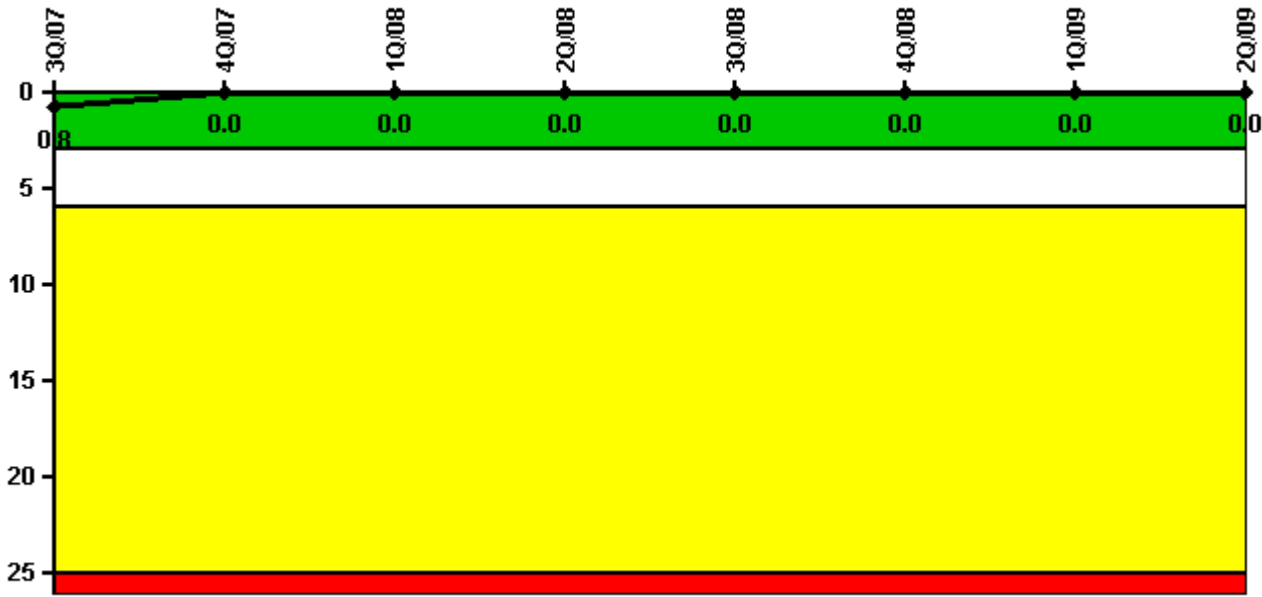


# Susquehanna 1

## 2Q/2009 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



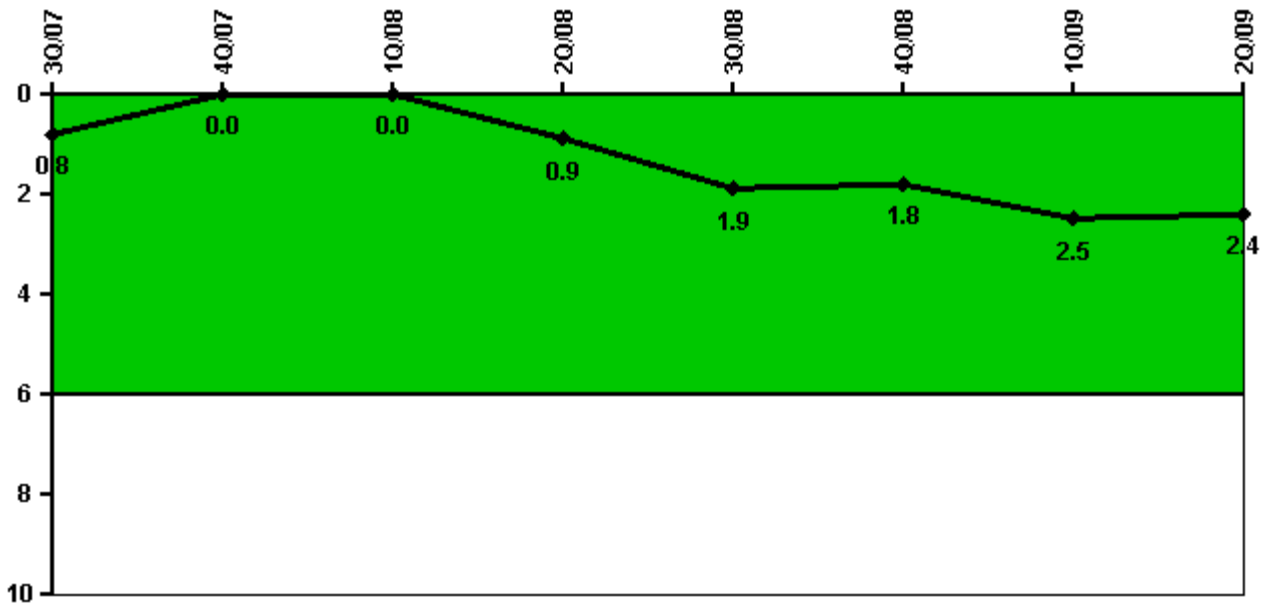
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2208.0	1851.1	1518.3	1830.0	2208.0	2209.0	2159.0	2184.0
Indicator value	0.8	0	0	0	0	0	0	0

