

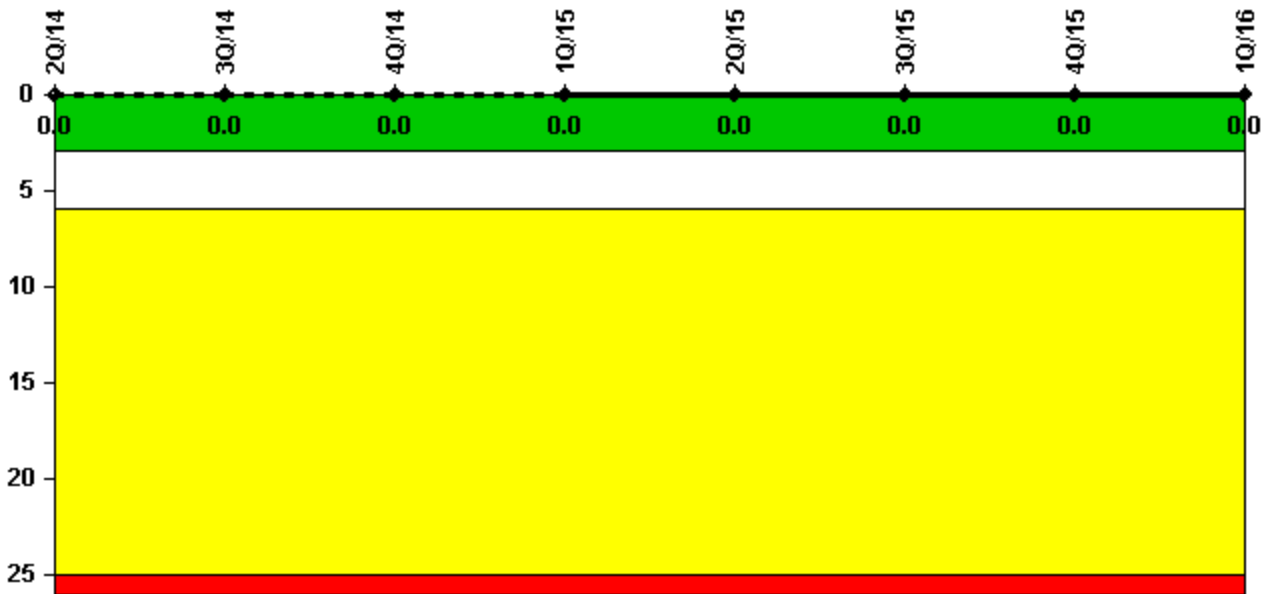
## Braidwood 2

### 1Q/2016 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: none

#### Unplanned Scrams per 7000 Critical Hrs



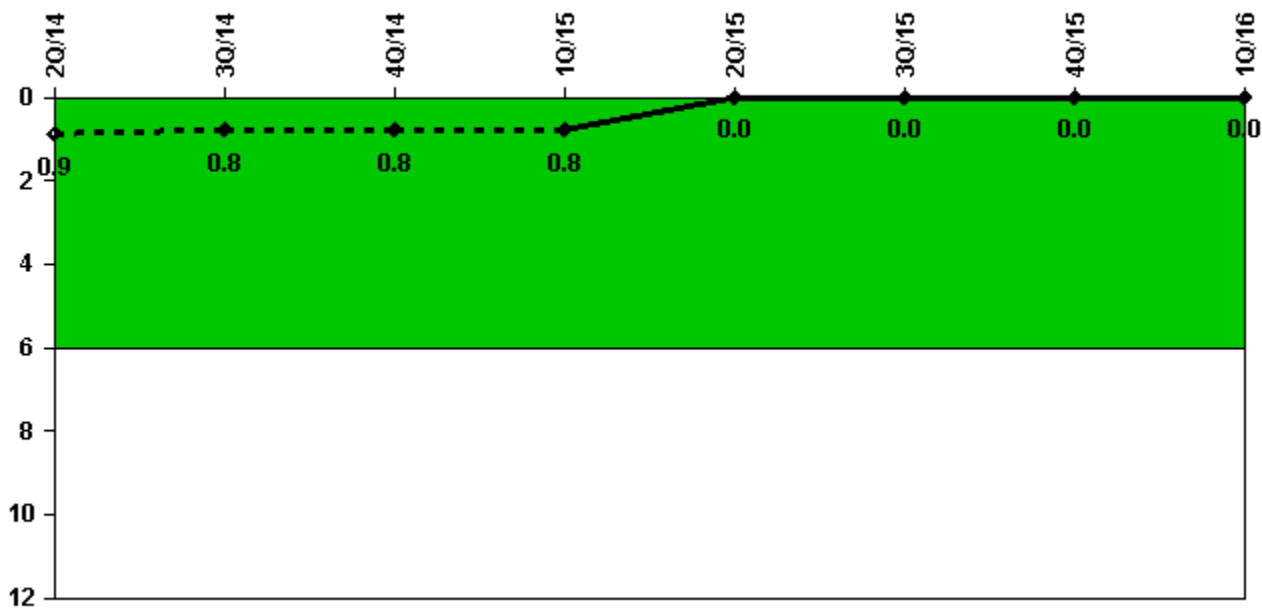
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

#### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	1716.3	2208.0	2209.0	2159.0	2184.0	2208.0	1772.3	2183.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



