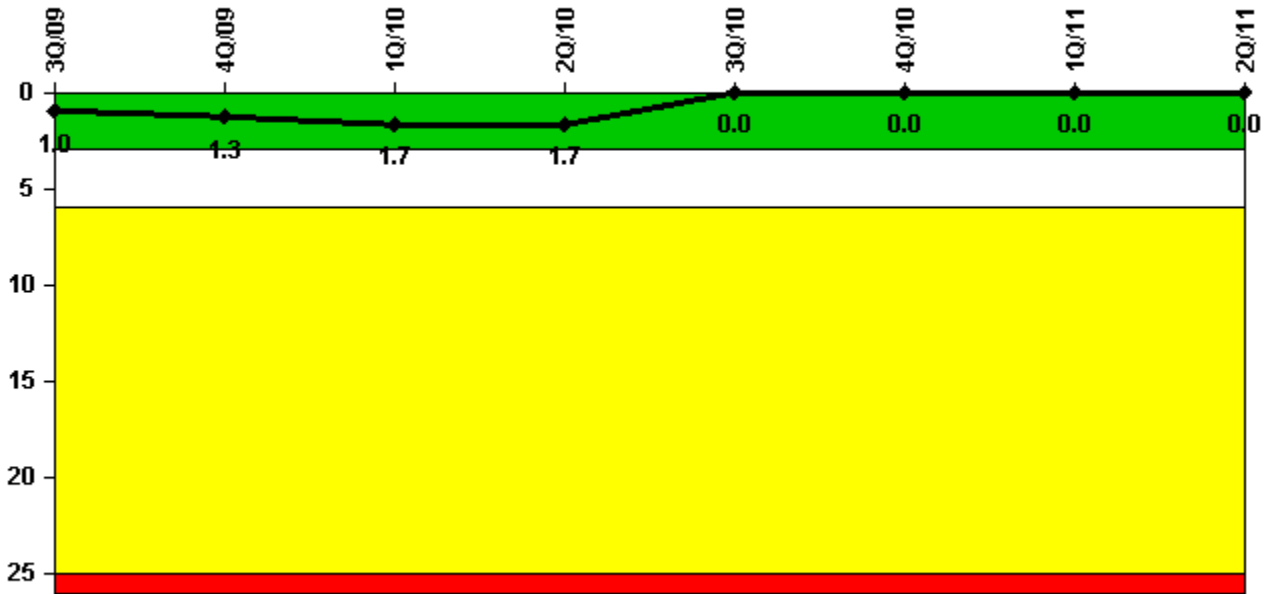


# San Onofre 2

## 2Q/2011 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



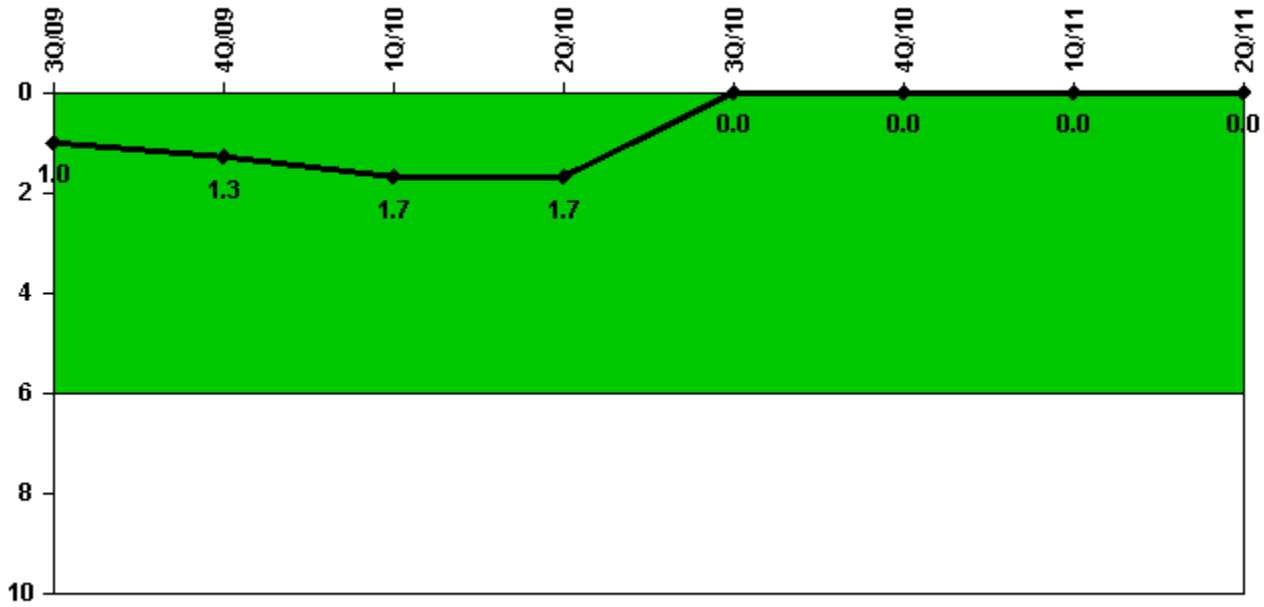
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

| Unplanned Scrams per 7000 Critical Hrs | 3Q/09  | 4Q/09 | 1Q/10 | 2Q/10  | 3Q/10  | 4Q/10  | 1Q/11  | 2Q/11  |
|--|--------|-------|-------|--------|--------|--------|--------|--------|
| Unplanned scrams                       | 1.0    | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| Critical hours                         | 2052.4 | 0     | 0     | 2003.8 | 2208.0 | 2209.0 | 2159.0 | 2184.0 |
| Indicator value                        | 1.0    | 1.3   | 1.7   | 1.7    | 0      | 0      | 0      | 0      |