Licensee Comments: none

## Unplanned Power Changes per 7000 Critical Hrs



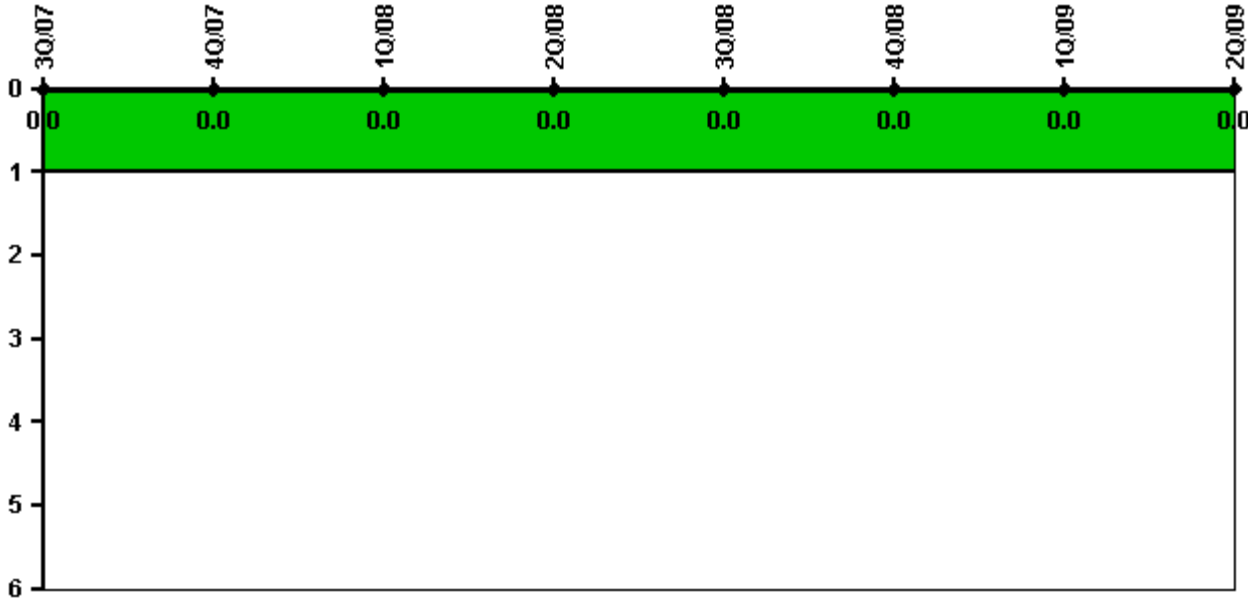
Thresholds: White > 6.0

### Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
Unplanned power changes	0	0	0	1.0	1.0	0	1.0	1.0
Critical hours	2208.0	1851.1	1518.3	1830.0	2208.0	2209.0	2159.0	2184.0
Indicator value	0.8	0	0	0.9	1.9	1.8	2.5	2.4

Licensee Comments: none

# Unplanned Scrams with Complications



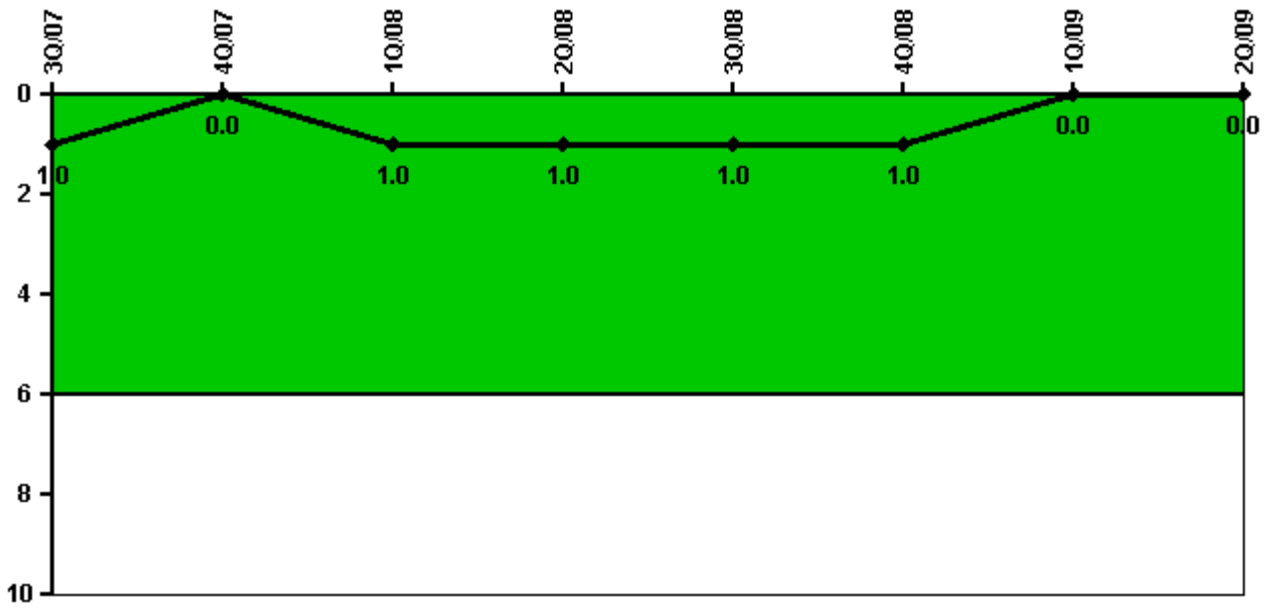
Thresholds: White > 1.0

**Notes**

Unplanned Scrams with Complications	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/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

