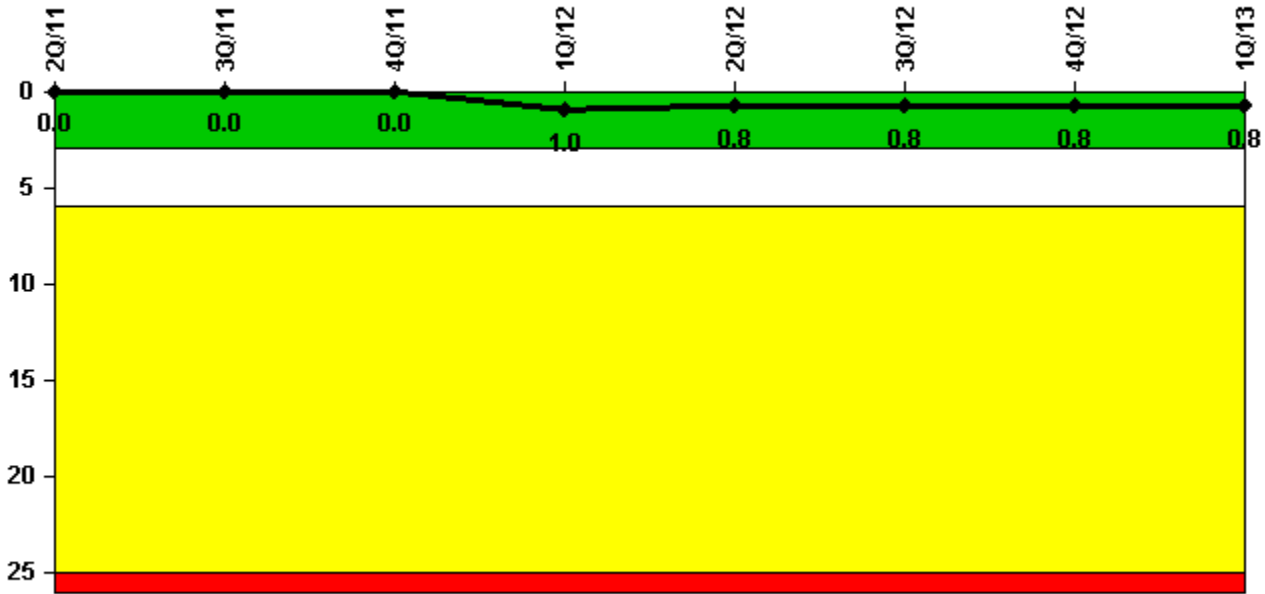


# Perry 1

## 1Q/2013 Performance Indicators

Licensee's General Comments: This change incorporates FAQ 12-04.

### Unplanned Scrams per 7000 Critical Hrs



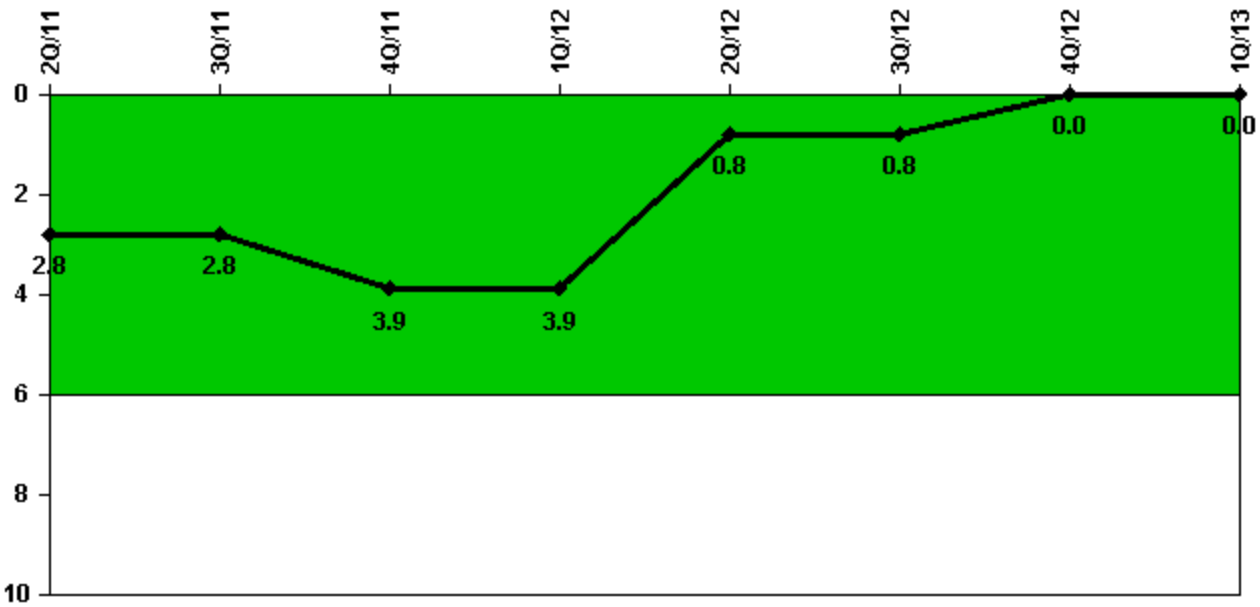
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### 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	1.0	0	0	0	1.0
Critical hours	1022.4	2208.0	1831.6	2131.0	2111.7	2208.0	2209.0	1719.9
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1.0</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



