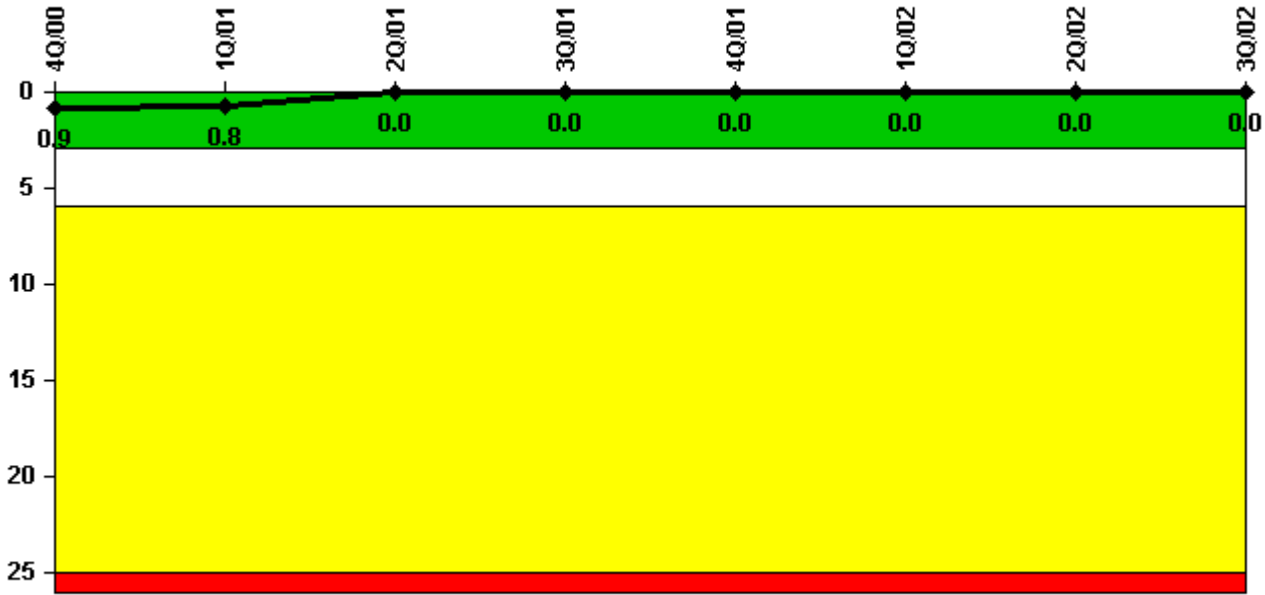


# Palisades

## 3Q/2002 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



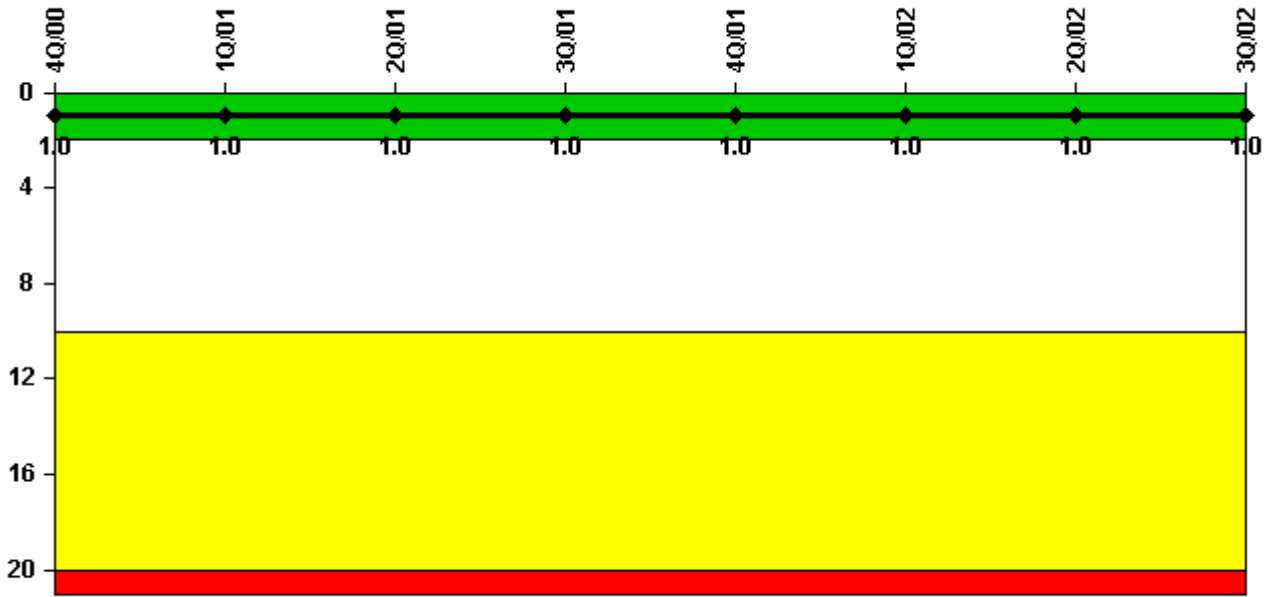
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

| Unplanned Scrams per 7000 Critical Hrs | 4Q/00  | 1Q/01  | 2Q/01  | 3Q/01 | 4Q/01 | 1Q/02  | 2Q/02  | 3Q/02  |
|--|--------|--------|--------|-------|-------|--------|--------|--------|
| Unplanned scrams                       | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      |
| Critical hours                         | 2209.0 | 2133.8 | 1050.3 | 0     | 0     | 1768.4 | 2183.0 | 2208.0 |
|  |        |        |        |       |       |        |        |        |
| Indicator value                        | 0.9    | 0.8    | 0      | 0     | 0     | 0      | 0      | 0      |

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



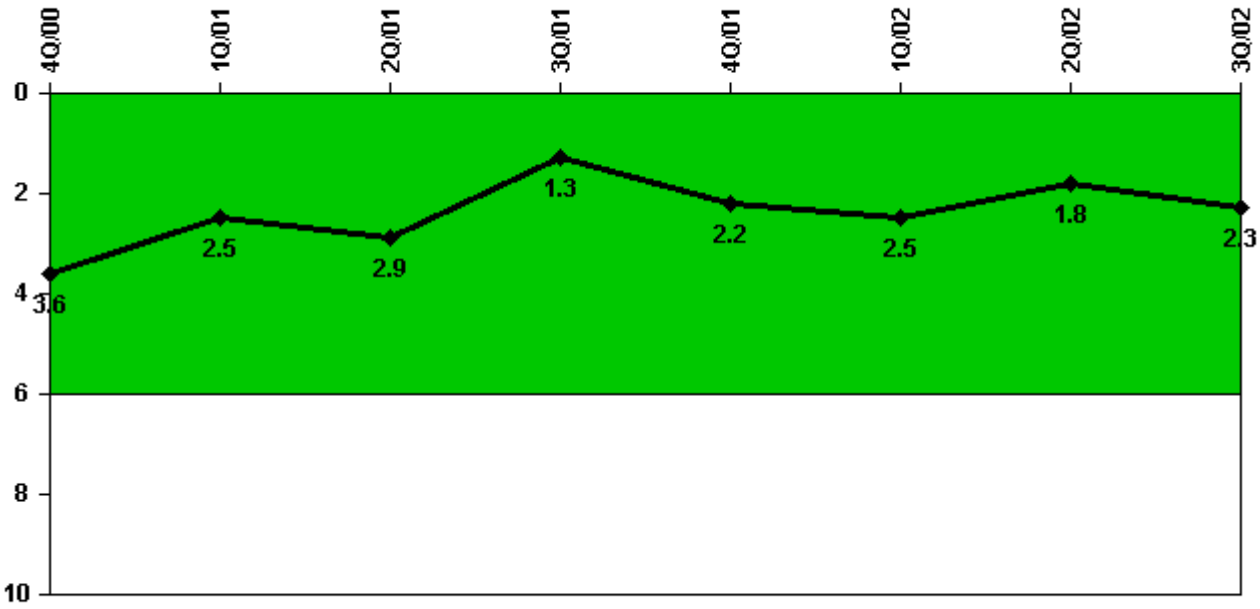
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

| Scrams with Loss of Normal Heat Removal | 4Q/00 | 1Q/01 | 2Q/01 | 3Q/01 | 4Q/01 | 1Q/02 | 2Q/02 | 3Q/02 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|
| Scrams                                  | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| Indicator value                         | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



