

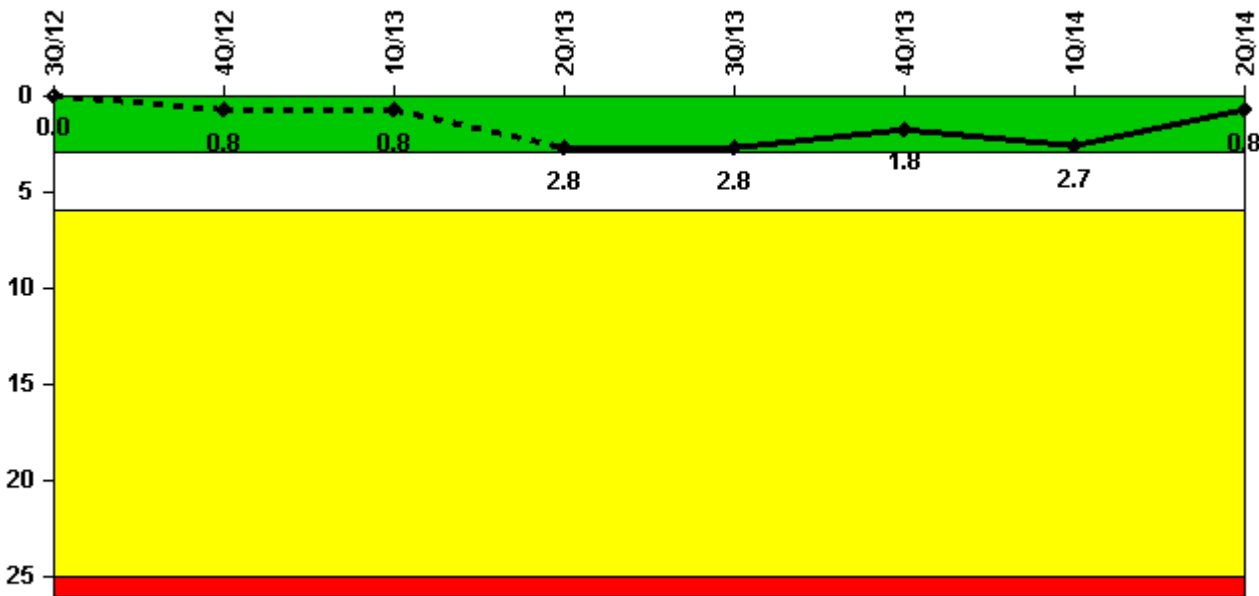
## North Anna 2

### 2Q/2014 Performance Indicators

The solid trend line represents the current reporting period.

Licensee's General Comments: The North Anna PRA model Revision 7 was approved on 10/22/13 with a corresponding MSPI coefficient update approved on 12/12/13. The PRA model revision was a periodic update to the model which included a data update, incorporation of recent design changes, and updating the internal flooding analysis. These revised MSPI coefficients were not entered into CDE as intended for the first quarter 2014 period. Subsequently, an error was discovered in those MSPI coefficients due to under-estimating the unavailability hours of the charging pumps. Corrected MSPI coefficients were calculated and approved on 7/9/14. Since the second quarter 2014 period is not reported until 7/21/14, first quarter 2014 is still the current reporting period. Therefore, in accordance with NEI 99-02, the CDE MSPI coefficients for the first quarter 2014 are being revised based on the 7/9/14 values in order to correctly calculate the indicators for the current reporting period. There are no color changes associated with this update to the MSPI Coefficients.

**Unplanned Scrams per 7000 Critical Hrs**



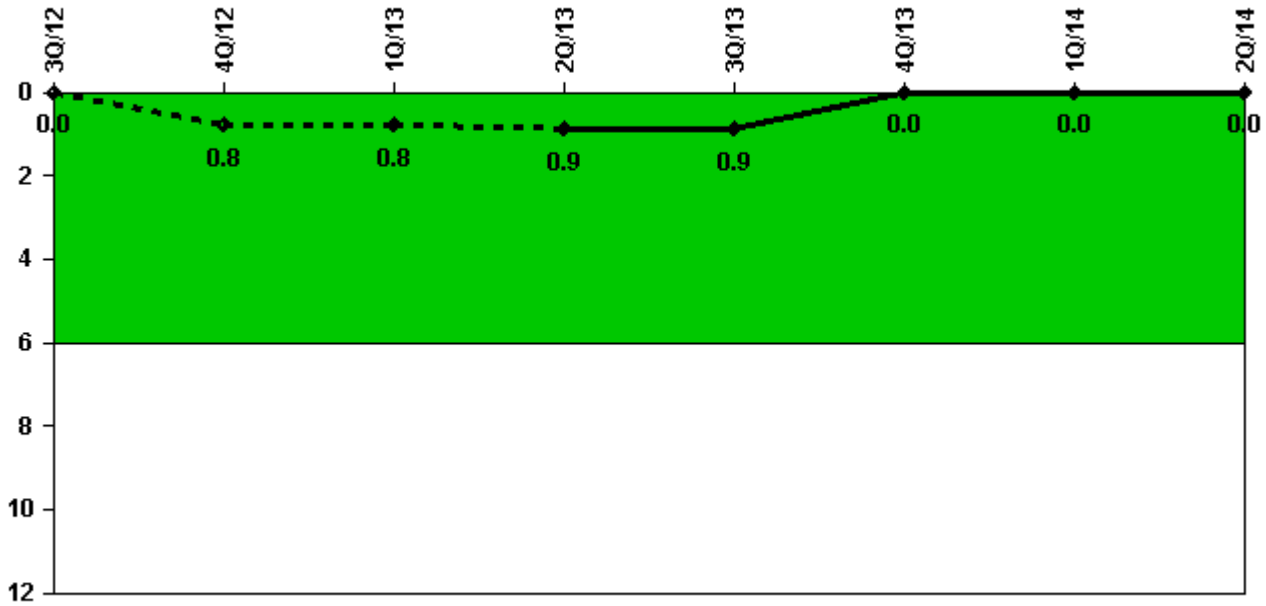
**Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0**

