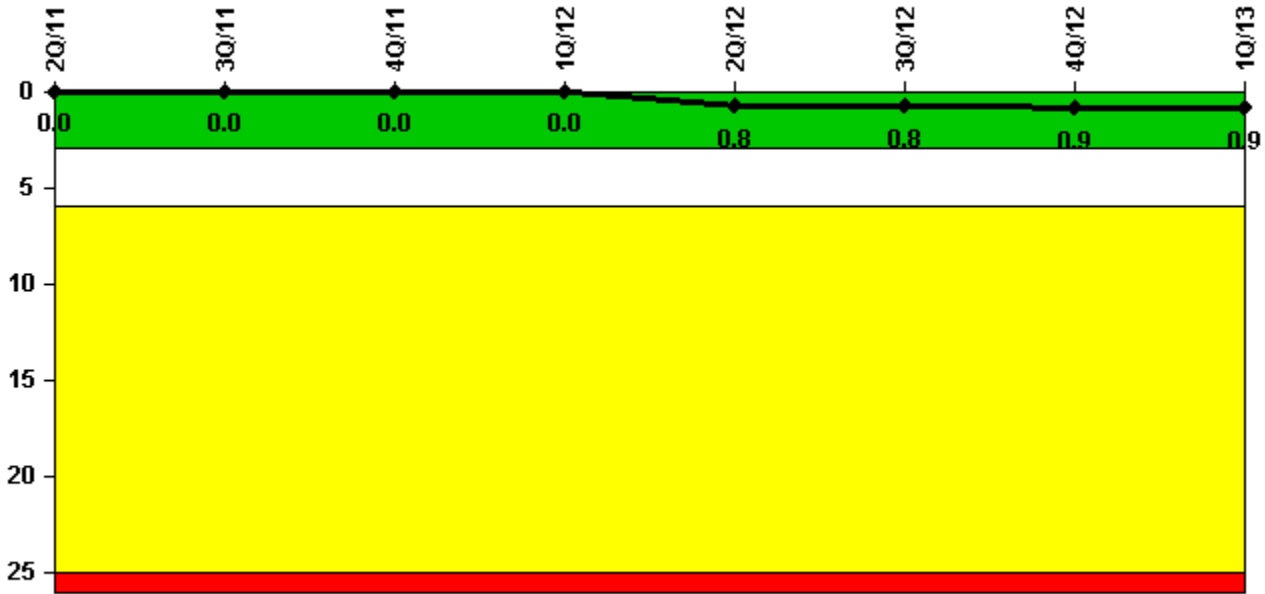


# Catawba 1

## 1Q/2013 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



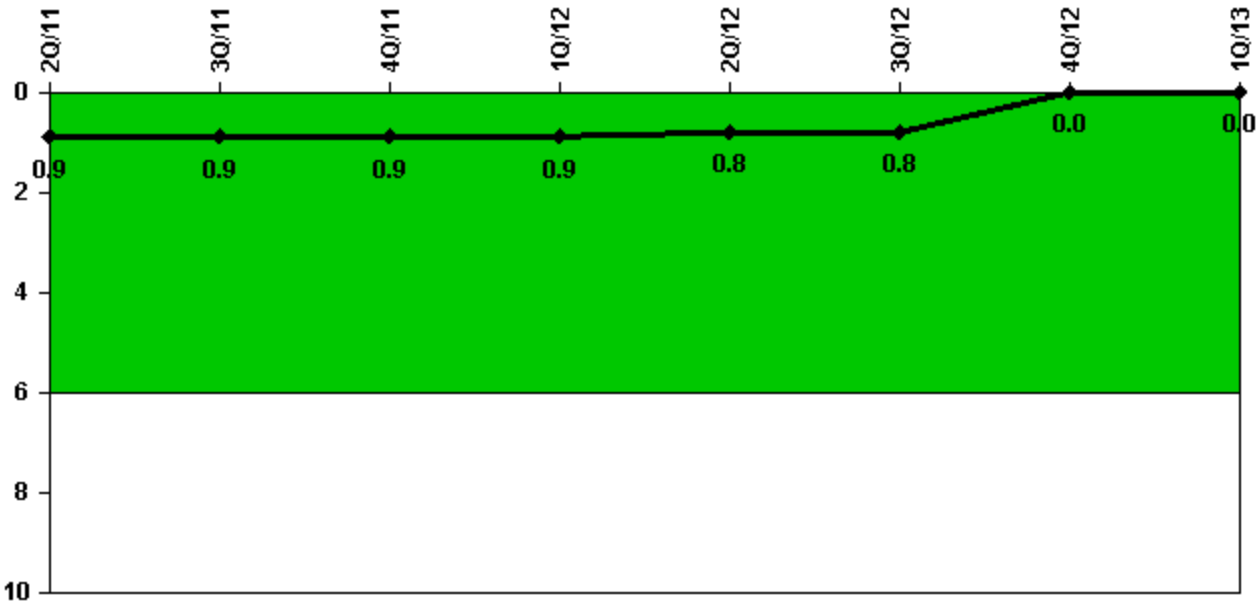
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Unplanned scrams	0	0	0	0	1.0	0	0	0
Critical hours	1169.0	2208.0	2193.3	2183.0	1912.7	2208.0	1417.1	2159.0
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.8</b>	<b>0.8</b>	<b>0.9</b>	<b>0.9</b>

