

# D.C. Cook 1

## 3Q/2010 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



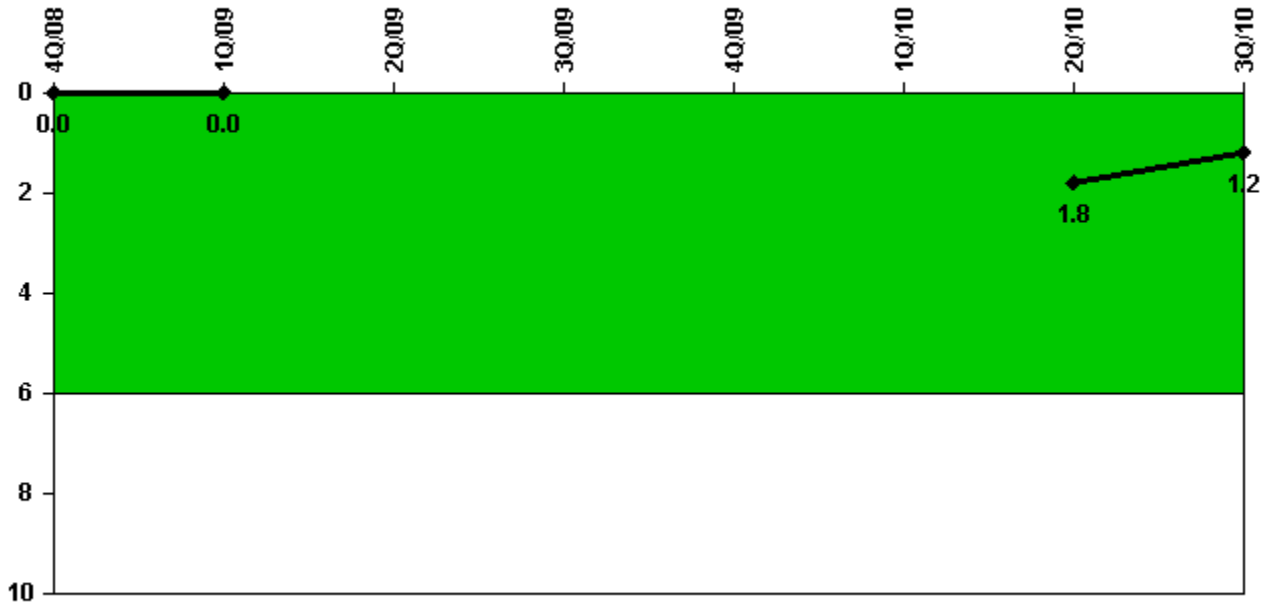
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

| Unplanned Scrams per 7000 Critical Hrs | 4Q/08 | 1Q/09 | 2Q/09 | 3Q/09 | 4Q/09 | 1Q/10  | 2Q/10  | 3Q/10  |
|--|-------|-------|-------|-------|-------|--------|--------|--------|
| Unplanned scrams                       | 0     | 0     | 0     | 0     | 0     | 0      | 0      | 0      |
| Critical hours                         | 0     | 0     | 0     | 0     | 335.1 | 1464.0 | 1988.1 | 2208.0 |
| Indicator value                        | 2.6   | 2.0   | N/A   | N/A   | N/A   | N/A    | 0      | 0      |

Licensee Comments: none

## Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

### Notes

| Unplanned Power Changes per 7000 Critical Hrs | 4Q/08 | 1Q/09 | 2Q/09 | 3Q/09 | 4Q/09 | 1Q/10  | 2Q/10  | 3Q/10  |
|---|-------|-------|-------|-------|-------|--------|--------|--------|
| Unplanned power changes                       | 0     | 0     | 0     | 0     | 0     | 0      | 1.0    | 0      |
| Critical hours                                | 0     | 0     | 0     | 0     | 335.1 | 1464.0 | 1988.1 | 2208.0 |
| Indicator value                               | 0     | 0     | N/A   | N/A   | N/A   | N/A    | 1.8    | 1.2    |

Licensee Comments: none

## Unplanned Scrams with Complications



Thresholds: White > 1.0

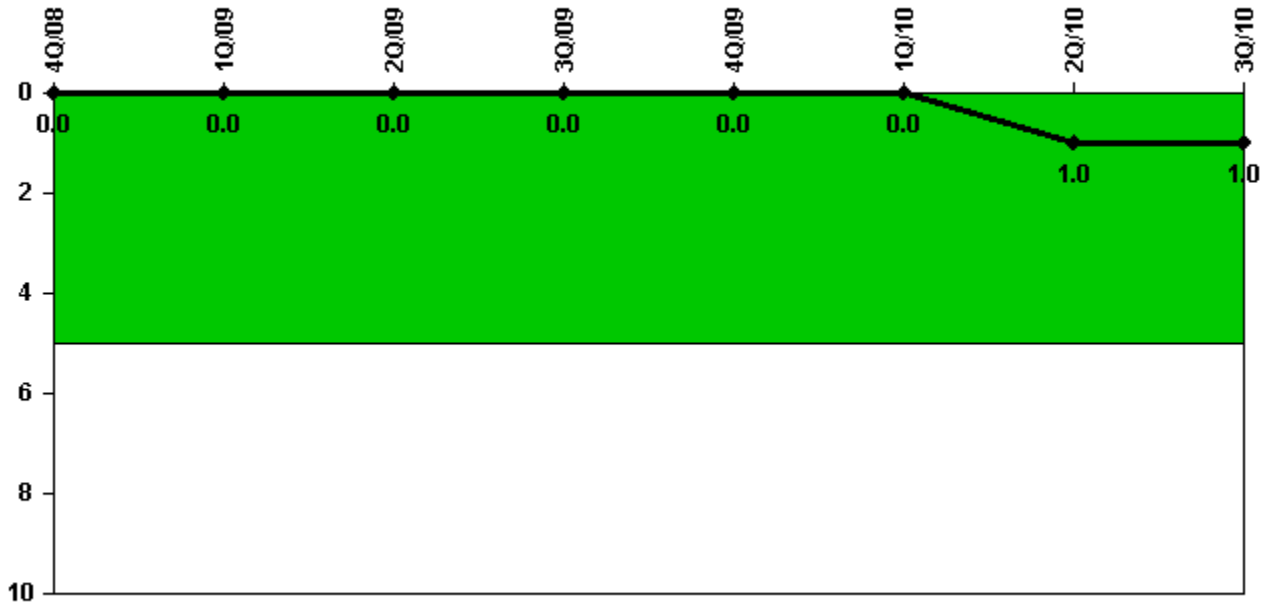
### Notes

| Unplanned Scrams with Complications | 4Q/08 | 1Q/09 | 2Q/09 | 3Q/09 | 4Q/09 | 1Q/10 | 2Q/10 | 3Q/10 |
|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| 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)



