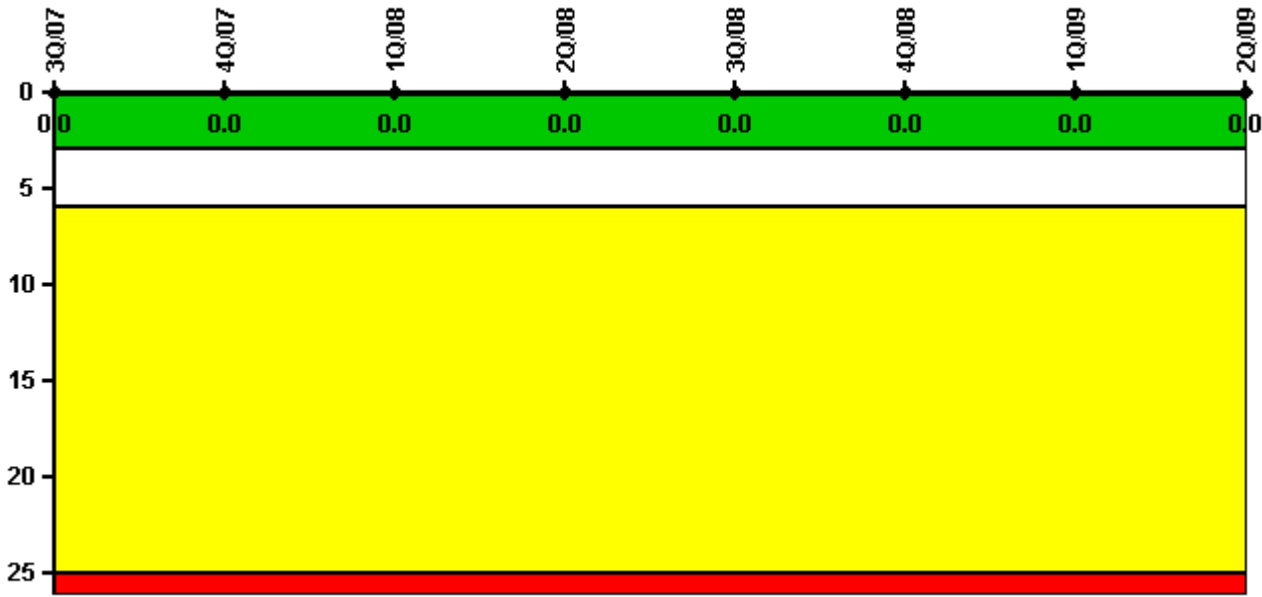


# Susquehanna 2

## 2Q/2009 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



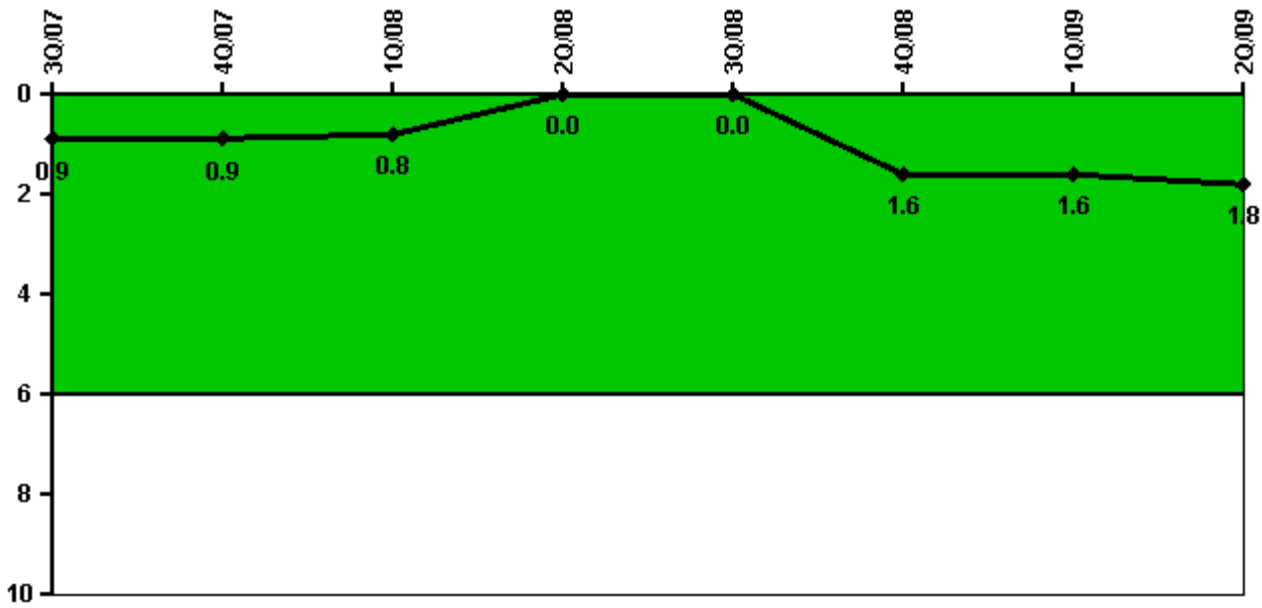
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### 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 | 2209.0 | 2183.0 | 2184.0 | 2208.0 | 2209.0 | 2159.0 | 1260.1 |
| Indicator value                        | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |

Licensee Comments: none

## Unplanned Power Changes per 7000 Critical Hrs



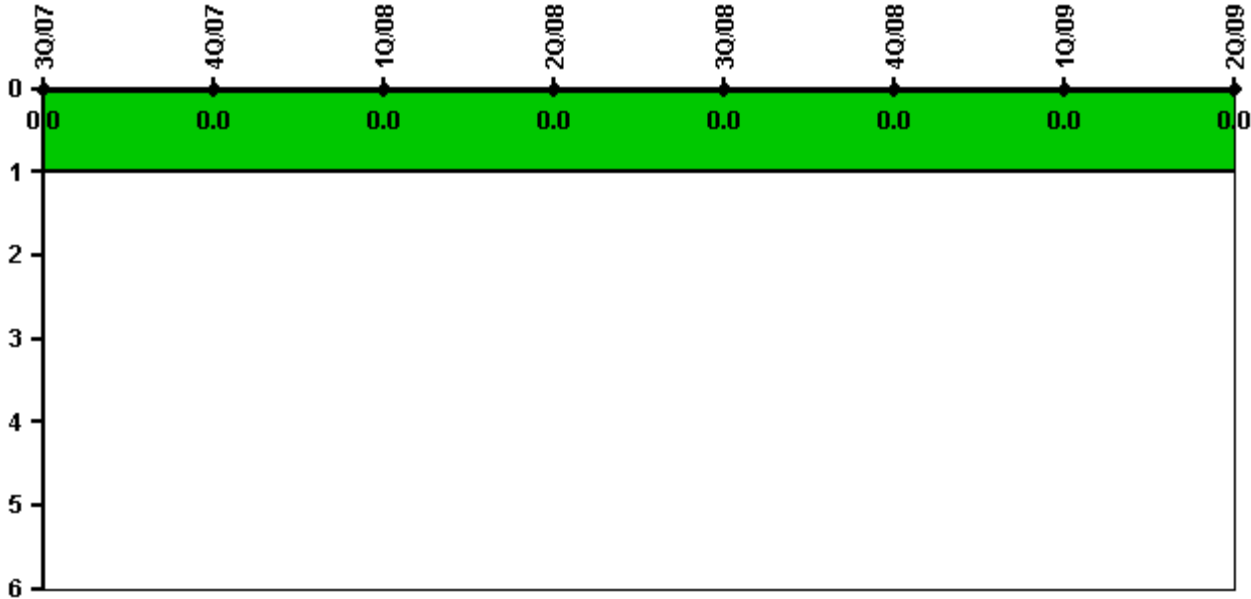
Thresholds: White > 6.0

### 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      | 0      | 0      | 2.0    | 0      | 0      |
| Critical hours                                | 2208.0 | 2209.0 | 2183.0 | 2184.0 | 2208.0 | 2209.0 | 2159.0 | 1260.1 |
| Indicator value                               | 0.9    | 0.9    | 0.8    | 0      | 0      | 1.6    | 1.6    | 1.8    |