## Safety System Functional Failures (BWR)



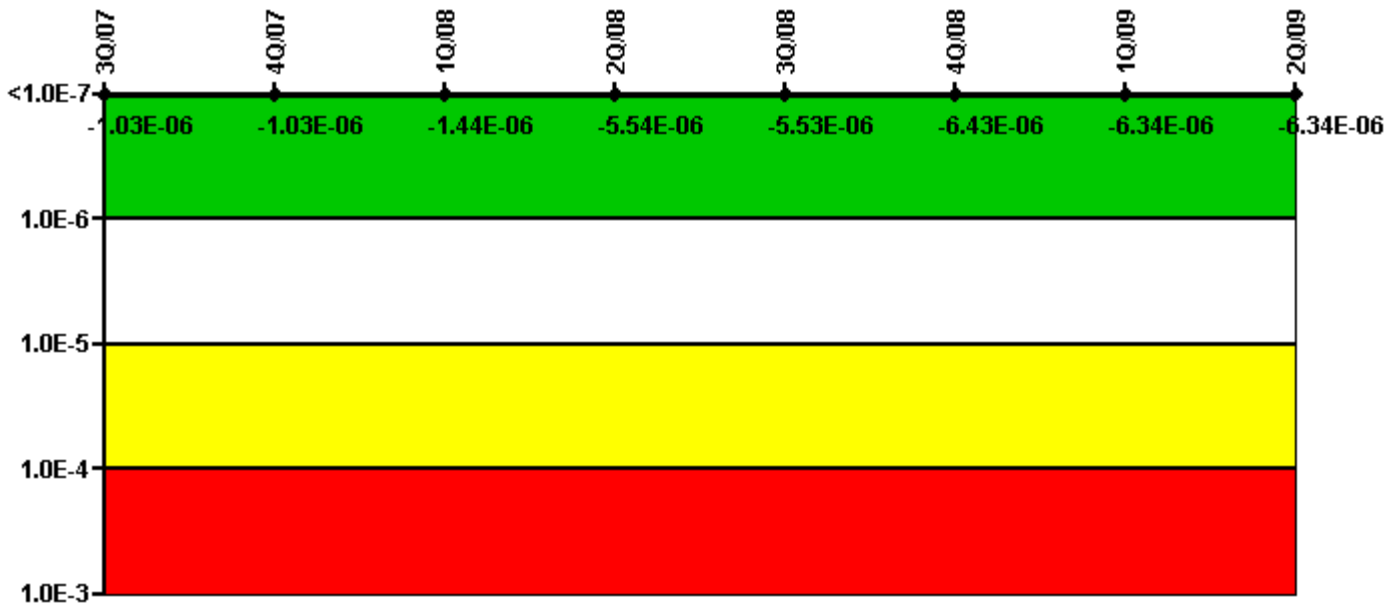
Thresholds: White > 6.0

### Notes

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

Licensee Comments: none

# Mitigating Systems Performance Index, Emergency AC Power System



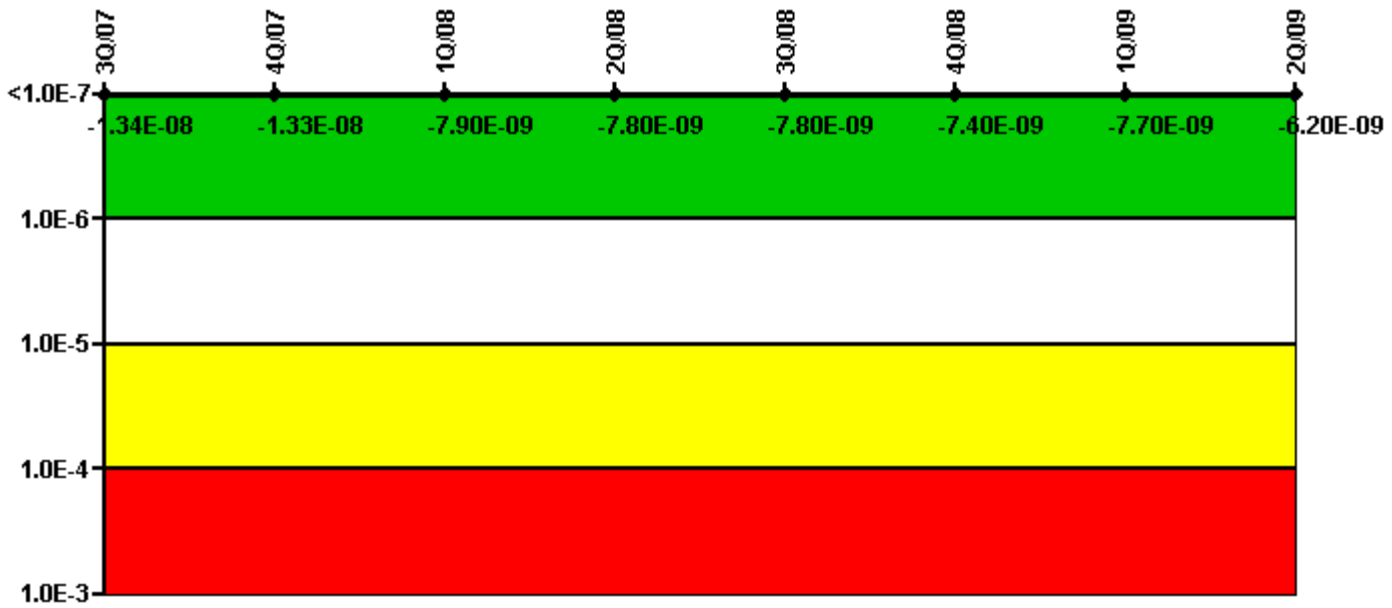
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
UAI (ΔCDF)	-2.90E-08	-3.10E-08	-3.80E-08	-3.60E-08	-2.90E-08	-3.40E-08	-3.90E-08	-4.20E-08
URI (ΔCDF)	-1.00E-06	-1.00E-06	-1.40E-06	-5.50E-06	-5.50E-06	-6.40E-06	-6.30E-06	-6.30E-06
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.03E-06	-1.03E-06	-1.44E-06	-5.54E-06	-5.53E-06	-6.43E-06	-6.34E-06	-6.34E-06