**Notes**

Unplanned Scrams per 7000 Critical Hrs	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Unplanned scrams	0	1.0	0	2.0	0	0	1.0	0
Critical hours	2208.0	1908.5	2159.0	1099.1	2208.0	2209.0	2130.7	2184.0
<b>Indicator value</b>	<b>0</b>	<b>0.8</b>	<b>0.8</b>	<b>2.8</b>	<b>2.8</b>	<b>1.8</b>	<b>2.7</b>	<b>0.8</b>

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



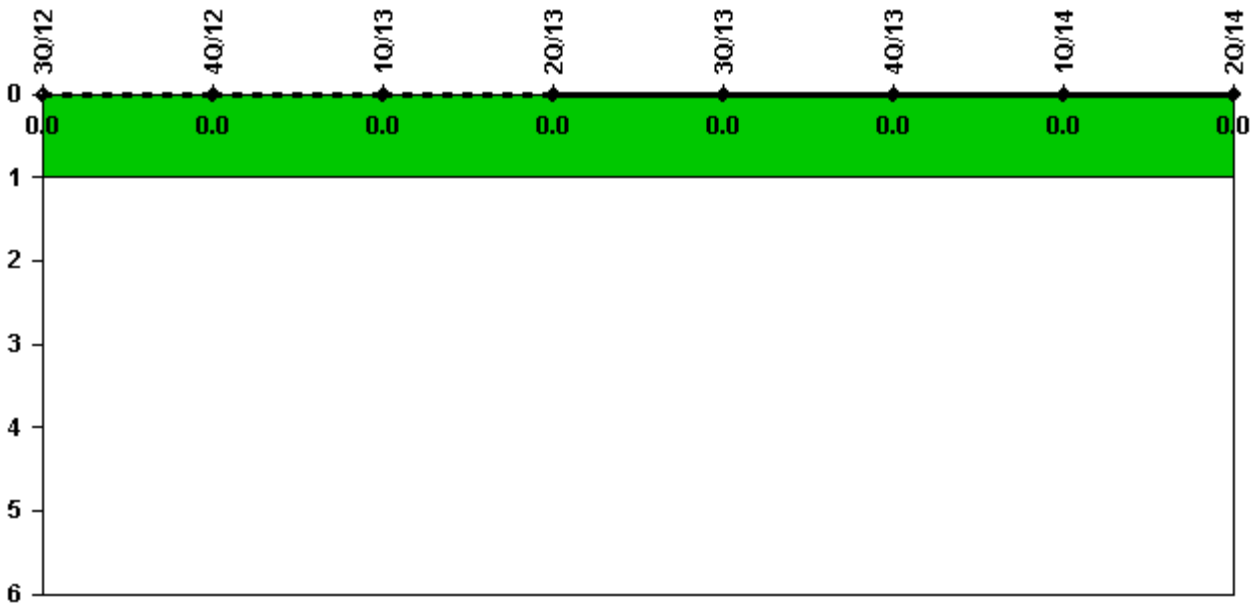
Thresholds: White > 6.0

### Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Unplanned power changes	0	1.0	0	0	0	0	0	0
Critical hours	2208.0	1908.5	2159.0	1099.1	2208.0	2209.0	2130.7	2184.0
<b>Indicator value</b>	<b>0</b>	<b>0.8</b>	<b>0.8</b>	<b>0.9</b>	<b>0.9</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

