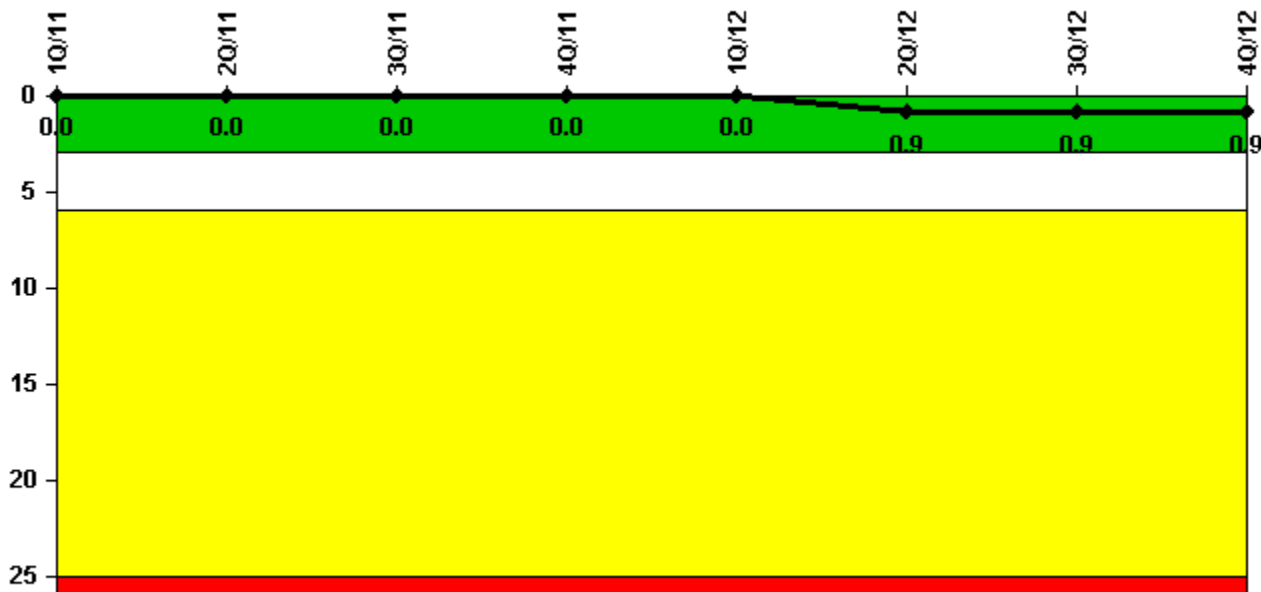


## D.C. Cook 2

### 4Q/2012 Performance Indicators

Licensee's General Comments: none

#### Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

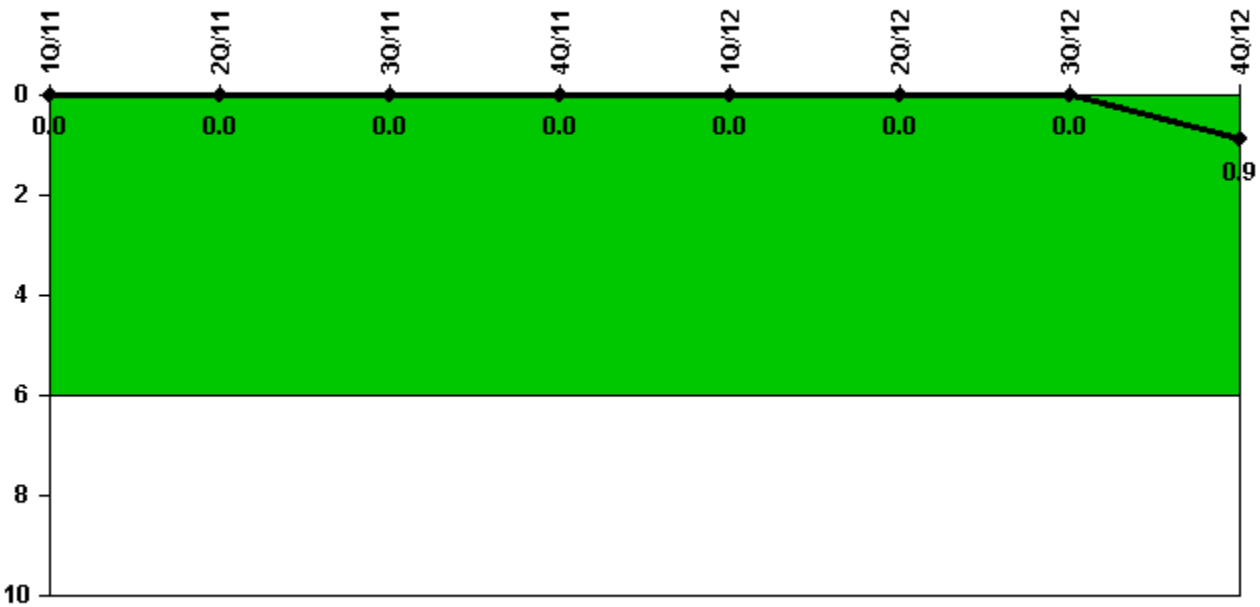
#### Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Unplanned scrams	0	0	0	0	0	1.0	0	0
Critical hours	2159.0	2184.0	2208.0	2209.0	1919.0	1510.6	2208.0	2209.0
Indicator value	0	0	0	0	0	0.9	0.9	0.9

Licensee Comments:

2Q/12: On April 30, the reactor automatically tripped due to a main generator trip caused by an incorrect protective relay setting.

### Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

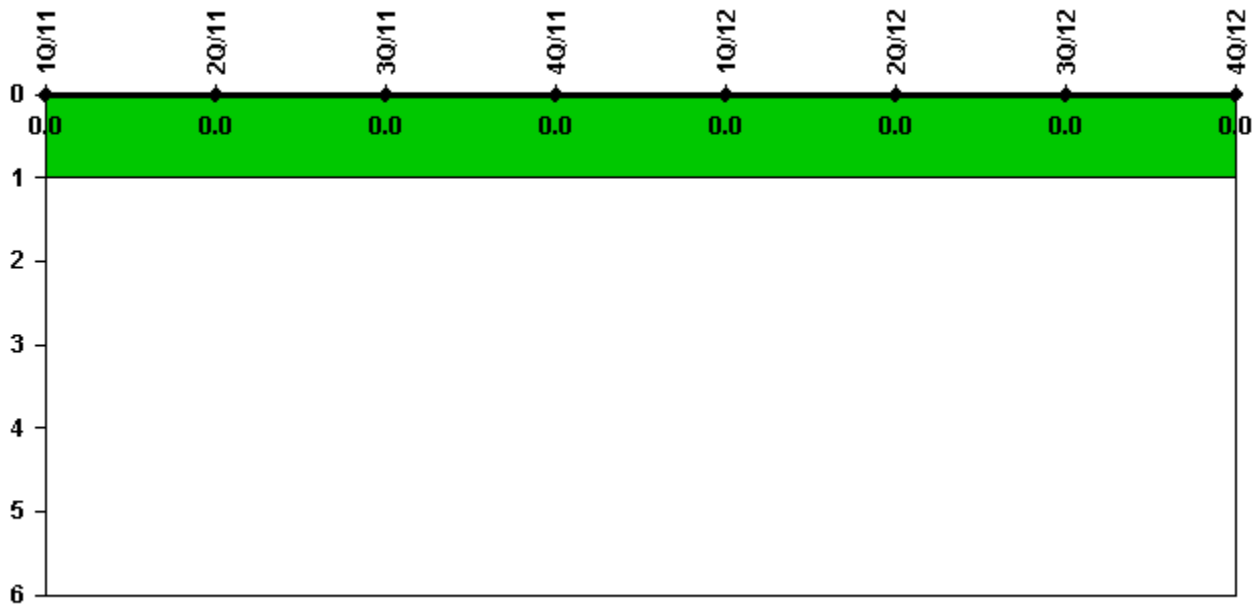
#### Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Unplanned power changes	0	0	0	0	0	0	0	1.0
Critical hours	2159.0	2184.0	2208.0	2209.0	1919.0	1510.6	2208.0	2209.0
<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>0.9</b>

Licensee Comments:

4Q/12: Downpower to 19% due to 2-BLP-130, Steam Generator Narrow Range Level Transmitter, leak on 11/28/12.

### Unplanned Scrams with Complications



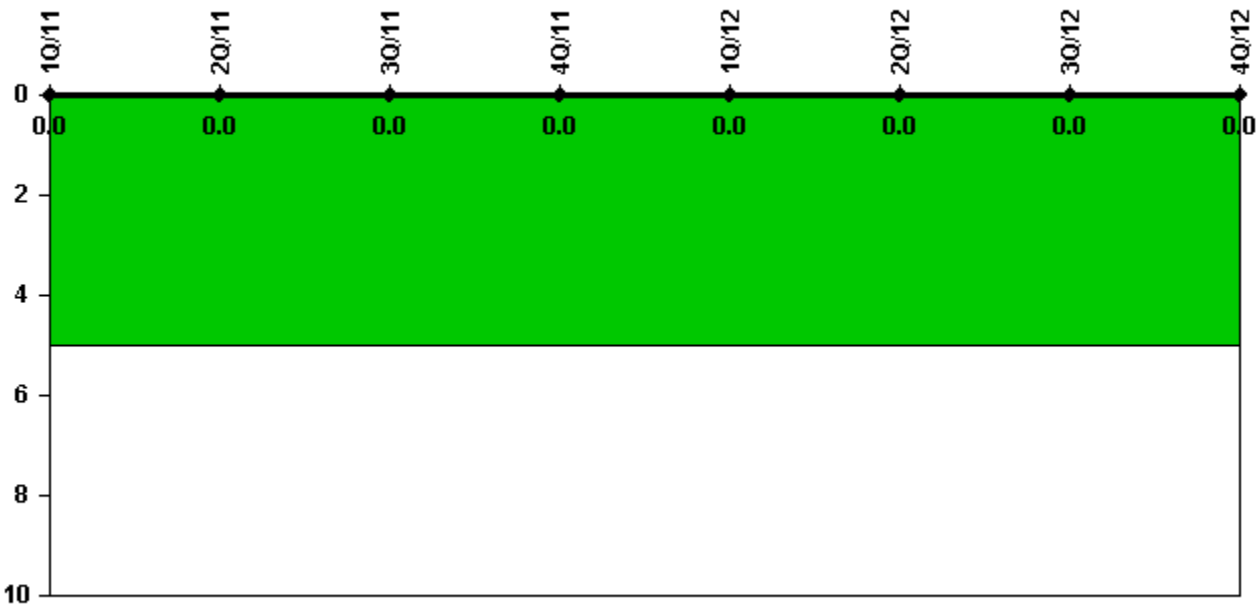
Thresholds: White > 1.0

#### Notes

Unplanned Scrams with Complications	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
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)



