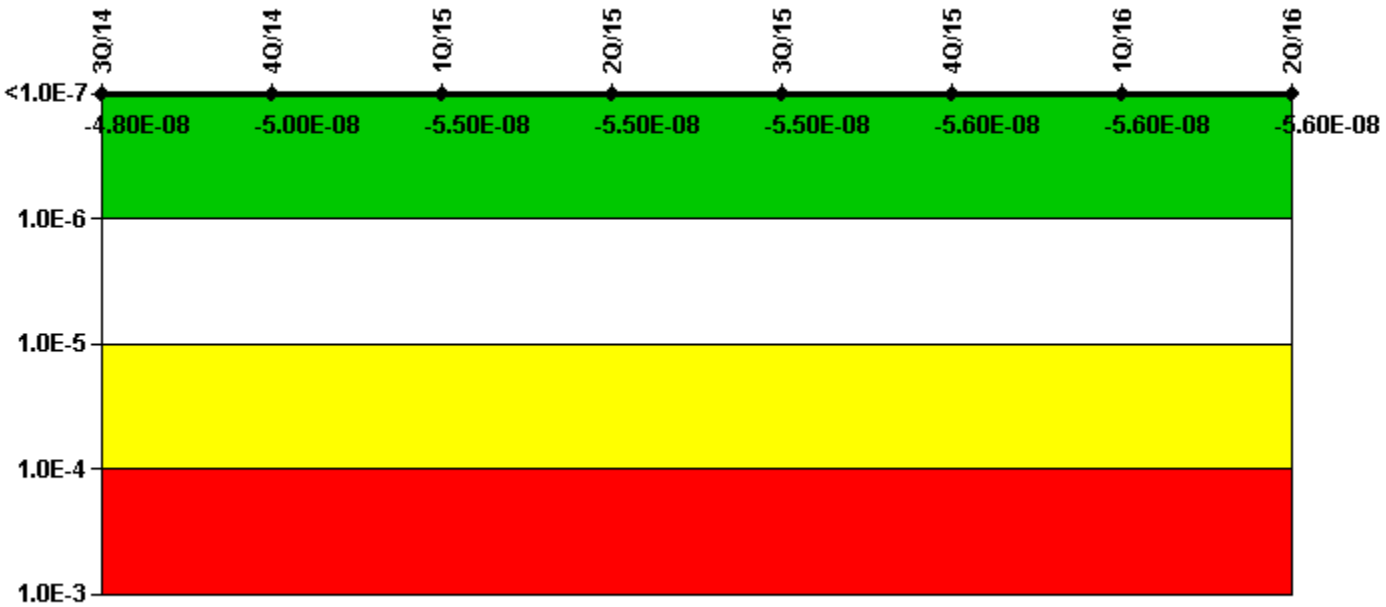
Licensee Comments:

1Q/16: An engineering evaluation associated with the "B" emergency diesel generator was pending at the end of the quarter.

1Q/15: Changed PRA Parameter(s). For all Mitigating Systems Performance Index (MSPI) Systems: MSPI Basis document has been updated to reflect changes in Probabilistic Risk Analysis (PRA) data effective 1st Quarter 2015.

4Q/14: Two engineering evaluations of degraded conditions were not completed at the time the 4th quarter 2014 data was submitted. Additionally, an evaluation for one other 4th quarter condition was identified in the 1st quarter of 2015. Evaluations were completed prior to submitting the 1st quarter 2015 data.

