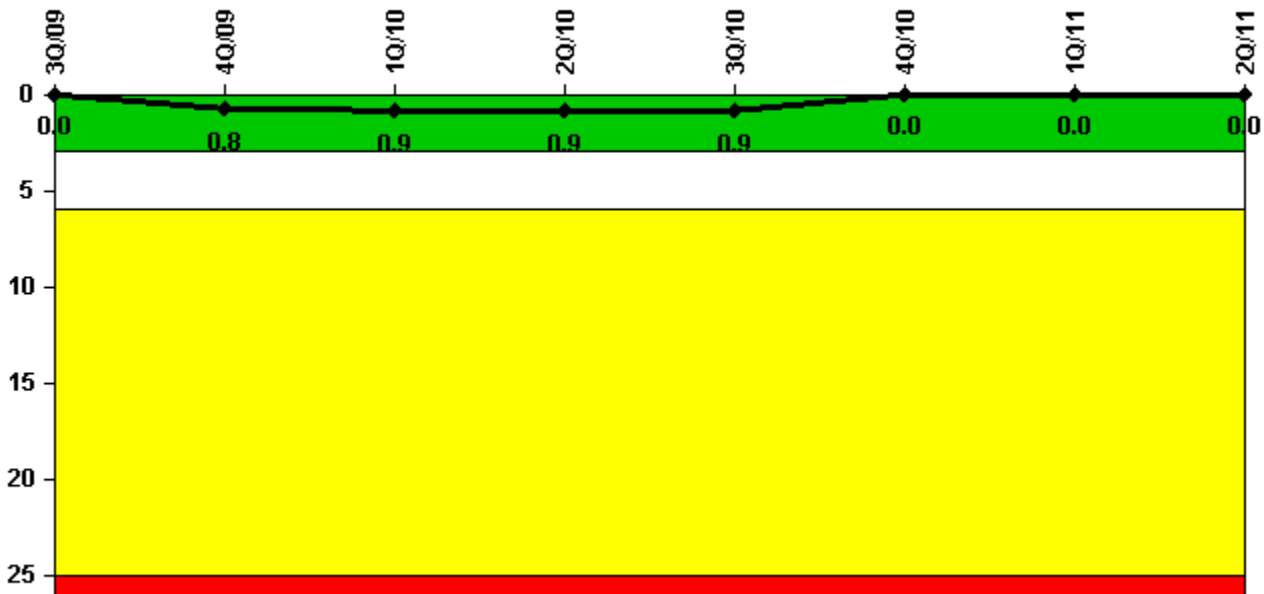


# Vogtle 2

## 2Q/2011 Performance Indicators

Licensee's General Comments: A revision to the plant's probabilistic risk assessment (PRA) model has resulted in changes to previous MSPI calculations. This PRA revision included changes to flood modeling; initiating frequency and component failure data; loss of offsite power event frequencies; and the addition of several initiating events which lead to a loss of RCP seal cooling that are now linked to a small break LOCA event. The latter change increases the risk importance of service water pumps and valves. The revised PRA has not resulted in any system's current performance moving out of the green indicator band.

