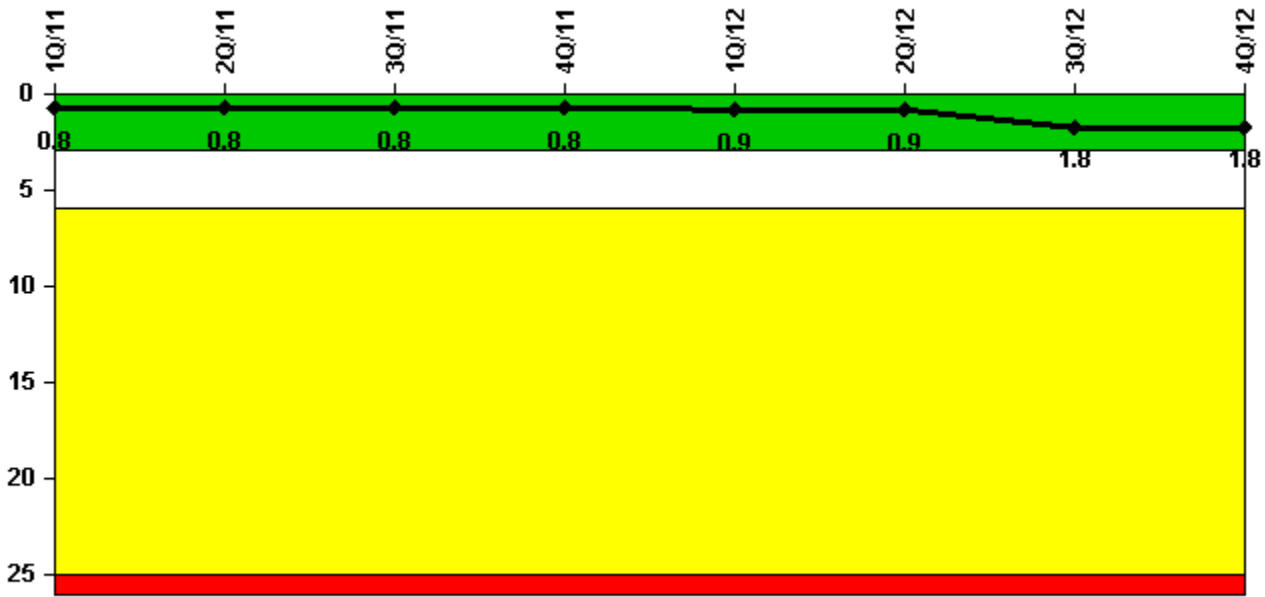


# Limerick 1

## 4Q/2012 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



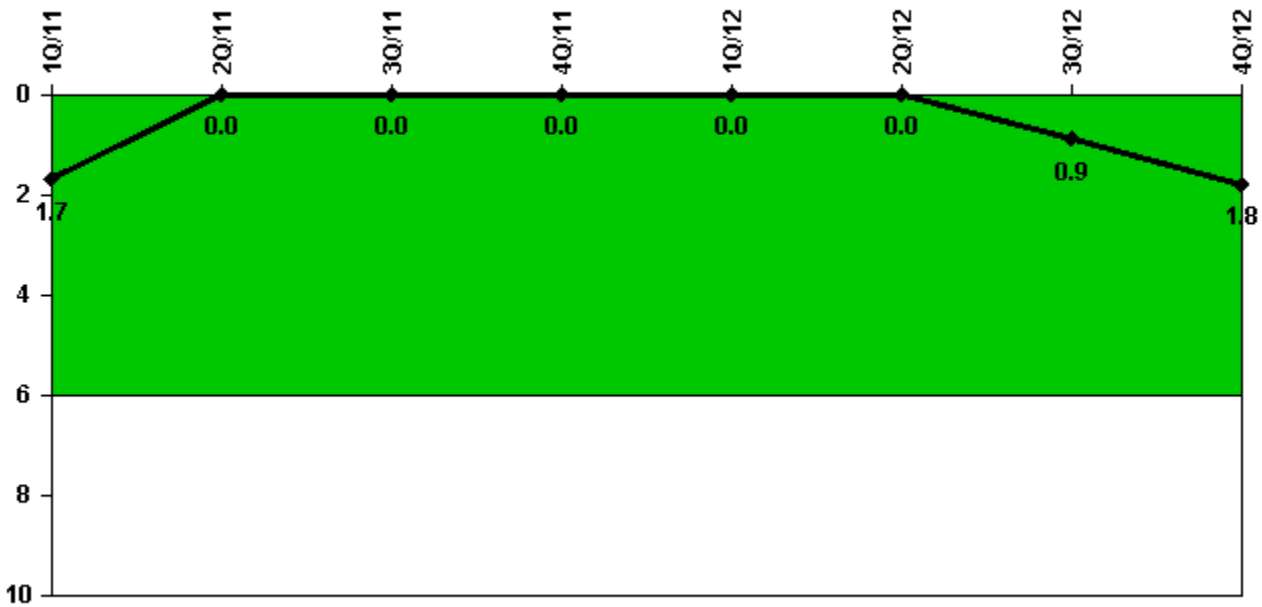
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### 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	1.0	0	0	0	1.0	1.0	0
Critical hours	2159.0	2142.8	2208.0	2018.1	1463.3	2150.3	2002.5	2209.0
<b>Indicator value</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>0.9</b>	<b>0.9</b>	<b>1.8</b>	<b>1.8</b>

Licensee Comments: none

### 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	1.0	1.0
Critical hours	2159.0	2142.8	2208.0	2018.1	1463.3	2150.3	2002.5	2209.0
<b>Indicator value</b>	<b>1.7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.9</b>	<b>1.8</b>

