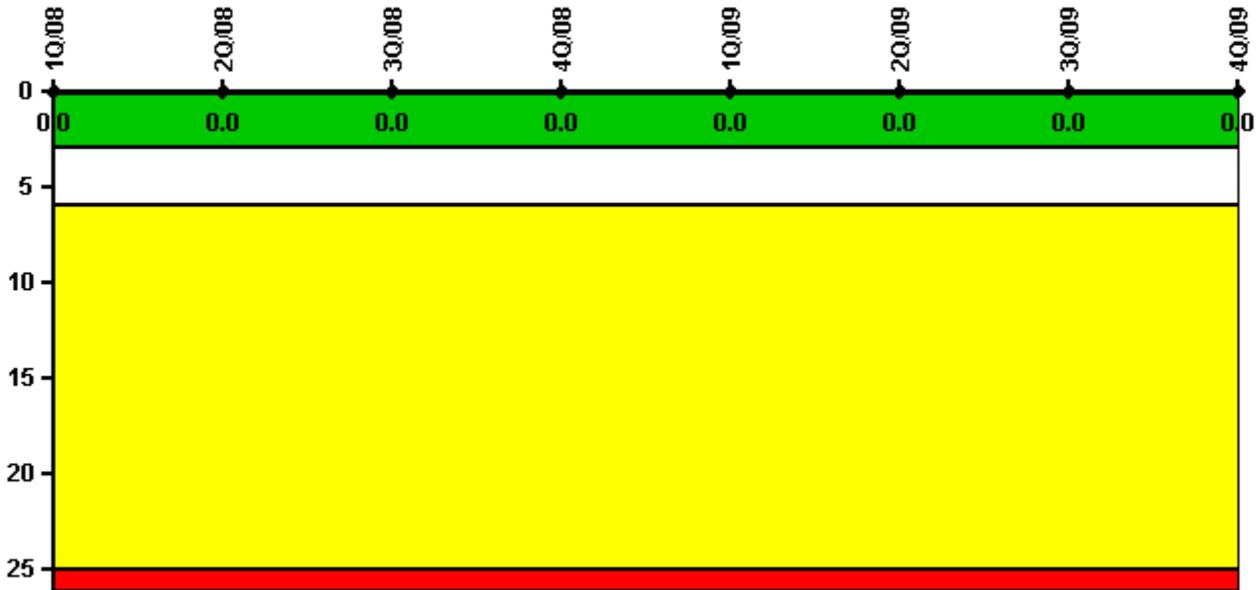


# Calvert Cliffs 2

## 4Q/2009 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

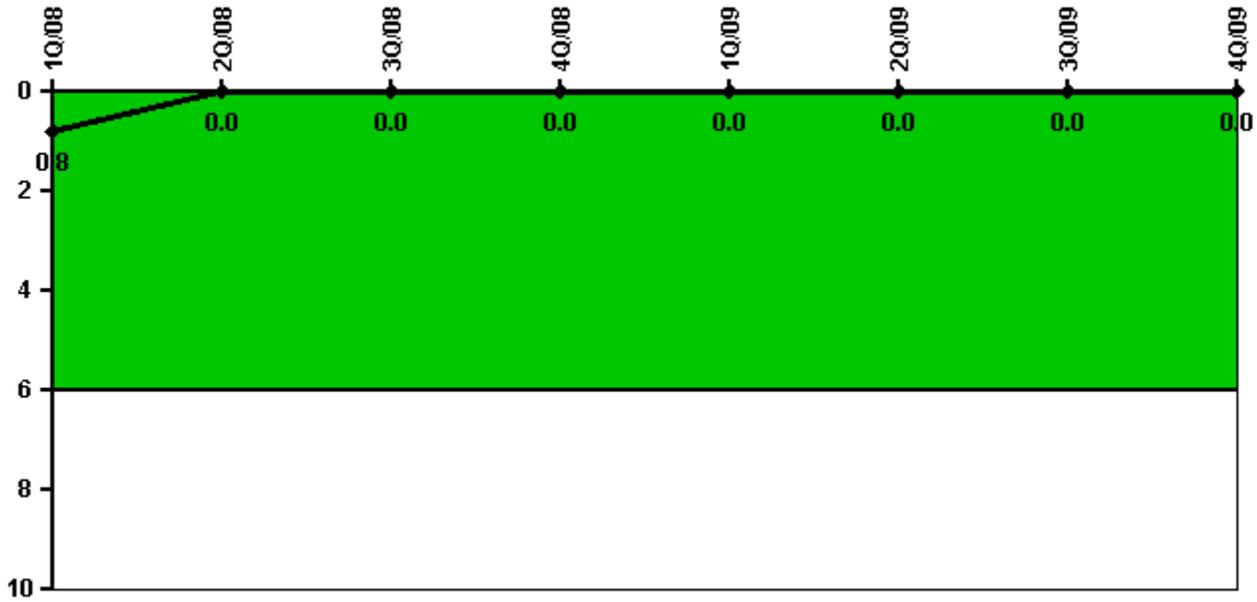
### Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2183.0	2184.0	2208.0	2209.0	1657.0	2184.0	2208.0	2209.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

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## Unplanned Power Changes per 7000 Critical Hrs