### Unplanned Scrams per 7000 Critical Hrs



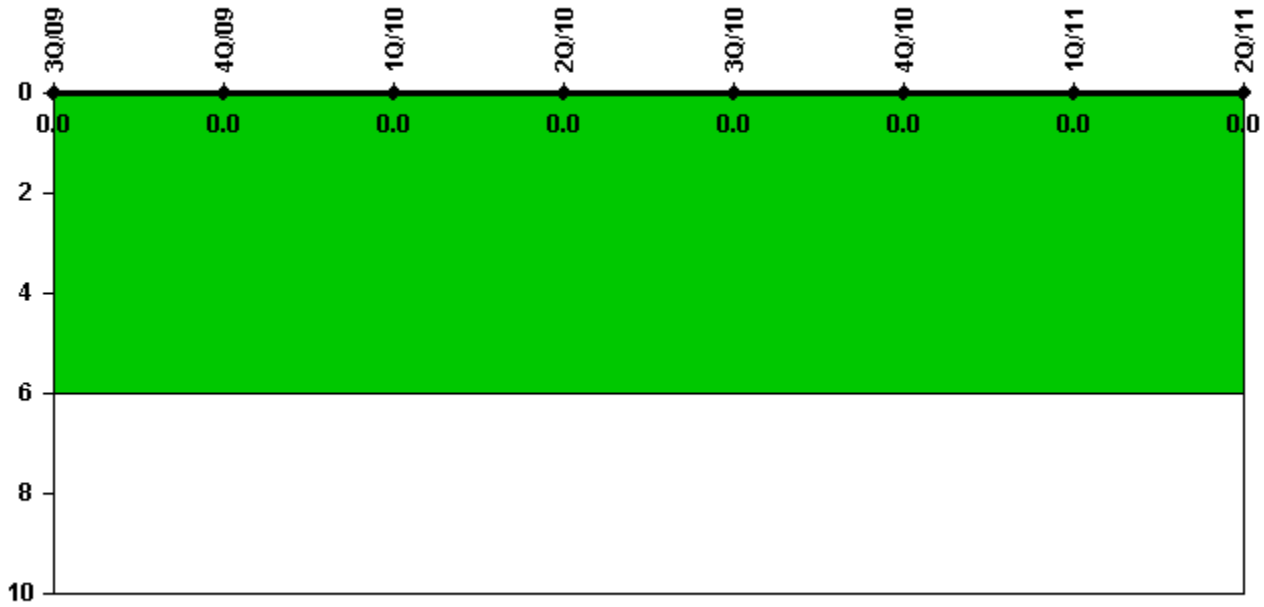
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Unplanned scrams	0	1.0	0	0	0	0	0	0
Critical hours	2208.0	2181.7	1565.1	2045.9	2208.0	2209.0	2159.0	2184.0
Indicator value	0	0.8	0.9	0.9	0.9	0	0	0

Licensee Comments: none

## Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

### Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2208.0	2181.7	1565.1	2045.9	2208.0	2209.0	2159.0	2184.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

# Unplanned Scrams with Complications



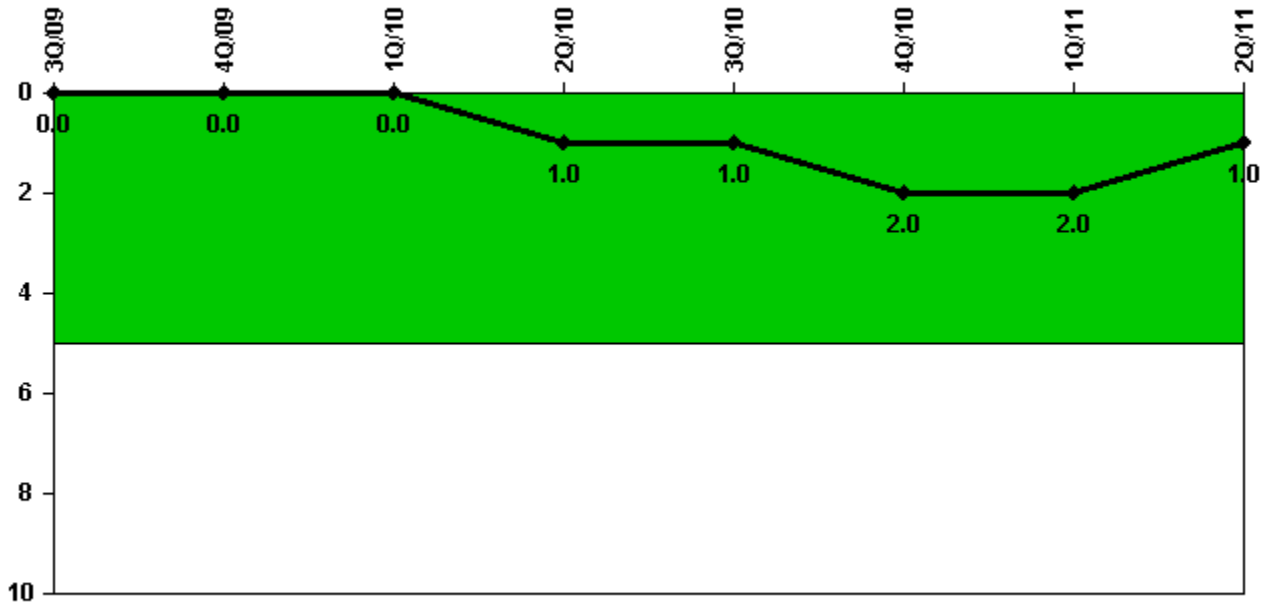
Thresholds: White > 1.0

## Notes

Unplanned Scrams with Complications	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
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)