Licensee Comments: none

### Unplanned Scrams with Complications



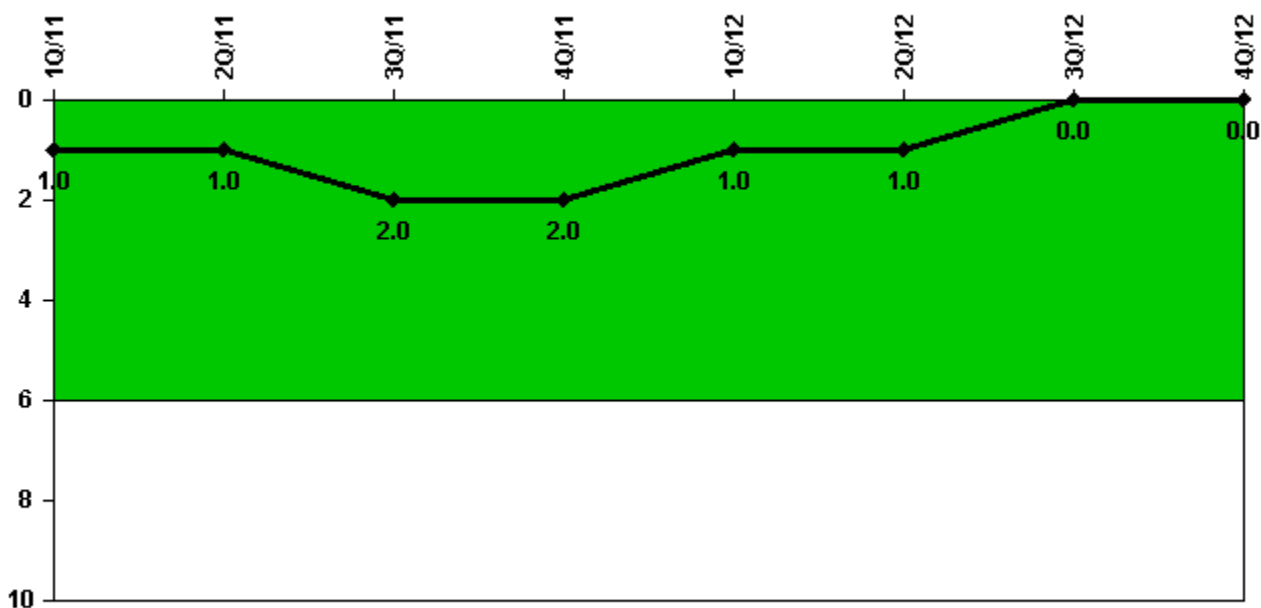
Thresholds: White > 1.0

#### 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 (BWR)



Thresholds: White > 6.0

#### Notes

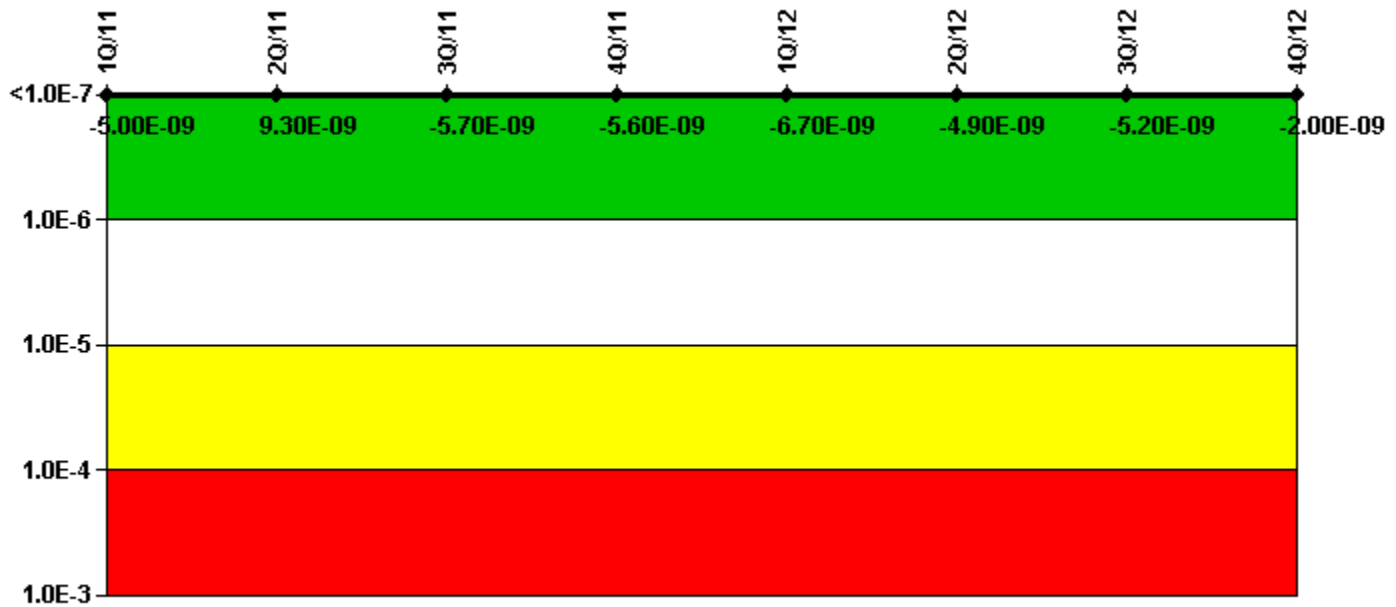
Safety System Functional Failures (BWR)	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Safety System Functional Failures	1	0	1	0	0	0	0	0
<b>Indicator value</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>

Licensee Comments:

3Q/11: LER 2011-003-00, High Pressure Coolant Injection System Turbine Control Valve failed to Fully Close After testing, Limerick Unit 1 issued 8/22/11.