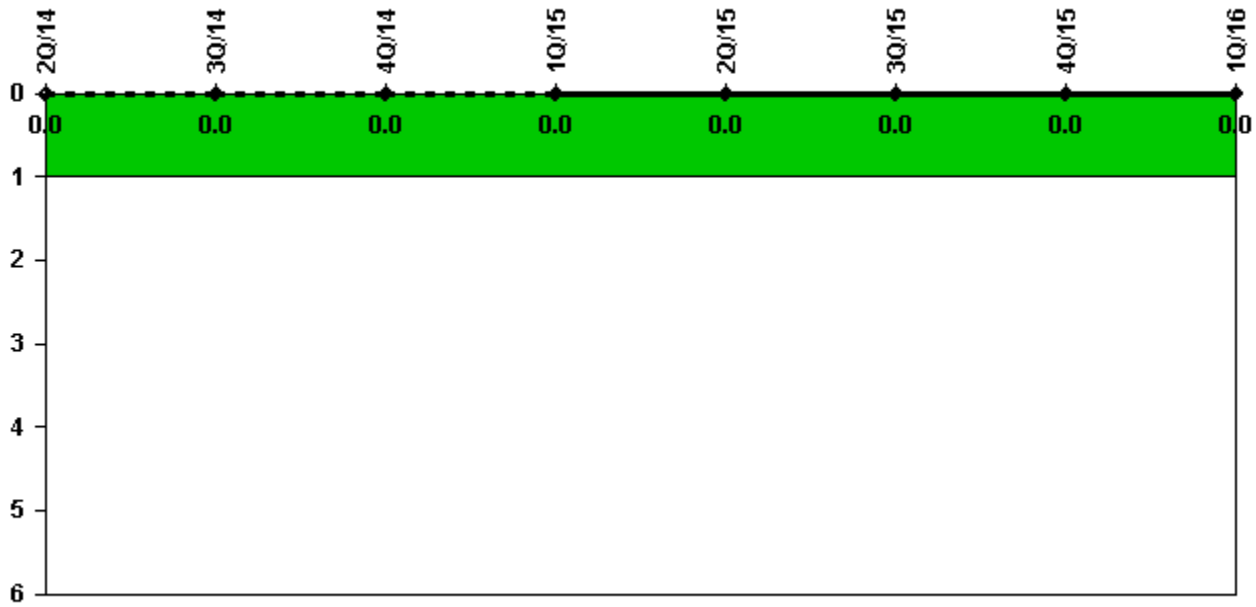
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Unplanned power changes	1.0	0	0	0	0	0	0	0
Critical hours	1716.3	2208.0	2209.0	2159.0	2184.0	2208.0	1772.3	2183.0
<b>Indicator value</b>	<b>0.9</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

### Unplanned Scrams with Complications



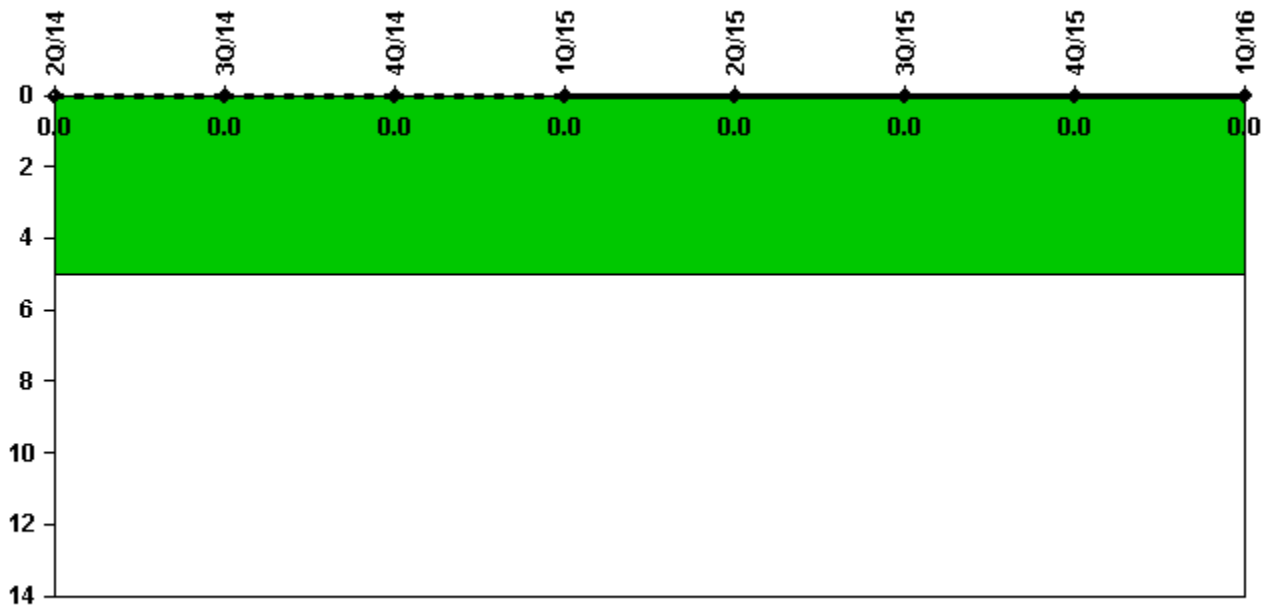
Thresholds: White > 1.0

#### Notes

Unplanned Scrams with Complications	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Scrams with complications	0	0	0	0	0	0	0	0
<b>Indicator value</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Licensee Comments: none