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



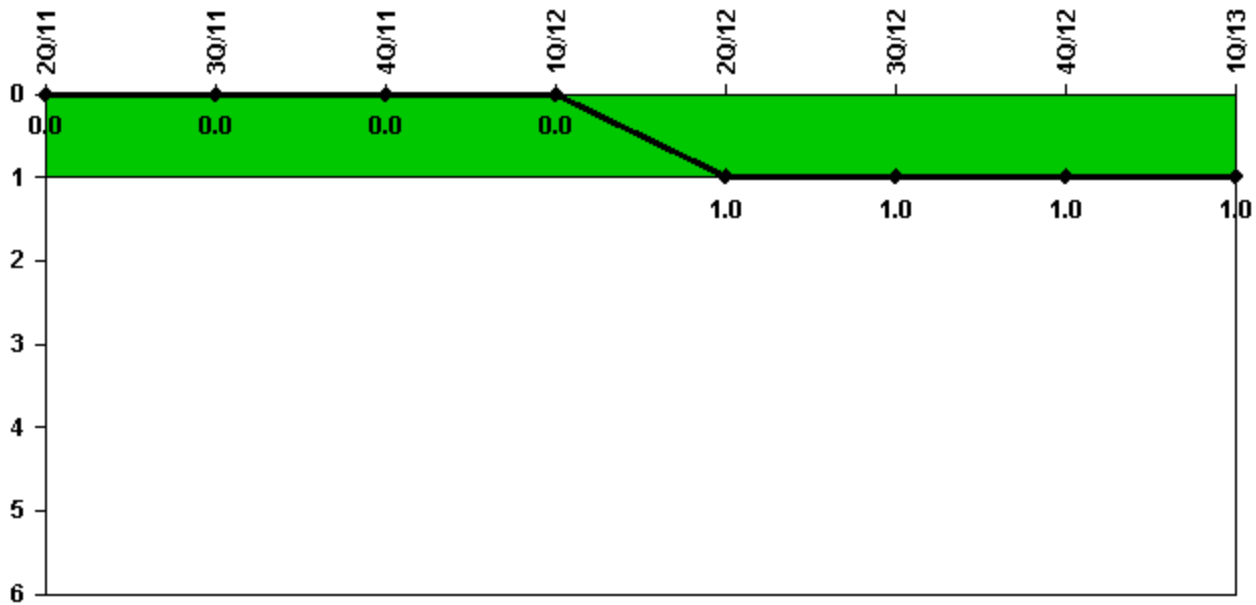
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Unplanned power changes	0	0	1.0	0	0	0	0	0
Critical hours	1169.0	2208.0	2193.3	2183.0	1912.7	2208.0	1417.1	2159.0
<b>Indicator value</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>	<b>0.8</b>	<b>0.8</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

### Unplanned Scrams with Complications



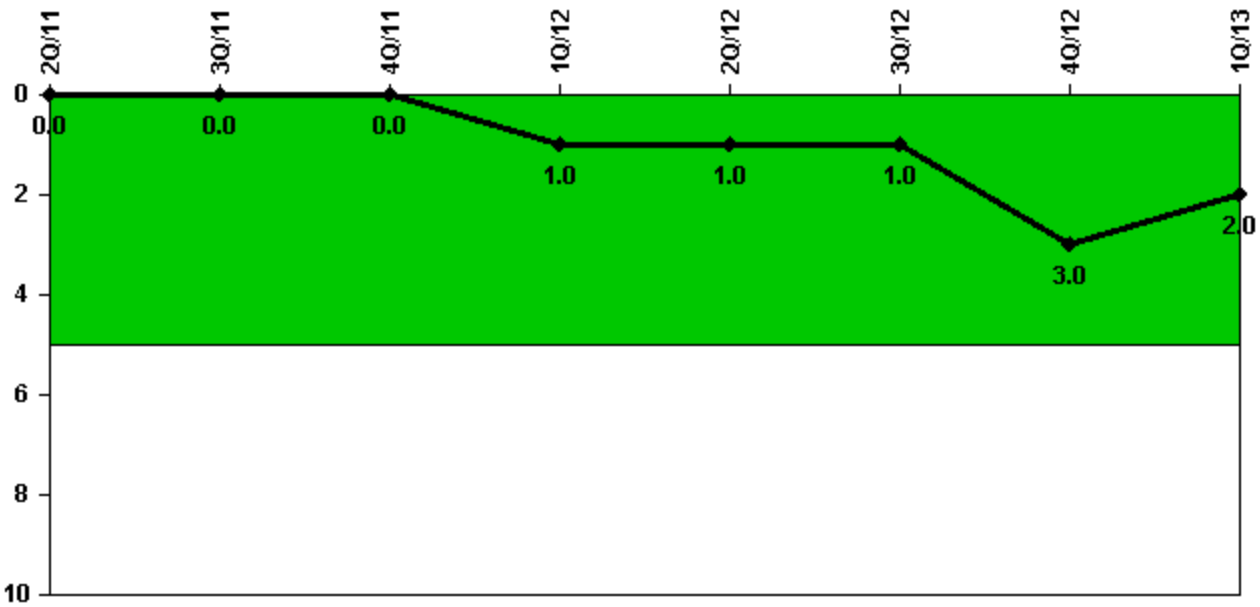
Thresholds: White > 1.0

#### Notes

Unplanned Scrams with Complications	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Scrams with complications	0	0	0	0	1.0	0	0	0
<b>Indicator value</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>