1Q/11: LER 2010-002-00 issued 2/10/11 for Unit 1 HPCI Overspeed Test Trip Mechanism Failure. event date 12/12/10. This event does not result in any threshold or color change to the indicator.

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



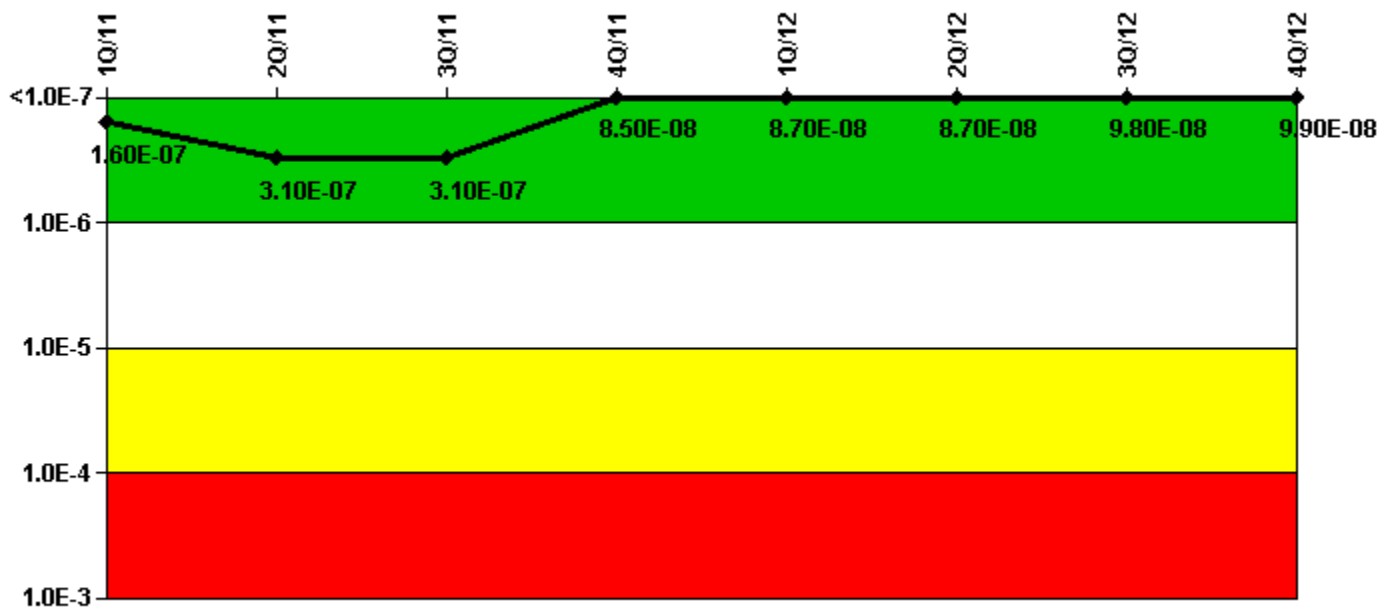
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### 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)	2.92E-09	2.21E-09	1.86E-09	8.48E-10	-1.66E-10	-1.22E-10	-1.24E-10	2.32E-09
URI ( $\Delta$ CDF)	-7.94E-09	7.10E-09	-7.58E-09	-6.45E-09	-6.58E-09	-4.78E-09	-5.12E-09	-4.27E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.00E-09	9.30E-09	-5.70E-09	-5.60E-09	-6.70E-09	-4.90E-09	-5.20E-09	-2.00E-09

Licensee Comments: none

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



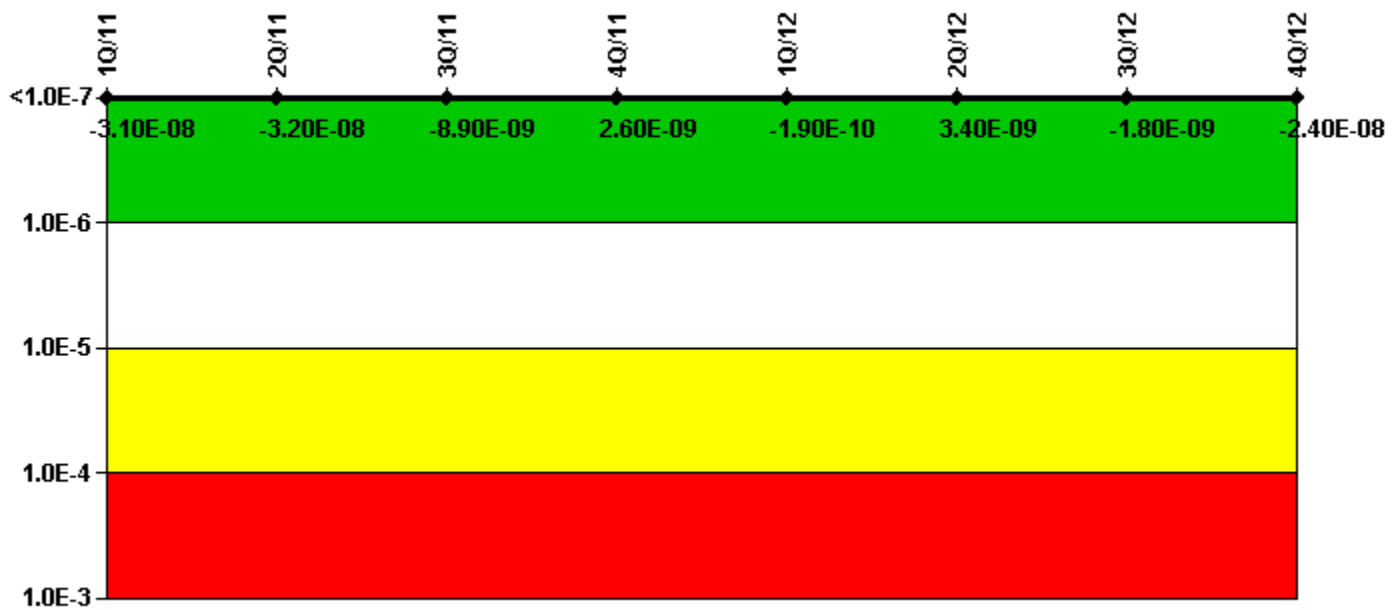
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### 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 (ΔCDF)	-2.38E-08	2.44E-08	2.44E-08	2.26E-08	2.42E-08	2.43E-08	3.60E-08	3.63E-08
URI (ΔCDF)	1.81E-07	2.90E-07	2.90E-07	6.26E-08	6.25E-08	6.25E-08	6.24E-08	6.24E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.60E-07	3.10E-07	3.10E-07	8.50E-08	8.70E-08	8.70E-08	9.80E-08	9.90E-08

Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



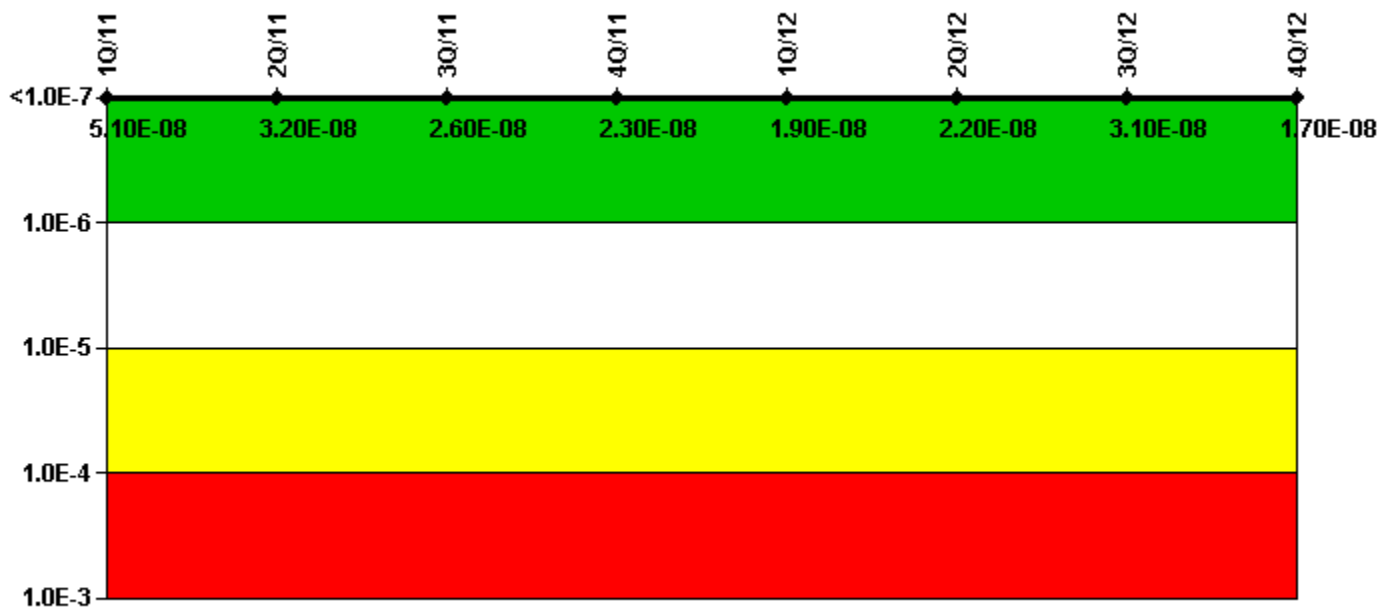
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

#### 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)	-3.78E-09	-4.17E-09	1.85E-08	3.00E-08	2.72E-08	3.08E-08	2.56E-08	3.69E-09
URI ( $\Delta$ CDF)	-2.73E-08	-2.73E-08	-2.73E-08	-2.73E-08	-2.73E-08	-2.73E-08	-2.73E-08	-2.73E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.10E-08	-3.20E-08	-8.90E-09	2.60E-09	-1.90E-10	3.40E-09	-1.80E-09	-2.40E-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