Licensee Comments: none

## Unplanned Power Changes per 7000 Critical Hrs



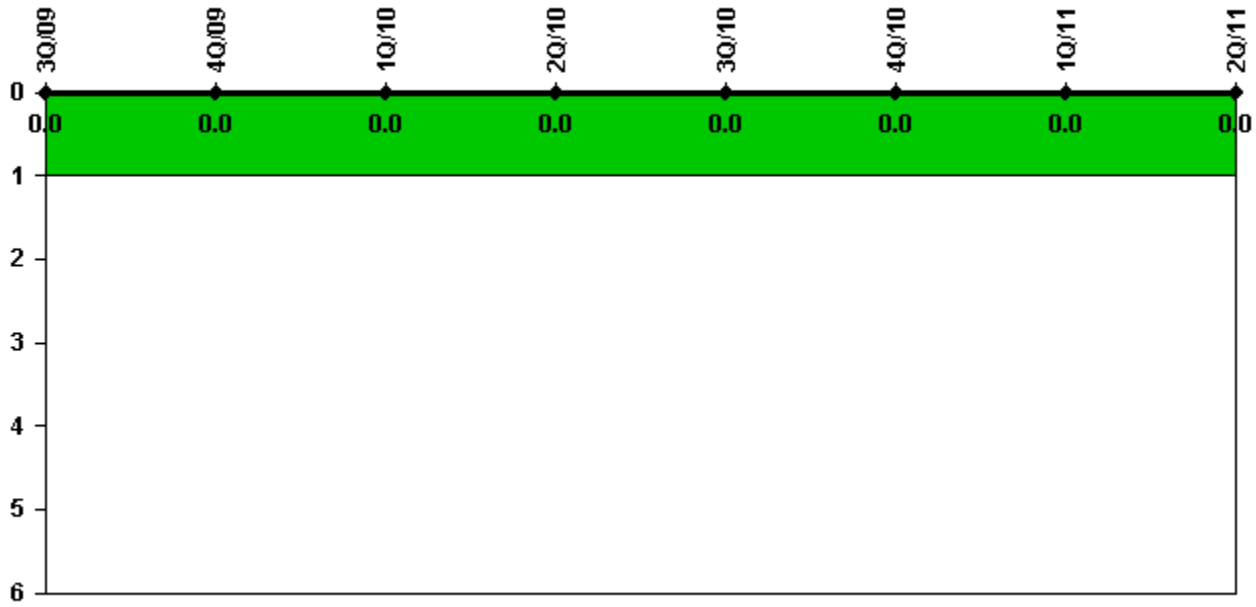
Thresholds: White > 6.0

### Notes

| Unplanned Power Changes per 7000 Critical Hrs | 3Q/09  | 4Q/09 | 1Q/10 | 2Q/10  | 3Q/10  | 4Q/10  | 1Q/11  | 2Q/11  |
|---|--------|-------|-------|--------|--------|--------|--------|--------|
| Unplanned power changes                       | 1.0    | 0     | 0     | 0      | 0      | 0      | 0      | 0      |
| Critical hours                                | 2052.4 | 0     | 0     | 2003.8 | 2208.0 | 2209.0 | 2159.0 | 2184.0 |
| Indicator value                               | 1.0    | 1.3   | 1.7   | 1.7    | 0      | 0      | 0      | 0      |

Licensee Comments: none

# Unplanned Scrams with Complications



Thresholds: White > 1.0

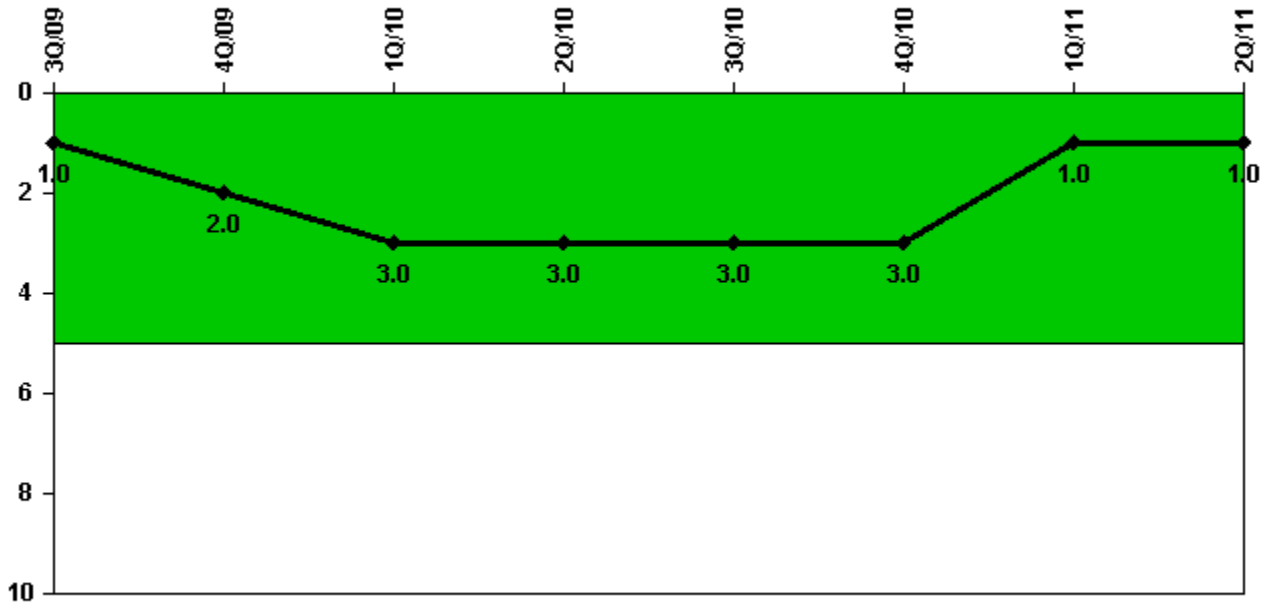
## Notes

| Unplanned Scrams with Complications | 3Q/09 | 4Q/09 | 1Q/10 | 2Q/10 | 3Q/10 | 4Q/10 | 1Q/11 | 2Q/11 |
|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| 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 (PWR)