### Unplanned Scrams with Complications



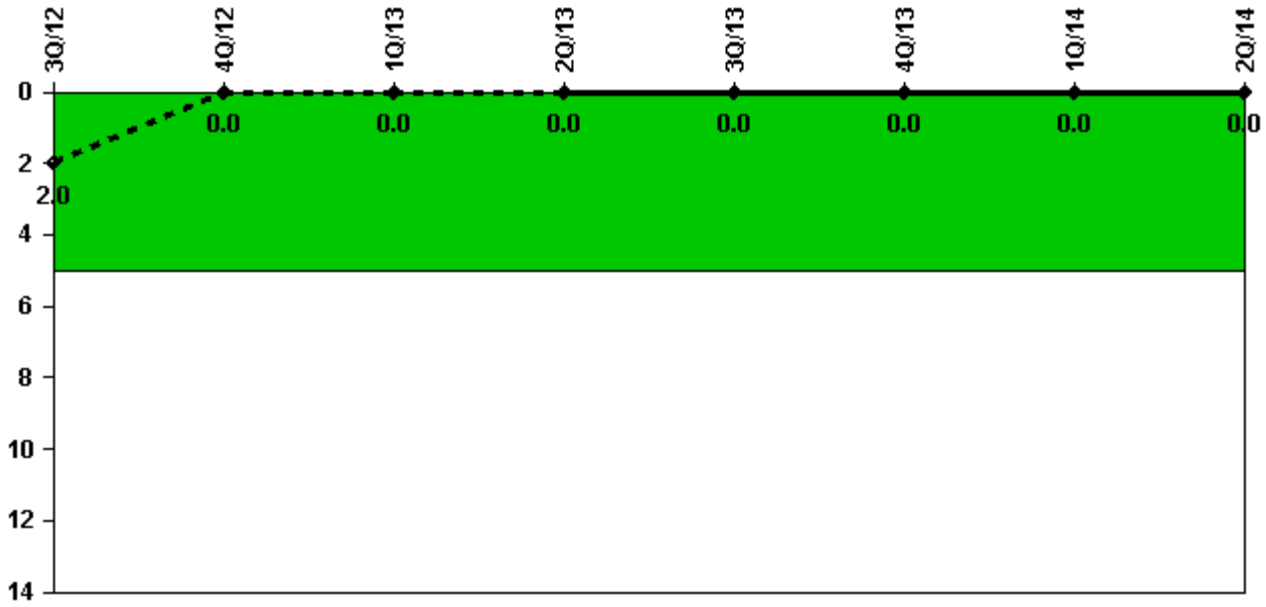
Thresholds: White > 1.0

#### Notes

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



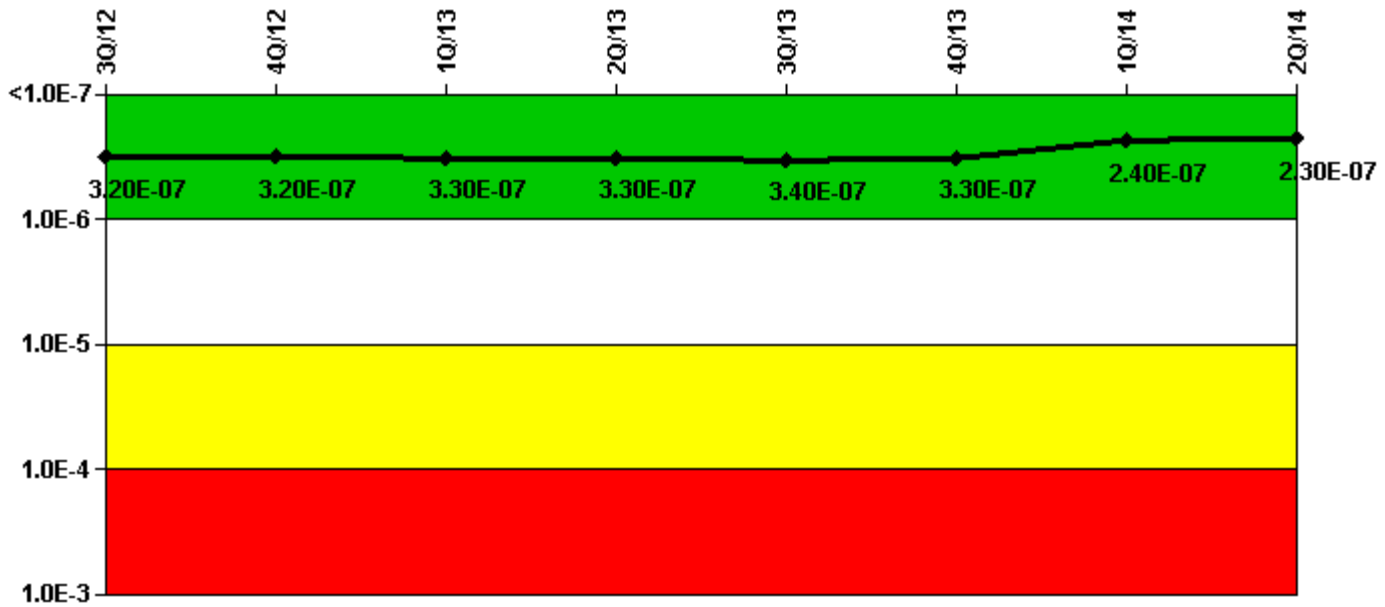
Thresholds: White > 5.0

#### Notes

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

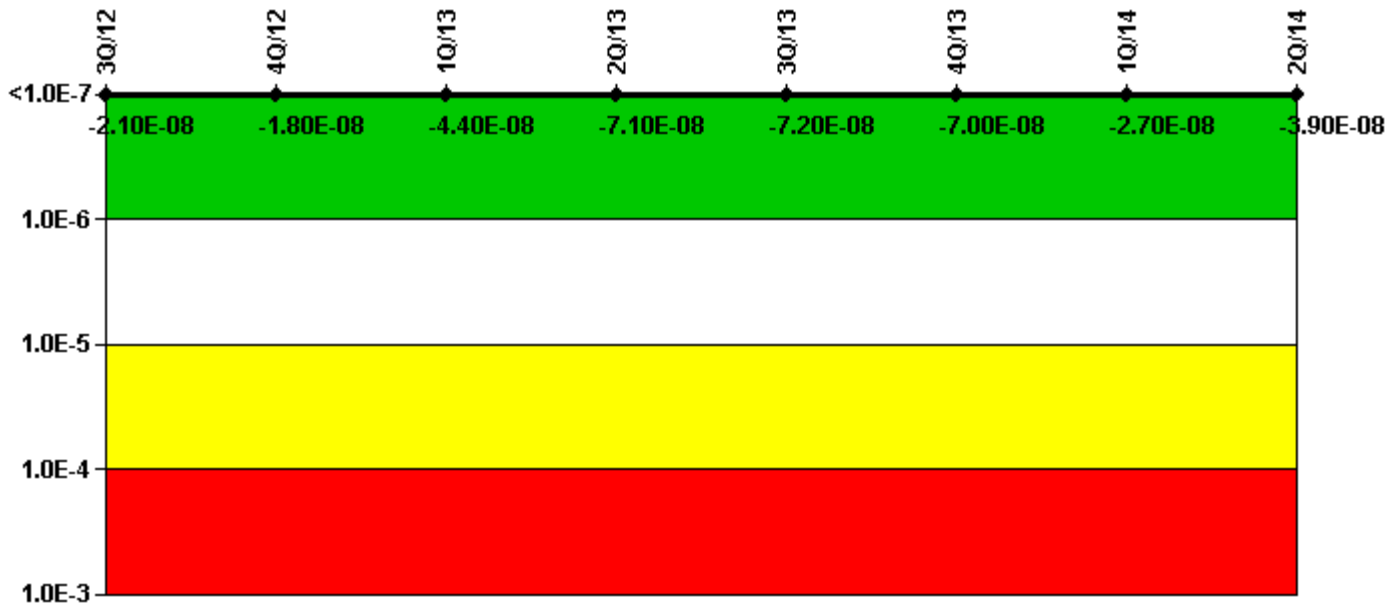
#### Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
UAI ( $\Delta$ CDF)	-1.39E-08	-1.39E-08	1.70E-09	2.73E-09	3.30E-09	2.28E-09	-1.17E-08	-1.17E-08
URI ( $\Delta$ CDF)	3.29E-07	3.32E-07	3.32E-07	3.32E-07	3.32E-07	3.32E-07	2.48E-07	2.43E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	3.20E-07	3.20E-07	3.30E-07	3.30E-07	3.40E-07	3.30E-07	2.40E-07	2.30E-07

Licensee Comments:

1Q/14: 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

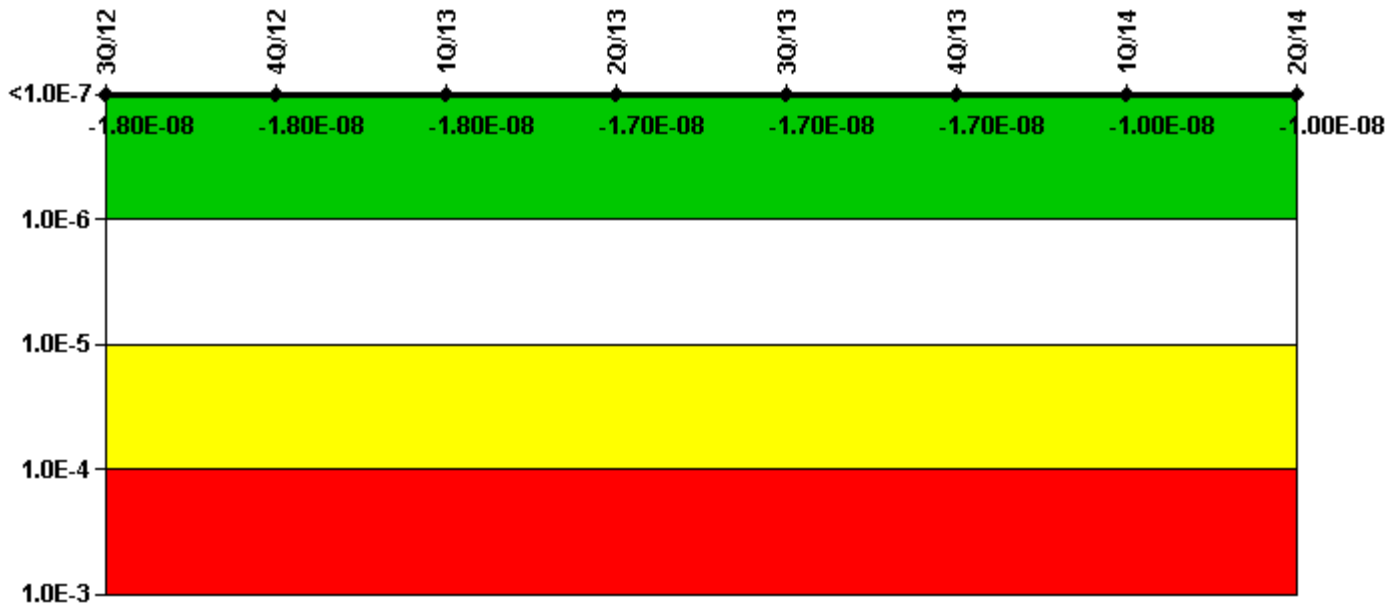
#### Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
UAI ( $\Delta$ CDF)	-6.72E-08	-6.39E-08	-6.06E-08	-5.87E-08	-5.93E-08	-5.72E-08	-1.35E-08	-2.51E-08
URI ( $\Delta$ CDF)	4.59E-08	4.60E-08	1.67E-08	-1.27E-08	-1.27E-08	-1.27E-08	-1.30E-08	-1.35E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.10E-08	-1.80E-08	-4.40E-08	-7.10E-08	-7.20E-08	-7.00E-08	-2.70E-08	-3.90E-08

Licensee Comments:

1Q/14: Changed PRA Parameter(s).

### Mitigating Systems Performance Index, Heat Removal System



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

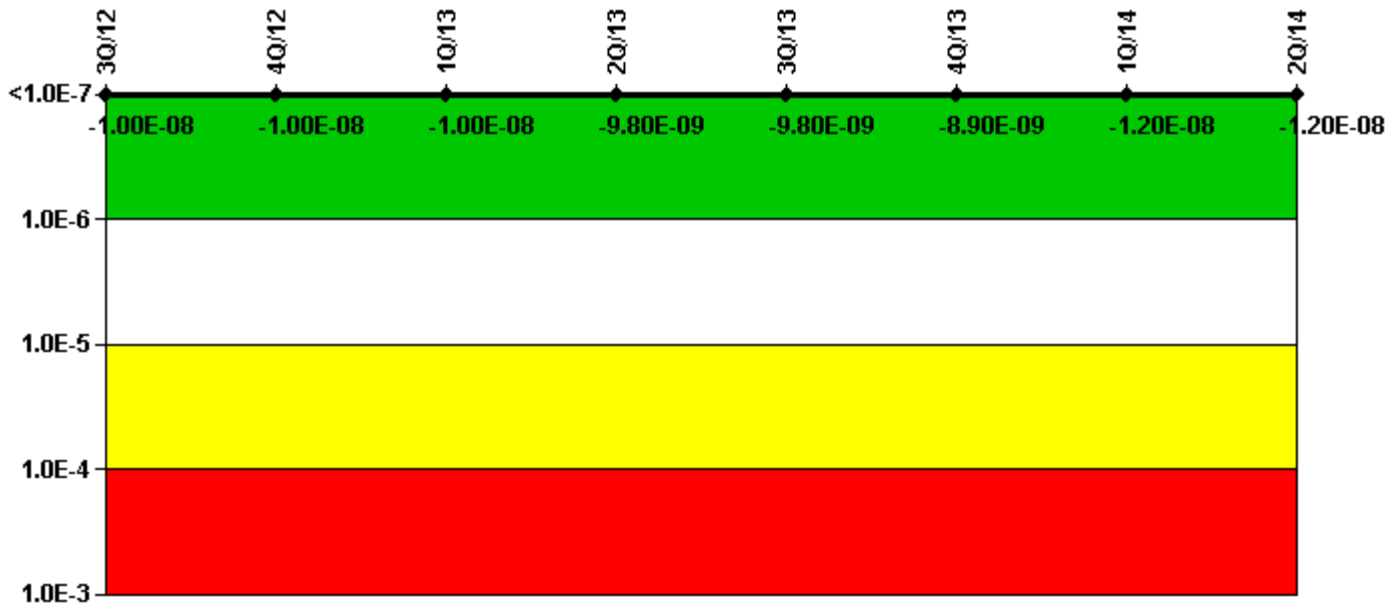
#### Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
UAI ( $\Delta$ CDF)	-5.23E-09	-5.23E-09	-5.23E-09	-5.23E-09	-5.23E-09	-5.23E-09	-2.77E-09	-2.77E-09
URI ( $\Delta$ CDF)	-1.24E-08	-1.24E-08	-1.24E-08	-1.19E-08	-1.19E-08	-1.19E-08	-7.45E-09	-7.50E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.80E-08	-1.80E-08	-1.80E-08	-1.70E-08	-1.70E-08	-1.70E-08	-1.00E-08	-1.00E-08