### Safety System Functional Failures (PWR)



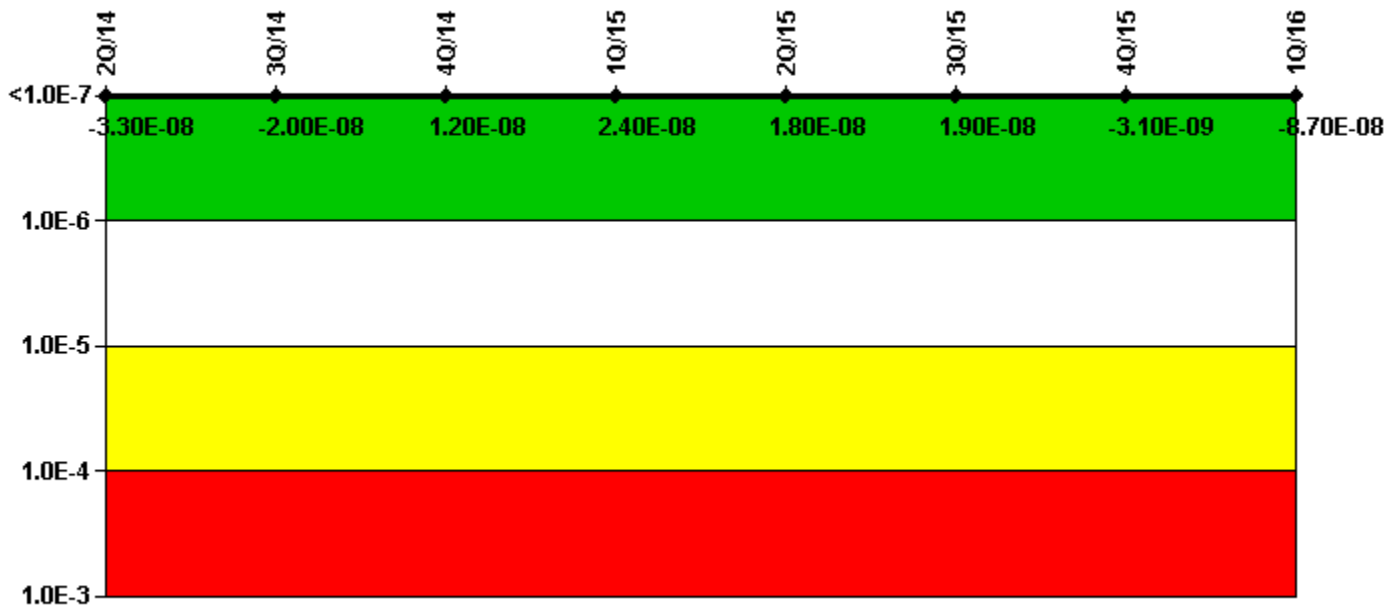
Thresholds: White > 5.0

#### Notes

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

Licensee Comments: none

### Mitigating Systems Performance Index, Emergency AC Power System



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

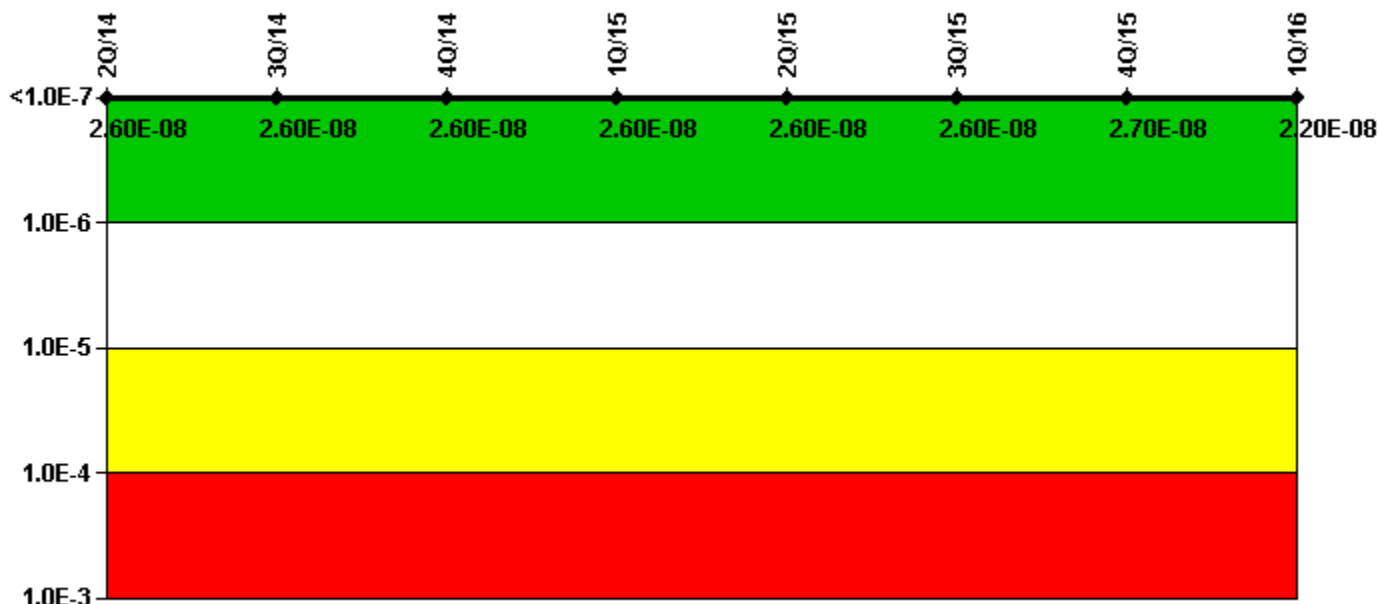
#### Notes

Mitigating Systems Performance Index, Emergency AC Power System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI ( $\Delta$ CDF)	7.10E-08	6.80E-08	8.34E-08	8.19E-08	8.19E-08	8.48E-08	5.21E-08	3.58E-08
URI ( $\Delta$ CDF)	-1.04E-07	-8.77E-08	-7.14E-08	-5.79E-08	-6.43E-08	-6.59E-08	-5.52E-08	-1.23E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.30E-08	-2.00E-08	1.20E-08	2.40E-08	1.80E-08	1.90E-08	-3.10E-09	-8.70E-08

Licensee Comments:

1Q/16: Changed PRA Parameter(s). 4/15/16: Braidwood ASM PRA Model Revision No. BB011b4 approved September 30, 2015, revised Byron Unit 1 and Braidwood Unit 2 PRA inputs for installation of Westinghouse Generation 3 RCP safe shutdown seal installation. These seals were installed in 4Q15 at Braidwood.