Thresholds: White > 5.0

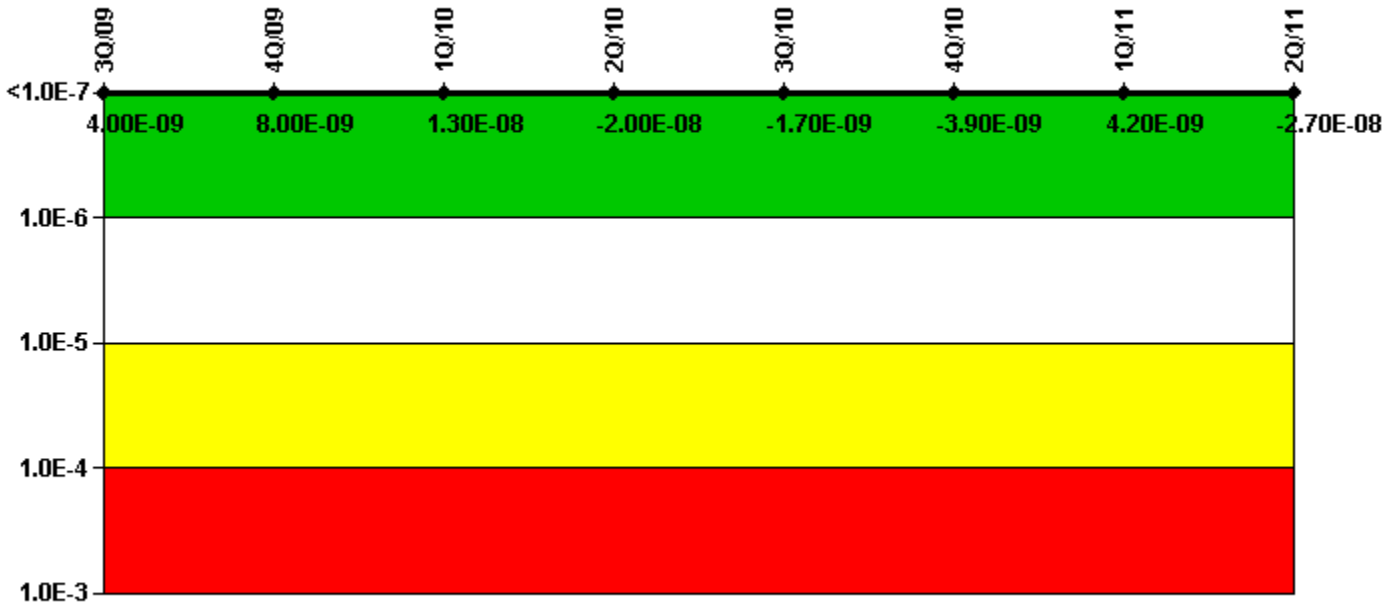
### Notes

| Safety System Functional Failures (PWR) | 3Q/09 | 4Q/09 | 1Q/10 | 2Q/10 | 3Q/10 | 4Q/10 | 1Q/11 | 2Q/11 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|
| Safety System Functional Failures       | 0     | 1     | 2     | 0     | 0     | 1     | 0     | 0     |
| Indicator value                         | 1     | 2     | 3     | 3     | 3     | 3     | 1     | 1     |

Licensee Comments: none

---

# Mitigating Systems Performance Index, Emergency AC Power System



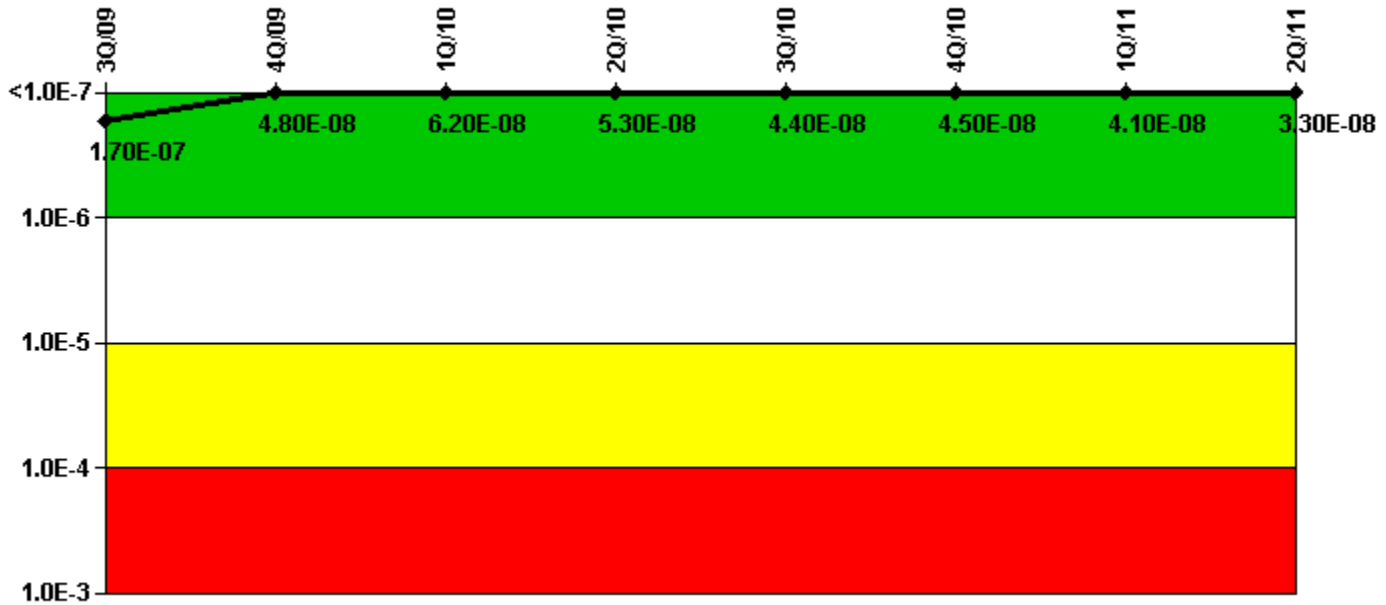
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

| Mitigating Systems Performance Index, Emergency AC Power System | 3Q/09     | 4Q/09     | 1Q/10     | 2Q/10     | 3Q/10     | 4Q/10     | 1Q/11     | 2Q/11     |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| UAI ( $\Delta$ CDF)   | 3.10E-08  | 3.40E-08  | 3.89E-08  | 3.42E-08  | 3.68E-08  | 3.46E-08  | 4.27E-08  | 3.76E-08  |
| URI ( $\Delta$ CDF)   | -2.70E-08 | -2.60E-08 | -2.55E-08 | -5.39E-08 | -3.85E-08 | -3.85E-08 | -3.85E-08 | -6.46E-08 |
| PLE   | NO        | NO        | NO        | NO        | NO        | NO        | NO        | NO        |
| Indicator value   | 4.00E-09  | 8.00E-09  | 1.30E-08  | -2.00E-08 | -1.70E-09 | -3.90E-09 | 4.20E-09  | -2.70E-08 |

Licensee Comments: none

# Mitigating Systems Performance Index, High Pressure Injection System



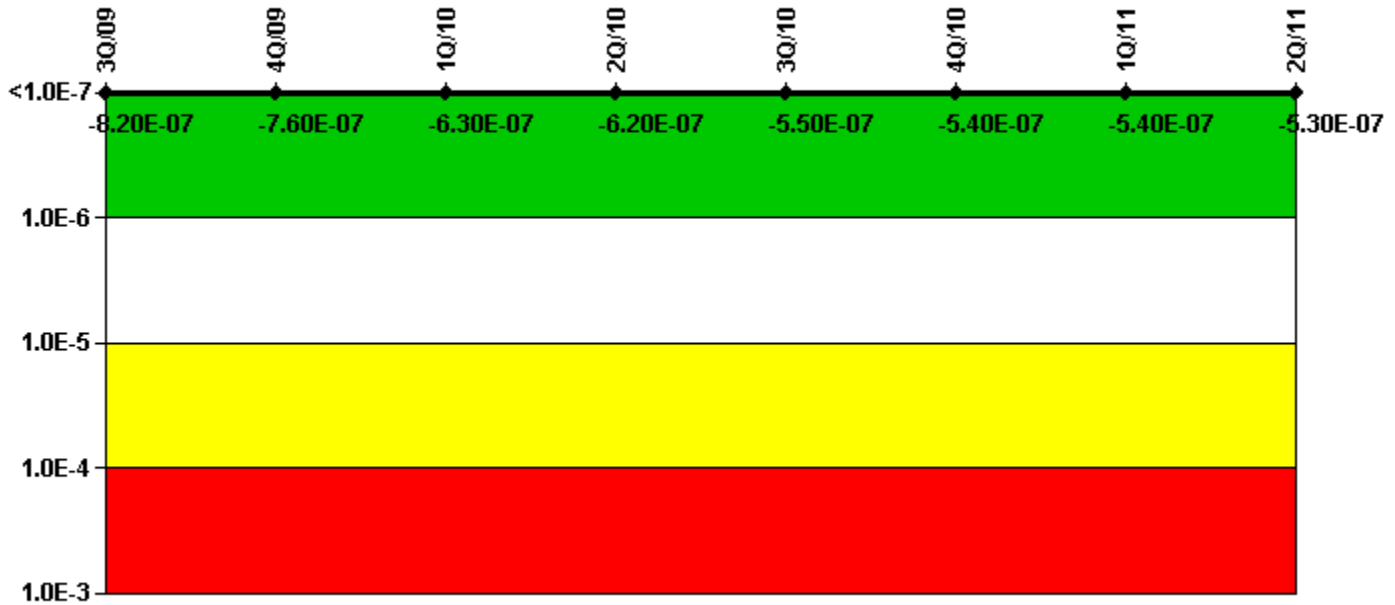
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