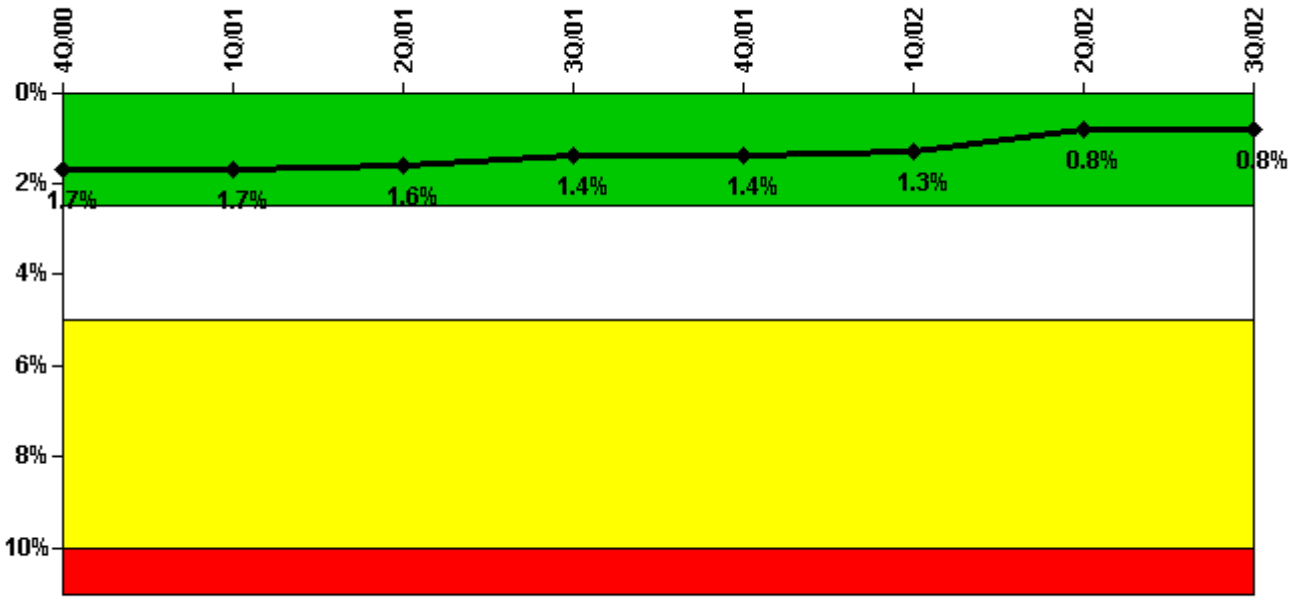
Thresholds: White > 6.0

#### Notes

| Unplanned Power Changes per 7000 Critical Hrs | 4Q/00  | 1Q/01  | 2Q/01  | 3Q/01 | 4Q/01 | 1Q/02  | 2Q/02  | 3Q/02  |
|---|--------|--------|--------|-------|-------|--------|--------|--------|
| Unplanned power changes                       | 0      | 0      | 1.0    | 0     | 0     | 0      | 1.0    | 1.0    |
| Critical hours                                | 2209.0 | 2133.8 | 1050.3 | 0     | 0     | 1768.4 | 2183.0 | 2208.0 |
|   |        |        |        |       |       |        |        |        |
| Indicator value                               | 3.6    | 2.5    | 2.9    | 1.3   | 2.2   | 2.5    | 1.8    | 2.3    |

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



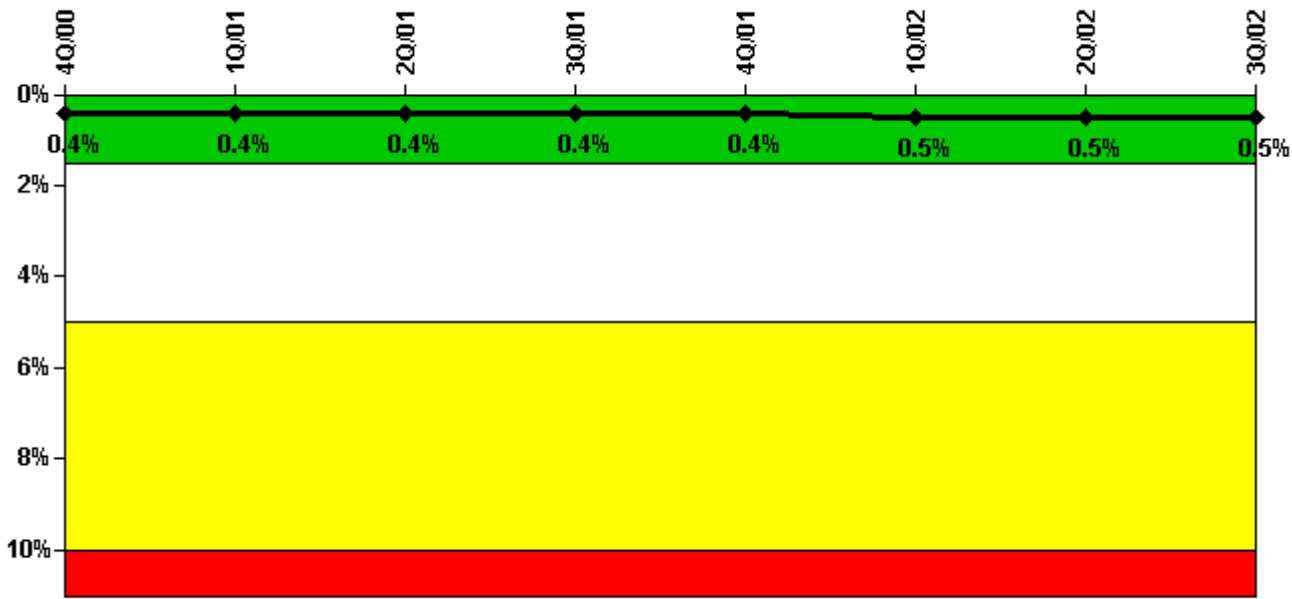
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