Licensee Comments: none

# Unplanned Scrams with Complications



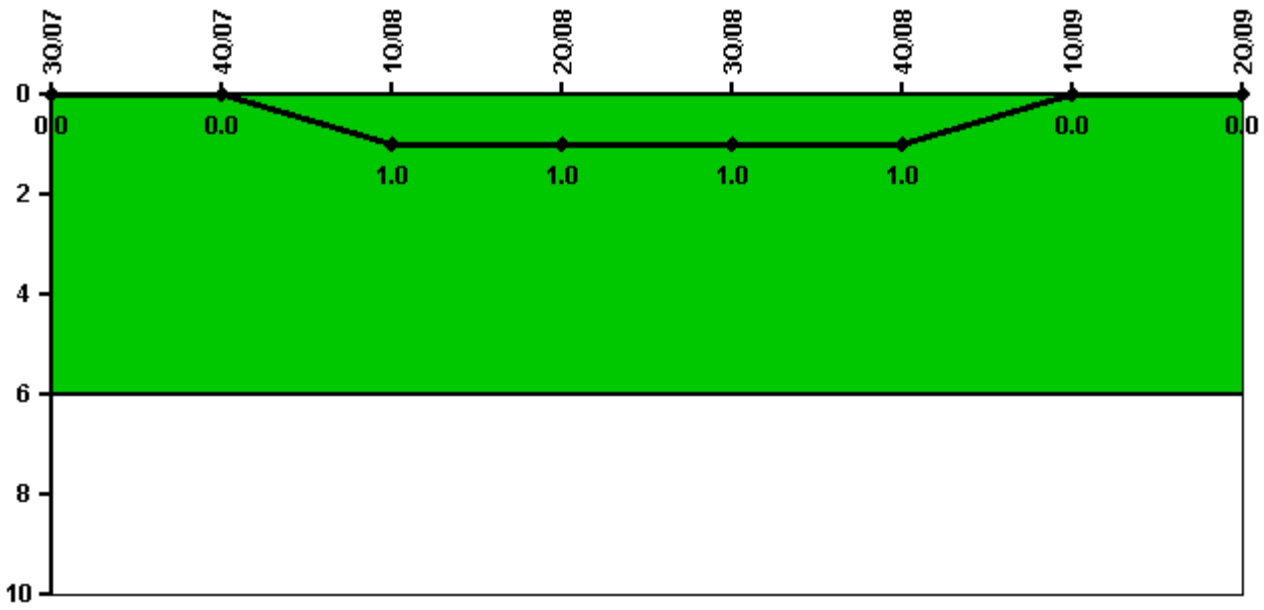
Thresholds: White > 1.0

**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)



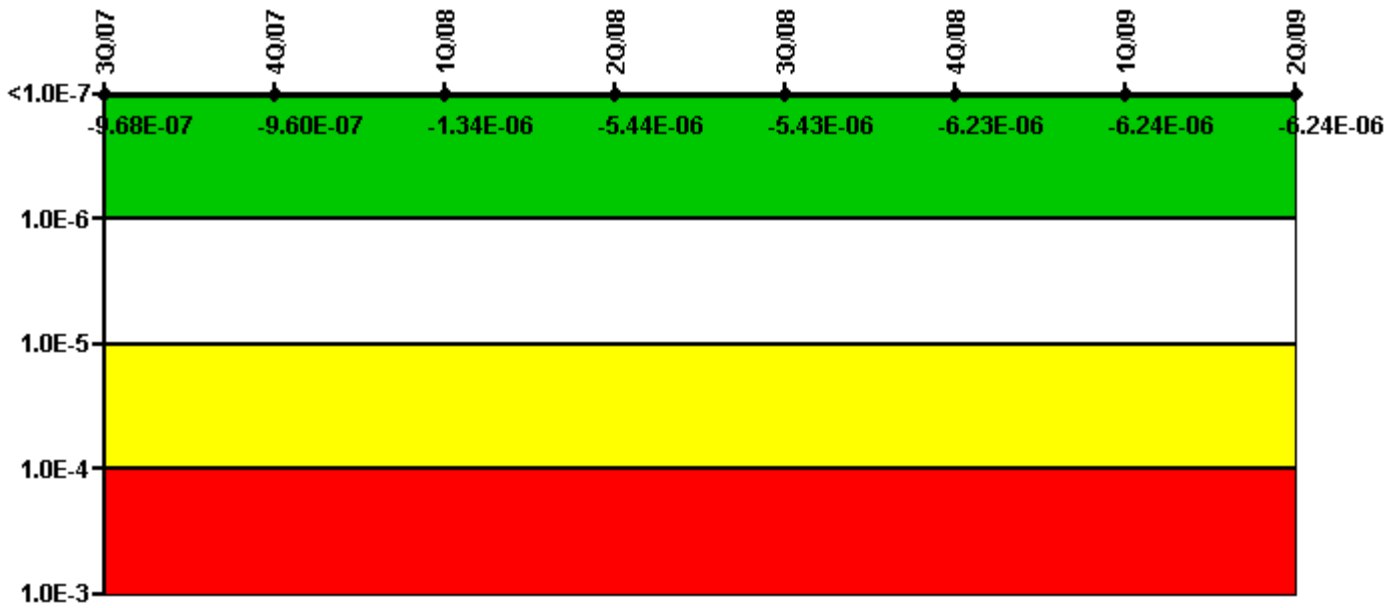
Thresholds: White > 6.0

### 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                         | 0     | 0     | 1     | 1     | 1     | 1     | 0     | 0     |

Licensee Comments: none

# Mitigating Systems Performance Index, Emergency AC Power System



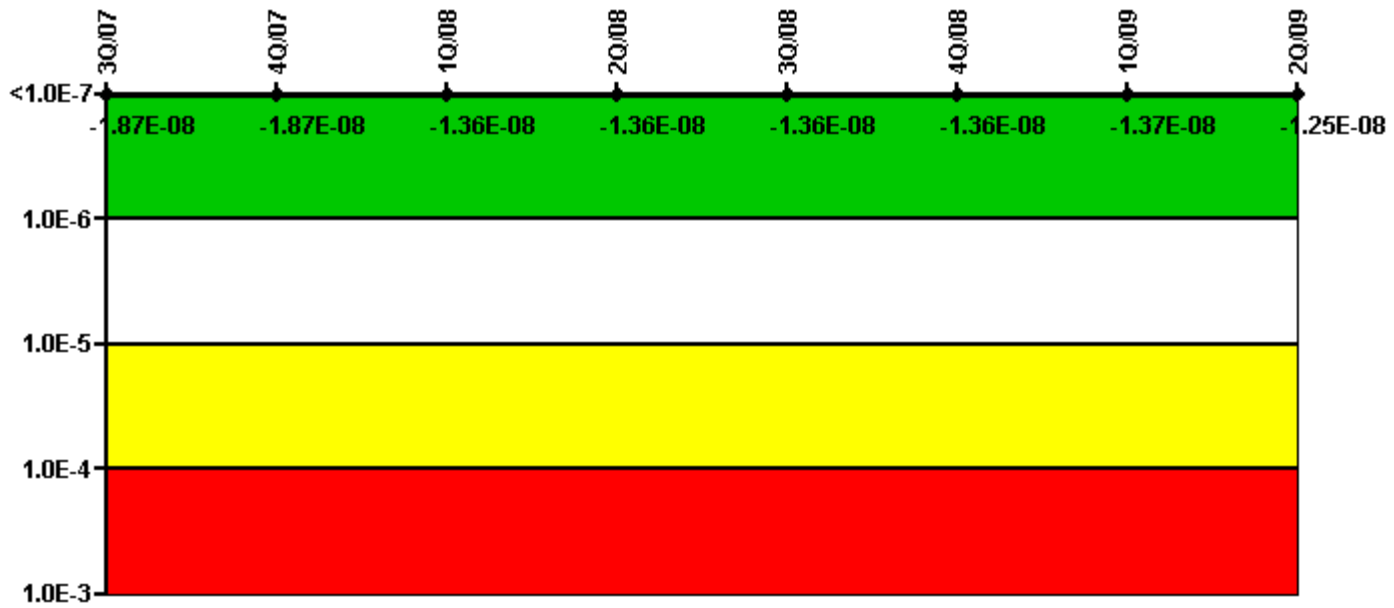
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## 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 ( $\Delta$ CDF)   | -2.80E-08 | -3.00E-08 | -3.70E-08 | -3.50E-08 | -2.90E-08 | -3.30E-08 | -3.70E-08 | -4.00E-08 |
| URI ( $\Delta$ CDF)   | -9.40E-07 | -9.30E-07 | -1.30E-06 | -5.40E-06 | -5.40E-06 | -6.20E-06 | -6.20E-06 | -6.20E-06 |
| PLE   | NO        | NO        | NO        | NO        | NO        | NO        | NO        | NO        |
| Indicator value   | -9.68E-07 | -9.60E-07 | -1.34E-06 | -5.44E-06 | -5.43E-06 | -6.23E-06 | -6.24E-06 | -6.24E-06 |