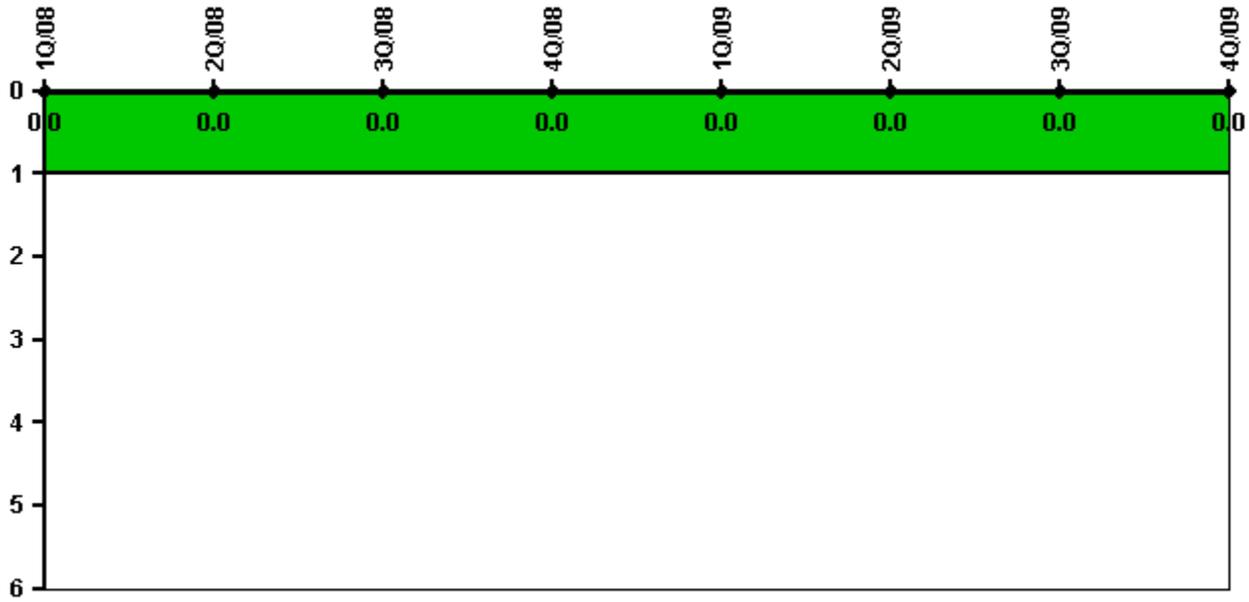
Thresholds: White > 6.0

### Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2183.0	2184.0	2208.0	2209.0	1657.0	2184.0	2208.0	2209.0
Indicator value	0.8	0	0	0	0	0	0	0

Licensee Comments: none

## Unplanned Scrams with Complications



Thresholds: White > 1.0

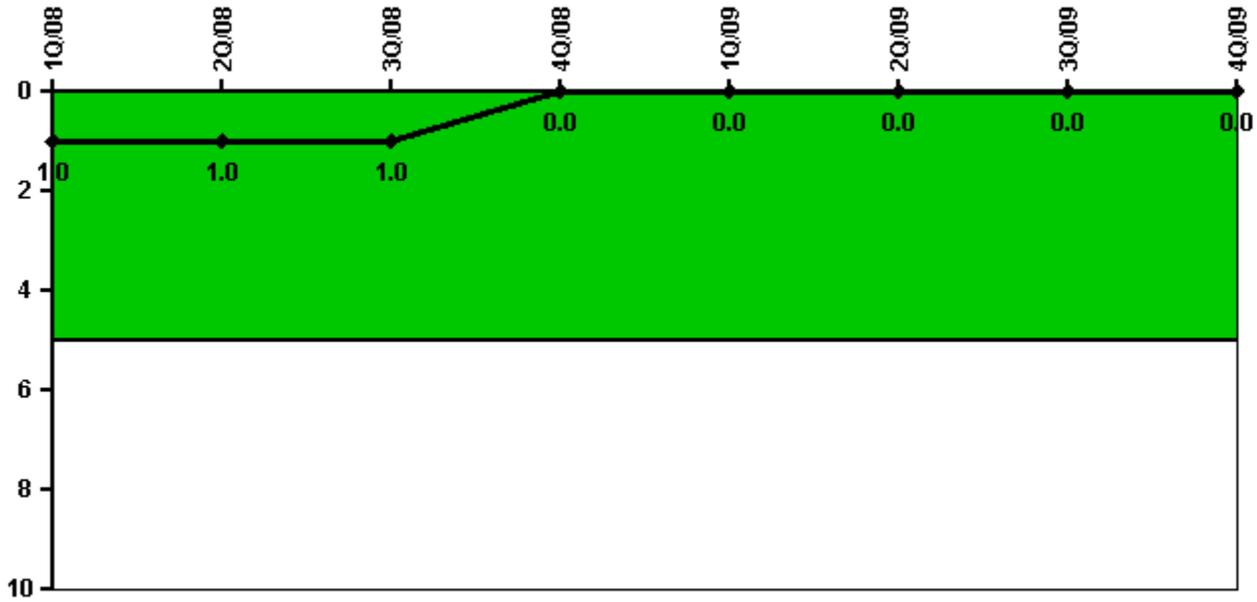
### Notes

Unplanned Scrams with Complications	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
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

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## Safety System Functional Failures (PWR)