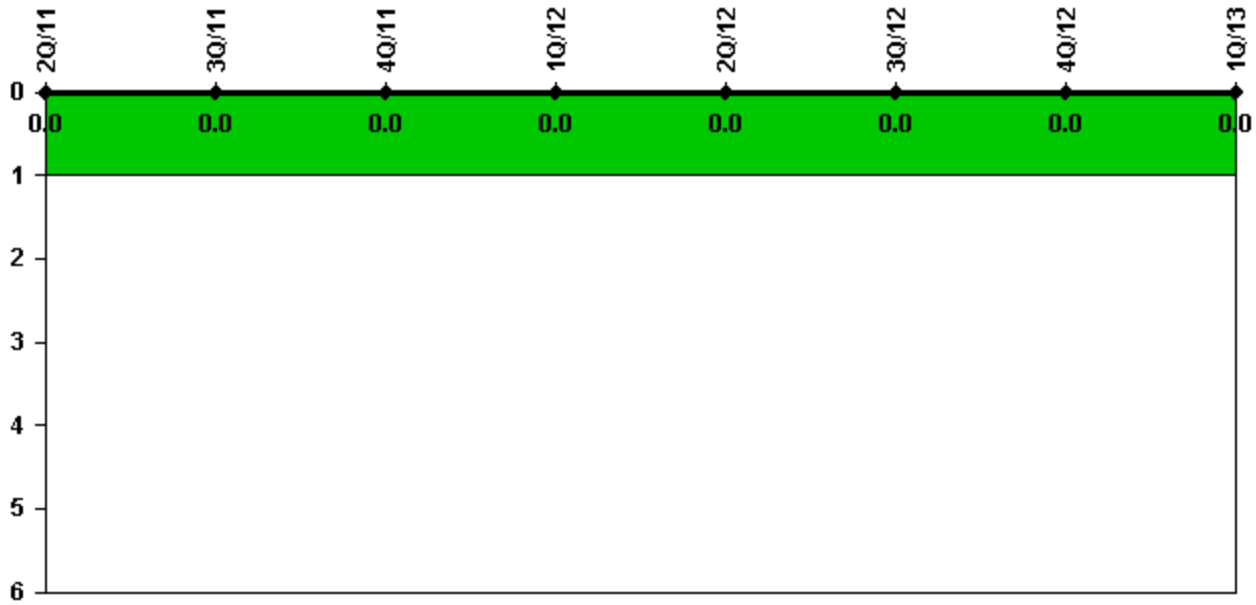
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Unplanned power changes	3.0	0	1.0	0	0	0	0	0
Critical hours	1022.4	2208.0	1831.6	2131.0	2111.7	2208.0	2209.0	1719.9
<b>Indicator value</b>	<b>2.8</b>	<b>2.8</b>	<b>3.9</b>	<b>3.9</b>	<b>0.8</b>	<b>0.8</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

### Unplanned Scrams with Complications



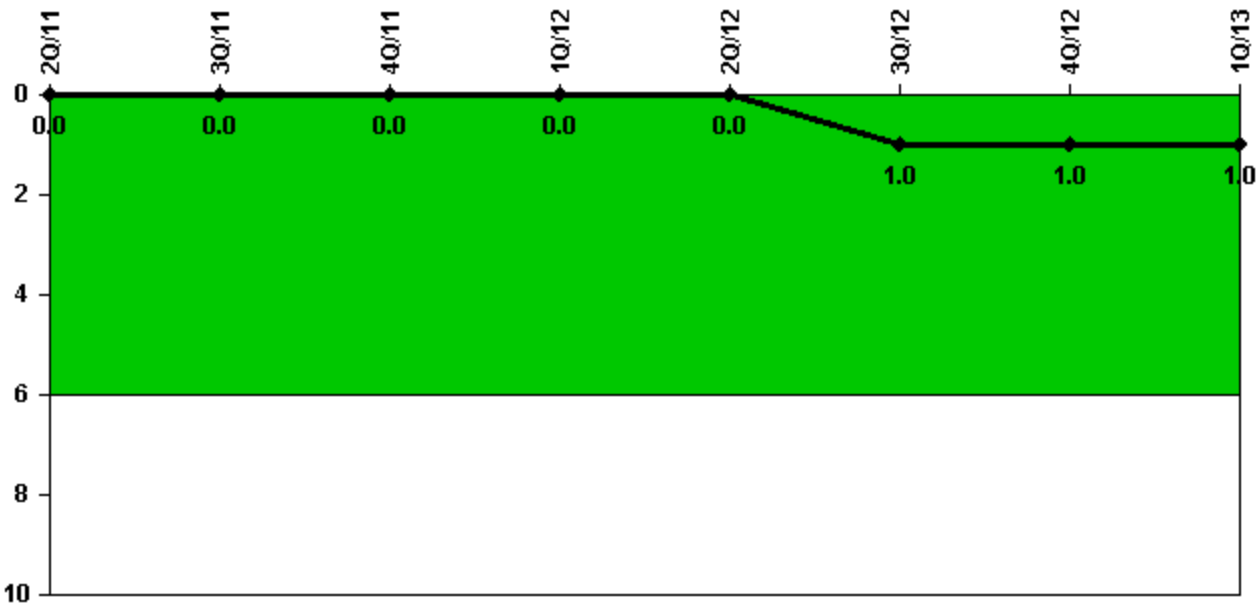
Thresholds: White > 1.0

#### 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	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 (BWR)



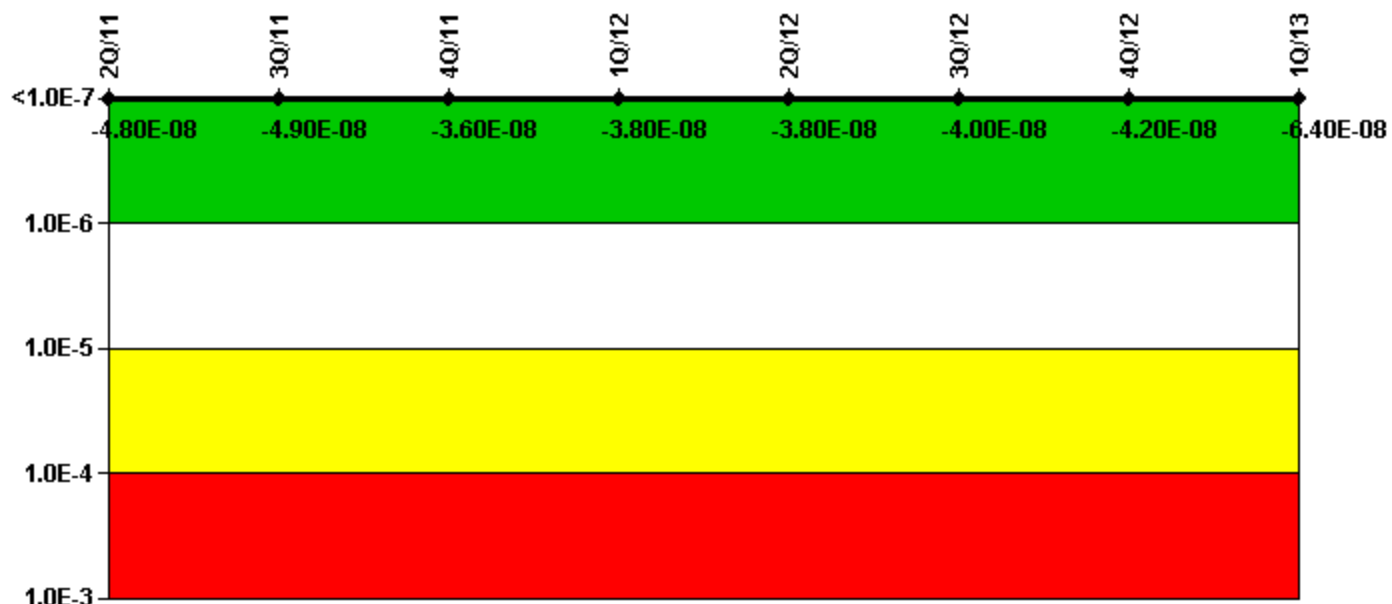
Thresholds: White > 6.0

#### Notes

Safety System Functional Failures (BWR)	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Safety System Functional Failures	0	0	0	0	0	1	0	0
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</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

