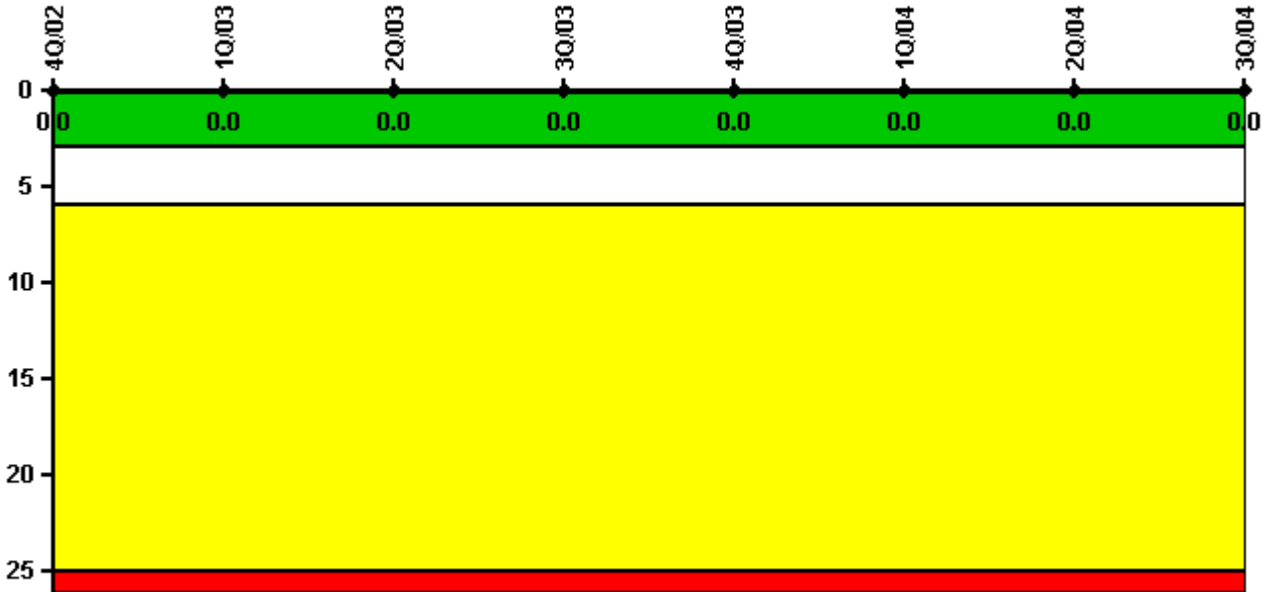


Byron 2

3Q/2004 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/02 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 | 1Q/04 | 2Q/04 | 3Q/04 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|
| Unplanned scrams | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Critical hours | 2062.0 | 2160.0 | 2183.0 | 2208.0 | 2209.0 | 1967.0 | 1989.1 | 2208.0 |
| Indicator value | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



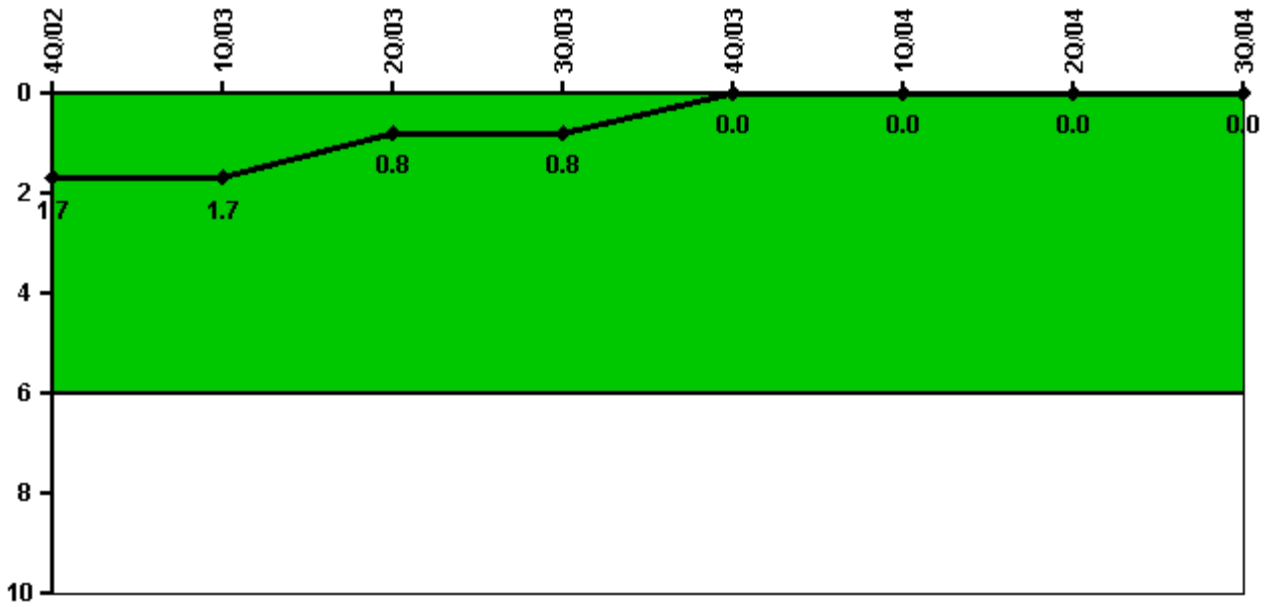
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

| Scrams with Loss of Normal Heat Removal | 4Q/02 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 | 1Q/04 | 2Q/04 | 3Q/04 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|
| Scrams | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Indicator value | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