| Mitigating Systems Performance Index, High Pressure Injection System | 3Q/09     | 4Q/09     | 1Q/10     | 2Q/10     | 3Q/10     | 4Q/10     | 1Q/11     | 2Q/11     |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| UAI (ΔCDF)   | 3.10E-07  | 9.90E-08  | 1.13E-07  | 1.07E-07  | 9.77E-08  | 9.91E-08  | 9.50E-08  | 8.71E-08  |
| URI (ΔCDF)   | -1.40E-07 | -5.10E-08 | -5.04E-08 | -5.43E-08 | -5.41E-08 | -5.41E-08 | -5.41E-08 | -5.41E-08 |
| PLE  | NO        | NO        | NO        | NO        | NO        | NO        | NO        | NO        |
| Indicator value  | 1.70E-07  | 4.80E-08  | 6.20E-08  | 5.30E-08  | 4.40E-08  | 4.50E-08  | 4.10E-08  | 3.30E-08  |

Licensee Comments: none

# Mitigating Systems Performance Index, Heat Removal System



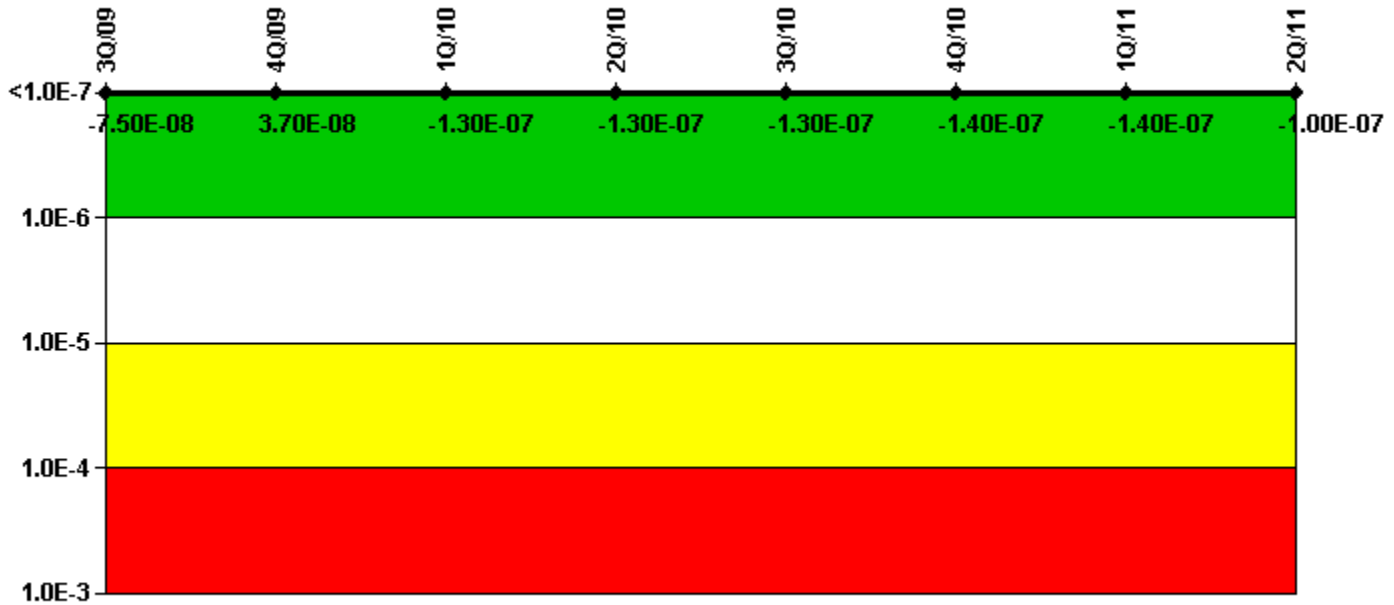
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

| Mitigating Systems Performance Index, Heat Removal System | 3Q/09     | 4Q/09     | 1Q/10     | 2Q/10     | 3Q/10     | 4Q/10     | 1Q/11     | 2Q/11     |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| UAI ( $\Delta$ CDF)                                       | -2.20E-07 | -2.00E-07 | -1.54E-07 | -1.54E-07 | -1.45E-07 | -1.37E-07 | -1.38E-07 | -1.38E-07 |
| URI ( $\Delta$ CDF)                                       | -6.00E-07 | -5.60E-07 | -4.74E-07 | -4.66E-07 | -4.03E-07 | -4.03E-07 | -4.03E-07 | -3.95E-07 |
| PLE   | NO        | NO        | NO        | NO        | NO        | NO        | NO        | NO        |
| Indicator value   | -8.20E-07 | -7.60E-07 | -6.30E-07 | -6.20E-07 | -5.50E-07 | -5.40E-07 | -5.40E-07 | -5.30E-07 |