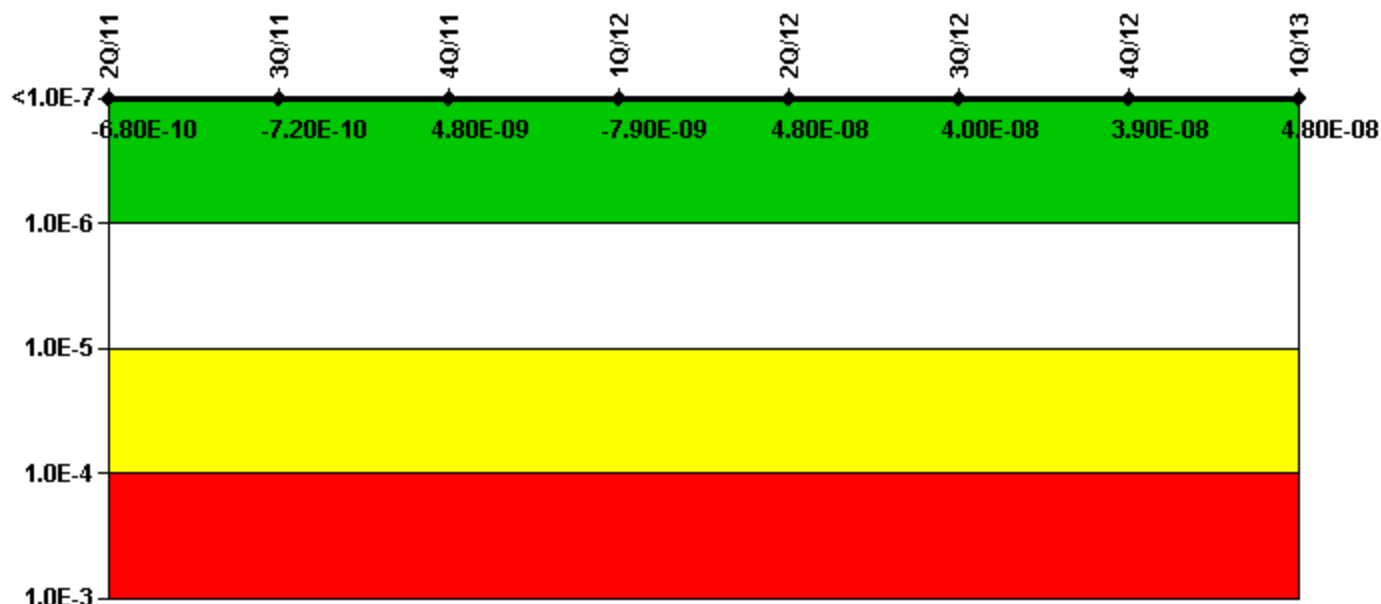
#### Notes

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)	1.23E-08	1.07E-08	2.43E-08	2.19E-08	2.26E-08	1.97E-08	4.00E-08	1.75E-08
URI ( $\Delta$ CDF)	-6.01E-08	-6.01E-08	-6.01E-08	-6.01E-08	-6.01E-08	-6.01E-08	-8.15E-08	-8.15E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.80E-08	-4.90E-08	-3.60E-08	-3.80E-08	-3.80E-08	-4.00E-08	-4.20E-08	-6.40E-08

Licensee Comments:

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

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



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

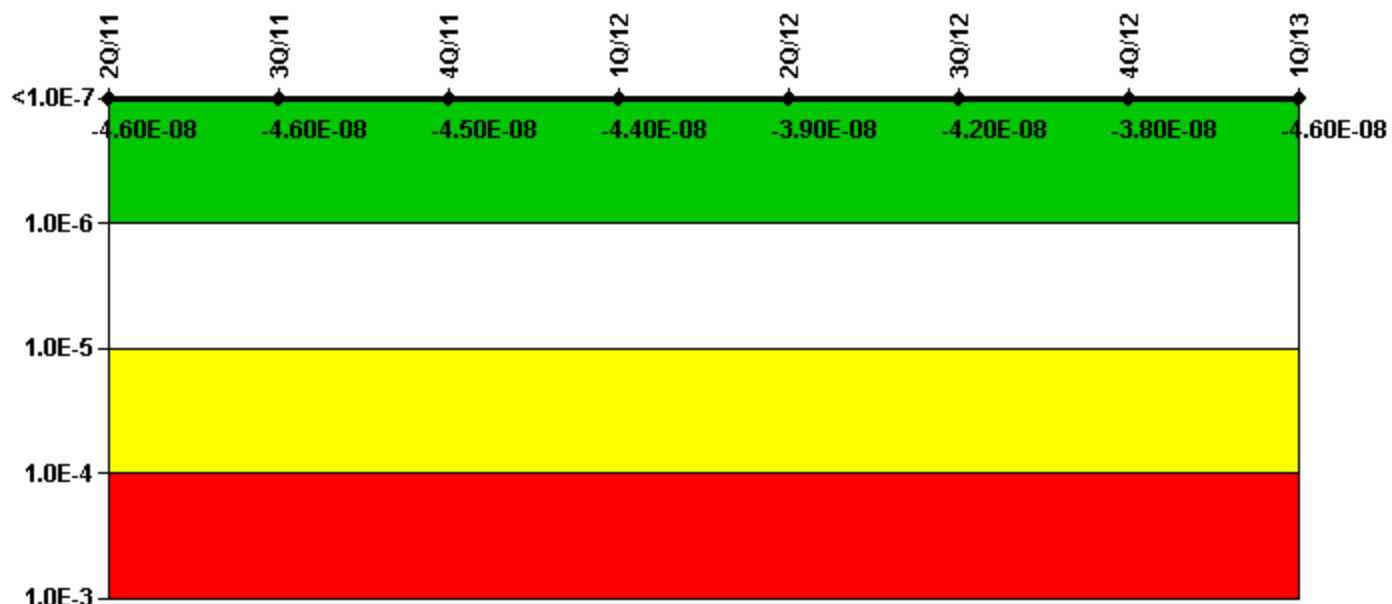
#### Notes

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)	$6.19E-08$	$6.19E-08$	$6.74E-08$	$5.47E-08$	$1.11E-07$	$1.02E-07$	$9.77E-08$	$1.08E-07$
URI ( $\Delta$ CDF)	$-6.26E-08$	$-6.26E-08$	$-6.26E-08$	$-6.26E-08$	$-6.26E-08$	$-6.26E-08$	$-5.91E-08$	$-5.96E-08$
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	$-6.80E-10$	$-7.20E-10$	$4.80E-09$	$-7.90E-09$	$4.80E-08$	$4.00E-08$	$3.90E-08$	$4.80E-08$

