

# Cooper

## 1Q/2009 Performance Indicators

Licensee's General Comments: One Run failure has been conservatively taken for the EDG Train A fuel oil transfer system low flow condition documented in CR-CNS-2008-08017 pending final resolution on two (2) outstanding FAQs. The first FAQ involves the introduction of the rubber debris into the Day Tank float operated valve during a test or maintenance while the EDG was inoperable and the second FAQ involves the component boundary for the fuel oil transfer system boundary which currently excludes the Day Tank float operated valve. Favorable resolution (concurrence with) either of the FAQs will result in a retraction of this run failure from the NRC PI.

### Unplanned Scrams per 7000 Critical Hrs



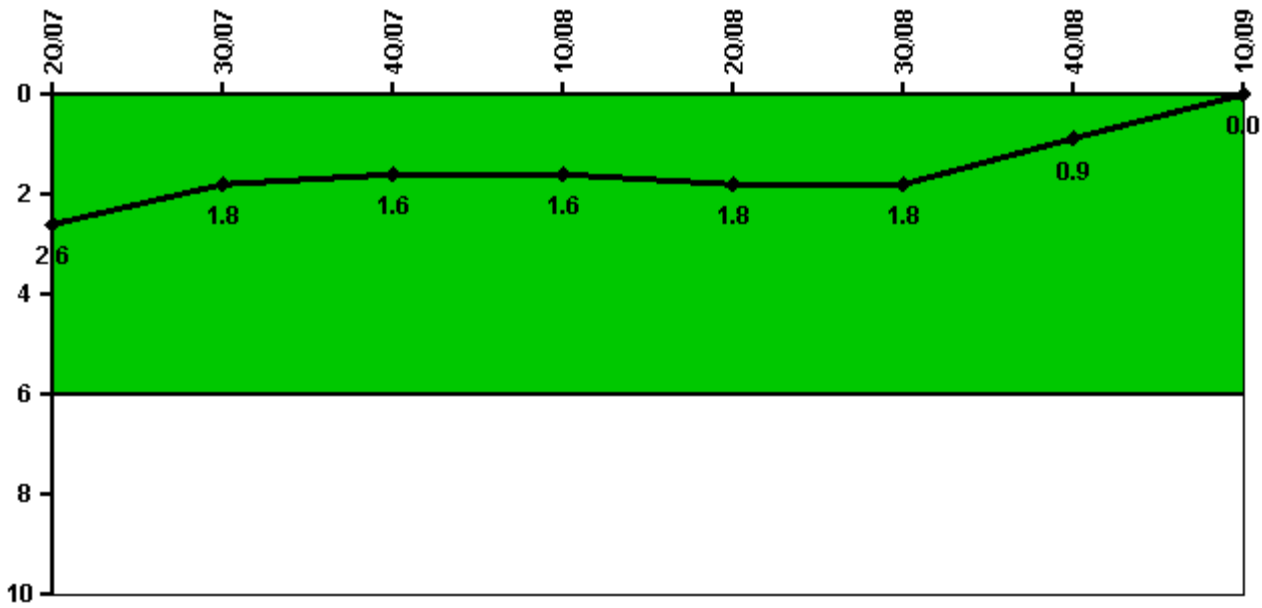
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
Unplanned scrams	1.0	0	0	0	0	1.0	0	0
Critical hours	2123.7	2208.0	2209.0	2183.0	1354.8	2153.9	2209.0	2038.7
Indicator value	0.9	0.9	0.8	0.8	0	0.9	0.9	0.9

Licensee Comments: none

## Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
Unplanned power changes	0	0	1.0	1.0	0	0	0	0
Critical hours	2123.7	2208.0	2209.0	2183.0	1354.8	2153.9	2209.0	2038.7
Indicator value	2.6	1.8	1.6	1.6	1.8	1.8	0.9	0

Licensee Comments: none

# Unplanned Scrams with Complications



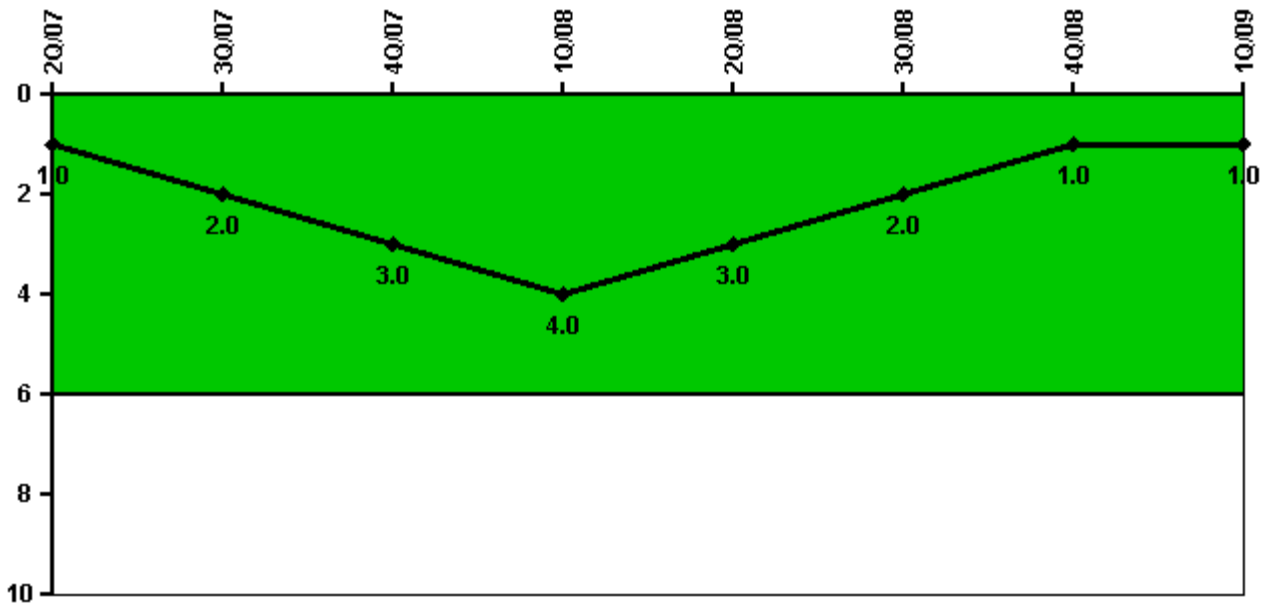
Thresholds: White > 1.0

**Notes**

Unplanned Scrams with Complications	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/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