Licensee Comments: none

### Safety System Functional Failures (PWR)



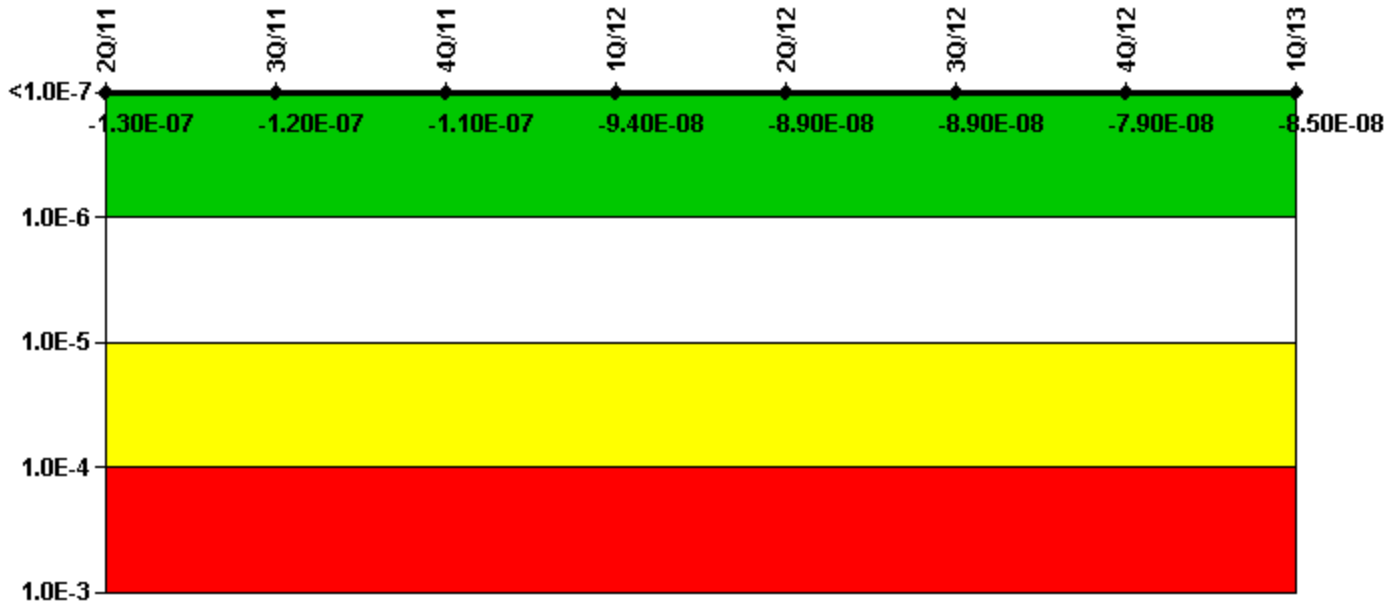
Thresholds: White > 5.0

#### Notes

Safety System Functional Failures (PWR)	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Safety System Functional Failures	0	0	0	1	0	0	2	0
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>2</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/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI ( $\Delta$ CDF)	4.93E-08	5.53E-08	6.76E-08	8.92E-08	9.35E-08	9.35E-08	1.04E-07	9.76E-08
URI ( $\Delta$ CDF)	-1.78E-07	-1.78E-07	-1.78E-07	-1.83E-07	-1.83E-07	-1.83E-07	-1.83E-07	-1.83E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.30E-07	-1.20E-07	-1.10E-07	-9.40E-08	-8.90E-08	-8.90E-08	-7.90E-08	-8.50E-08

Licensee Comments:

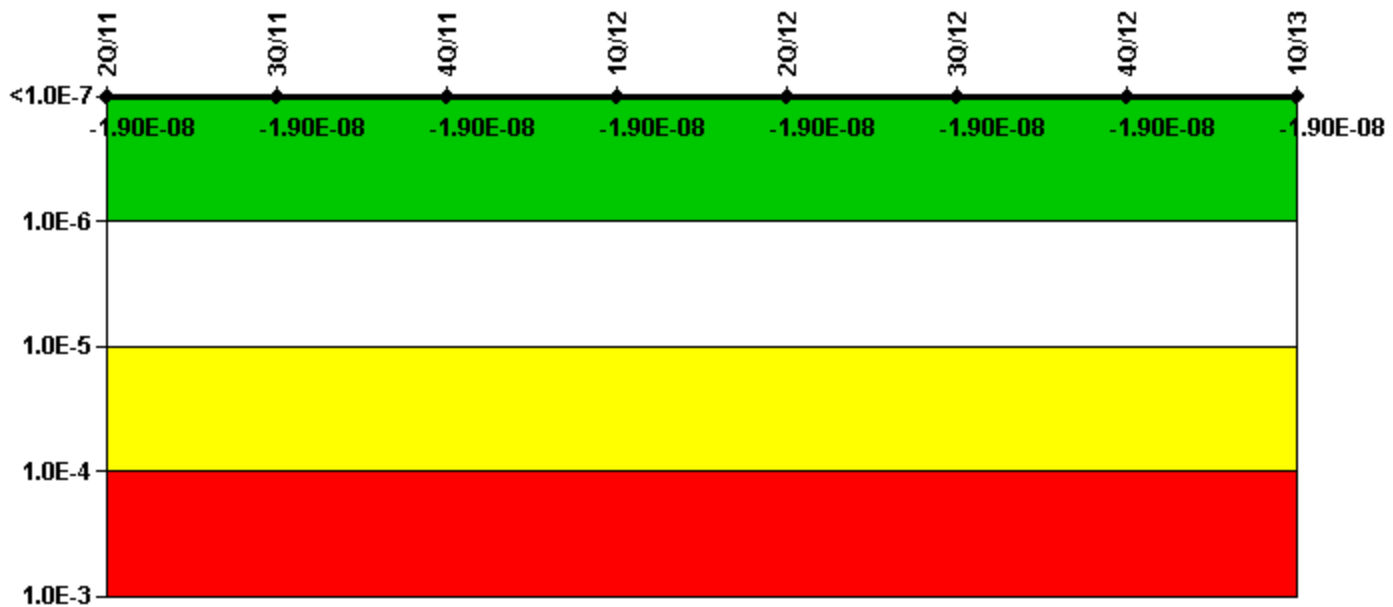
1Q/12: Changed PRA Parameter(s).

4Q/11: Changed PRA Parameter(s).

3Q/11: Changed PRA Parameter(s).

2Q/11: 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	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI ( $\Delta$ CDF)	-7.57E-09	-7.57E-09	-7.57E-09	-7.78E-09	-7.78E-09	-7.78E-09	-7.78E-09	-7.78E-09
URI ( $\Delta$ CDF)	-1.14E-08	-1.14E-08	-1.14E-08	-1.17E-08	-1.17E-08	-1.17E-08	-1.17E-08	-1.17E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.90E-08	-1.90E-08	-1.90E-08	-1.90E-08	-1.90E-08	-1.90E-08	-1.90E-08	-1.90E-08

Licensee Comments:

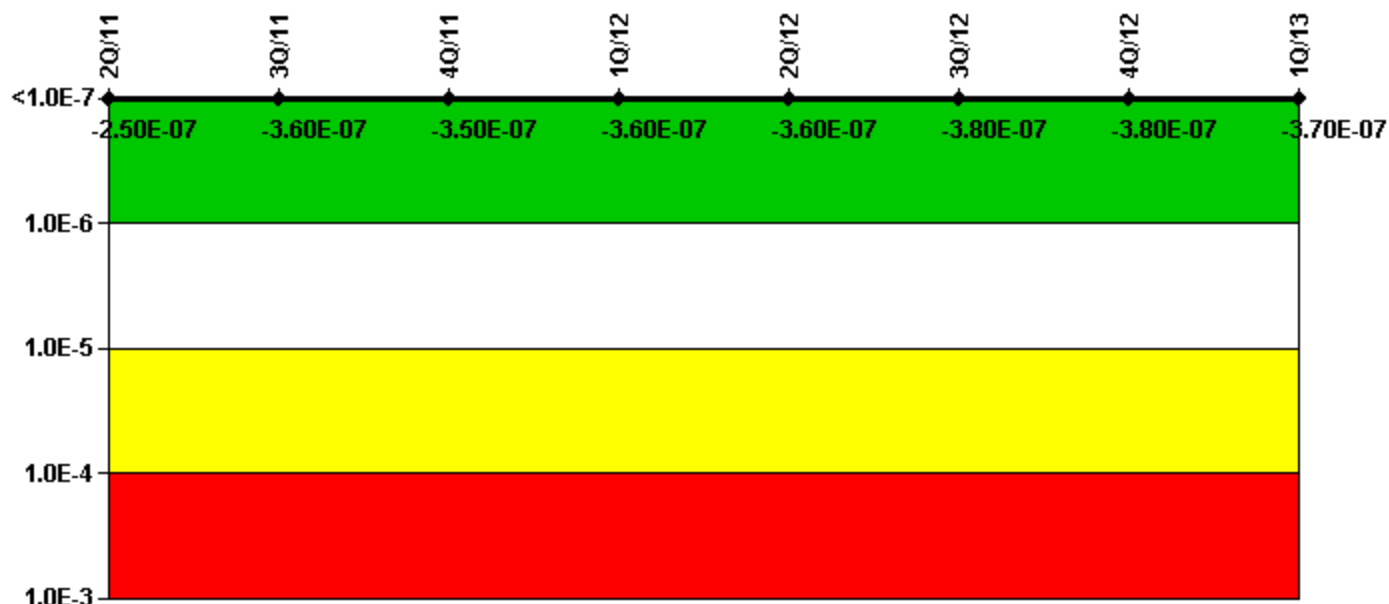
1Q/12: Changed PRA Parameter(s).

4Q/11: Changed PRA Parameter(s).

3Q/11: Changed PRA Parameter(s).

2Q/11: 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	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI ( $\Delta$ CDF)	9.50E-08	-1.20E-08	-1.89E-09	-9.11E-09	-1.17E-08	-2.24E-08	-2.32E-08	-1.92E-08
URI ( $\Delta$ CDF)	-3.43E-07	-3.43E-07	-3.43E-07	-3.53E-07	-3.53E-07	-3.53E-07	-3.53E-07	-3.53E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.50E-07	-3.60E-07	-3.50E-07	-3.60E-07	-3.60E-07	-3.80E-07	-3.80E-07	-3.70E-07

Licensee Comments:

1Q/12: Changed PRA Parameter(s).

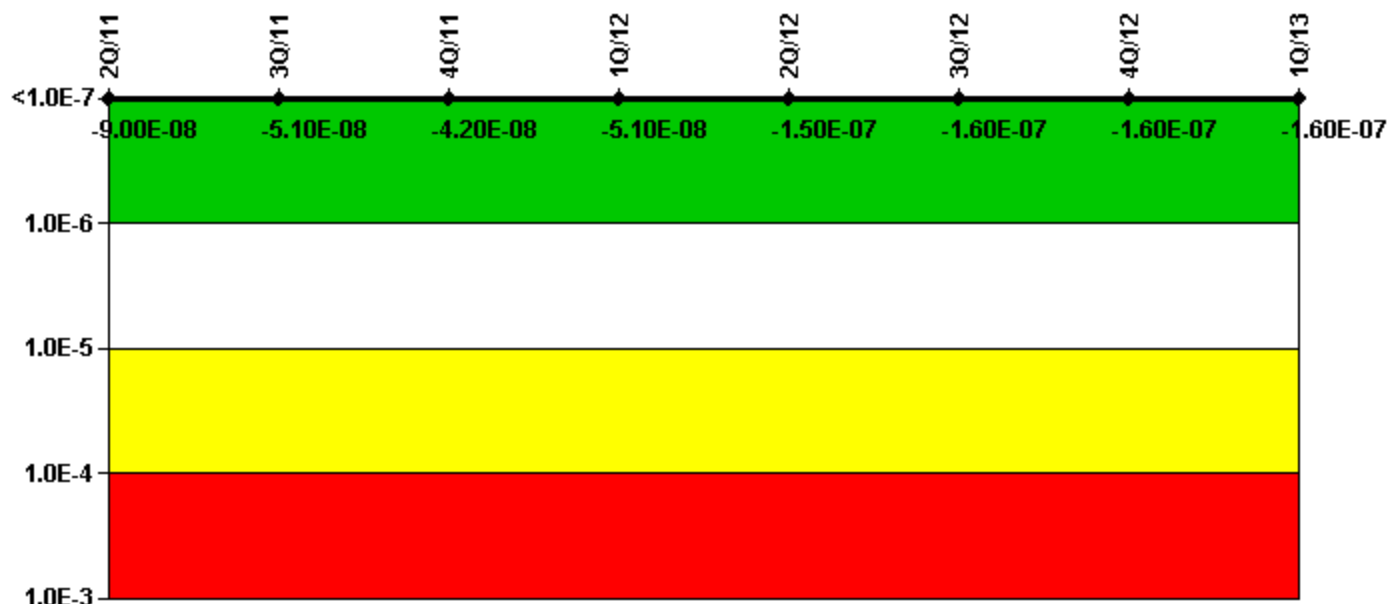
4Q/11: Changed PRA Parameter(s).

3Q/11: Changed PRA Parameter(s).

2Q/11: Changed PRA Parameter(s).

2Q/11: 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	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI ( $\Delta$ CDF)	5.01E-08	8.86E-08	9.75E-08	9.30E-08	-1.07E-08	-1.20E-08	-1.14E-08	-1.35E-08
URI ( $\Delta$ CDF)	-1.40E-07	-1.40E-07	-1.40E-07	-1.44E-07	-1.44E-07	-1.44E-07	-1.44E-07	-1.44E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.00E-08	-5.10E-08	-4.20E-08	-5.10E-08	-1.50E-07	-1.60E-07	-1.60E-07	-1.60E-07

#### Licensee Comments:

1Q/12: Changed PRA Parameter(s).