Thresholds: White > 5.0

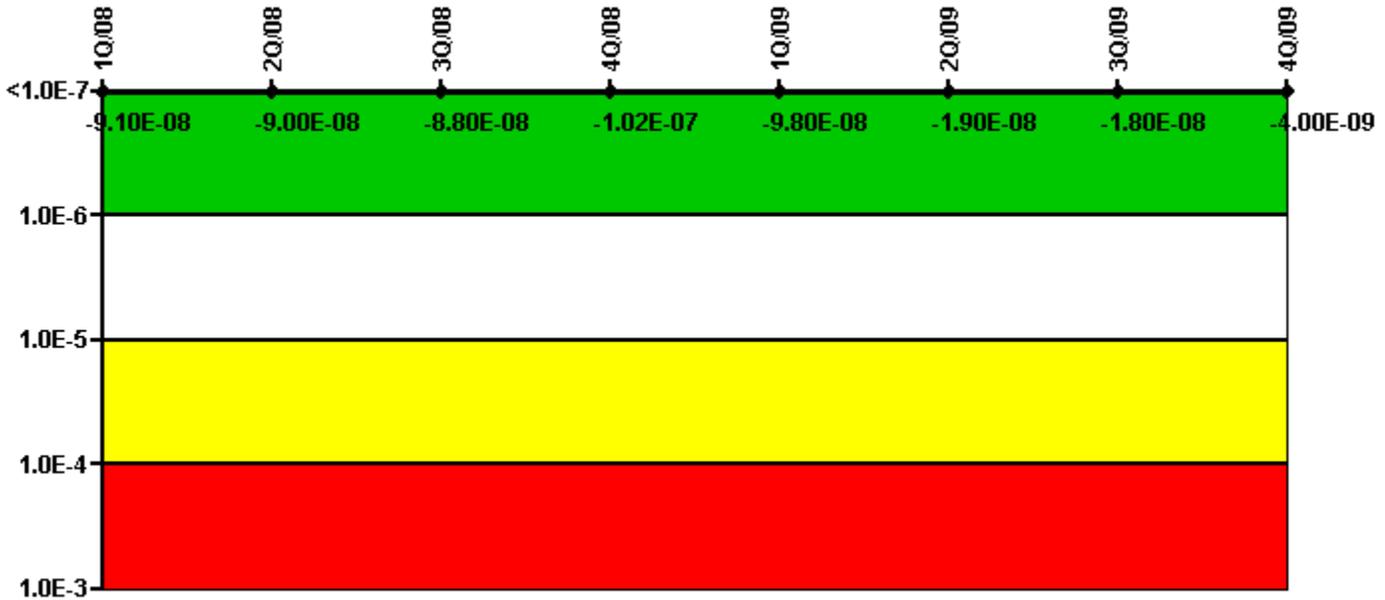
### Notes

Safety System Functional Failures (PWR)	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	1	1	1	0	0	0	0	0

Licensee Comments: none

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# Mitigating Systems Performance Index, Emergency AC Power System



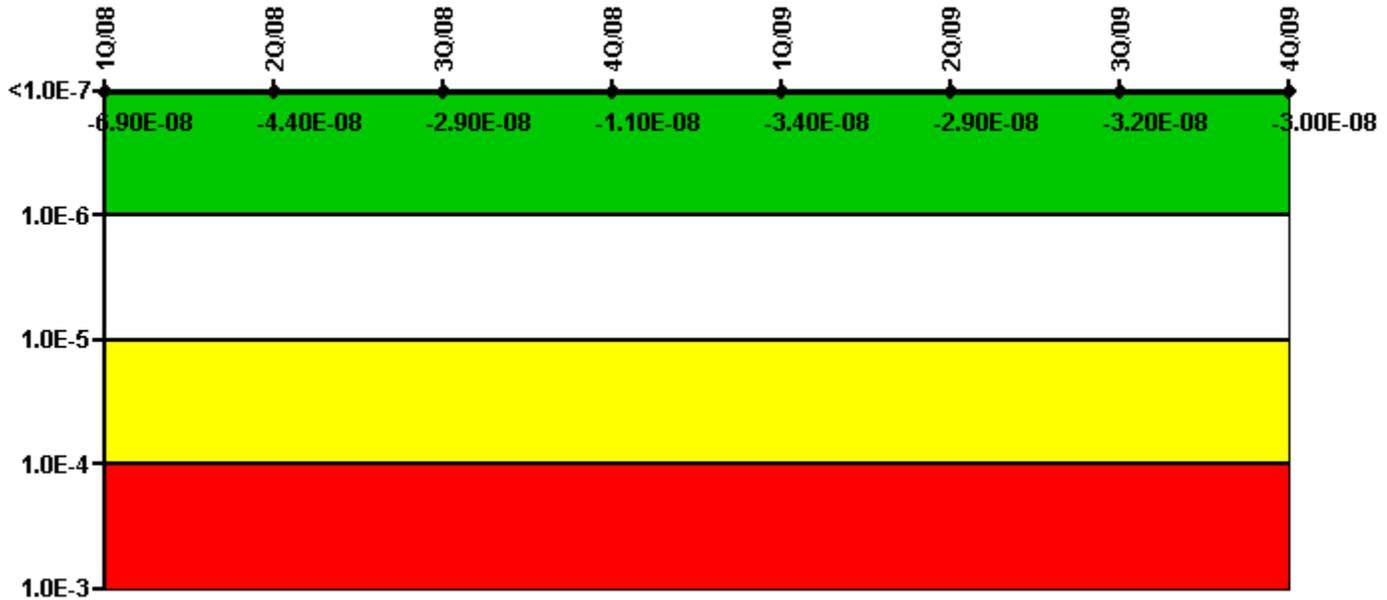
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI ( $\Delta$ CDF)	2.90E-08	4.00E-08	4.20E-08	1.80E-08	2.20E-08	5.50E-08	5.60E-08	7.00E-08
URI ( $\Delta$ CDF)	-1.20E-07	-1.30E-07	-1.30E-07	-1.20E-07	-1.20E-07	-7.40E-08	-7.40E-08	-7.40E-08
PLE	NO							
Indicator value	-9.10E-08	-9.00E-08	-8.80E-08	-1.02E-07	-9.80E-08	-1.90E-08	-1.80E-08	-4.00E-09

