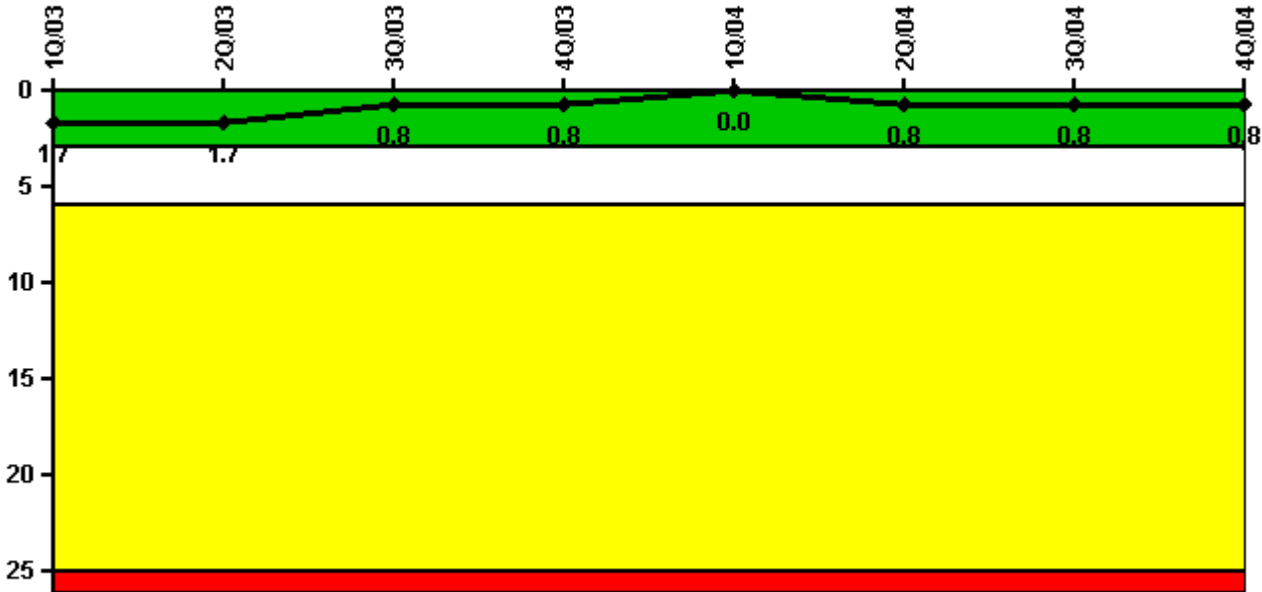


## Limerick 2

### 4Q/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 | 1Q/03  | 2Q/03  | 3Q/03  | 4Q/03  | 1Q/04  | 2Q/04  | 3Q/04  | 4Q/04  |
|--|--------|--------|--------|--------|--------|--------|--------|--------|
| Unplanned scrams                       | 1.0    | 0      | 0      | 0      | 0      | 1.0    | 0      | 0      |
| Critical hours                         | 1722.6 | 2183.0 | 2208.0 | 2209.0 | 2184.0 | 2152.1 | 2208.0 | 2209.0 |
| Indicator value                        | 1.7    | 1.7    | 0.8    | 0.8    | 0      | 0.8    | 0.8    | 0.8    |