Licensee Comments: none

# Mitigating Systems Performance Index, High Pressure Injection System



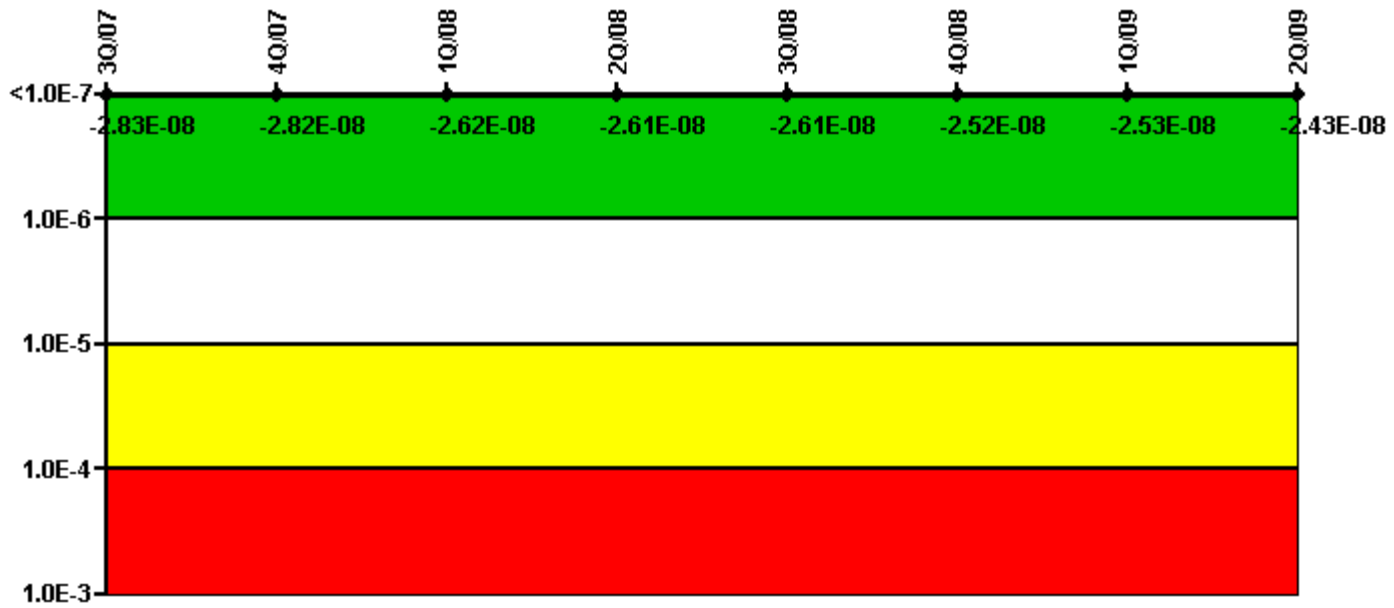
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
UAI ( $\Delta$ CDF)	1.60E-09	1.70E-09	2.10E-09	2.20E-09	2.20E-09	2.10E-09	1.90E-09	1.80E-09
URI ( $\Delta$ CDF)	-1.50E-08	-1.50E-08	-1.00E-08	-1.00E-08	-1.00E-08	-9.50E-09	-9.60E-09	-8.00E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.34E-08	-1.33E-08	-7.90E-09	-7.80E-09	-7.80E-09	-7.40E-09	-7.70E-09	-6.20E-09

Licensee Comments: none

# Mitigating Systems Performance Index, Heat Removal System



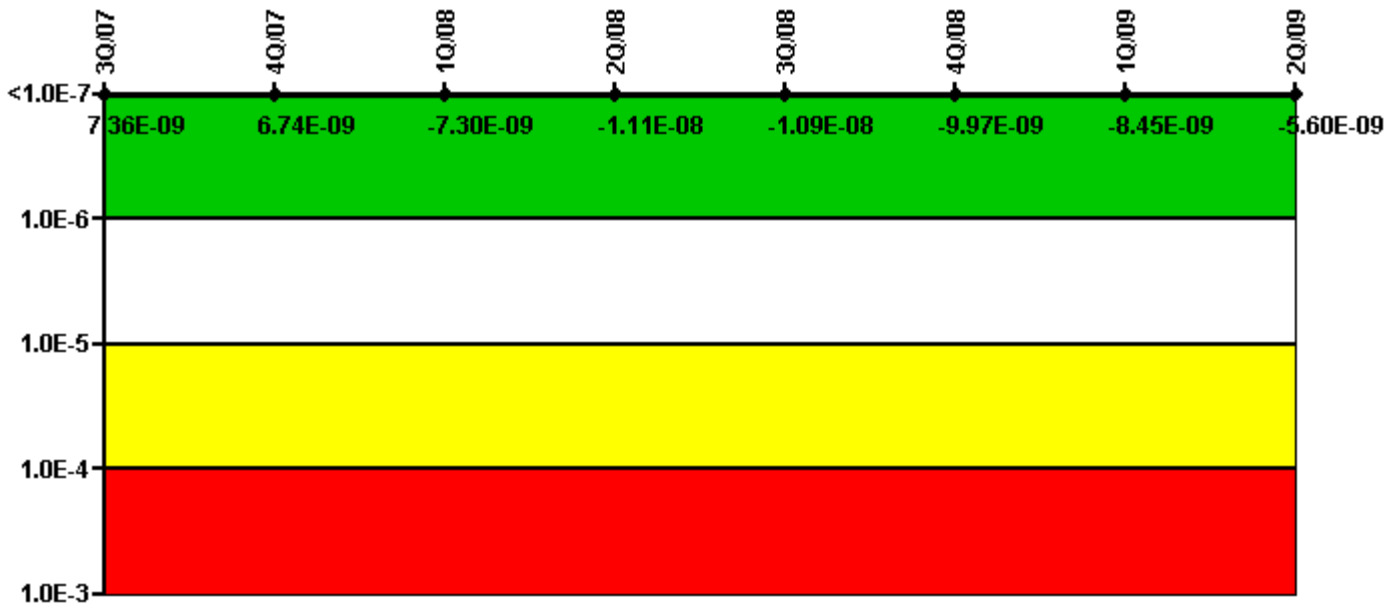
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
UAI ( $\Delta$ CDF)	-5.30E-09	-5.20E-09	-7.20E-09	-7.10E-09	-7.10E-09	-7.20E-09	-7.30E-09	-7.30E-09
URI ( $\Delta$ CDF)	-2.30E-08	-2.30E-08	-1.90E-08	-1.90E-08	-1.90E-08	-1.80E-08	-1.80E-08	-1.70E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.83E-08	-2.82E-08	-2.62E-08	-2.61E-08	-2.61E-08	-2.52E-08	-2.53E-08	-2.43E-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