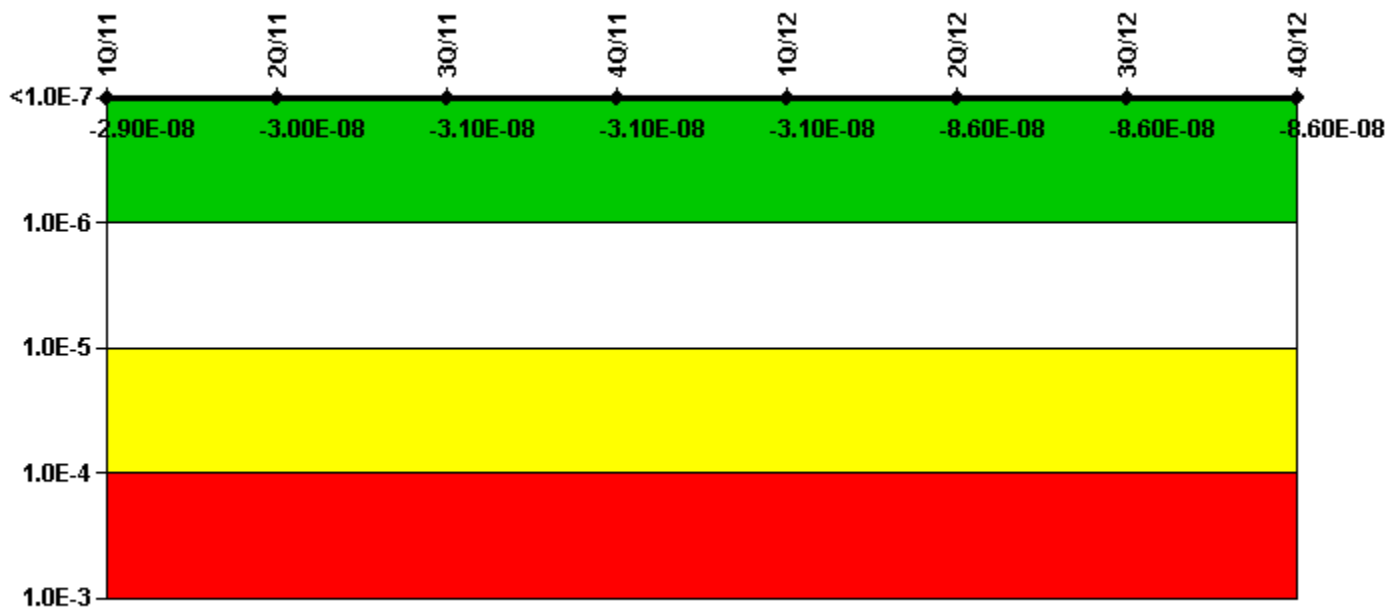
Thresholds: White > 5.0

#### Notes

Safety System Functional Failures (PWR)	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
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



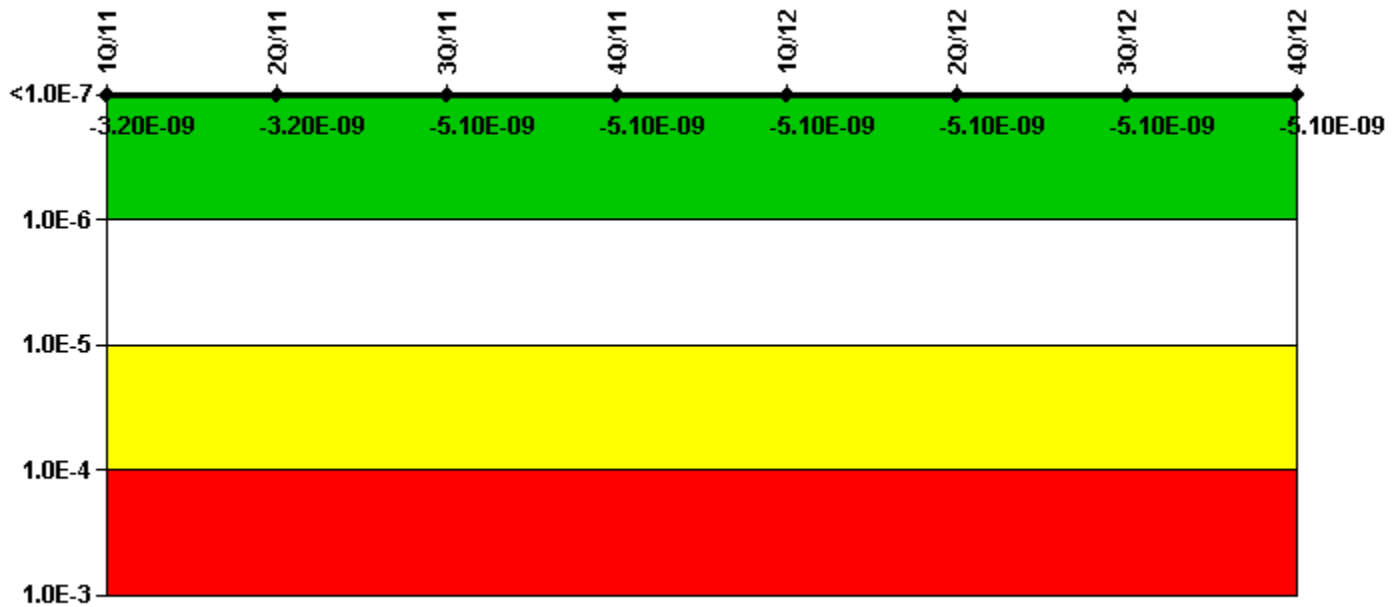
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
UAI ( $\Delta$ CDF)	6.00E-10	3.07E-10	-2.13E-10	-2.39E-10	-2.32E-10	2.06E-10	-5.99E-11	-6.18E-11
URI ( $\Delta$ CDF)	-2.99E-08	-2.99E-08	-3.11E-08	-3.11E-08	-3.11E-08	-8.64E-08	-8.64E-08	-8.64E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	<b>-2.90E-08</b>	<b>-3.00E-08</b>	<b>-3.10E-08</b>	<b>-3.10E-08</b>	<b>-3.10E-08</b>	<b>-8.60E-08</b>	<b>-8.60E-08</b>	<b>-8.60E-08</b>