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



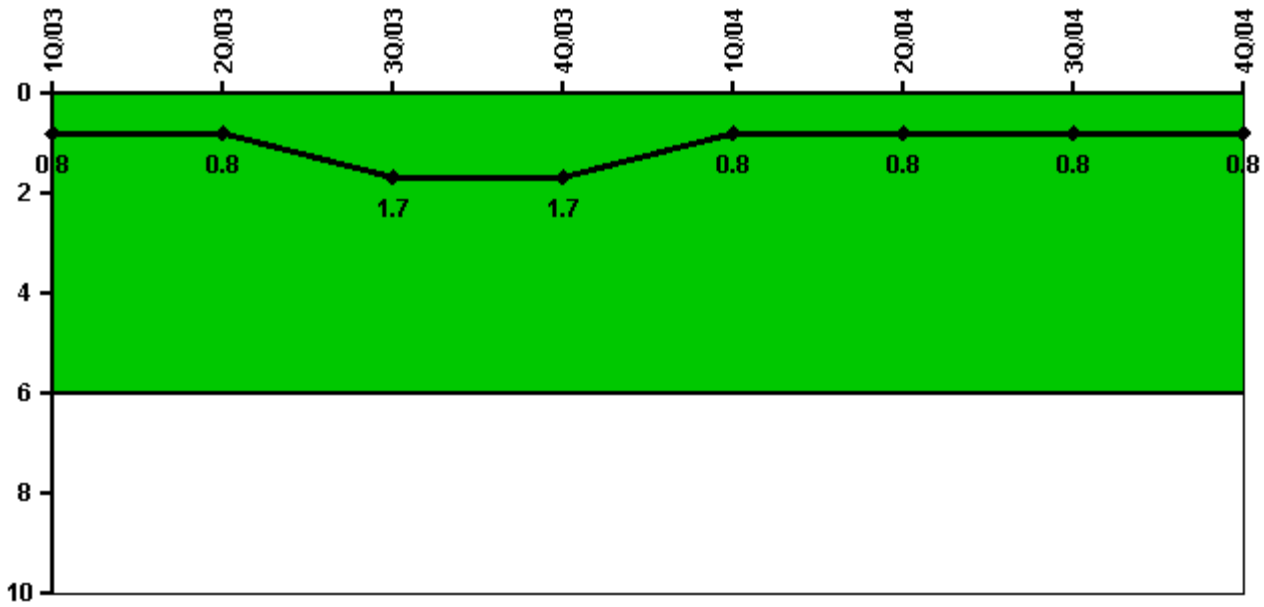
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

| Scrams with Loss of Normal Heat Removal | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 | 1Q/04 | 2Q/04 | 3Q/04 | 4Q/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



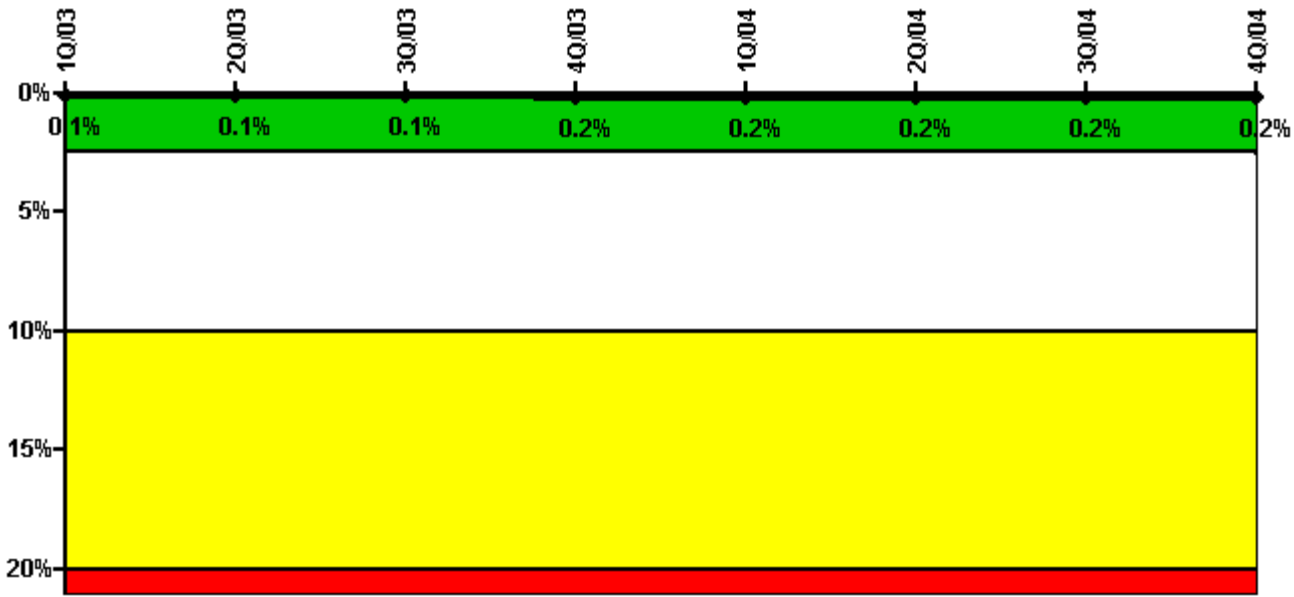
Thresholds: White > 6.0

#### Notes

| Unplanned Power Changes per 7000 Critical Hrs | 1Q/03  | 2Q/03  | 3Q/03  | 4Q/03  | 1Q/04  | 2Q/04  | 3Q/04  | 4Q/04  |
|---|--------|--------|--------|--------|--------|--------|--------|--------|
| Unplanned power changes                       | 1.0    | 0      | 1.0    | 0      | 0      | 0      | 1.0    | 0      |
| Critical hours                                | 1722.6 | 2183.0 | 2208.0 | 2209.0 | 2184.0 | 2152.1 | 2208.0 | 2209.0 |
| Indicator value                               | 0.8    | 0.8    | 1.7    | 1.7    | 0.8    | 0.8    | 0.8    | 0.8    |