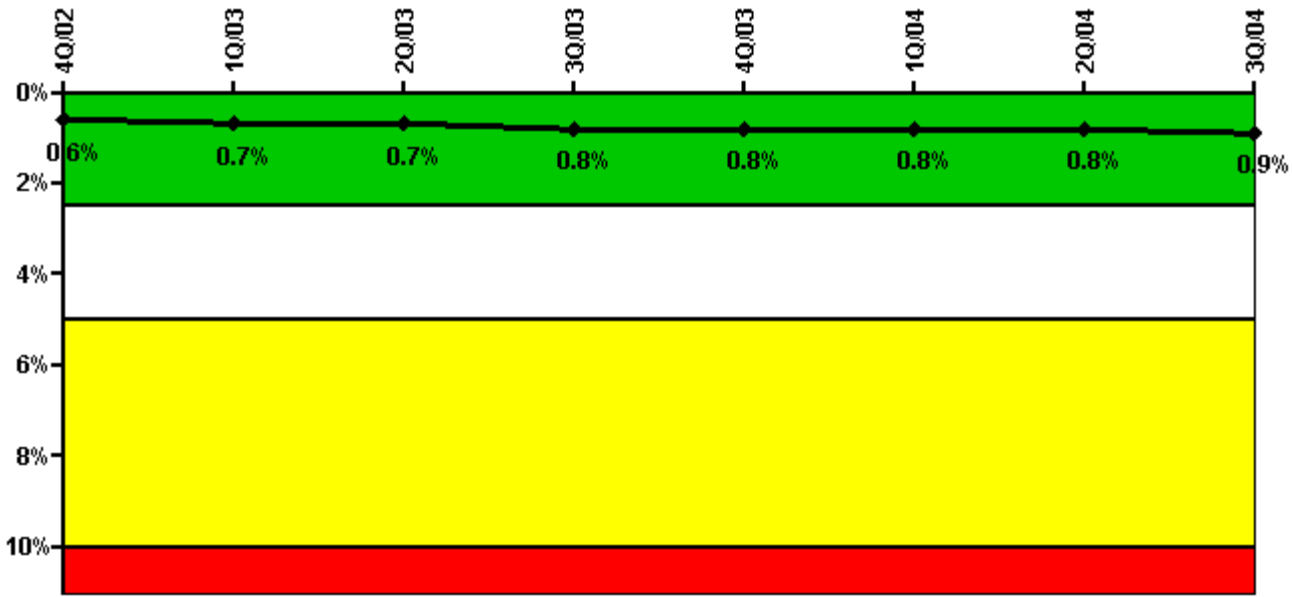
Thresholds: White > 6.0

Notes

| Unplanned Power Changes per 7000 Critical Hrs | 4Q/02 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 | 1Q/04 | 2Q/04 | 3Q/04 |
|---|------------|------------|------------|------------|----------|----------|----------|----------|
| Unplanned power changes | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Critical hours | 2062.0 | 2160.0 | 2183.0 | 2208.0 | 2209.0 | 1967.0 | 1989.1 | 2208.0 |
| Indicator value | 1.7 | 1.7 | 0.8 | 0.8 | 0 | 0 | 0 | 0 |

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



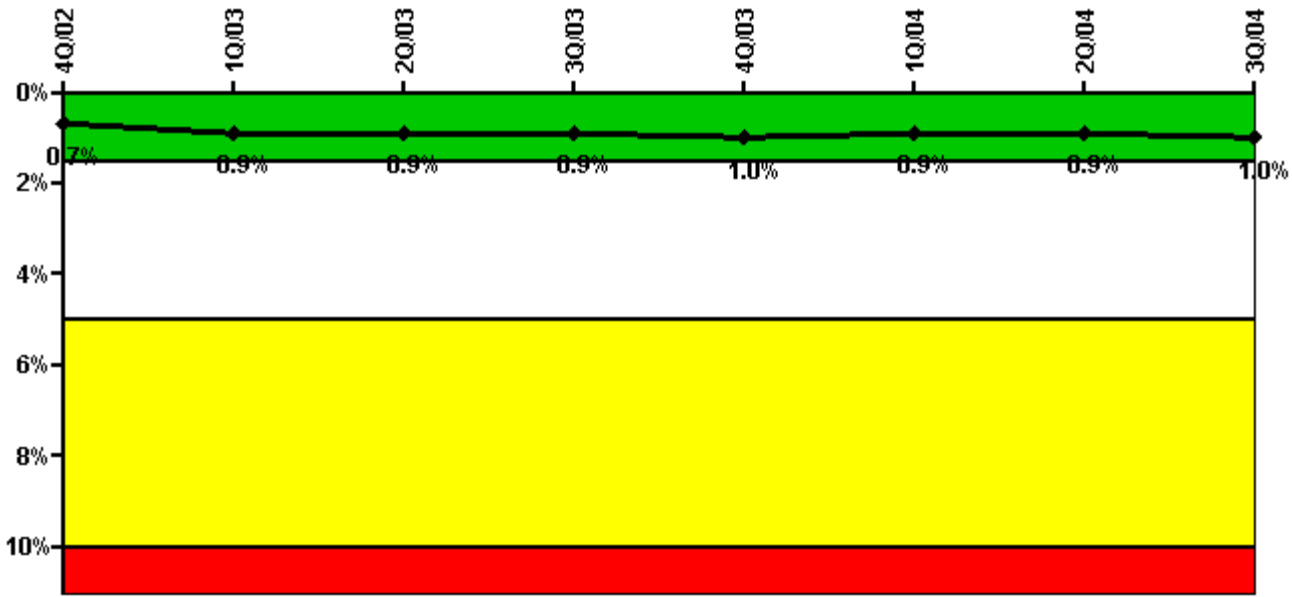
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