Licensee Comments: none

# Mitigating Systems Performance Index, High Pressure Injection System



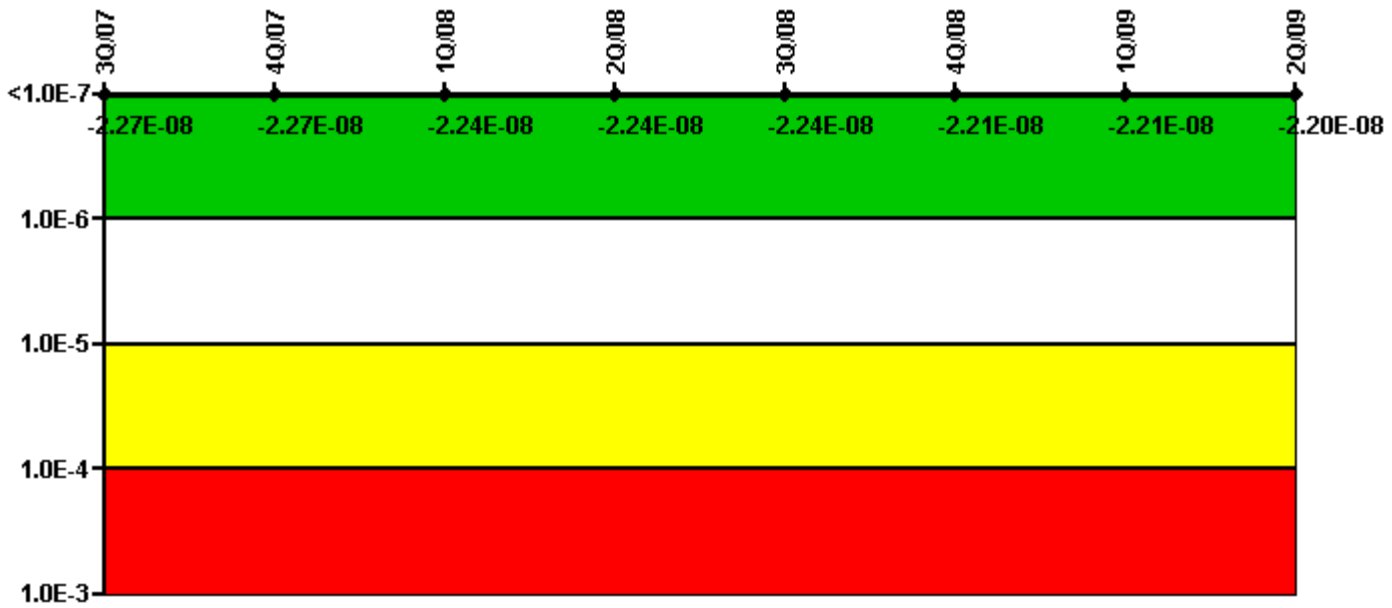
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## 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)  | -4.70E-09 | -4.70E-09 | -5.10E-09 | -5.10E-09 | -5.10E-09 | -5.10E-09 | -5.10E-09 | -4.50E-09 |
| URI ( $\Delta$ CDF)  | -1.40E-08 | -1.40E-08 | -8.50E-09 | -8.50E-09 | -8.50E-09 | -8.50E-09 | -8.60E-09 | -8.00E-09 |
| PLE  | NO        | NO        | NO        | NO        | NO        | NO        | NO        | NO        |
| Indicator value  | -1.87E-08 | -1.87E-08 | -1.36E-08 | -1.36E-08 | -1.36E-08 | -1.36E-08 | -1.37E-08 | -1.25E-08 |

Licensee Comments: none

# Mitigating Systems Performance Index, Heat Removal System



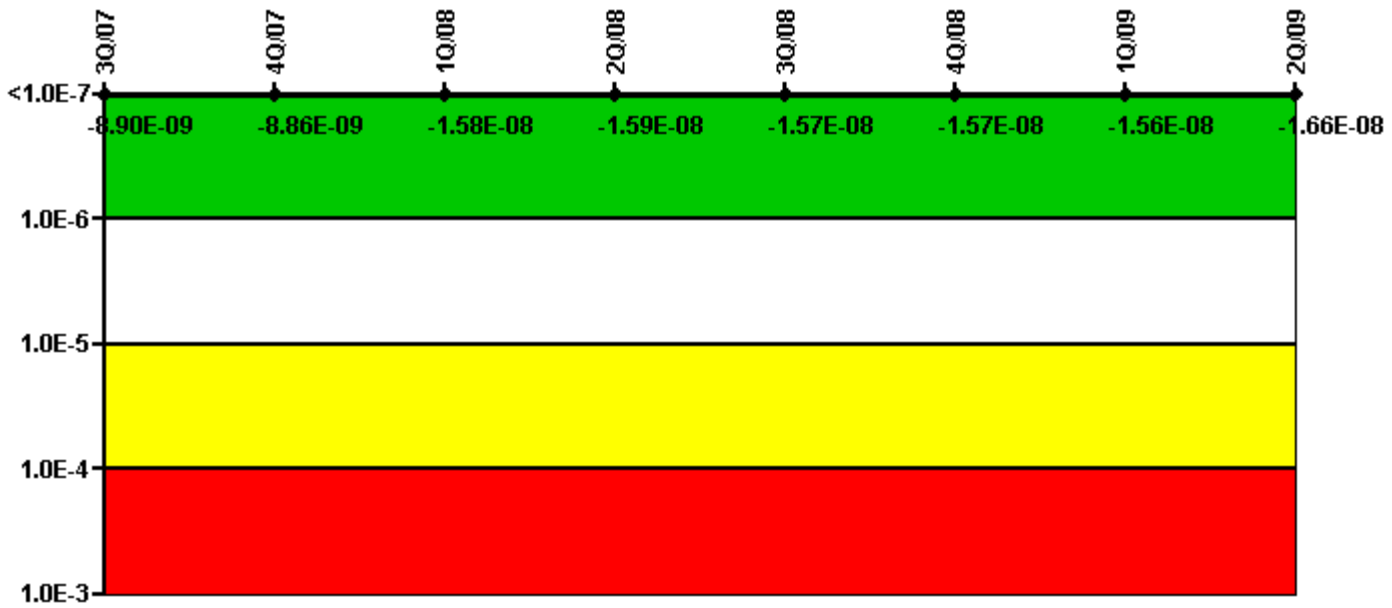
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

| Mitigating Systems Performance Index, Heat Removal System | 3Q/07     | 4Q/07     | 1Q/08     | 2Q/08     | 3Q/08     | 4Q/08     | 1Q/09     | 2Q/09     |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| UAI ( $\Delta$ CDF)                                       | -4.70E-09 | -4.70E-09 | -7.40E-09 | -7.40E-09 | -7.40E-09 | -7.10E-09 | -7.10E-09 | -7.00E-09 |
| URI ( $\Delta$ CDF)                                       | -1.80E-08 | -1.80E-08 | -1.50E-08 | -1.50E-08 | -1.50E-08 | -1.50E-08 | -1.50E-08 | -1.50E-08 |
| PLE   | NO        | NO        | NO        | NO        | NO        | NO        | NO        | NO        |
| Indicator value   | -2.27E-08 | -2.27E-08 | -2.24E-08 | -2.24E-08 | -2.24E-08 | -2.21E-08 | -2.21E-08 | -2.20E-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