Mitigating Systems Performance Index, High Pressure Injection System



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

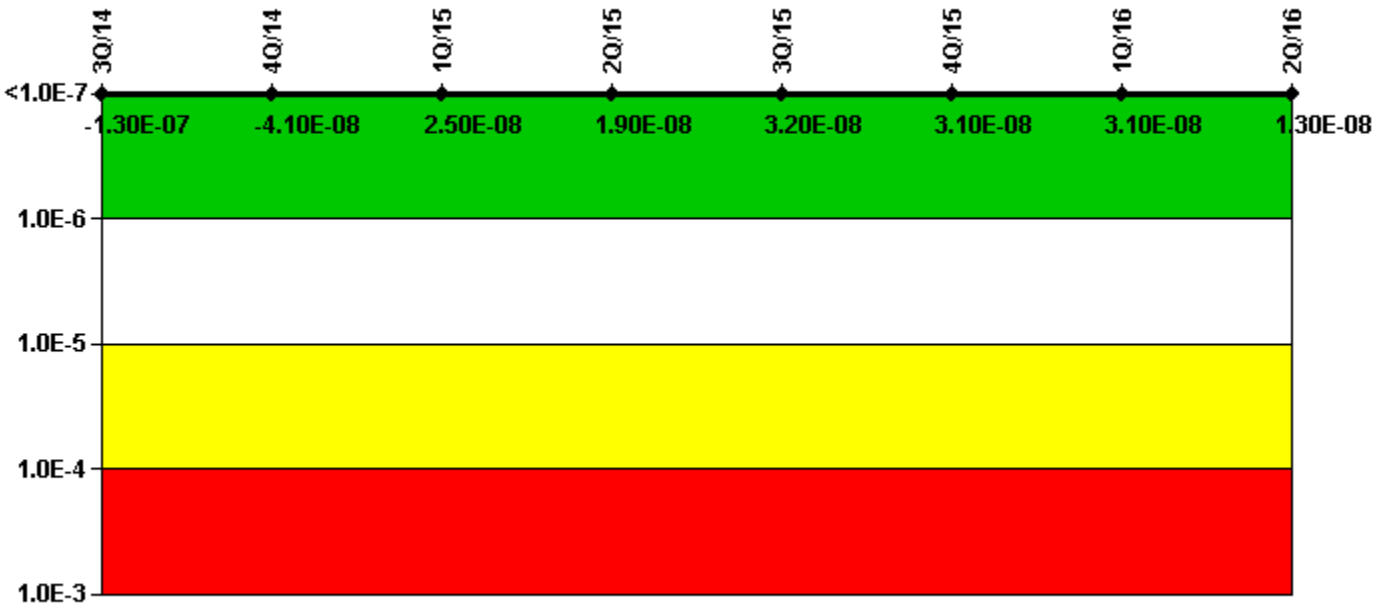
Notes

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 (ΔCDF)	-1.12E-08	-1.27E-08	-1.34E-08	-1.34E-08	-1.34E-08	-1.44E-08	-1.44E-08	-1.44E-08
URI (ΔCDF)	-3.71E-08	-3.71E-08	-4.14E-08	-4.14E-08	-4.14E-08	-4.14E-08	-4.14E-08	-4.14E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-4.80E-08**	**-5.00E-08**	**-5.50E-08**	**-5.50E-08**	**-5.50E-08**	**-5.60E-08**	**-5.60E-08**	**-5.60E-08**

Licensee Comments:

1Q/15: Changed PRA Parameter(s). For all Mitigating Systems Performance Index (MSPI) Systems: MSPI Basis document has been updated to reflect changes in Probabilistic Risk Analysis (PRA) data effective 1st Quarter 2015.

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)	2.64E-08	7.78E-08	8.69E-08	8.12E-08	8.06E-08	7.98E-08	7.94E-08	6.15E-08
URI (ΔCDF)	-1.60E-07	-1.19E-07	-6.24E-08	-6.24E-08	-4.85E-08	-4.85E-08	-4.85E-08	-4.85E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-1.30E-07**	**-4.10E-08**	**2.50E-08**	**1.90E-08**	**3.20E-08**	**3.10E-08**	**3.10E-08**	**1.30E-08**

Licensee Comments:

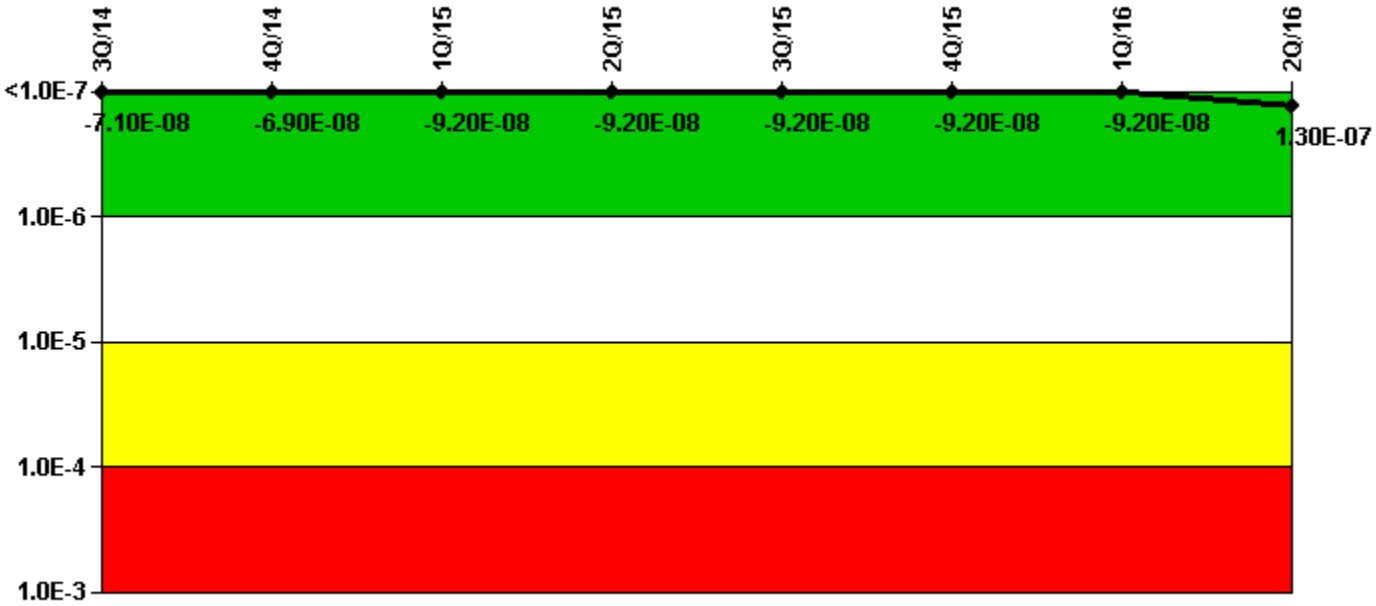
3Q/15: An engineering evaluation associated with a degraded condition for an Auxiliary Feedwater valve's Modutronics Card was not completed when data for the third quarter 2015 was submitted. 4th quarter 2014 availability data revised for valve ALHV0005.