Licensee Comments: none

# Mitigating Systems Performance Index, Residual Heat Removal System



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

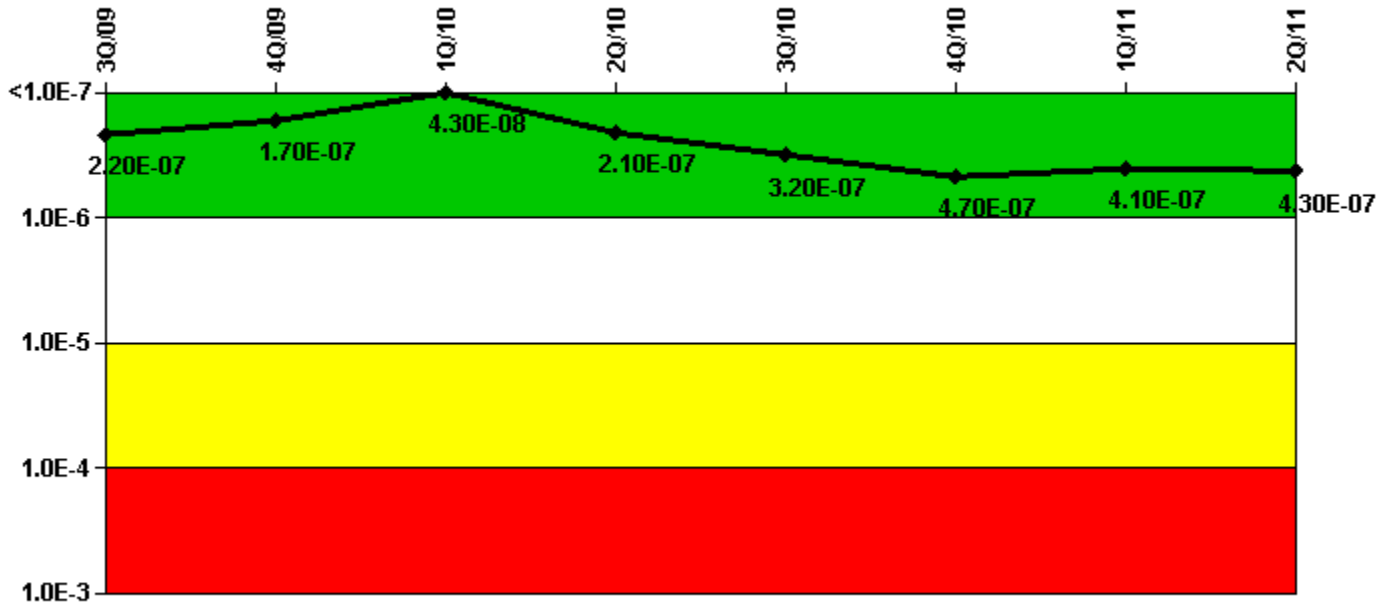
## Notes

| Mitigating Systems Performance Index, Residual Heat Removal System | 3Q/09     | 4Q/09     | 1Q/10     | 2Q/10     | 3Q/10     | 4Q/10     | 1Q/11     | 2Q/11     |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| UAI ( $\Delta$ CDF)  | 3.50E-08  | 6.30E-08  | -1.09E-07 | -1.09E-07 | -1.07E-07 | -1.12E-07 | -1.12E-07 | -7.85E-08 |
| URI ( $\Delta$ CDF)  | -1.10E-07 | -2.60E-08 | -2.51E-08 | -2.51E-08 | -2.50E-08 | -2.50E-08 | -2.50E-08 | -2.50E-08 |
| PLE  | NO        | NO        | NO        | NO        | NO        | NO        | NO        | NO        |
| Indicator value  | -7.50E-08 | 3.70E-08  | -1.30E-07 | -1.30E-07 | -1.30E-07 | -1.40E-07 | -1.40E-07 | -1.00E-07 |

Licensee Comments: none



# Mitigating Systems Performance Index, Cooling Water Systems



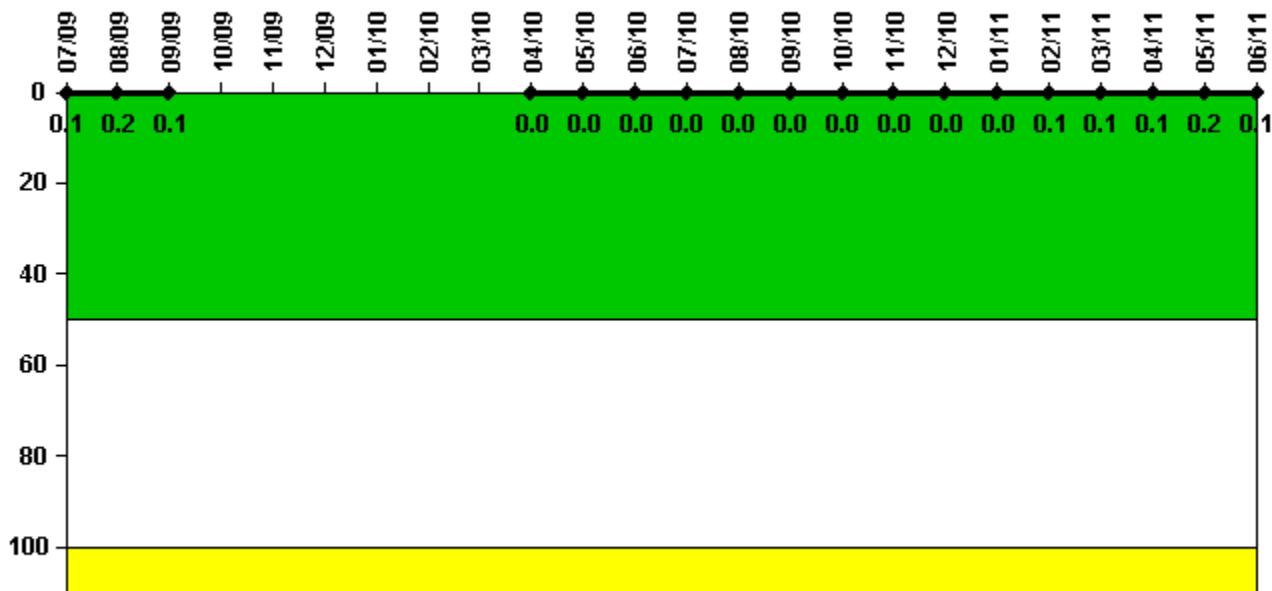
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

| Mitigating Systems Performance Index, Cooling Water Systems | 3Q/09     | 4Q/09     | 1Q/10     | 2Q/10     | 3Q/10     | 4Q/10     | 1Q/11     | 2Q/11     |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| UAI ( $\Delta$ CDF)   | 3.80E-07  | 2.90E-07  | 1.63E-07  | 3.26E-07  | 4.38E-07  | 5.93E-07  | 5.34E-07  | 5.47E-07  |
| URI ( $\Delta$ CDF)   | -1.60E-07 | -1.20E-07 | -1.20E-07 | -1.20E-07 | -1.19E-07 | -1.19E-07 | -1.19E-07 | -1.19E-07 |
| PLE   | NO        | NO        | NO        | NO        | NO        | NO        | NO        | NO        |
| Indicator value   | 2.20E-07  | 1.70E-07  | 4.30E-08  | 2.10E-07  | 3.20E-07  | 4.70E-07  | 4.10E-07  | 4.30E-07  |