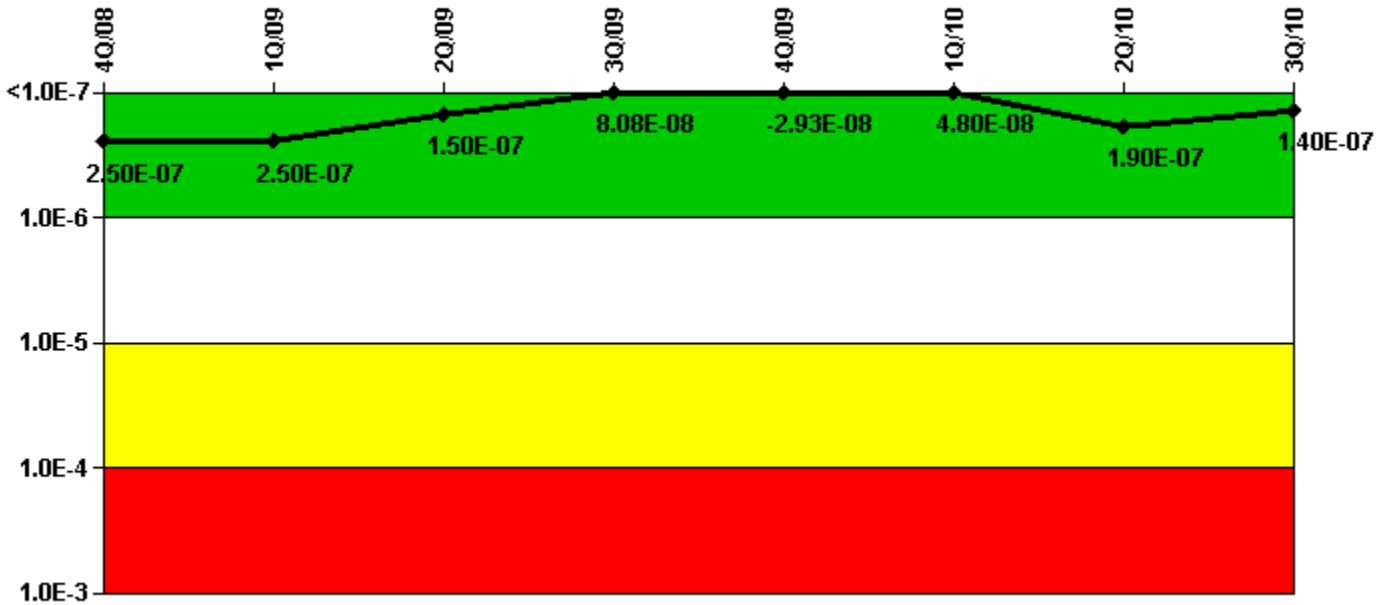
Thresholds: White > 5.0

### Notes

| Safety System Functional Failures (PWR) | 4Q/08 | 1Q/09 | 2Q/09 | 3Q/09 | 4Q/09 | 1Q/10 | 2Q/10 | 3Q/10 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|
| Safety System Functional Failures       | 0     | 0     | 0     | 0     | 0     | 0     | 1     | 0     |
| Indicator value                         | 0     | 0     | 0     | 0     | 0     | 0     | 1     | 1     |

Licensee Comments: none

# Mitigating Systems Performance Index, Emergency AC Power System



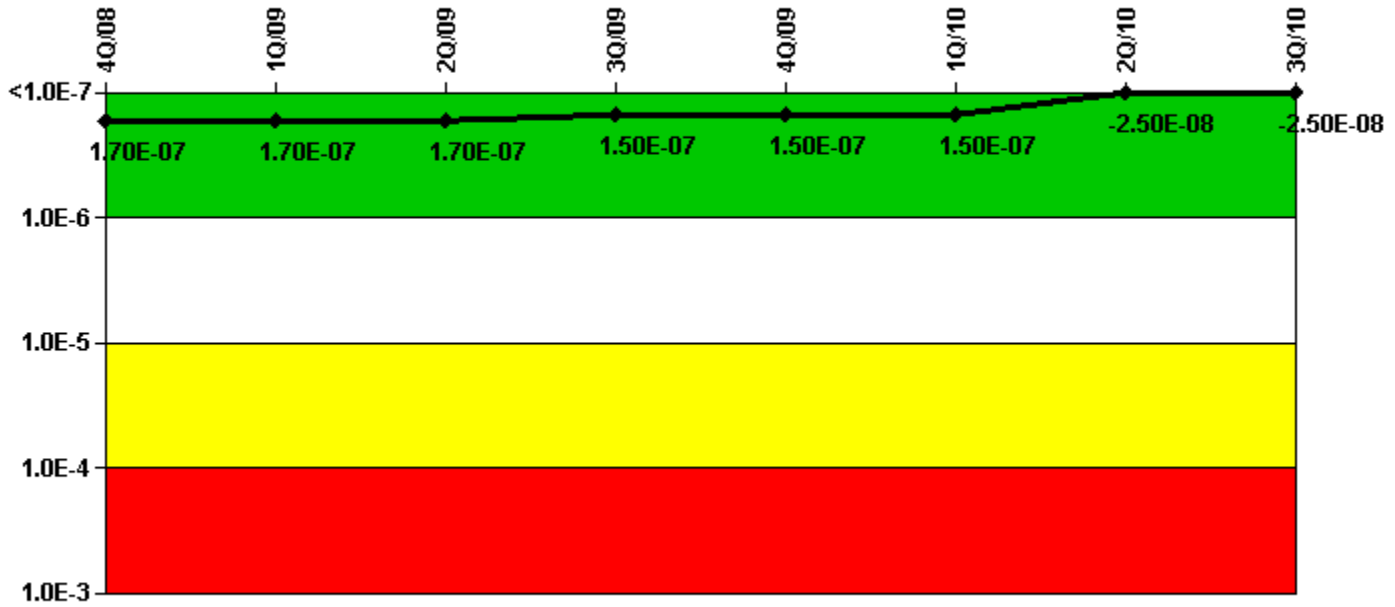
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