Licensee Comments: none

## Safety System Functional Failures (BWR)



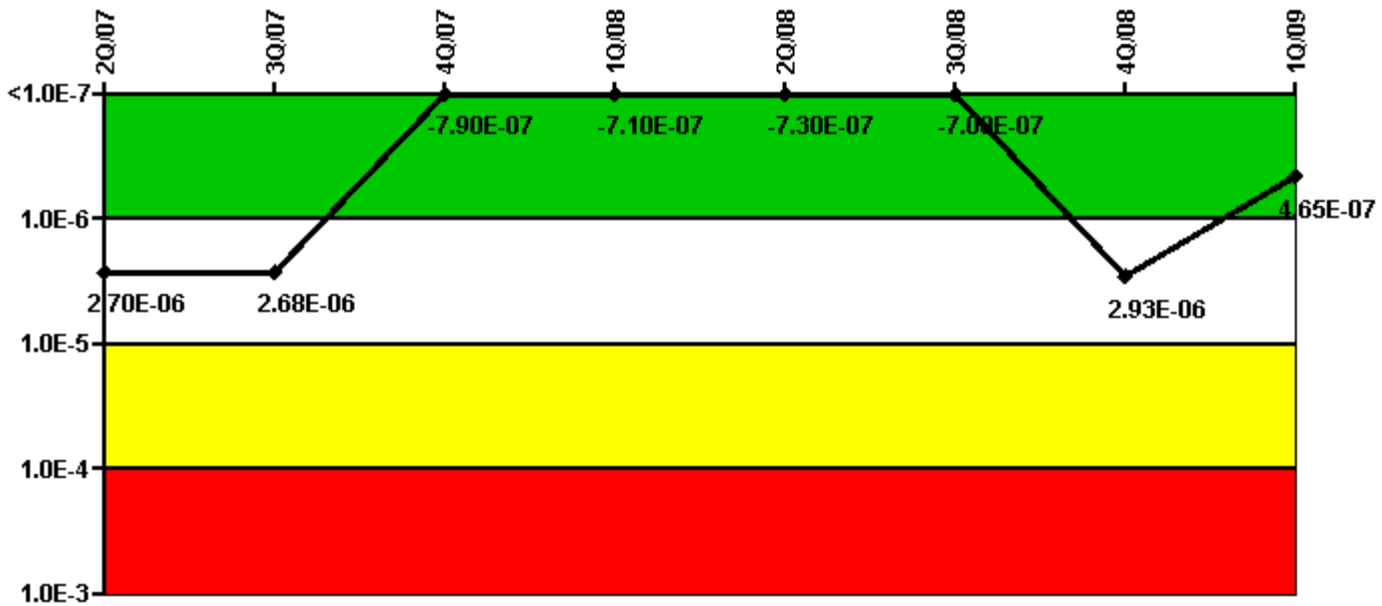
Thresholds: White > 6.0

### Notes

Safety System Functional Failures (BWR)	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
Safety System Functional Failures	1	1	1	1	0	0	0	1
Indicator value	1	2	3	4	3	2	1	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

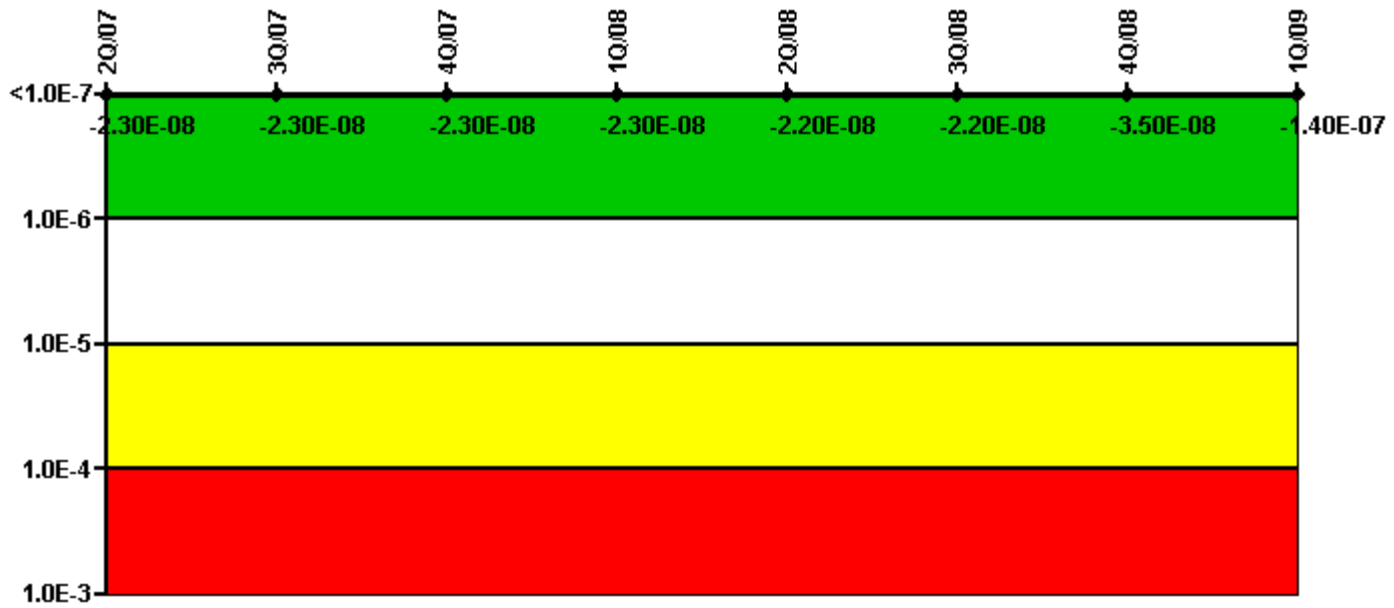
Mitigating Systems Performance Index, Emergency AC Power System	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
UAI (ΔCDF)	1.00E-07	1.80E-07	1.10E-07	1.50E-07	1.60E-07	2.00E-07	3.30E-07	8.50E-08
URI (ΔCDF)	2.60E-06	2.50E-06	-9.00E-07	-8.60E-07	-8.90E-07	-9.00E-07	2.60E-06	3.80E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.70E-06	2.68E-06	-7.90E-07	-7.10E-07	-7.30E-07	-7.00E-07	2.93E-06	4.65E-07

