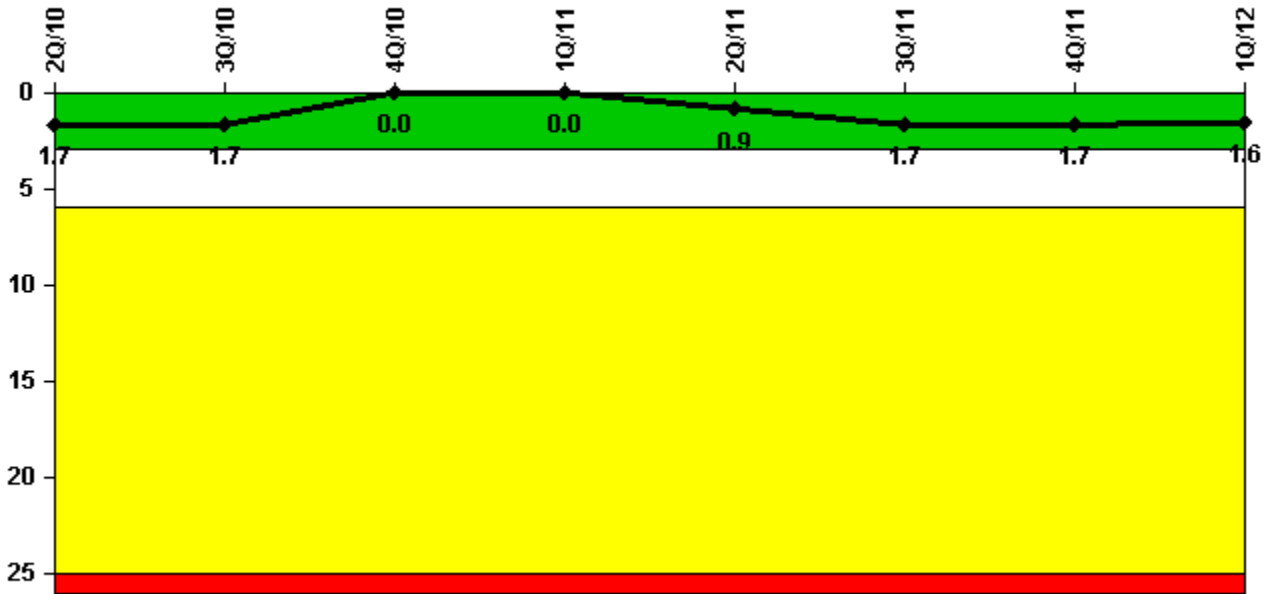


# Vogle 1

## 1Q/2012 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



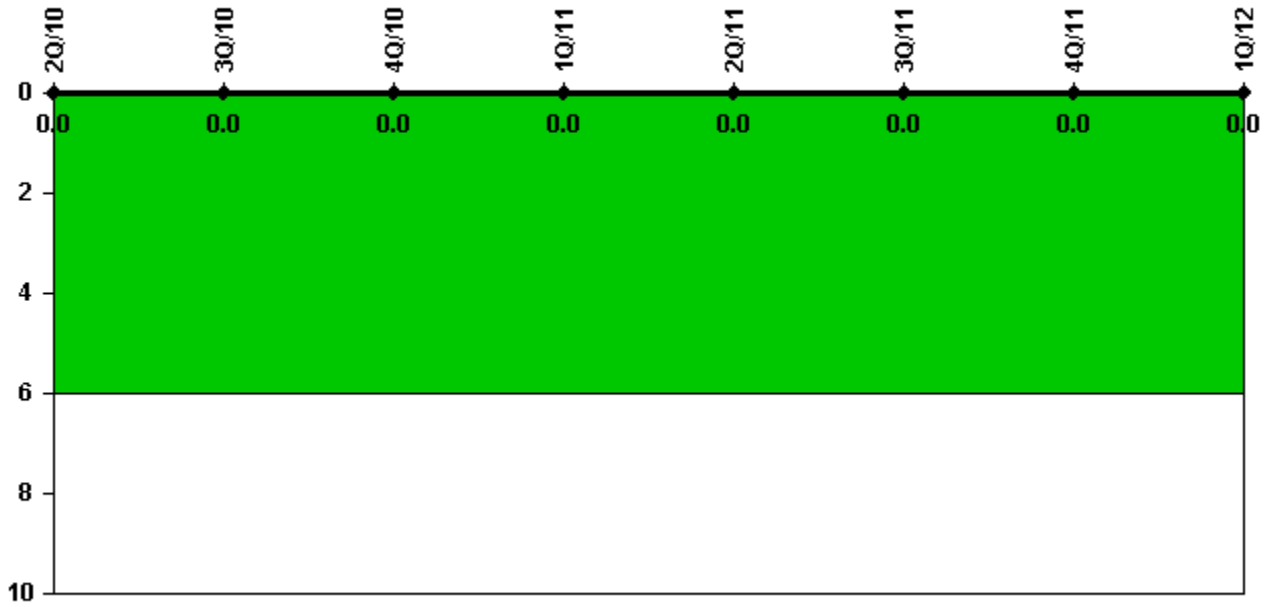
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Unplanned scrams	0	0	0	0	1.0	1.0	0	0
Critical hours	2184.0	2208.0	2209.0	1544.5	2105.8	2174.6	2209.0	2183.0
Indicator value	1.7	1.7	0	0	0.9	1.7	1.7	1.6