1Q/15: For all Mitigating Systems Performance Index (MSPI) Systems: MSPI Basis document has been updated to reflect changes in Probabilistic Risk Analysis (PRA) data effective 1st Quarter 2015.

1Q/15: Changed PRA Parameter(s). For all Mitigating Systems Performance Index (MSPI) Systems: MSPI Basis document has been updated to reflect changes in Probabilistic Risk Analysis (PRA) data effective 1st Quarter 2015.

4Q/14: One engineering evaluation was identified in the 1st quarter of 2015 for a degraded condition identified in the 4th quarter 2014. Revised with 3rd quarter 2015 data submittal to reflect additional time that valve ALHV0005 was inoperable in November and December 2014.

Mitigating Systems Performance Index, Residual Heat Removal System



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

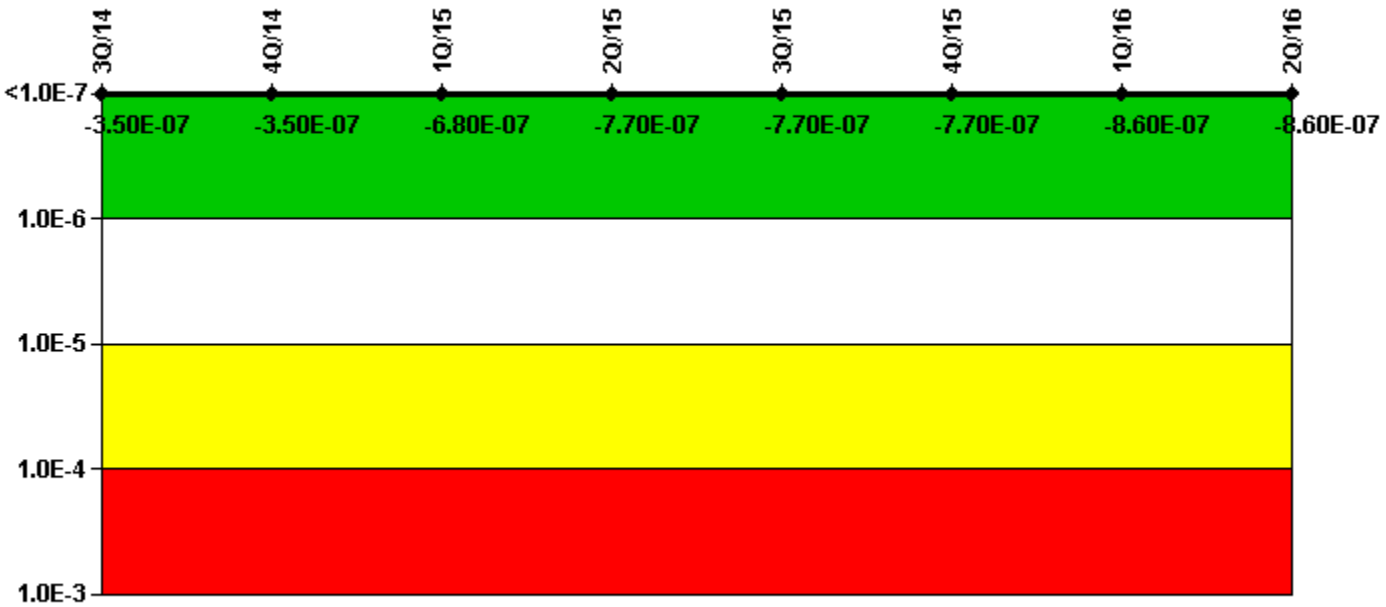
Notes

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 (ΔCDF)	-5.81E-09	-4.31E-09	-1.11E-08	-1.11E-08	-1.11E-08	-1.11E-08	-1.11E-08	-1.11E-08
URI (ΔCDF)	-6.48E-08	-6.48E-08	-8.09E-08	-8.09E-08	-8.09E-08	-8.09E-08	-8.09E-08	1.40E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-7.10E-08**	**-6.90E-08**	**-9.20E-08**	**-9.20E-08**	**-9.20E-08**	**-9.20E-08**	**-9.20E-08**	**1.30E-07**

Licensee Comments:

1Q/15: Changed PRA Parameter(s). For all Mitigating Systems Performance Index (MSPI) Systems: MSPI Basis document has been updated to reflect changes in Probabilistic Risk Analysis (PRA) data effective 1st Quarter 2015.