| Mitigating Systems Performance Index, Emergency AC Power System | 4Q/08     | 1Q/09     | 2Q/09     | 3Q/09     | 4Q/09     | 1Q/10     | 2Q/10    | 3Q/10    |
|---|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|
| UAI ( $\Delta$ CDF)   | -3.50E-10 | -3.20E-10 | -3.70E-10 | -1.80E-10 | -2.60E-10 | -2.53E-10 | 6.93E-10 | 6.21E-10 |
| URI ( $\Delta$ CDF)   | 2.50E-07  | 2.50E-07  | 1.50E-07  | 8.10E-08  | -2.90E-08 | 4.82E-08  | 1.90E-07 | 1.35E-07 |
| PLE   | NO        | NO        | NO        | NO        | NO        | NO        | NO       | NO       |
| Indicator value   | 2.50E-07  | 2.50E-07  | 1.50E-07  | 8.08E-08  | -2.93E-08 | 4.80E-08  | 1.90E-07 | 1.40E-07 |

Licensee Comments: none

# Mitigating Systems Performance Index, High Pressure Injection System



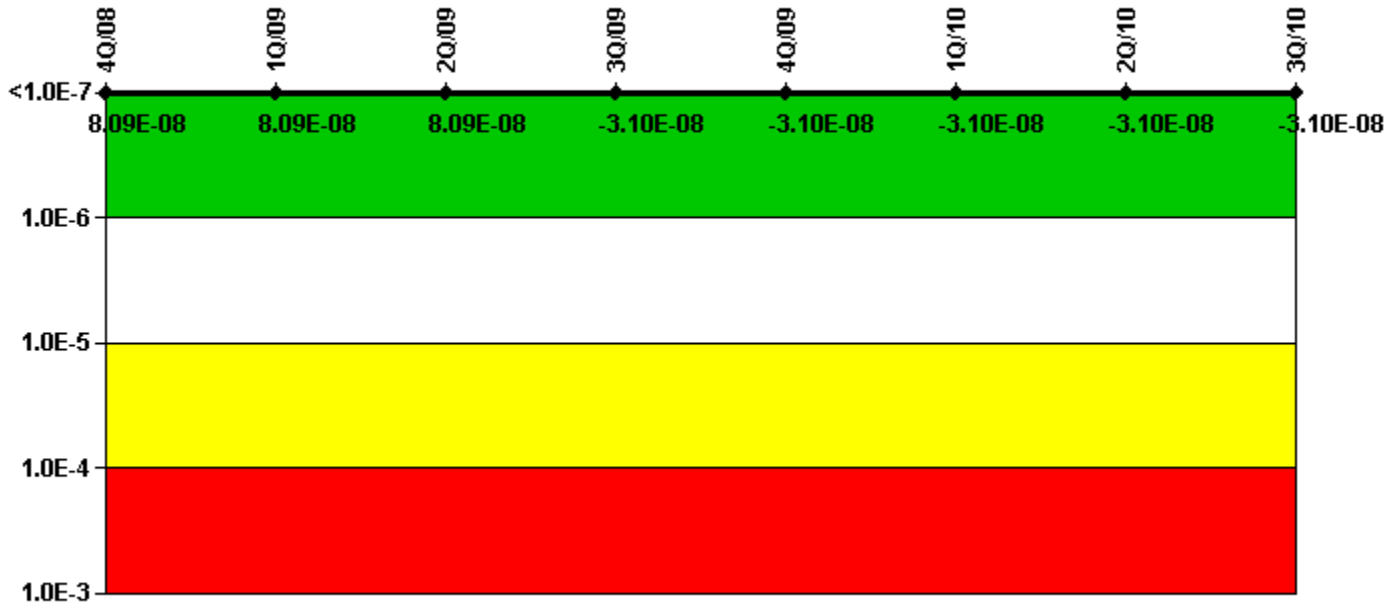
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

| Mitigating Systems Performance Index, High Pressure Injection System | 4Q/08     | 1Q/09     | 2Q/09     | 3Q/09     | 4Q/09     | 1Q/10     | 2Q/10     | 3Q/10     |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| UAI ( $\Delta$ CDF)  | -3.20E-11 | -3.10E-11 | -2.90E-11 | -1.20E-11 | -1.10E-11 | -1.07E-11 | -2.67E-11 | -2.67E-11 |
| URI ( $\Delta$ CDF)  | 1.70E-07  | 1.70E-07  | 1.70E-07  | 1.50E-07  | 1.50E-07  | 1.48E-07  | -2.51E-08 | -2.51E-08 |
| PLE  | NO        | NO        | NO        | NO        | NO        | NO        | NO        | NO        |
| Indicator value  | 1.70E-07  | 1.70E-07  | 1.70E-07  | 1.50E-07  | 1.50E-07  | 1.50E-07  | -2.50E-08 | -2.50E-08 |