Licensee Comments: none

## Unplanned Power Changes per 7000 Critical Hrs



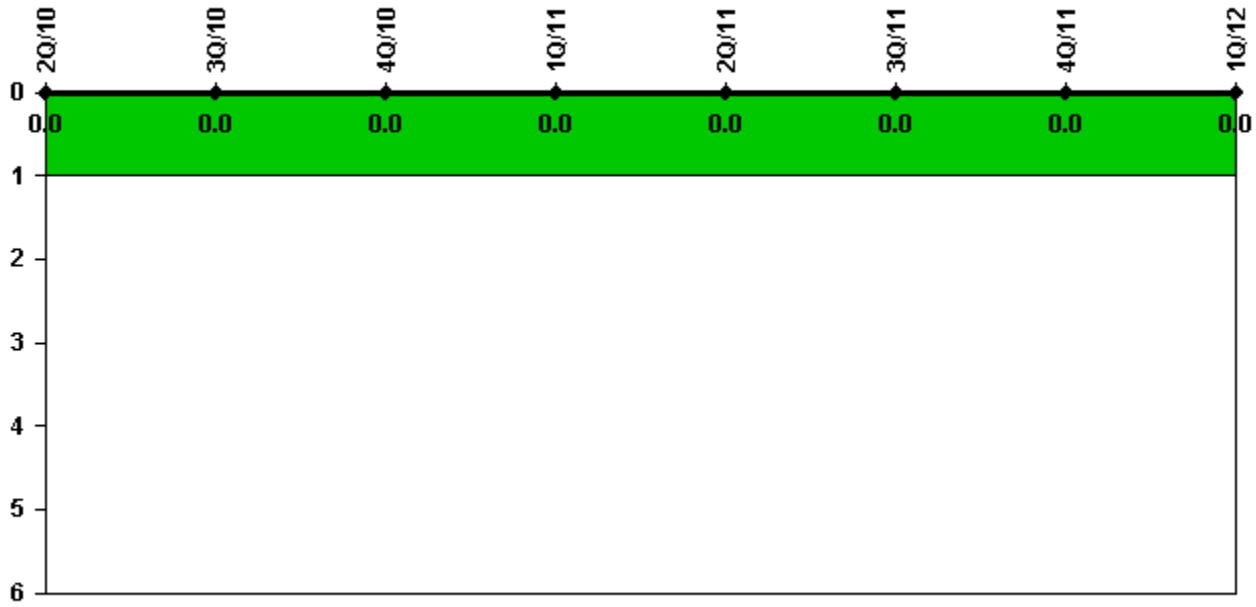
Thresholds: White > 6.0

### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2184.0	2208.0	2209.0	1544.5	2105.8	2174.6	2209.0	2183.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

# Unplanned Scrams with Complications



Thresholds: White > 1.0

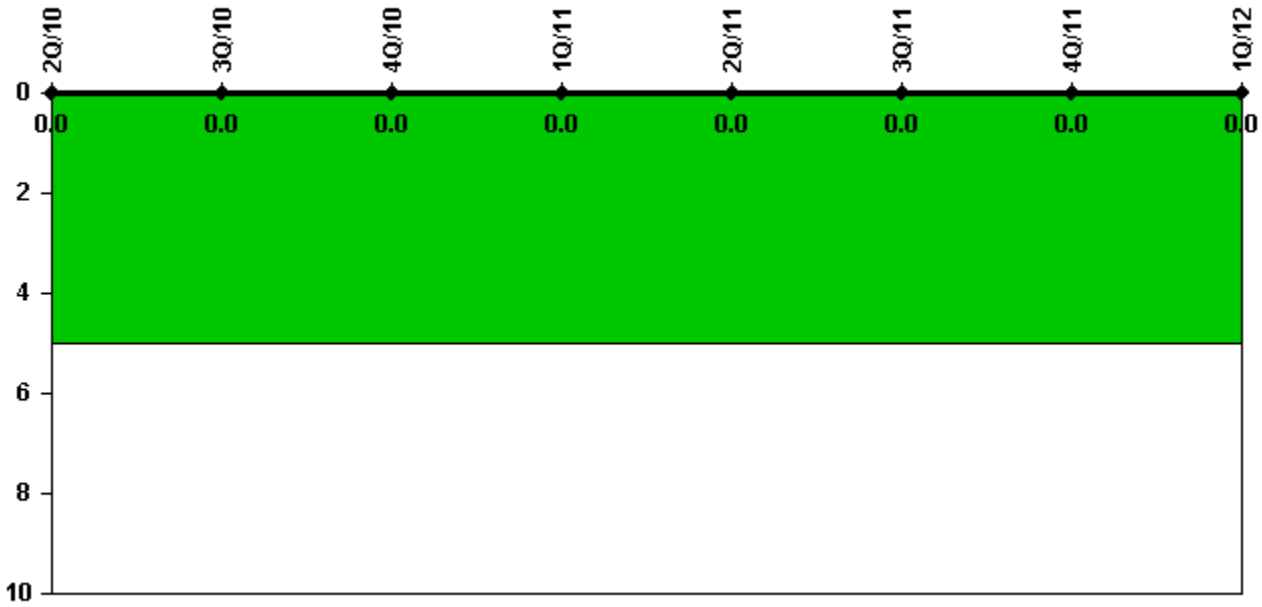
## Notes

Unplanned Scrams with Complications	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