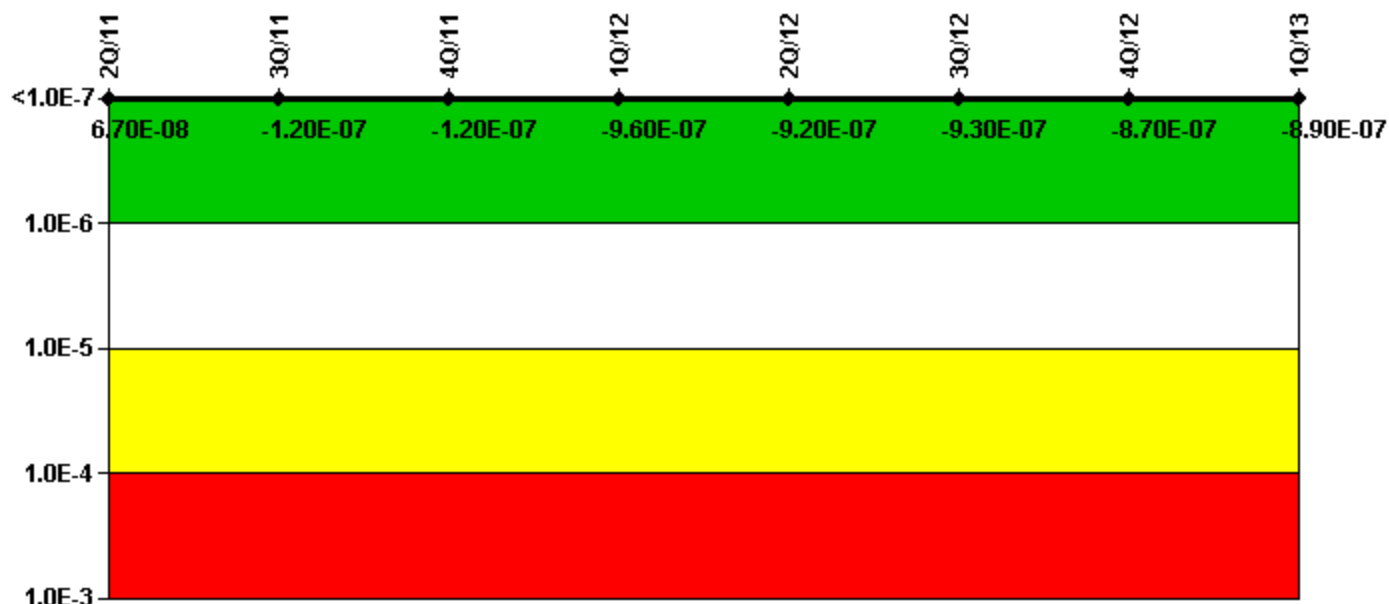
4Q/11: Changed PRA Parameter(s).

3Q/11: Changed PRA Parameter(s).

2Q/11: 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	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI ( $\Delta$ CDF)	1.74E-07	-1.44E-08	-1.39E-08	-5.11E-07	-4.77E-07	-4.84E-07	-4.22E-07	-4.46E-07
URI ( $\Delta$ CDF)	-1.08E-07	-1.10E-07	-1.10E-07	-4.47E-07	-4.47E-07	-4.47E-07	-4.47E-07	-4.47E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	6.70E-08	-1.20E-07	-1.20E-07	-9.60E-07	-9.20E-07	-9.30E-07	-8.70E-07	-8.90E-07

Licensee Comments:

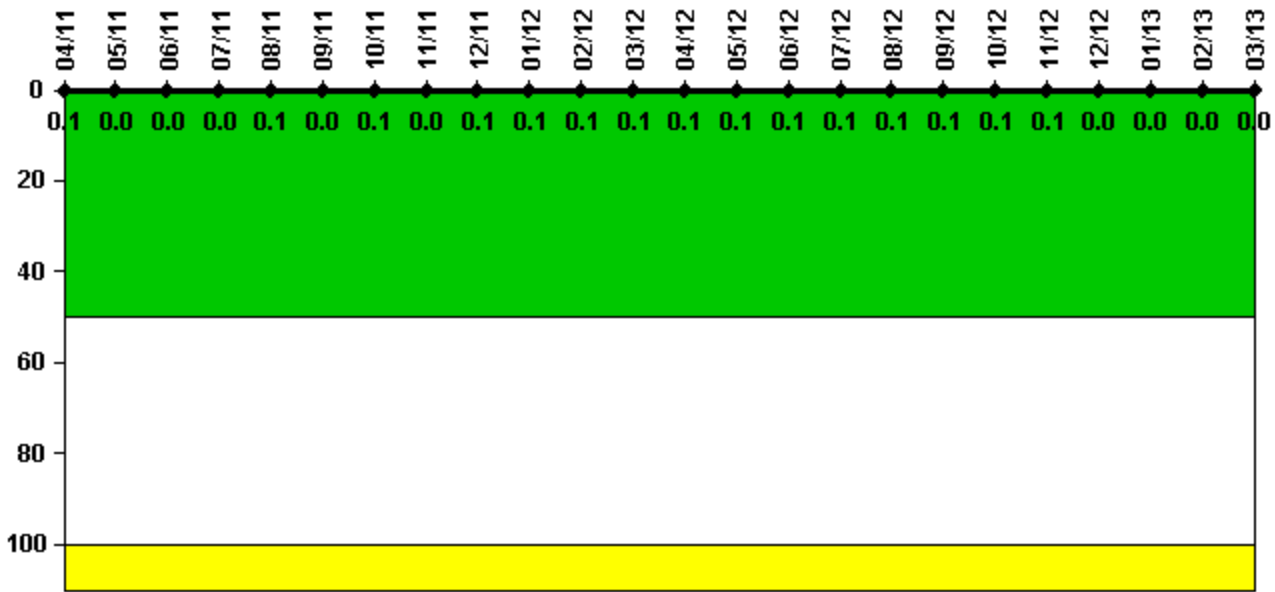
1Q/12: Changed PRA Parameter(s).

4Q/11: Changed PRA Parameter(s).