Licensee Comments:

1Q/14: 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

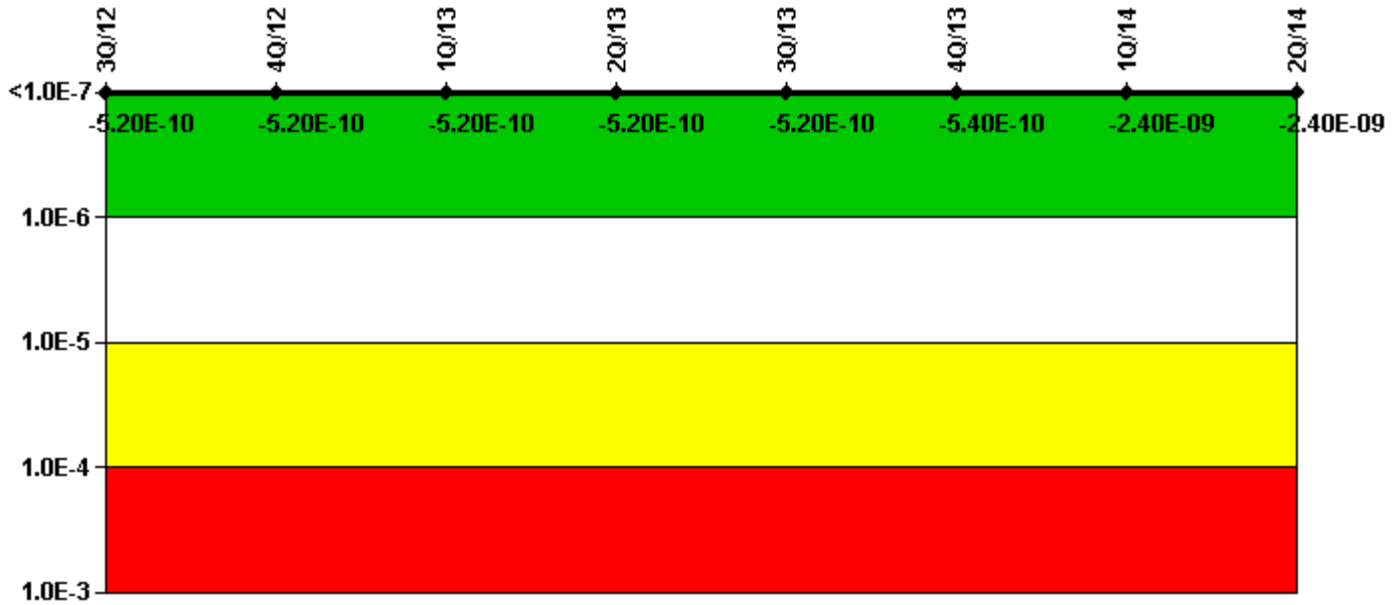
Mitigating Systems Performance Index, Residual Heat Removal System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
UAI ( $\Delta$ CDF)	-2.69E-09	-2.68E-09	-2.69E-09	-2.68E-09	-2.68E-09	-1.85E-09	-3.75E-09	-3.75E-09
URI ( $\Delta$ CDF)	-7.75E-09	-7.75E-09	-7.53E-09	-7.09E-09	-7.09E-09	-7.09E-09	-8.36E-09	-8.36E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.00E-08	-1.00E-08	-1.00E-08	-9.80E-09	-9.80E-09	-8.90E-09	-1.20E-08	-1.20E-08

Licensee Comments:

1Q/14: Changed PRA Parameter(s).



### Mitigating Systems Performance Index, Cooling Water Systems



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

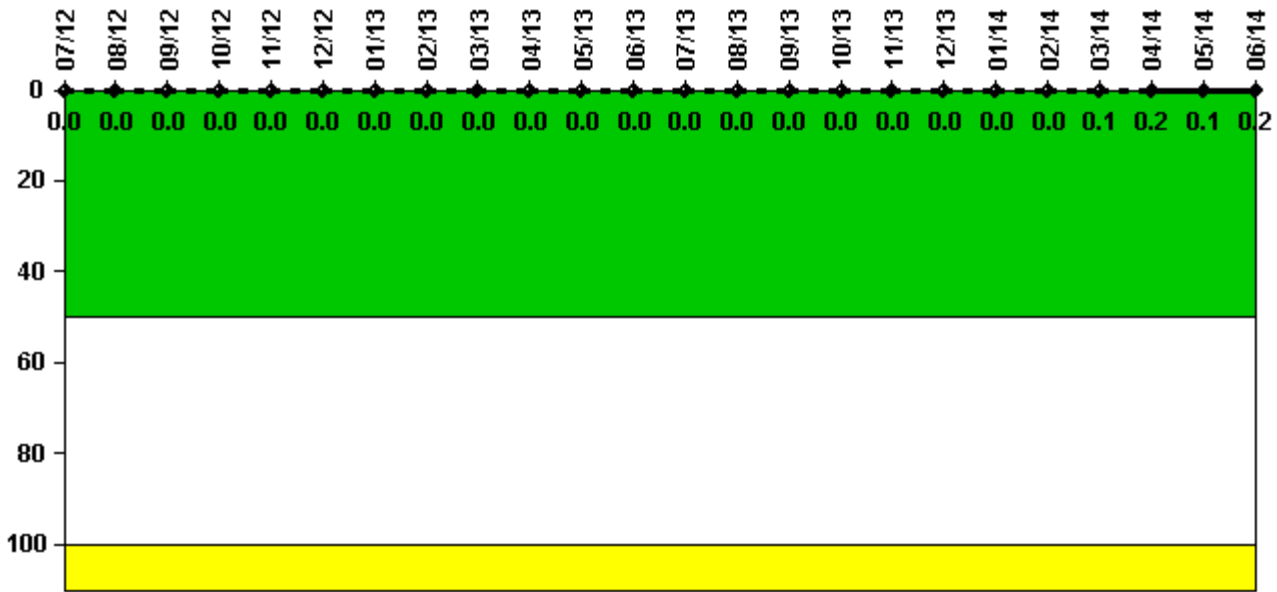
#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
UAI ( $\Delta$ CDF)	-6.18E-11	-6.17E-11	-6.18E-11	-6.17E-11	-6.17E-11	-7.50E-11	-2.30E-10	-2.30E-10
URI ( $\Delta$ CDF)	-4.62E-10	-4.62E-10	-4.62E-10	-4.62E-10	-4.62E-10	-4.62E-10	-2.17E-09	-2.17E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.20E-10	-5.20E-10	-5.20E-10	-5.20E-10	-5.20E-10	-5.40E-10	-2.40E-09	-2.40E-09

Licensee Comments:

1Q/14: Changed PRA Parameter(s).

