

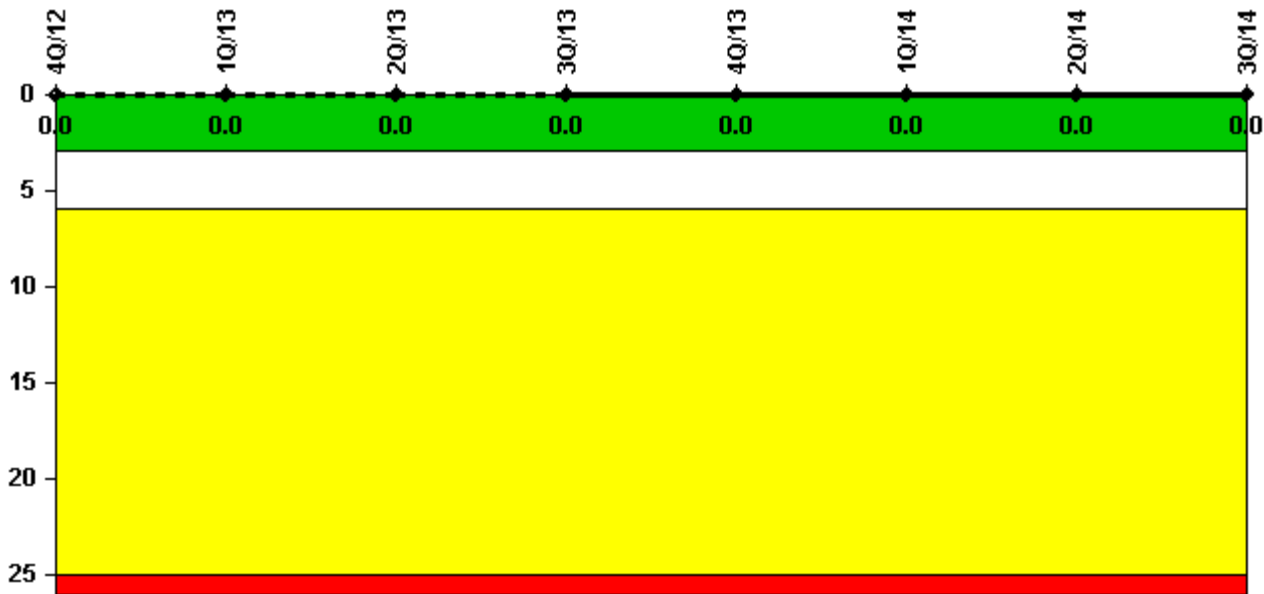
# Byron 1

## 3Q/2014 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: BYRON STATION 3Q2014C UNIT 1

### Unplanned Scrams per 7000 Critical Hrs



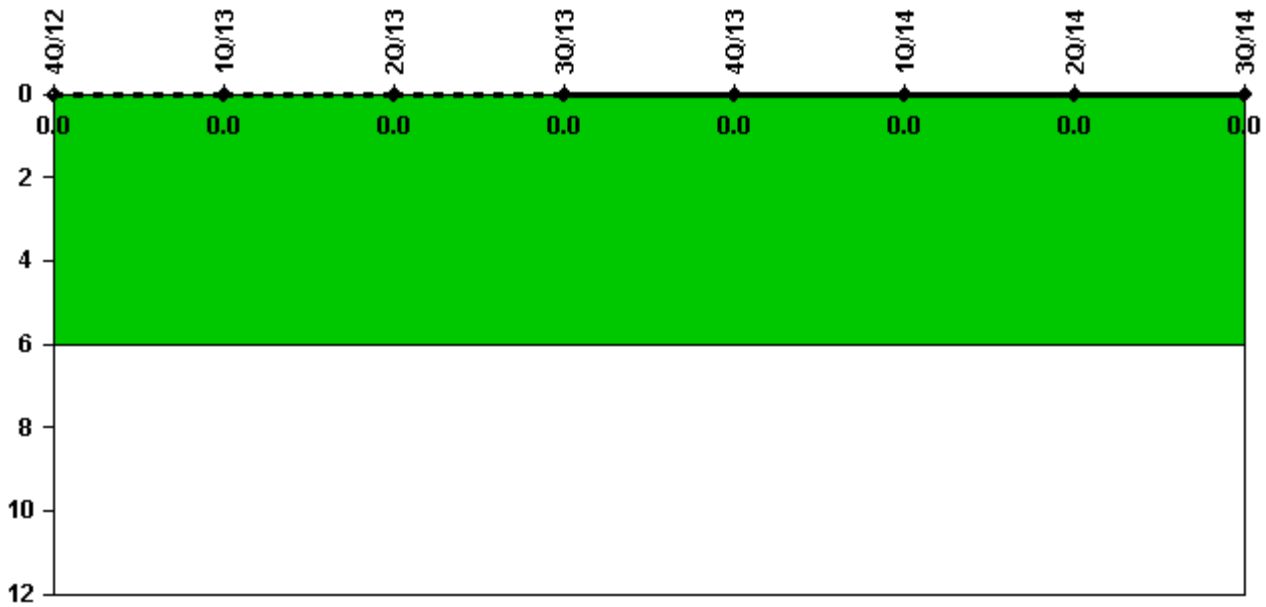
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2050.7	2159.0	2184.0	2208.0	2209.0	1735.7	2184.0	2208.0
<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