#### Notes

| Safety System Unavailability, Emergency AC Power | 4Q/00       | 1Q/01       | 2Q/01       | 3Q/01       | 4Q/01       | 1Q/02       | 2Q/02       | 3Q/02       |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Train 1</b>                                   |             |             |             |             |             |             |             |             |
| Planned unavailable hours                        | 55.88       | 19.62       | 0.67        | 0           | 0           | 0.57        | 47.22       | 3.75        |
| Unplanned unavailable hours                      | 49.28       | 0           | 0           | 0           | 0           | 0           | 0           | 5.72        |
| Fault exposure hours                             | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 4.57        |
| Effective Reset hours                            | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| Required hours                                   | 2209.00     | 2160.00     | 2183.00     | 2208.00     | 2209.00     | 2160.00     | 2183.00     | 2208.00     |
| <b>Train 2</b>                                   |             |             |             |             |             |             |             |             |
| Planned unavailable hours                        | 25.68       | 2.20        | 0.28        | 0           | 0           | 0.99        | 0.57        | 3.23        |
| Unplanned unavailable hours                      | 0           | 0           | 0           | 0           | 0           | 6.18        | 0           | 32.32       |
| 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     | 2160.00     | 2183.00     | 2208.00     |
|  |             |             |             |             |             |             |             |             |
| <b>Indicator value</b>                           | <b>1.7%</b> | <b>1.7%</b> | <b>1.6%</b> | <b>1.4%</b> | <b>1.4%</b> | <b>1.3%</b> | <b>0.8%</b> | <b>0.8%</b> |

Licensee Comments: none

### Safety System Unavailability, High Pressure Injection System (HPSI)



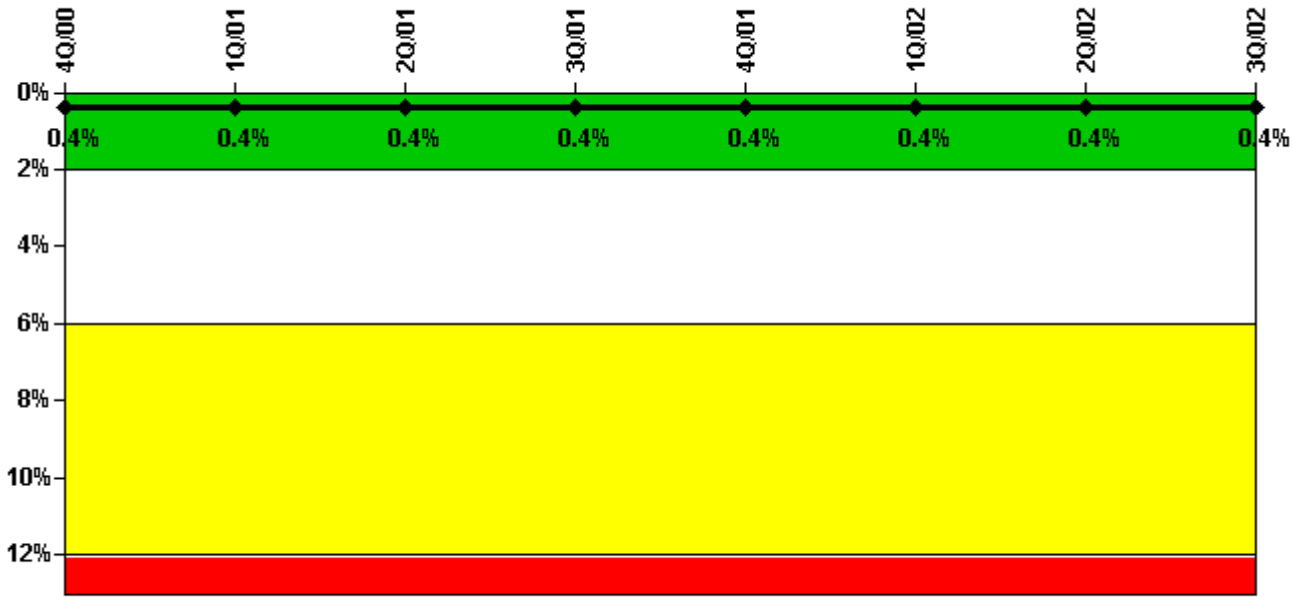
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

#### Notes

| Safety System Unavailability, High Pressure Injection System (HPSI) | 4Q/00   | 1Q/01   | 2Q/01   | 3Q/01 | 4Q/01 | 1Q/02   | 2Q/02   | 3Q/02   |
|---|---------|---------|---------|-------|-------|---------|---------|---------|
| <b>Train 1</b>  |         |         |         |       |       |         |         |         |
| Planned unavailable hours   | 14.52   | 16.59   | 0.27    | 0     | 0     | 10.93   | 0       | 6.06    |
| Unplanned unavailable hours   | 0       | 0       | 0       | 0     | 0     | 8.72    | 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 | 2146.67 | 1154.80 | 0     | 0     | 1851.33 | 2183.00 | 2208.00 |
| <b>Train 2</b>  |         |         |         |       |       |         |         |         |
| Planned unavailable hours   | 10.27   | 3.72    | 0       | 0     | 0     | 12.58   | 23.08   | 0.37    |
| Unplanned unavailable hours   | 0.27    | 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 | 2146.67 | 1154.80 | 0     | 0     | 1851.33 | 2183.00 | 2208.00 |
| Indicator value   | 0.4%    | 0.4%    | 0.4%    | 0.4%  | 0.4%  | 0.5%    | 0.5%    | 0.5%    |

Licensee Comments: none

### Safety System Unavailability, Heat Removal System (AFW)



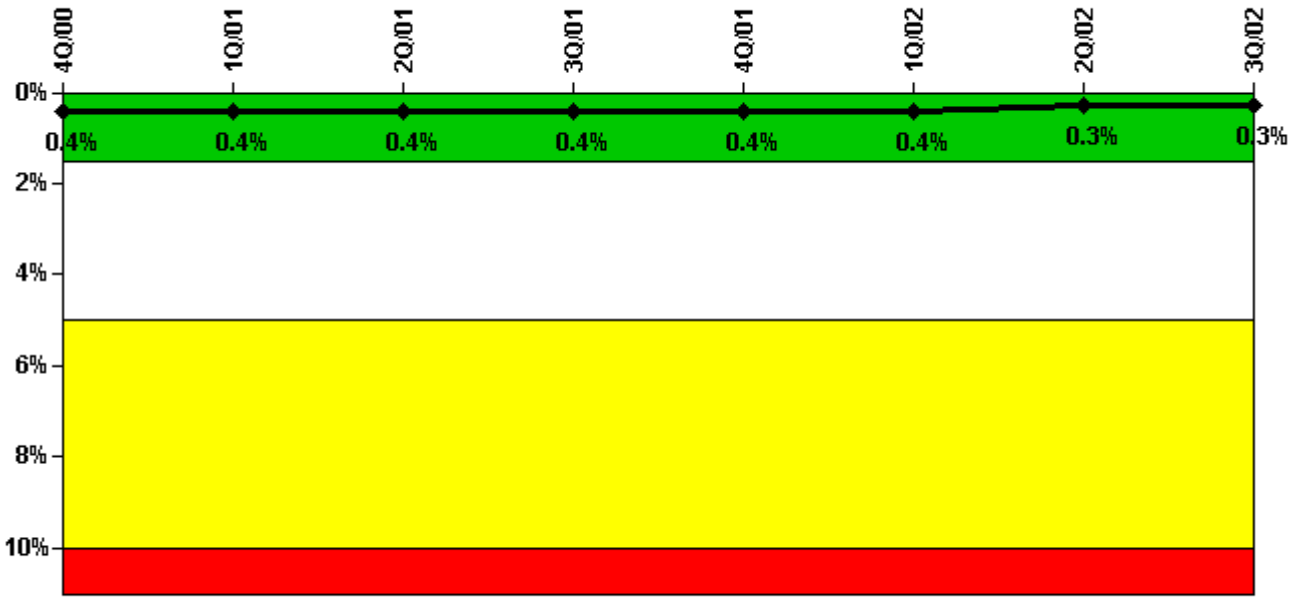
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