### Reactor Coolant System Activity



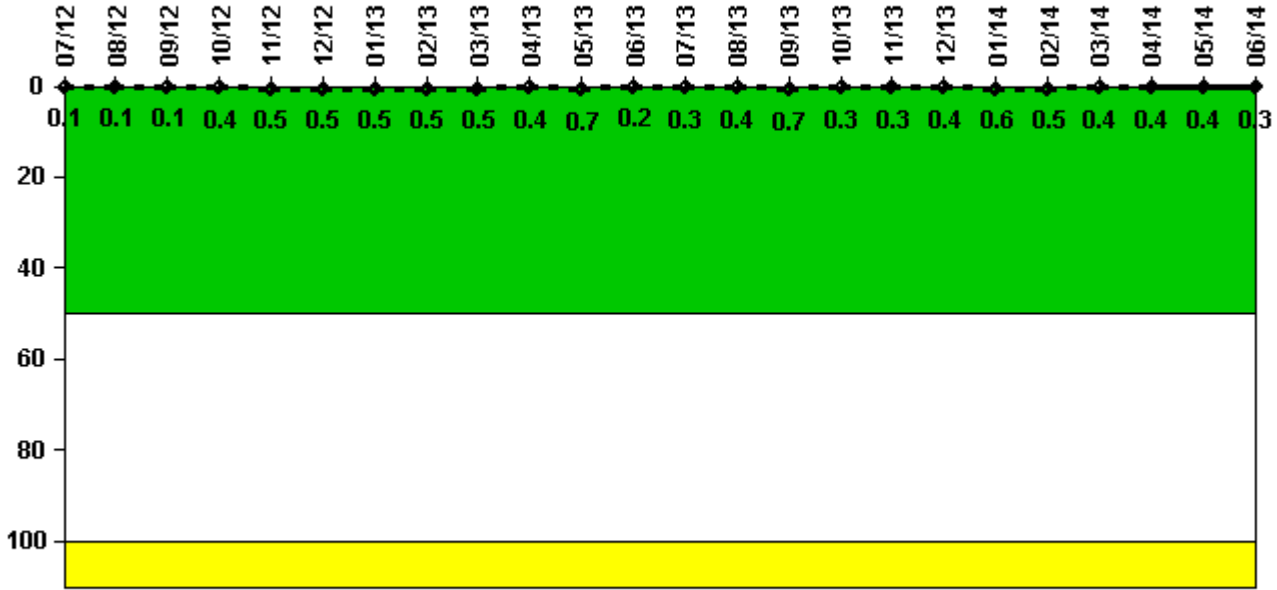
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Activity	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13
Maximum activity	0.000189	0.000206	0.000219	0.000262	0.000230	0.000222	0.000235	0.000245	0.000256	0.000274	0.000161	0.000139
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	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14	4/14	5/14	6/14
Maximum activity	0.000230	0.000155	0.000168	0.000167	0.000193	0.000202	0.000207	0.000293	0.000621	0.001770	0.001470	0.001660
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	0.1	0.2	0.1	0.2

Licensee Comments: none

### Reactor Coolant System Leakage



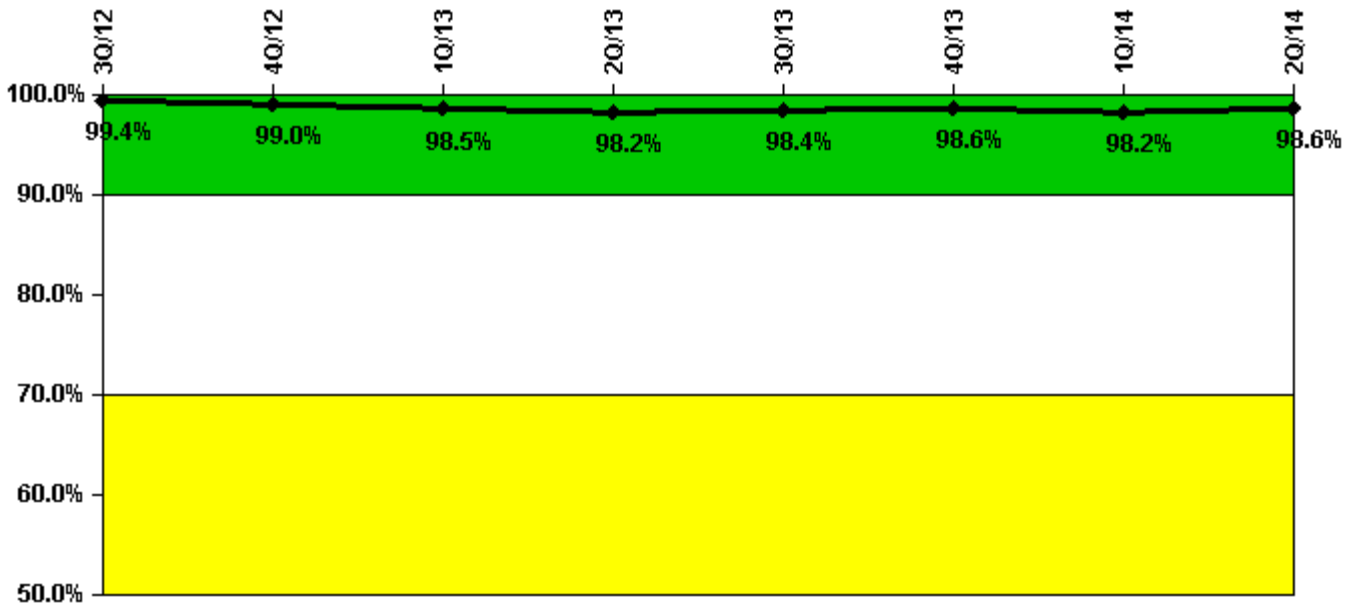
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Leakage	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13	4/13	5/13	6/13
Maximum leakage	0.014	0.012	0.007	0.036	0.049	0.049	0.048	0.047	0.046	0.044	0.072	0.018
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	0.1	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.7	0.2
Reactor Coolant System Leakage	7/13	8/13	9/13	10/13	11/13	12/13	1/14	2/14	3/14	4/14	5/14	6/14
Maximum leakage	0.027	0.036	0.067	0.033	0.034	0.035	0.056	0.049	0.036	0.039	0.036	0.026
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	0.3	0.4	0.7	0.3	0.3	0.4	0.6	0.5	0.4	0.4	0.4	0.3