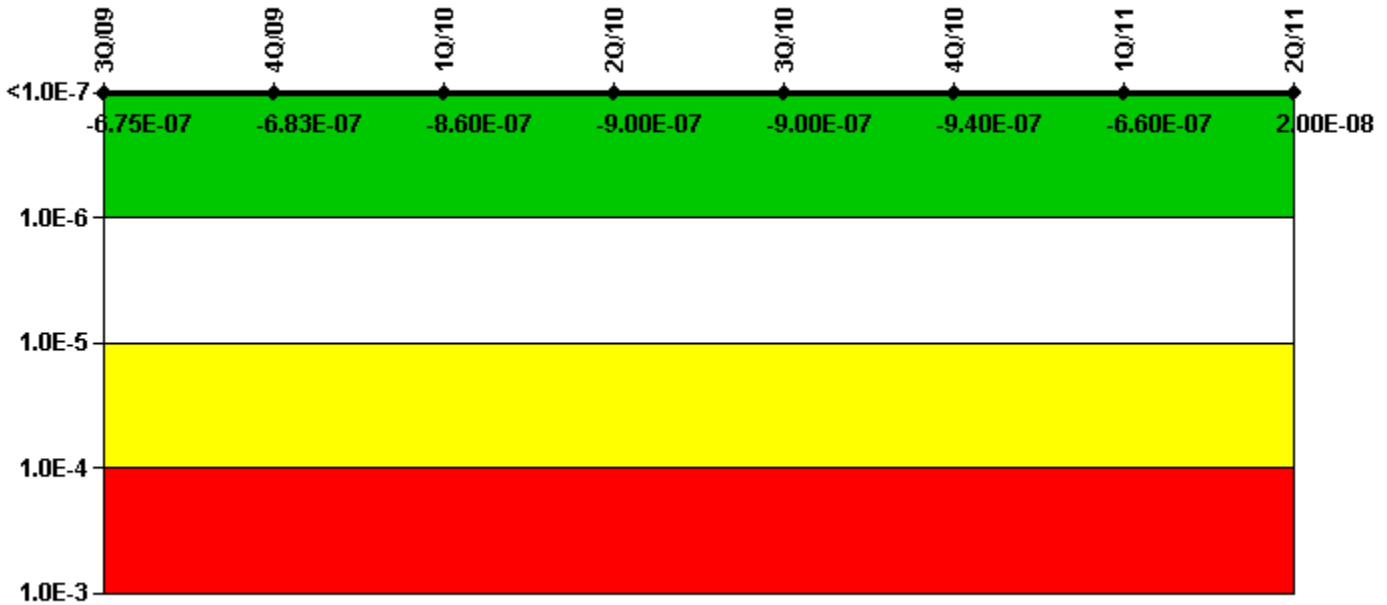
Thresholds: White > 5.0

### Notes

Safety System Functional Failures (PWR)	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Safety System Functional Failures	0	0	0	1	0	1	0	0
Indicator value	0	0	0	1	1	2	2	1

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	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI ( $\Delta$ CDF)	8.50E-08	8.70E-08	-7.14E-08	-1.01E-07	-1.36E-07	-1.68E-07	1.52E-07	-3.04E-08
URI ( $\Delta$ CDF)	-7.60E-07	-7.70E-07	-7.90E-07	-7.96E-07	-7.68E-07	-7.73E-07	-8.14E-07	5.01E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-6.75E-07	-6.83E-07	-8.60E-07	-9.00E-07	-9.00E-07	-9.40E-07	-6.60E-07	2.00E-08

Licensee Comments:

2Q/11: Risk Cap Invoked. Changed PRA Parameter(s). There are no fault exposure hours as the diesel failed 67 minutes into a test.