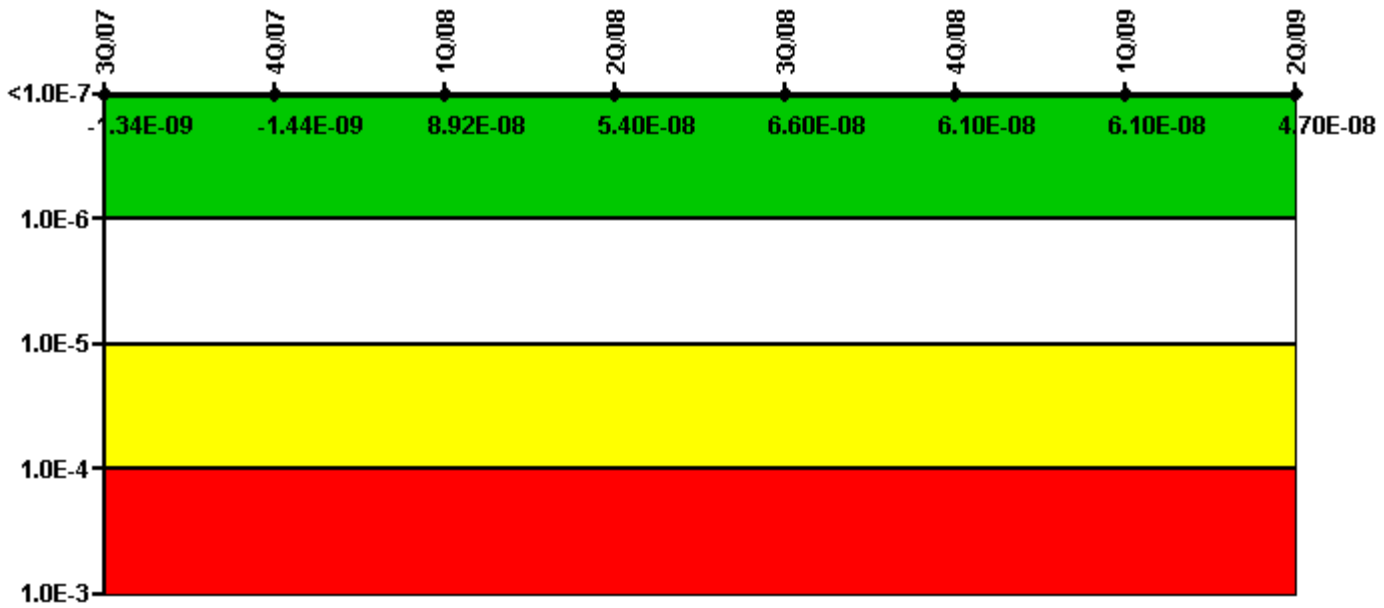
## Notes

| 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)  | 2.00E-10  | 1.40E-10  | -8.20E-10 | -9.00E-10 | -7.40E-10 | -6.50E-10 | -5.80E-10 | -5.50E-10 |
| URI ( $\Delta$ CDF)  | -9.10E-09 | -9.00E-09 | -1.50E-08 | -1.50E-08 | -1.50E-08 | -1.50E-08 | -1.50E-08 | -1.60E-08 |
| PLE  | NO        | NO        | NO        | NO        | NO        | NO        | NO        | NO        |
| Indicator value  | -8.90E-09 | -8.86E-09 | -1.58E-08 | -1.59E-08 | -1.57E-08 | -1.57E-08 | -1.56E-08 | -1.66E-08 |

Licensee Comments: none



# Mitigating Systems Performance Index, Cooling Water Systems



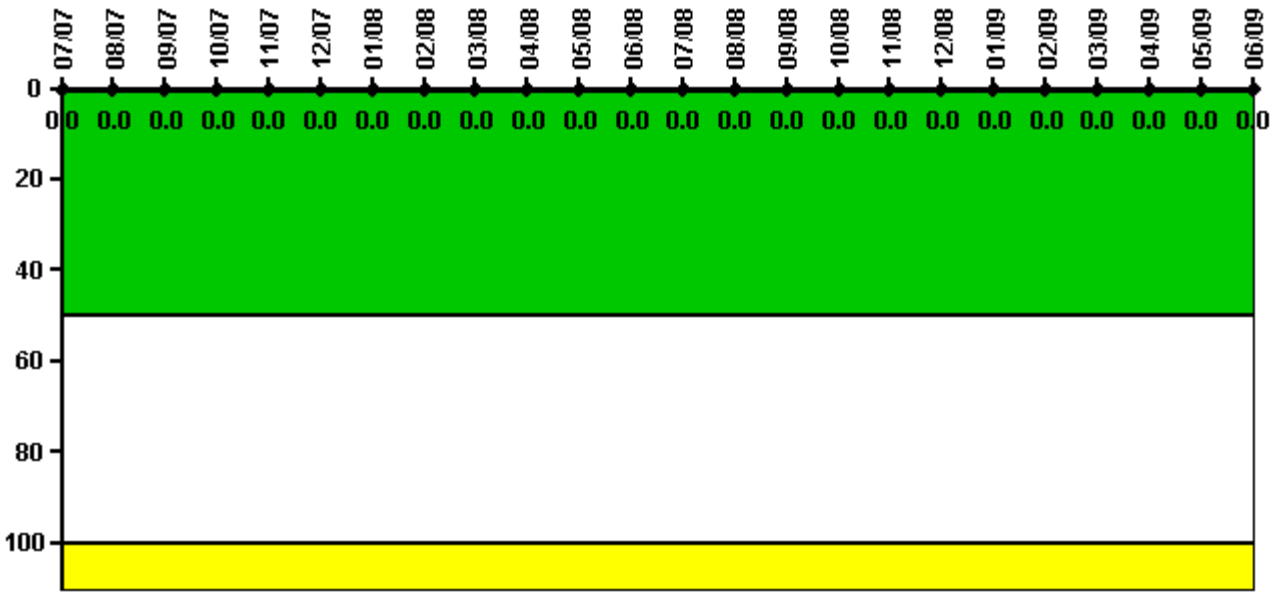
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## 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)   | 8.60E-10  | 8.60E-10  | 9.50E-08  | 6.00E-08  | 8.00E-08  | 7.40E-08  | 7.40E-08  | 6.90E-08  |
| URI ( $\Delta$ CDF)   | -2.20E-09 | -2.30E-09 | -5.80E-09 | -6.00E-09 | -1.40E-08 | -1.30E-08 | -1.30E-08 | -2.20E-08 |
| PLE   | NO        | NO        | NO        | NO        | NO        | NO        | NO        | NO        |
| Indicator value   | -1.34E-09 | -1.44E-09 | 8.92E-08  | 5.40E-08  | 6.60E-08  | 6.10E-08  | 6.10E-08  | 4.70E-08  |