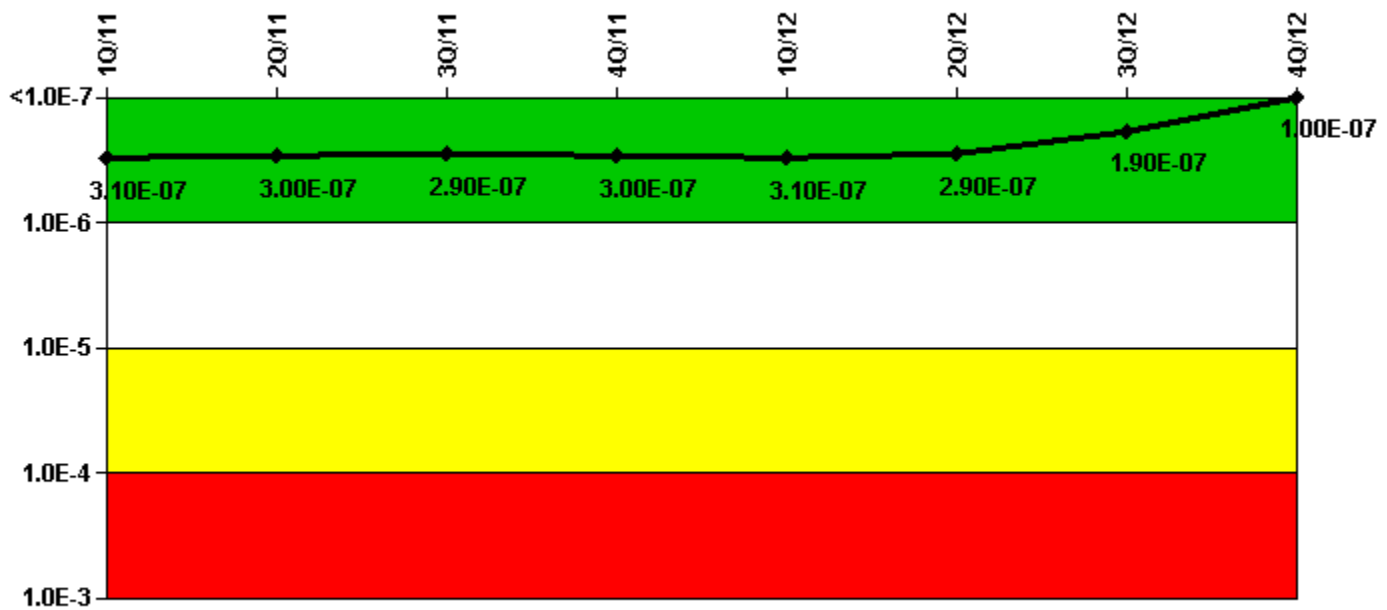
#### Notes

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)	5.24E-08	3.36E-08	2.71E-08	2.47E-08	2.06E-08	2.43E-08	3.31E-08	1.87E-08
URI ( $\Delta$ CDF)	-1.16E-09	-1.13E-09	-1.11E-09	-1.76E-09	-1.99E-09	-1.96E-09	-1.92E-09	-1.92E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	5.10E-08	3.20E-08	2.60E-08	2.30E-08	1.90E-08	2.20E-08	3.10E-08	1.70E-08

Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



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

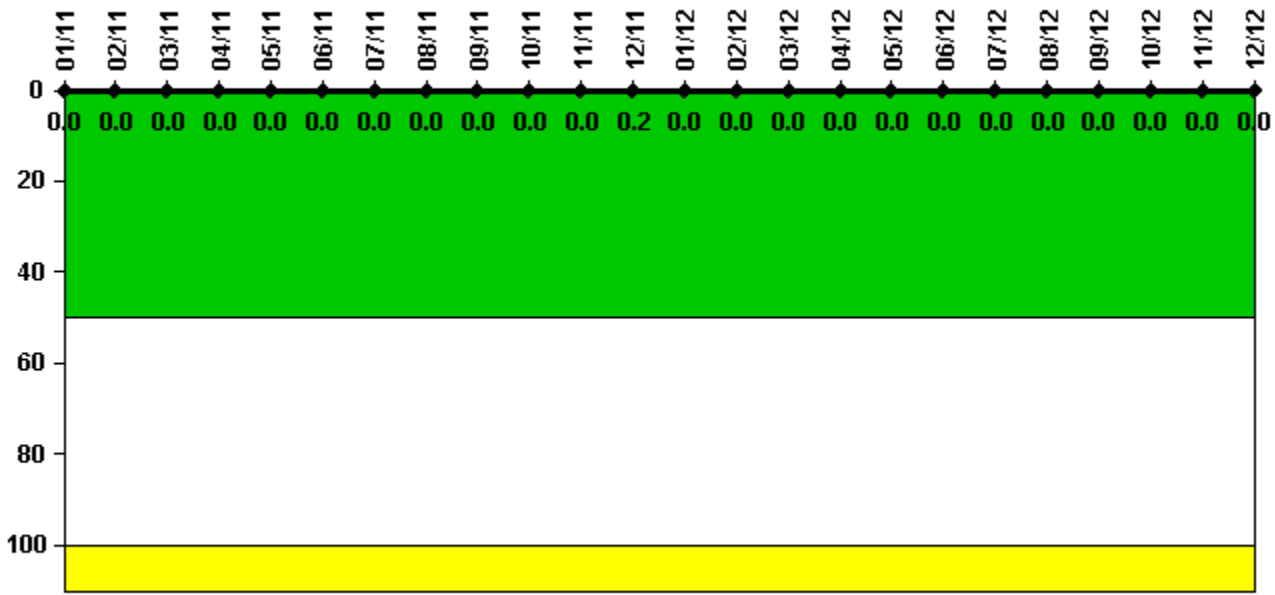
#### Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
UAI (ΔCDF)	3.36E-07	3.34E-07	3.23E-07	3.31E-07	3.41E-07	3.18E-07	2.23E-07	1.35E-07
URI (ΔCDF)	-2.82E-08	-2.85E-08	-2.92E-08	-3.01E-08	-3.06E-08	-3.10E-08	-3.13E-08	-3.15E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	3.10E-07	3.00E-07	2.90E-07	3.00E-07	3.10E-07	2.90E-07	1.90E-07	1.00E-07

#### Licensee Comments:

1Q/12: LGS MSPI Basis Document revision 4 was effective on 01/01/12. This was approved and issued on 12/15/11. This revision incorporated FAQs 11-01 (CW), 11-06, 11-07, 11-08 (EDGs) and other minor changes. No PRA data or factors were changed and there was no impact to historical PI data.