| Safety System Unavailability, Emergency AC Power | 4Q/02 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 | 1Q/04 | 2Q/04 | 3Q/04 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Train 1 | | | | | | | | |
| Planned unavailable hours | 8.60 | 42.30 | 14.80 | 3.20 | 1.50 | 6.20 | 2.20 | 22.40 |
| Unplanned unavailable hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fault exposure hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Effective Reset hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Required hours | 2209.00 | 2160.00 | 2183.00 | 2208.00 | 2209.00 | 2184.00 | 2183.00 | 2208.00 |
| Train 2 | | | | | | | | |
| Planned unavailable hours | 2.60 | 1.70 | 11.40 | 4.10 | 2.90 | 1.80 | 17.40 | 1.80 |
| Unplanned unavailable hours | 0 | 0 | 11.80 | 54.90 | 0 | 0 | 0 | 25.10 |
| Fault exposure hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Effective Reset hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Required hours | 2209.00 | 2160.00 | 2183.00 | 2208.00 | 2209.00 | 2184.00 | 2183.00 | 2208.00 |
| Indicator value | 0.6% | 0.7% | 0.7% | 0.8% | 0.8% | 0.8% | 0.8% | 0.9% |

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



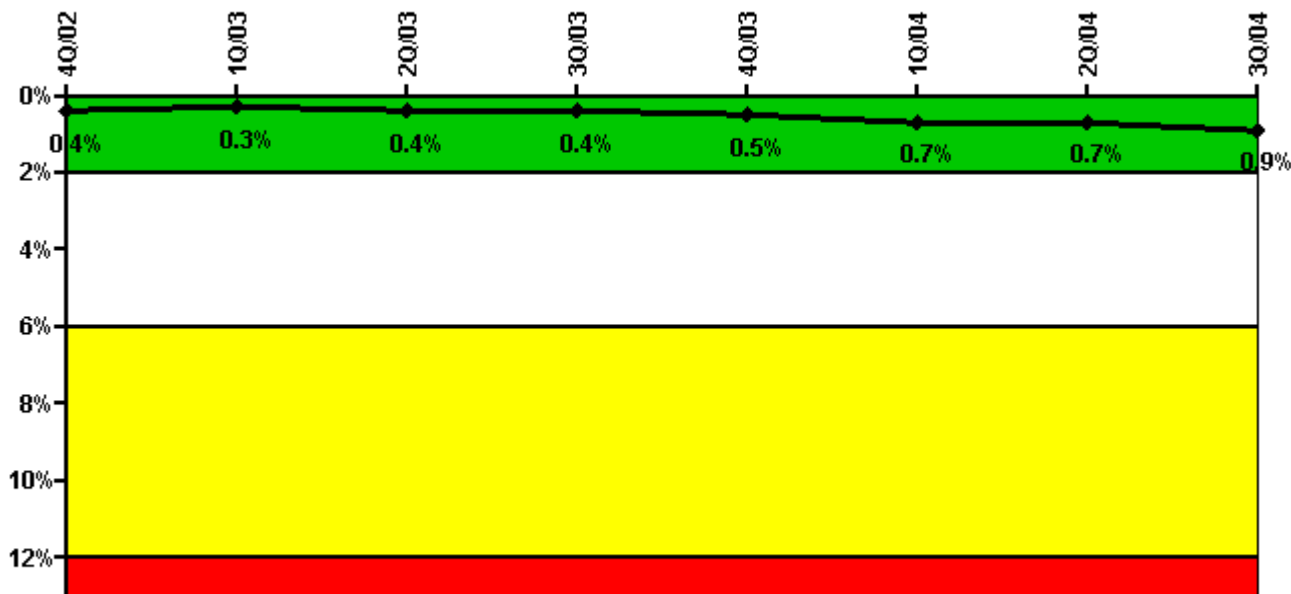
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

| Safety System Unavailability, High Pressure Injection System (HPSI) | 4Q/02 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 | 1Q/04 | 2Q/04 | 3Q/04 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Train 1 | | | | | | | | |
| Planned unavailable hours | 2.40 | 3.60 | 1.80 | 3.20 | 23.40 | 5.30 | 2.20 | 42.60 |
| Unplanned unavailable hours | 0 | 213.80 | 0 | 0 | 3.70 | 0 | 0 | 0 |
| Fault exposure hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Effective Reset hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Required hours | 2062.20 | 2160.00 | 2183.00 | 2208.00 | 2209.00 | 1967.02 | 1989.13 | 2208.00 |
| Train 2 | | | | | | | | |
| Planned unavailable hours | 1.30 | 1.70 | 4.10 | 1.90 | 2.90 | 1.80 | 2.90 | 4.90 |
| Unplanned unavailable hours | 135.90 | 2.80 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fault exposure hours | 50.40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Effective Reset hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Required hours | 2062.20 | 2160.00 | 2183.00 | 2208.00 | 2209.00 | 1967.02 | 1989.13 | 2208.00 |
| Train 3 | | | | | | | | |
| Planned unavailable hours | 2.40 | 13.60 | 39.00 | 3.20 | 1.50 | 5.30 | 47.90 | 3.10 |
| Unplanned unavailable hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fault exposure hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Effective Reset hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Required hours | 2062.20 | 2160.00 | 2183.00 | 2208.00 | 2209.00 | 1967.02 | 1989.13 | 2208.00 |
| Train 4 | | | | | | | | |
| Planned unavailable hours | 3.00 | 1.70 | 4.10 | 3.10 | 24.60 | 1.80 | 16.60 | 45.50 |
| Unplanned unavailable hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fault exposure hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Effective Reset hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Required hours | 2062.20 | 2160.00 | 2183.00 | 2208.00 | 2209.00 | 1967.02 | 1989.13 | 2208.00 |
| Indicator value | 0.7% | 0.9% | 0.9% | 0.9% | 1.0% | 0.9% | 0.9% | 1.0% |