3Q/11: Changed PRA Parameter(s).

2Q/11: Changed PRA Parameter(s).

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

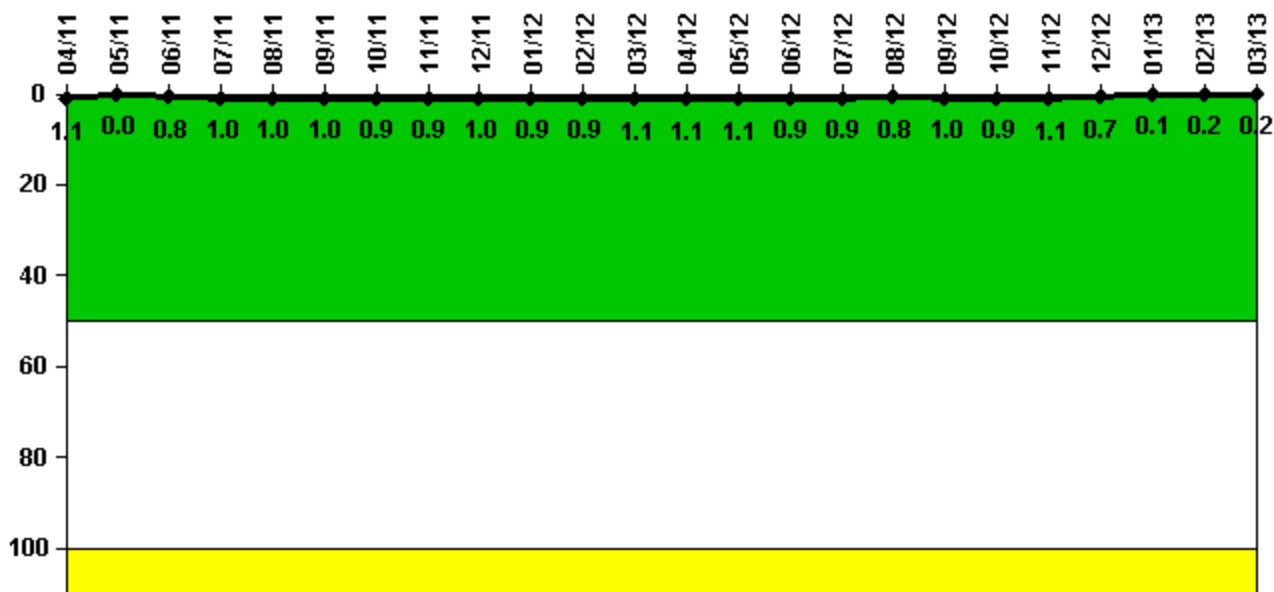
Reactor Coolant System Activity	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12
Maximum activity	0.000468	0	0.000171	0.000185	0.000304	0.000204	0.000233	0.000222	0.000241	0.000273	0.000241	0.000266
Technical specification limit	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Indicator value	0.1	0	0	0	0.1	0	0.1	0	0.1	0.1	0.1	0.1

Reactor Coolant System Activity	4/12	5/12	6/12	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13
Maximum activity	0.000264	0.000310	0.000297	0.000302	0.000312	0.000354	0.000323	0.000304	0.000020	0.000090	0.000075	0.000055
Technical specification limit	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Indicator value	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0

Licensee Comments: none

### Reactor Coolant System Leakage



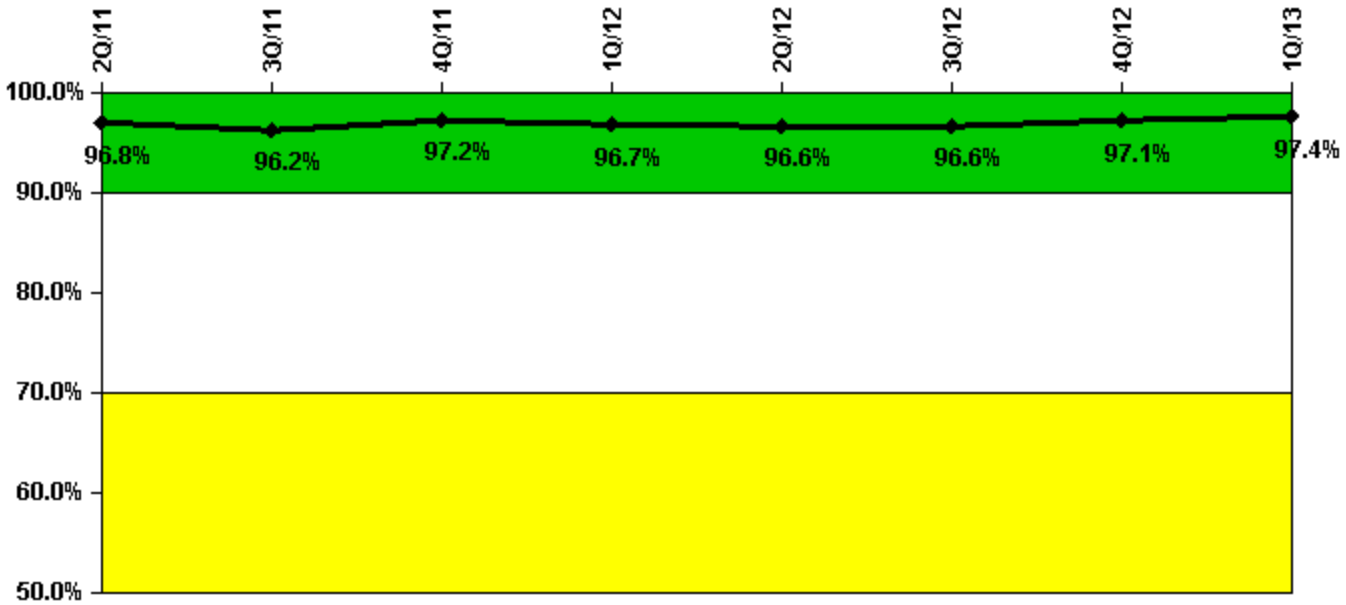
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Leakage	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12
Maximum leakage	0.109	0	0.078	0.103	0.103	0.098	0.086	0.094	0.097	0.094	0.094	0.106
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
<b>Indicator value</b>	<b>1.1</b>	<b>0</b>	<b>0.8</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>0.9</b>	<b>0.9</b>	<b>1.0</b>	<b>0.9</b>	<b>0.9</b>	<b>1.1</b>
Reactor Coolant System Leakage	4/12	5/12	6/12	7/12	8/12	9/12	10/12	11/12	12/12	1/13	2/13	3/13
Maximum leakage	0.105	0.108	0.090	0.091	0.083	0.099	0.092	0.106	0.067	0.009	0.016	0.017
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
<b>Indicator value</b>	<b>1.1</b>	<b>1.1</b>	<b>0.9</b>	<b>0.9</b>	<b>0.8</b>	<b>1.0</b>	<b>0.9</b>	<b>1.1</b>	<b>0.7</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>