---

## Safety System Functional Failures (PWR)



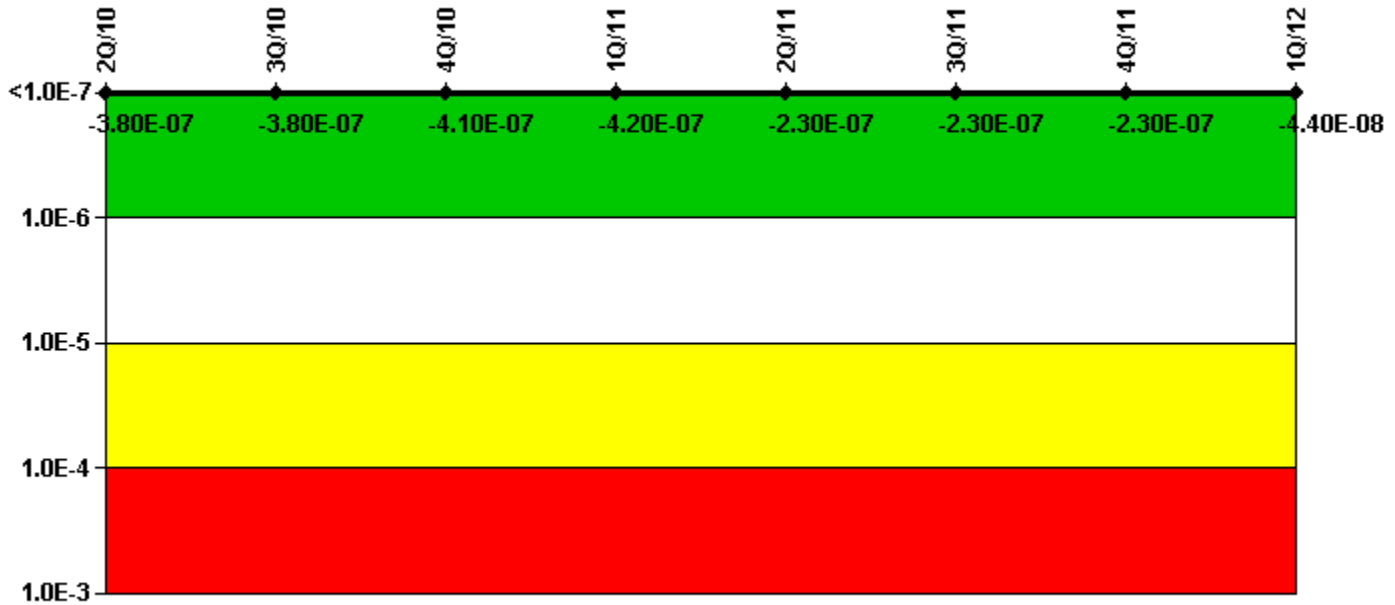
Thresholds: White > 5.0

### Notes

Safety System Functional Failures (PWR)	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

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/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	-1.32E-07	-1.31E-07	-1.31E-07	-1.30E-07	-8.03E-08	-8.01E-08	-8.24E-08	1.10E-07
URI ( $\Delta$ CDF)	-2.48E-07	-2.54E-07	-2.76E-07	-2.86E-07	-1.51E-07	-1.52E-07	-1.49E-07	-1.55E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.80E-07	-3.80E-07	-4.10E-07	-4.20E-07	-2.30E-07	-2.30E-07	-2.30E-07	-4.40E-08

Licensee Comments:

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

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

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

1Q/11: Risk Cap Invoked.

1Q/11: Risk Cap Invoked. Changed PRA Parameter(s).

4Q/10: Risk Cap Invoked.

4Q/10: Risk Cap Invoked. Changed PRA Parameter(s).

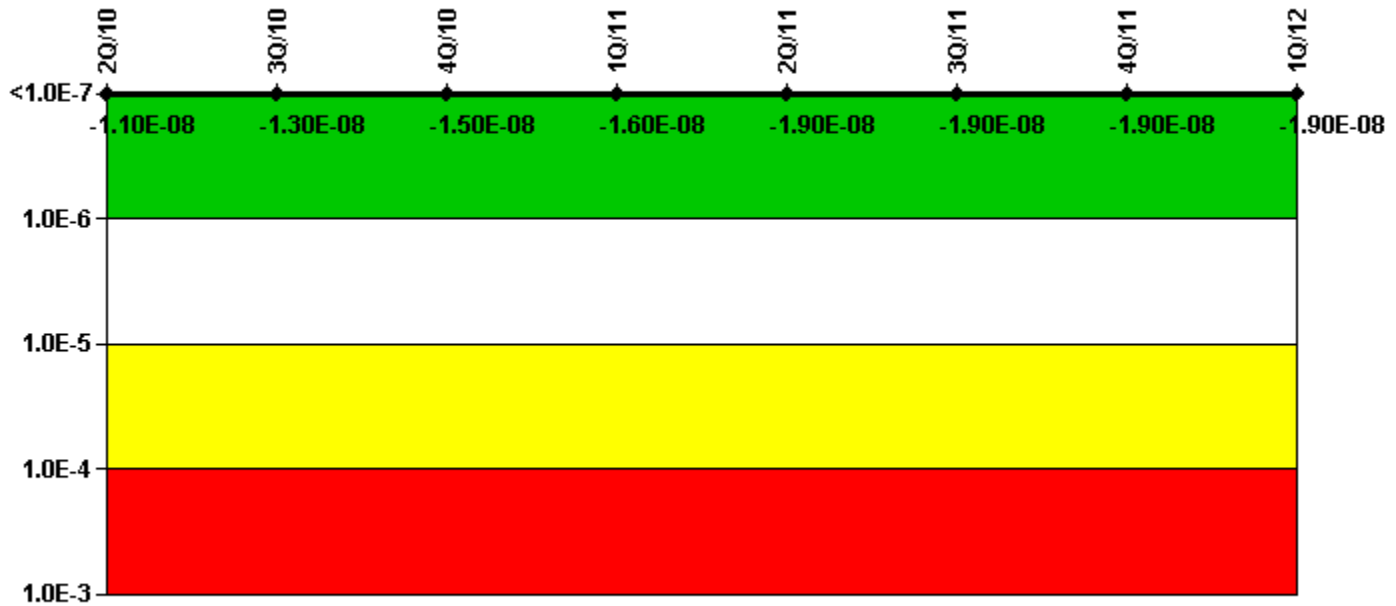
3Q/10: Risk Cap Invoked. Changed PRA Parameter(s).

3Q/10: Risk Cap Invoked.

2Q/10: Risk Cap Invoked. Changed PRA Parameter(s).

2Q/10: Risk Cap Invoked.

## 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/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	-1.83E-09	-3.40E-09	-5.44E-09	-5.07E-09	-5.67E-09	-5.66E-09	-5.75E-09	-5.85E-09
URI ( $\Delta$ CDF)	-9.54E-09	-9.66E-09	-9.70E-09	-1.08E-08	-1.33E-08	-1.32E-08	-1.30E-08	-1.28E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.10E-08	-1.30E-08	-1.50E-08	-1.60E-08	-1.90E-08	-1.90E-08	-1.90E-08	-1.90E-08