### Unplanned Power Changes per 7000 Critical Hrs



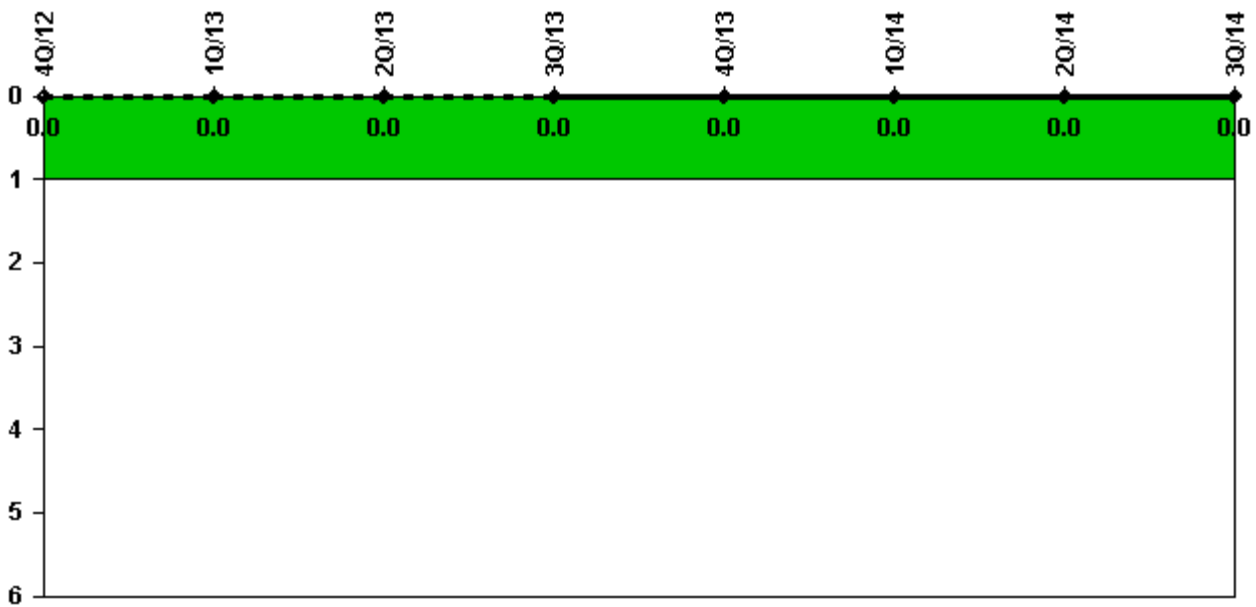
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2050.7	2159.0	2184.0	2208.0	2209.0	1735.7	2184.0	2208.0
<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

### Unplanned Scrams with Complications



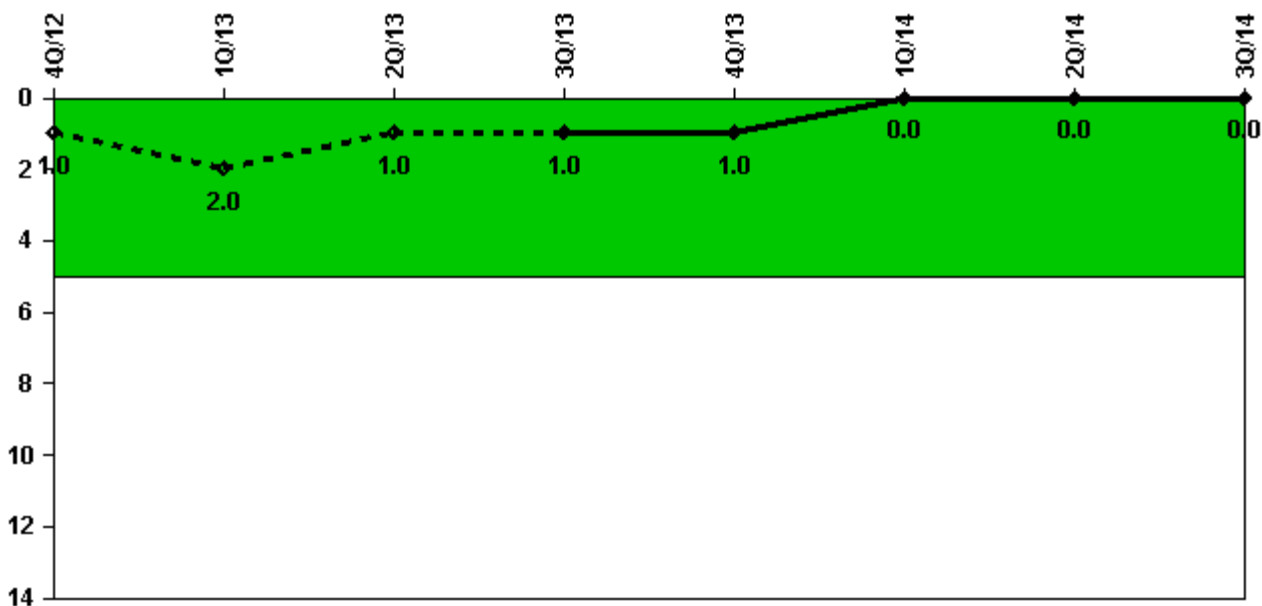
Thresholds: White > 1.0

#### Notes

Unplanned Scrams with Complications	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
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