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

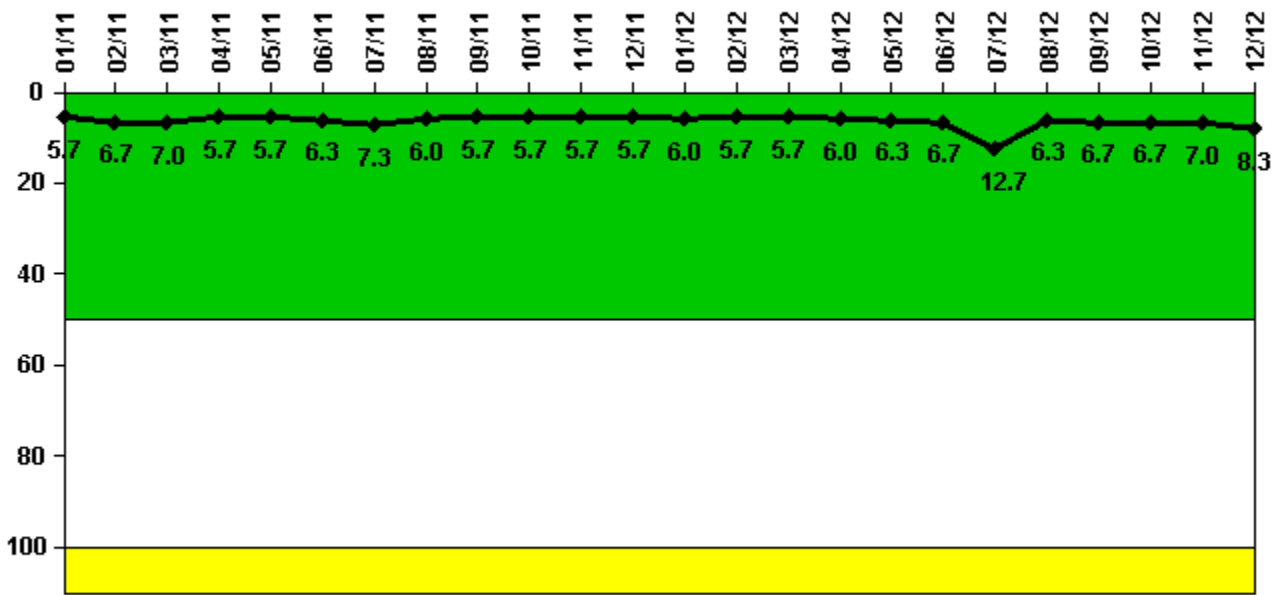
Reactor Coolant System Activity	1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11
Maximum activity	0.000003	0.000003	0.000006	0.000002	0.000003	0.000020	0.000005	0.000004	0.000003	0.000003	0.000003	0.000311
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0.2

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	0.000008	0.000004	0.000007	0.000003	0.000003	0.000003	0.000005	0.000006	0.000003	0.000003	0.000002	0.000003
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

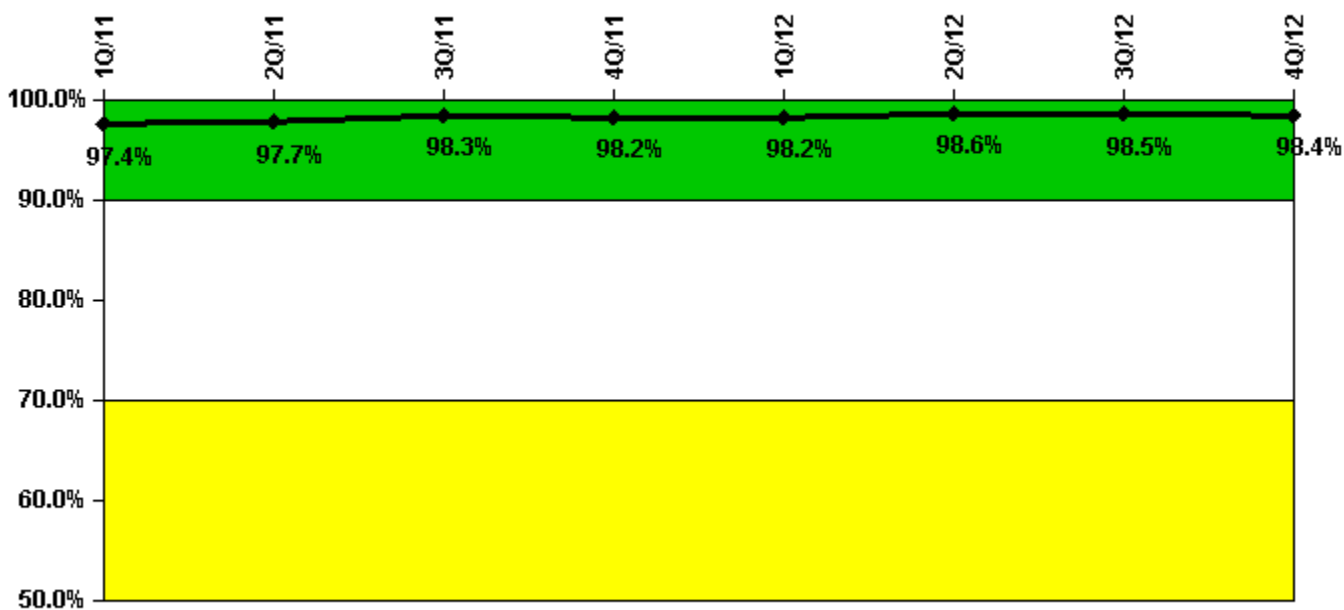
Reactor Coolant System Leakage	1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11
Maximum leakage	1.700	2.000	2.100	1.700	1.700	1.900	2.200	1.800	1.700	1.700	1.700	1.700
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Indicator value	5.7	6.7	7.0	5.7	5.7	6.3	7.3	6.0	5.7	5.7	5.7	5.7

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	1.800	1.700	1.700	1.800	1.900	2.000	3.800	1.900	2.000	2.000	2.100	2.500
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	6.0	5.7	5.7	6.0	6.3	6.7	12.7	6.3	6.7	6.7	7.0	8.3