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



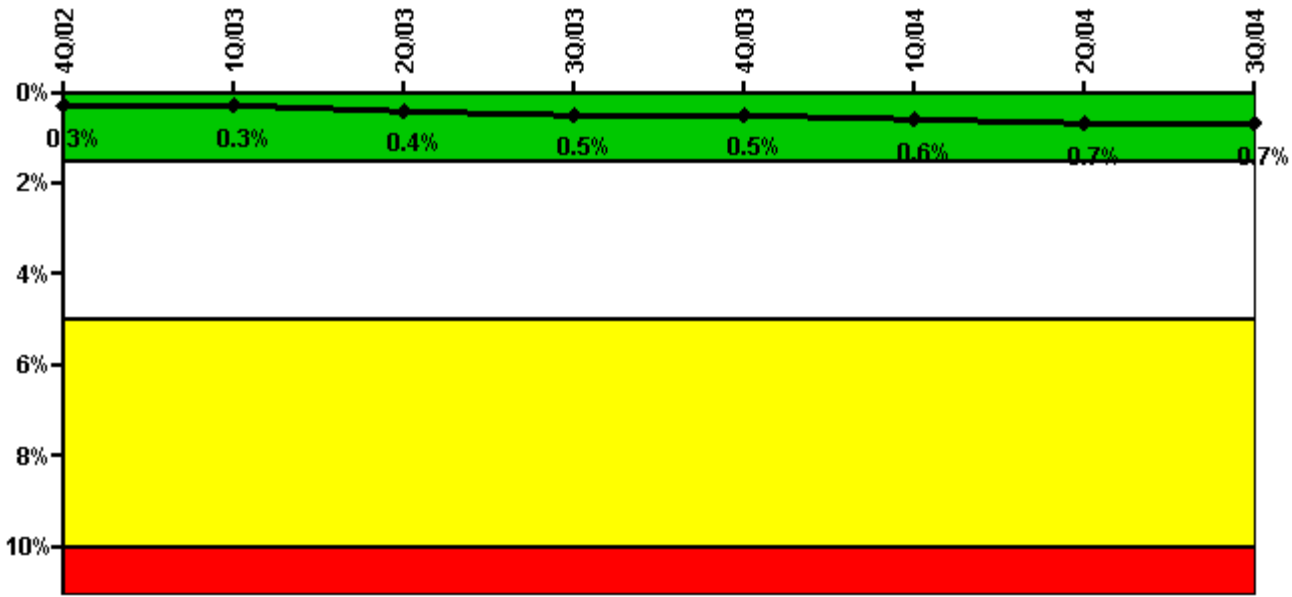
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

| Safety System Unavailability, Heat Removal System (AFW) | 4Q/02 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 | 1Q/04 | 2Q/04 | 3Q/04 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Train 1 | | | | | | | | |
| Planned unavailable hours | 4.10 | 4.60 | 3.30 | 7.00 | 3.30 | 6.90 | 4.10 | 5.80 |
| Unplanned unavailable hours | 0 | 0 | 0 | 7.00 | 0 | 0 | 0 | 0 |
| Fault exposure hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Effective Reset hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Required hours | 2062.20 | 2160.00 | 2183.00 | 2208.00 | 2209.00 | 1967.02 | 1989.13 | 2208.00 |
| Train 2 | | | | | | | | |
| Planned unavailable hours | 19.30 | 2.80 | 59.70 | 3.40 | 11.10 | 42.60 | 4.90 | 56.30 |
| Unplanned unavailable hours | 0 | 0 | 0 | 0 | 25.60 | 57.90 | 0 | 66.80 |
| Fault exposure hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Effective Reset hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Required hours | 2062.20 | 2160.00 | 2183.00 | 2208.00 | 2209.00 | 1967.02 | 1989.13 | 2208.00 |
| Indicator value | 0.4% | 0.3% | 0.4% | 0.4% | 0.5% | 0.7% | 0.7% | 0.9% |

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



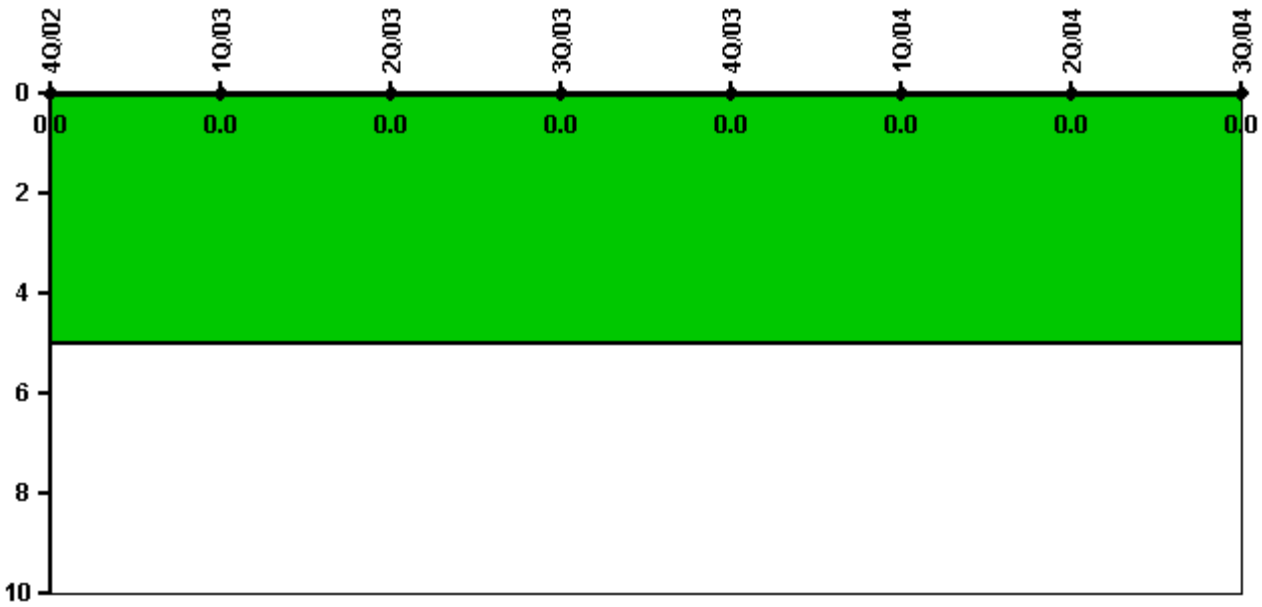
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