Licensee Comments: none

# Mitigating Systems Performance Index, High Pressure Injection System



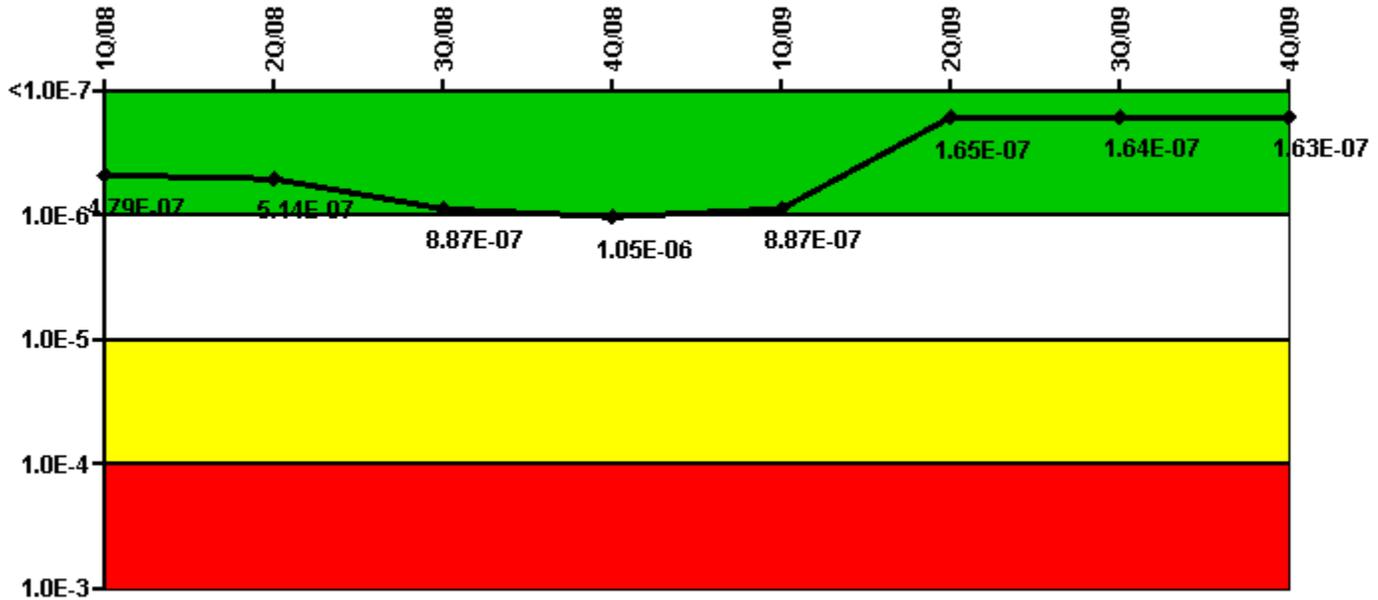
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI ( $\Delta$ CDF)	2.00E-08	4.80E-08	6.10E-08	7.80E-08	6.00E-08	4.60E-08	4.20E-08	4.10E-08
URI ( $\Delta$ CDF)	-8.90E-08	-9.20E-08	-9.00E-08	-8.90E-08	-9.40E-08	-7.50E-08	-7.40E-08	-7.10E-08
PLE	NO							
Indicator value	-6.90E-08	-4.40E-08	-2.90E-08	-1.10E-08	-3.40E-08	-2.90E-08	-3.20E-08	-3.00E-08