Licensee Comments: none

# Mitigating Systems Performance Index, Heat Removal System



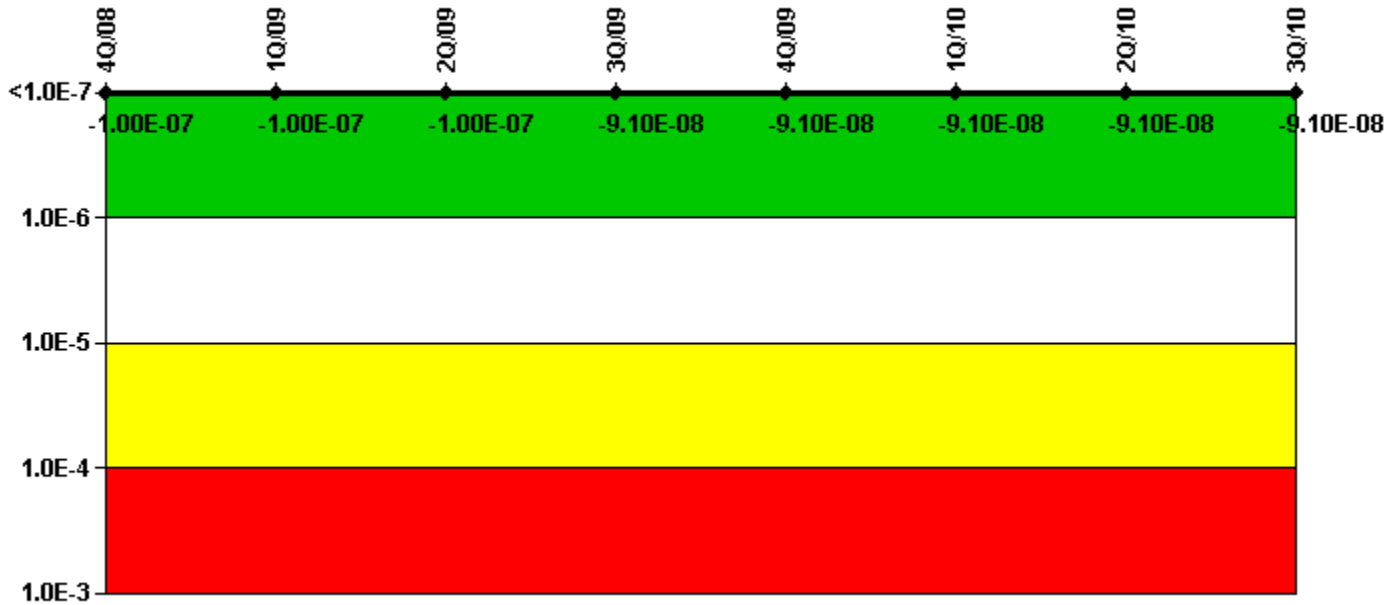
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

| Mitigating Systems Performance Index, Heat Removal System | 4Q/08     | 1Q/09     | 2Q/09     | 3Q/09     | 4Q/09     | 1Q/10     | 2Q/10     | 3Q/10     |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| UAI ( $\Delta$ CDF)                                       | -6.00E-11 | -5.80E-11 | -5.60E-11 | -2.90E-11 | -2.90E-11 | -2.86E-11 | -2.86E-11 | -2.86E-11 |
| URI ( $\Delta$ CDF)                                       | 8.10E-08  | 8.10E-08  | 8.10E-08  | -3.10E-08 | -3.10E-08 | -3.06E-08 | -3.06E-08 | -3.06E-08 |
| PLE   | NO        | NO        | NO        | NO        | NO        | NO        | NO        | NO        |
| Indicator value   | 8.09E-08  | 8.09E-08  | 8.09E-08  | -3.10E-08 | -3.10E-08 | -3.10E-08 | -3.10E-08 | -3.10E-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

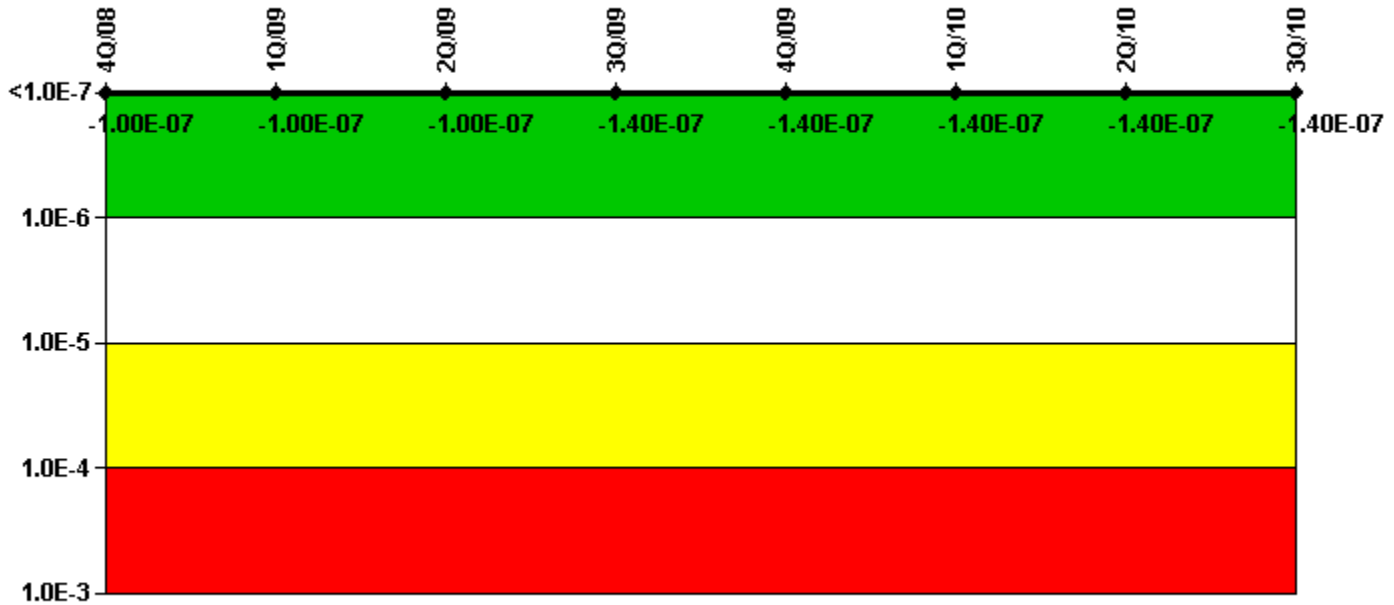
## Notes

| Mitigating Systems Performance Index, Residual Heat Removal System | 4Q/08     | 1Q/09     | 2Q/09     | 3Q/09     | 4Q/09     | 1Q/10     | 2Q/10     | 3Q/10     |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| UAI ( $\Delta$ CDF)  | -2.50E-13 | -2.50E-13 | -2.50E-13 | -3.20E-13 | -3.20E-13 | -2.12E-13 | -2.00E-13 | -3.23E-13 |
| URI ( $\Delta$ CDF)  | -1.00E-07 | -1.00E-07 | -1.00E-07 | -9.10E-08 | -9.10E-08 | -9.13E-08 | -9.13E-08 | -9.13E-08 |
| PLE  | NO        | NO        | NO        | NO        | NO        | NO        | NO        | NO        |
| Indicator value  | -1.00E-07 | -1.00E-07 | -1.00E-07 | -9.10E-08 | -9.10E-08 | -9.10E-08 | -9.10E-08 | -9.10E-08 |