Licensee Comments: none

# Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

## Notes

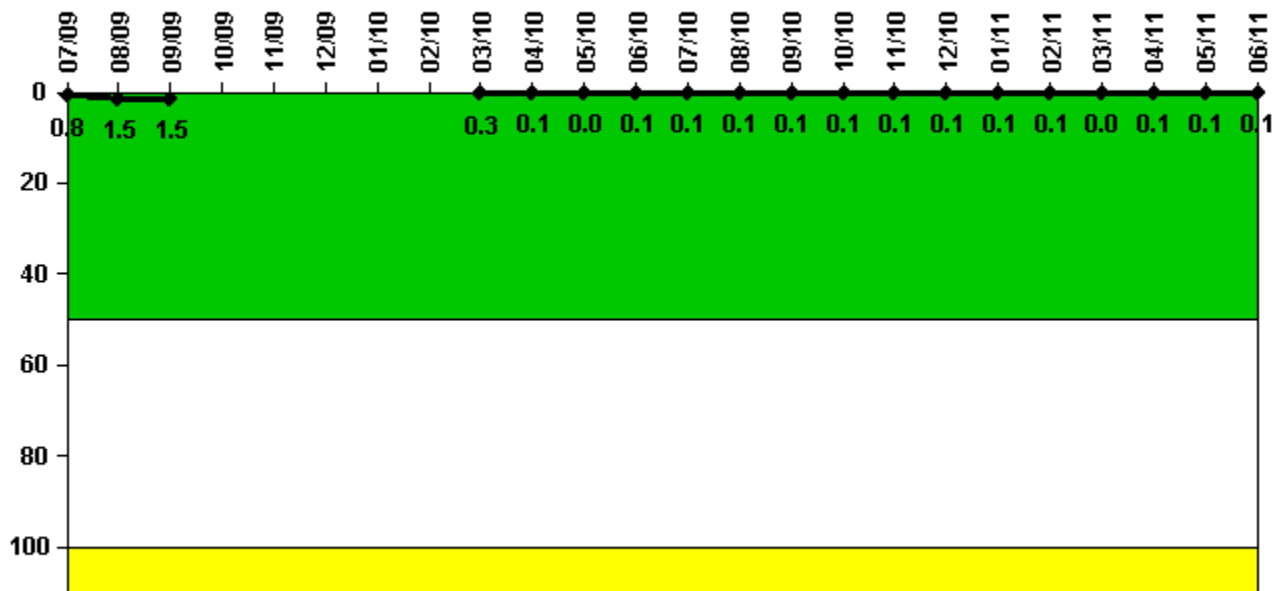
| Reactor Coolant System Activity | 7/09     | 8/09     | 9/09     | 10/09 | 11/09 | 12/09 | 1/10 | 2/10 | 3/10 | 4/10     | 5/10     | 6/10     |
|---------------------------------|----------|----------|----------|-------|-------|-------|------|------|------|----------|----------|----------|
| Maximum activity                | 0.001300 | 0.001530 | 0.001420 | N/A   | N/A   | N/A   | N/A  | N/A  | N/A  | 0.000112 | 0.000110 | 0.000301 |
| 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                 | 0.1      | 0.2      | 0.1      | N/A   | N/A   | N/A   | N/A  | N/A  | N/A  | 0        | 0        | 0        |

| Reactor Coolant System Activity | 7/10     | 8/10     | 9/10     | 10/10    | 11/10    | 12/10    | 1/11     | 2/11     | 3/11     | 4/11     | 5/11     | 6/11     |
|---------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Maximum activity                | 0.000291 | 0.000266 | 0.000280 | 0.000317 | 0.000306 | 0.000335 | 0.000370 | 0.000752 | 0.000962 | 0.001360 | 0.001610 | 0.001230 |
| 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                 | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0.1      | 0.1      | 0.1      | 0.2      | 0.1      |

Licensee Comments: none

## Reactor Coolant System Leakage



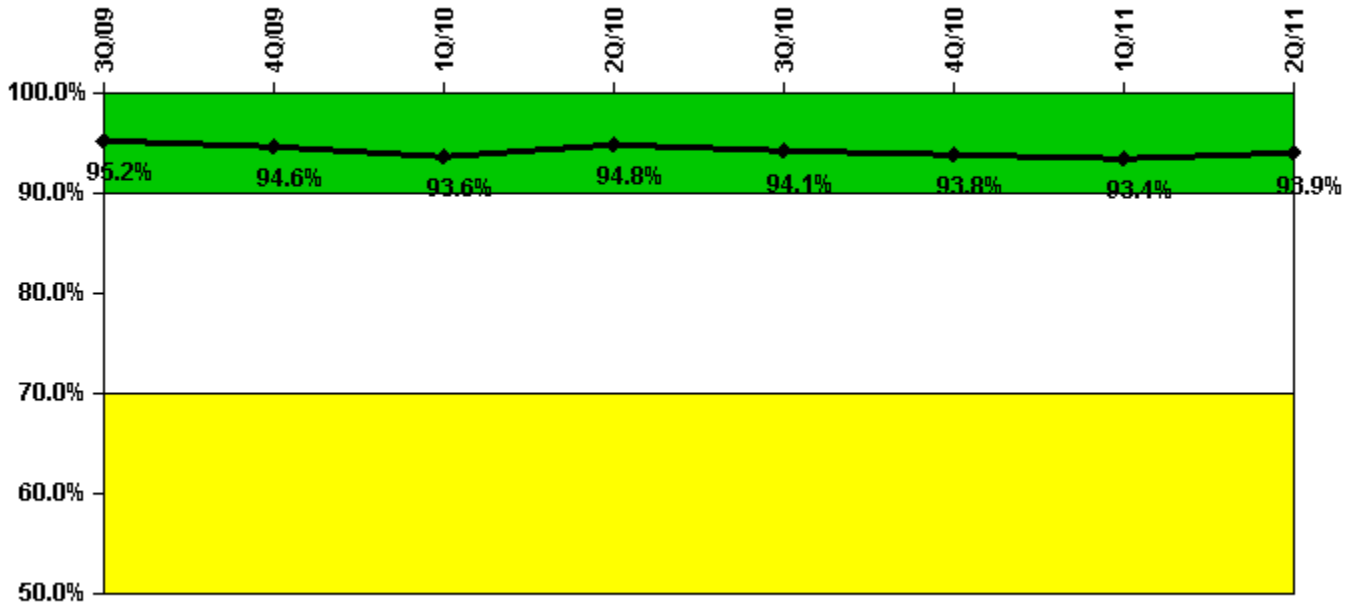
Thresholds: White > 50.0 Yellow > 100.0

### Notes

|                                |       |       |       |       |       |       |       |       |       |       |       |       |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Reactor Coolant System Leakage | 7/09  | 8/09  | 9/09  | 10/09 | 11/09 | 12/09 | 1/10  | 2/10  | 3/10  | 4/10  | 5/10  | 6/10  |
| Maximum leakage                | 0.080 | 0.150 | 0.150 | N/A   | N/A   | N/A   | N/A   | N/A   | 0.030 | 0.010 | 0     | 0.010 |
| 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                | 0.8   | 1.5   | 1.5   | N/A   | N/A   | N/A   | N/A   | N/A   | 0.3   | 0.1   | 0     | 0.1   |
| Reactor Coolant System Leakage | 7/10  | 8/10  | 9/10  | 10/10 | 11/10 | 12/10 | 1/11  | 2/11  | 3/11  | 4/11  | 5/11  | 6/11  |
| Maximum leakage                | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 | 0     | 0.010 | 0.010 | 0.010 |
| 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                | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0     | 0.1   | 0.1   | 0.1   |