Licensee Comments: none

### Drill/Exercise Performance



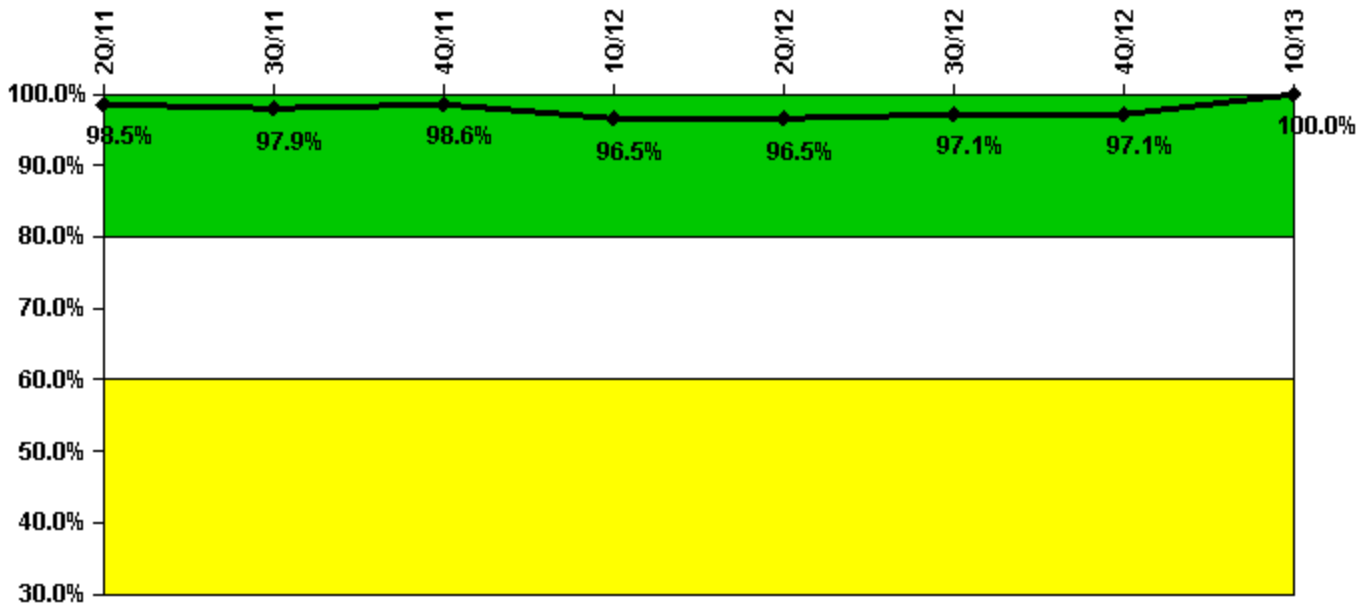
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Successful opportunities	6.0	73.0	8.0	8.0	20.0	41.0	30.0	38.0
Total opportunities	6.0	77.0	8.0	8.0	21.0	42.0	30.0	38.0
Indicator value	96.8%	96.2%	97.2%	96.7%	96.6%	96.6%	97.1%	97.4%

Licensee Comments: none

### ERO Drill Participation



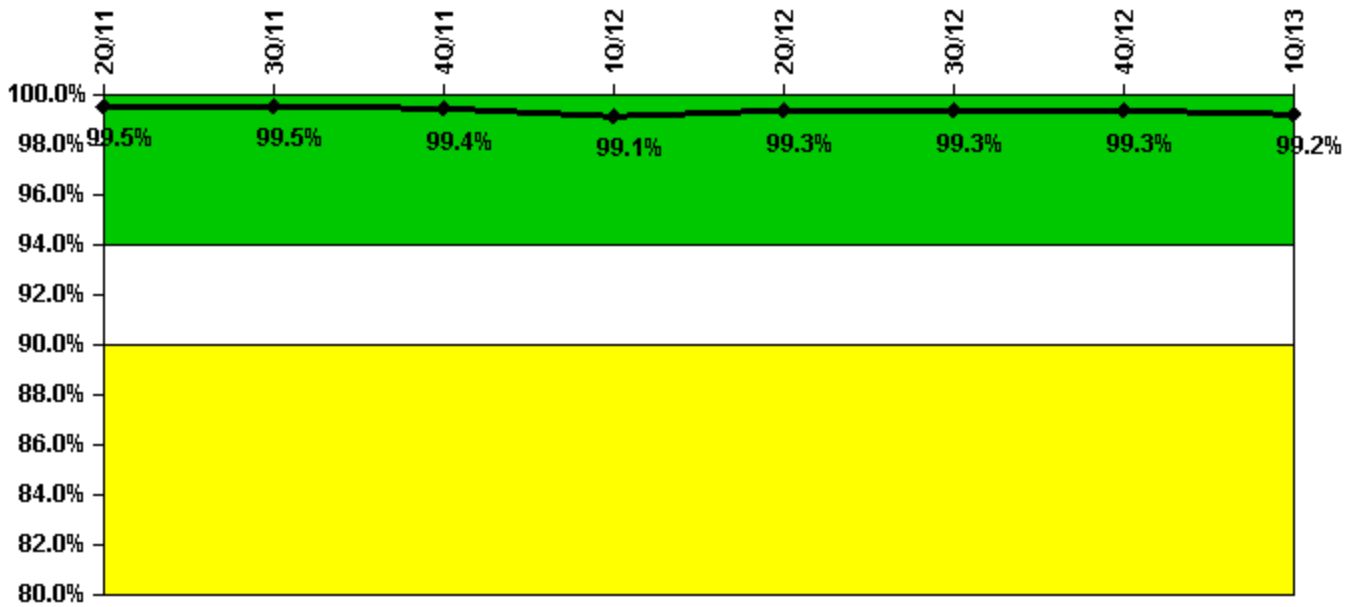
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Participating Key personnel	133.0	137.0	141.0	138.0	137.0	136.0	134.0	131.0
Total Key personnel	135.0	140.0	143.0	143.0	142.0	140.0	138.0	131.0
Indicator value	98.5%	97.9%	98.6%	96.5%	96.5%	97.1%	97.1%	100.0%