Licensee Comments:

1Q/09: Changed PRA Parameter(s).

4Q/08: Risk Cap Invoked.

# Mitigating Systems Performance Index, High Pressure Injection System



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

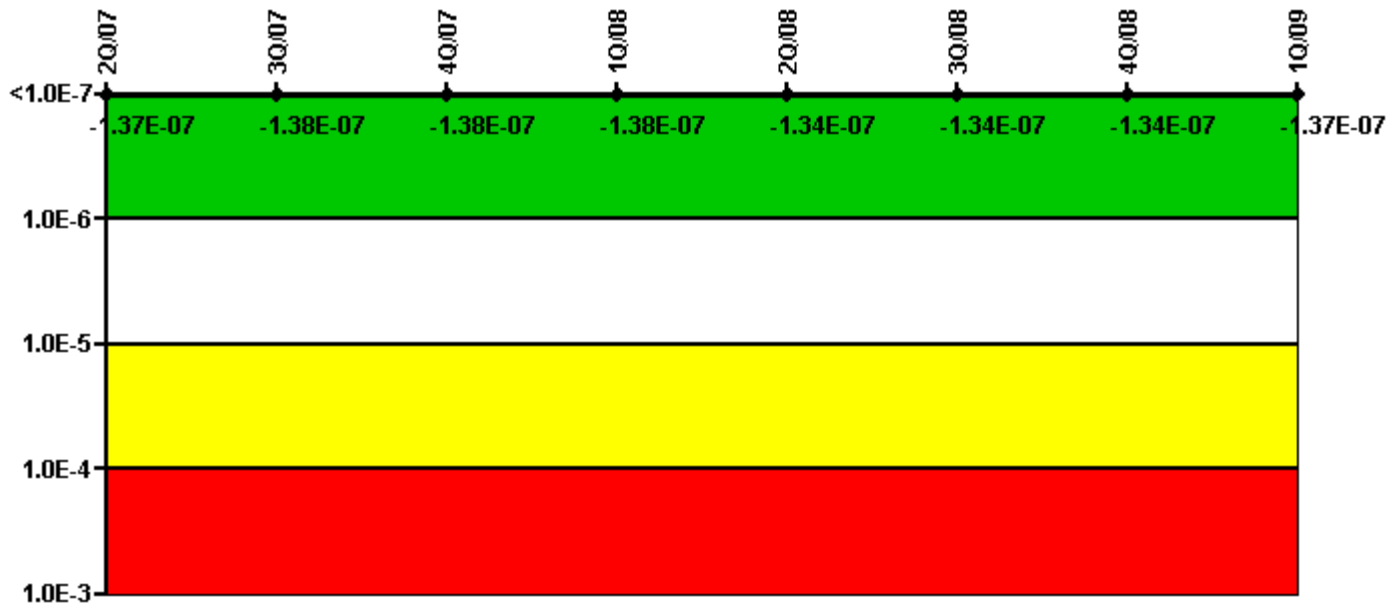
## Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
UAI ( $\Delta$ CDF)	-1.00E-08	-1.00E-08	-1.00E-08	-1.00E-08	-1.00E-08	-1.00E-08	-1.10E-08	2.10E-10
URI ( $\Delta$ CDF)	-1.30E-08	-1.30E-08	-1.30E-08	-1.30E-08	-1.20E-08	-1.20E-08	-2.40E-08	-1.40E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.30E-08	-2.30E-08	-2.30E-08	-2.30E-08	-2.20E-08	-2.20E-08	-3.50E-08	-1.40E-07

Licensee Comments:

1Q/09: Changed PRA Parameter(s).