Licensee Comments: none

### 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	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
UAI ( $\Delta$ CDF)	-2.66E-11	-2.66E-11	-2.66E-11	-2.66E-11	-2.66E-11	-2.66E-11	-2.66E-11	-2.66E-11
URI ( $\Delta$ CDF)	-3.19E-09	-3.19E-09	-5.04E-09	-5.04E-09	-5.04E-09	-5.04E-09	-5.04E-09	-5.04E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.20E-09	-3.20E-09	-5.10E-09	-5.10E-09	-5.10E-09	-5.10E-09	-5.10E-09	-5.10E-09

Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



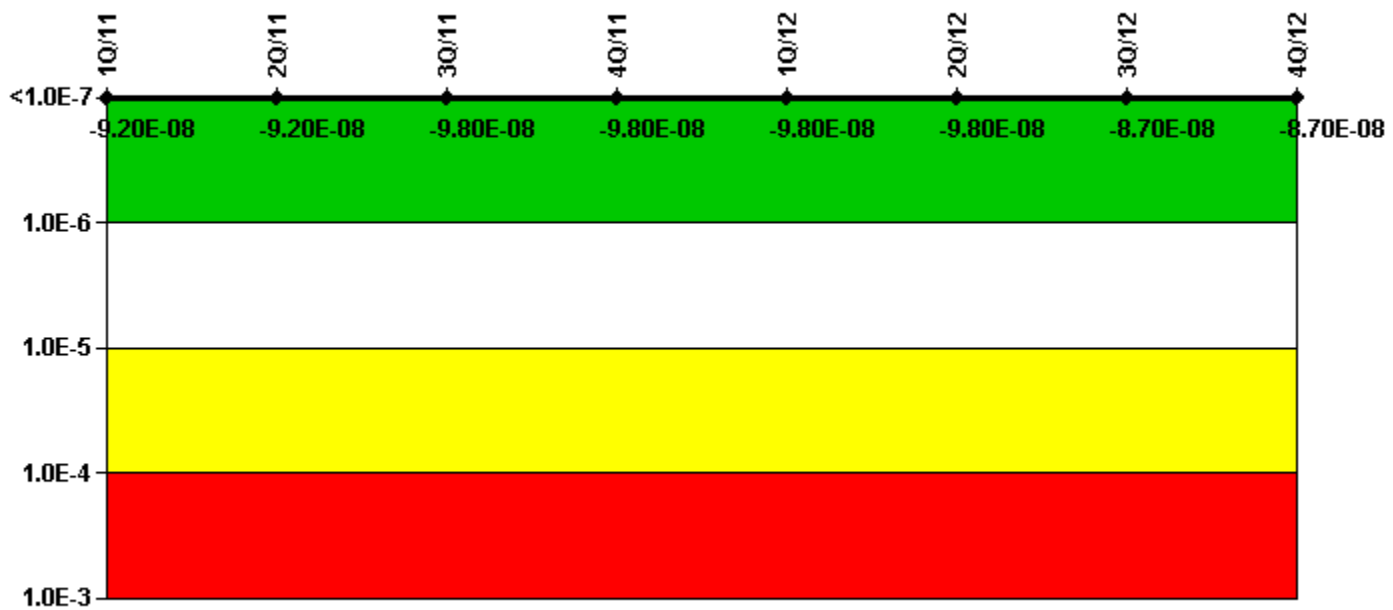
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
UAI ( $\Delta$ CDF)	-2.85E-11	-2.85E-11	-2.85E-11	-2.85E-11	-2.70E-11	-2.70E-11	-7.22E-12	-7.22E-12
URI ( $\Delta$ CDF)	-3.12E-08	-3.12E-08	-3.20E-08	-3.20E-08	-3.20E-08	-3.20E-08	-3.20E-08	-3.20E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.10E-08	-3.10E-08	-3.20E-08	-3.20E-08	-3.20E-08	-3.20E-08	-3.20E-08	-3.20E-08

Licensee Comments: none

### 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	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
UAI ( $\Delta$ CDF)	-3.23E-13	-3.23E-13	-3.23E-13	-3.23E-13	-3.23E-13	-3.23E-13	-1.68E-13	-2.07E-13
URI ( $\Delta$ CDF)	-9.20E-08	-9.20E-08	-9.83E-08	-9.83E-08	-9.83E-08	-9.83E-08	-8.69E-08	-8.69E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.20E-08	-9.20E-08	-9.80E-08	-9.80E-08	-9.80E-08	-9.80E-08	-8.70E-08	-8.70E-08

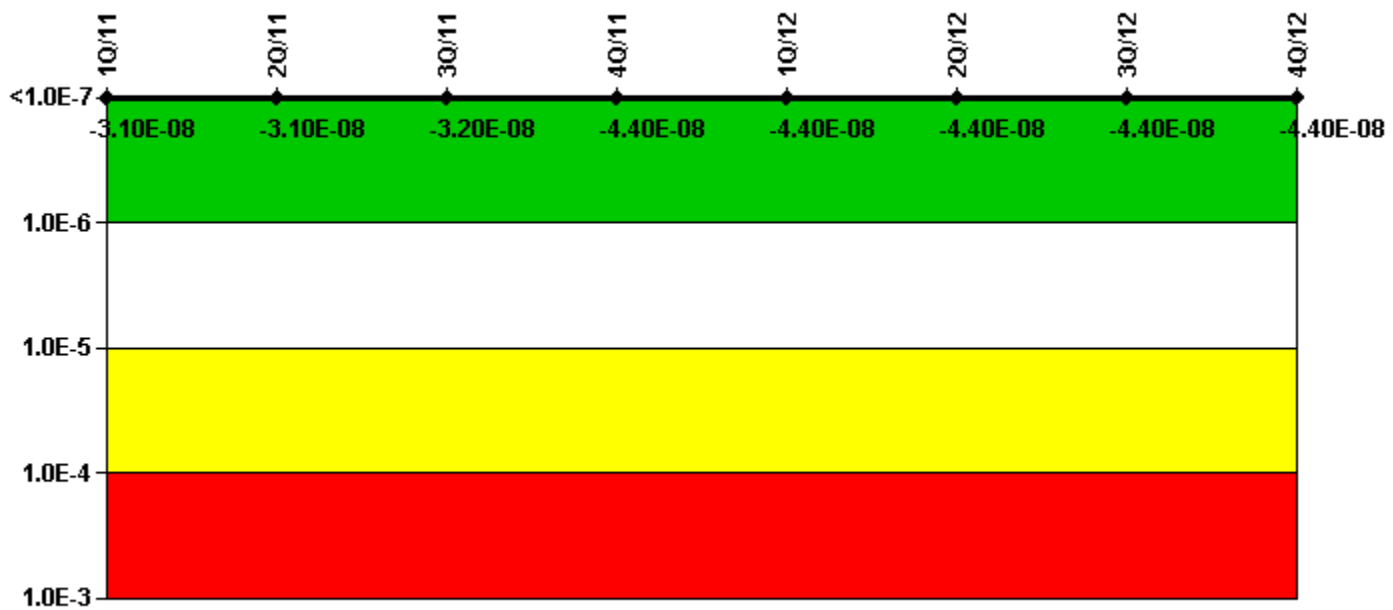
Licensee Comments:

2Q/12: The MSPI Basis document was revised to exclude two Unit 2 RHR heat exchanger CCW outlet valves from monitoring based on their Birnbaum importance.

1Q/12: March 31, 2012 test results for valve 2-CMO-429 are currently being evaluated to determine if a failure occurred per MSPI criteria. If it is determined that an MSPI equipment failure occurred, a change report will be submitted.



### Mitigating Systems Performance Index, Cooling Water Systems



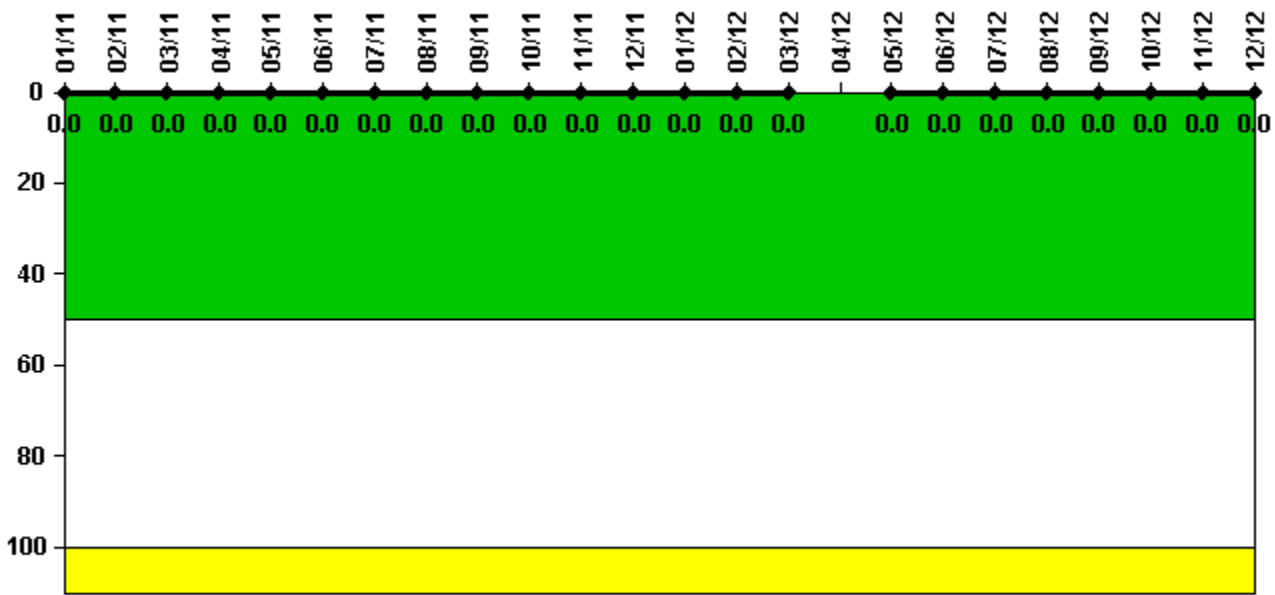
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
UAI ( $\Delta$ CDF)	8.50E-12	8.50E-12	2.08E-12	-1.29E-11	3.37E-11	3.33E-11	6.99E-11	6.99E-11
URI ( $\Delta$ CDF)	-3.06E-08	-3.07E-08	-3.19E-08	-4.36E-08	-4.36E-08	-4.36E-08	-4.36E-08	-4.36E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.10E-08	-3.10E-08	-3.20E-08	-4.40E-08	-4.40E-08	-4.40E-08	-4.40E-08	-4.40E-08

Licensee Comments: none

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

**Notes**

Reactor Coolant System Activity	1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11
Maximum activity	0.000094	0.000098	0.000100	0.000146	0.000152	0.000167	0.000163	0.000167	0.000170	0.000188	0.000190	0.000203
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