Licensee Comments: none

## Drill/Exercise Performance



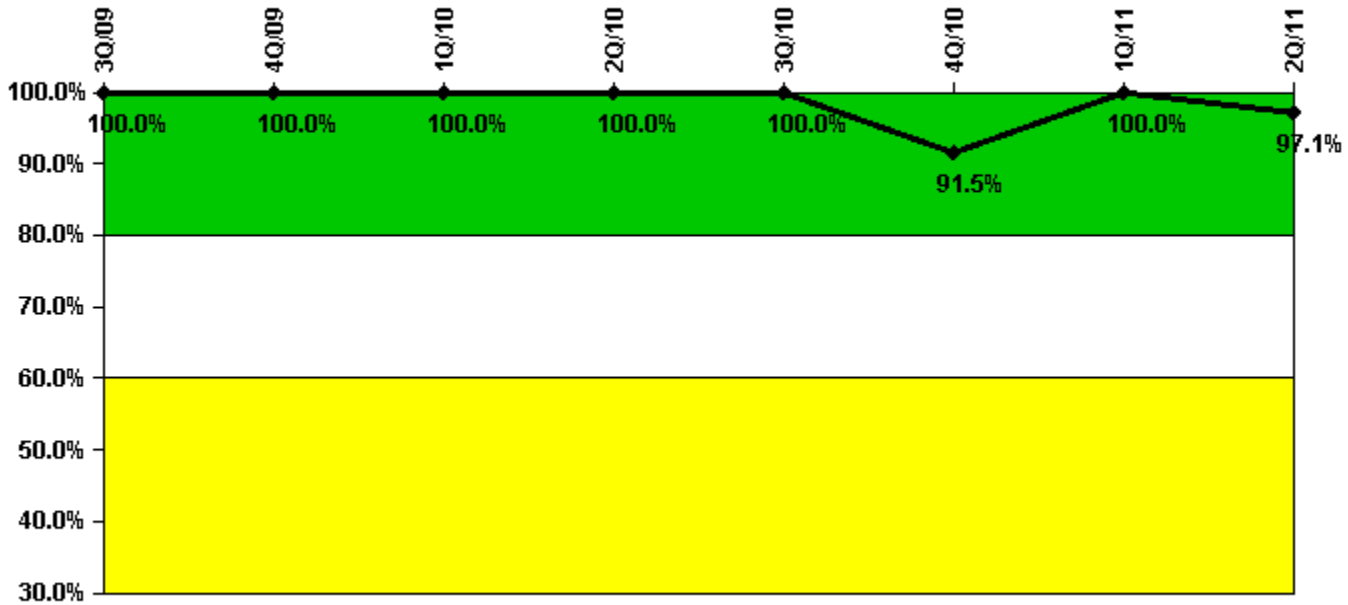
Thresholds: White < 90.0% Yellow < 70.0%

### Notes

| Drill/Exercise Performance | 3Q/09 | 4Q/09 | 1Q/10 | 2Q/10 | 3Q/10 | 4Q/10 | 1Q/11 | 2Q/11 |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Successful opportunities   | 33.0  | 24.0  | 11.0  | 52.0  | 50.0  | 0     | 25.0  | 65.0  |
| Total opportunities        | 38.0  | 24.0  | 15.0  | 52.0  | 55.0  | 0     | 27.0  | 66.0  |
|                            |       |       |       |       |       |       |       |       |
| Indicator value            | 95.2% | 94.6% | 93.6% | 94.8% | 94.1% | 93.8% | 93.4% | 93.9% |

Licensee Comments: none

# ERO Drill Participation



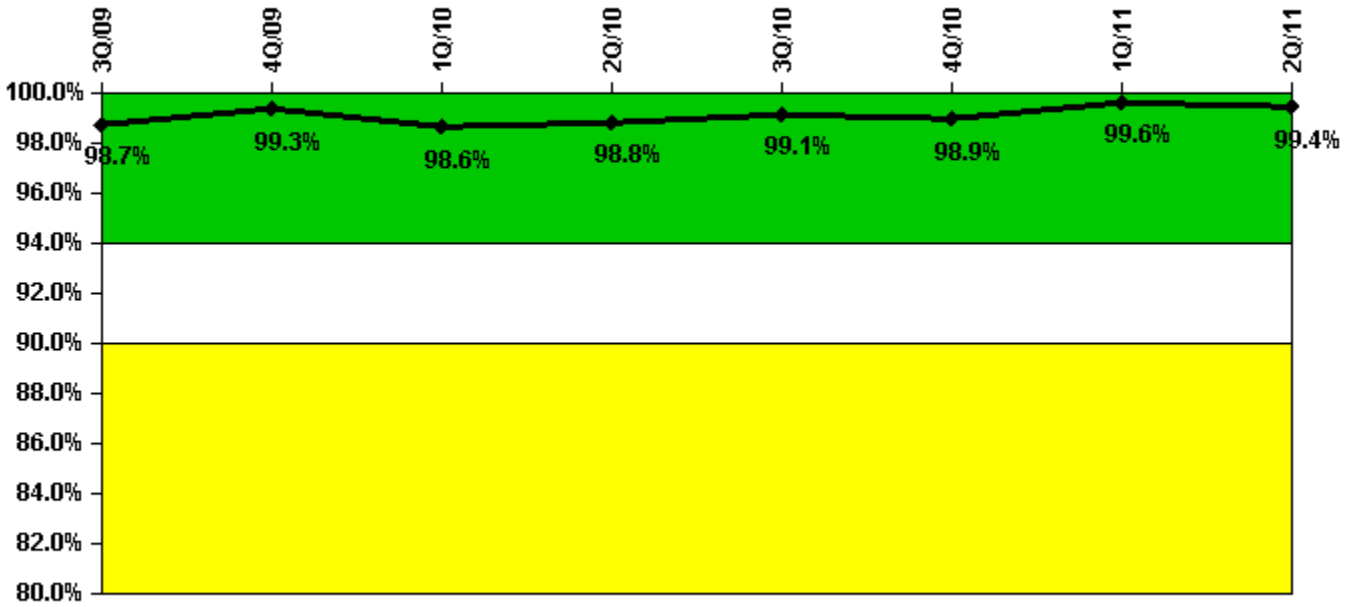
Thresholds: White < 80.0% Yellow < 60.0%