# Mitigating Systems Performance Index, Heat Removal System



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

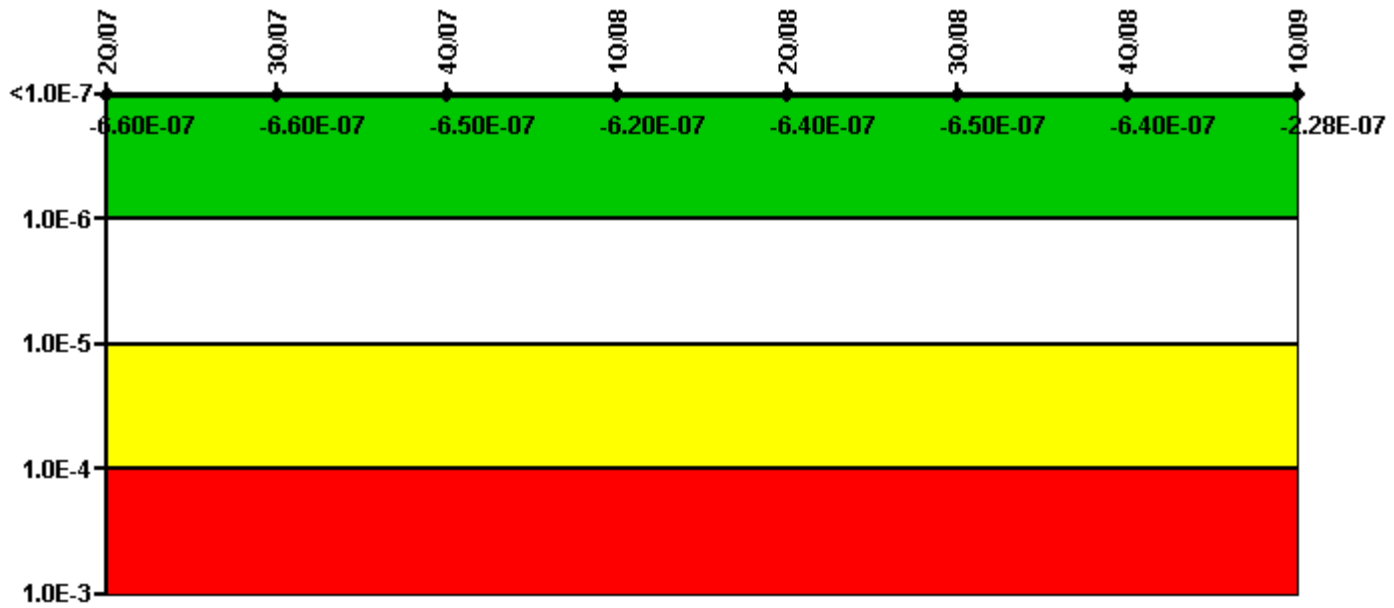
## Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
UAI ( $\Delta$ CDF)	-4.50E-08	-4.60E-08	-4.60E-08	-4.60E-08	-4.60E-08	-4.60E-08	-4.60E-08	-5.20E-08
URI ( $\Delta$ CDF)	-9.20E-08	-9.20E-08	-9.20E-08	-9.20E-08	-8.80E-08	-8.80E-08	-8.80E-08	-8.50E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.37E-07	-1.38E-07	-1.38E-07	-1.38E-07	-1.34E-07	-1.34E-07	-1.34E-07	-1.37E-07

Licensee Comments:

1Q/09: 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

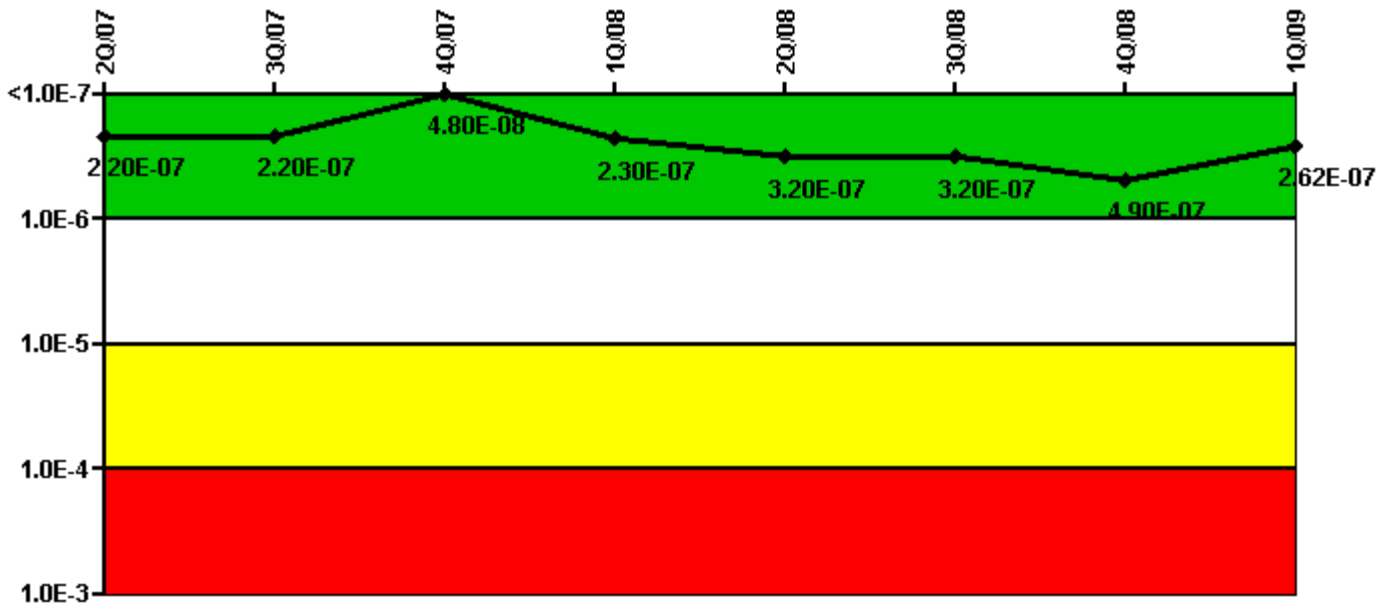
Mitigating Systems Performance Index, Residual Heat Removal System	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
UAI ( $\Delta$ CDF)	-1.10E-07	-1.10E-07	-1.10E-07	-1.10E-07	-1.00E-07	-1.10E-07	-1.10E-07	-1.80E-08
URI ( $\Delta$ CDF)	-5.50E-07	-5.50E-07	-5.40E-07	-5.10E-07	-5.40E-07	-5.40E-07	-5.30E-07	-2.10E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-6.60E-07	-6.60E-07	-6.50E-07	-6.20E-07	-6.40E-07	-6.50E-07	-6.40E-07	-2.28E-07

Licensee Comments:

1Q/09: Changed PRA Parameter(s).