### Mitigating Systems Performance Index, High Pressure Injection System



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

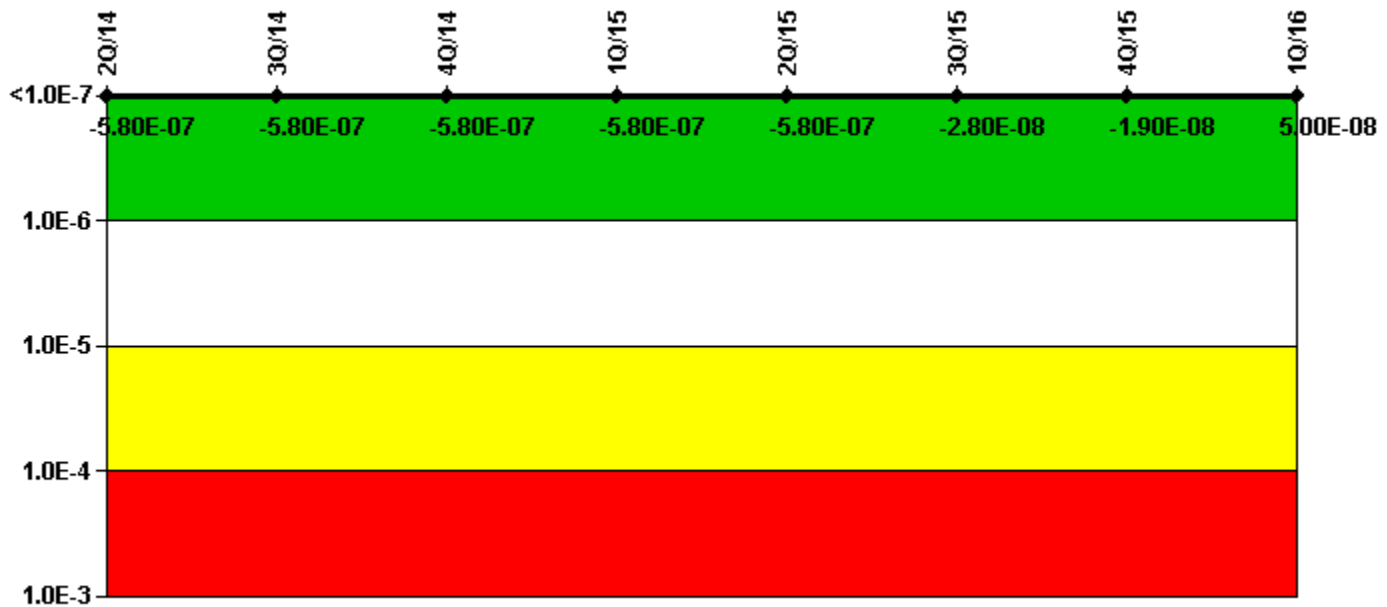
#### Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI ( $\Delta$ CDF)	-2.82E-08	-2.82E-08	-2.82E-08	-2.82E-08	-2.82E-08	-2.82E-08	-2.82E-08	-1.79E-08
URI ( $\Delta$ CDF)	5.43E-08	5.42E-08	5.42E-08	5.42E-08	5.42E-08	5.41E-08	5.48E-08	3.96E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.60E-08	2.60E-08	2.60E-08	2.60E-08	2.60E-08	2.60E-08	2.70E-08	2.20E-08

Licensee Comments:

1Q/16: Changed PRA Parameter(s). 4/15/16: Braidwood ASM PRA Model Revision No. BB011b4 approved September 30, 2015, revised Byron Unit 1 and Braidwood Unit 2 PRA inputs for installation of Westinghouse Generation 3 RCP safe shutdown seal installation. These seals were installed in 4Q15 at Braidwood.

### 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/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI (ΔCDF)	-1.17E-07	-1.19E-07	-1.19E-07	-1.19E-07	-1.19E-07	-5.60E-08	-5.64E-08	2.25E-08
URI (ΔCDF)	-4.63E-07	-4.63E-07	-4.63E-07	-4.64E-07	-4.64E-07	2.76E-08	3.77E-08	2.76E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.80E-07	-5.80E-07	-5.80E-07	-5.80E-07	-5.80E-07	-2.80E-08	-1.90E-08	5.00E-08

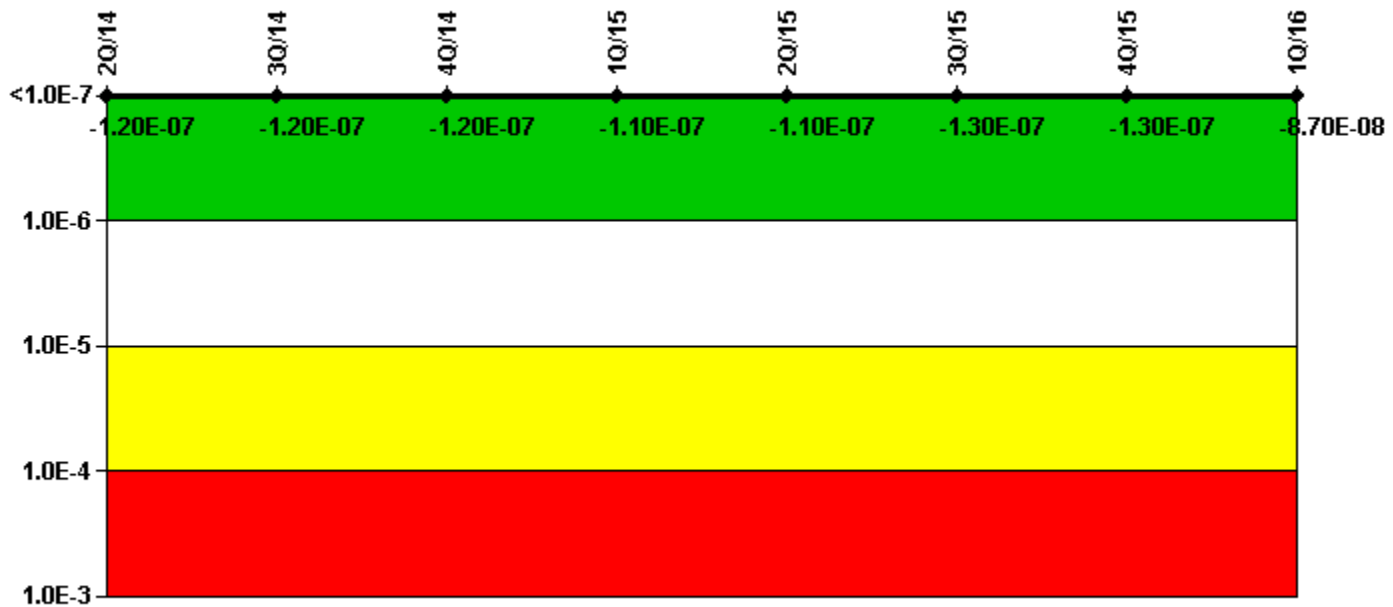
#### Licensee Comments:

1Q/16: Risk Cap Invoked. Changed PRA Parameter(s). 4/15/16: Braidwood ASM PRA Model Revision No. BB011b4 approved September 30, 2015, revised Byron Unit 1 and Braidwood Unit 2 PRA inputs for installation of Westinghouse Generation 3 RCP safe shutdown seal installation. These seals were installed in 4Q15 at Braidwood.

4Q/15: Risk Cap Invoked.

3Q/15: Risk Cap Invoked.