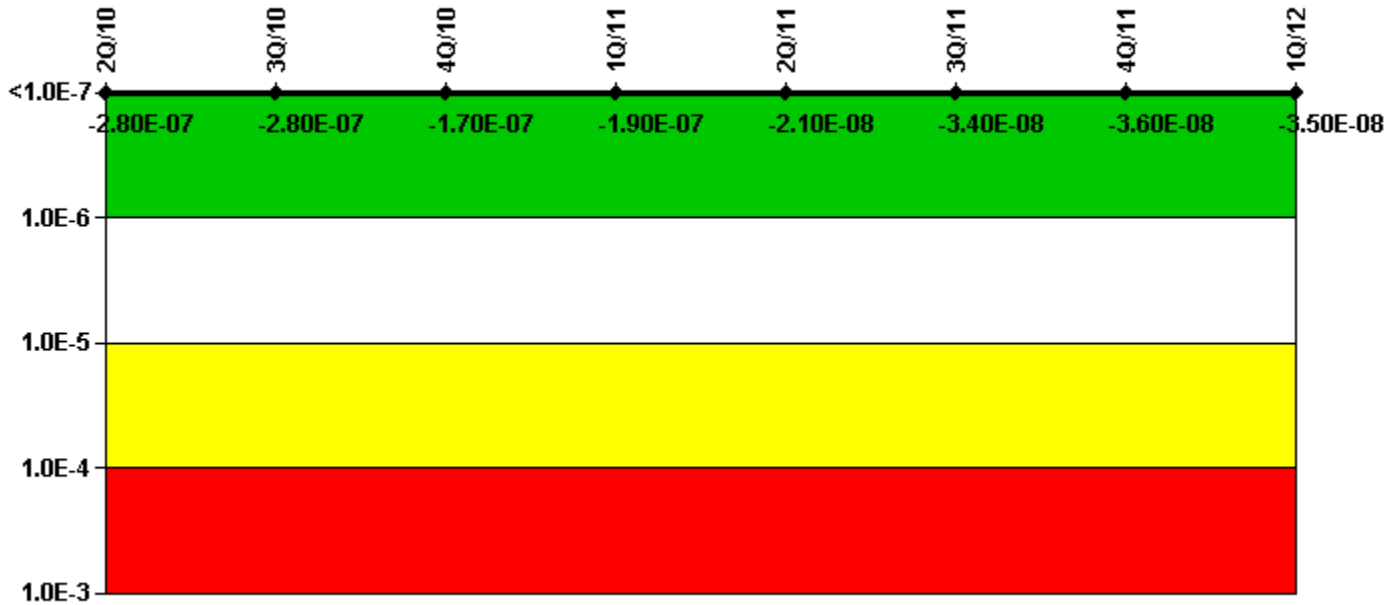
Licensee Comments:

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

2Q/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/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI (ΔCDF)	-3.46E-09	-6.57E-09	1.04E-07	1.05E-07	5.65E-09	1.37E-09	-4.61E-10	1.37E-10
URI (ΔCDF)	-2.77E-07	-2.77E-07	-2.77E-07	-2.93E-07	-2.68E-08	-3.52E-08	-3.52E-08	-3.52E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.80E-07	-2.80E-07	-1.70E-07	-1.90E-07	-2.10E-08	-3.40E-08	-3.60E-08	-3.50E-08

Licensee Comments:

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

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

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

1Q/11: Risk Cap Invoked.

1Q/11: Risk Cap Invoked.

1Q/11: Risk Cap Invoked.

4Q/10: Risk Cap Invoked.

4Q/10: Risk Cap Invoked.

4Q/10: Risk Cap Invoked.

3Q/10: Risk Cap Invoked.

3Q/10: Risk Cap Invoked.

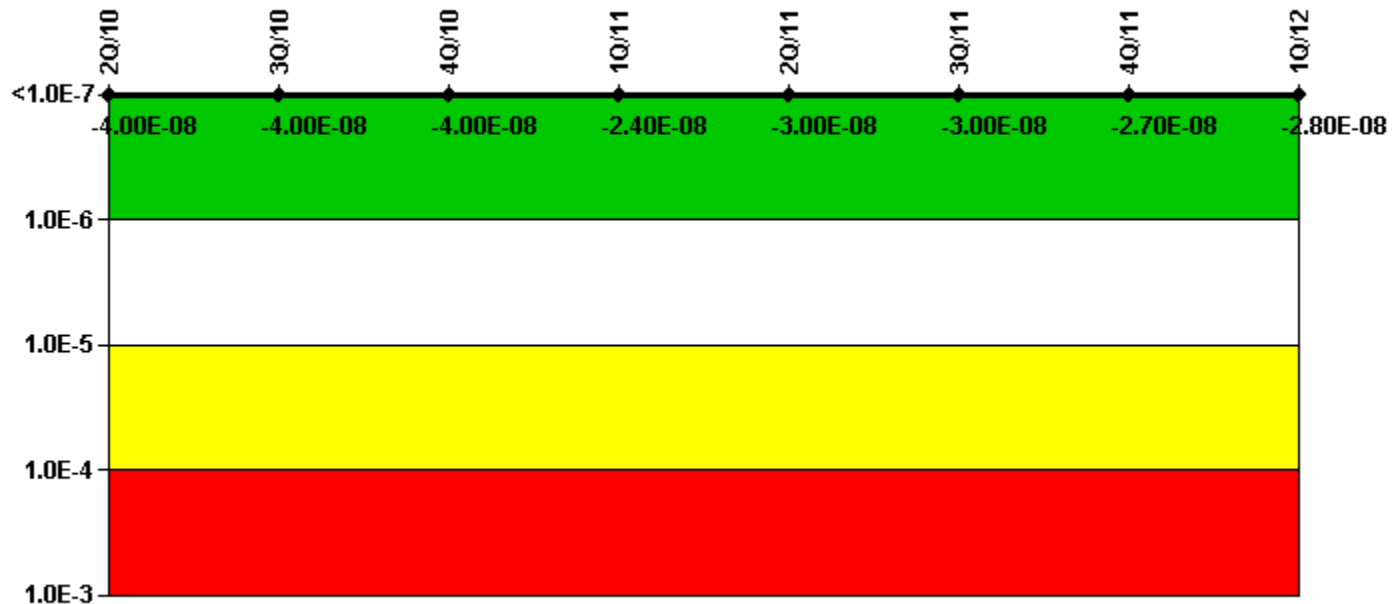
3Q/10: Risk Cap Invoked.

2Q/10: Risk Cap Invoked.

2Q/10: Risk Cap Invoked.

2Q/10: Risk Cap Invoked.