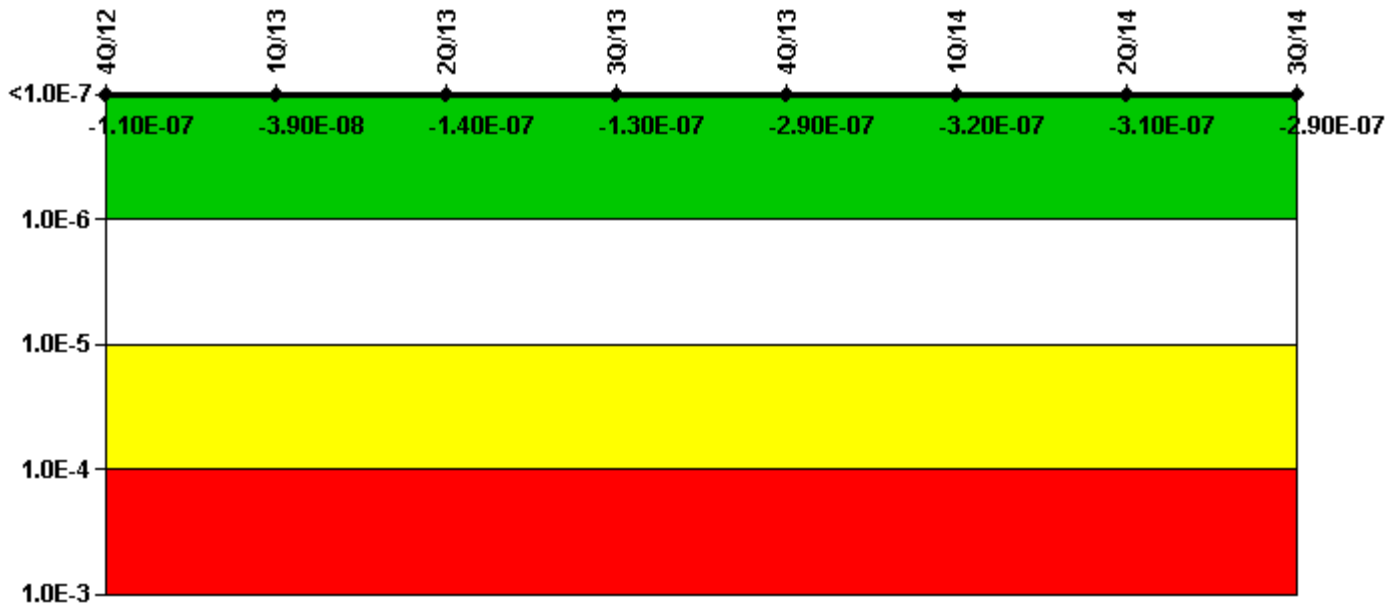
#### Notes

Safety System Functional Failures (PWR)	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
Safety System Functional Failures	0	1	0	0	0	0	0	0
<b>Indicator value</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments:

1Q/13: LER 454-2012-003-01, Containment Area Radiation Monitors Inoperable for Longer than Allowed By Technical Specifications Due to Inadequate Procedure Controls

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



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

#### Notes

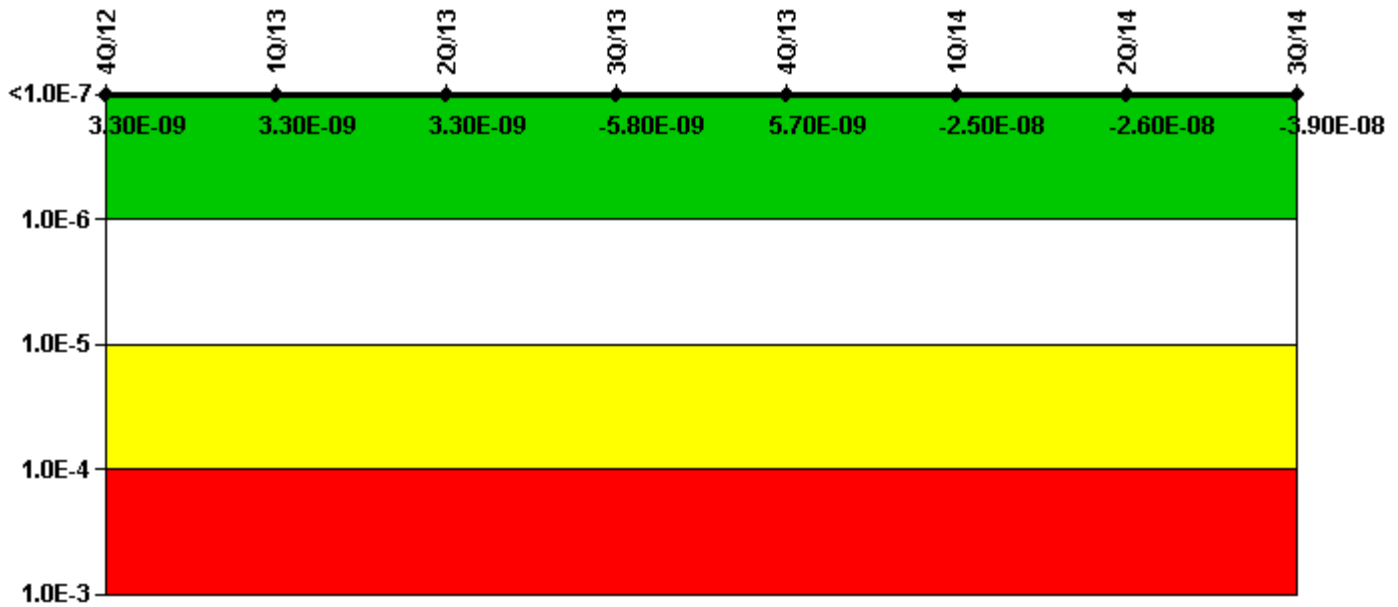
Mitigating Systems Performance Index, Emergency AC Power System	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
UAI ( $\Delta$ CDF)	1.64E-08	7.00E-08	7.50E-08	7.68E-08	3.96E-08	4.04E-09	3.75E-09	8.03E-09
URI ( $\Delta$ CDF)	-1.24E-07	-1.09E-07	-2.17E-07	-2.05E-07	-3.26E-07	-3.20E-07	-3.12E-07	-3.02E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.10E-07	-3.90E-08	-1.40E-07	-1.30E-07	-2.90E-07	-3.20E-07	-3.10E-07	-2.90E-07

Licensee Comments:

4Q/12: Changed PRA Parameter(s).