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power, >2EDG



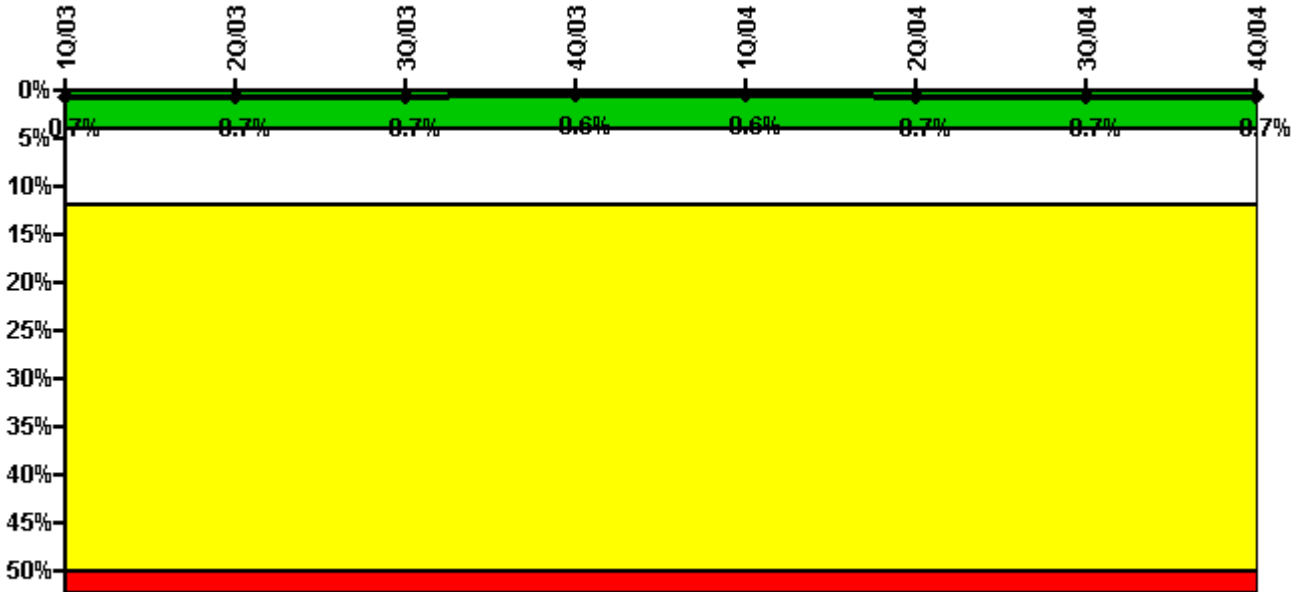
Thresholds: White > 2.5% Yellow > 10.0% Red > 20.0%

#### Notes

| Safety System Unavailability, Emergency AC Power, >2EDG | 1Q/03       | 2Q/03       | 3Q/03       | 4Q/03       | 1Q/04       | 2Q/04       | 3Q/04       | 4Q/04       |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Train 1</b>  |             |             |             |             |             |             |             |             |
| Planned unavailable hours                               | 0           | 1.68        | 0           | 0.57        | 0.33        | 0           | 0.92        | 0           |
| Unplanned unavailable hours                             | 0           | 0           | 0           | 0           | 11.27       | 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  | 1951.30     | 2183.00     | 2208.00     | 2209.00     | 2184.00     | 2183.00     | 2208.00     | 2209.00     |
| <b>Train 2</b>  |             |             |             |             |             |             |             |             |
| Planned unavailable hours                               | 6.64        | 2.65        | 1.12        | 1.08        | 6.55        | 0           | 0           | 0           |
| Unplanned unavailable hours                             | 7.35        | 2.85        | 0           | 0           | 3.78        | 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  | 1951.30     | 2183.00     | 2208.00     | 2209.00     | 2184.00     | 2183.00     | 2208.00     | 2209.00     |
| <b>Train 3</b>  |             |             |             |             |             |             |             |             |
| Planned unavailable hours                               | 0           | 0.82        | 0.62        | 0.87        | 0           | 9.13        | 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  | 1951.30     | 2183.00     | 2208.00     | 2209.00     | 2184.00     | 2183.00     | 2208.00     | 2209.00     |
| <b>Train 4</b>  |             |             |             |             |             |             |             |             |
| Planned unavailable hours                               | 6.65        | 1.12        | 0.90        | 0           | 0           | 2.23        | 0           | 0           |
| Unplanned unavailable hours                             | 0           | 0           | 0           | 47.95       | 2.57        | 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  | 1951.30     | 2183.00     | 2208.00     | 2209.00     | 2184.00     | 2183.00     | 2208.00     | 2209.00     |
| <b>Indicator value</b>                                  | <b>0.1%</b> | <b>0.1%</b> | <b>0.1%</b> | <b>0.2%</b> | <b>0.2%</b> | <b>0.2%</b> | <b>0.2%</b> | <b>0.2%</b> |