Licensee Comments: none



# Mitigating Systems Performance Index, Cooling Water Systems



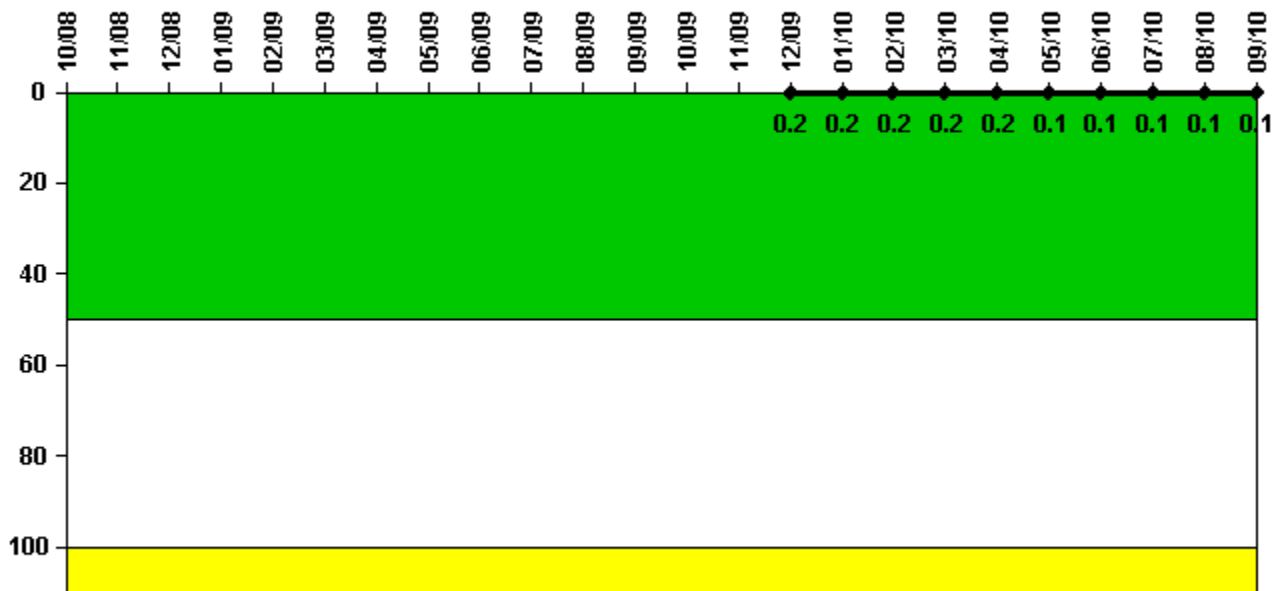
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

| Mitigating Systems Performance Index, Cooling Water Systems | 4Q/08     | 1Q/09     | 2Q/09     | 3Q/09     | 4Q/09     | 1Q/10     | 2Q/10     | 3Q/10     |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| UAI ( $\Delta$ CDF)   | 2.60E-11  | 2.90E-11  | 3.70E-11  | 3.00E-11  | 3.30E-11  | 2.20E-11  | 2.27E-11  | -3.23E-12 |
| URI ( $\Delta$ CDF)   | -1.00E-07 | -1.00E-07 | -1.00E-07 | -1.40E-07 | -1.40E-07 | -1.42E-07 | -1.42E-07 | -1.42E-07 |
| PLE   | NO        | NO        | NO        | NO        | NO        | NO        | NO        | NO        |
| Indicator value   | -1.00E-07 | -1.00E-07 | -1.00E-07 | -1.40E-07 | -1.40E-07 | -1.40E-07 | -1.40E-07 | -1.40E-07 |

Licensee Comments: none

# Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

## Notes

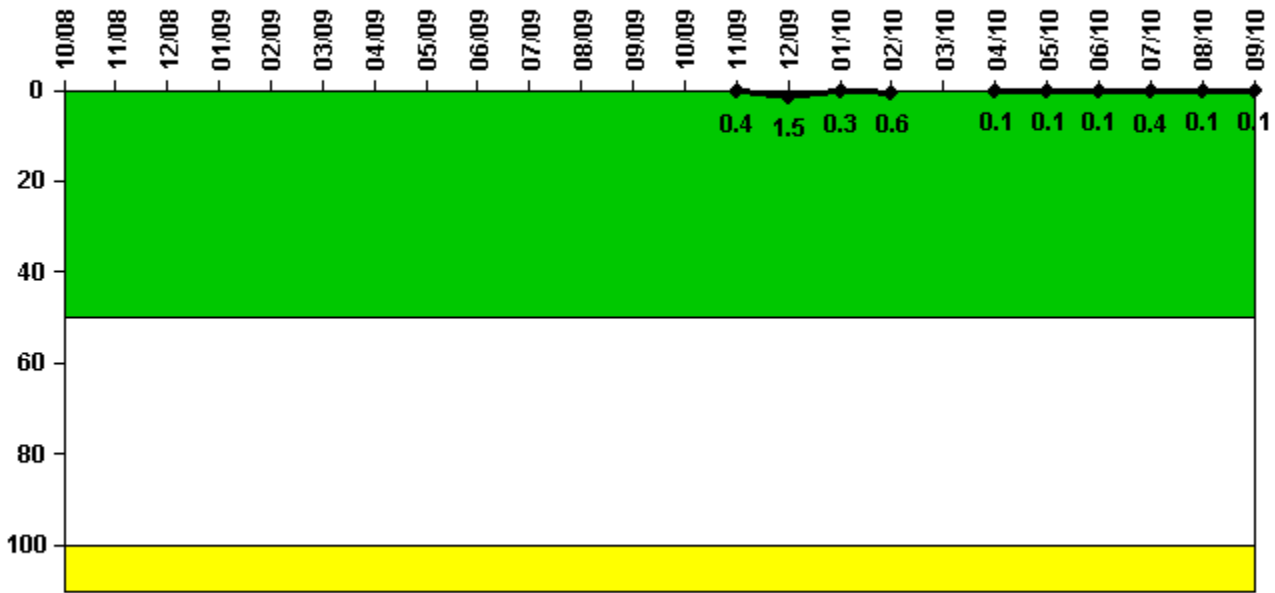
| Reactor Coolant System Activity | 10/08 | 11/08 | 12/08 | 1/09 | 2/09 | 3/09 | 4/09 | 5/09 | 6/09 | 7/09 | 8/09 | 9/09 |
|---------------------------------|-------|-------|-------|------|------|------|------|------|------|------|------|------|
| Maximum activity                | N/A   | N/A   | N/A   | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  |
| Technical specification limit   | 0.2   | 0.2   | 0.2   | 0.2  | 0.2  | 0.2  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  |
| Indicator value                 | N/A   | N/A   | N/A   | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  |