# Mitigating Systems Performance Index, High Pressure Injection System



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

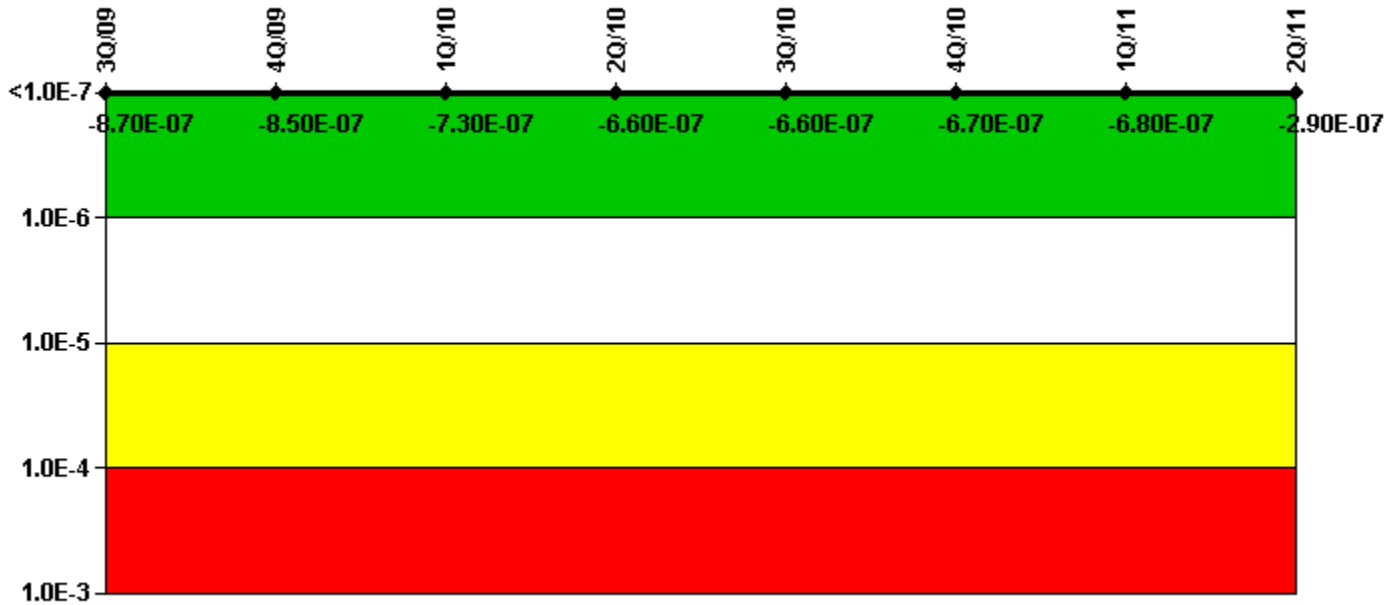
## Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI ( $\Delta$ CDF)	-5.50E-09	-5.70E-09	-6.75E-10	-2.27E-09	-3.84E-09	-5.51E-09	-5.62E-09	-5.98E-09
URI ( $\Delta$ CDF)	-1.20E-08	-1.20E-08	-1.32E-08	-1.29E-08	-1.10E-08	-1.02E-08	-1.02E-08	-1.41E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.75E-08	-1.77E-08	-1.40E-08	-1.50E-08	-1.50E-08	-1.60E-08	-1.60E-08	-2.00E-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

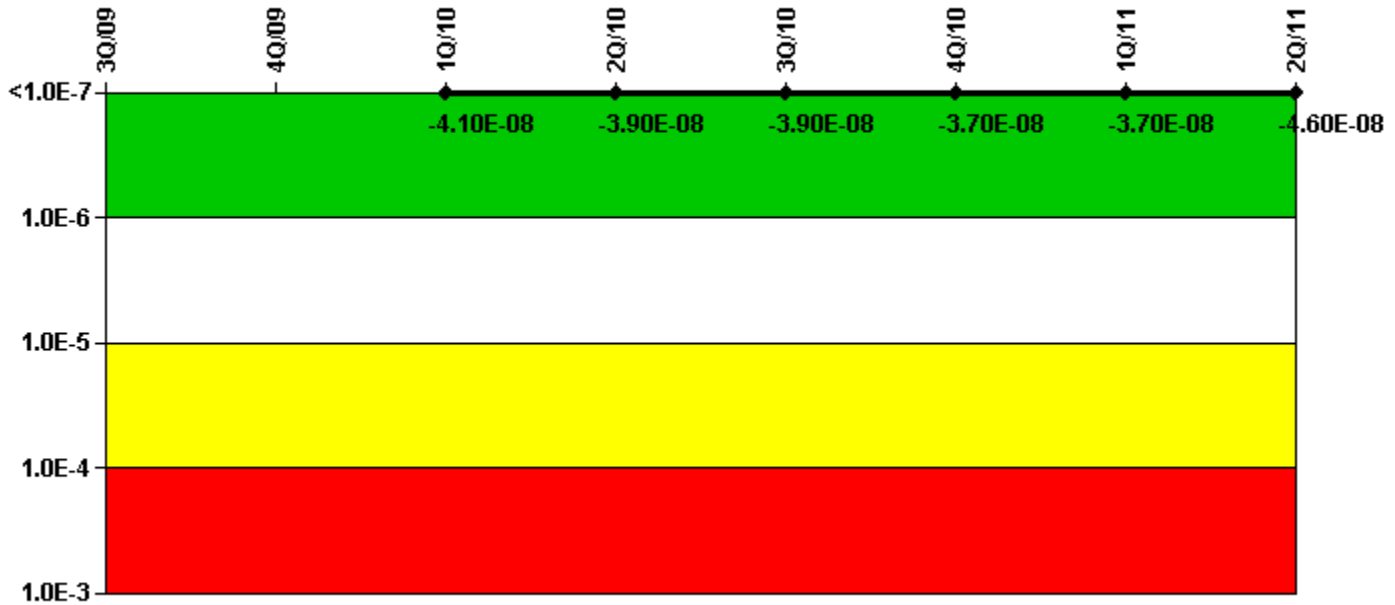
## Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI ( $\Delta$ CDF)	-1.21E-07	-9.99E-08	6.28E-08	9.95E-08	9.58E-08	8.32E-08	7.65E-08	4.25E-08
URI ( $\Delta$ CDF)	-7.47E-07	-7.55E-07	-7.92E-07	-7.57E-07	-7.57E-07	-7.57E-07	-7.57E-07	-3.32E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-8.70E-07	-8.50E-07	-7.30E-07	-6.60E-07	-6.60E-07	-6.70E-07	-6.80E-07	-2.90E-07