Licensee Comments: none

## Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

### Notes

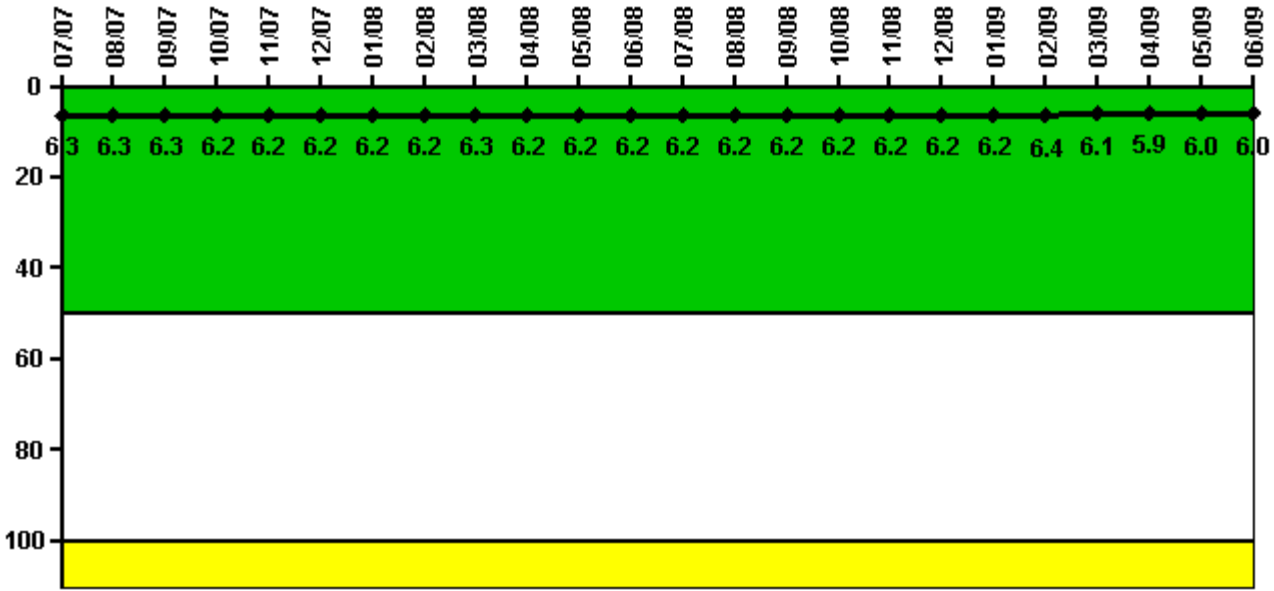
| Reactor Coolant System Activity | 7/07     | 8/07     | 9/07     | 10/07    | 11/07    | 12/07    | 1/08     | 2/08     | 3/08     | 4/08     | 5/08     | 6/08     |
|---------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Maximum activity                | 0.000002 | 0.000002 | 0.000006 | 0.000006 | 0.000007 | 0.000007 | 0.000007 | 0.000007 | 0.000007 | 0.000008 | 0.000008 | 0.000007 |
| 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 | 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                | 0.000007 | 0.000007 | 0.000007 | 0.000008 | 0.000008 | 0.000008 | 0.000009 | 0.000008 | 0.000010 | 0.000009 | 0.000005 | 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        | 0        | 0        | 0        |