Licensee Comments: none

# Mitigating Systems Performance Index, Heat Removal System



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

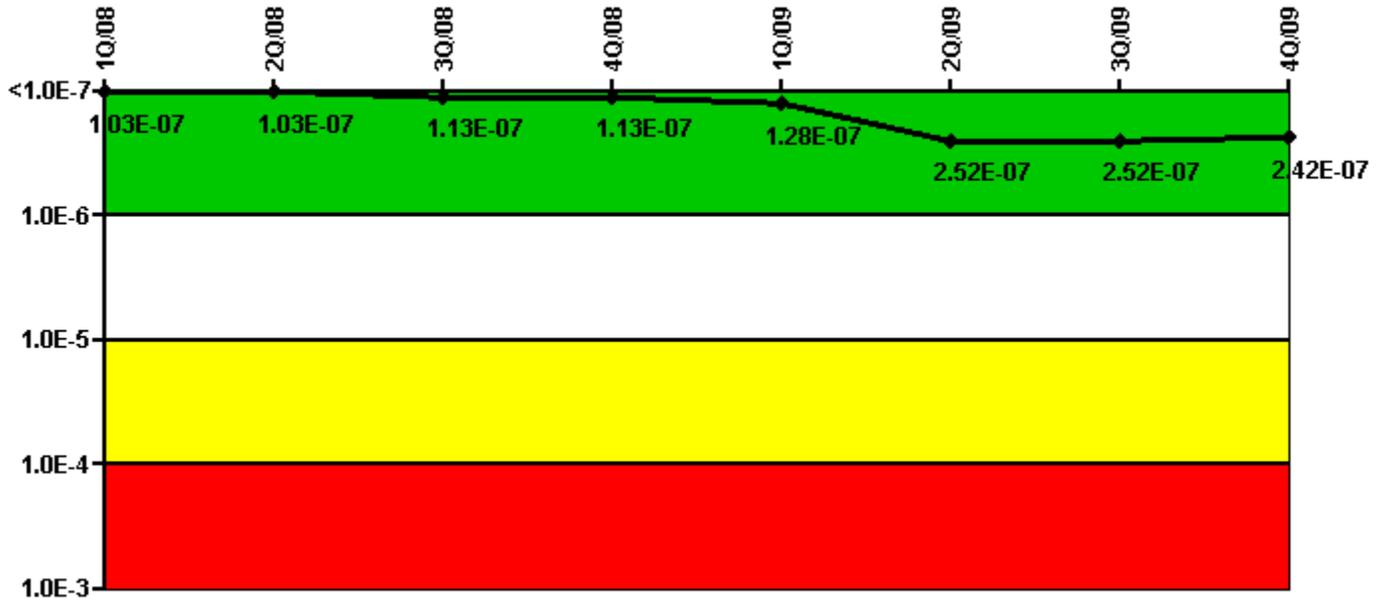
## Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI (ΔCDF)	6.90E-08	9.40E-08	8.70E-08	8.60E-08	4.70E-08	4.90E-09	3.50E-09	3.10E-09
URI (ΔCDF)	4.10E-07	4.20E-07	8.00E-07	9.60E-07	8.40E-07	1.60E-07	1.60E-07	1.60E-07
PLE	NO							
Indicator value	4.79E-07	5.14E-07	8.87E-07	1.05E-06	8.87E-07	1.65E-07	1.64E-07	1.63E-07

Licensee Comments:

1Q/08: A failure on 3/31/2007 on 22 AFW Pp was reported as a fail-to-start event. The failure occurred two hours into the test run and should be classified as fail-to-run event. Record corrected on 12/17/2009

# 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/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI (ΔCDF)	1.00E-07	1.00E-07	1.10E-07	1.10E-07	1.20E-07	2.40E-07	2.40E-07	2.30E-07
URI (ΔCDF)	2.50E-09	2.50E-09	2.60E-09	2.70E-09	8.30E-09	1.20E-08	1.20E-08	1.20E-08
PLE	NO							
Indicator value	1.03E-07	1.03E-07	1.13E-07	1.13E-07	1.28E-07	2.52E-07	2.52E-07	2.42E-07

## Licensee Comments:

3Q/09: A failure on 3/31/2007 on 22 AFW Pp was reported as a fail-to-start event. The failure occurred two hours into the test run and should be classified as fail-to-run event. Record corrected on 12/17/2009

2Q/09: A failure on 3/31/2007 on 22 AFW Pp was reported as a fail-to-start event. The failure occurred two hours into the test run and should be classified as fail-to-run event. Record corrected on 12/17/2009

1Q/09: A failure on 3/31/2007 on 22 AFW Pp was reported as a fail-to-start event. The failure occurred two hours into the test run and should be classified as fail-to-run event. Record corrected on 12/17/2009

4Q/08: A failure on 3/31/2007 on 22 AFW Pp was reported as a fail-to-start event. The failure occurred two hours into the test run and should be classified as fail-to-run event. Record corrected on 12/17/2009

3Q/08: A failure on 3/31/2007 on 22 AFW Pp was reported as a fail-to-start event. The failure occurred two hours into the test run and should be classified as fail-to-run event. Record corrected on 12/17/2009

2Q/08: A failure on 3/31/2007 on 22 AFW Pp was reported as a fail-to-start event. The failure occurred two hours into the test run and should be classified as fail-to-run event. Record corrected on 12/17/2009

1Q/08: A failure on 3/31/2007 on 22 AFW Pp was reported as a fail-to-start event. The failure occurred two hours into the test run and should be classified as fail-to-run event. Record corrected on 12/17/2009

4Q/07: A failure on 3/31/2007 on 22 AFW Pp was reported as a fail-to-start event. The failure occurred two hours into the test run and should be classified as fail-to-run event. Record corrected on 12/17/2009