Licensee Comments: none

### Drill/Exercise Performance



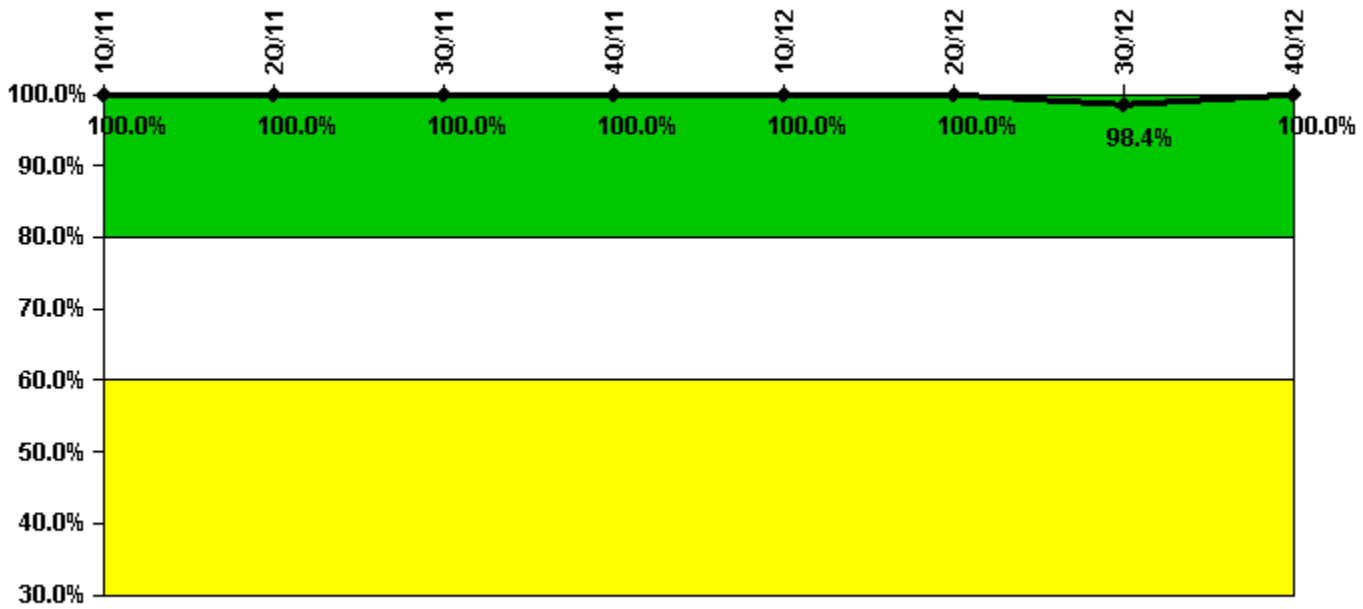
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Successful opportunities	66.0	20.0	112.0	56.0	0	73.0	26.0	27.0
Total opportunities	68.0	20.0	113.0	57.0	0	73.0	28.0	27.0
<b>Indicator value</b>	<b>97.4%</b>	<b>97.7%</b>	<b>98.3%</b>	<b>98.2%</b>	<b>98.2%</b>	<b>98.6%</b>	<b>98.5%</b>	<b>98.4%</b>

Licensee Comments: none

### ERO Drill Participation



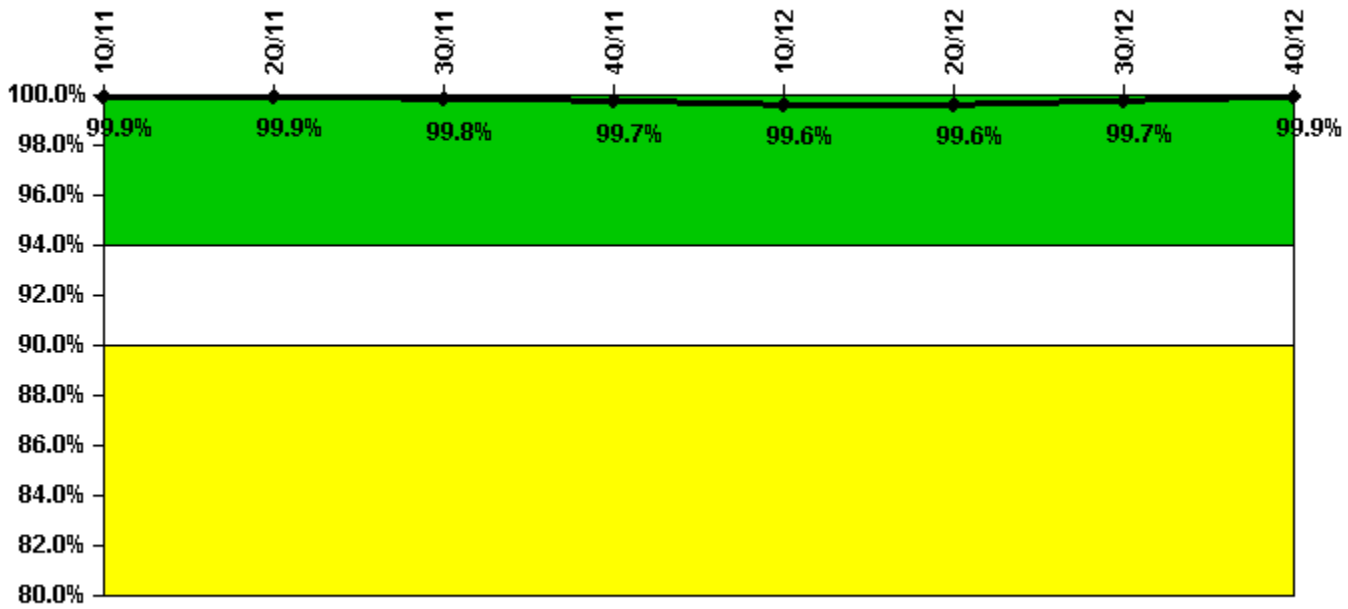
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Participating Key personnel	65.0	64.0	63.0	65.0	64.0	66.0	62.0	65.0
Total Key personnel	65.0	64.0	63.0	65.0	64.0	66.0	63.0	65.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.4%	100.0%