Licensee Comments: none

### Drill/Exercise Performance



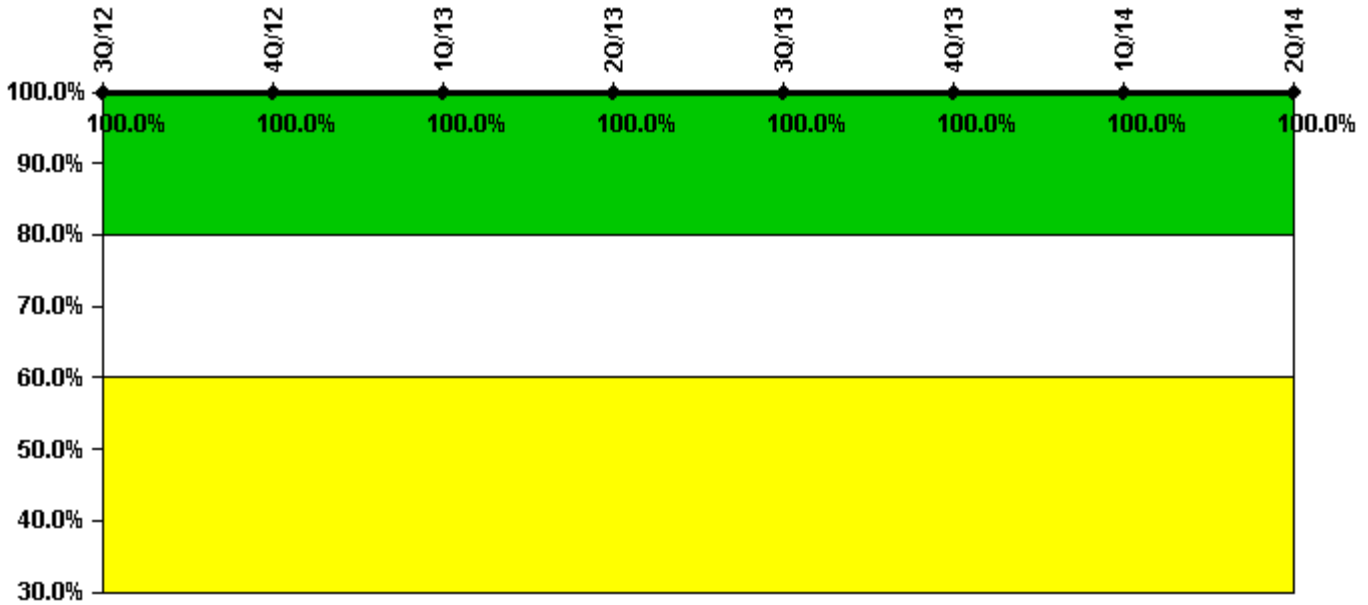
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Successful opportunities	109.0	8.0	26.0	12.0	35.0	57.0	20.0	7.0
Total opportunities	110.0	9.0	27.0	12.0	35.0	57.0	21.0	7.0
Indicator value	99.4%	99.0%	98.5%	98.2%	98.4%	98.6%	98.2%	98.6%

Licensee Comments: none

### ERO Drill Participation



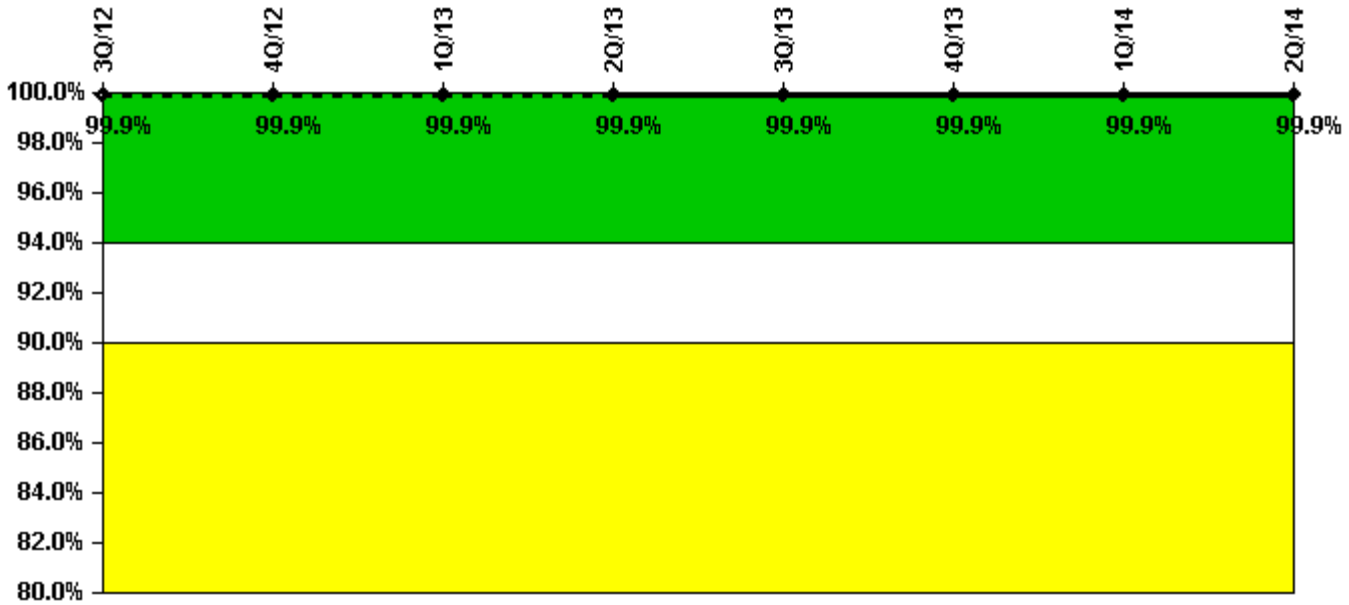
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Participating Key personnel	164.0	163.0	167.0	170.0	168.0	166.0	170.0	166.0
Total Key personnel	164.0	163.0	167.0	170.0	168.0	166.0	170.0	166.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