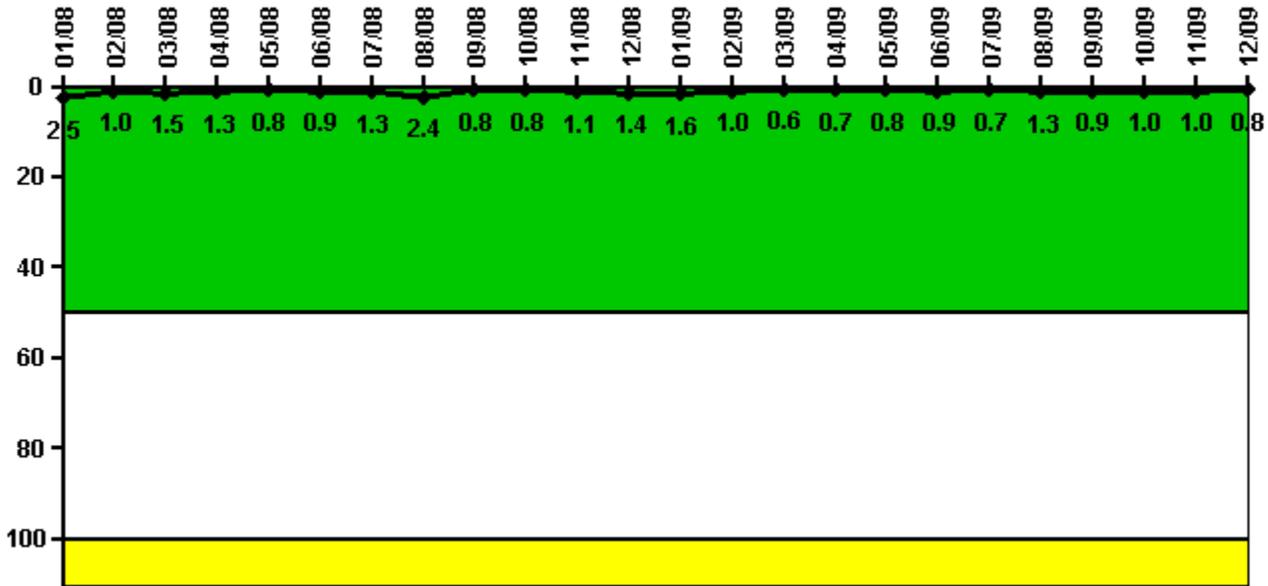




value	1.2	1.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
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Licensee Comments: none

### Reactor Coolant System Leakage



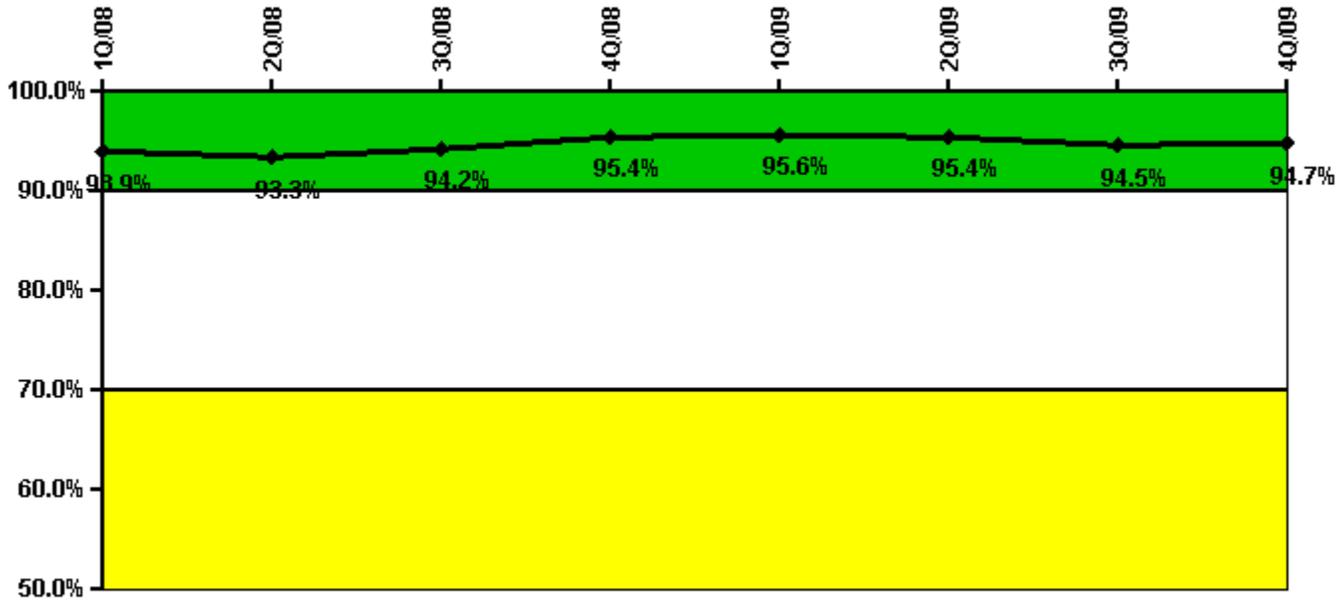
Thresholds: White > 50.0 Yellow > 100.0

### Notes

Reactor Coolant System Leakage	1/08	2/08	3/08	4/08	5/08	6/08	7/08	8/08	9/08	10/08	11/08	12/08
Maximum leakage	0.250	0.100	0.150	0.130	0.080	0.090	0.130	0.240	0.080	0.080	0.110	0.140
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	2.5	1.0	1.5	1.3	0.8	0.9	1.3	2.4	0.8	0.8	1.1	1.4
Reactor Coolant System Leakage	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09
Maximum leakage	0.160	0.100	0.060	0.070	0.080	0.090	0.070	0.130	0.090	0.100	0.100	0.080
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	1.6	1.0	0.6	0.7	0.8	0.9	0.7	1.3	0.9	1.0	1.0	0.8