| Safety System Unavailability, Residual Heat Removal System | 4Q/02 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 | 1Q/04 | 2Q/04 | 3Q/04 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Train 1 | | | | | | | | |
| Planned unavailable hours | 2.40 | 18.10 | 49.80 | 58.50 | 1.60 | 9.50 | 3.30 | 3.10 |
| Unplanned unavailable hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fault exposure hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Effective Reset hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Required hours | 2209.00 | 2160.00 | 2183.00 | 2208.00 | 2209.00 | 2184.00 | 2183.00 | 2208.00 |
| Train 2 | | | | | | | | |
| Planned unavailable hours | 2.60 | 1.70 | 18.20 | 1.90 | 44.20 | 46.40 | 30.90 | 7.20 |
| Unplanned unavailable hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fault exposure hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Effective Reset hours | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Required hours | 2209.00 | 2160.00 | 2183.00 | 2208.00 | 2209.00 | 2184.00 | 2183.00 | 2208.00 |
| Indicator value | 0.3% | 0.3% | 0.4% | 0.5% | 0.5% | 0.6% | 0.7% | 0.7% |

Licensee Comments: none

Safety System Functional Failures (PWR)



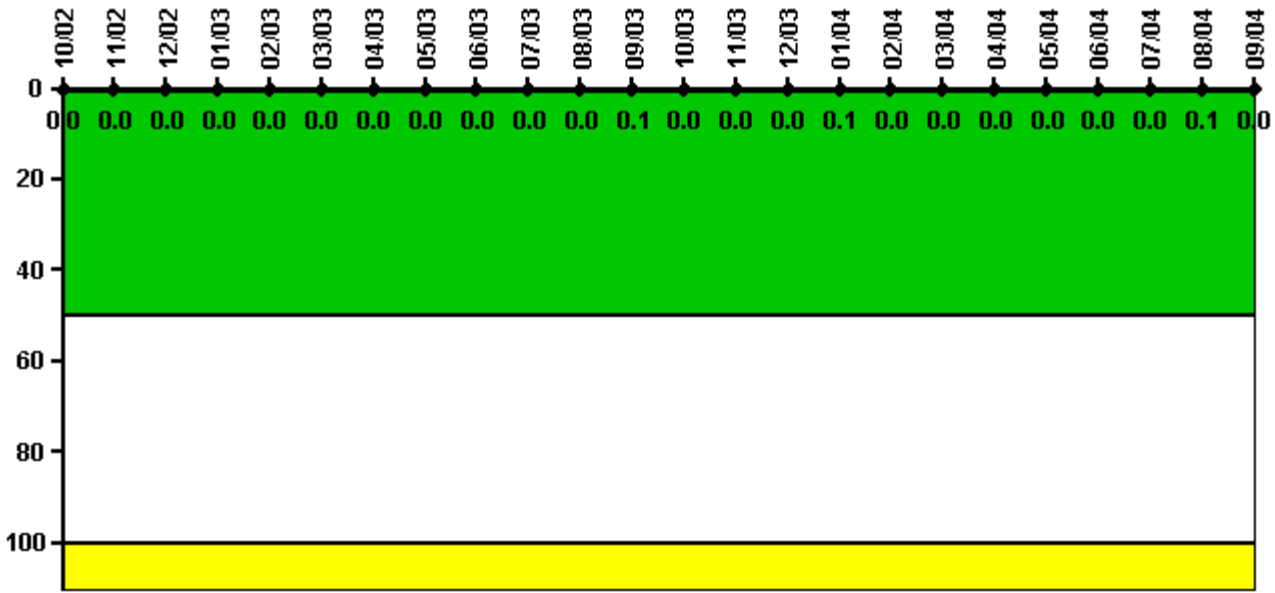
Thresholds: White > 5.0

Notes

| Safety System Functional Failures (PWR) | 4Q/02 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 | 1Q/04 | 2Q/04 | 3Q/04 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|
| Safety System Functional Failures | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Indicator value | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Licensee Comments: none