### Mitigating Systems Performance Index, Residual Heat Removal System



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

#### Notes

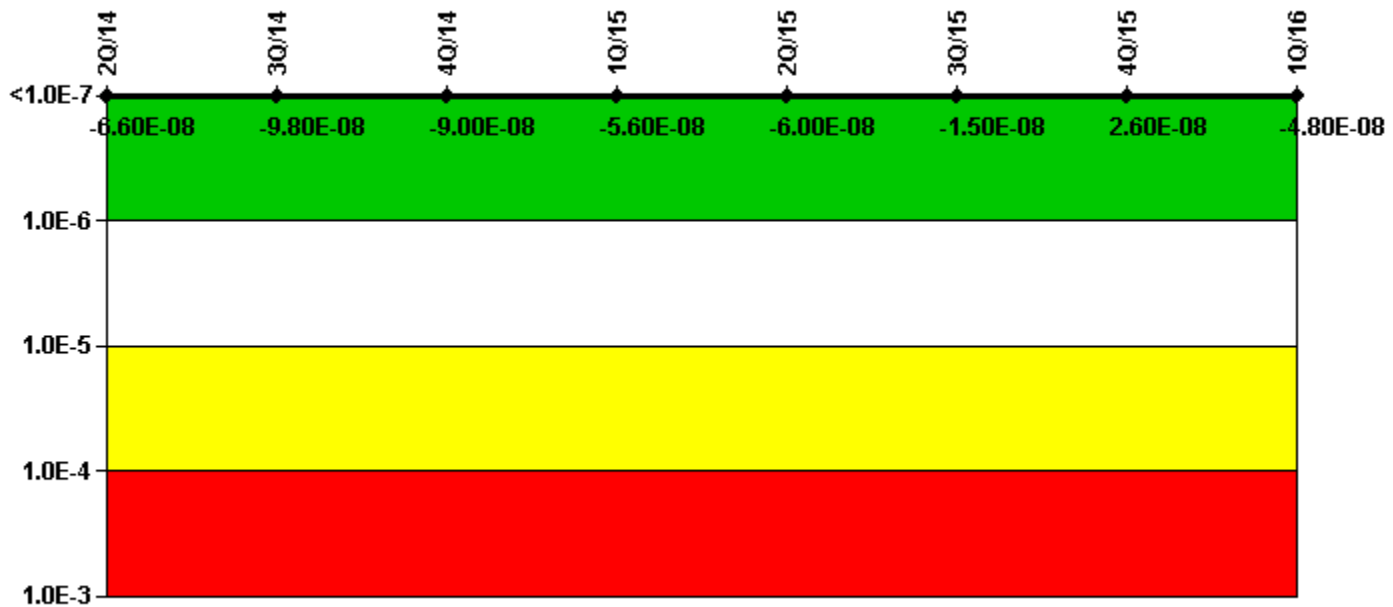
Mitigating Systems Performance Index, Residual Heat Removal System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI ( $\Delta$ CDF)	-2.51E-08	-2.51E-08	-2.51E-08	-1.42E-08	-1.42E-08	-3.48E-08	-3.48E-08	-2.32E-08
URI ( $\Delta$ CDF)	-9.70E-08	-9.71E-08	-9.70E-08	-9.69E-08	-9.69E-08	-9.76E-08	-9.55E-08	-6.40E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.20E-07	-1.20E-07	-1.20E-07	-1.10E-07	-1.10E-07	-1.30E-07	-1.30E-07	-8.70E-08

#### Licensee Comments:

1Q/16: Changed PRA Parameter(s). 4/15/16: Braidwood ASM PRA Model Revision No. BB011b4 approved September 30, 2015, revised Byron Unit 1 and Braidwood Unit 2 PRA inputs for installation of Westinghouse Generation 3 RCP safe shutdown seal installation. These seals were installed in 4Q15 at Braidwood.



### Mitigating Systems Performance Index, Cooling Water Systems



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

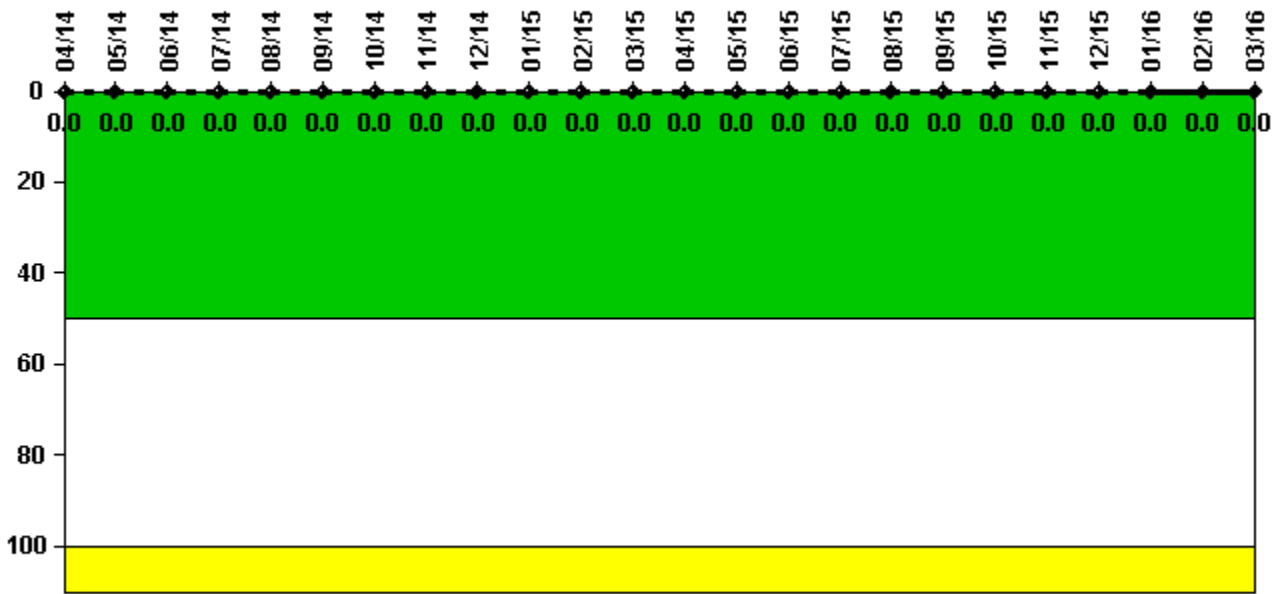
#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
UAI ( $\Delta$ CDF)	6.03E-08	2.15E-08	2.49E-08	5.32E-08	4.86E-08	9.28E-08	1.31E-07	2.45E-08
URI ( $\Delta$ CDF)	-1.27E-07	-1.20E-07	-1.15E-07	-1.09E-07	-1.08E-07	-1.07E-07	-1.05E-07	-7.21E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-6.60E-08	-9.80E-08	-9.00E-08	-5.60E-08	-6.00E-08	-1.50E-08	2.60E-08	-4.80E-08

Licensee Comments:

1Q/16: Changed PRA Parameter(s). 4/15/16: Braidwood ASM PRA Model Revision No. BB011b4 approved September 30, 2015, revised Byron Unit 1 and Braidwood Unit 2 PRA inputs for installation of Westinghouse Generation 3 RCP safe shutdown seal installation. These seals were installed in 4Q15 at Braidwood.