### 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/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	-9.57E-09	-9.57E-09	-9.57E-09	8.25E-09	7.60E-09	7.87E-09	1.07E-08	1.02E-08
URI ( $\Delta$ CDF)	-3.07E-08	-3.07E-08	-3.07E-08	-3.19E-08	-3.76E-08	-3.77E-08	-3.79E-08	-3.81E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.00E-08	-4.00E-08	-4.00E-08	-2.40E-08	-3.00E-08	-3.00E-08	-2.70E-08	-2.80E-08

Licensee Comments:

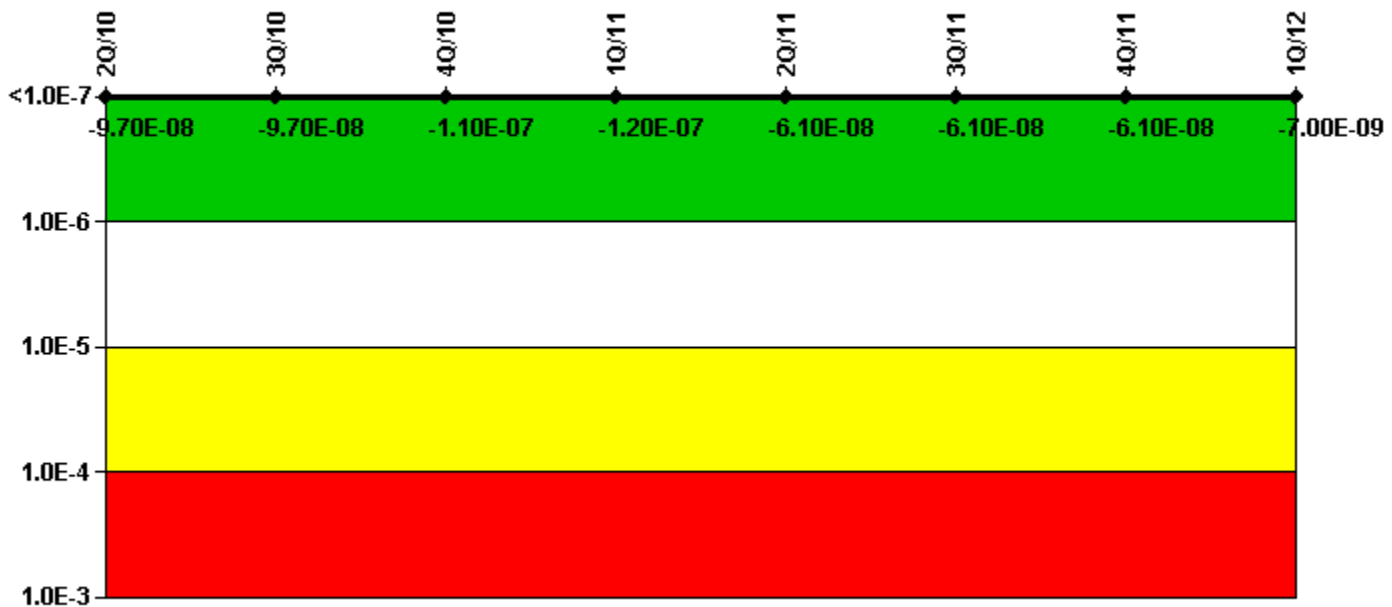
3Q/11: Changed PRA Parameter(s).

2Q/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/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	$2.78E-08$	$2.78E-08$	$1.10E-08$	$1.13E-08$	$2.73E-08$	$2.73E-08$	$2.73E-08$	$3.44E-08$
URI ( $\Delta$ CDF)	$-1.25E-07$	$-1.25E-07$	$-1.26E-07$	$-1.26E-07$	$-8.82E-08$	$-8.84E-08$	$-8.84E-08$	$-4.14E-08$
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	$-9.70E-08$	$-9.70E-08$	$-1.10E-07$	$-1.20E-07$	$-6.10E-08$	$-6.10E-08$	$-6.10E-08$	$-7.00E-09$

Licensee Comments:

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

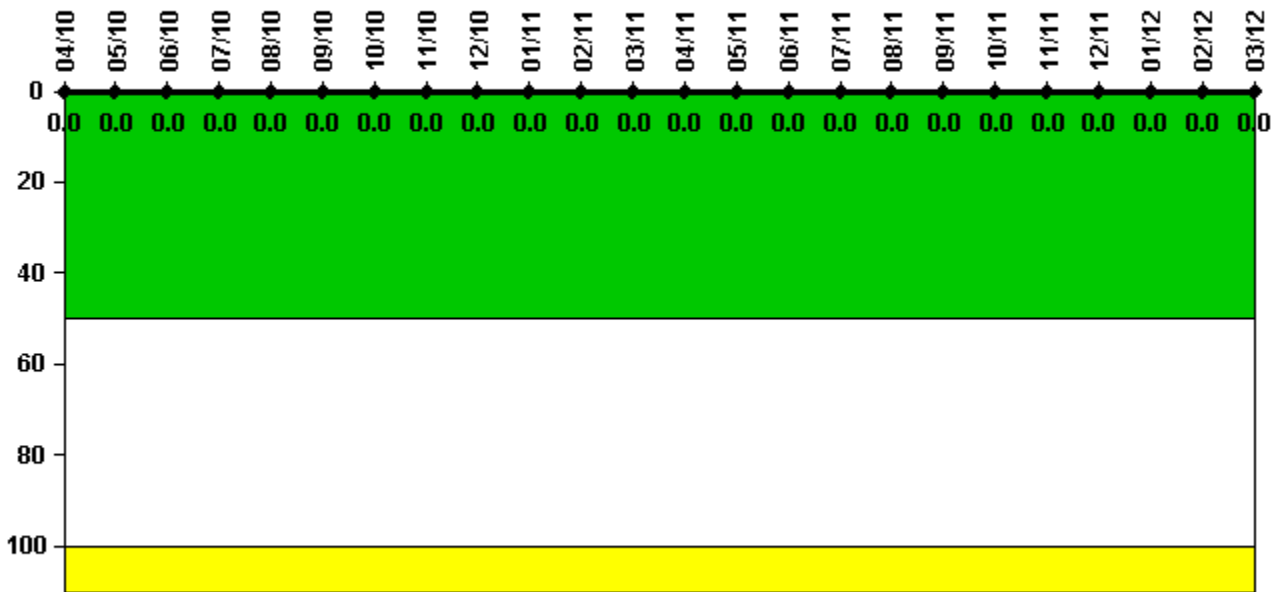
2Q/11: Changed PRA Parameter(s).

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

3Q/10: While researching equipment history, discovered that while one NSCW fan was down for maintenance, a second NSCW fan was placed in pull-to-lock which prevents an auto start of that fan, with more than one fan out of service the train was unavailable. The performance level for this indicator remains green.