Licensee Comments: none

### Alert & Notification System



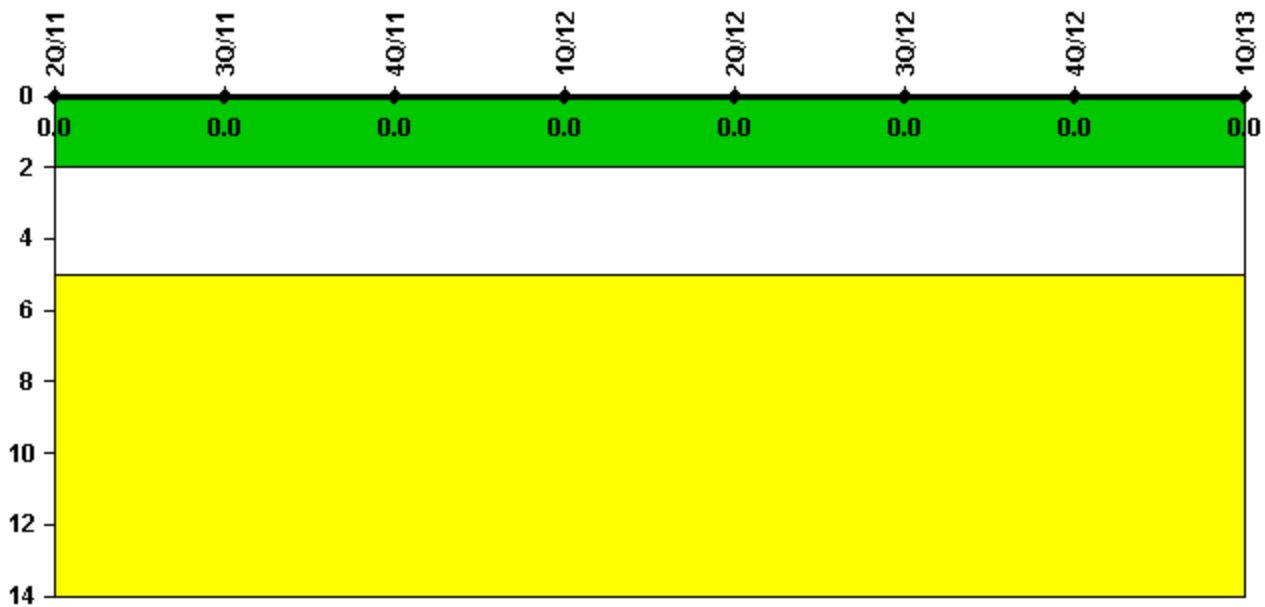
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Successful siren-tests	2378	2395	2390	2367	2391	2397	2302	2356
Total sirens-tests	2403	2403	2403	2403	2403	2403	2314	2403
Indicator value	99.5%	99.5%	99.4%	99.1%	99.3%	99.3%	99.3%	99.2%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



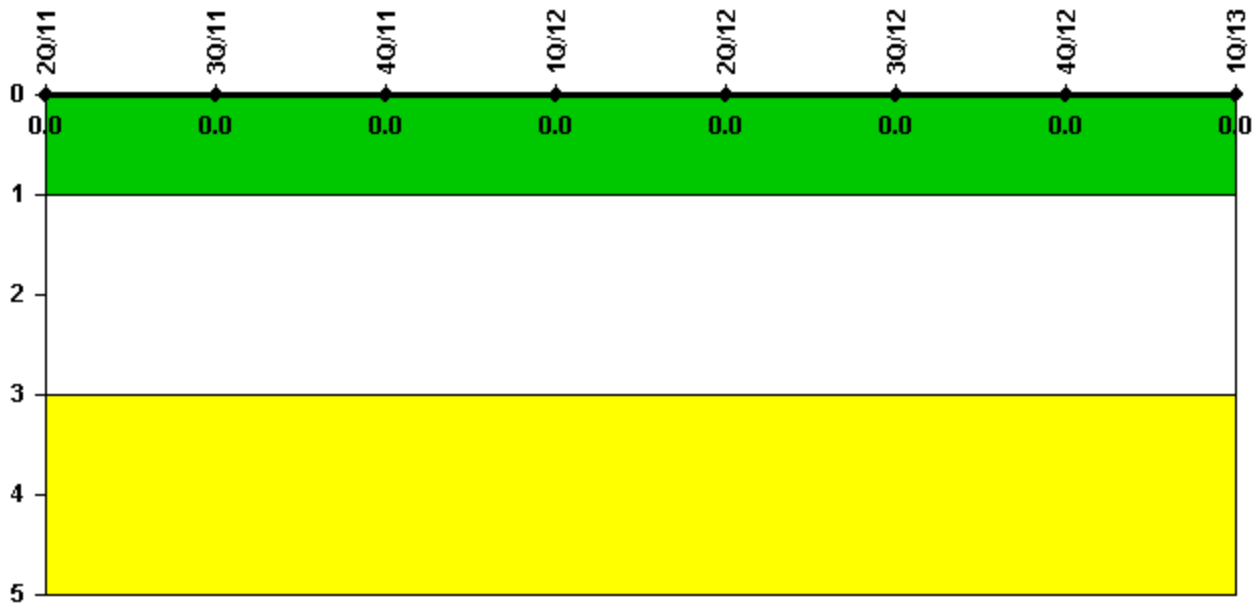
Thresholds: White > 2.0 Yellow > 5.0

**Notes**

Occupational Exposure Control Effectiveness	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
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/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
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, 2013*