Licensee Comments: none

## Reactor Coolant System Leakage



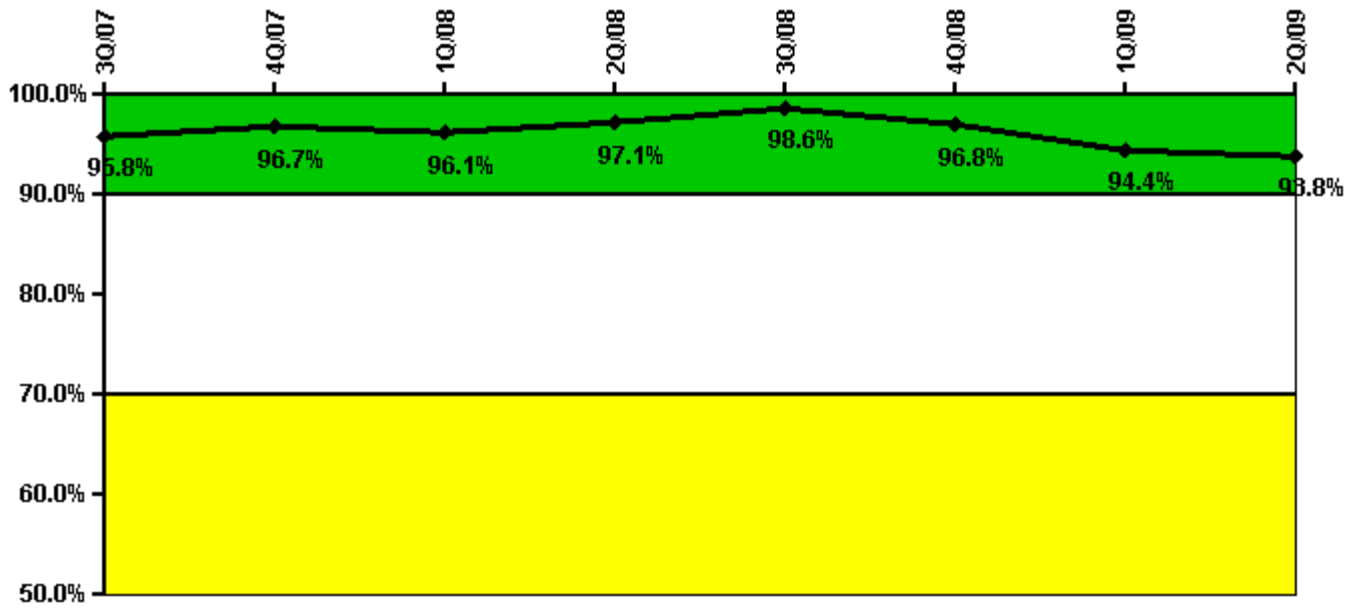
Thresholds: White > 50.0 Yellow > 100.0

### Notes

| Reactor Coolant System Leakage | 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 leakage                | 1.580 | 1.580 | 1.570 | 1.560 | 1.550 | 1.550 | 1.560 | 1.550 | 1.580 | 1.550 | 1.550 | 1.540 |
| 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                | 6.3   | 6.3   | 6.3   | 6.2   | 6.2   | 6.2   | 6.2   | 6.2   | 6.3   | 6.2   | 6.2   | 6.2   |
| Reactor Coolant System Leakage | 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 leakage                | 1.550 | 1.560 | 1.560 | 1.540 | 1.540 | 1.540 | 1.540 | 1.610 | 1.530 | 1.480 | 1.500 | 1.500 |
| 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                | 6.2   | 6.2   | 6.2   | 6.2   | 6.2   | 6.2   | 6.2   | 6.4   | 6.1   | 5.9   | 6.0   | 6.0   |

Licensee Comments: none

## Drill/Exercise Performance



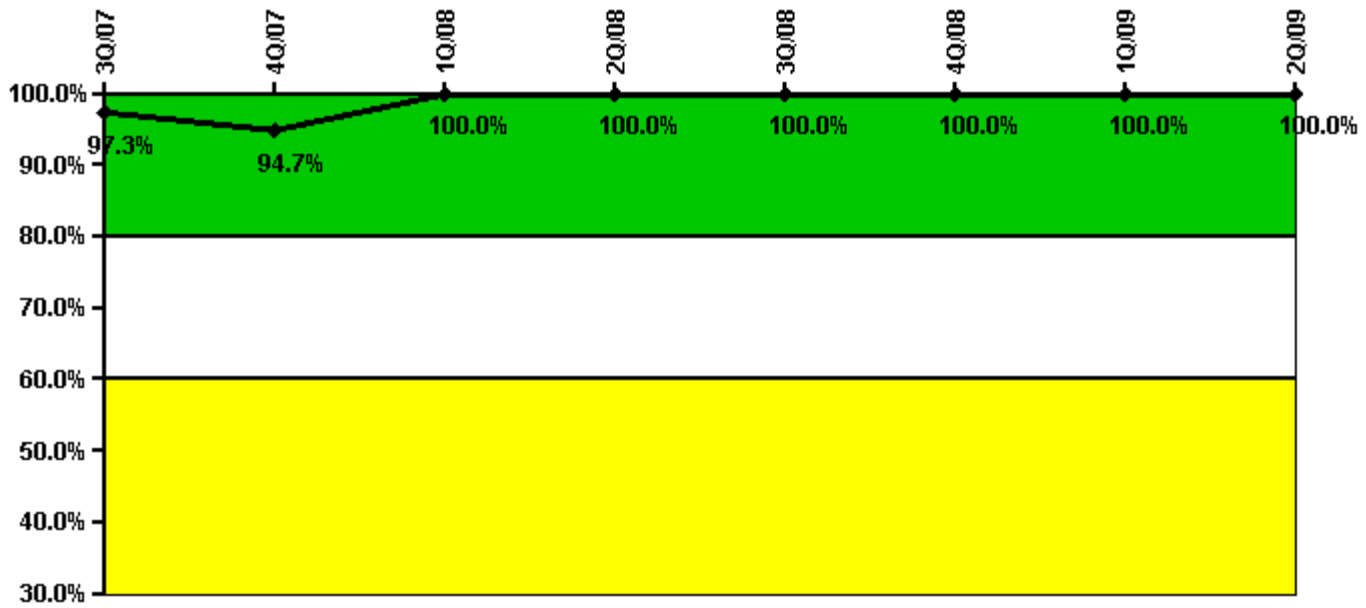
Thresholds: White < 90.0% Yellow < 70.0%

### 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



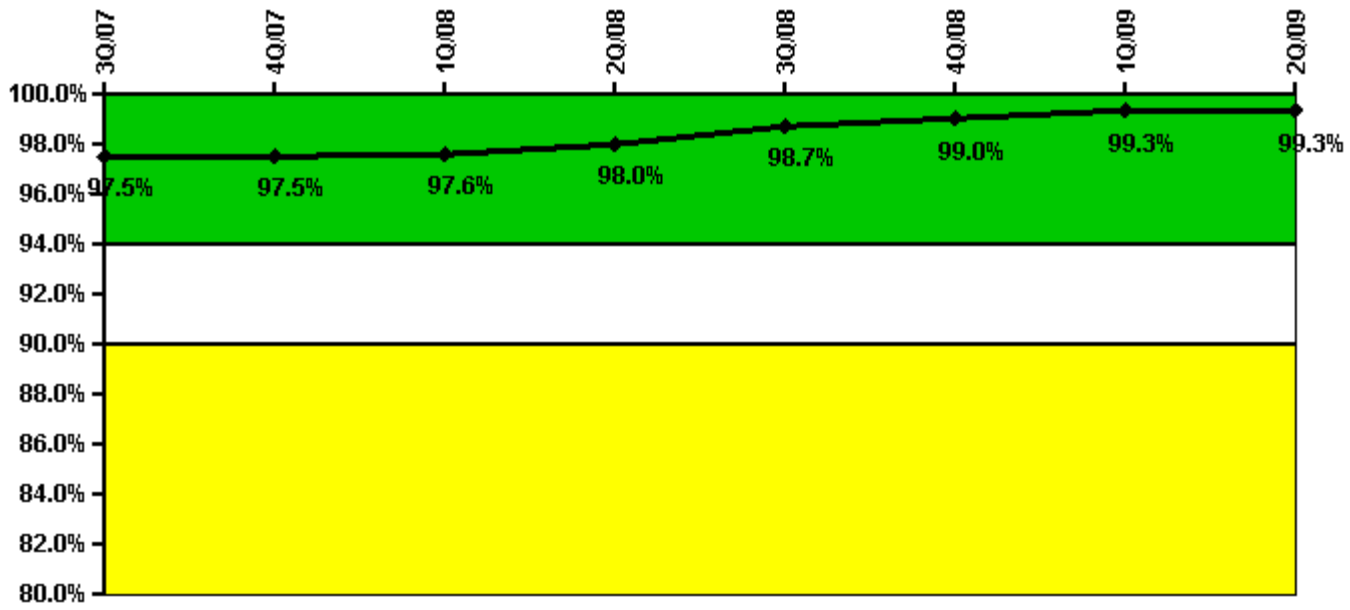
Thresholds: White < 80.0% Yellow < 60.0%