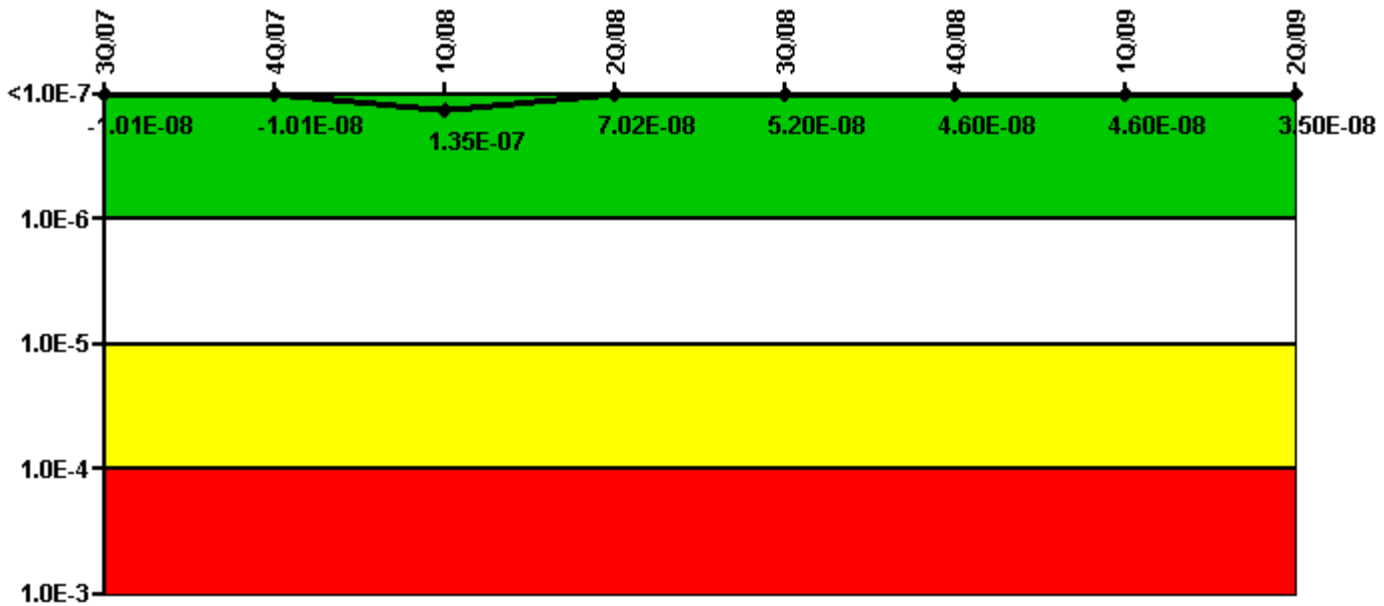
## Notes

Mitigating Systems Performance Index, Residual Heat Removal System	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
UAI ( $\Delta$ CDF)	3.60E-10	3.40E-10	3.70E-09	9.40E-10	5.10E-11	-8.70E-10	-9.50E-10	-1.10E-09
URI ( $\Delta$ CDF)	7.00E-09	6.40E-09	-1.10E-08	-1.20E-08	-1.10E-08	-9.10E-09	-7.50E-09	-4.50E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	7.36E-09	6.74E-09	-7.30E-09	-1.11E-08	-1.09E-08	-9.97E-09	-8.45E-09	-5.60E-09

Licensee Comments: none



# Mitigating Systems Performance Index, Cooling Water Systems



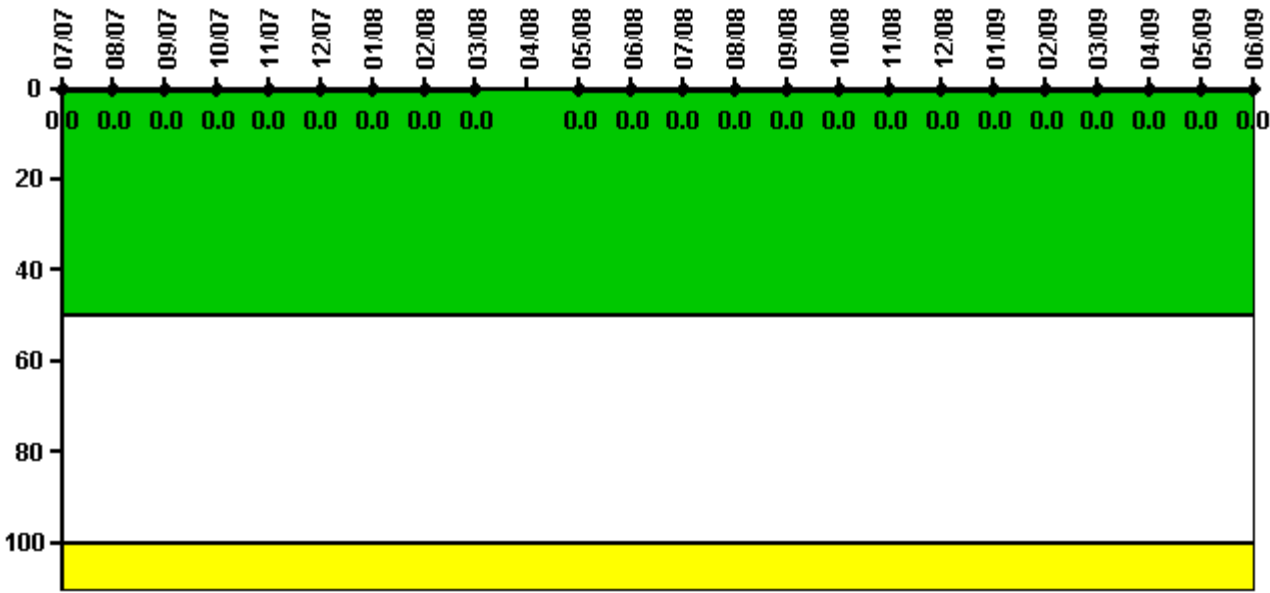
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
UAI ( $\Delta$ CDF)	9.00E-10	9.30E-10	1.40E-07	7.60E-08	6.70E-08	6.00E-08	5.90E-08	5.90E-08
URI ( $\Delta$ CDF)	-1.10E-08	-1.10E-08	-5.50E-09	-5.80E-09	-1.50E-08	-1.40E-08	-1.30E-08	-2.40E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.01E-08	-1.01E-08	1.35E-07	7.02E-08	5.20E-08	4.60E-08	4.60E-08	3.50E-08