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	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI ( $\Delta$ CDF)	-3.07E-09	-2.89E-09	-3.74E-09	-4.49E-09	-4.42E-09	-2.36E-09	-2.22E-09	-1.80E-09
URI ( $\Delta$ CDF)			-3.70E-08	-3.46E-08	-3.46E-08	-3.46E-08	-3.46E-08	-4.42E-08
PLE	N/A	N/A	NO	NO	NO	NO	NO	NO
Indicator value			-4.10E-08	-3.90E-08	-3.90E-08	-3.70E-08	-3.70E-08	-4.60E-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

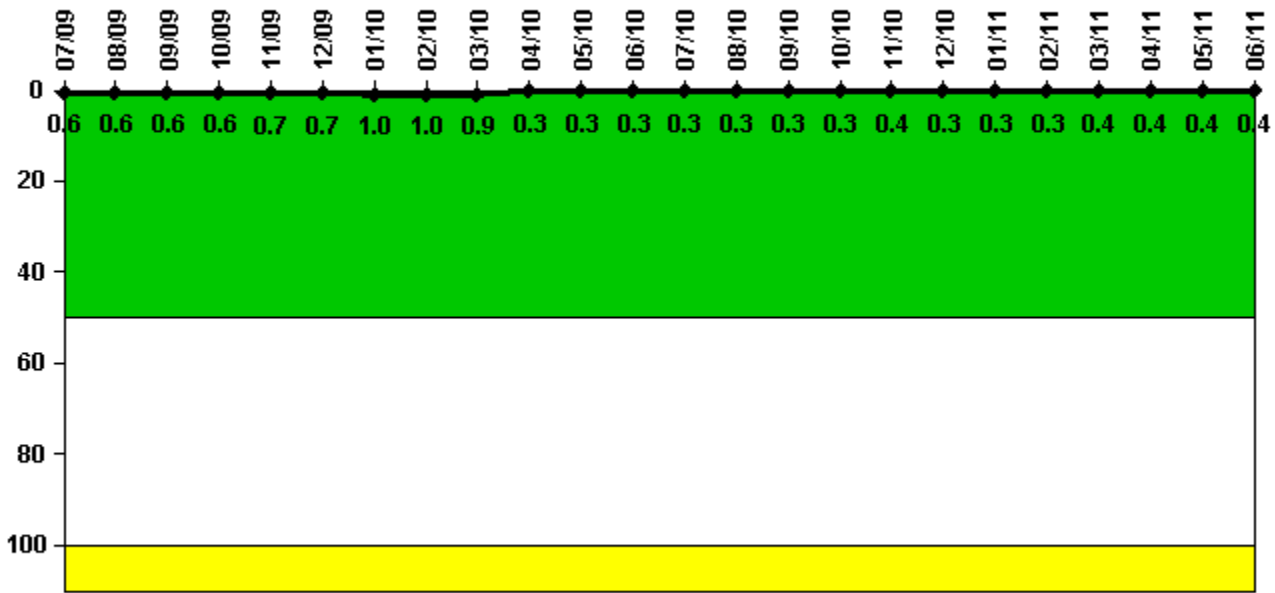
## Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI ( $\Delta$ CDF)	-7.00E-08	-4.40E-08	-4.43E-08	-4.49E-08	-4.49E-08	-4.49E-08	-4.49E-08	-1.14E-07
URI ( $\Delta$ CDF)	-8.50E-08	-3.60E-08	3.27E-08	3.67E-08	1.16E-07	1.10E-07	1.07E-07	8.02E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.55E-07	-8.00E-08	-1.20E-08	-8.20E-09	7.10E-08	6.50E-08	6.20E-08	-3.40E-08