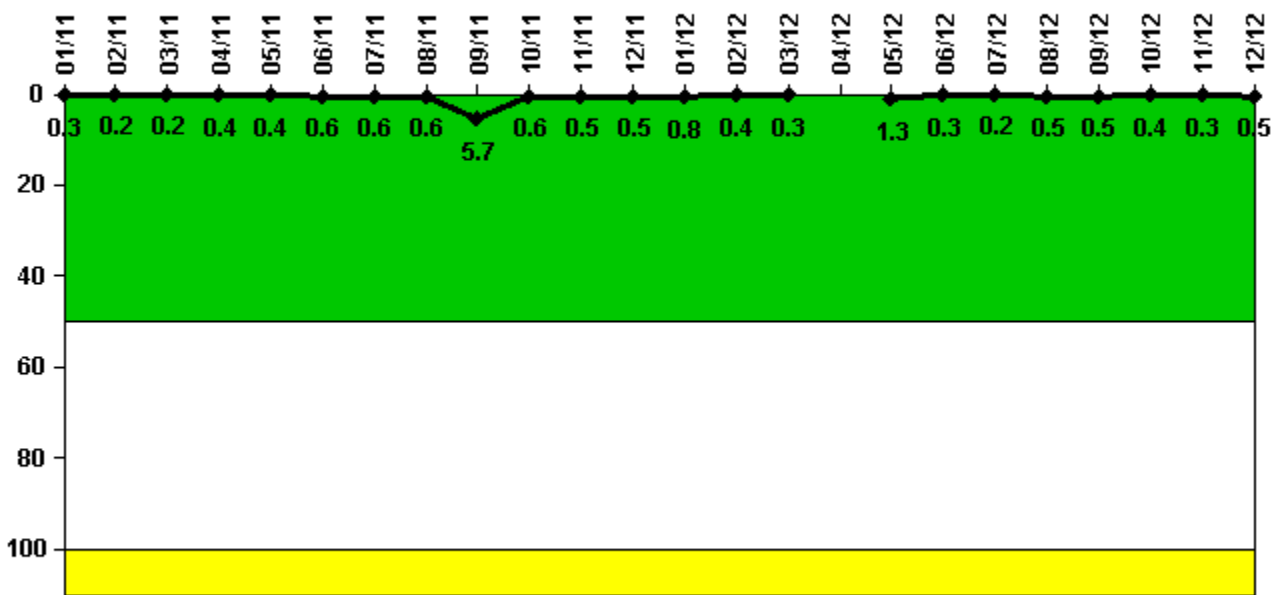
  

Reactor Coolant System Activity	1/12	2/12	3/12	4/12	5/12	6/12	7/12	8/12	9/12	10/12	11/12	12/12
Maximum activity	0.000200	0.000211	0.000152	N/A	0.000097	0.000099	0.000104	0.000205	0.000120	0.000123	0.000160	0.000130
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	N/A	0	0	0	0	0	0	0	0

Licensee Comments:

6/12: Due to a refueling outage followed by power escalation, no RCS activity data is available for April.

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

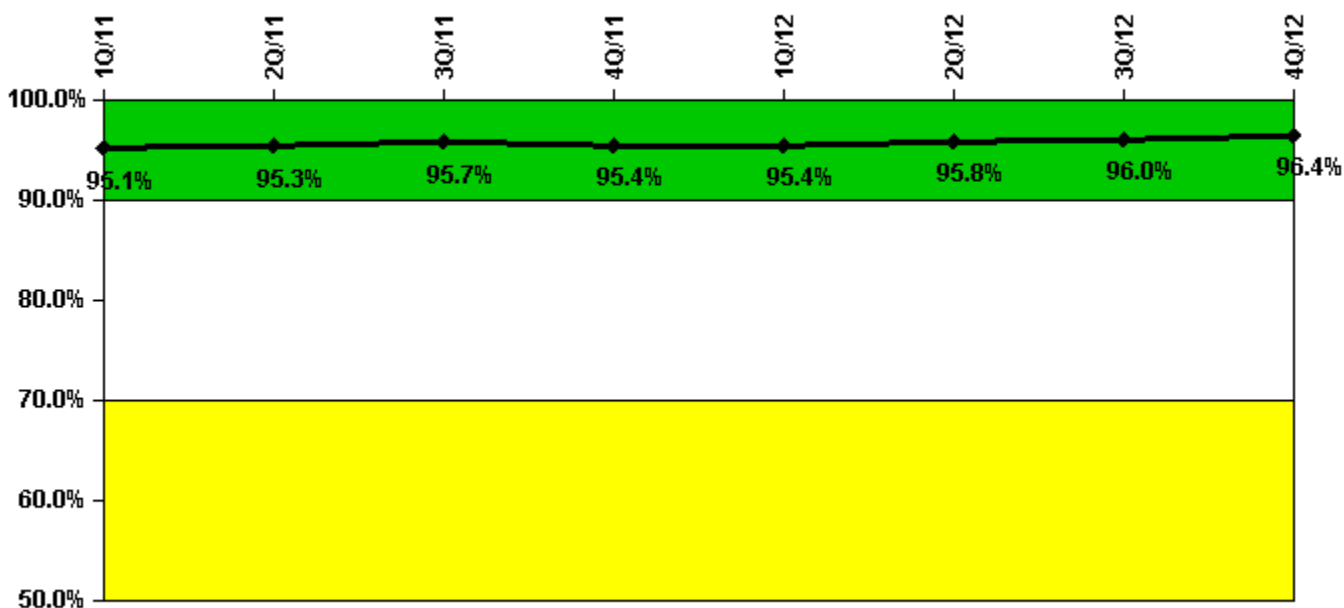
Reactor Coolant System Leakage	1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11
Maximum leakage	0.038	0.027	0.025	0.041	0.048	0.061	0.062	0.068	0.622	0.066	0.056	0.056
Technical specification limit	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Indicator value	0.3	0.2	0.2	0.4	0.4	0.6	0.6	0.6	5.7	0.6	0.5	0.5
Reactor Coolant System Leakage	1/12	2/12	3/12	4/12	5/12	6/12	7/12	8/12	9/12	10/12	11/12	12/12
Maximum leakage	0.085	0.045	0.036	N/A	0.147	0.031	0.023	0.050	0.055	0.040	0.034	0.057
Technical specification limit	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Indicator value	0.8	0.4	0.3	N/A	1.3	0.3	0.2	0.5	0.5	0.4	0.3	0.5

Licensee Comments:

6/12: Due to a refueling outage followed by power escalation, no RCS leakage data is available for April.

9/11: Elevated (0.6 gpm) RCS leak rate in September due to apparent packing leak occurring during pressurizer PORV block valve stroke test on September 22; leak was isolated the following day.