Licensee Comments:

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

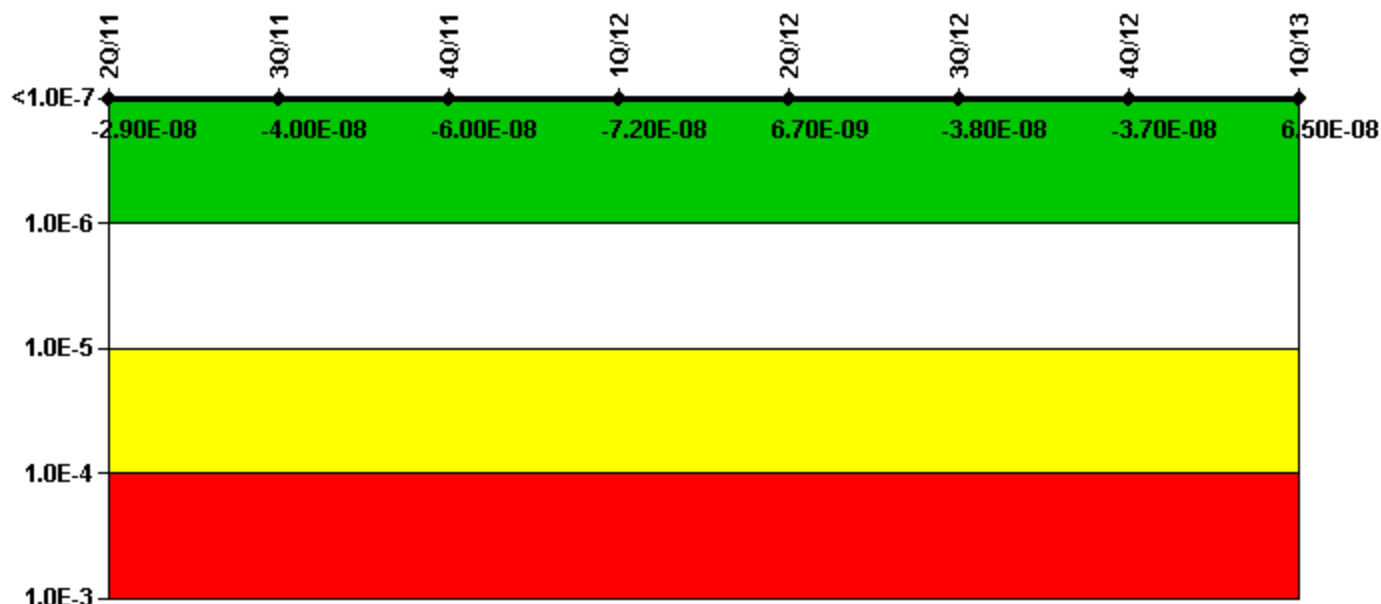
#### Notes

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)	-5.20E-09	-5.20E-09	-5.03E-09	-3.71E-09	1.79E-09	-1.37E-09	4.38E-09	-2.00E-09
URI ( $\Delta$ CDF)	-4.03E-08	-4.03E-08	-4.03E-08	-4.03E-08	-4.03E-08	-4.03E-08	-4.20E-08	-4.40E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.60E-08	-4.60E-08	-4.50E-08	-4.40E-08	-3.90E-08	-4.20E-08	-3.80E-08	-4.60E-08

Licensee Comments:

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

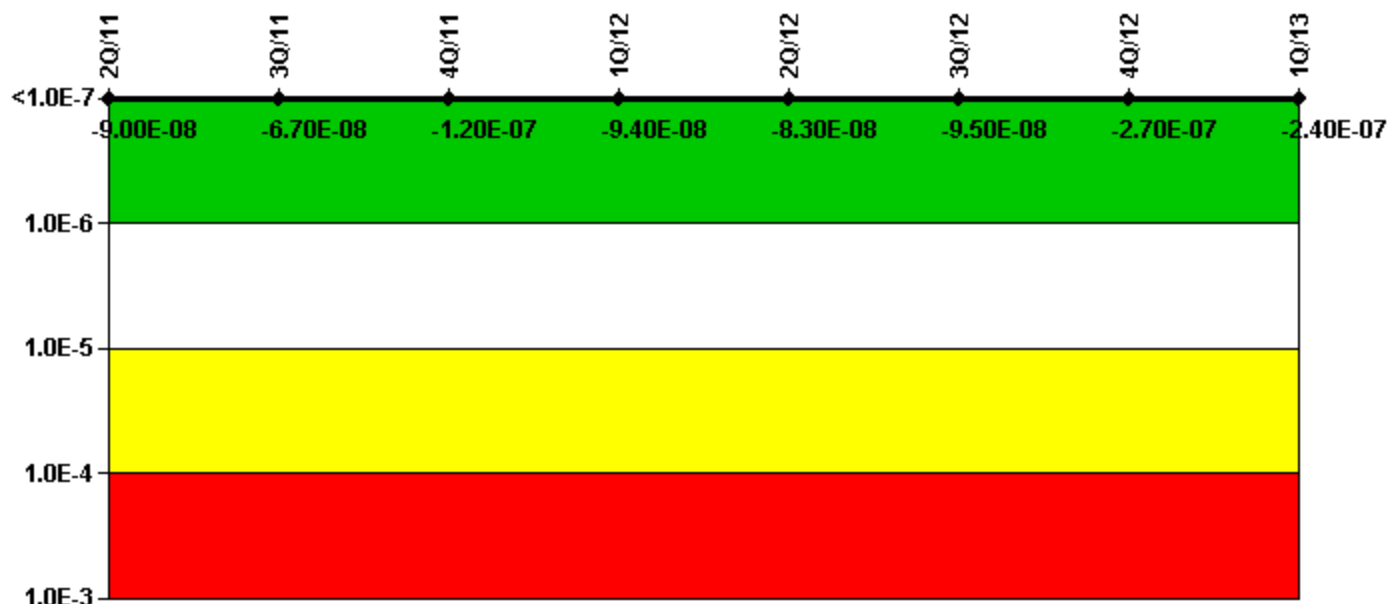
Mitigating Systems Performance Index, Residual Heat Removal System	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
UAI (ΔCDF)	5.15E-08	4.01E-08	2.02E-08	8.46E-09	8.71E-08	4.28E-08	4.14E-08	1.43E-07
URI (ΔCDF)	-8.04E-08	-8.04E-08	-8.04E-08	-8.04E-08	-8.04E-08	-8.04E-08	-7.85E-08	-7.85E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.90E-08	-4.00E-08	-6.00E-08	-7.20E-08	6.70E-09	-3.80E-08	-3.70E-08	6.50E-08