#### Notes

| Safety System Unavailability, Heat Removal System (AFW) | 4Q/00   | 1Q/01   | 2Q/01   | 3Q/01 | 4Q/01 | 1Q/02   | 2Q/02   | 3Q/02   |
|---|---------|---------|---------|-------|-------|---------|---------|---------|
| <b>Train 1</b>  |         |         |         |       |       |         |         |         |
| Planned unavailable hours                               | 36.22   | 22.06   | 0.73    | 0     | 0     | 4.40    | 2.48    | 6.18    |
| 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 | 2146.67 | 1154.80 | 0     | 0     | 1851.33 | 2183.00 | 2208.00 |
| <b>Train 2</b>  |         |         |         |       |       |         |         |         |
| Planned unavailable hours                               | 5.64    | 8.90    | 0       | 0     | 0     | 1.22    | 3.55    | 6.18    |
| 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 | 2146.67 | 1072.40 | 0     | 0     | 1768.40 | 2183.00 | 2208.00 |
| <b>Train 3</b>  |         |         |         |       |       |         |         |         |
| Planned unavailable hours                               | 0.77    | 9.84    | 0       | 0     | 0     | 1.08    | 0.73    | 9.30    |
| 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 | 2146.67 | 1154.80 | 0     | 0     | 1851.33 | 2183.00 | 2208.00 |
| Indicator value   | 0.4%    | 0.4%    | 0.4%    | 0.4%  | 0.4%  | 0.4%    | 0.4%    | 0.4%    |

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



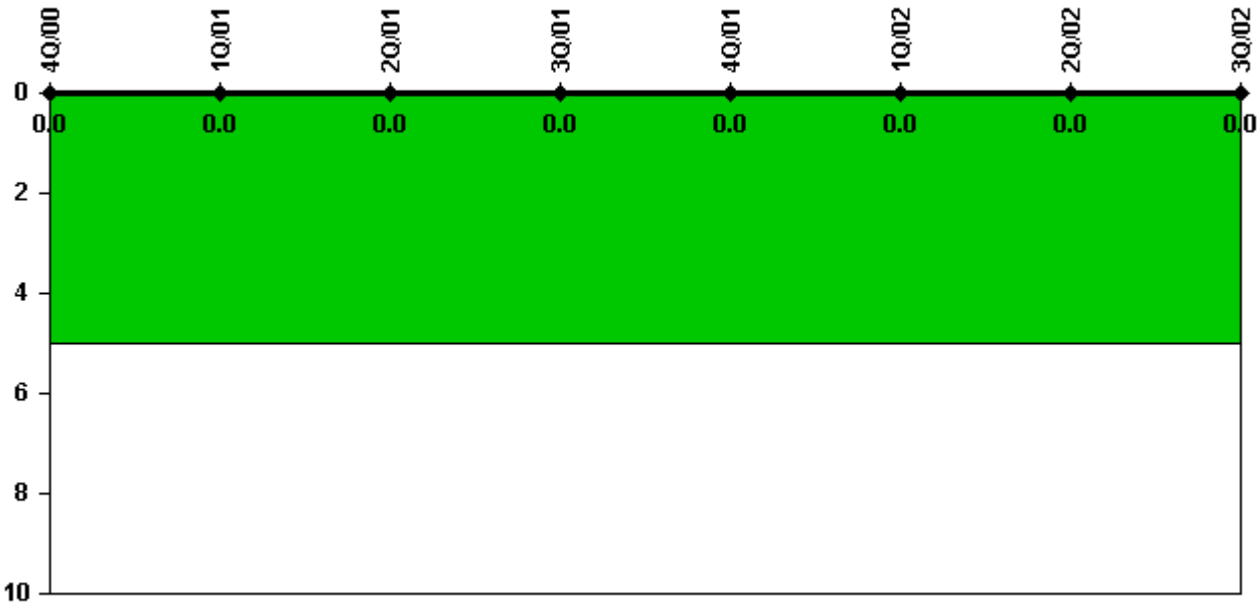
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

**Notes**

| Safety System Unavailability, Residual Heat Removal System | 4Q/00       | 1Q/01       | 2Q/01       | 3Q/01       | 4Q/01       | 1Q/02       | 2Q/02       | 3Q/02       |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Train 1</b>   |             |             |             |             |             |             |             |             |
| Planned unavailable hours                                  | 3.49        | 1.14        | 0.83        | 0           | 0           | 2.30        | 0.92        | 1.01        |
| 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     | 2146.67     | 1154.80     | 0           | 0           | 1851.33     | 2183.00     | 2208.00     |
| <b>Train 2</b>   |             |             |             |             |             |             |             |             |
| Planned unavailable hours                                  | 3.67        | 1.17        | 0           | 0           | 0           | 0           | 0.66        | 0           |
| 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     | 2146.67     | 1154.80     | 0           | 0           | 1851.33     | 2183.00     | 2208.00     |
| <b>Train 3</b>   |             |             |             |             |             |             |             |             |
| Planned unavailable hours                                  | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 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   | 0           | 0           | 900.70      | 2208.00     | 2209.00     | 302.12      | 0           | 0           |
| <b>Train 4</b>   |             |             |             |             |             |             |             |             |
| Planned unavailable hours                                  | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| 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   | 0           | 0           | 789.90      | 2208.00     | 2209.00     | 302.12      | 0           | 0           |
| <b>Indicator value</b>                                     | <b>0.4%</b> | <b>0.4%</b> | <b>0.4%</b> | <b>0.4%</b> | <b>0.4%</b> | <b>0.4%</b> | <b>0.3%</b> | <b>0.3%</b> |