# Mitigating Systems Performance Index, Cooling Water Systems



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

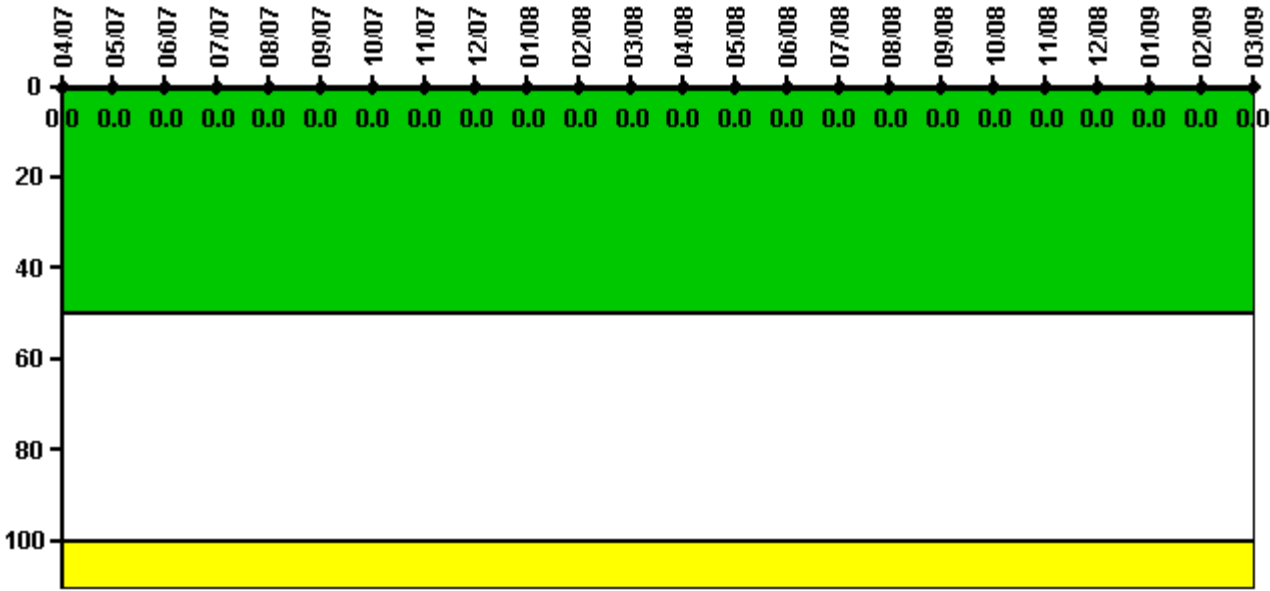
## Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
UAI (ΔCDF)	1.10E-07	1.10E-07	1.10E-07	1.10E-07	2.00E-07	2.00E-07	2.00E-07	7.20E-08
URI (ΔCDF)	1.10E-07	1.10E-07	-6.20E-08	1.20E-07	1.20E-07	1.20E-07	2.90E-07	1.90E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.20E-07	2.20E-07	4.80E-08	2.30E-07	3.20E-07	3.20E-07	4.90E-07	2.62E-07

Licensee Comments:

1Q/09: Changed PRA Parameter(s).

## Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

### Notes

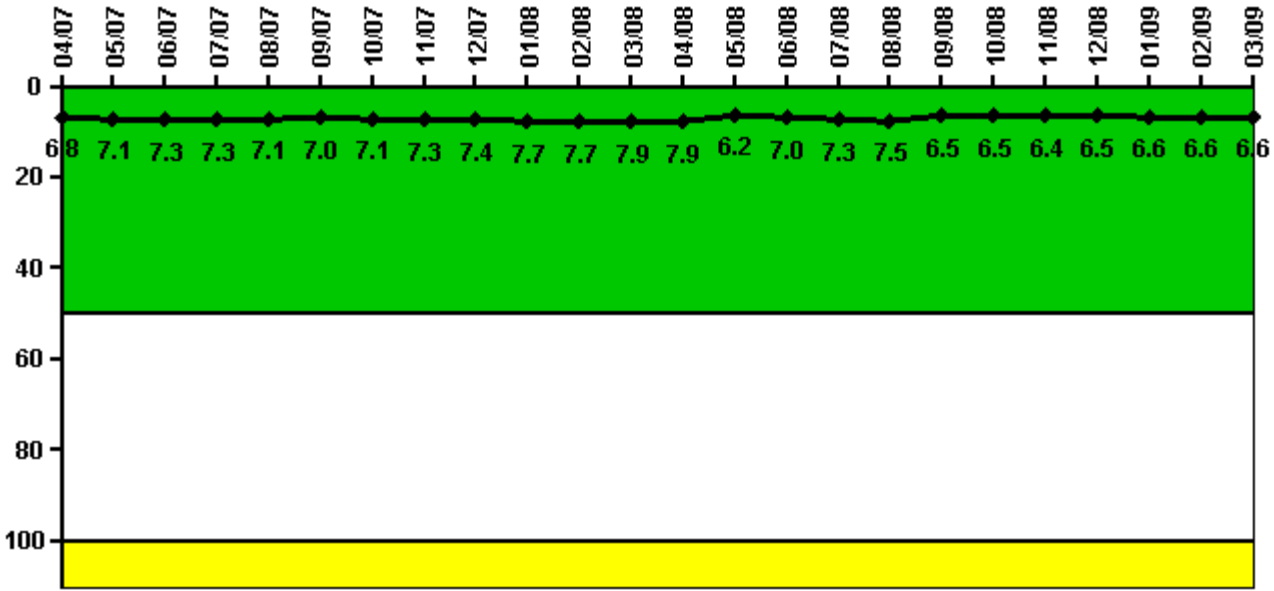
Reactor Coolant System Activity	4/07	5/07	6/07	7/07	8/07	9/07	10/07	11/07	12/07	1/08	2/08	3/08
Maximum activity	0.000026	0.000026	0.000016	0.000017	0.000017	0.000016	0.000017	0.000021	0.000018	0.000017	0.000018	0.000021
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Reactor Coolant System Activity	4/08	5/08	6/08	7/08	8/08	9/08	10/08	11/08	12/08	1/09	2/09	3/09
Maximum activity	0.000017	0.000028	0.000017	0.000019	0.000017	0.000017	0.000015	0.000016	0.000017	0.000017	0.000022	0.000027
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