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

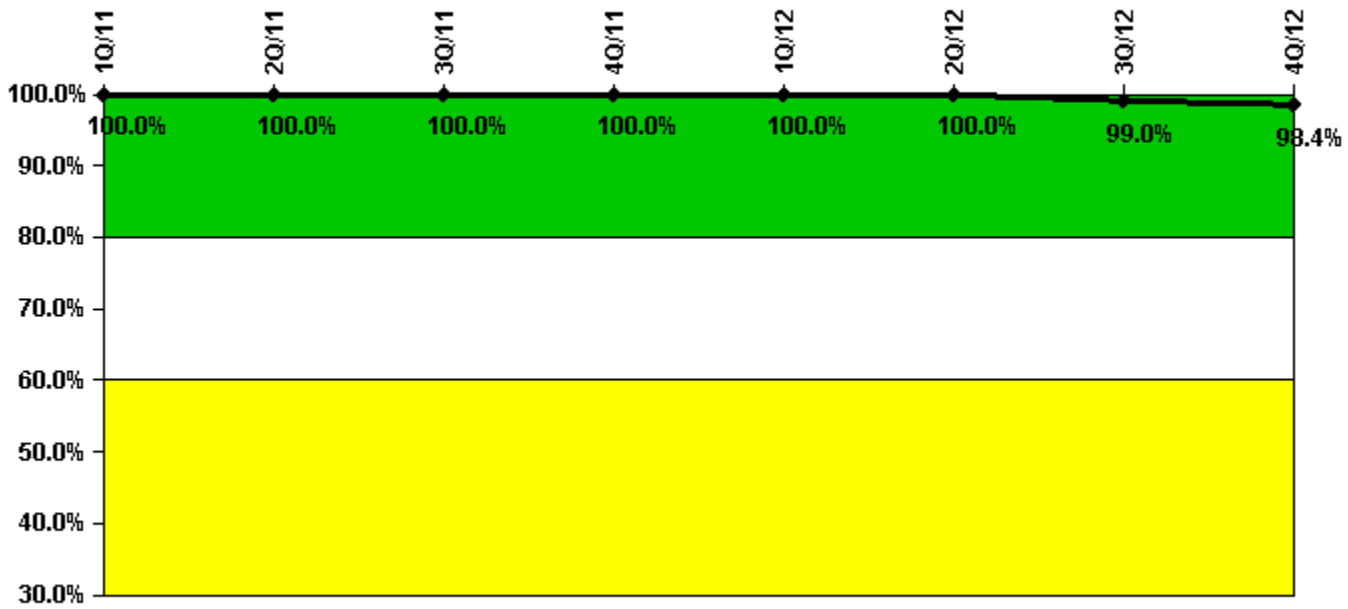
#### Notes

Drill/Exercise Performance	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Successful opportunities	43.0	16.0	41.0	0	34.0	24.0	41.0	66.0
Total opportunities	50.0	16.0	41.0	0	35.0	25.0	41.0	67.0
Indicator value	95.1%	95.3%	95.7%	95.4%	95.4%	95.8%	96.0%	96.4%

#### Licensee Comments:

1Q/11: Previously submitted data for February 2011 was revised to correct an error in grading drill results. Data was changed from "19 of 21 successful" to "18 of 21 successful". This changes the first quarter 2011 total from "44 of 50 successful" to "43 of 50 successful". This change has no impact on performance indicator color.

### ERO Drill Participation



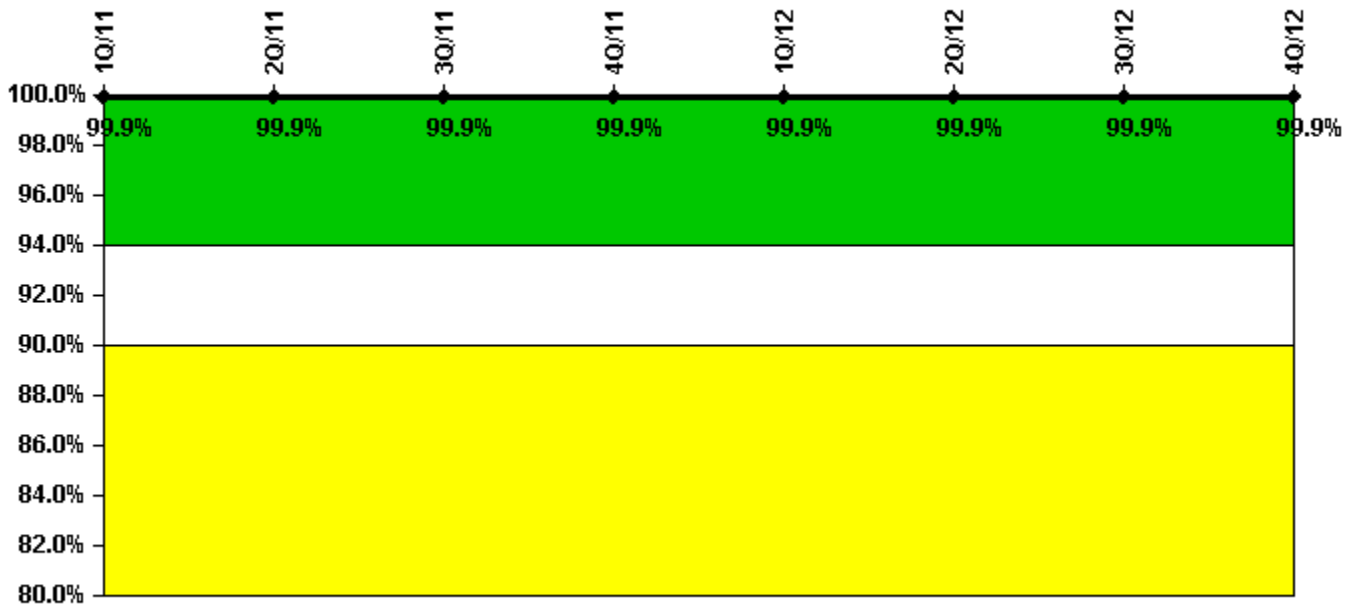
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Participating Key personnel	92.0	92.0	91.0	91.0	91.0	89.0	95.0	126.0
Total Key personnel	92.0	92.0	91.0	91.0	91.0	89.0	96.0	128.0
Indicator value	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>99.0%</b>	<b>98.4%</b>