Licensee Comments: none

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

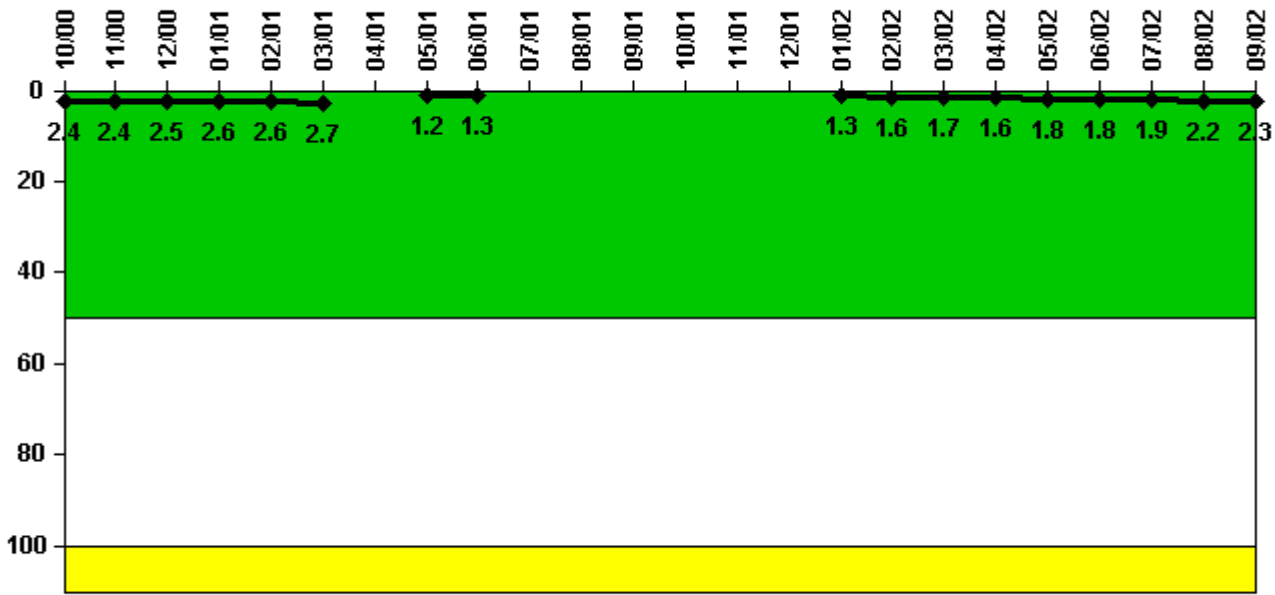
#### Notes

| Safety System Functional Failures (PWR) | 4Q/00 | 1Q/01 | 2Q/01 | 3Q/01 | 4Q/01 | 1Q/02 | 2Q/02 | 3Q/02 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|
| 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

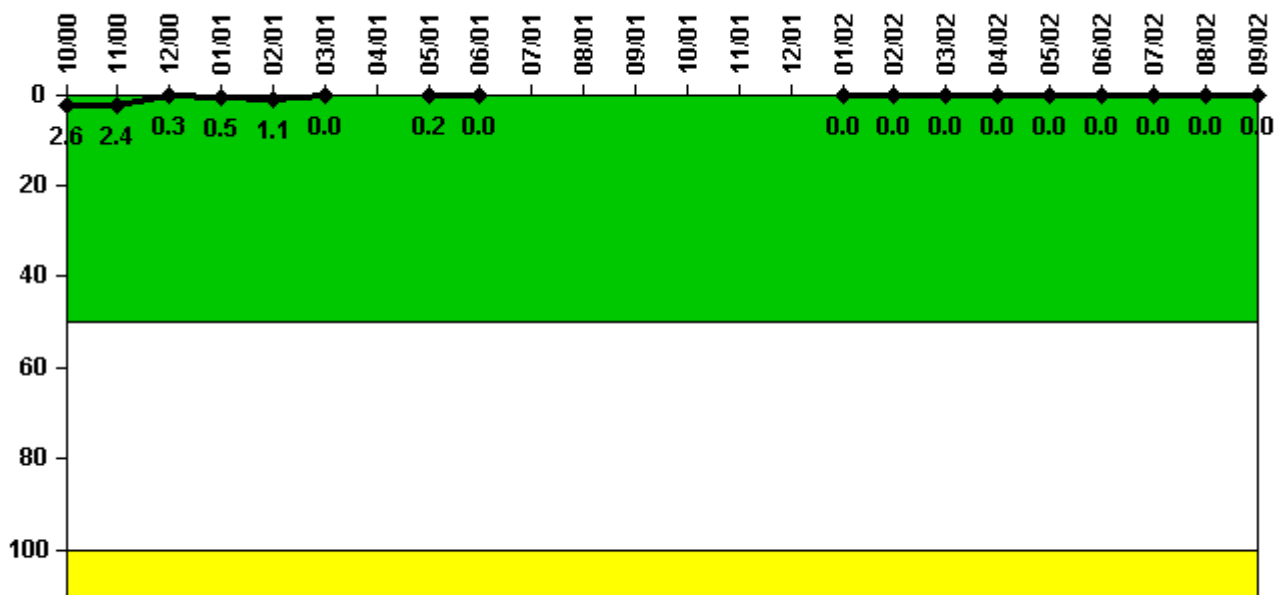
| Reactor Coolant System Activity | 10/00    | 11/00    | 12/00    | 1/01     | 2/01     | 3/01     | 4/01 | 5/01     | 6/01     | 7/01 | 8/01 | 9/01 |
|---------------------------------|----------|----------|----------|----------|----------|----------|------|----------|----------|------|------|------|
| Maximum activity                | 0.024000 | 0.024300 | 0.024800 | 0.026300 | 0.025600 | 0.026500 | N/A  | 0.012300 | 0.013000 | N/A  | N/A  | N/A  |
| Technical specification limit   | 1.0      | 1.0      | 1.0      | 1.0      | 1.0      | 1.0      | N/A  | 1.0      | 1.0      | 1.0  | 1.0  | 1.0  |
| Indicator value                 | 2.4      | 2.4      | 2.5      | 2.6      | 2.6      | 2.7      | N/A  | 1.2      | 1.3      | N/A  | N/A  | N/A  |

| Reactor Coolant System Activity | 10/01 | 11/01 | 12/01 | 1/02     | 2/02     | 3/02     | 4/02     | 5/02     | 6/02     | 7/02     | 8/02     | 9/02     |
|---------------------------------|-------|-------|-------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Maximum activity                | N/A   | N/A   | N/A   | 0.013300 | 0.016400 | 0.017300 | 0.016300 | 0.018100 | 0.018100 | 0.019300 | 0.021700 | 0.022700 |
| 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   | N/A   | 1.3      | 1.6      | 1.7      | 1.6      | 1.8      | 1.8      | 1.9      | 2.2      | 2.3      |

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

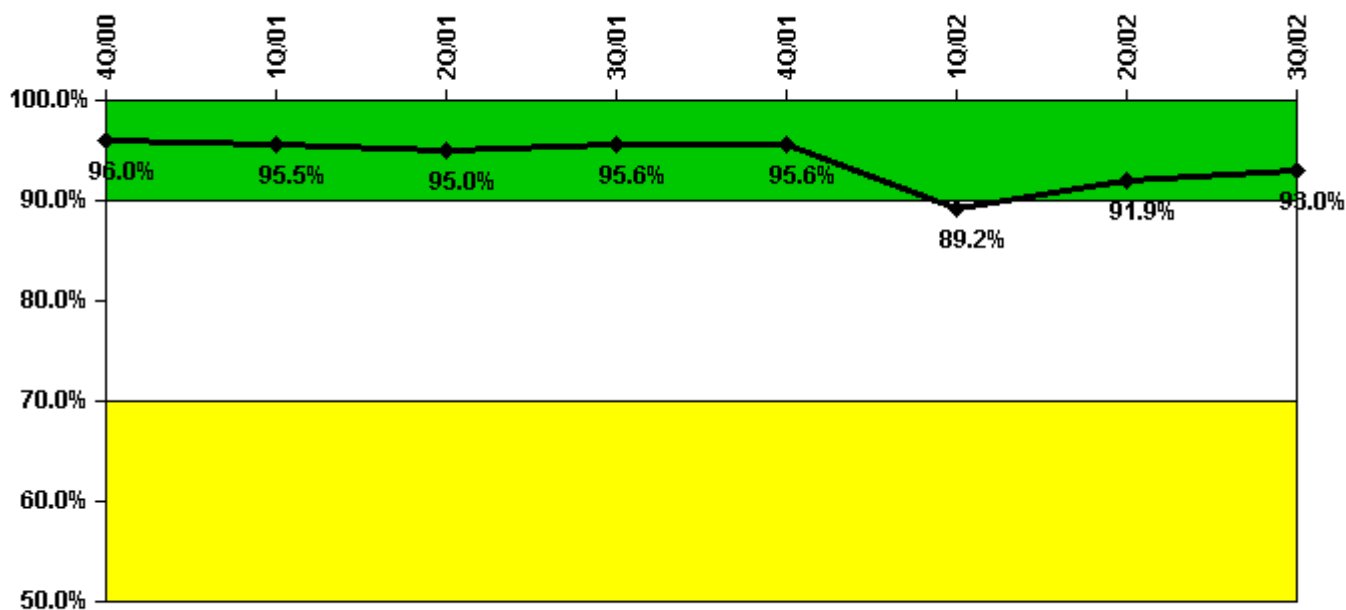
| Reactor Coolant System Leakage | 10/00 | 11/00 | 12/00 | 1/01  | 2/01  | 3/01 | 4/01 | 5/01  | 6/01  | 7/01 | 8/01 | 9/01 |
|--------------------------------|-------|-------|-------|-------|-------|------|------|-------|-------|------|------|------|
| Maximum leakage                | 0.261 | 0.241 | 0.030 | 0.047 | 0.112 | 0    | N/A  | 0.015 | 0.003 | N/A  | N/A  | N/A  |
| Technical specification limit  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0 | N/A  | 10.0  | 10.0  | 10.0 | 10.0 | 10.0 |
| Indicator value                | 2.6   | 2.4   | 0.3   | 0.5   | 1.1   | 0    | N/A  | 0.2   | 0     | N/A  | N/A  | N/A  |