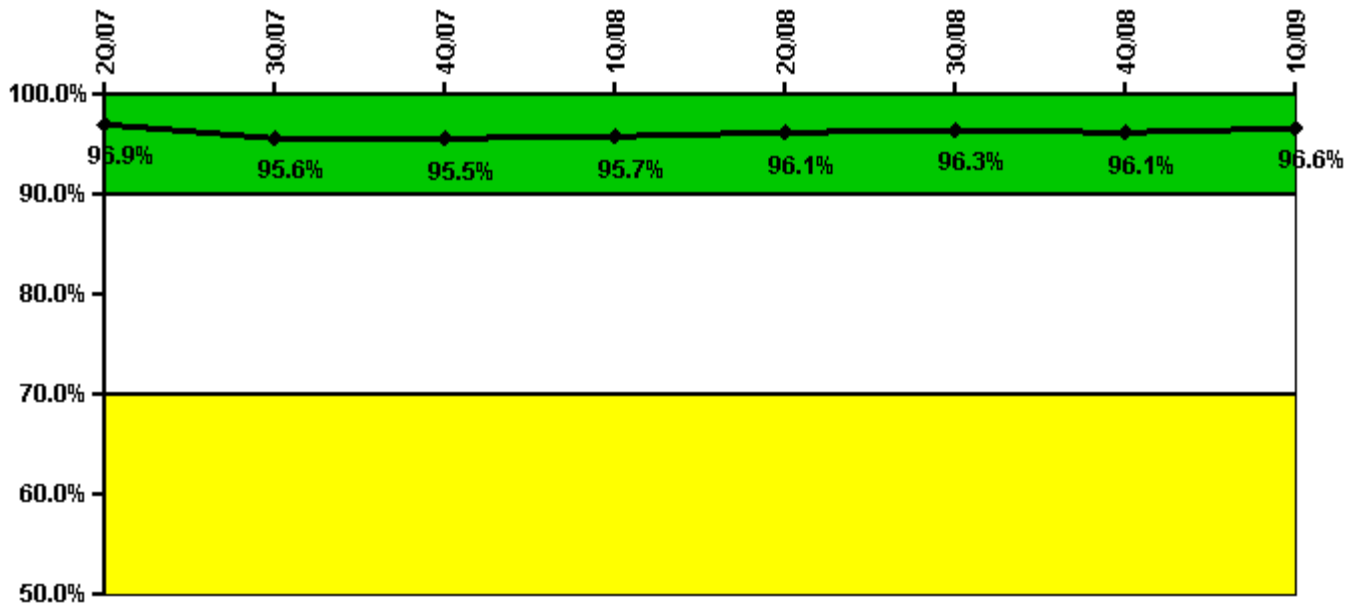
Thresholds: White > 50.0 Yellow > 100.0

### Notes

Reactor Coolant System Leakage	4/07	5/07	6/07	7/07	8/07	9/07	10/07	11/07	12/07	1/08	2/08	3/08
Maximum leakage	2.028	2.134	2.201	2.184	2.131	2.110	2.117	2.187	2.219	2.300	2.312	2.358
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	6.8	7.1	7.3	7.3	7.1	7.0	7.1	7.3	7.4	7.7	7.7	7.9
Reactor Coolant System Leakage	4/08	5/08	6/08	7/08	8/08	9/08	10/08	11/08	12/08	1/09	2/09	3/09
Maximum leakage	2.360	1.846	2.090	2.201	2.263	1.940	1.947	1.919	1.935	1.979	1.965	1.973
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	7.9	6.2	7.0	7.3	7.5	6.5	6.5	6.4	6.5	6.6	6.6	6.6