4Q/12: 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

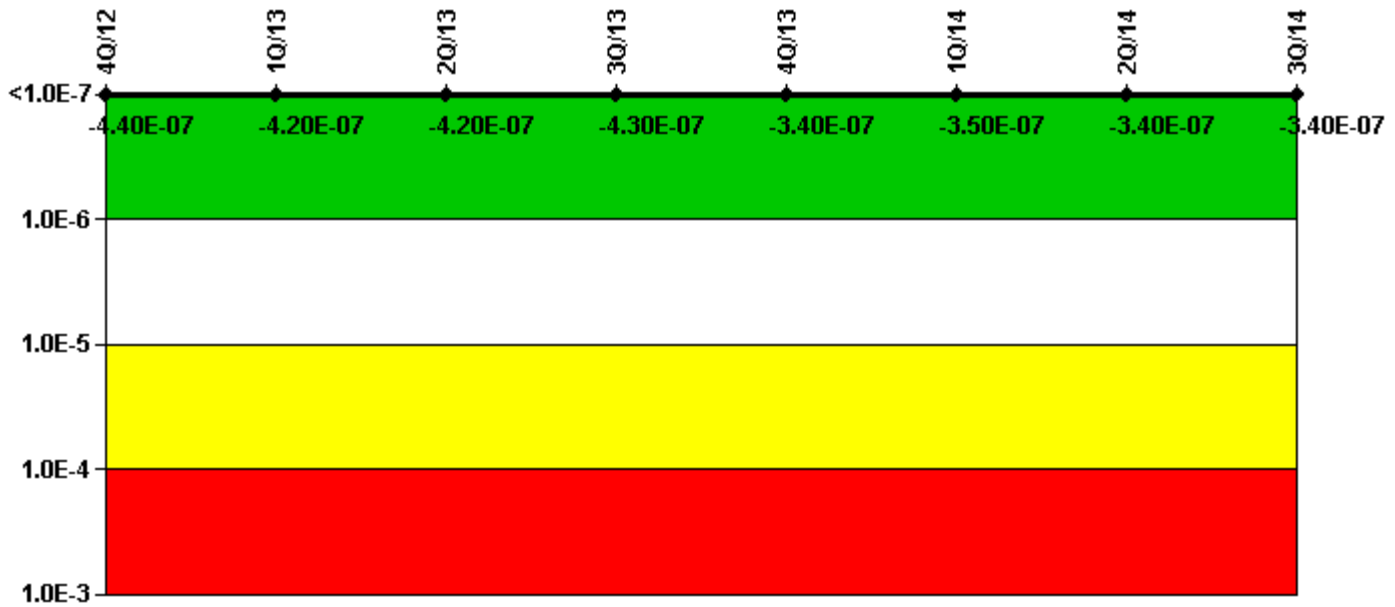
Mitigating Systems Performance Index, High Pressure Injection System	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
UAI ( $\Delta$ CDF)	1.26E-08	1.26E-08	1.26E-08	3.49E-09	1.50E-08	-1.54E-08	-1.65E-08	-2.95E-08
URI ( $\Delta$ CDF)	-9.27E-09	-9.27E-09	-9.27E-09	-9.27E-09	-9.27E-09	-9.27E-09	-9.27E-09	-9.27E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>3.30E-09</b>	<b>3.30E-09</b>	<b>3.30E-09</b>	<b>-5.80E-09</b>	<b>5.70E-09</b>	<b>-2.50E-08</b>	<b>-2.60E-08</b>	<b>-3.90E-08</b>

Licensee Comments:

4Q/12: Changed PRA Parameter(s).

4Q/12: 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	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
UAI ( $\Delta$ CDF)	-5.91E-08	-4.31E-08	-4.08E-08	-4.11E-08	4.25E-08	4.24E-08	2.79E-08	3.04E-08
URI ( $\Delta$ CDF)	-3.82E-07	-3.82E-07	-3.82E-07	-3.85E-07	-3.87E-07	-3.92E-07	-3.68E-07	-3.68E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.40E-07	-4.20E-07	-4.20E-07	-4.30E-07	-3.40E-07	-3.50E-07	-3.40E-07	-3.40E-07

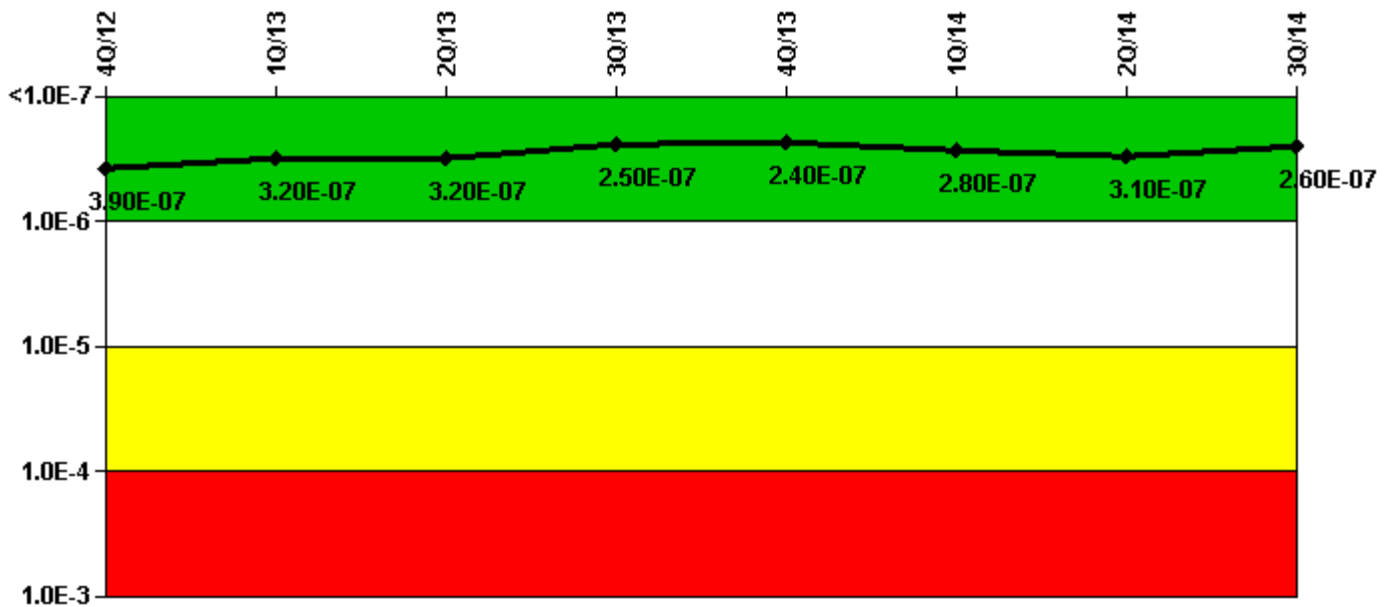
#### Licensee Comments:

1Q/13: U1-U2 Train A Cross-tie considered unavailable starting on 10/28/2011 when standing order 11-057 and 1/2BFR H.1 procedure revisions were issued to remove procedural guidance on use of the crosstie modification pending NRC approval. Reference IR#01257908.

4Q/12: Changed PRA Parameter(s).