Licensee Comments:

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

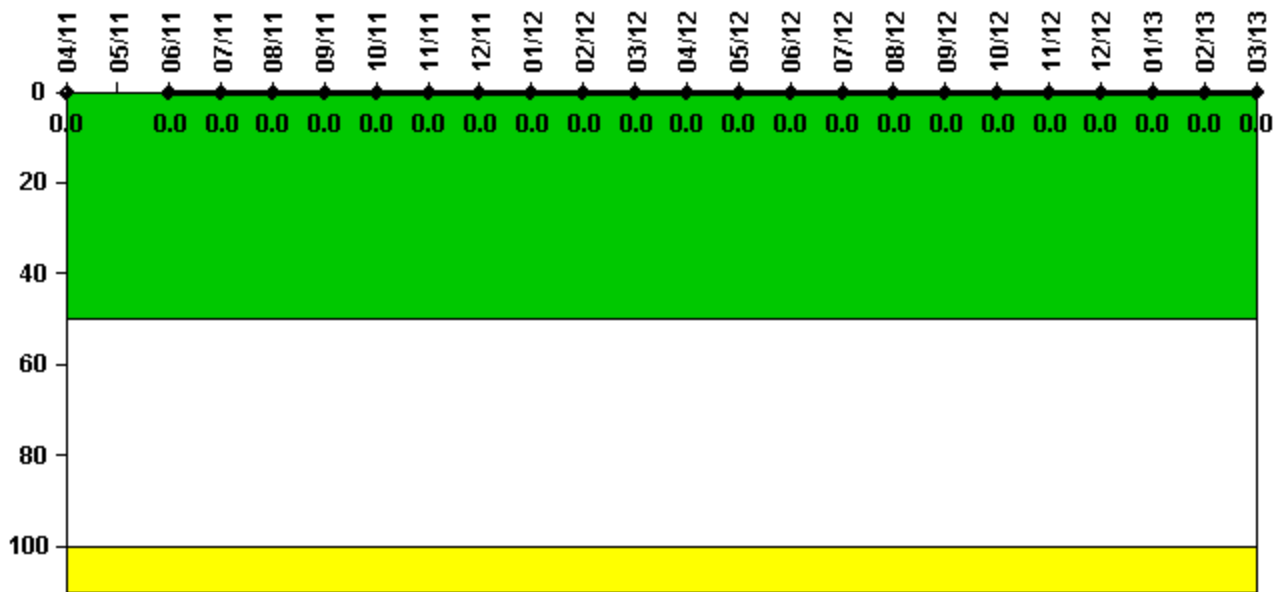
#### Notes

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)	-4.98E-08	-2.63E-08	-7.59E-08	-5.39E-08	-4.20E-08	-5.41E-08	-3.91E-08	-1.11E-08
URI ( $\Delta$ CDF)	-4.06E-08	-4.06E-08	-4.06E-08	-4.06E-08	-4.06E-08	-4.06E-08	-2.28E-07	-2.28E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.00E-08	-6.70E-08	-1.20E-07	-9.40E-08	-8.30E-08	-9.50E-08	-2.70E-07	-2.40E-07

Licensee Comments:

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

### Reactor Coolant System Activity



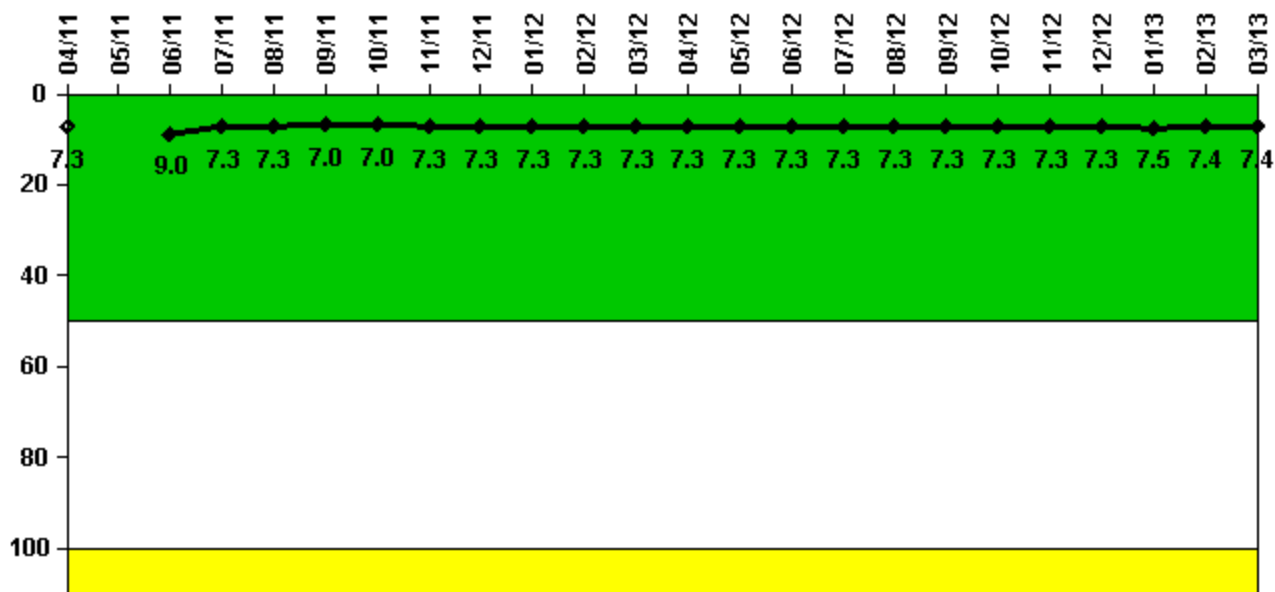
Thresholds: White > 50.0 Yellow > 100.0

#### 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	0.000042	N/A	0.000024	0.000024	0.000041	0.000023	0.000020	0.000022	0.000024	0.000037	0.000045	0.000043
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	N/A	0	0	0	0	0	0	0	0	0	0
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	0.000026	0.000029	0.000032	0.000030	0.000028	0.000029	0.000039	0.000027	0.000031	0.000025	0.000028	0.000029
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
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