Mitigating Systems Performance Index, Cooling Water Systems



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

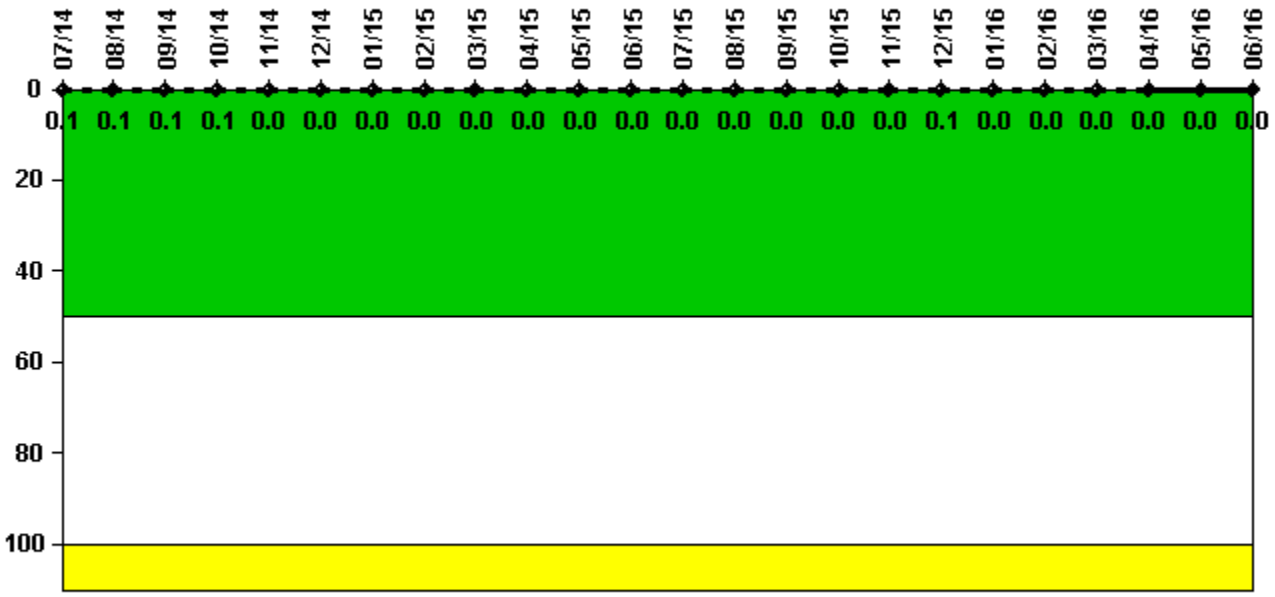
Notes

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)	1.52E-07	1.51E-07	4.35E-08	-4.11E-08	-4.03E-08	-4.39E-08	-1.27E-07	-1.30E-07
URI (ΔCDF)	-4.97E-07	-4.98E-07	-7.28E-07	-7.29E-07	-7.30E-07	-7.30E-07	-7.30E-07	-7.30E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-3.50E-07**	**-3.50E-07**	**-6.80E-07**	**-7.70E-07**	**-7.70E-07**	**-7.70E-07**	**-8.60E-07**	**-8.60E-07**

Licensee Comments:

1Q/15: Changed PRA Parameter(s). For all Mitigating Systems Performance Index (MSPI) Systems: MSPI Basis document has been updated to reflect changes in Probabilistic Risk Analysis (PRA) data effective 1st Quarter 2015.