### 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



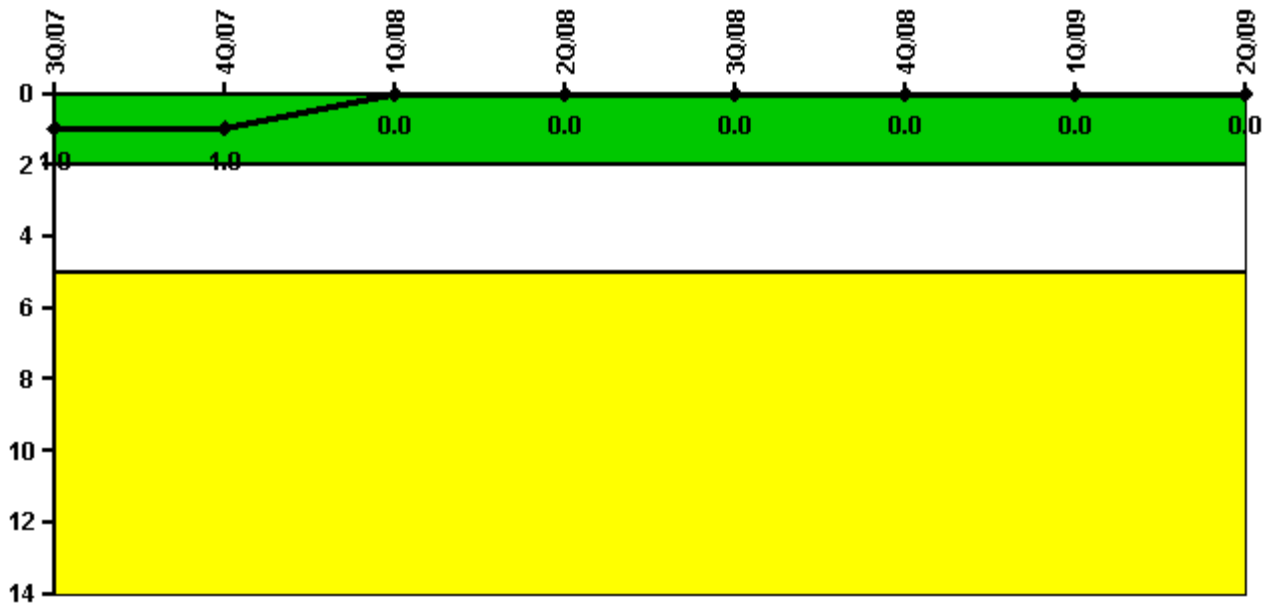
Thresholds: White < 94.0% Yellow < 90.0%

### 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



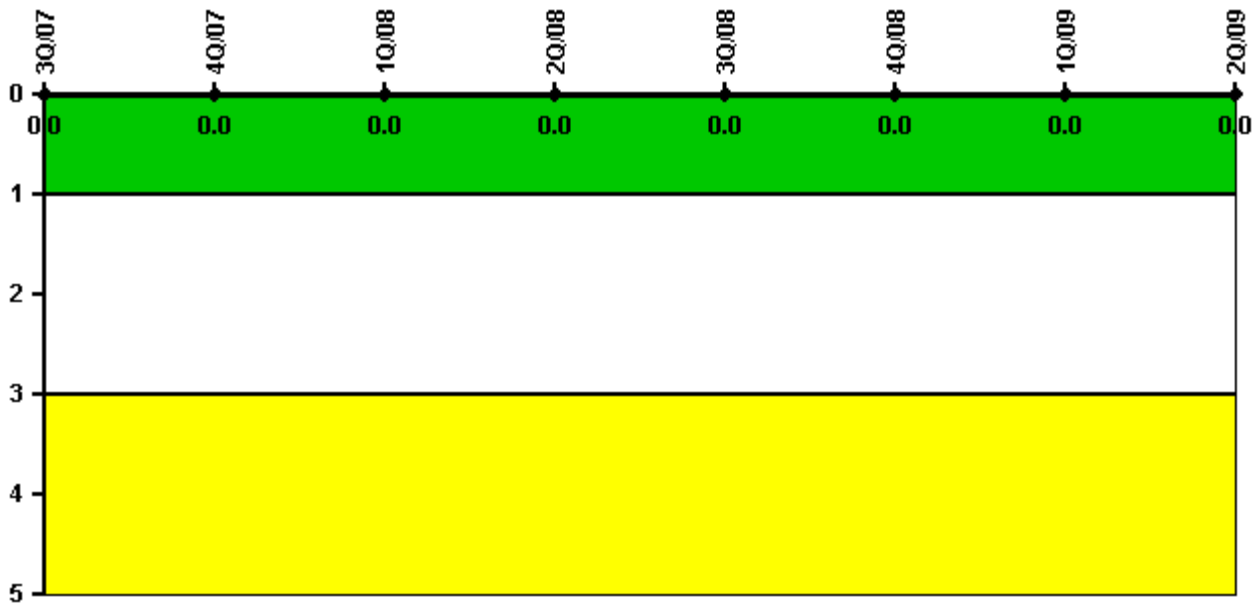
Thresholds: White > 2.0 Yellow > 5.0

### 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.