2Q/10: In July 2010 a thermal analysis was performed for the motor thrust bearing for a Nuclear Service Cooling Water pump by the Kingsbury Corporation. This analysis was necessary due to the motor cooler discharge line freezing on January 7th and 11th 2010. The purpose of this analysis was to determine whether or not the pump motor would meet its Mission Time with no motor cooling water. The conclusion was that the thrust and upper guide bearings would be able to continually function without cooling water under the conditions noted during the initial event and therefore are not MSPI failures.

## Reactor Coolant System Activity



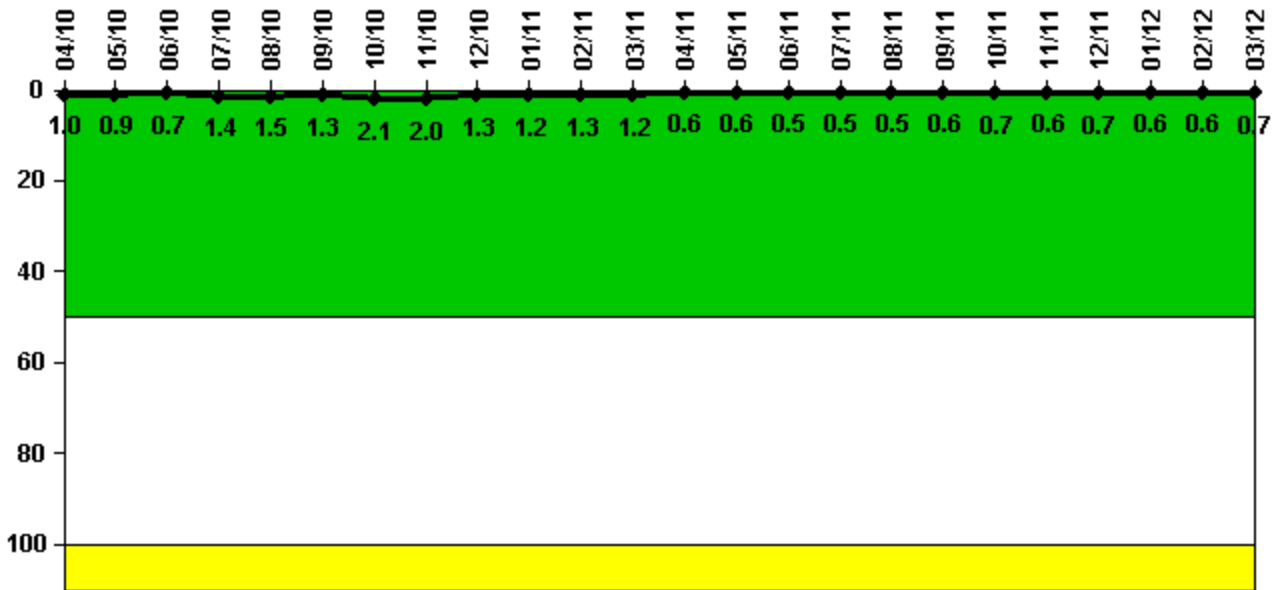
Thresholds: White > 50.0 Yellow > 100.0

### Notes

<b>Reactor Coolant System Activity</b>	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11
Maximum activity	0.000101	0.000115	0.000110	0.000110	0.000111	0.000117	0.000125	0.000129	0.000137	0.000150	0.000163	0.000316
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
<b>Reactor Coolant System Activity</b>	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	0.000063	0.000058	0.000094	0.000057	0.000073	0.000065	0.000073	0.000090	0.000104	0.000095	0.000093	0.000099
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

Licensee Comments: none

## Reactor Coolant System Leakage



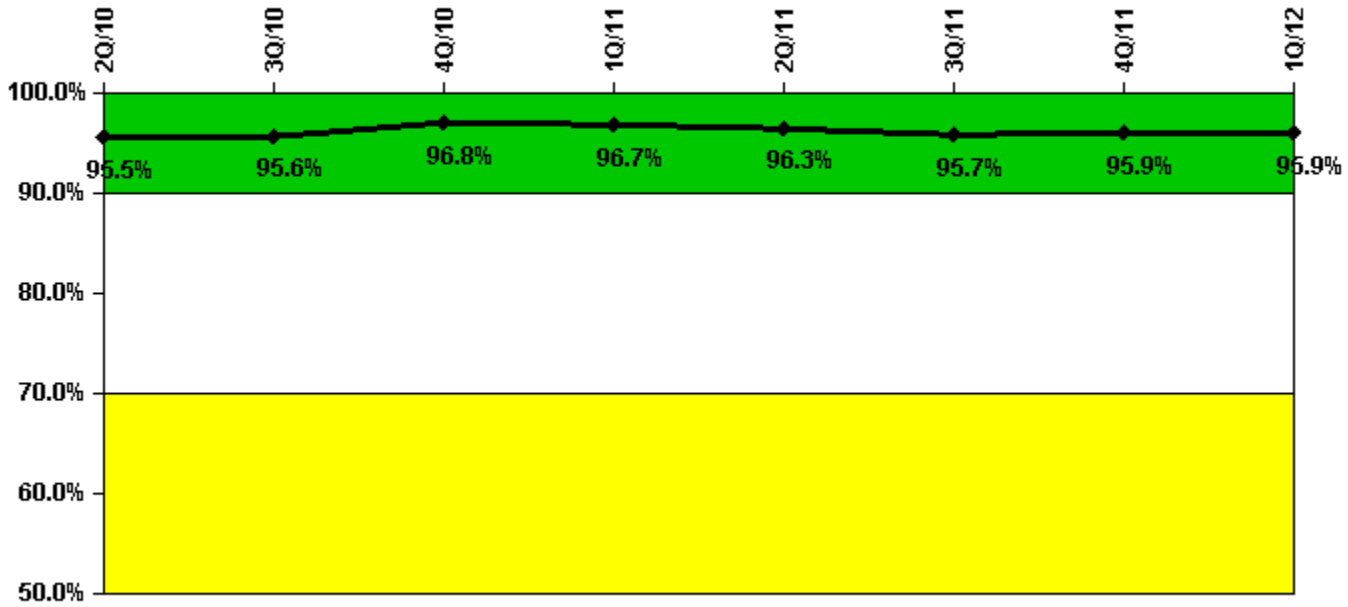
Thresholds: White > 50.0 Yellow > 100.0

### Notes

Reactor Coolant System Leakage	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11
Maximum leakage	0.101	0.094	0.073	0.137	0.149	0.125	0.211	0.195	0.128	0.122	0.131	0.116
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	1.0	0.9	0.7	1.4	1.5	1.3	2.1	2.0	1.3	1.2	1.3	1.2
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	0.057	0.057	0.050	0.048	0.049	0.060	0.065	0.059	0.068	0.062	0.063	0.070
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	0.6	0.6	0.5	0.5	0.5	0.6	0.7	0.6	0.7	0.6	0.6	0.7