Licensee Comments:

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

# Reactor Coolant System Activity



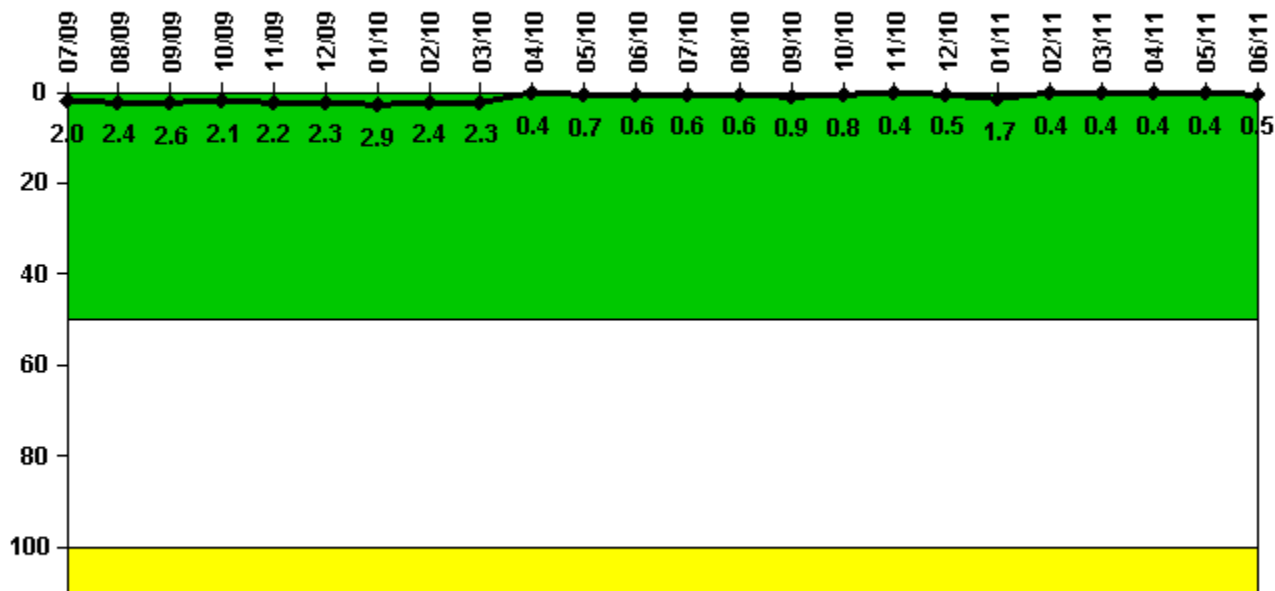
Thresholds: White > 50.0 Yellow > 100.0

## Notes

Reactor Coolant System Activity	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10
Maximum activity	0.006038	0.005776	0.006345	0.006163	0.006658	0.006987	0.009640	0.009962	0.008534	0.003320	0.002575	0.002717
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	0.6	0.6	0.6	0.6	0.7	0.7	1.0	1.0	0.9	0.3	0.3	0.3
Reactor Coolant System Activity	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11	4/11	5/11	6/11
Maximum activity	0.002775	0.002844	0.002962	0.003047	0.003643	0.003272	0.003423	0.003368	0.003604	0.003688	0.003567	0.003770
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	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4