### Alert & Notification System



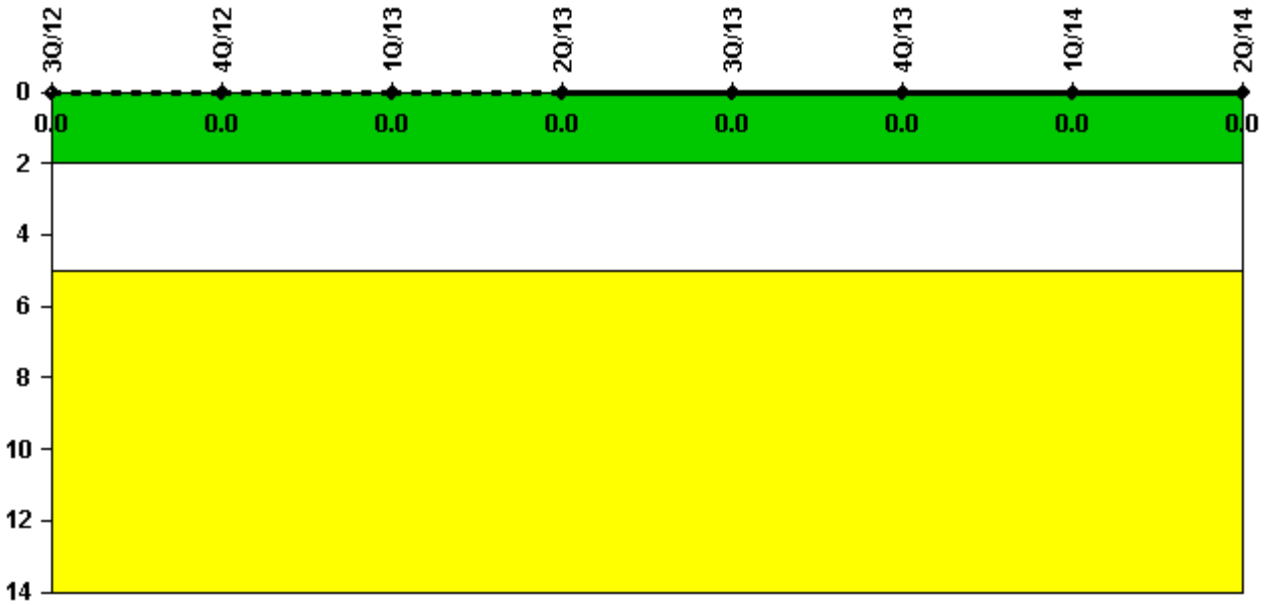
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/14
Successful siren-tests	475	476	476	475	475	476	476	476
Total sirens-tests	476	476	476	476	476	476	476	476
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



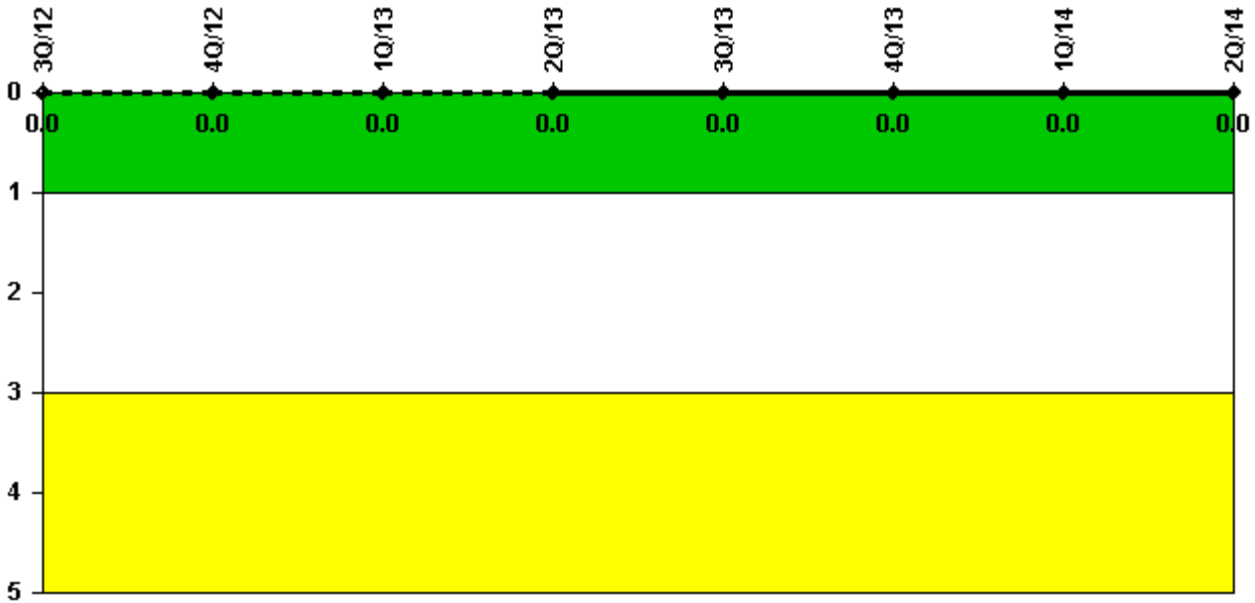
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/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	3Q/12	4Q/12	1Q/13	2Q/13	3Q/13	4Q/13	1Q/14	2Q/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: July 31, 2014*