Reactor Coolant System Activity



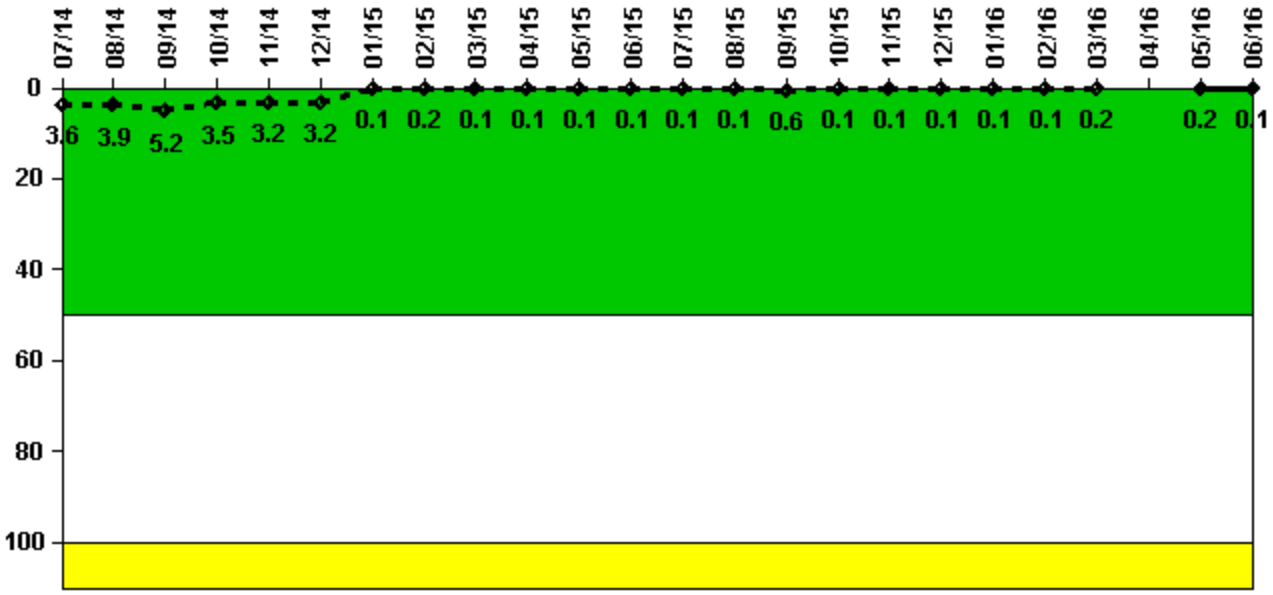
Thresholds: White > 50.0 Yellow > 100.0

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	0.000887	0.000880	0.001060	0.000746	0.000171	0.000339	0.000246	0.000343	0.000376	0.000305	0.000351	0.000225
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**	**0.1**	**0.1**	**0.1**	**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	0.000307	0.000364	0.000462	0.000353	0.000422	0.001480	0.000499	0.000469	0.000448	0.000314	0.000255	0.000187
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**	**0.1**	**0**	**0**	**0**	**0**	**0**	**0**