### Reactor Coolant System Activity



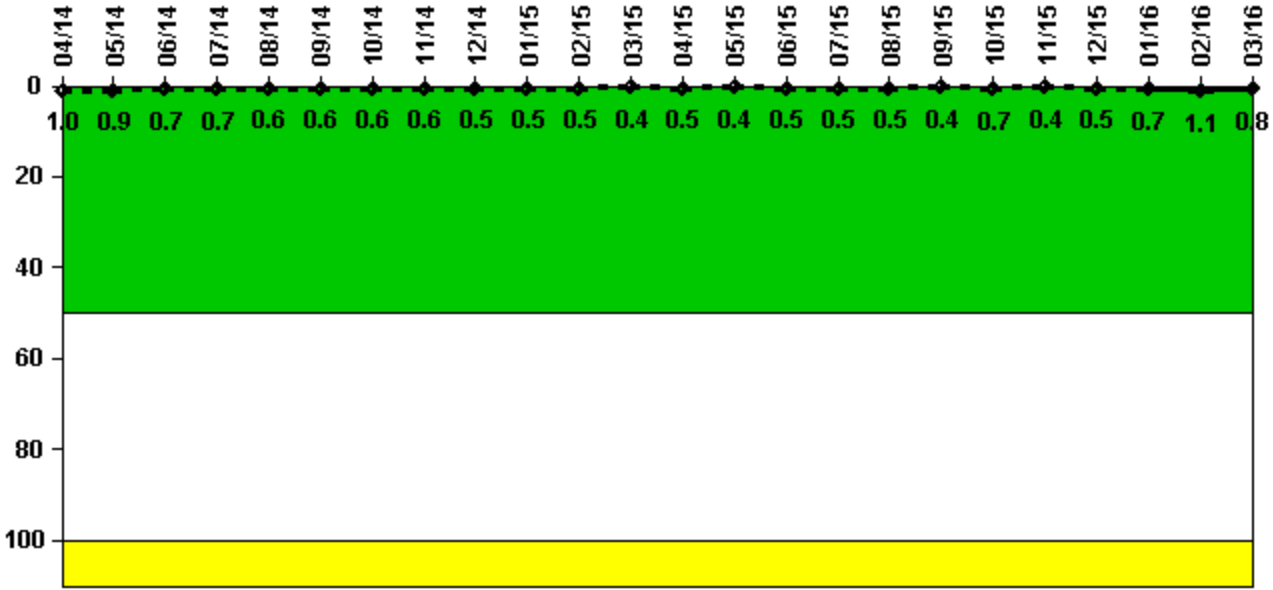
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

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	0.000371	0.000133	0.000162	0.000157	0.000170	0.000164	0.000176	0.000208	0.000205	0.000200	0.000222	0.000237
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	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16
Maximum activity	0.000265	0.000268	0.000257	0.000265	0.000279	0.000285	0.000107	0.000111	0.000127	0.000151	0.000137	0.000196
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



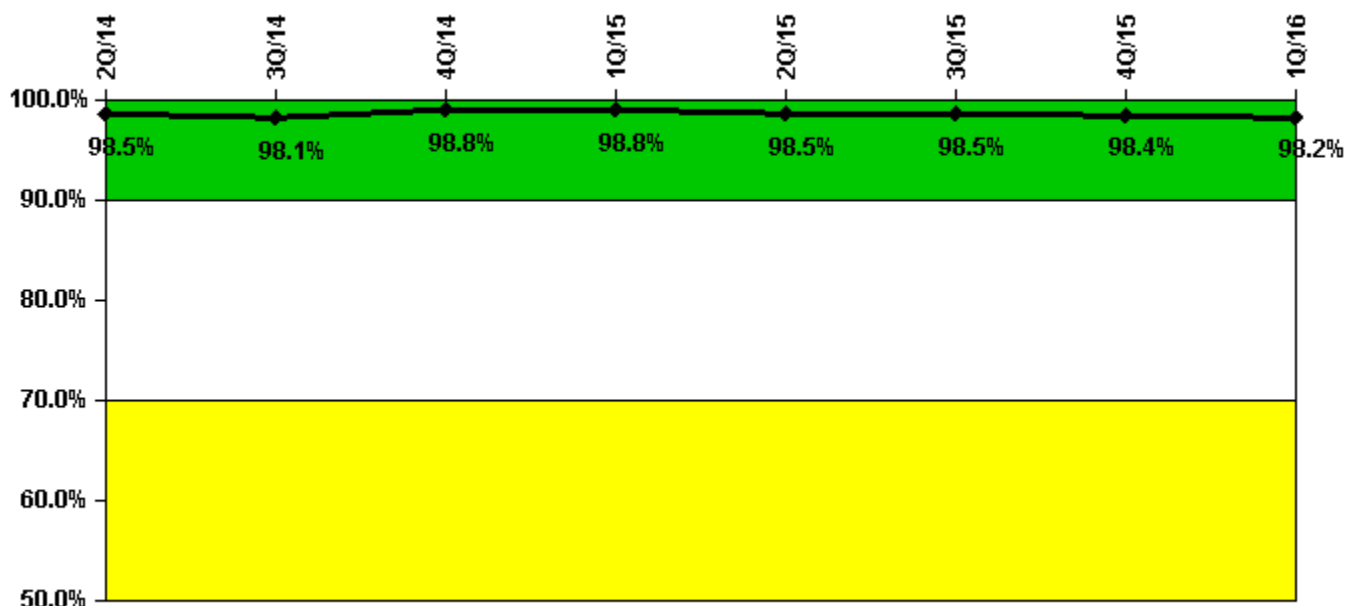
Thresholds: White > 50.0 Yellow > 100.0

**Notes**

Reactor Coolant System Leakage	4/14	5/14	6/14	7/14	8/14	9/14	10/14	11/14	12/14	1/15	2/15	3/15
Maximum leakage	0.102	0.088	0.068	0.067	0.061	0.057	0.059	0.056	0.045	0.051	0.048	0.043
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	<b>1.0</b>	<b>0.9</b>	<b>0.7</b>	<b>0.7</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.4</b>
Reactor Coolant System Leakage	4/15	5/15	6/15	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16
Maximum leakage	0.045	0.044	0.048	0.046	0.049	0.043	0.074	0.039	0.053	0.073	0.112	0.078
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	<b>0.5</b>	<b>0.4</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.4</b>	<b>0.7</b>	<b>0.4</b>	<b>0.5</b>	<b>0.7</b>	<b>1.1</b>	<b>0.8</b>