Licensee Comments: none

## Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

### Notes

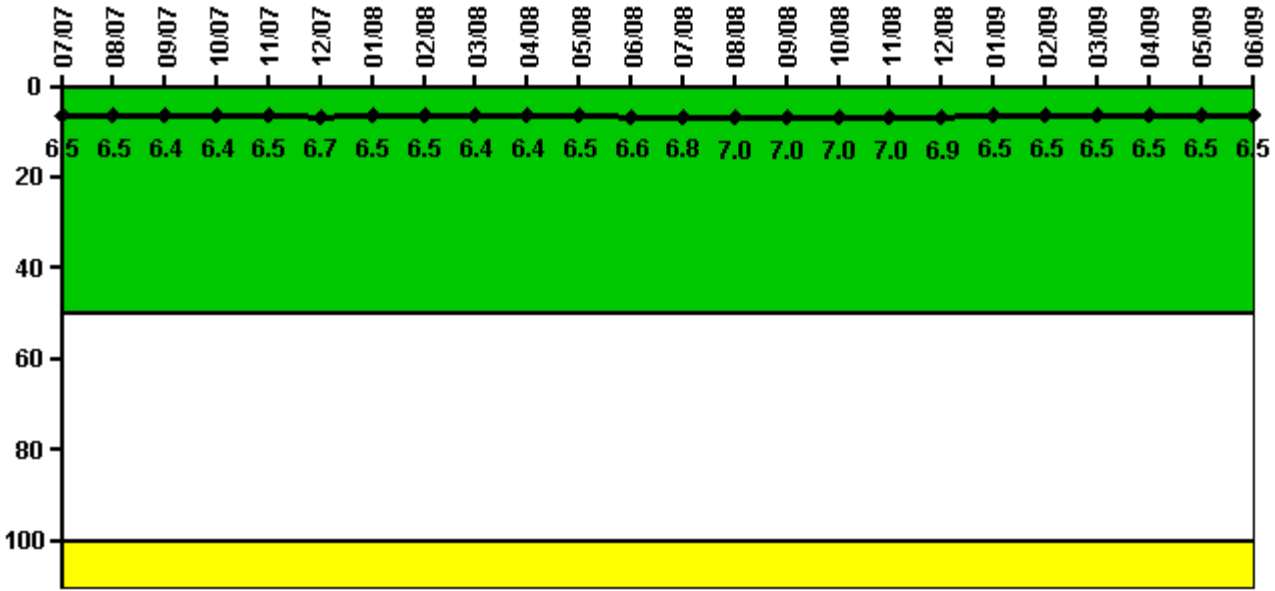
Reactor Coolant System Activity	7/07	8/07	9/07	10/07	11/07	12/07	1/08	2/08	3/08	4/08	5/08	6/08
Maximum activity	0.000004	0.000005	0.000016	0.000016	0.000012	0.000013	0.000013	0.000015	0.000015	N/A	0.000004	0.000005
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	0	0	0	0	0	0	0	N/A	0	0

Reactor Coolant System Activity	7/08	8/08	9/08	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09
Maximum activity	0.000005	0.000006	0.000008	0.000007	0.000007	0.000007	0.000007	0.000007	0.000007	0.000007	0.000007	0.000008
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



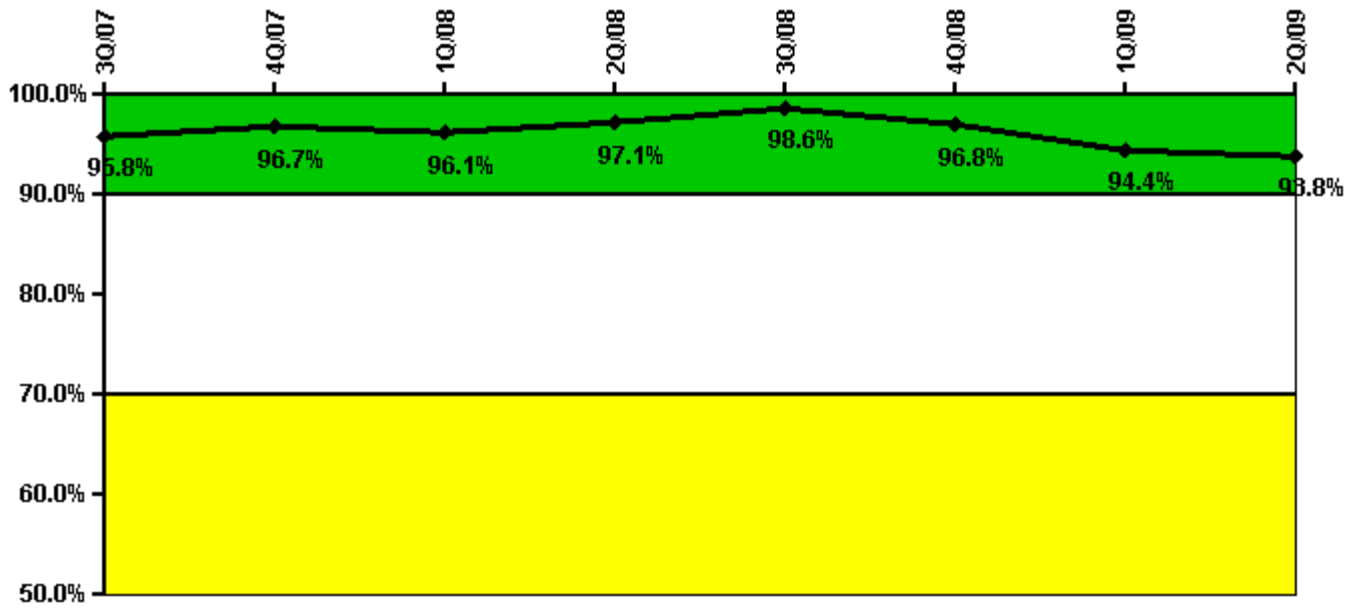
Thresholds: White > 50.0 Yellow > 100.0

### Notes

<b>Reactor Coolant System Leakage</b>	<b>7/07</b>	<b>8/07</b>	<b>9/07</b>	<b>10/07</b>	<b>11/07</b>	<b>12/07</b>	<b>1/08</b>	<b>2/08</b>	<b>3/08</b>	<b>4/08</b>	<b>5/08</b>	<b>6/08</b>
Maximum leakage	1.620	1.620	1.610	1.600	1.620	1.670	1.620	1.620	1.600	1.600	1.620	1.660
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	6.5	6.5	6.4	6.4	6.5	6.7	6.5	6.5	6.4	6.4	6.5	6.6
<b>Reactor Coolant System Leakage</b>	<b>7/08</b>	<b>8/08</b>	<b>9/08</b>	<b>10/08</b>	<b>11/08</b>	<b>12/08</b>	<b>1/09</b>	<b>2/09</b>	<b>3/09</b>	<b>4/09</b>	<b>5/09</b>	<b>6/09</b>
Maximum leakage	1.710	1.760	1.760	1.760	1.760	1.720	1.630	1.620	1.620	1.630	1.620	1.620
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	6.8	7.0	7.0	7.0	7.0	6.9	6.5	6.5	6.5	6.5	6.5	6.5