Licensee Comments: none

## Drill/Exercise Performance



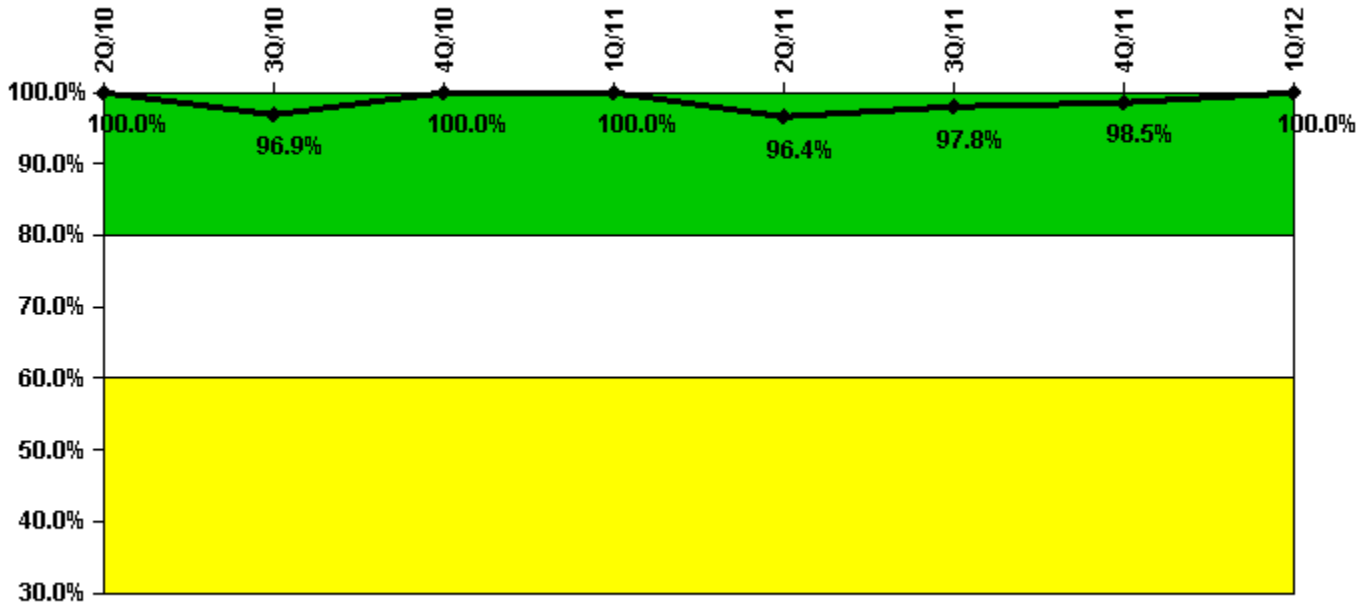
Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Successful opportunities	51.0	35.0	30.0	52.0	66.0	38.0	25.0	55.0
Total opportunities	53.0	35.0	32.0	54.0	70.0	41.0	26.0	56.0
Indicator value	95.5%	95.6%	96.8%	96.7%	96.3%	95.7%	95.9%	95.9%

Licensee Comments: none

## ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

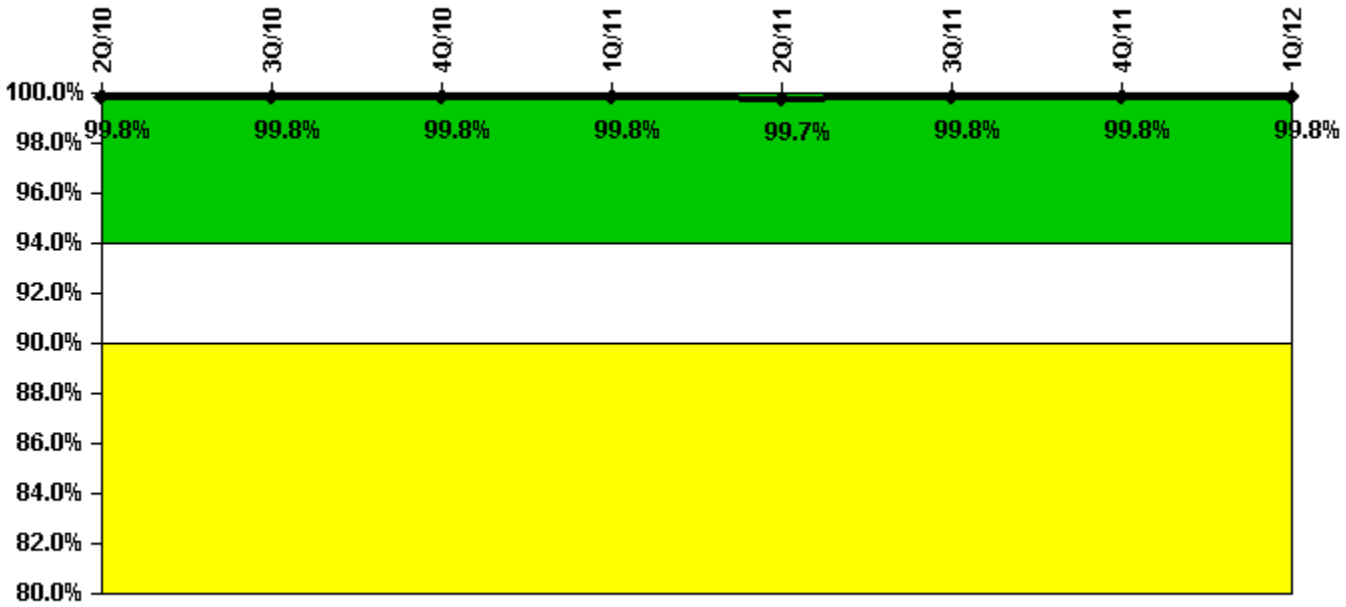
### Notes

ERO Drill Participation	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Participating Key personnel	128.0	126.0	132.0	140.0	133.0	132.0	132.0	130.0
Total Key personnel	128.0	130.0	132.0	140.0	138.0	135.0	134.0	130.0
Indicator value	100.0%	96.9%	100.0%	100.0%	96.4%	97.8%	98.5%	100.0%