Licensee Comments: none

### Drill/Exercise Performance



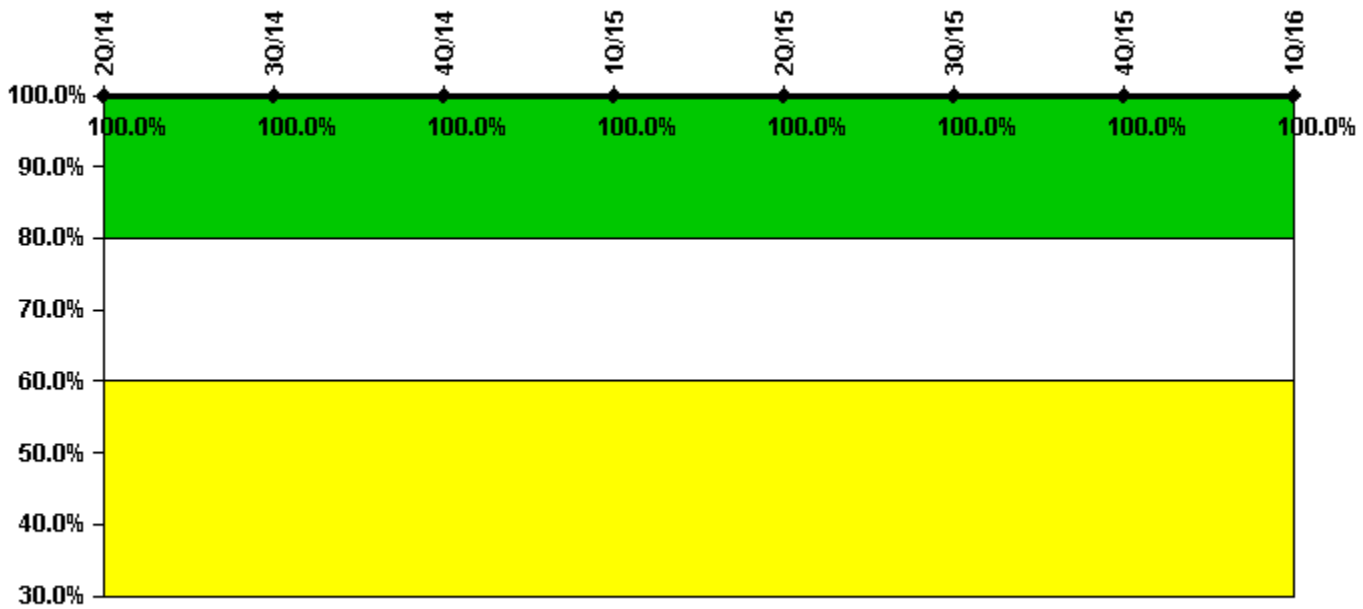
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Successful opportunities	66.0	51.0	74.0	26.0	86.0	58.0	46.0	34.0
Total opportunities	68.0	54.0	74.0	26.0	88.0	58.0	46.0	35.0
<b>Indicator value</b>	<b>98.5%</b>	<b>98.1%</b>	<b>98.8%</b>	<b>98.8%</b>	<b>98.5%</b>	<b>98.5%</b>	<b>98.4%</b>	<b>98.2%</b>

Licensee Comments: none

### ERO Drill Participation



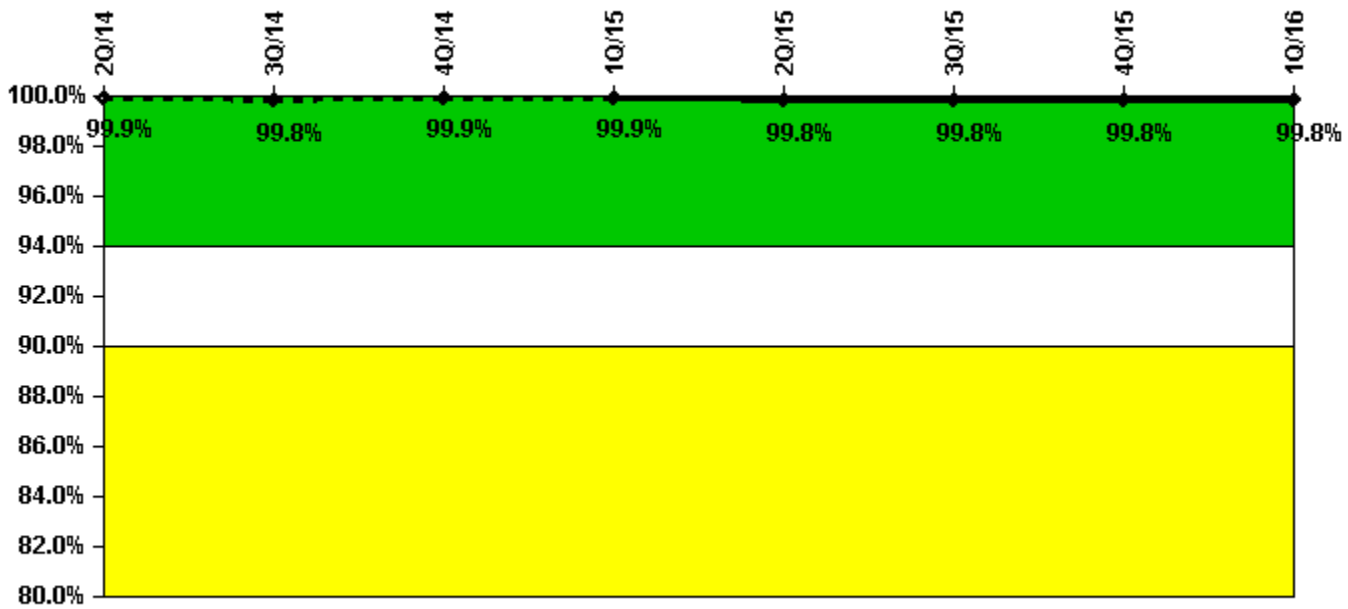
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Participating Key personnel	65.0	66.0	68.0	66.0	69.0	67.0	64.0	67.0
Total Key personnel	65.0	66.0	68.0	66.0	69.0	67.0	64.0	67.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