Licensee Comments: none

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



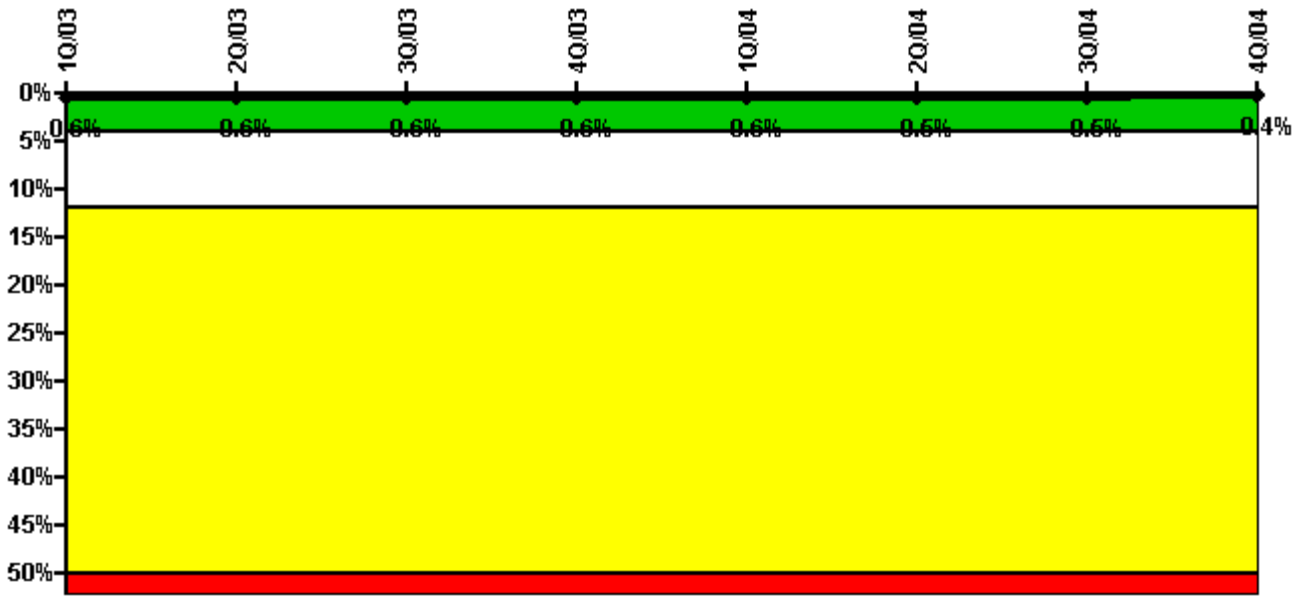
Thresholds: White > 4.0% Yellow > 12.0% Red > 50.0%

### Notes

| Safety System Unavailability, High Pressure Injection System (HPCI) | 1Q/03       | 2Q/03       | 3Q/03       | 4Q/03       | 1Q/04       | 2Q/04       | 3Q/04       | 4Q/04       |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Train 1</b>  |             |             |             |             |             |             |             |             |
| Planned unavailable hours   | 2.00        | 15.50       | 0.30        | 0           | 0           | 38.90       | 0.90        | 21.40       |
| Unplanned unavailable hours   | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| Fault exposure hours  | 32.80       | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| Effective Reset hours   | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0           |
| Required hours  | 1722.60     | 2183.00     | 2208.00     | 2209.00     | 2184.00     | 2152.13     | 2208.00     | 2209.00     |
| <b>Indicator value</b>  | <b>0.7%</b> | <b>0.7%</b> | <b>0.7%</b> | <b>0.6%</b> | <b>0.6%</b> | <b>0.7%</b> | <b>0.7%</b> | <b>0.7%</b> |