Licensee Comments: none

## Drill/Exercise Performance



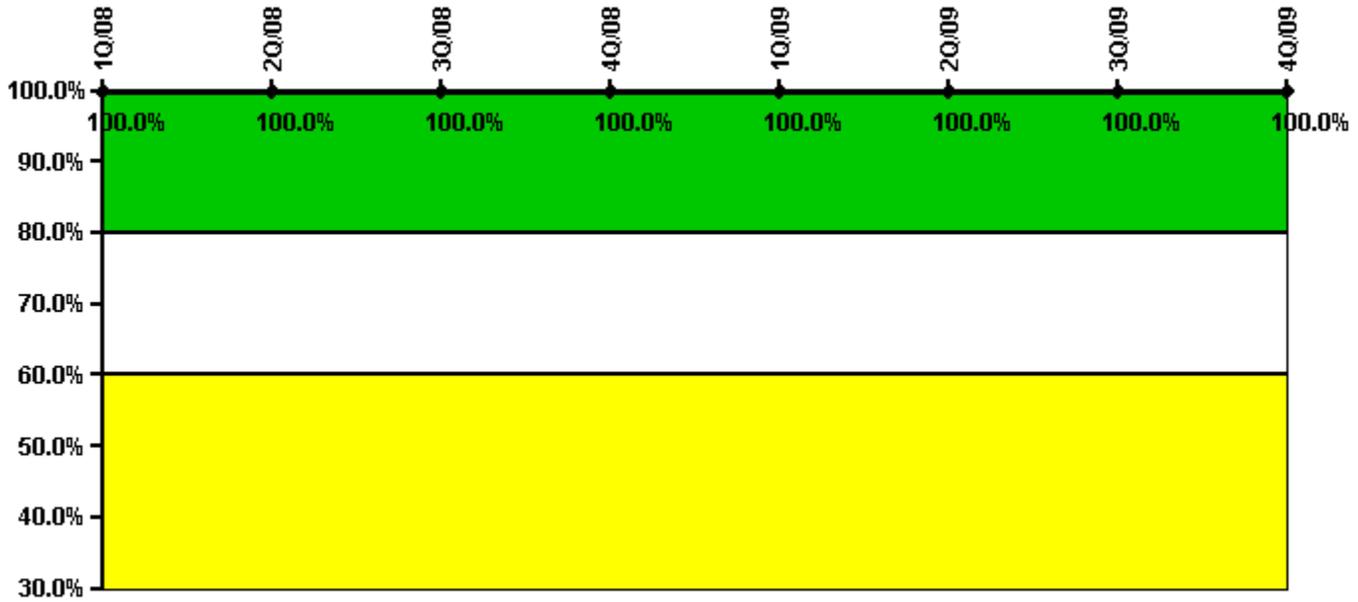
Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Successful opportunities	4.0	26.0	40.0	52.0	10.0	30.0	43.0	63.0
Total opportunities	5.0	27.0	40.0	59.0	10.0	32.0	46.0	64.0
Indicator value	93.9%	93.3%	94.2%	95.4%	95.6%	95.4%	94.5%	94.7%

Licensee Comments: none

## ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

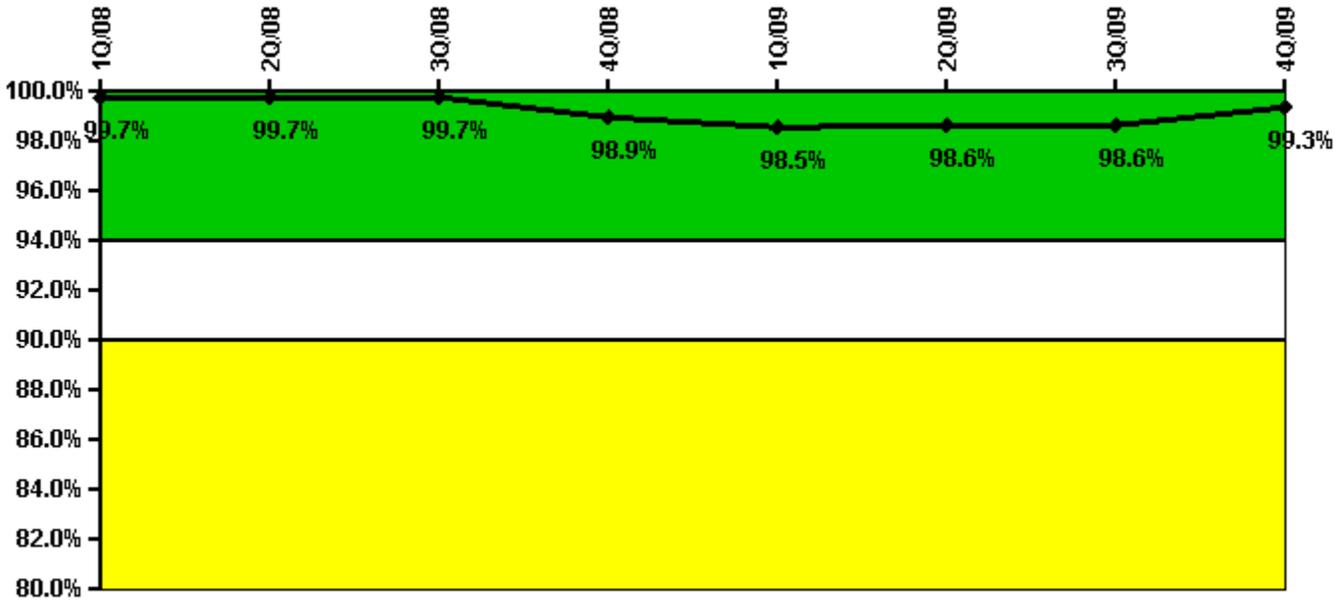
### Notes

ERO Drill Participation	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Participating Key personnel	83.0	87.0	86.0	84.0	88.0	98.0	101.0	95.0
Total Key personnel	83.0	87.0	86.0	84.0	88.0	98.0	101.0	95.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

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# Alert & Notification System