Licensee Comments: none

Reactor Coolant System Leakage

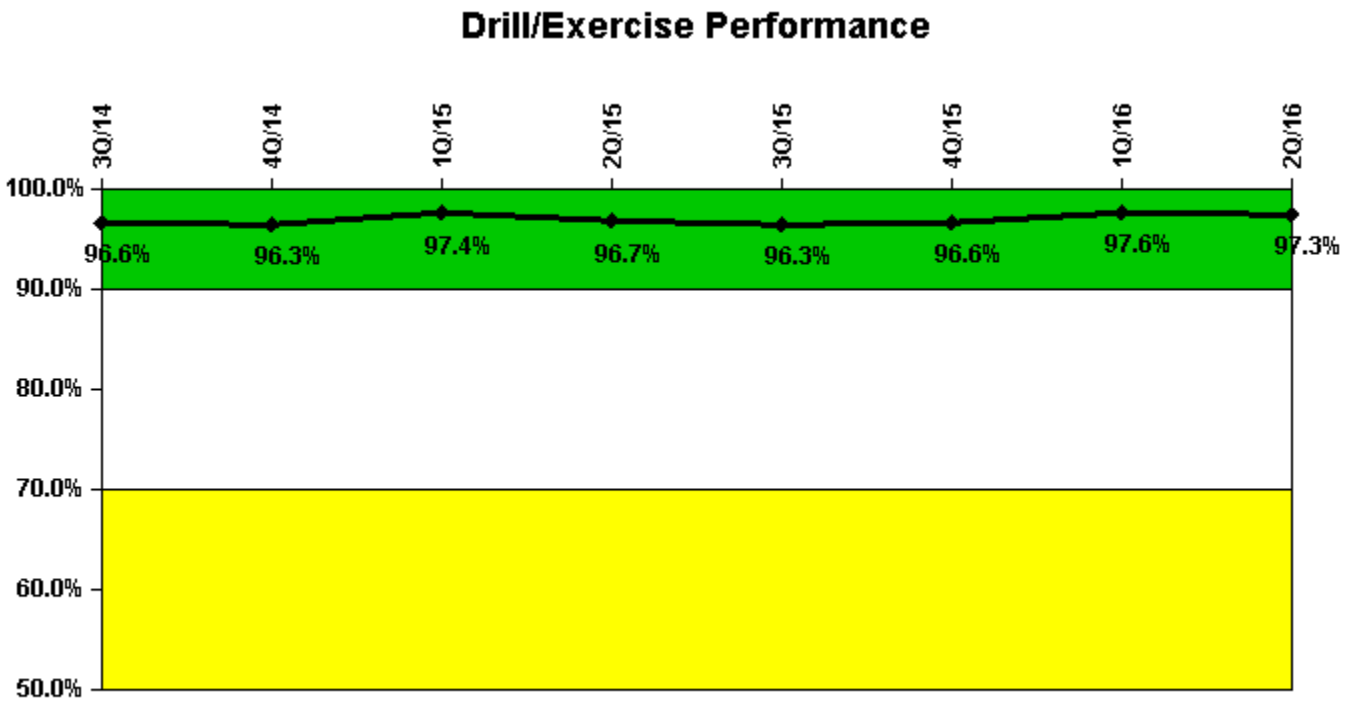


Thresholds: White > 50.0 Yellow > 100.0

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	0.363	0.390	0.518	0.346	0.321	0.317	0.006	0.017	0.007	0.012	0.008	0.009
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	**3.6**	**3.9**	**5.2**	**3.5**	**3.2**	**3.2**	**0.1**	**0.2**	**0.1**	**0.1**	**0.1**	**0.1**
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	0.006	0.013	0.061	0.007	0.012	0.012	0.010	0.009	0.016	N/A	0.016	0.005
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	**0.1**	**0.1**	**0.6**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.2**	**N/A**	**0.2**	**0.1**

Licensee Comments: none

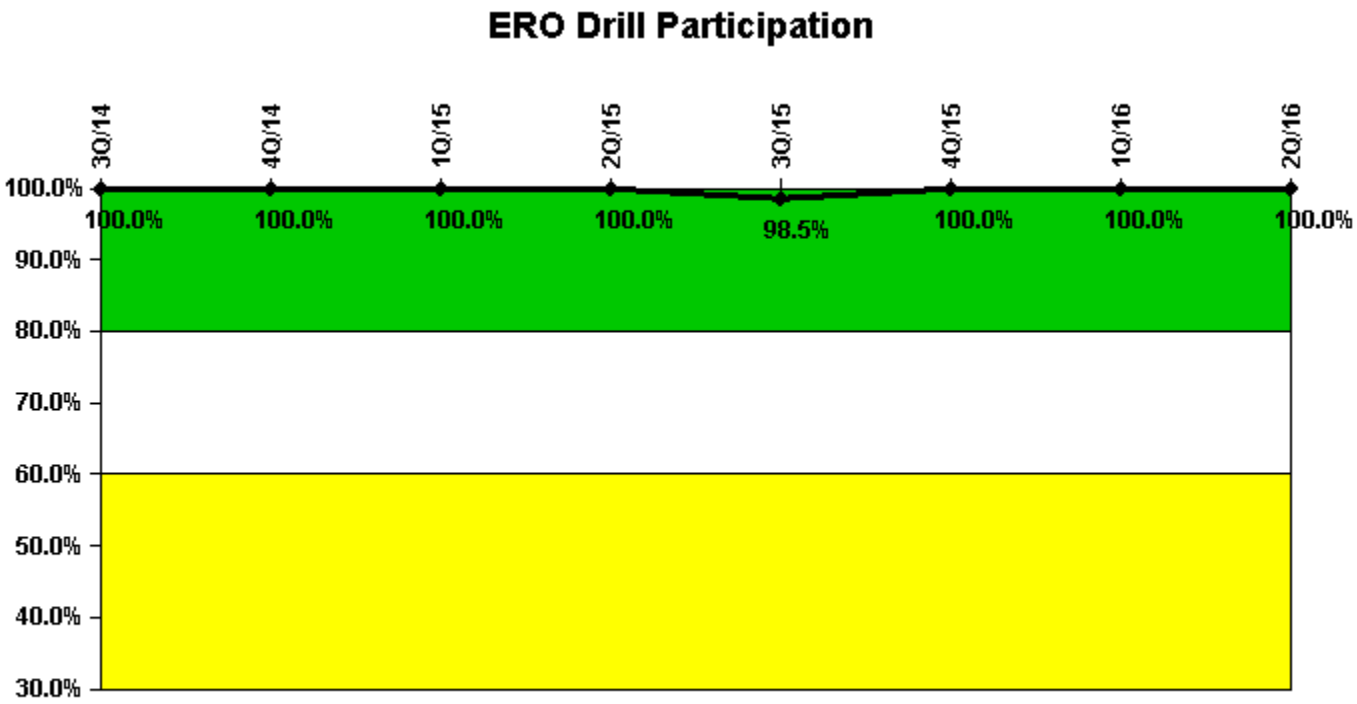


Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Successful opportunities	68.0	0	61.0	6.0	21.0	50.0	34.0	15.0
Total opportunities	68.0	0	61.0	8.0	23.0	52.0	34.0	16.0
Indicator value	**96.6%**	**96.3%**	**97.4%**	**96.7%**	**96.3%**	**96.6%**	**97.6%**	**97.3%**