### Alert & Notification System



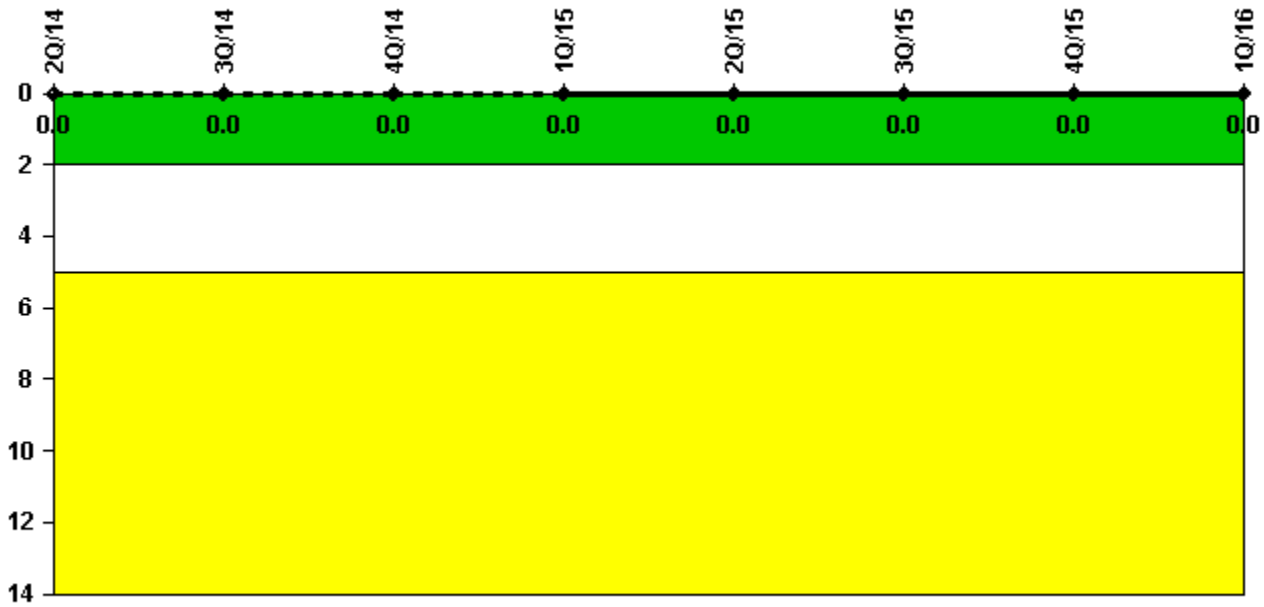
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
Successful siren-tests	3070	3058	3070	3024	3059	3112	3070	3070
Total sirens-tests	3072	3072	3072	3024	3072	3120	3072	3072
<b>Indicator value</b>	<b>99.9%</b>	<b>99.8%</b>	<b>99.9%</b>	<b>99.9%</b>	<b>99.8%</b>	<b>99.8%</b>	<b>99.8%</b>	<b>99.8%</b>

Licensee Comments: none

### Occupational Exposure Control Effectiveness



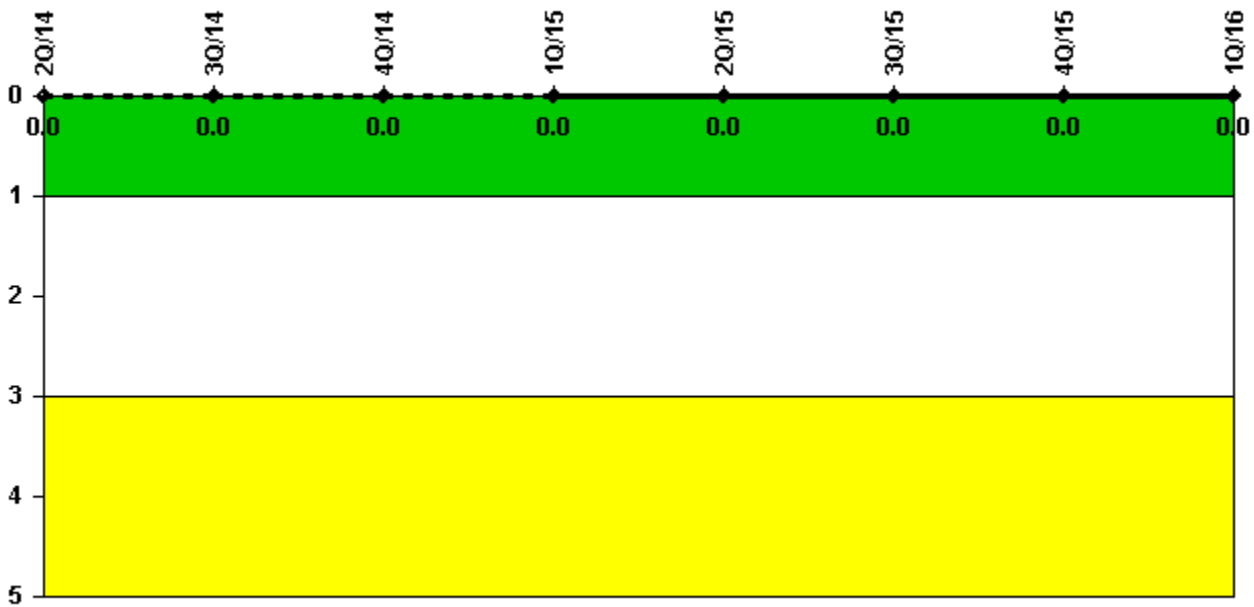
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/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
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

### RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

#### Notes

RETS/ODCM Radiological Effluent	2Q/14	3Q/14	4Q/14	1Q/15	2Q/15	3Q/15	4Q/15	1Q/16
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

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, 2016*