## Notes

| ERO Drill Participation     | 3Q/09  | 4Q/09  | 1Q/10  | 2Q/10  | 3Q/10  | 4Q/10 | 1Q/11  | 2Q/11 |
|-----------------------------|--------|--------|--------|--------|--------|-------|--------|-------|
| Participating Key personnel | 74.0   | 79.0   | 72.0   | 74.0   | 65.0   | 65.0  | 68.0   | 66.0  |
| Total Key personnel         | 74.0   | 79.0   | 72.0   | 74.0   | 65.0   | 71.0  | 68.0   | 68.0  |
|                             |        |        |        |        |        |       |        |       |
| Indicator value             | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 91.5% | 100.0% | 97.1% |

Licensee Comments: none

# Alert & Notification System



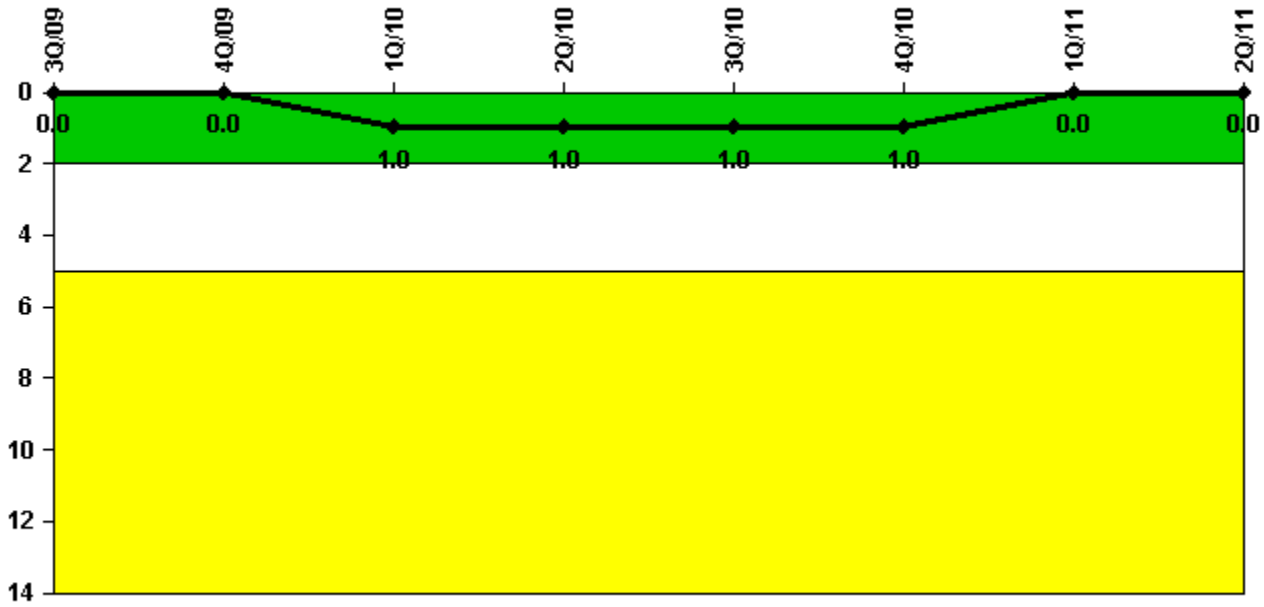
Thresholds: White < 94.0% Yellow < 90.0%

## Notes

| Alert & Notification System | 3Q/09 | 4Q/09 | 1Q/10 | 2Q/10 | 3Q/10 | 4Q/10 | 1Q/11 | 2Q/11 |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Successful siren-tests      | 359   | 519   | 350   | 405   | 399   | 447   | 394   | 347   |
| Total sirens-tests          | 364   | 520   | 362   | 406   | 400   | 450   | 396   | 350   |
| Indicator value             | 98.7% | 99.3% | 98.6% | 98.8% | 99.1% | 98.9% | 99.6% | 99.4% |

Licensee Comments: none

## Occupational Exposure Control Effectiveness



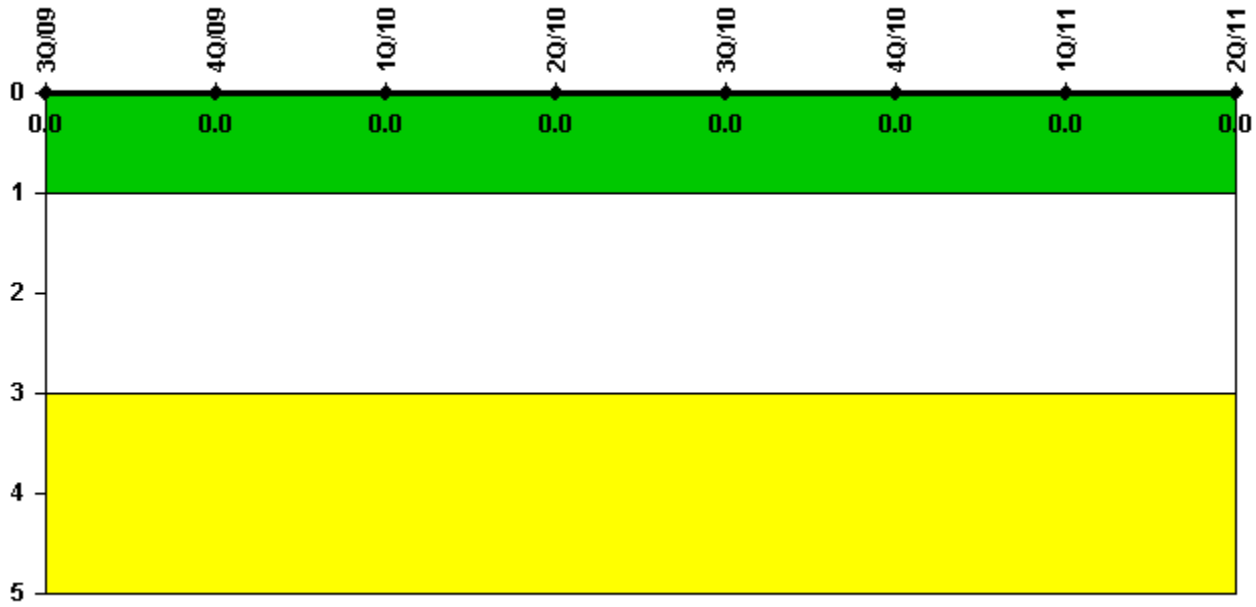
Thresholds: White > 2.0 Yellow > 5.0

### Notes

| Occupational Exposure Control Effectiveness | 3Q/09    | 4Q/09    | 1Q/10    | 2Q/10    | 3Q/10    | 4Q/10    | 1Q/11    | 2Q/11    |
|---|----------|----------|----------|----------|----------|----------|----------|----------|
| High radiation area occurrences             | 0        | 0        | 1        | 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>1</b> | <b>1</b> | <b>1</b> | <b>1</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 | 3Q/09 | 4Q/09 | 1Q/10 | 2Q/10 | 3Q/10 | 4Q/10 | 1Q/11 | 2Q/11 |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| 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.