Licensee Comments: none

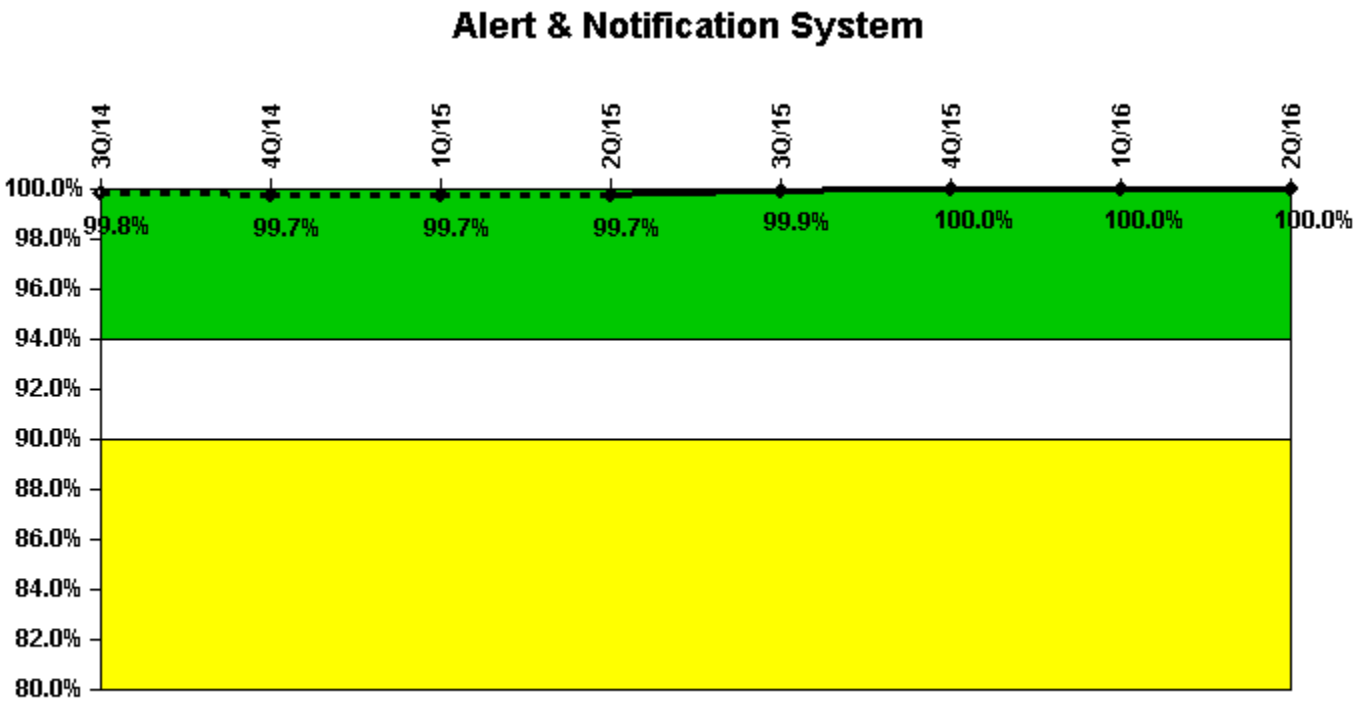


Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Participating Key personnel	106.0	107.0	105.0	97.0	67.0	70.0	68.0	63.0
Total Key personnel	106.0	107.0	105.0	97.0	68.0	70.0	68.0	63.0
Indicator value	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**98.5%**	**100.0%**	**100.0%**	**100.0%**