Licensee Comments: none

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



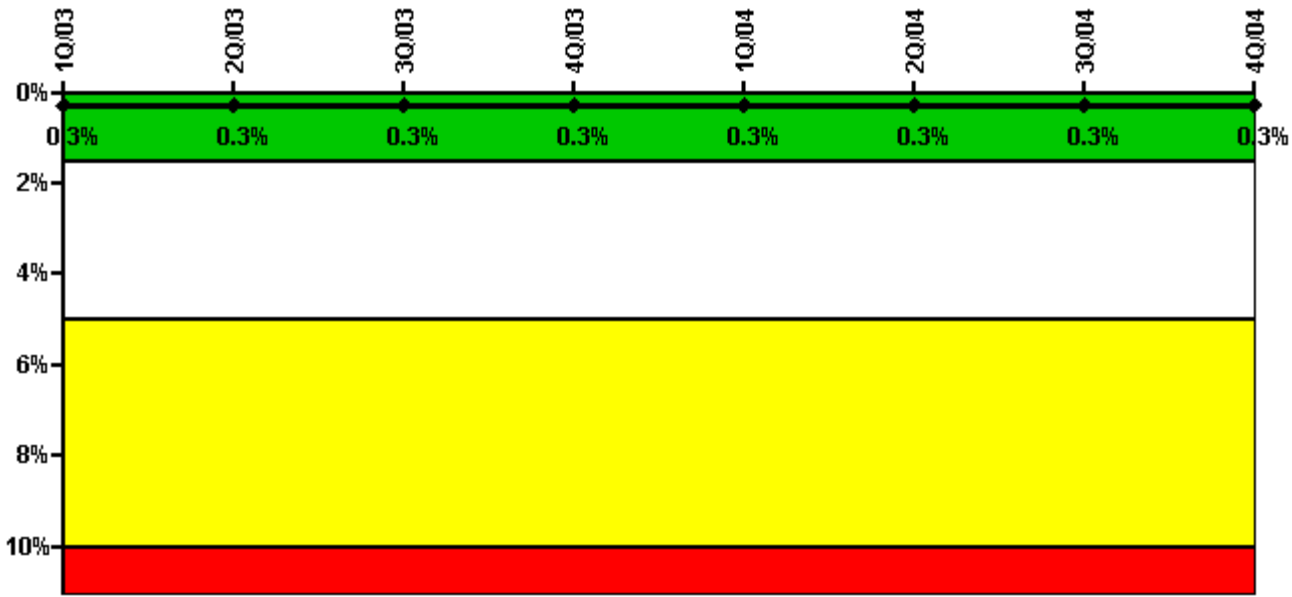
Thresholds: White > 4.0% Yellow > 12.0% Red > 50.0%

#### Notes

| Safety System Unavailability, Heat Removal System (RCIC) | 1Q/03       | 2Q/03       | 3Q/03       | 4Q/03       | 1Q/04       | 2Q/04       | 3Q/04       | 4Q/04       |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Train 1</b>   |             |             |             |             |             |             |             |             |
| Planned unavailable hours                                | 8.10        | 2.30        | 26.20       | 0.30        | 0           | 32.30       | 0.30        | 2.30        |
| 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   | 1722.60     | 2183.00     | 2208.00     | 2209.00     | 2184.00     | 2152.13     | 2208.00     | 2209.00     |
| <b>Indicator value</b>                                   | <b>0.6%</b> | <b>0.6%</b> | <b>0.6%</b> | <b>0.6%</b> | <b>0.6%</b> | <b>0.5%</b> | <b>0.5%</b> | <b>0.4%</b> |