4Q/12: 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	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
UAI (ΔCDF)	1.21E-07	5.14E-08	5.14E-08	-2.32E-08	-3.33E-08	9.21E-09	4.44E-08	-1.19E-08
URI (ΔCDF)	2.69E-07	2.69E-07	2.69E-07	2.69E-07	2.69E-07	2.69E-07	2.69E-07	2.69E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	3.90E-07	3.20E-07	3.20E-07	2.50E-07	2.40E-07	2.80E-07	3.10E-07	2.60E-07

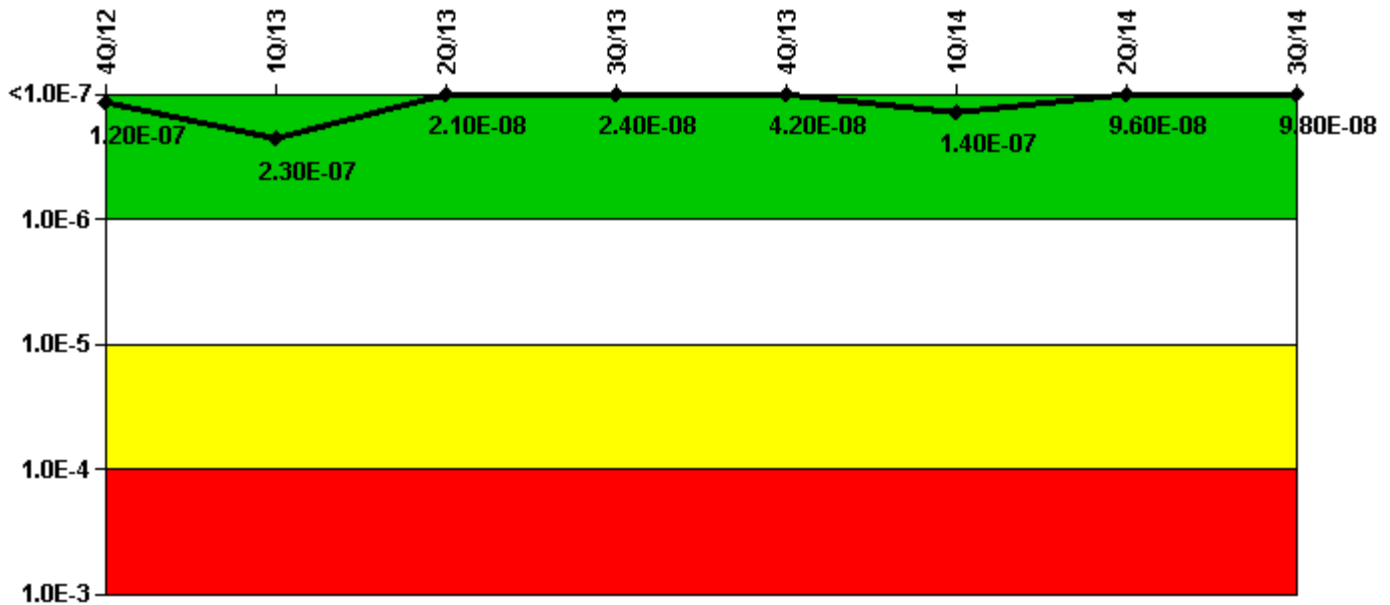
Licensee Comments:

4Q/12: Changed PRA Parameter(s).

4Q/12: 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	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
UAI ( $\Delta$ CDF)	1.63E-07	2.66E-07	4.86E-08	4.56E-08	5.74E-08	1.54E-07	9.93E-08	9.58E-08
URI ( $\Delta$ CDF)	-3.78E-08	-3.26E-08	-2.72E-08	-2.16E-08	-1.58E-08	-9.92E-09	-3.82E-09	2.49E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.20E-07	2.30E-07	2.10E-08	2.40E-08	4.20E-08	1.40E-07	9.60E-08	9.80E-08

Licensee Comments:

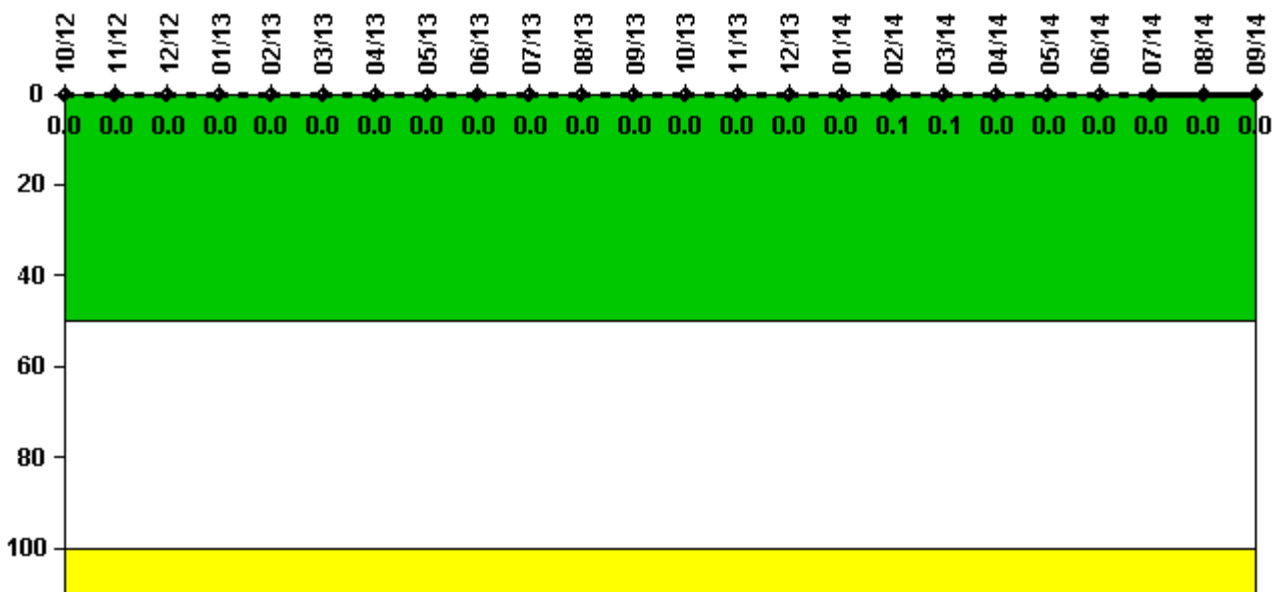
2Q/13: Changed PRA Parameter(s).