| Reactor Coolant System Leakage | 10/01 | 11/01 | 12/01 | 1/02  | 2/02 | 3/02 | 4/02  | 5/02 | 6/02  | 7/02  | 8/02  | 9/02  |
|--------------------------------|-------|-------|-------|-------|------|------|-------|------|-------|-------|-------|-------|
| Maximum leakage                | N/A   | N/A   | N/A   | 0.003 | 0    | 0    | 0.002 | 0    | 0.002 | 0.002 | 0.002 | 0.001 |
| 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                | N/A   | N/A   | N/A   | 0     | 0    | 0    | 0     | 0    | 0     | 0     | 0     | 0     |

Licensee Comments: none

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

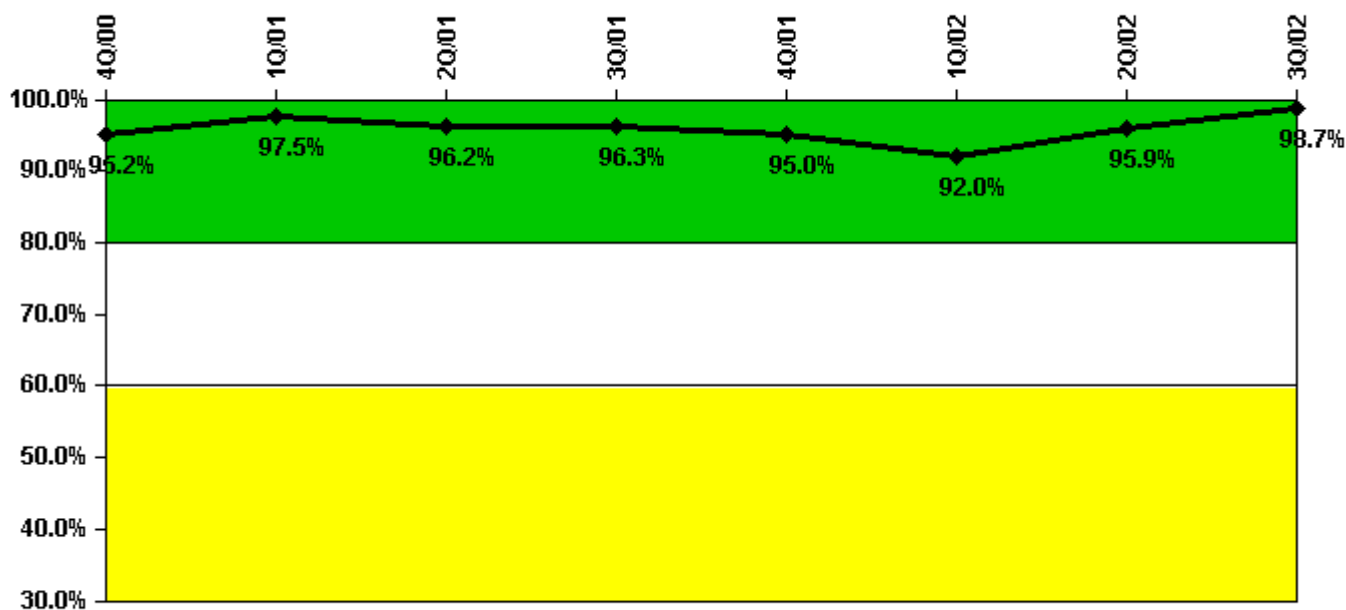
### Notes

| Drill/Exercise Performance | 4Q/00 | 1Q/01 | 2Q/01 | 3Q/01 | 4Q/01 | 1Q/02 | 2Q/02 | 3Q/02 |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Successful opportunities   | 10.0  | 13.0  | 0     | 2.0   | 0     | 15.0  | 69.0  | 11.0  |
| Total opportunities        | 10.0  | 14.0  | 0     | 2.0   | 0     | 20.0  | 72.0  | 11.0  |
|                            |       |       |       |       |       |       |       |       |
| Indicator value            | 96.0% | 95.5% | 95.0% | 95.6% | 95.6% | 89.2% | 91.9% | 93.0% |

Licensee Comments:

1Q/02: Changed the number of drill, exercises, and actual event opportunities from 17 to 15 as a result of assessing operator simulator scenario off site notification forms. Two forms were discovered that were not checked either "this is a drill" or "this is not a drill." Errors in the notification forms were discovered and documented in NRC Inspection Report 50-255/02-06(DRS) and were evaluated internally via C-PAL-02-02177.

### ERO Drill Participation



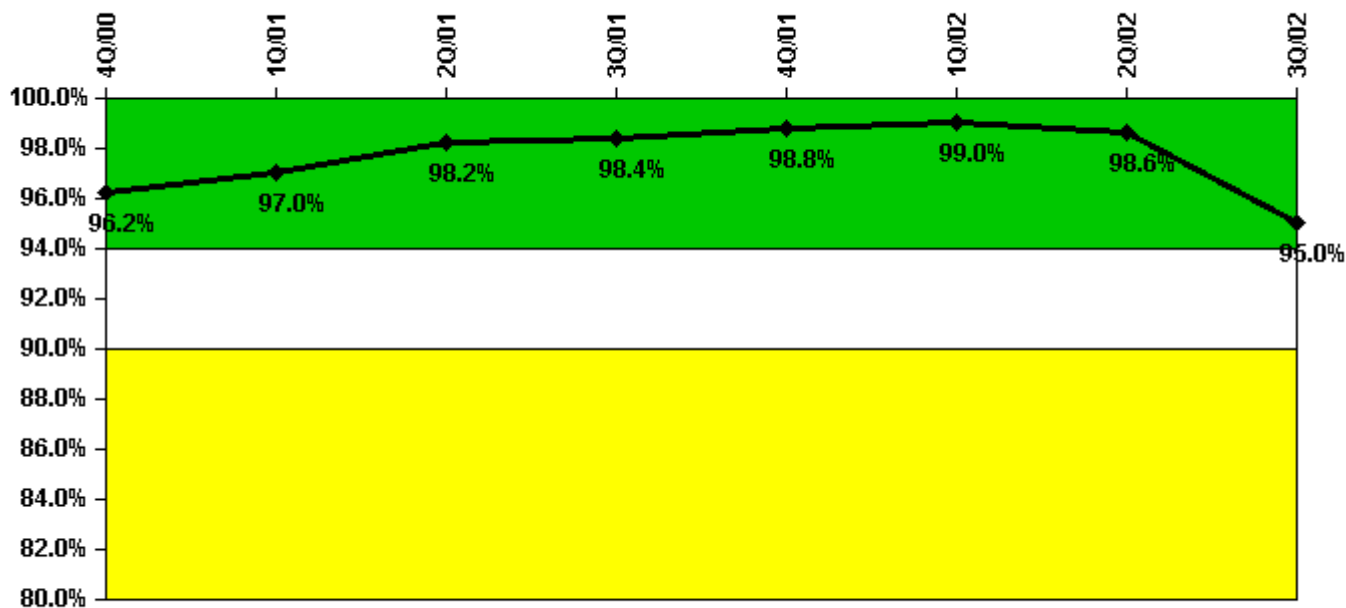
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