Licensee Comments: none

### Alert & Notification System



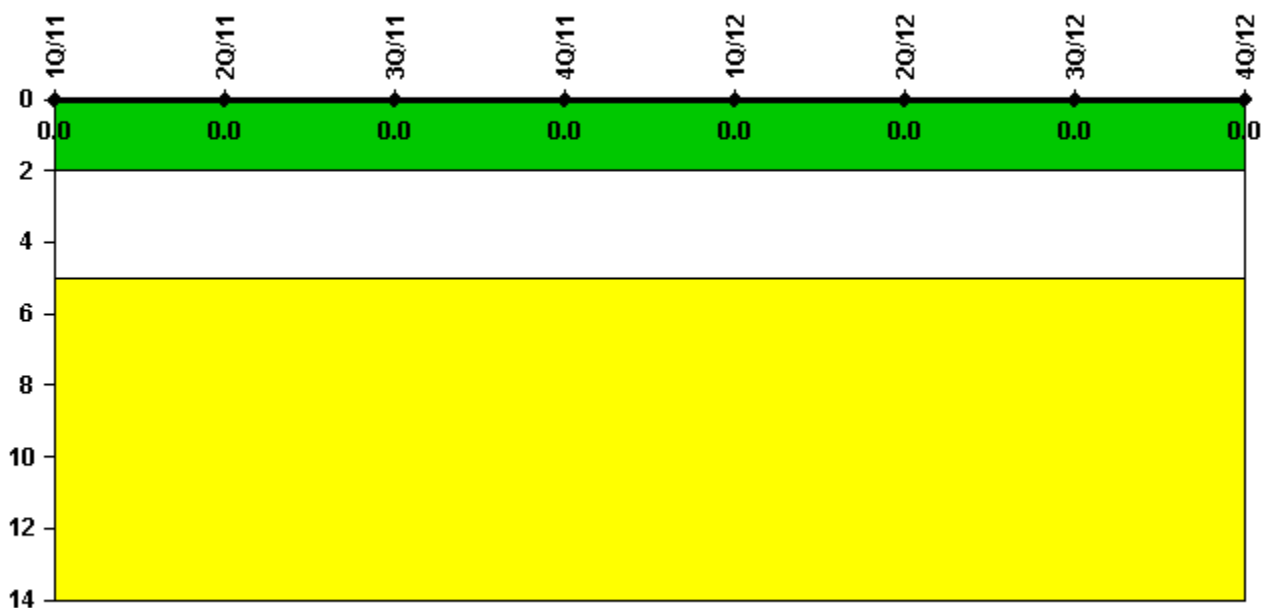
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12	2Q/12	3Q/12	4Q/12
Successful siren-tests	2144	2144	2136	2128	2141	2143	2141	2309
Total sirens-tests	2145	2145	2145	2145	2145	2145	2145	2310
Indicator value	99.9%	99.9%	99.8%	99.7%	99.6%	99.6%	99.7%	99.9%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

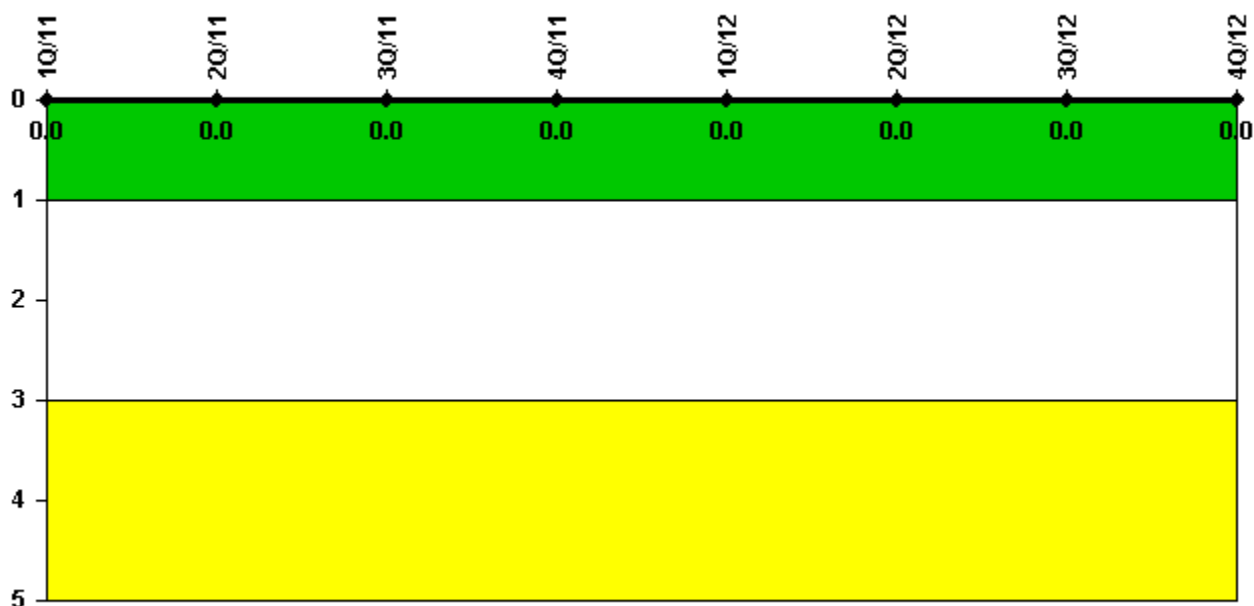
**Notes**

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:

2Q/11: The NRC has determined that the event was not a performance indicator occurrence during the Limerick Radiation Instruments inspection from December 12-16, 2011. There is no Color Change associated with this event.

### 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.