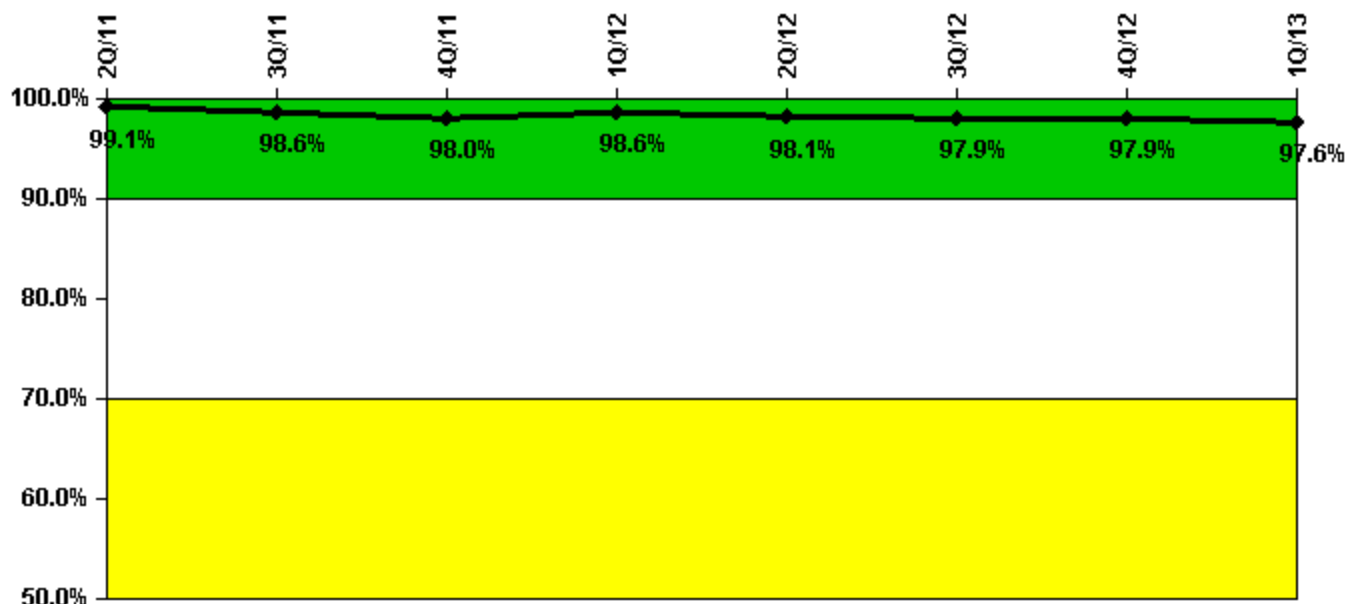
Reactor Coolant System Leakage	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12
Maximum leakage	2.200	N/A	2.700	2.200	2.200	2.100	2.090	2.180	2.180	2.180	2.200	2.200
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Indicator value	7.3	N/A	9.0	7.3	7.3	7.0	7.0	7.3	7.3	7.3	7.3	7.3

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	2.190	2.190	2.190	2.190	2.180	2.180	2.200	2.200	2.200	2.250	2.210	2.210
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Indicator value	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.5	7.4	7.4

Licensee Comments: none

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

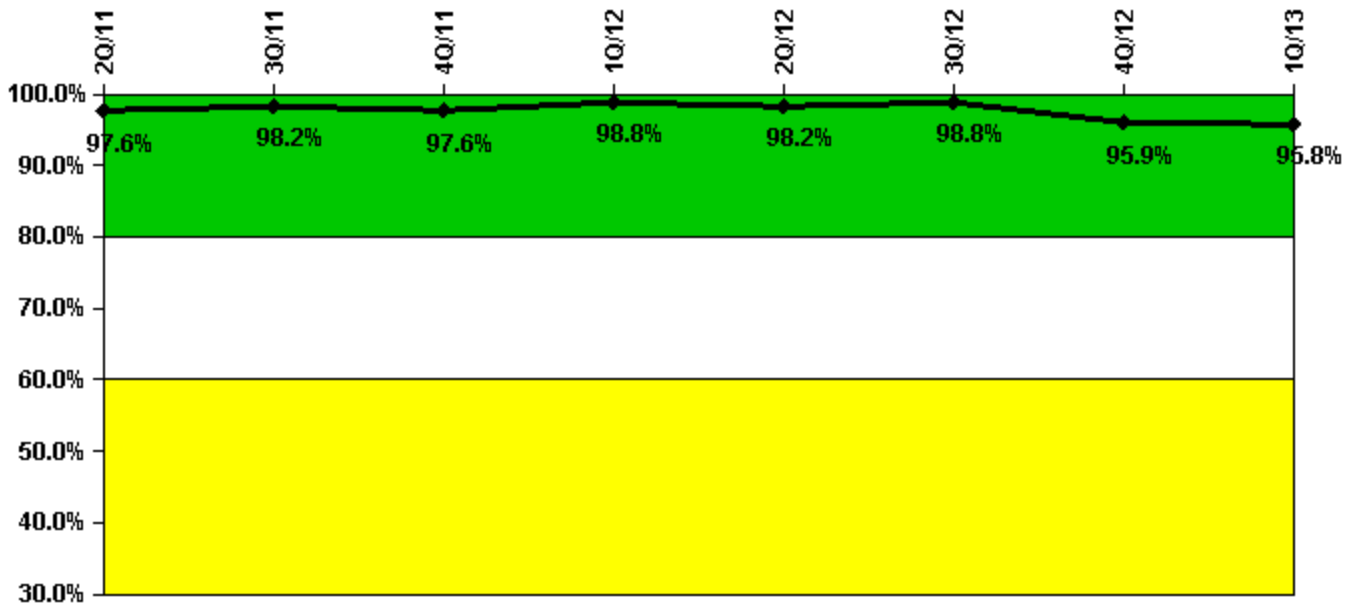
#### Notes

Drill/Exercise Performance	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Successful opportunities	0	21.0	21.0	46.0	22.0	25.0	19.0	7.0
Total opportunities	0	22.0	22.0	46.0	23.0	26.0	19.0	7.0
Indicator value	99.1%	98.6%	98.0%	98.6%	98.1%	97.9%	97.9%	97.6%

#### Licensee Comments:

2Q/12: Corrected the number total opportunities from 2 to 3 initially reported for June 2012. Added a missed DEP opportunity for not declaring an Unusual Event for in-plant changing radiological conditions on June 3, 2012 that met EPlan entry criteria, discovered after the fact. PI color remains GREEN.

### ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

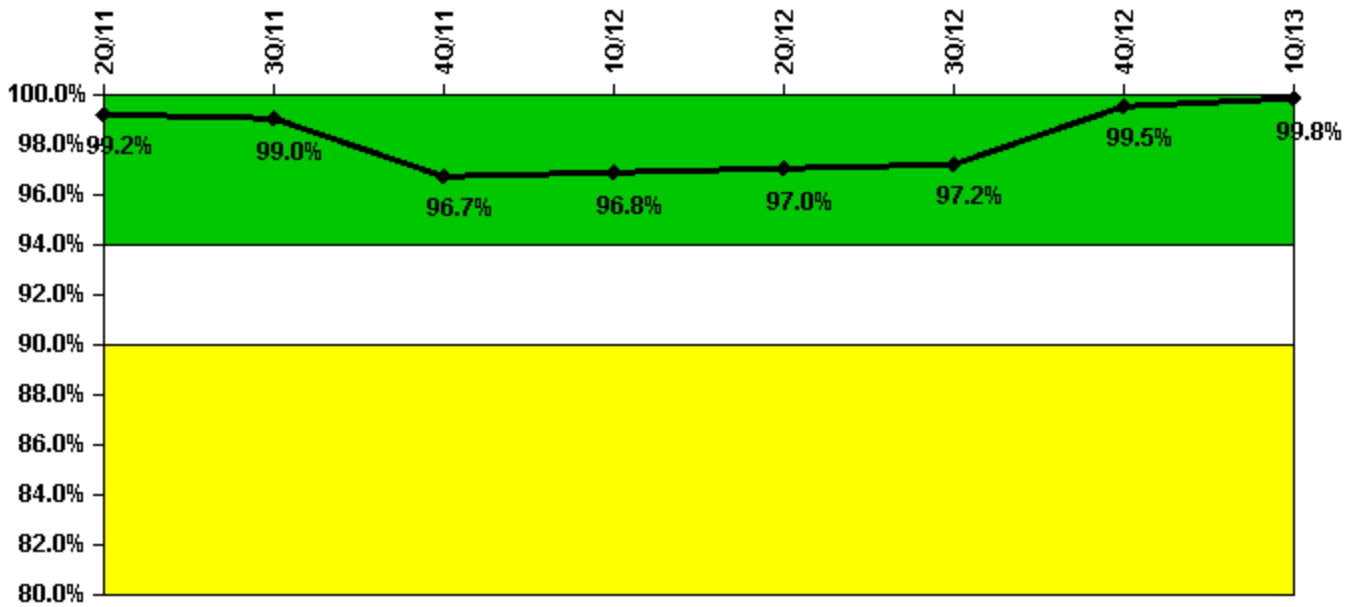
#### Notes

ERO Drill Participation	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Participating Key personnel	166.0	163.0	162.0	161.0	165.0	162.0	163.0	159.0
Total Key personnel	170.0	166.0	166.0	163.0	168.0	164.0	170.0	166.0
Indicator value	97.6%	98.2%	97.6%	98.8%	98.2%	98.8%	95.9%	95.8%

Licensee Comments:

3Q/12: Changed the number of participating and total key ERO personnel initially reported in September 2012. An individual was removed from the key ERO population for unavailability to respond to an emergency event. PI color remains GREEN.

### Alert & Notification System



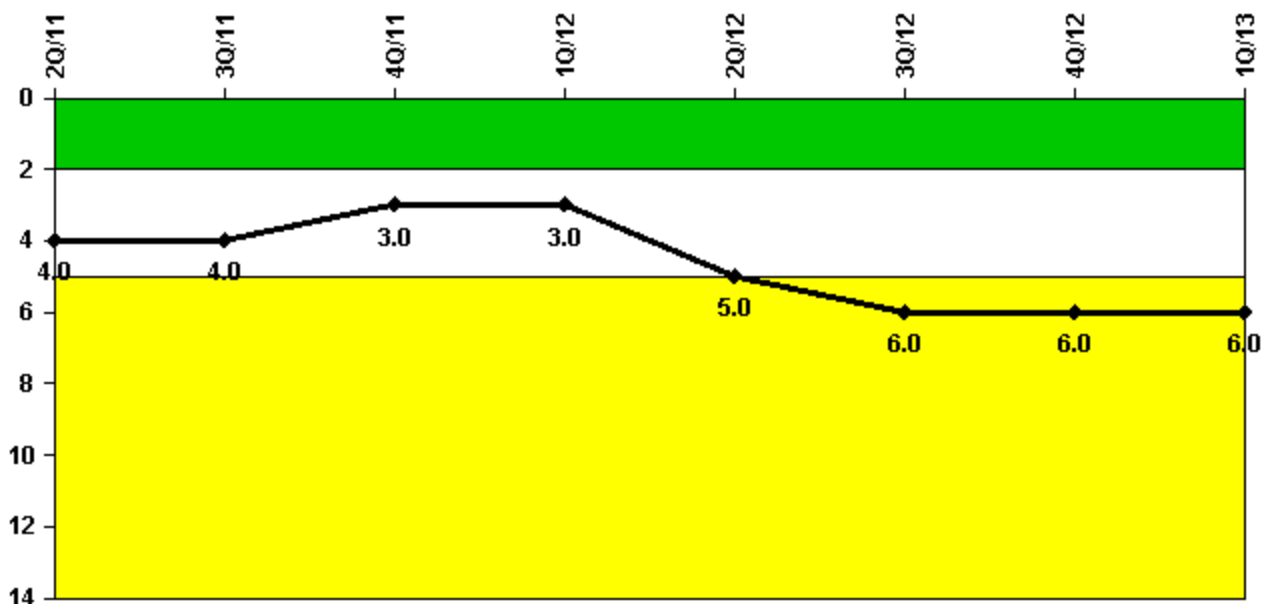
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12	1Q/13
Successful siren-tests	525	527	483	525	530	520	531	531
Total sirens-tests	532	532	532	532	532	521	532	532
Indicator value	99.2%	99.0%	96.7%	96.8%	97.0%	97.2%	99.5%	99.8%

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	3	0	0	0	5	1	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>4</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>5</b>	<b>6</b>	<b>6</b>	<b>6</b>

#### Licensee Comments:

3Q/12: The 2012-09 PI occurrence for potential inadequate LHRA controls established for a loaded HI-STORM container is currently being evaluated at the root cause level. The PI value may change depending on results of the root cause evaluation.