Licensee Comments: none

## Reactor Coolant System Leakage



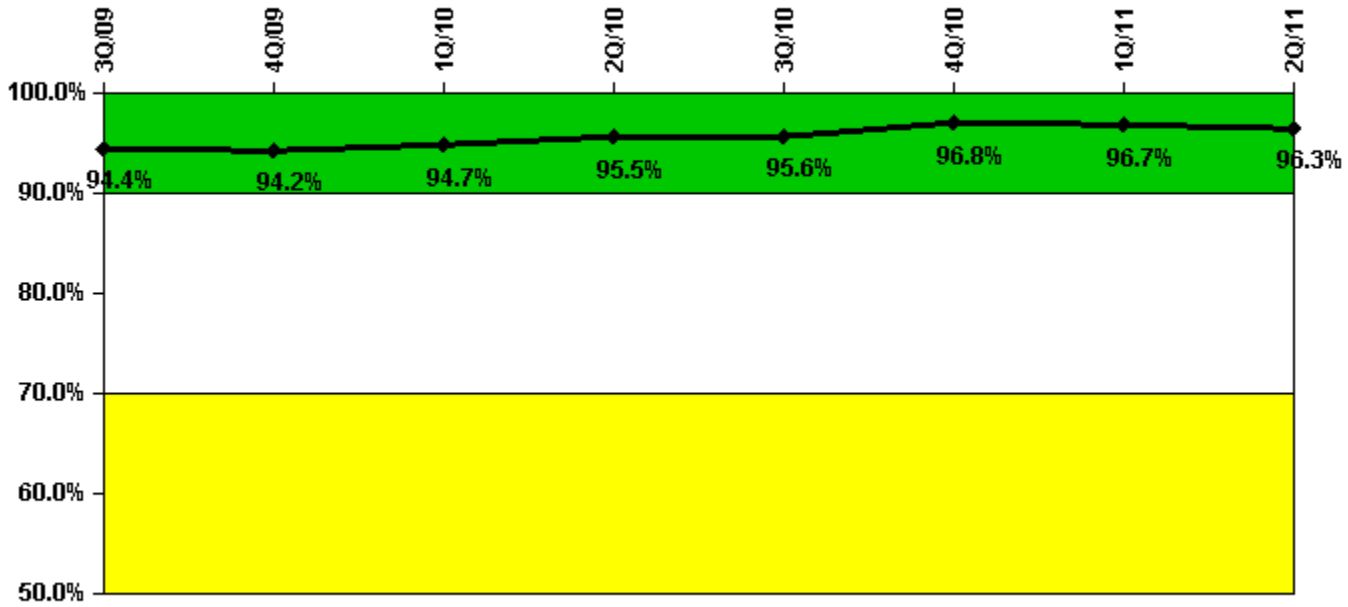
Thresholds: White > 50.0 Yellow > 100.0

### Notes

Reactor Coolant System Leakage	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10
Maximum leakage	0.203	0.239	0.264	0.208	0.215	0.225	0.285	0.236	0.234	0.044	0.065	0.062
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	2.0	2.4	2.6	2.1	2.2	2.3	2.9	2.4	2.3	0.4	0.7	0.6
Reactor Coolant System Leakage	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11	4/11	5/11	6/11
Maximum leakage	0.060	0.059	0.085	0.080	0.041	0.048	0.174	0.039	0.041	0.041	0.040	0.053
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	0.9	0.8	0.4	0.5	1.7	0.4	0.4	0.4	0.4	0.5

Licensee Comments: none

## Drill/Exercise Performance



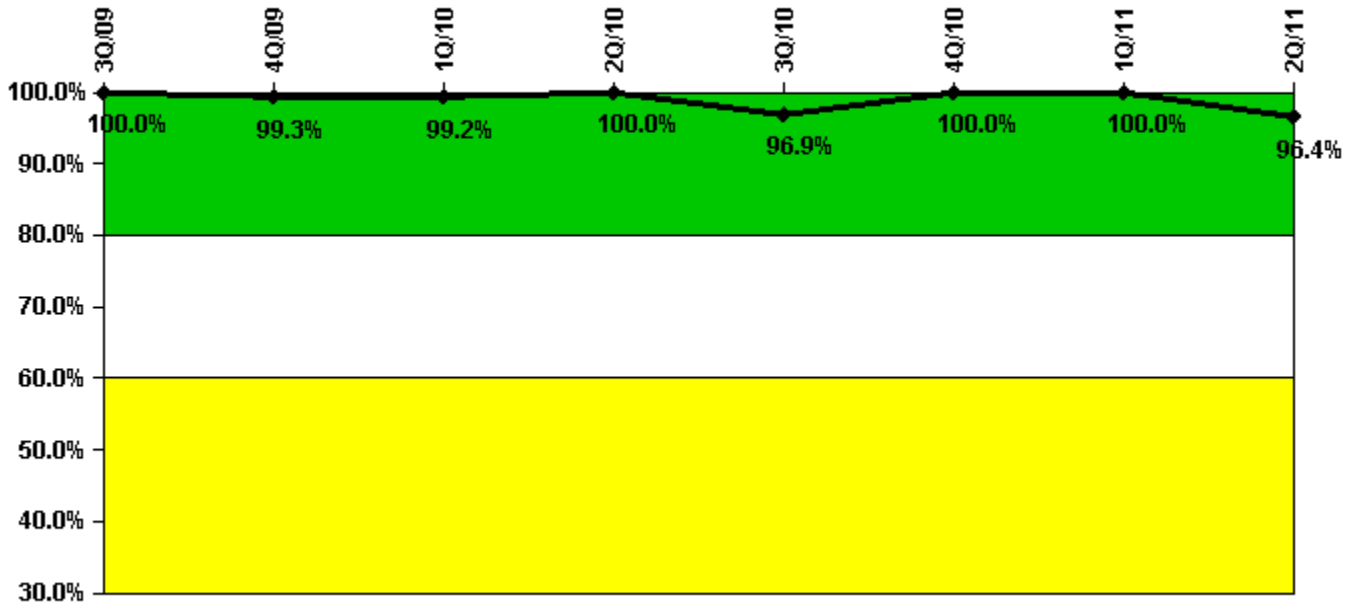
Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Successful opportunities	81.0	51.0	53.0	51.0	35.0	30.0	52.0	66.0
Total opportunities	83.0	54.0	54.0	53.0	35.0	32.0	54.0	70.0
Indicator value	94.4%	94.2%	94.7%	95.5%	95.6%	96.8%	96.7%	96.3%