Licensee Comments: none

## Drill/Exercise Performance



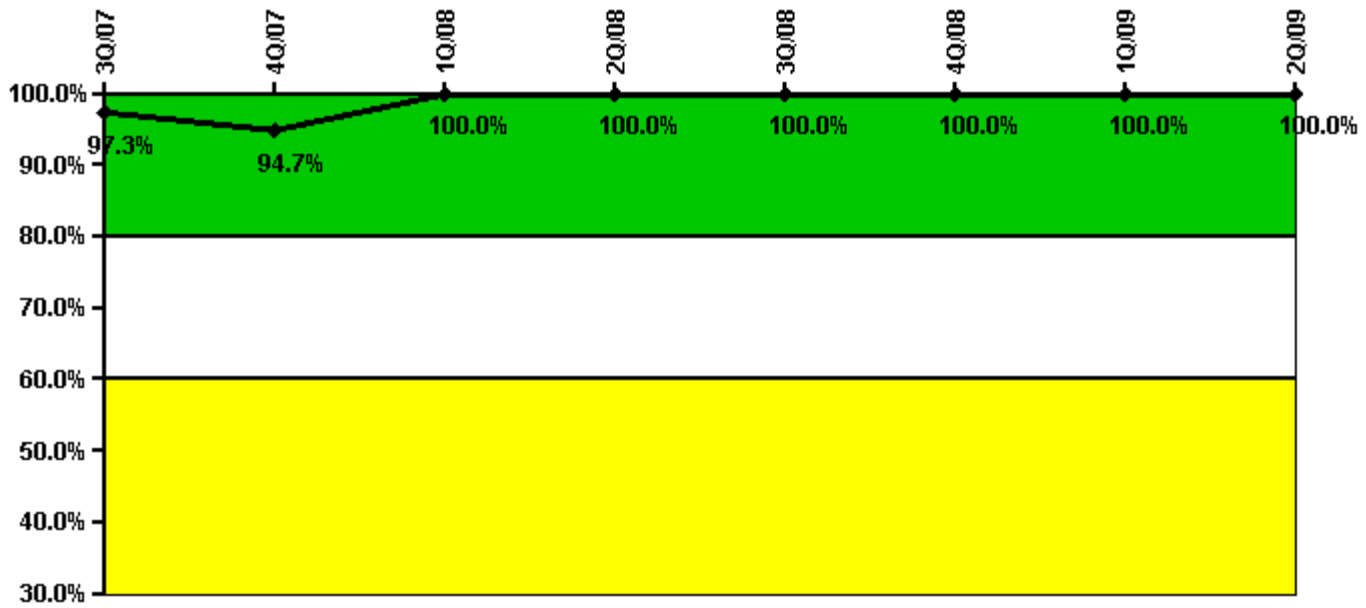
Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
Successful opportunities	16.0	13.0	17.0	18.0	25.0	20.0	9.0	19.0
Total opportunities	16.0	13.0	18.0	18.0	25.0	23.0	13.0	20.0
Indicator value	95.8%	96.7%	96.1%	97.1%	98.6%	96.8%	94.4%	93.8%

Licensee Comments: none

## ERO Drill Participation



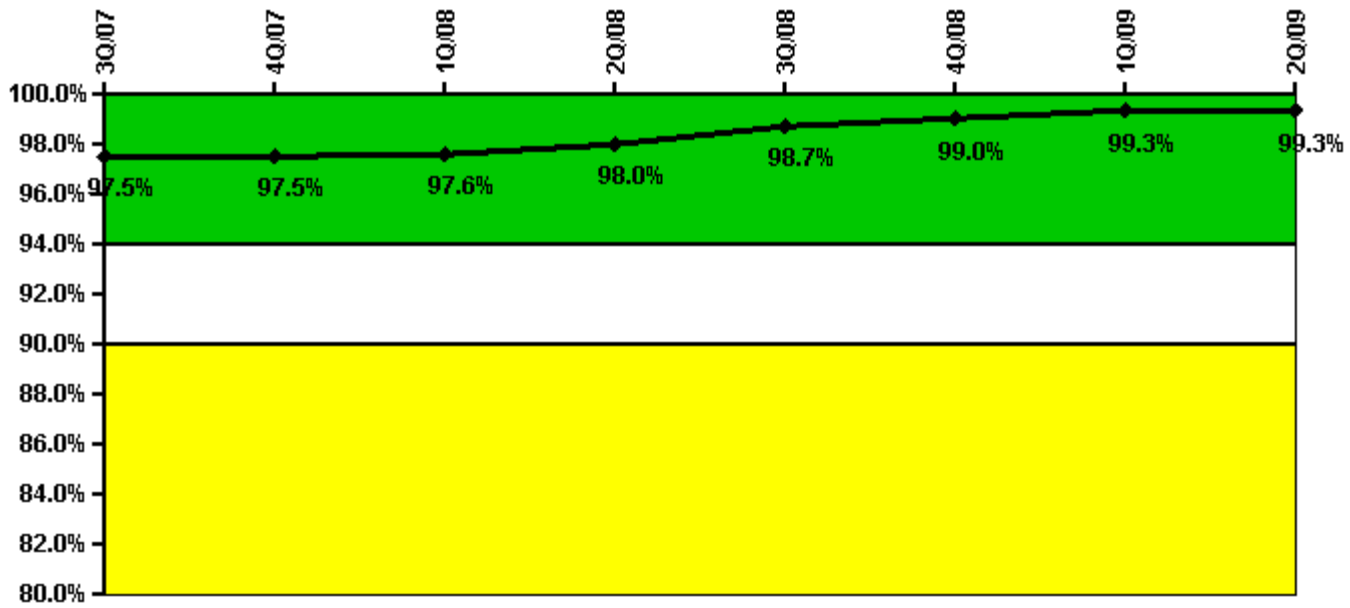
Thresholds: White < 80.0% Yellow < 60.0%