1Q/13: Planned work windows

4Q/12: Changed PRA Parameter(s).

4Q/12: Changed PRA Parameter(s).

### Reactor Coolant System Activity



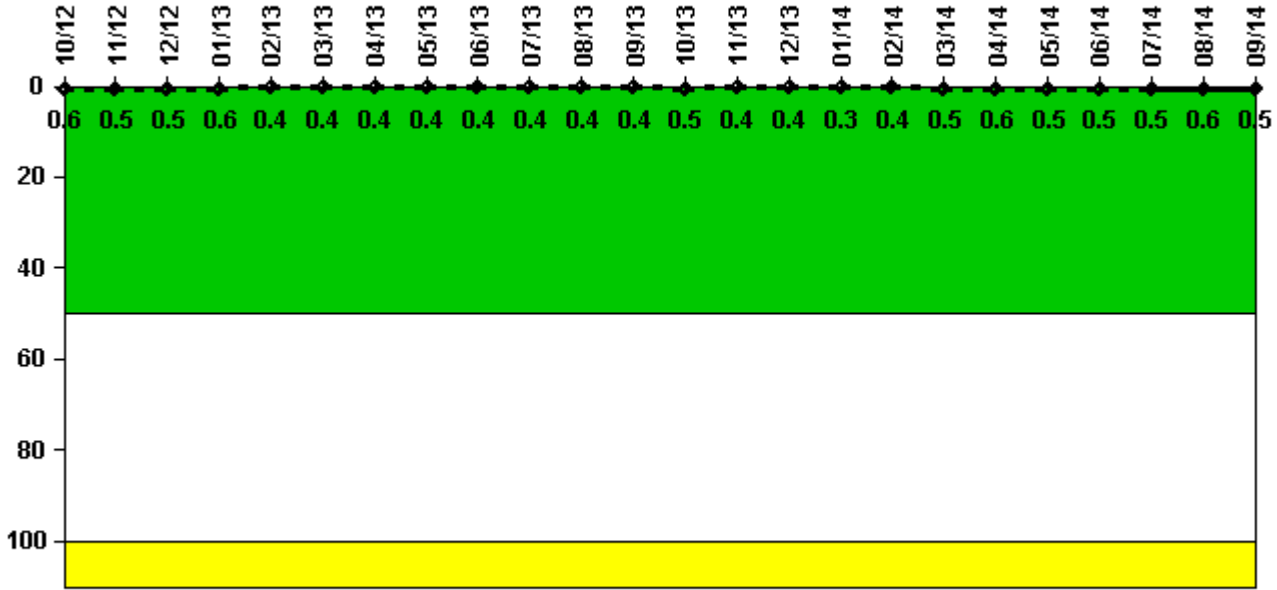
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Activity	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13	7/13	8/13	9/13
Maximum activity	0.000220	0.000238	0.000252	0.000265	0.000284	0.000300	0.000307	0.000335	0.000360	0.000367	0.000392	0.000406
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	10/13	11/13	12/13	1/14	2/14	3/14	4/14	5/14	6/14	7/14	8/14	9/14
Maximum activity	0.000418	0.000436	0.000453	0.000474	0.000504	0.000506	0.000168	0.000182	0.000196	0.000211	0.000224	0.000243
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	0.1	0.1	0	0	0	0	0	0

Licensee Comments: none

### Reactor Coolant System Leakage



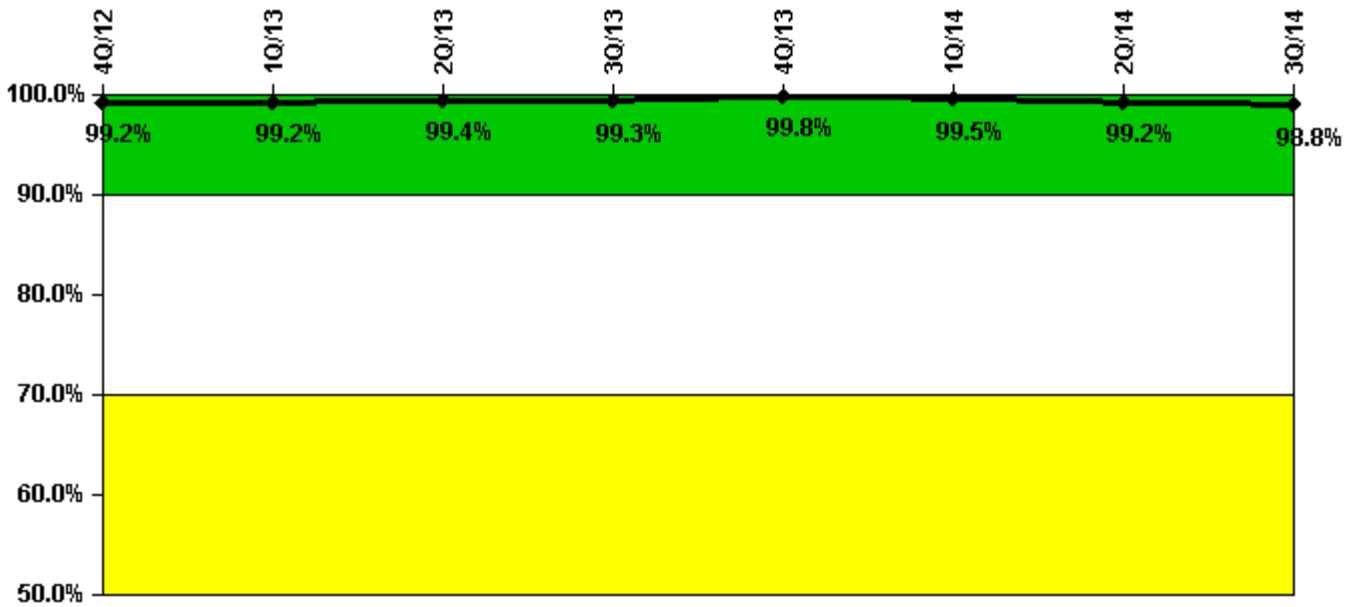
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Leakage	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13	7/13	8/13	9/13
Maximum leakage	0.060	0.050	0.050	0.060	0.040	0.040	0.040	0.040	0.040	0.040	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	<b>0.6</b>	<b>0.5</b>	<b>0.5</b>	<b>0.6</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>
Reactor Coolant System Leakage	10/13	11/13	12/13	1/14	2/14	3/14	4/14	5/14	6/14	7/14	8/14	9/14
Maximum leakage	0.050	0.040	0.040	0.030	0.040	0.050	0.060	0.050	0.050	0.050	0.060	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	<b>0.5</b>	<b>0.4</b>	<b>0.4</b>	<b>0.3</b>	<b>0.4</b>	<b>0.5</b>	<b>0.6</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.6</b>	<b>0.5</b>