| ERO Drill Participation     | 4Q/00 | 1Q/01 | 2Q/01 | 3Q/01 | 4Q/01 | 1Q/02 | 2Q/02 | 3Q/02 |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Participating Key personnel | 79.0  | 78.0  | 76.0  | 77.0  | 76.0  | 69.0  | 71.0  | 74.0  |
| Total Key personnel         | 83.0  | 80.0  | 79.0  | 80.0  | 80.0  | 75.0  | 74.0  | 75.0  |
|                             |       |       |       |       |       |       |       |       |
| Indicator value             | 95.2% | 97.5% | 96.2% | 96.3% | 95.0% | 92.0% | 95.9% | 98.7% |

Licensee Comments: none

### Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

| Alert & Notification System | 4Q/00 | 1Q/01 | 2Q/01 | 3Q/01 | 4Q/01 | 1Q/02 | 2Q/02 | 3Q/02 |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Successful siren-tests      | 246   | 249   | 251   | 246   | 250   | 251   | 247   | 210   |
| Total sirens-tests          | 252   | 252   | 252   | 252   | 252   | 252   | 252   | 252   |
|                             |       |       |       |       |       |       |       |       |
| Indicator value             | 96.2% | 97.0% | 98.2% | 98.4% | 98.8% | 99.0% | 98.6% | 95.0% |

Licensee Comments: none

### Occupational Exposure Control Effectiveness



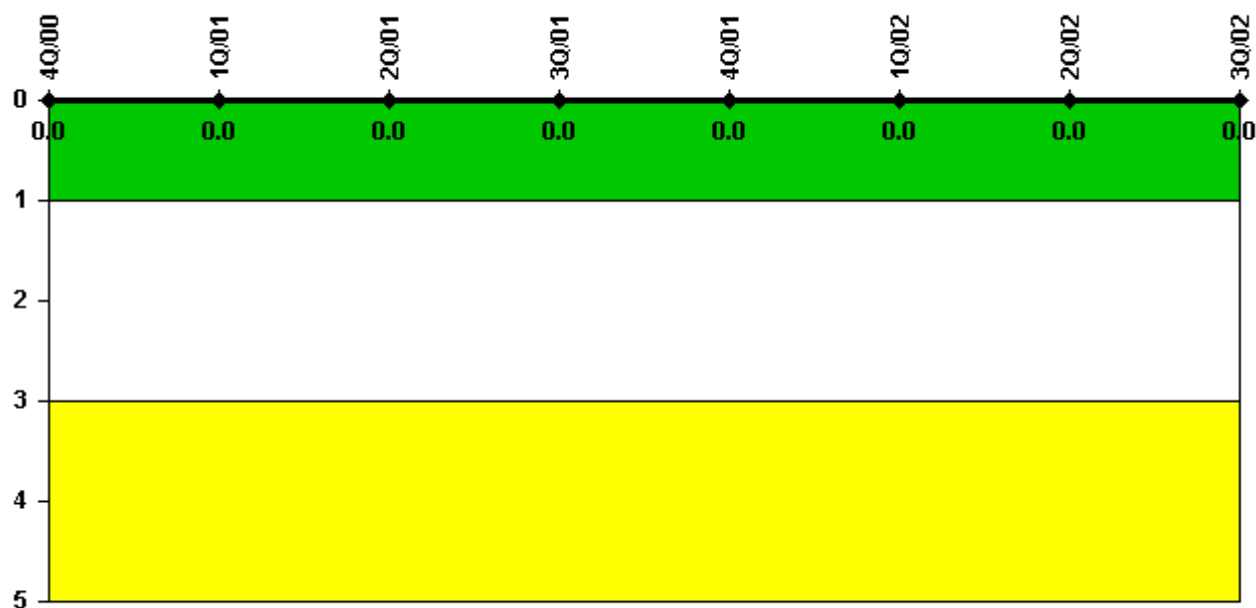
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

| Occupational Exposure Control Effectiveness | 4Q/00 | 1Q/01 | 2Q/01 | 3Q/01 | 4Q/01 | 1Q/02 | 2Q/02 | 3Q/02 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|
| 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



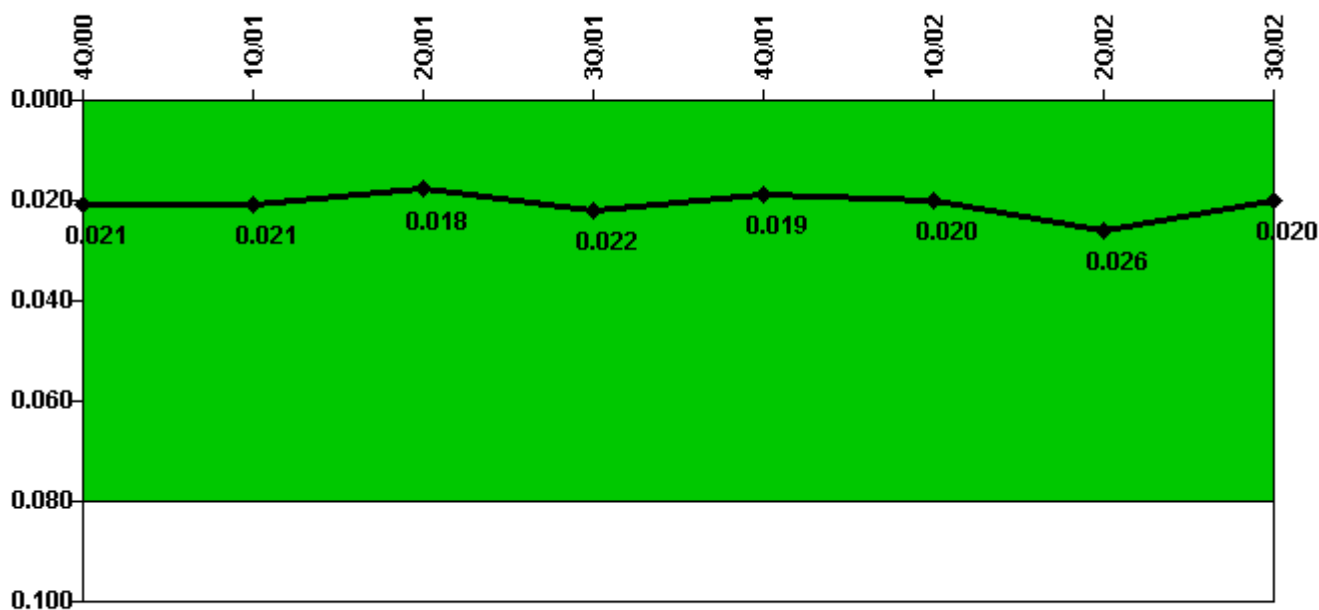
Thresholds: White > 1.0 Yellow > 3.0

**Notes**

| RETS/ODCM Radiological Effluent | 4Q/00 | 1Q/01 | 2Q/01 | 3Q/01 | 4Q/01 | 1Q/02 | 2Q/02 | 3Q/02 |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| RETS/ODCM occurrences           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
|                                 |       |       |       |       |       |       |       |       |
| Indicator value                 | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |

Licensee Comments: none

### Protected Area Security Performance Index



Thresholds: White > 0.080

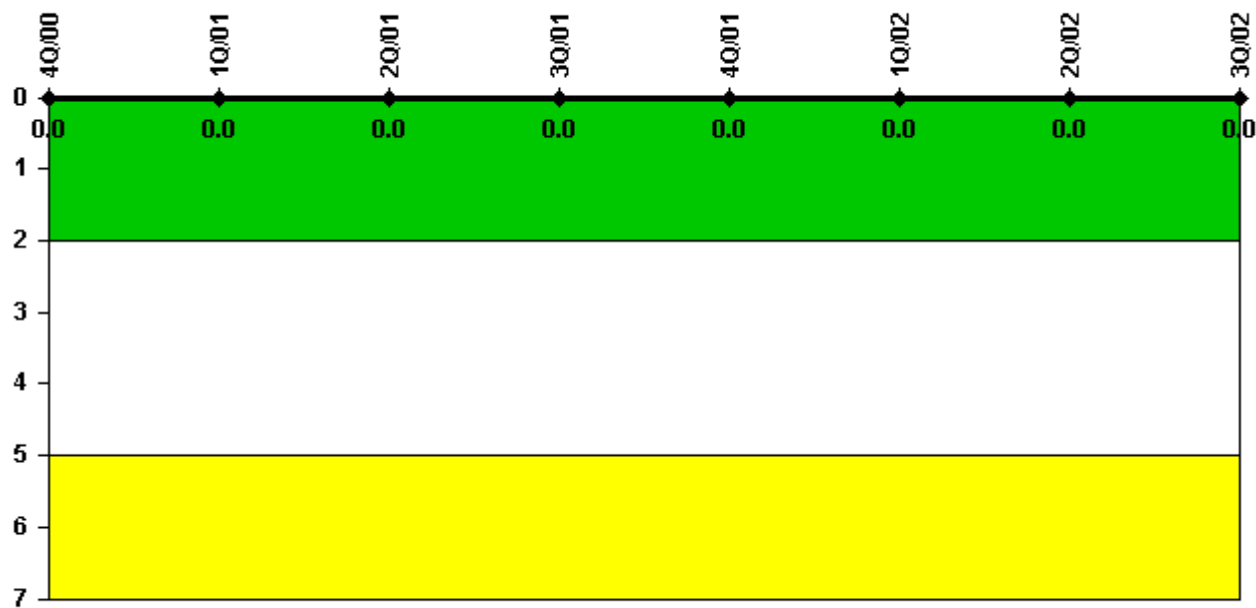
#### Notes

| Protected Area Security Performance Index | 4Q/00  | 1Q/01 | 2Q/01  | 3Q/01  | 4Q/01  | 1Q/02 | 2Q/02  | 3Q/02 |
|---|--------|-------|--------|--------|--------|-------|--------|-------|
| IDS compensatory hours                    | 196.99 | 64.37 | 126.28 | 163.03 | 136.99 | 74.69 | 279.20 | 22.20 |
| CCTV compensatory hours                   | 0      | 0     | 0      | 0      | 0      | 0     | 0      | 0     |
| IDS normalization factor                  | 1.45   | 1.45  | 1.45   | 1.45   | 1.45   | 1.45  | 1.45   | 1.45  |
| CCTV normalization factor                 | 1.0    | 1.0   | 1.0    | 1.0    | 1.0    | 1.0   | 1.0    | 1.0   |
|   |        |       |        |        |        |       |        |       |
| Index Value                               | 0.021  | 0.021 | 0.018  | 0.022  | 0.019  | 0.020 | 0.026  | 0.020 |

Licensee Comments: none



### Personnel Screening Program



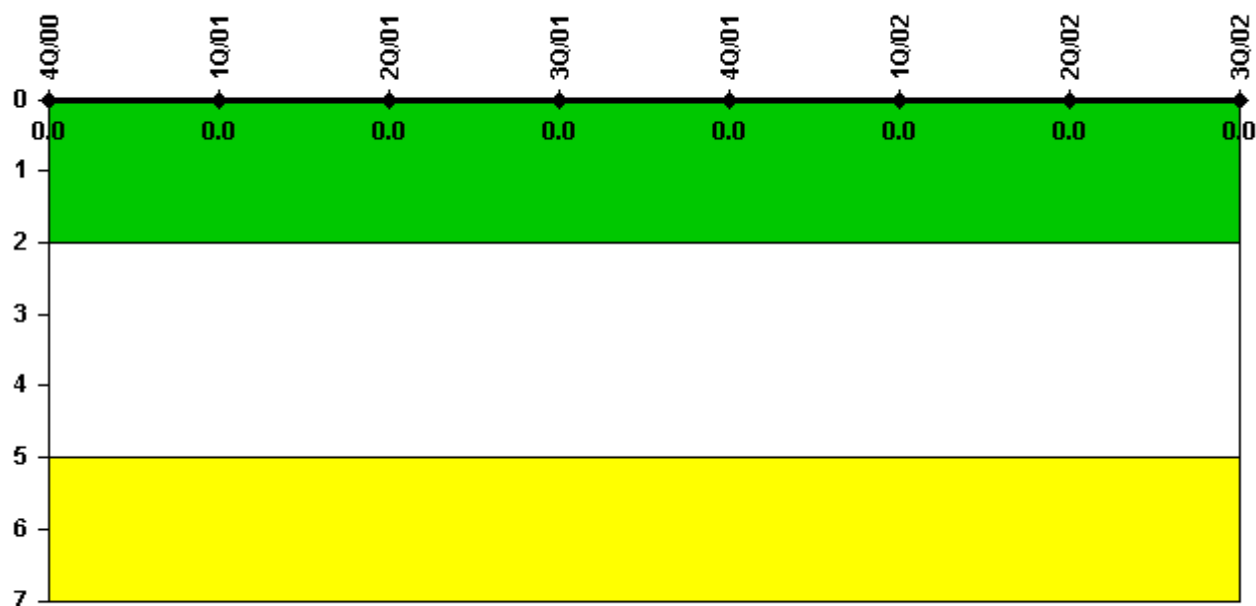
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

| Personnel Screening Program | 4Q/00 | 1Q/01 | 2Q/01 | 3Q/01 | 4Q/01 | 1Q/02 | 2Q/02 | 3Q/02 |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Program failures            | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
|                             |       |       |       |       |       |       |       |       |
| Indicator value             | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |

Licensee Comments: none

### FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

| FFD/Personnel Reliability | 4Q/00 | 1Q/01 | 2Q/01 | 3Q/01 | 4Q/01 | 1Q/02 | 2Q/02 | 3Q/02 |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Program Failures          | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
|                           |       |       |       |       |       |       |       |       |
| Indicator value           | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |

Licensee Comments: none

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

Last Modified: October 22, 2002