### Notes

ERO Drill Participation	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
Participating Key personnel	73.0	71.0	72.0	74.0	72.0	71.0	68.0	69.0
Total Key personnel	75.0	75.0	72.0	74.0	72.0	71.0	68.0	69.0
Indicator value	97.3%	94.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

## Alert & Notification System



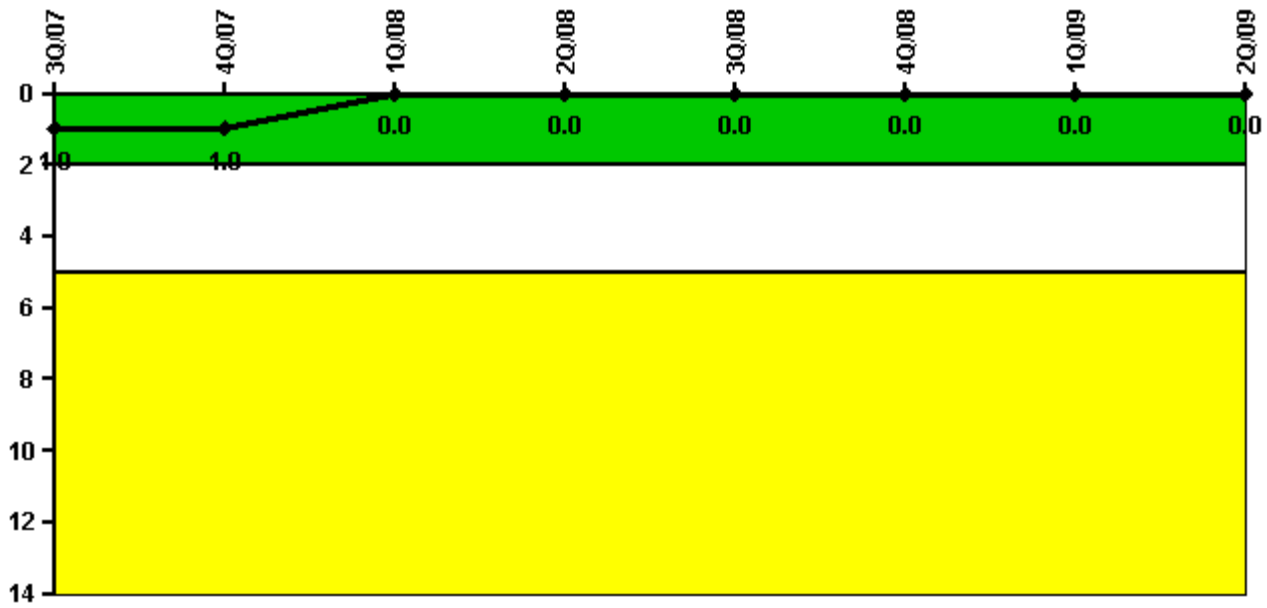
**Thresholds:** White < 94.0% Yellow < 90.0%

### Notes

Alert & Notification System	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
Successful siren-tests	970	736	883	777	994	786	532	603
Total sirens-tests	1008	748	896	784	1008	788	532	608
Indicator value	97.5%	97.5%	97.6%	98.0%	98.7%	99.0%	99.3%	99.3%

Licensee Comments: none

## Occupational Exposure Control Effectiveness



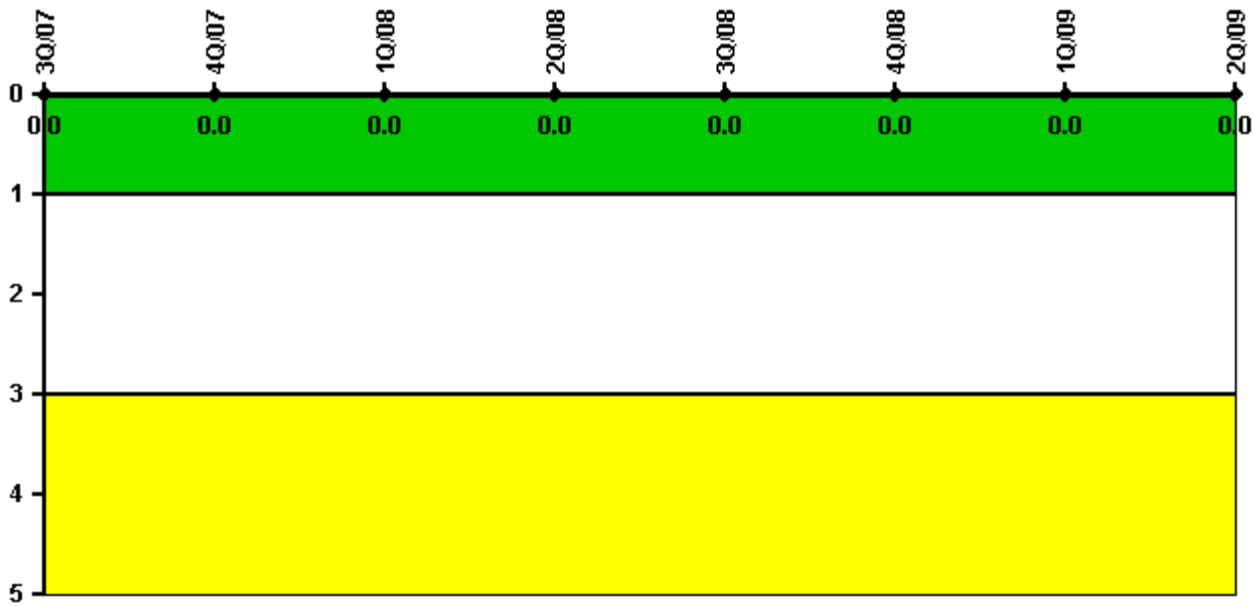
Thresholds: White > 2.0 Yellow > 5.0

### Notes

Occupational Exposure Control Effectiveness	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/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	1	1	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	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/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.