Licensee Comments: none

### Drill/Exercise Performance



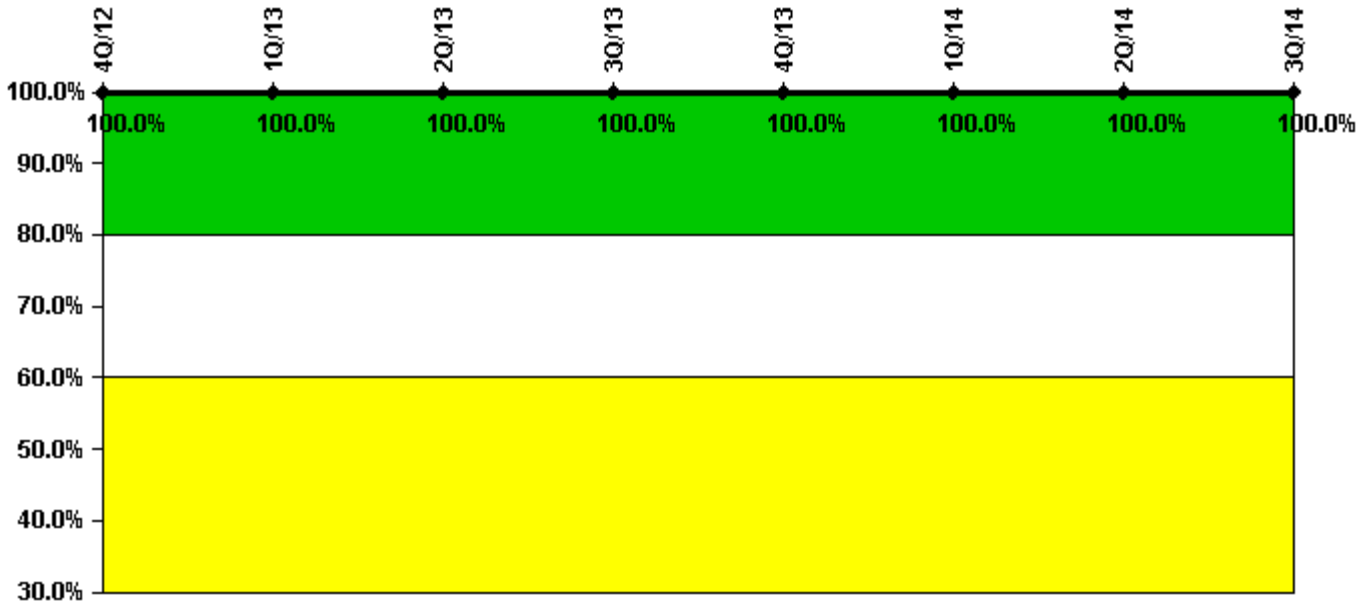
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
Successful opportunities	3.0	104.0	12.0	55.0	32.0	62.0	70.0	90.0
Total opportunities	3.0	104.0	12.0	55.0	32.0	64.0	71.0	92.0
Indicator value	99.2%	99.2%	99.4%	99.3%	99.8%	99.5%	99.2%	98.8%

Licensee Comments: none

### ERO Drill Participation



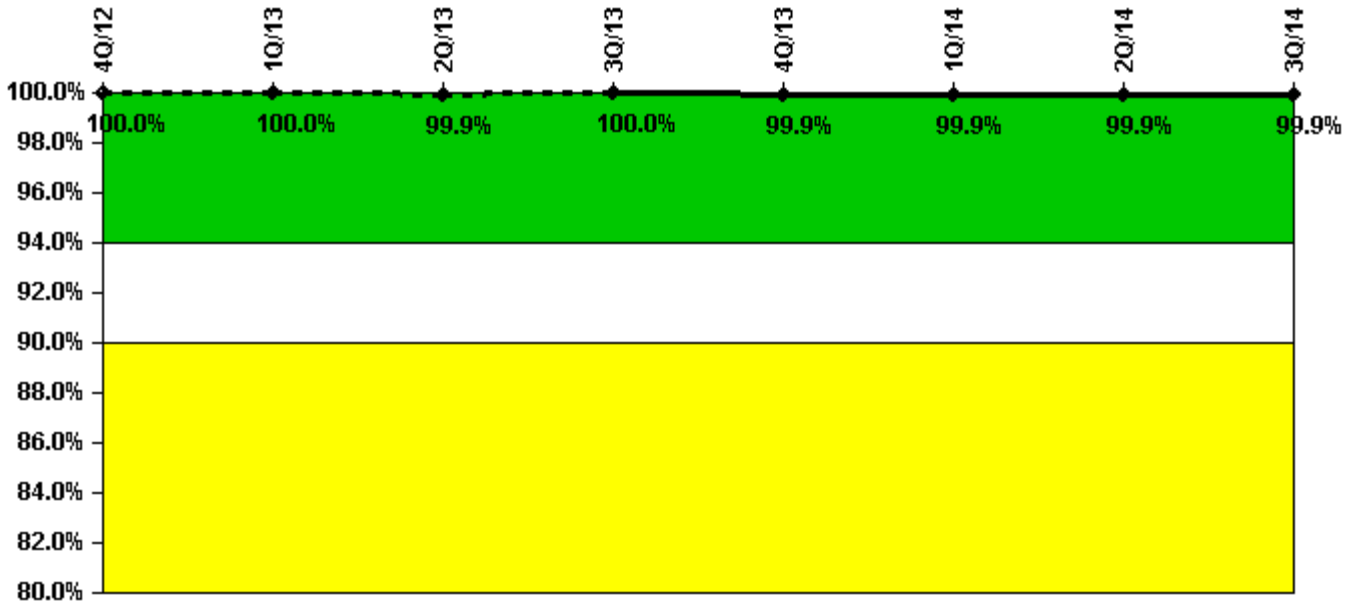
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
Participating Key personnel	78.0	78.0	76.0	71.0	74.0	77.0	79.0	78.0
Total Key personnel	78.0	78.0	76.0	71.0	74.0	77.0	79.0	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