Licensee Comments: none

## ERO Drill Participation



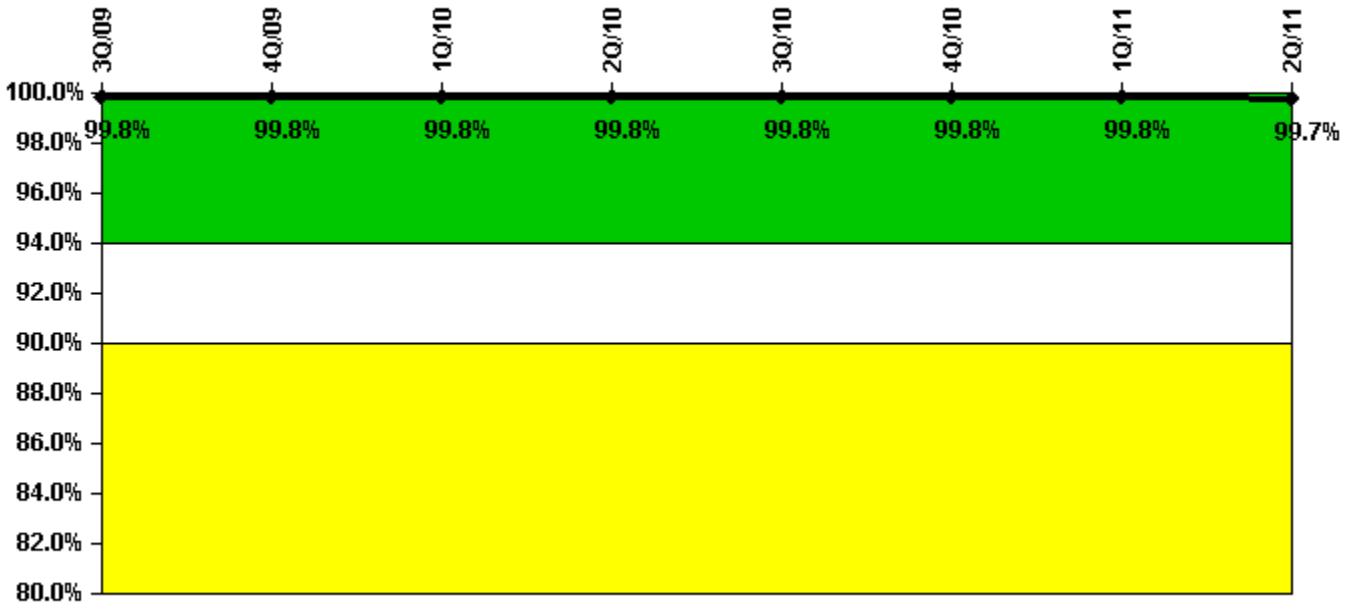
Thresholds: White < 80.0% Yellow < 60.0%

### Notes

ERO Drill Participation	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Participating Key personnel	139.0	135.0	128.0	128.0	126.0	132.0	140.0	133.0
Total Key personnel	139.0	136.0	129.0	128.0	130.0	132.0	140.0	138.0
Indicator value	100.0%	99.3%	99.2%	100.0%	96.9%	100.0%	100.0%	96.4%

Licensee Comments: none

# Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

## Notes

Alert & Notification System	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Successful siren-tests	607	611	611	610	608	611	610	608
Total sirens-tests	611	611	611	611	611	611	611	611
Indicator value	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.7%

Licensee Comments: none

# Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

## Notes

Occupational Exposure Control Effectiveness	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
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	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
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.