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



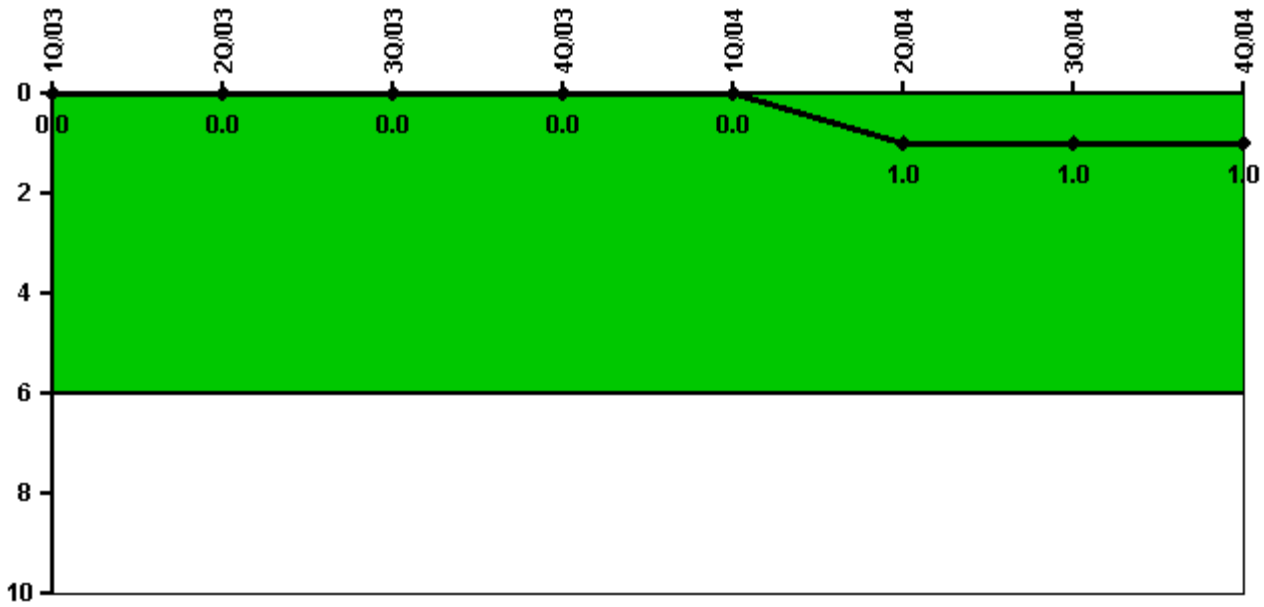
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

#### Notes

| Safety System Unavailability, Residual Heat Removal System | 1Q/03       | 2Q/03       | 3Q/03       | 4Q/03       | 1Q/04       | 2Q/04       | 3Q/04       | 4Q/04       |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Train 1</b>   |             |             |             |             |             |             |             |             |
| Planned unavailable hours                                  | 2.87        | 0           | 2.18        | 26.85       | 1.30        | 0           | 7.80        | 22.88       |
| 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   | 2160.00     | 2183.00     | 2208.00     | 2209.00     | 2184.00     | 2183.00     | 2208.00     | 2209.00     |
| <b>Train 2</b>   |             |             |             |             |             |             |             |             |
| Planned unavailable hours                                  | 6.30        | 17.00       | 0           | 0           | 0           | 20.67       | 1.82        | 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   | 2160.00     | 2183.00     | 2208.00     | 2209.00     | 2184.00     | 2183.00     | 2208.00     | 2209.00     |
| <b>Indicator value</b>                                     | <b>0.3%</b> | <b>0.3%</b> | <b>0.3%</b> | <b>0.3%</b> | <b>0.3%</b> | <b>0.3%</b> | <b>0.3%</b> | <b>0.3%</b> |