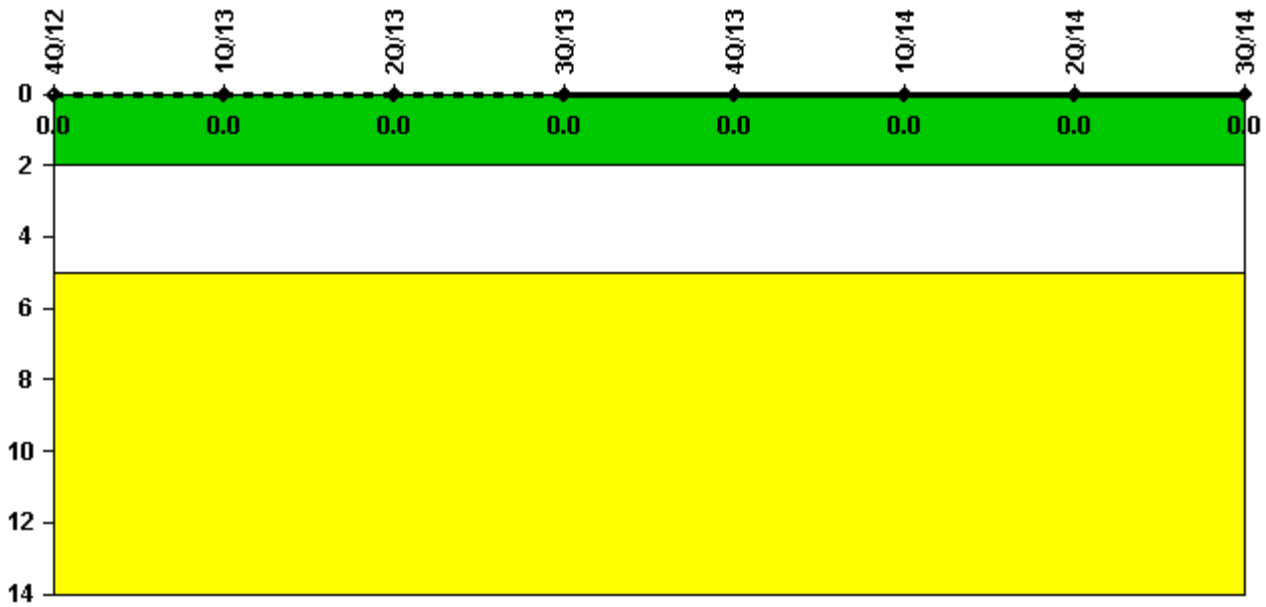
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
Successful siren-tests	3904	3902	3900	3903	3900	3841	3898	3896
Total sirens-tests	3904	3904	3904	3904	3904	3843	3904	3904
Indicator value	100.0%	100.0%	99.9%	100.0%	99.9%	99.9%	99.9%	99.9%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



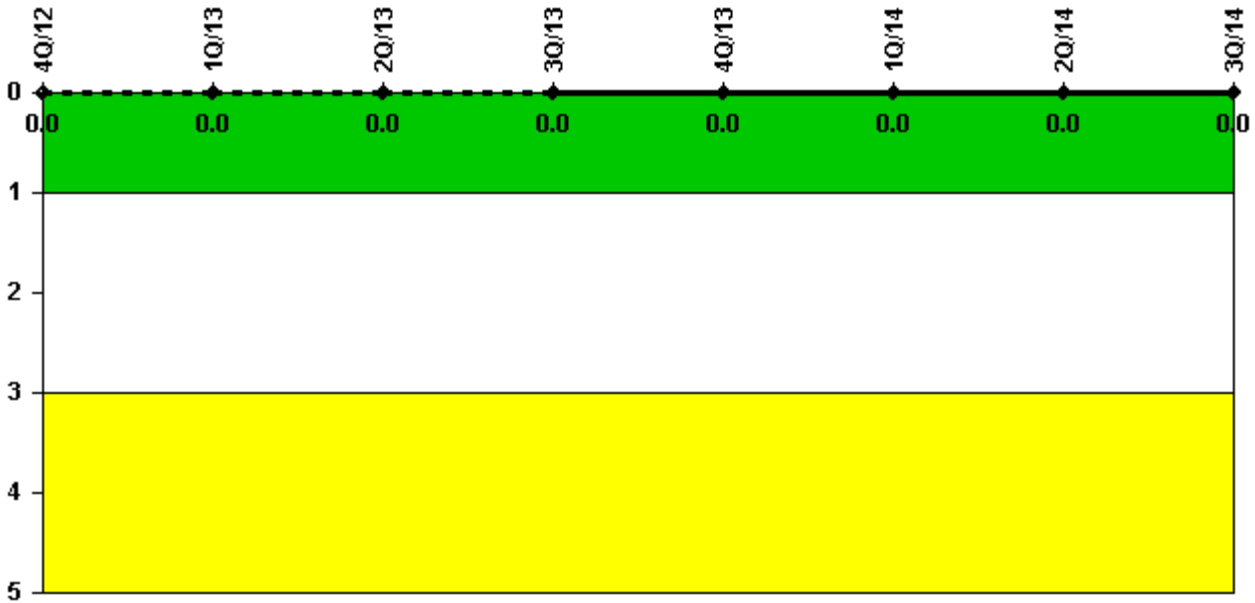
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
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	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14	3Q/14
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: November 3, 2014*