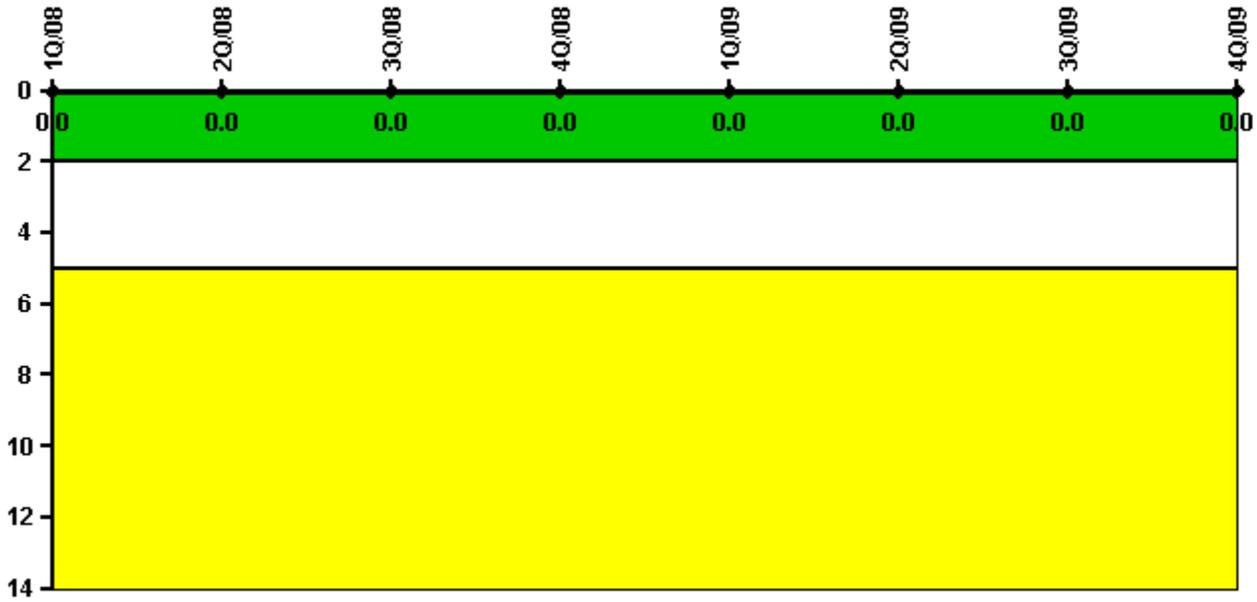
Thresholds: White < 94.0% Yellow < 90.0%

## Notes

Alert & Notification System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Successful siren-tests	947	946	946	916	932	948	947	942
Total sirens-tests	949	949	949	949	949	949	949	949
Indicator value	99.7%	99.7%	99.7%	98.9%	98.5%	98.6%	98.6%	99.3%

Licensee Comments: none

# Occupational Exposure Control Effectiveness



**Thresholds: White > 2.0 Yellow > 5.0**

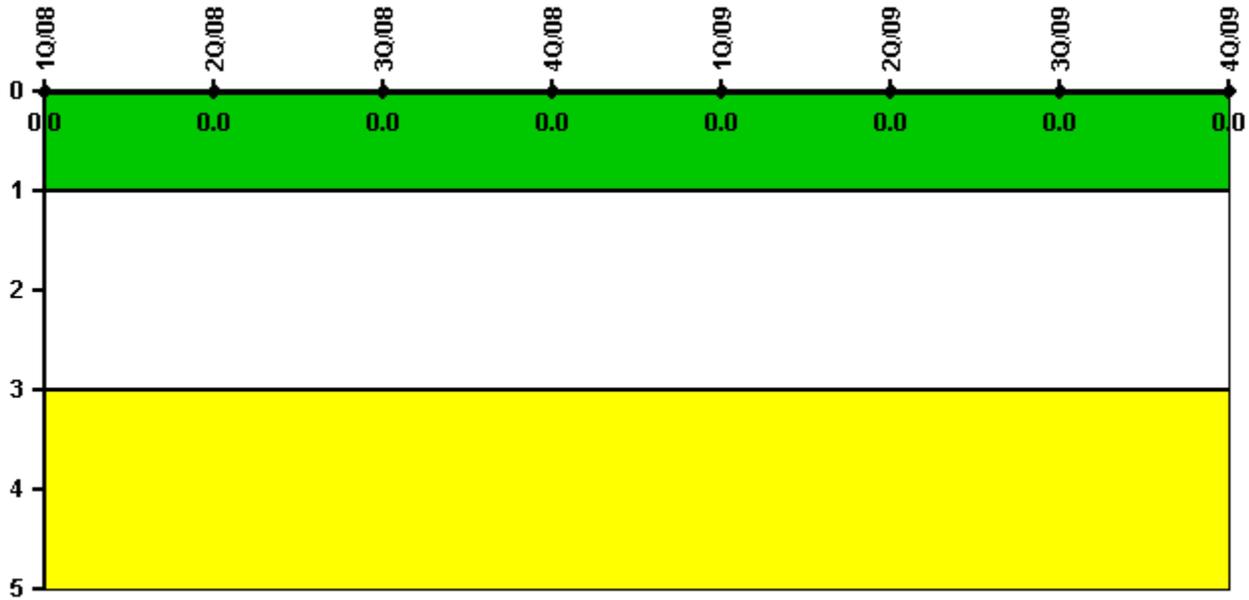
## Notes

Occupational Exposure Control Effectiveness	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
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>							

Licensee Comments: none

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# RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

## Notes

RETS/ODCM Radiological Effluent	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
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.