Reactor Coolant System Activity



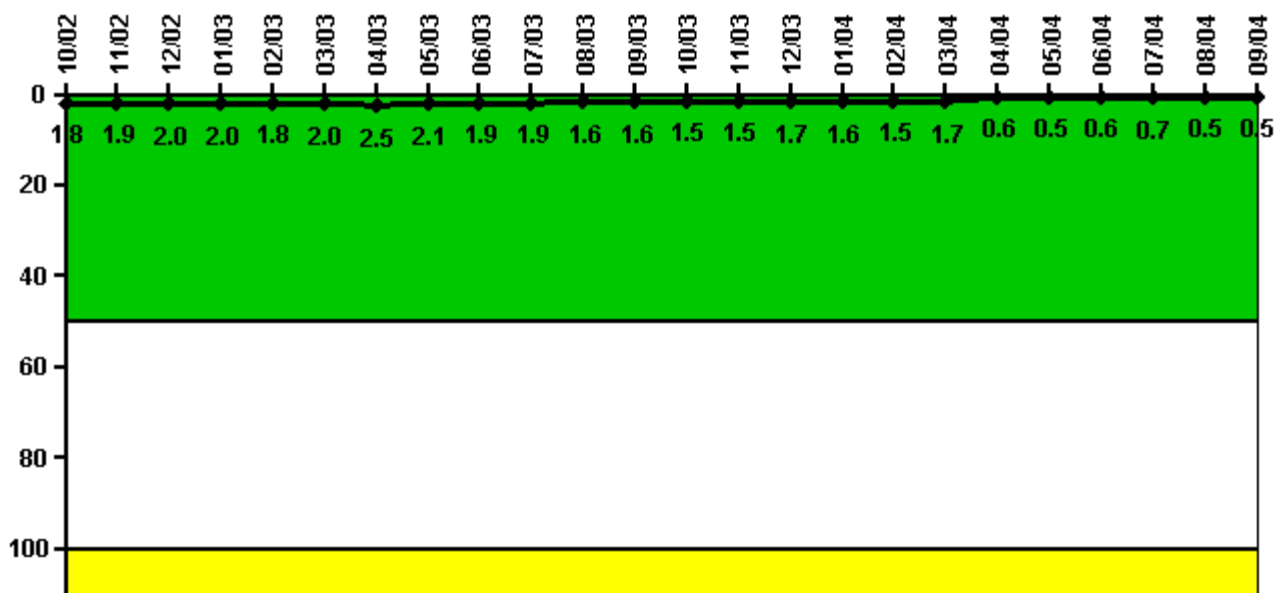
Thresholds: White > 50.0 Yellow > 100.0

Notes

| Reactor Coolant System Activity | 10/02 | 11/02 | 12/02 | 1/03 | 2/03 | 3/03 | 4/03 | 5/03 | 6/03 | 7/03 | 8/03 | 9/03 |
|---------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Maximum activity | 0.000242 | 0.000318 | 0.000327 | 0.000287 | 0.000301 | 0.000288 | 0.000295 | 0.000344 | 0.000317 | 0.000335 | 0.000342 | 0.000523 |
| 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 | 0 | 0 | 0 | 0.1 |
| Reactor Coolant System Activity | 10/03 | 11/03 | 12/03 | 1/04 | 2/04 | 3/04 | 4/04 | 5/04 | 6/04 | 7/04 | 8/04 | 9/04 |
| Maximum activity | 0.000012 | 0.000365 | 0.000399 | 0.001020 | 0.000380 | 0.000384 | 0.000220 | 0.000239 | 0.000245 | 0.000276 | 0.000541 | 0.000288 |
| 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 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 |