Licensee Comments: none

## Drill/Exercise Performance



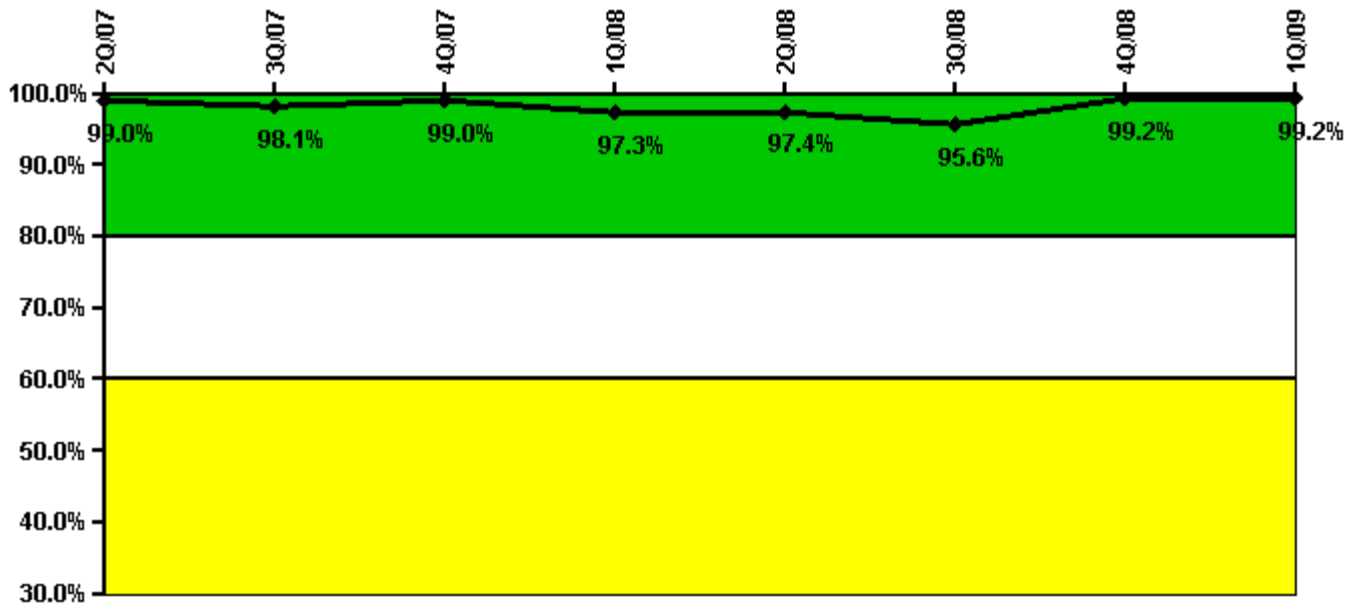
Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
Successful opportunities	59.0	29.0	31.0	50.0	52.0	27.0	28.0	35.0
Total opportunities	61.0	33.0	32.0	51.0	52.0	28.0	29.0	36.0
Indicator value	96.9%	95.6%	95.5%	95.7%	96.1%	96.3%	96.1%	96.6%

Licensee Comments: none

## ERO Drill Participation



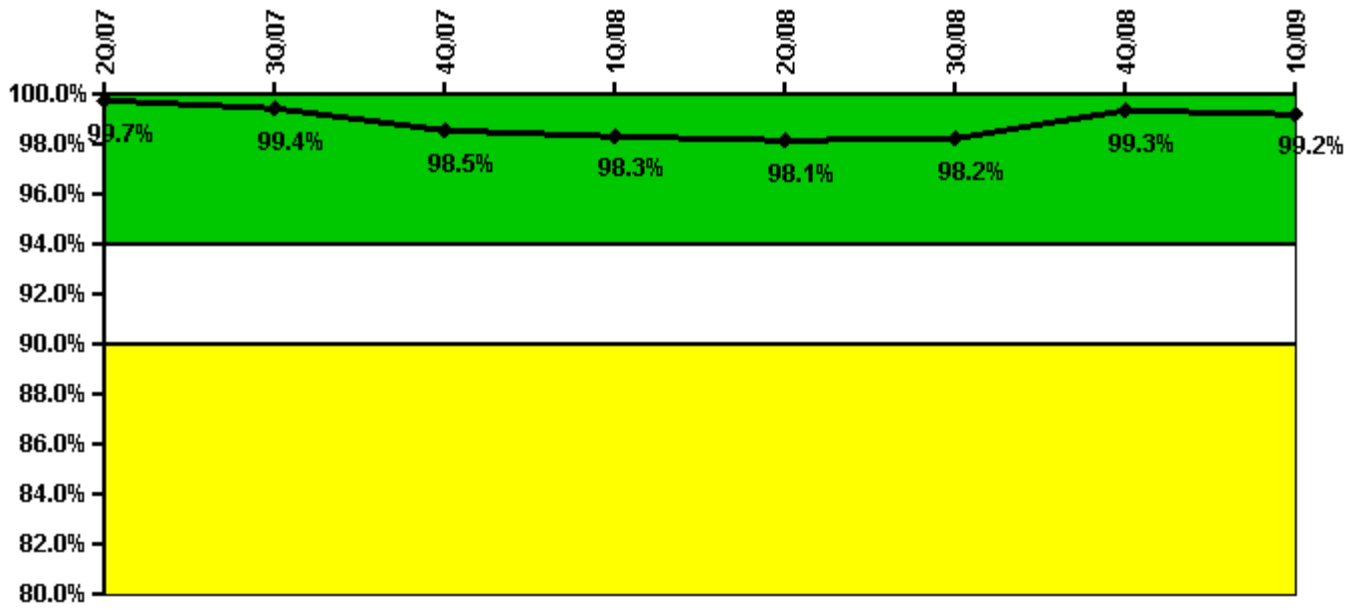
**Thresholds: White < 80.0% Yellow < 60.0%**

### Notes

ERO Drill Participation	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
Participating Key personnel	100.0	101.0	99.0	107.0	113.0	108.0	125.0	127.0
Total Key personnel	101.0	103.0	100.0	110.0	116.0	113.0	126.0	128.0
Indicator value	99.0%	98.1%	99.0%	97.3%	97.4%	95.6%	99.2%	99.2%