Licensee Comments: none

### Safety System Functional Failures (BWR)



Thresholds: White > 6.0

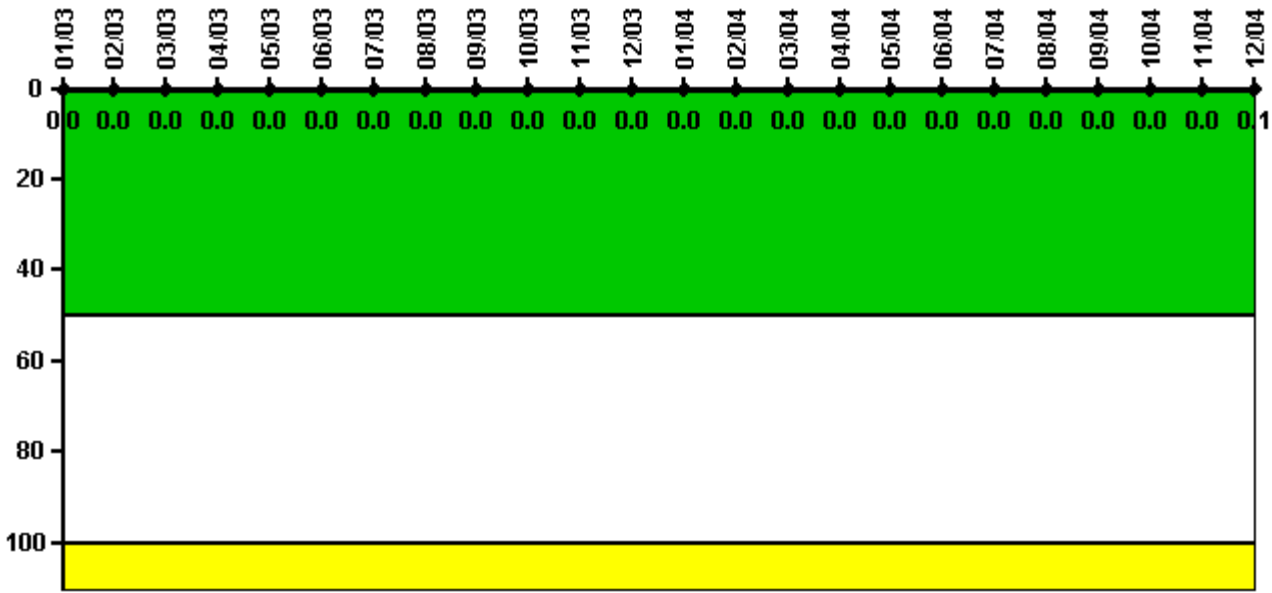
#### Notes

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

Licensee Comments: none



### Reactor Coolant System Activity



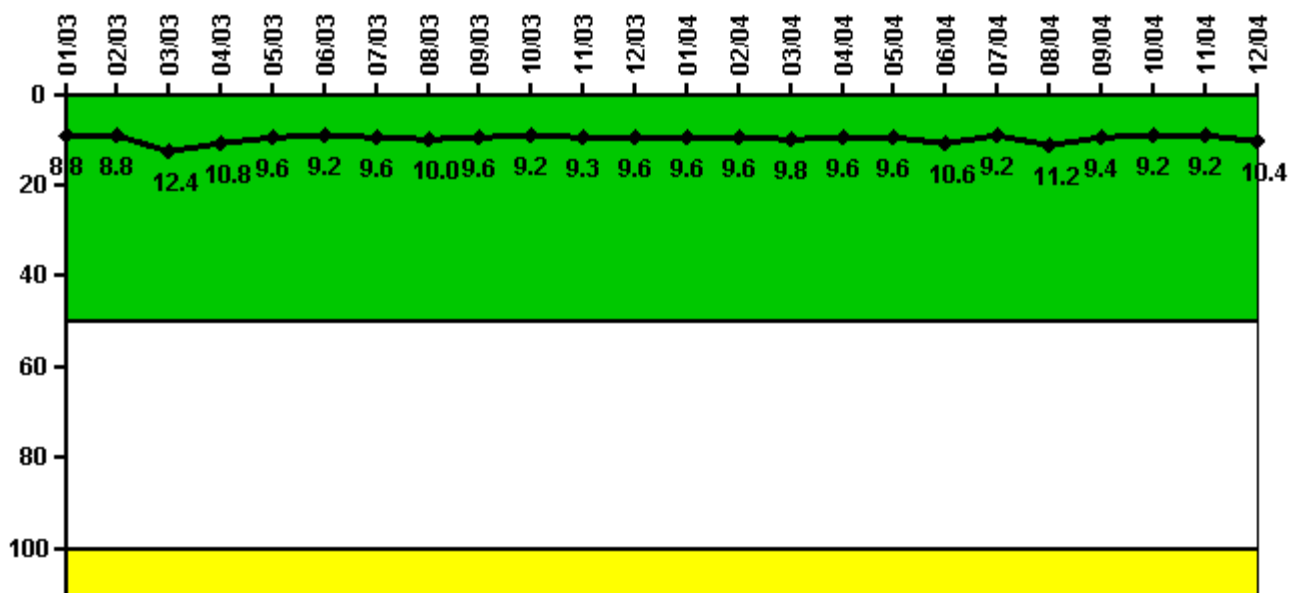
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

| Reactor Coolant System Activity | 1/03     | 2/03     | 3/03     | 4/03     | 5/03     | 6/03     | 7/03     | 8/03     | 9/03     | 10/03    | 11/03    | 12/03    |
|---------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Maximum activity                | 0.000015 | 0.000028 | 0.000020 | 0.000009 | 0.000013 | 0.000010 | 0.000009 | 0.000013 | 0.000012 | 0.000010 | 0.000010 | 0.000010 |
| 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 | 1/04     | 2/04     | 3/04     | 4/04     | 5/04     | 6/04     | 7/04     | 8/04     | 9/04     | 10/04    | 11/04    | 12/04    |
| Maximum activity                | 0.000010 | 0.000009 | 0.000012 | 0.000013 | 0.000014 | 0.000063 | 0.000016 | 0.000014 | 0.000015 | 0.000042 | 0.000069 | 0.000131 |
| 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        | 0.1      |