2Q/12: Corrected the number of TS HRA occurrences initially reported for June 2012 from 4 to 2 based on further review of the associated event and application of NEI 99-02 guidelines. A Frequently Asked Question (FAQ) has been submitted to address the associated issues, which include having the same cause in a common time frame for the occurrences. The FAQ is currently under review at this time. The PI value may be modified at the completion of the FAQ process. The PI color is WHITE (Increased Regulatory Response Band) and is not changed by this correction. Corrected the number of TS HRA occurrences reported for April 2012 from 0 to 1. A root cause extent-of-condition review performed in the fourth quarter 2012 identified an area in the plant which met TS HRA conditions in April 2012 that was not controlled in accordance with TS. PI color remains WHITE.

2Q/12: Corrected the number of TS HRA occurrences initially reported for June 2012 from 4 to 2 based on further review of the associated event and application of NEI 99-02 guidelines. A Frequently Asked Question (FAQ) has been submitted to address the associated issues, which include having the same cause in a common time frame for the occurrences. The FAQ is currently under review at this time. The PI value may be modified at the completion of the FAQ process. The PI color is WHITE (Increased Regulatory Response Band) and is not changed

by this correction.

2Q/12: The number of TS HRA occurrences reported for June remains under evaluation at this time. A Frequently Asked Question (FAQ) submittal is planned to address the associated issues, which include having the same cause in a common time frame for the occurrences. The PI value may be modified as a result. With submittal of the Second Quarter 2012 PI data, the indicator performance has exceeded the green/white threshold and has moved to the Increased Regulatory Response Band. The PI color is WHITE.

2Q/12: Corrected the number of TS HRA occurrences initially reported for June 2012 from 2 to 3 based on the final outcome of Frequently Asked Question (FAQ) 12-04. The FAQ process was entered to evaluate the number of occurrences that should be reported for the June 2-7, 2012, Radwaste El. 574 resin event. NRC ROP review of the FAQ determined that 3 TS HRA occurrences should be reported. Also the number of TS HRA occurrences reported for April 2012 was corrected earlier from 0 to 1. A root cause extent-of-condition review performed in the fourth quarter 2012 identified an area of the plant which met TS HRA conditions in April 2012 that was not controlled in accordance with TS. With these corrections, the total number of TS HRA occurrences at the end of the Second Quarter 2012 is 5, which is at WHITE/YELLOW (Increased Regulatory Response Band/Required Regulatory Response Band) performance threshold. The PI color transitions to YELLOW in September 2012 when a TS HRA occurrence was experienced for failure to adequately control access to the top of a loaded HI-STORM container whose radiation levels met criteria for a TS HRA. In April 2013, performance returns to the WHITE/YELLOW threshold with a total of 5 occurrences in the past 12 months.

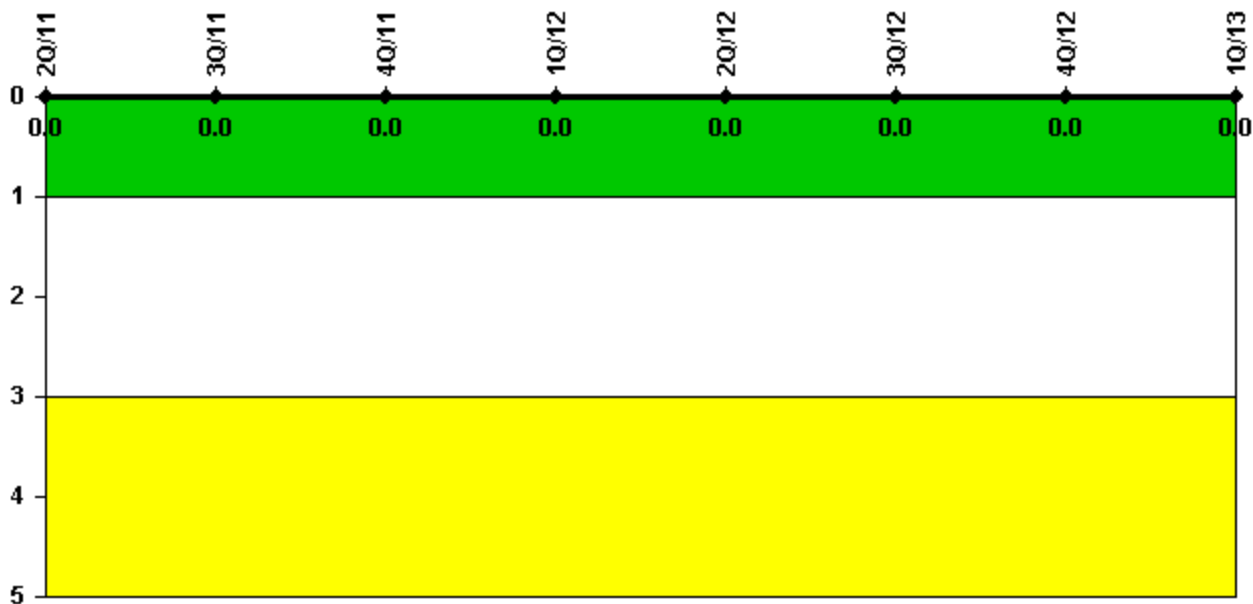
2Q/11: OR01 indicator performance is in the Increased Regulatory Response Band (White). Changed the number of High radiation area occurrences to 2 from 1 initially reported for April 2011. The reinsertion of source range monitor C detector into the reactor vessel on April 22 has been re-evaluated and determined to be reportable based on the dose rates in the accessible undervessel areas not being characterized sufficiently, which is a violation of TS 5.7.1.b. The indicator color is unchanged by this correction.

2Q/11: OR1 PI performance is in the Increased Regulatory Response Band (White).

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### 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
Indicator value	0	0	0	0	0	0	0	0

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: June 18, 2013*