Licensee Comments: none

Reactor Coolant System Leakage



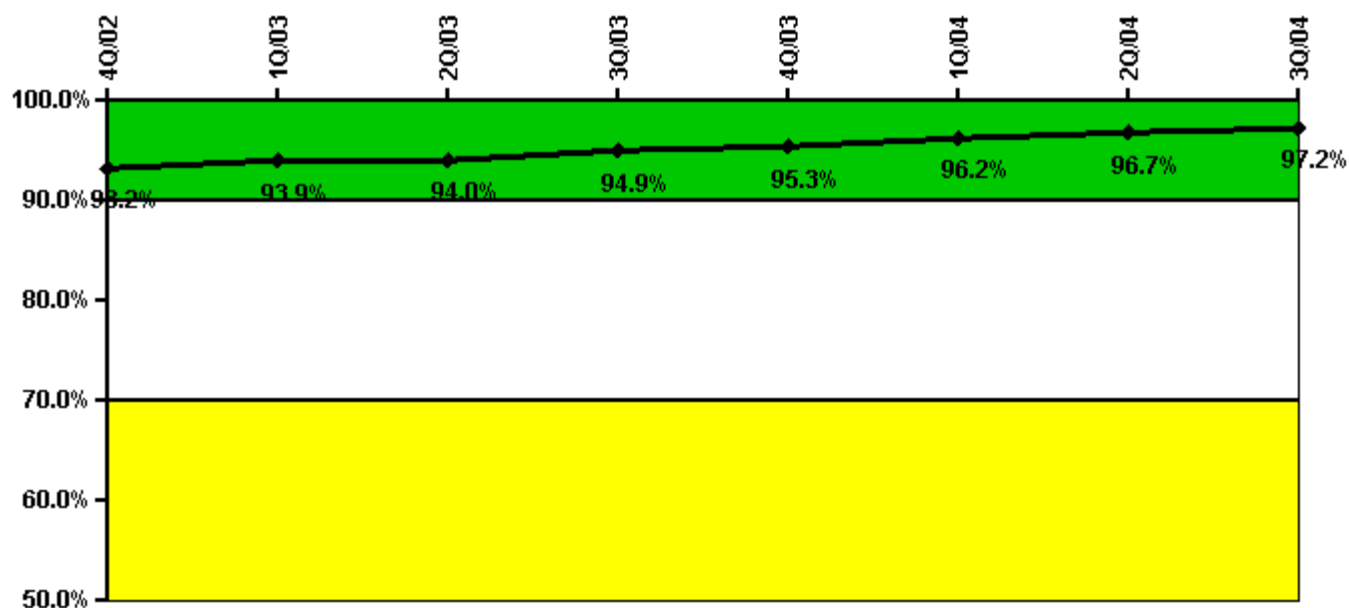
Thresholds: White > 50.0 Yellow > 100.0

Notes

| Reactor Coolant System Leakage | 10/02 | 11/02 | 12/02 | 1/03 | 2/03 | 3/03 | 4/03 | 5/03 | 6/03 | 7/03 | 8/03 | 9/03 |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum leakage | 0.182 | 0.192 | 0.204 | 0.199 | 0.180 | 0.199 | 0.247 | 0.212 | 0.188 | 0.185 | 0.155 | 0.157 |
| 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 | 1.8 | 1.9 | 2.0 | 2.0 | 1.8 | 2.0 | 2.5 | 2.1 | 1.9 | 1.9 | 1.6 | 1.6 |
| Reactor Coolant System Leakage | 10/03 | 11/03 | 12/03 | 1/04 | 2/04 | 3/04 | 4/04 | 5/04 | 6/04 | 7/04 | 8/04 | 9/04 |
| Maximum leakage | 0.152 | 0.148 | 0.172 | 0.156 | 0.154 | 0.174 | 0.064 | 0.051 | 0.060 | 0.067 | 0.054 | 0.049 |
| 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 | 1.5 | 1.5 | 1.7 | 1.6 | 1.5 | 1.7 | 0.6 | 0.5 | 0.6 | 0.7 | 0.5 | 0.5 |

Licensee Comments: none

Drill/Exercise Performance



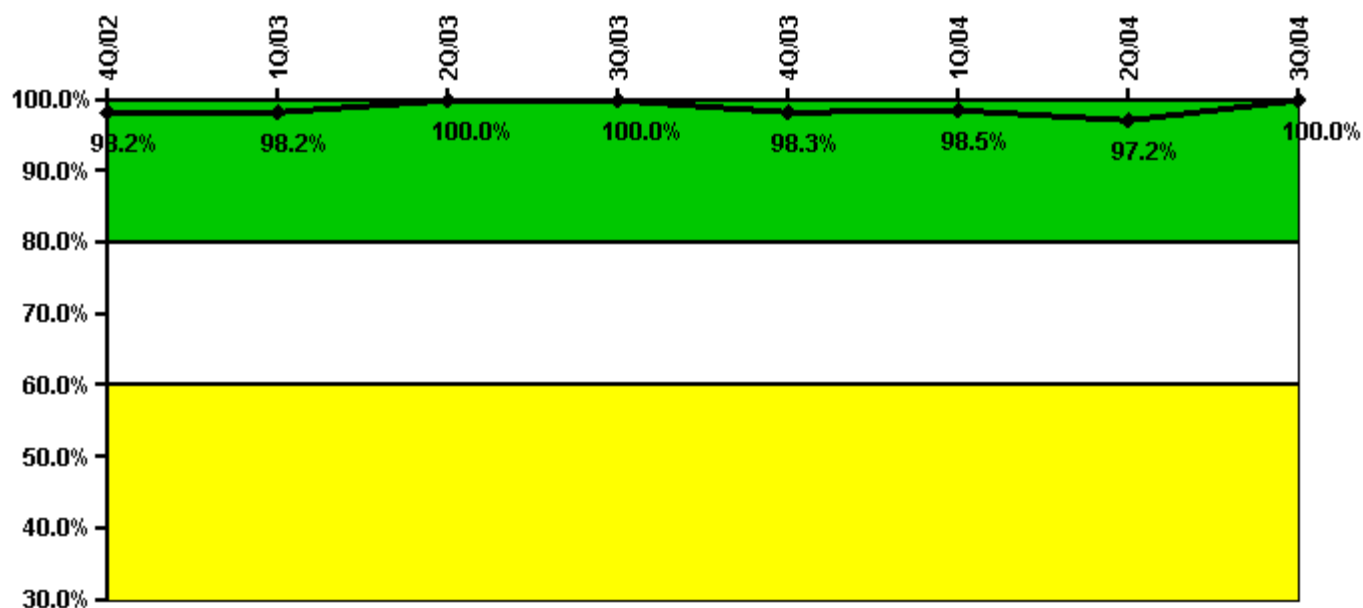
Thresholds: White < 90.0% Yellow < 70.0%

Notes

| Drill/Exercise Performance | 4Q/02 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 | 1Q/04 | 2Q/04 | 3Q/04 |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Successful opportunities | 43.0 | 39.0 | 36.0 | 45.0 | 18.0 | 50.0 | 62.0 | 93.0 |
| Total opportunities | 47.0 | 41.0 | 38.0 | 47.0 | 18.0 | 50.0 | 62.0 | 94.0 |
| Indicator value | 93.2% | 93.9% | 94.0% | 94.9% | 95.3% | 96.2% | 96.7% | 97.2% |

Licensee Comments: none

ERO Drill Participation



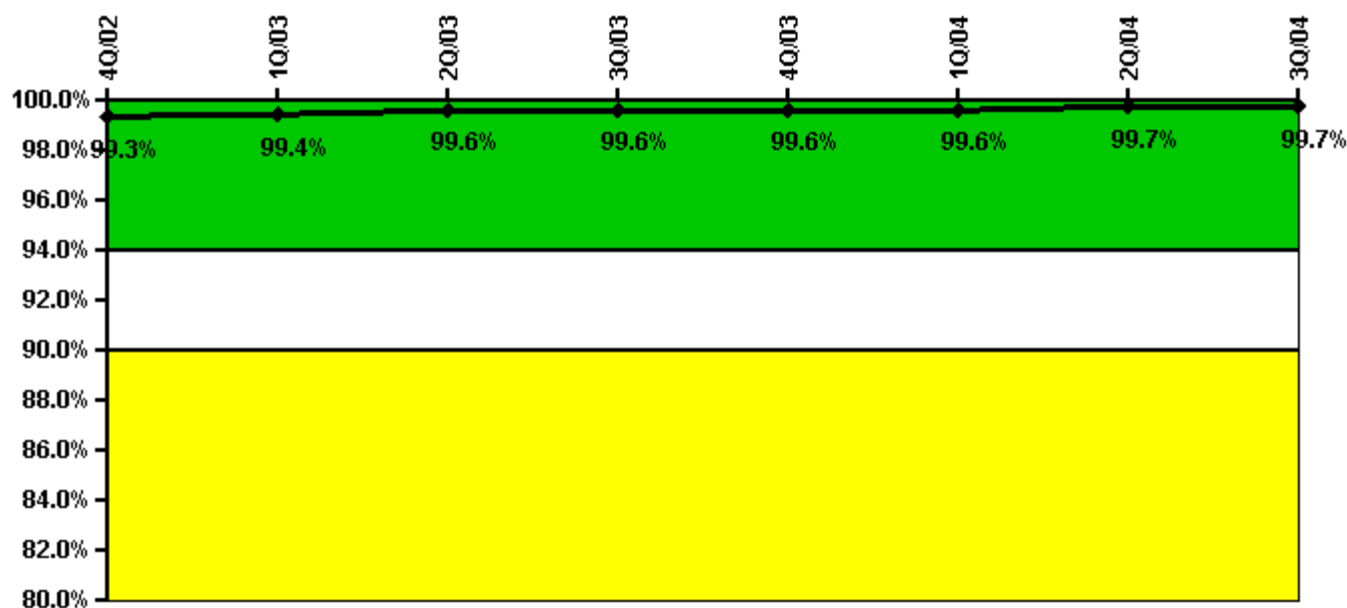
Thresholds: White < 80.0% Yellow < 60.0%