Licensee Comments: none

### Alert & Notification System



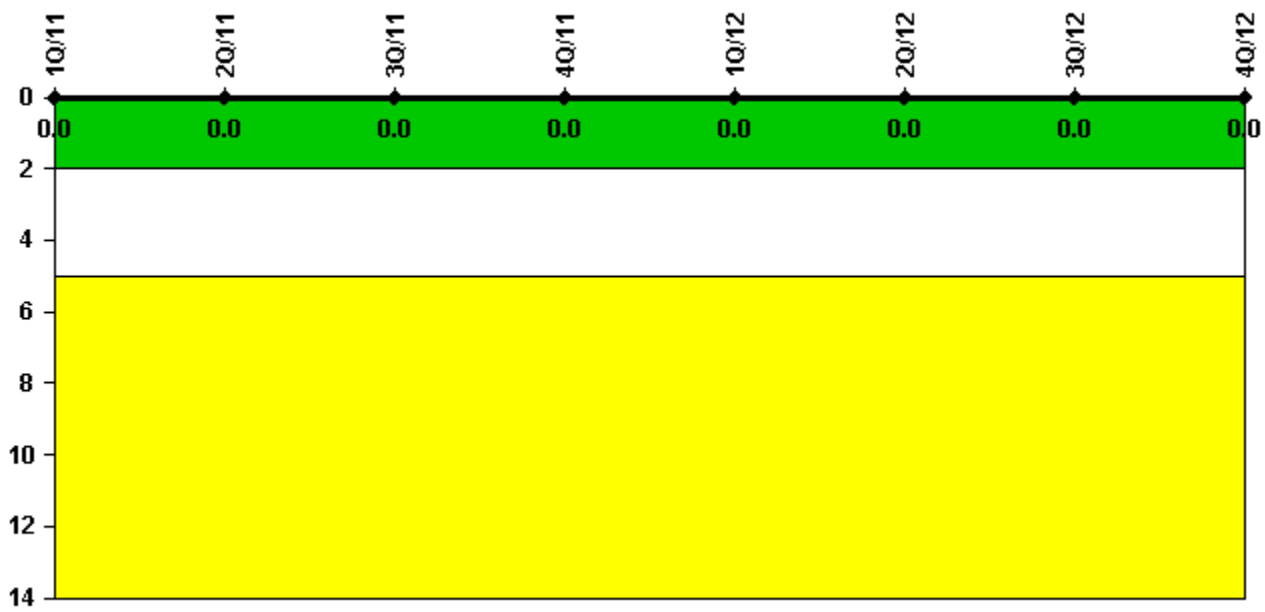
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Successful siren-tests	1119	1117	1120	1120	1118	1118	1120	1120
Total sirens-tests	1120	1119	1120	1120	1120	1119	1120	1120
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



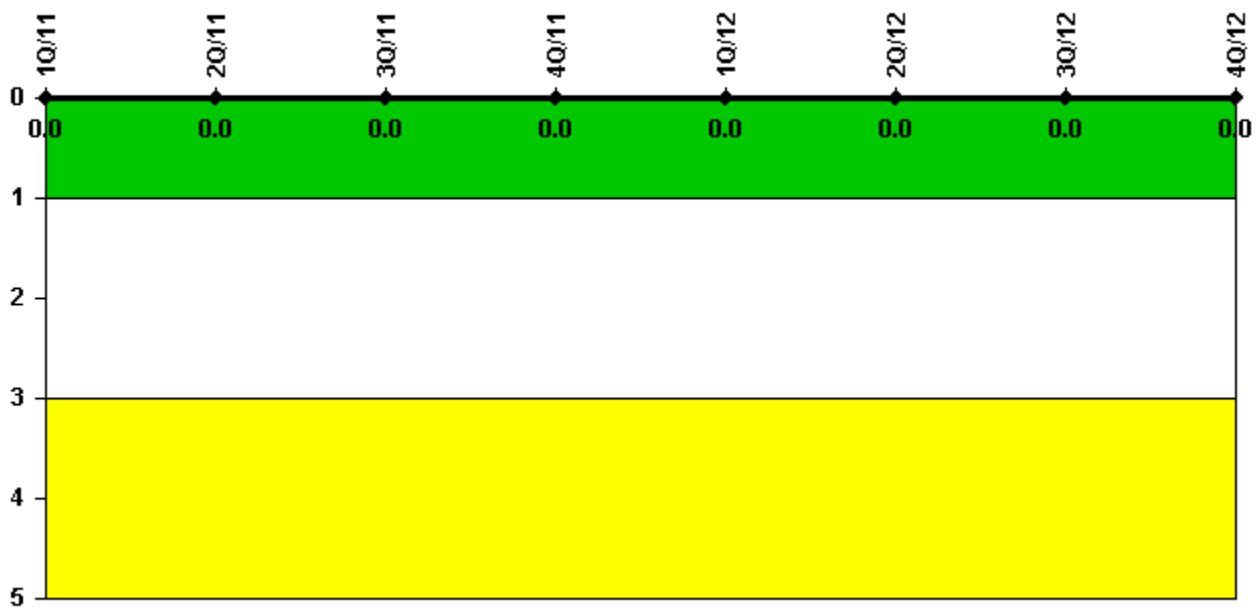
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
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	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
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.