| Reactor Coolant System Activity | 10/09 | 11/09 | 12/09    | 1/10     | 2/10     | 3/10     | 4/10     | 5/10     | 6/10     | 7/10     | 8/10     | 9/10     |
|---------------------------------|-------|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Maximum activity                | N/A   | N/A   | 0.002080 | 0.001980 | 0.002060 | 0.001630 | 0.001590 | 0.001170 | 0.001240 | 0.001330 | 0.001360 | 0.001420 |
| 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                 | N/A   | N/A   | 0.2      | 0.2      | 0.2      | 0.2      | 0.2      | 0.1      | 0.1      | 0.1      | 0.1      | 0.1      |

Licensee Comments: none

## Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

### Notes

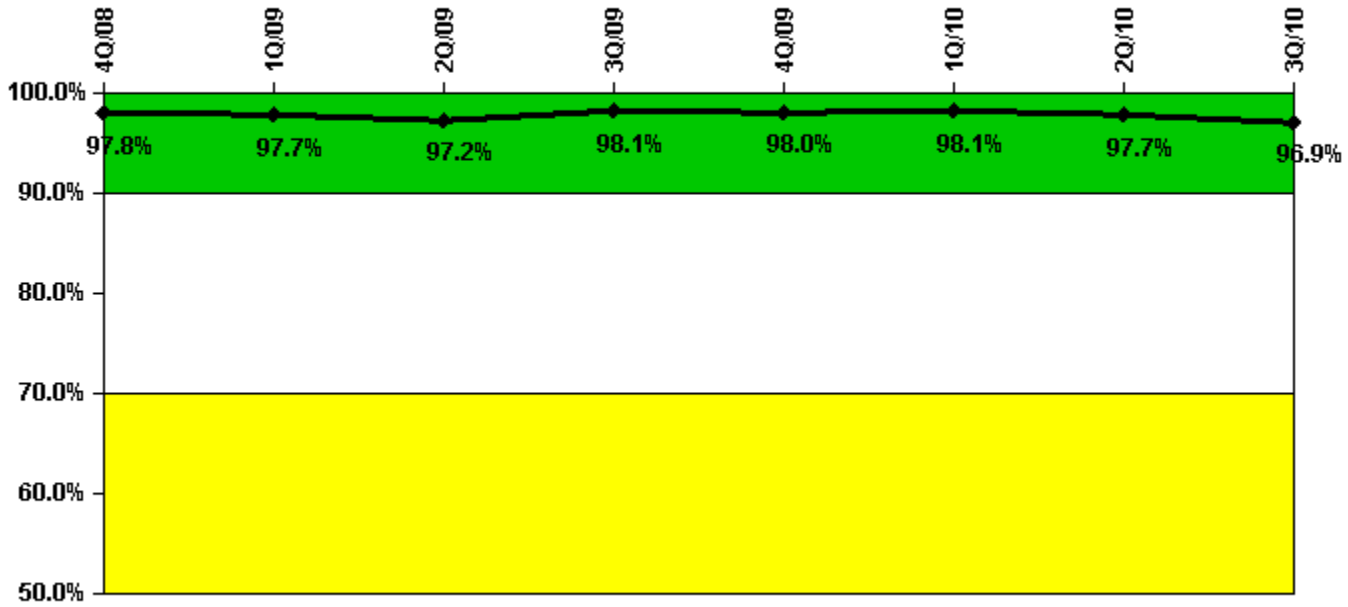
| Reactor Coolant System Leakage | 10/08 | 11/08 | 12/08 | 1/09 | 2/09 | 3/09 | 4/09 | 5/09 | 6/09 | 7/09 | 8/09 | 9/09 |
|--------------------------------|-------|-------|-------|------|------|------|------|------|------|------|------|------|
| Maximum leakage                | N/A   | N/A   | N/A   | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  |
| Technical specification limit  | 10.8  | 10.8  | 10.8  | 10.8 | 10.8 | 10.8 | 10.8 | 10.8 | 10.8 | 10.8 | 10.8 | 10.8 |
| Indicator value                | N/A   | N/A   | N/A   | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  | N/A  |

| Reactor Coolant System Leakage | 10/09 | 11/09 | 12/09 | 1/10  | 2/10  | 3/10 | 4/10  | 5/10  | 6/10  | 7/10  | 8/10  | 9/10  |
|--------------------------------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|
| Maximum leakage                | N/A   | 0.041 | 0.166 | 0.029 | 0.068 | N/A  | 0.012 | 0.014 | 0.016 | 0.047 | 0.006 | 0.009 |
| Technical specification limit  | 10.8  | 10.8  | 10.8  | 10.8  | 10.8  | 10.8 | 10.8  | 10.8  | 10.8  | 10.8  | 10.8  | 10.8  |
| Indicator value                | N/A   | 0.4   | 1.5   | 0.3   | 0.6   | N/A  | 0.1   | 0.1   | 0.1   | 0.4   | 0.1   | 0.1   |