Notes

| ERO Drill Participation | 4Q/02 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 | 1Q/04 | 2Q/04 | 3Q/04 |
|-----------------------------|-------|-------|--------|--------|-------|-------|-------|--------|
| Participating Key personnel | 54.0 | 54.0 | 57.0 | 59.0 | 57.0 | 67.0 | 70.0 | 76.0 |
| Total Key personnel | 55.0 | 55.0 | 57.0 | 59.0 | 58.0 | 68.0 | 72.0 | 76.0 |
| Indicator value | 98.2% | 98.2% | 100.0% | 100.0% | 98.3% | 98.5% | 97.2% | 100.0% |

Licensee Comments: none

Alert & Notification System



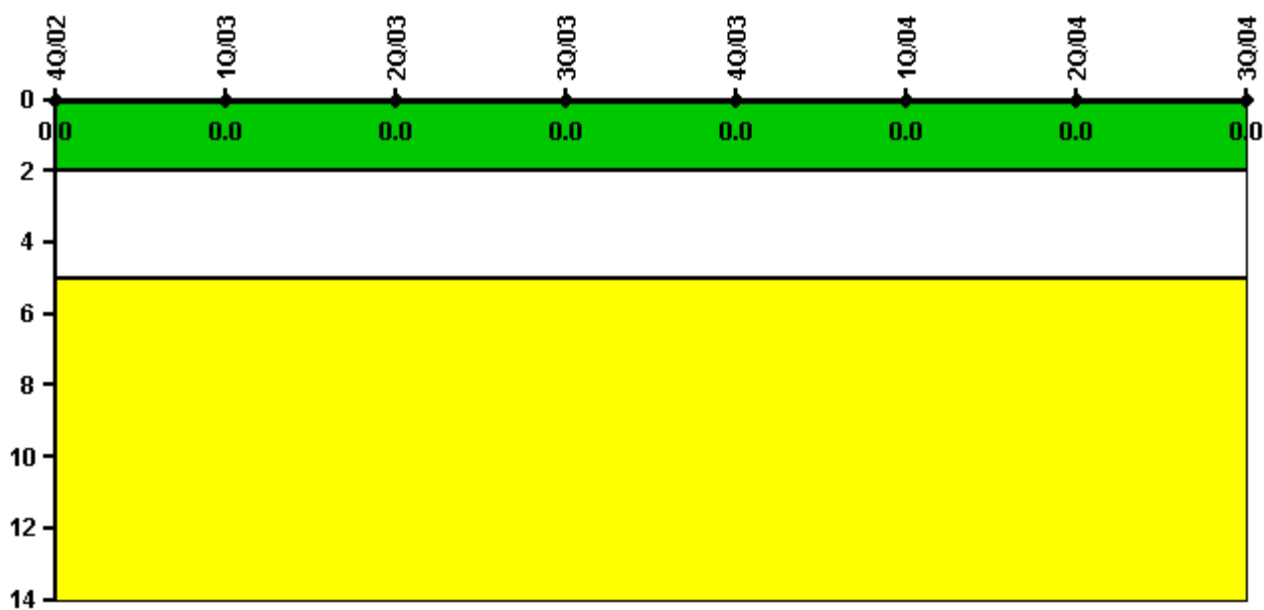
Thresholds: White < 94.0% Yellow < 90.0%

Notes

| Alert & Notification System | 4Q/02 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 | 1Q/04 | 2Q/04 | 3Q/04 |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Successful siren-tests | 5991 | 5898 | 5990 | 5988 | 5997 | 6000 | 5996 | 6093 |
| Total sirens-tests | 6016 | 5922 | 6016 | 6016 | 6016 | 6016 | 6016 | 6110 |
| Indicator value | 99.3% | 99.4% | 99.6% | 99.6% | 99.6% | 99.6% | 99.7% | 99.7% |

Licensee Comments: none

Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

Notes

| Occupational Exposure Control Effectiveness | 4Q/02 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 | 1Q/04 | 2Q/04 | 3Q/04 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|
| 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 | 0 | 0 | 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 | 4Q/02 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 | 1Q/04 | 2Q/04 | 3Q/04 |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| RETS/ODCM occurrences | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Indicator value | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Licensee Comments: none

[Physical Protection](#) information not publicly available.

▲ [Action Matrix Summary](#) | [Inspection Findings Summary](#) | [PI Summary](#) | [Reactor Oversight Process](#)

Last Modified: October 25, 2004