Licensee Comments: none



Thresholds: White < 94.0% Yellow < 90.0%

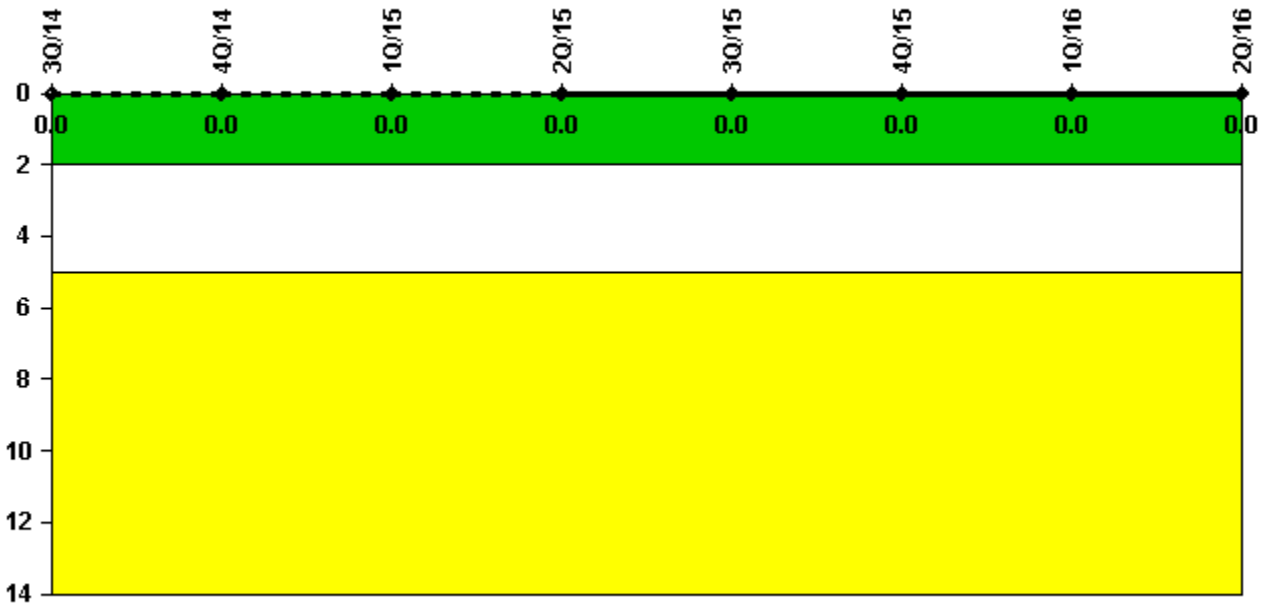
Notes

Alert & Notification System	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16	2Q/16
Successful siren-tests	404	375	377	377	377	377	377	377
Total sirens-tests	406	377	377	377	377	377	377	377
Indicator value	**99.8%**	**99.7%**	**99.7%**	**99.7%**	**99.9%**	**100.0%**	**100.0%**	**100.0%**

Licensee Comments:

3Q/14: Two siren failures were not recorded correctly in a spreadsheet which resulted in reporting 406/406 in 3Q2014 instead of 404/406 being reported. This change does not affect the color of the PI.

Occupational Exposure Control Effectiveness

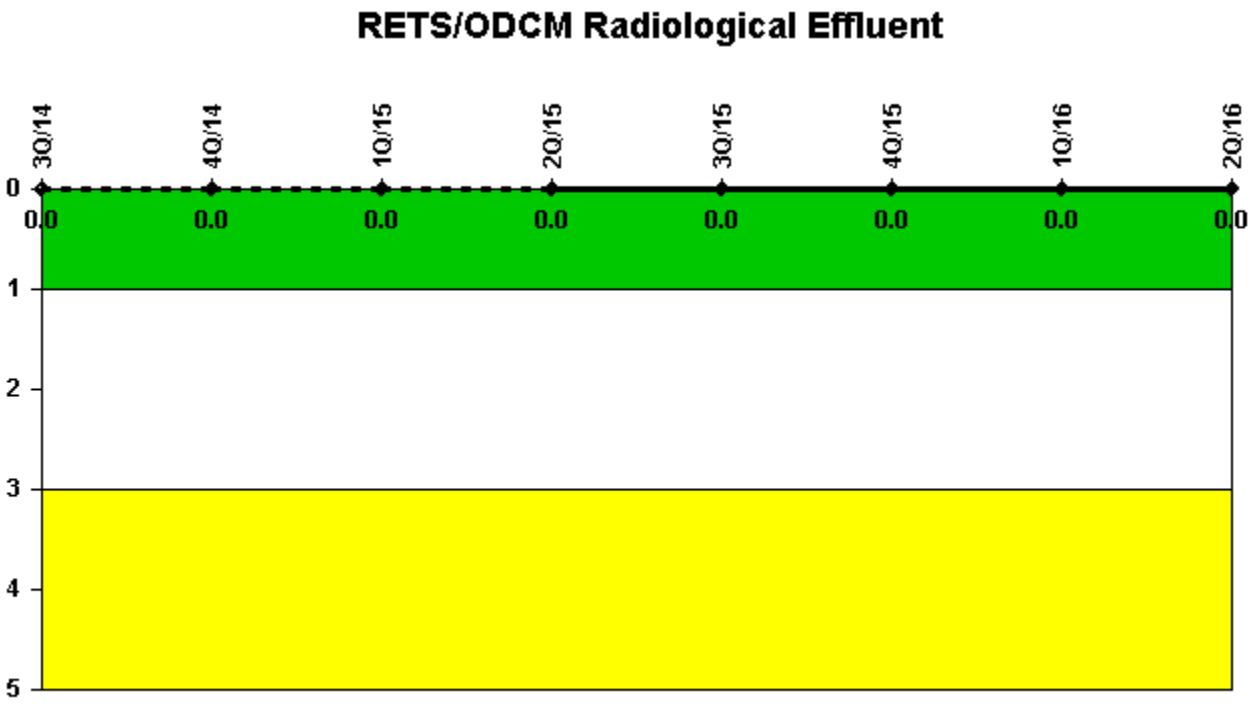


Thresholds: White > 2.0 Yellow > 5.0

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



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