Licensee Comments: none

## Drill/Exercise Performance



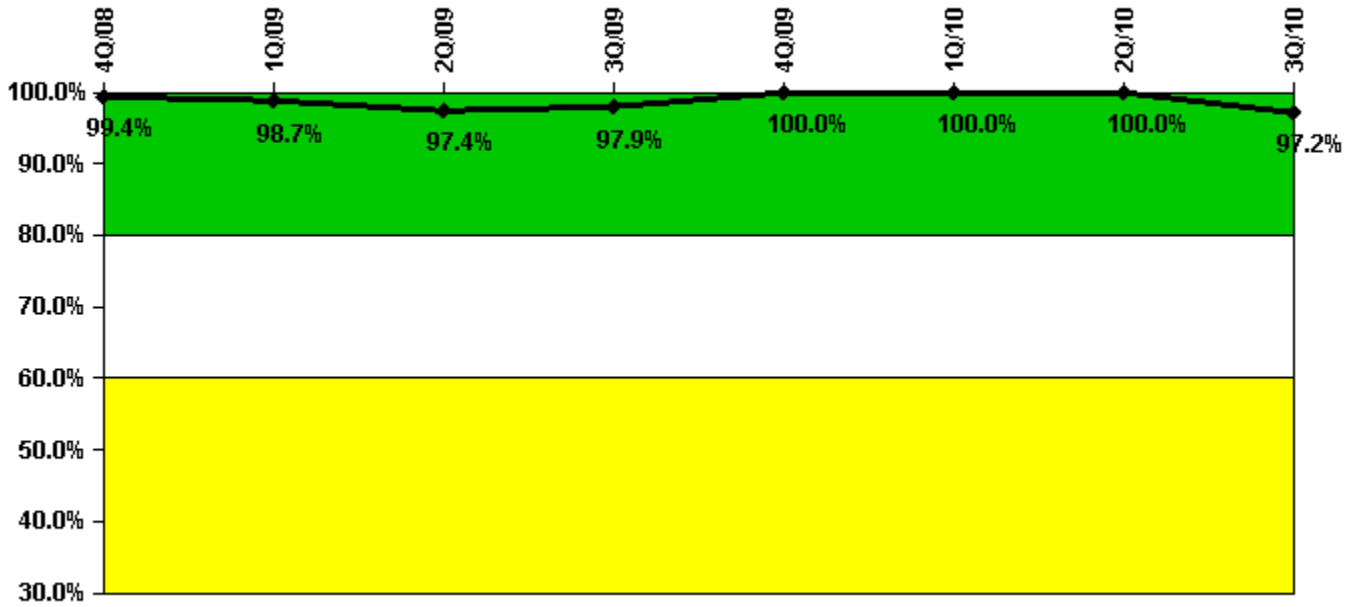
Thresholds: White < 90.0% Yellow < 70.0%

### Notes

| Drill/Exercise Performance | 4Q/08 | 1Q/09 | 2Q/09 | 3Q/09 | 4Q/09 | 1Q/10 | 2Q/10 | 3Q/10 |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Successful opportunities   | 96.0  | 47.0  | 5.0   | 82.0  | 16.0  | 12.0  | 26.0  | 29.0  |
| Total opportunities        | 101.0 | 47.0  | 5.0   | 85.0  | 16.0  | 12.0  | 28.0  | 29.0  |
|                            |       |       |       |       |       |       |       |       |
| Indicator value            | 97.8% | 97.7% | 97.2% | 98.1% | 98.0% | 98.1% | 97.7% | 96.9% |

Licensee Comments: none

## ERO Drill Participation



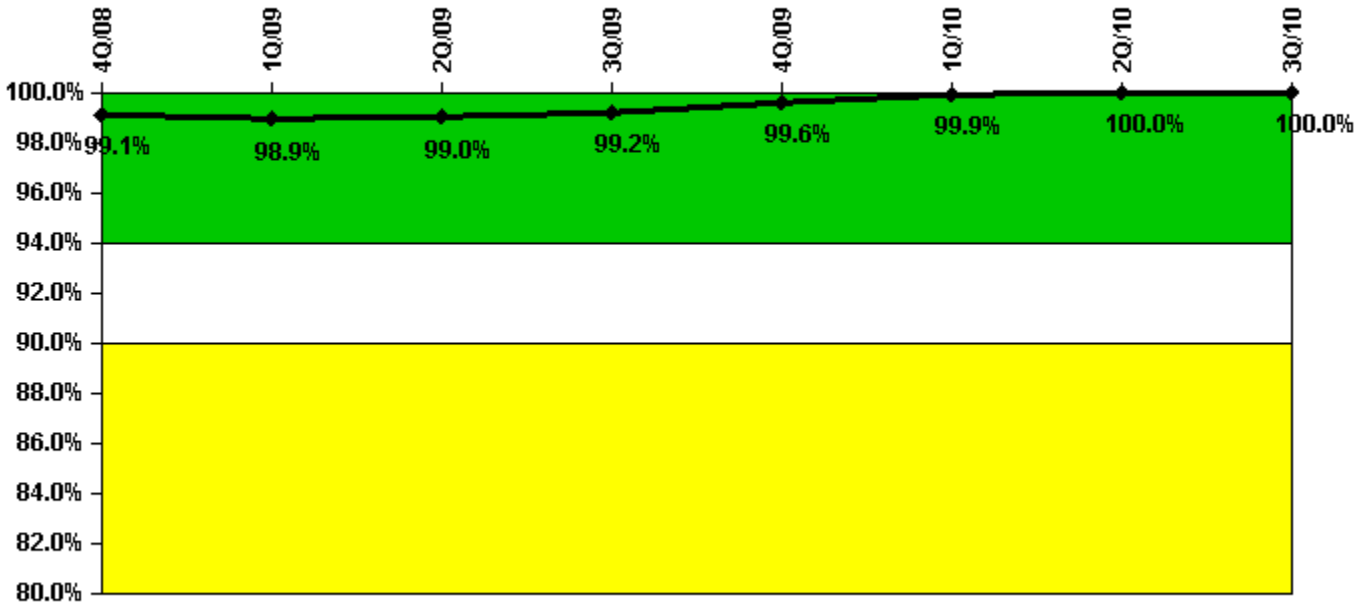
Thresholds: White < 80.0% Yellow < 60.0%

### Notes

| ERO Drill Participation     | 4Q/08 | 1Q/09 | 2Q/09 | 3Q/09 | 4Q/09  | 1Q/10  | 2Q/10  | 3Q/10 |
|-----------------------------|-------|-------|-------|-------|--------|--------|--------|-------|
| Participating Key personnel | 153.0 | 156.0 | 152.0 | 140.0 | 144.0  | 95.0   | 96.0   | 103.0 |
| Total Key personnel         | 154.0 | 158.0 | 156.0 | 143.0 | 144.0  | 95.0   | 96.0   | 106.0 |
| Indicator value             | 99.4% | 98.7% | 97.4% | 97.9% | 100.0% | 100.0% | 100.0% | 97.2% |