Licensee Comments: none

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# Alert & Notification System



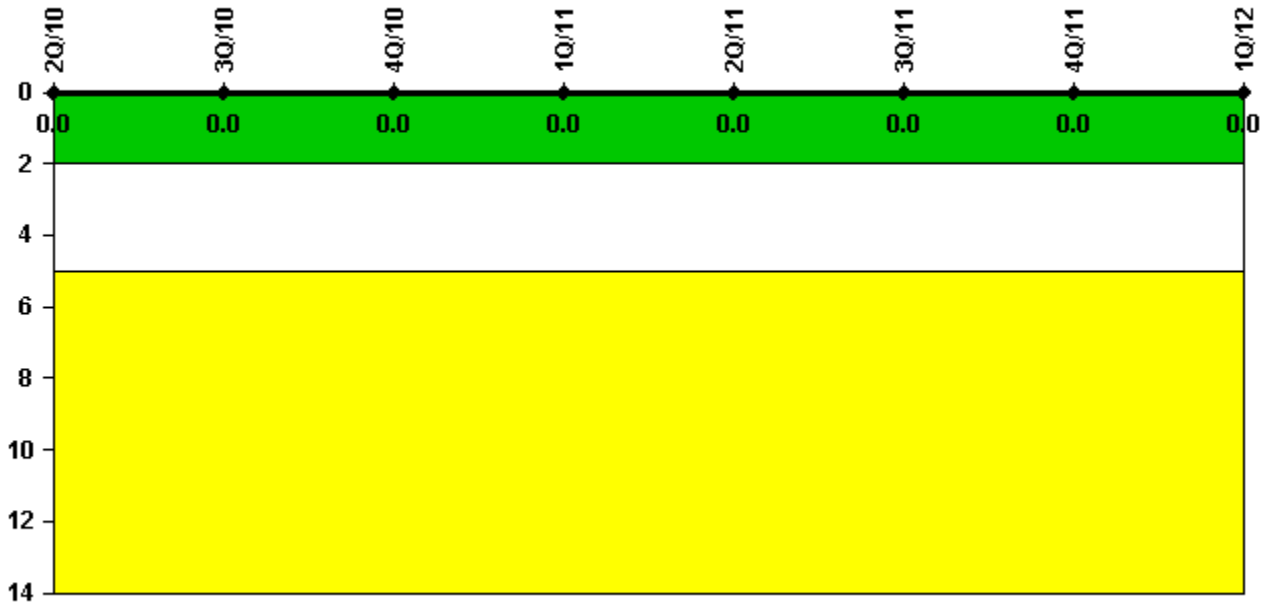
Thresholds: White < 94.0% Yellow < 90.0%

## Notes

Alert & Notification System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Successful siren-tests	610	608	611	610	608	611	611	610
Total sirens-tests	611	611	611	611	611	611	611	611
Indicator value	99.8%	99.8%	99.8%	99.8%	99.7%	99.8%	99.8%	99.8%

Licensee Comments: none

# Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

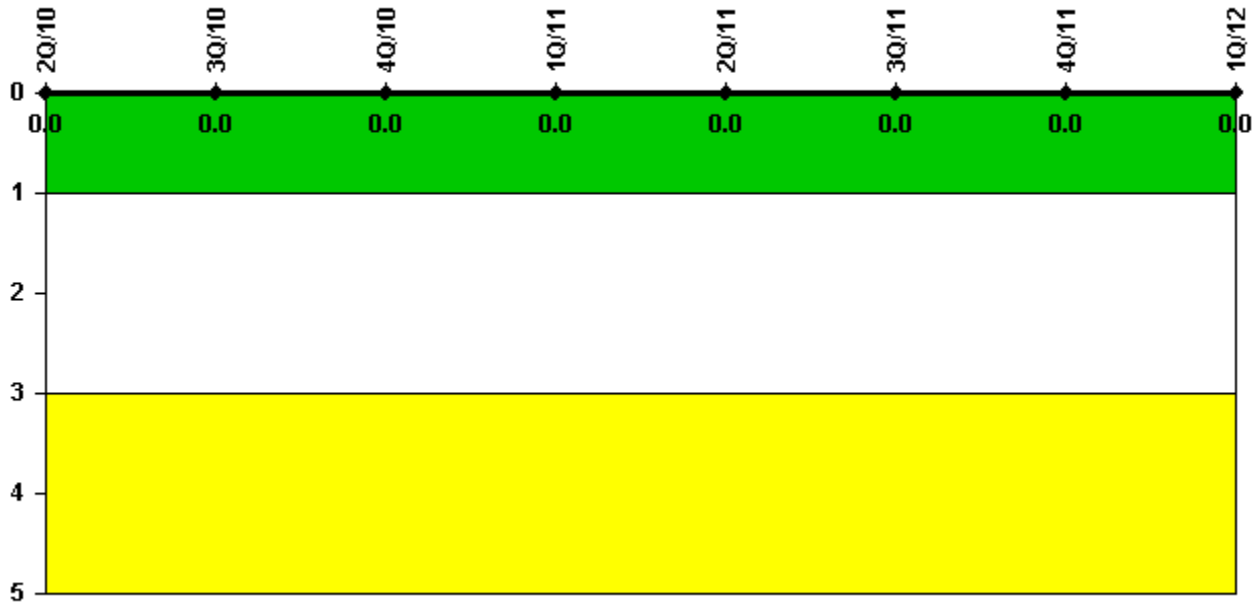
## Notes

Occupational Exposure Control Effectiveness	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/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

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# RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

## Notes

RETS/ODCM Radiological Effluent	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Security](#) information not publicly available.