Licensee Comments: none

## Alert & Notification System



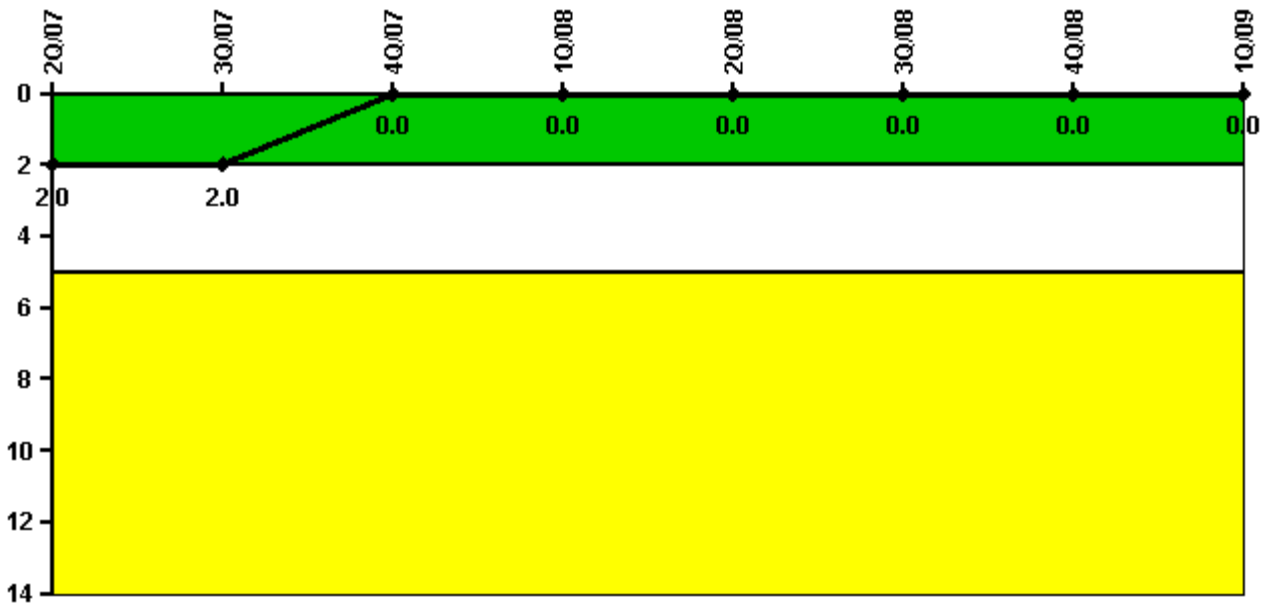
**Thresholds:** White < 94.0% Yellow < 90.0%

### Notes

Alert & Notification System	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
Successful siren-tests	287	285	298	286	285	286	311	281
Total sirens-tests	288	288	312	288	288	288	312	284
Indicator value	99.7%	99.4%	98.5%	98.3%	98.1%	98.2%	99.3%	99.2%

Licensee Comments: none

## Occupational Exposure Control Effectiveness



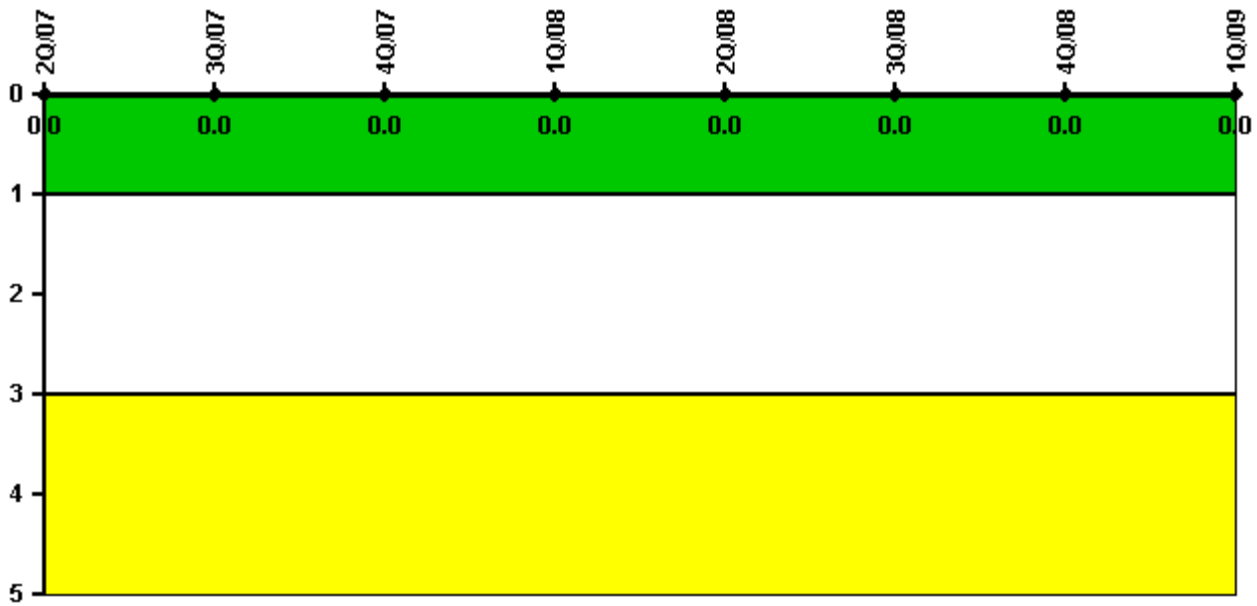
Thresholds: White > 2.0 Yellow > 5.0

### Notes

Occupational Exposure Control Effectiveness	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/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
Indicator value	2	2	0	0	0	0	0	0

Licensee Comments: none

## RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

### Notes

RETS/ODCM Radiological Effluent	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/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.