Licensee Comments: none

# Alert & Notification System



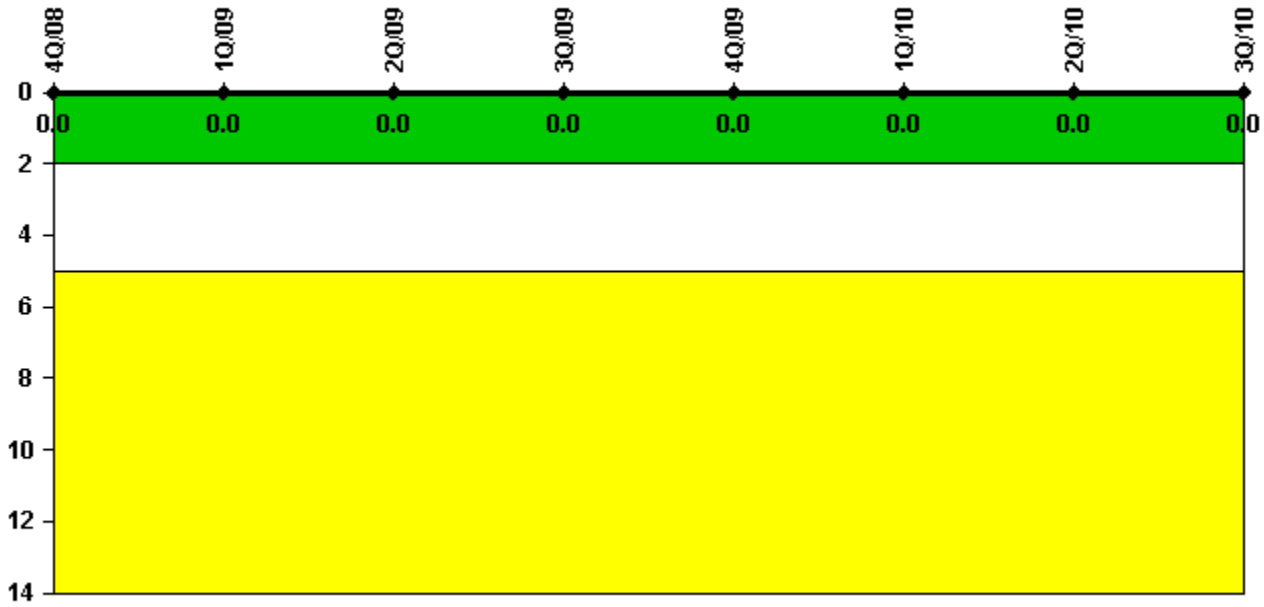
Thresholds: White < 94.0% Yellow < 90.0%

## Notes

| Alert & Notification System | 4Q/08 | 1Q/09 | 2Q/09 | 3Q/09 | 4Q/09 | 1Q/10 | 2Q/10  | 3Q/10  |
|-----------------------------|-------|-------|-------|-------|-------|-------|--------|--------|
| Successful siren-tests      | 1171  | 1035  | 1117  | 1190  | 1115  | 1119  | 1119   | 1118   |
| Total sirens-tests          | 1190  | 1050  | 1119  | 1190  | 1116  | 1119  | 1119   | 1119   |
| Indicator value             | 99.1% | 98.9% | 99.0% | 99.2% | 99.6% | 99.9% | 100.0% | 100.0% |

Licensee Comments: none

# Occupational Exposure Control Effectiveness



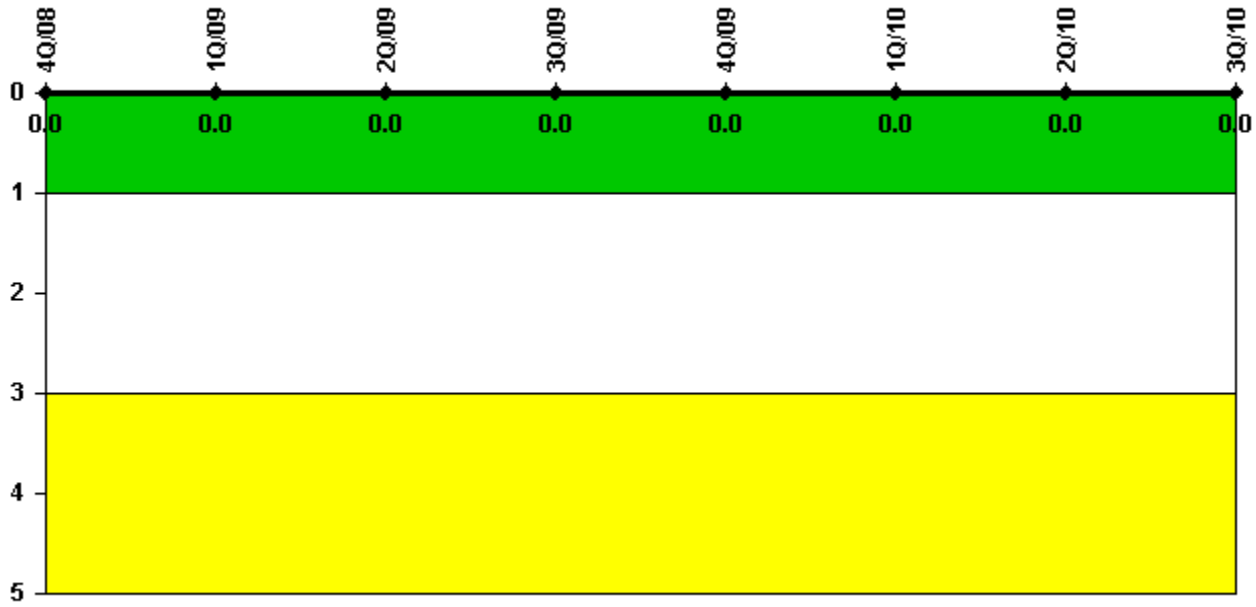
Thresholds: White > 2.0 Yellow > 5.0

## Notes

| Occupational Exposure Control Effectiveness | 4Q/08    | 1Q/09    | 2Q/09    | 3Q/09    | 4Q/09    | 1Q/10    | 2Q/10    | 3Q/10    |
|---|----------|----------|----------|----------|----------|----------|----------|----------|
| 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

# RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

## Notes

| RETS/ODCM Radiological Effluent | 4Q/08 | 1Q/09 | 2Q/09 | 3Q/09 | 4Q/09 | 1Q/10 | 2Q/10 | 3Q/10 |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| 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.