Licensee Comments: none

### Reactor Coolant System Leakage



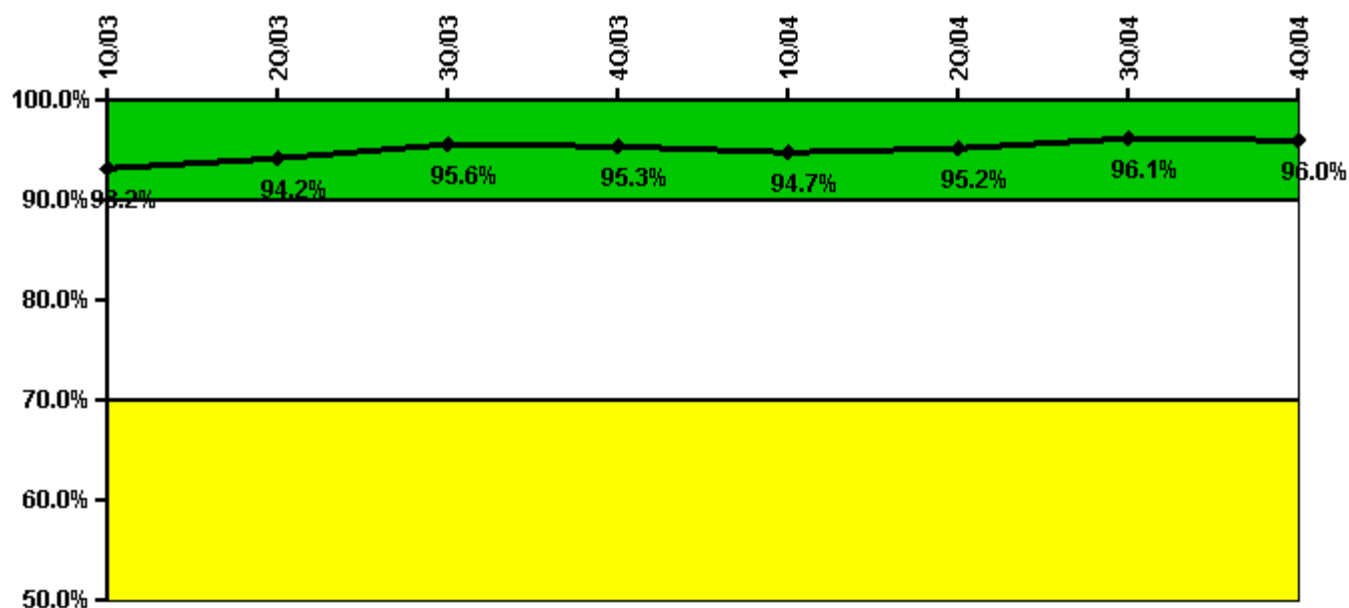
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

| Reactor Coolant System Leakage | 1/03  | 2/03  | 3/03  | 4/03  | 5/03  | 6/03  | 7/03  | 8/03  | 9/03  | 10/03 | 11/03 | 12/03 |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum leakage                | 2.200 | 2.200 | 3.100 | 2.700 | 2.400 | 2.300 | 2.400 | 2.500 | 2.400 | 2.300 | 2.320 | 2.400 |
| 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                | 8.8   | 8.8   | 12.4  | 10.8  | 9.6   | 9.2   | 9.6   | 10.0  | 9.6   | 9.2   | 9.3   | 9.6   |
| Reactor Coolant System Leakage | 1/04  | 2/04  | 3/04  | 4/04  | 5/04  | 6/04  | 7/04  | 8/04  | 9/04  | 10/04 | 11/04 | 12/04 |
| Maximum leakage                | 2.400 | 2.400 | 2.450 | 2.400 | 2.400 | 2.650 | 2.300 | 2.800 | 2.350 | 2.300 | 2.300 | 2.600 |
| 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                | 9.6   | 9.6   | 9.8   | 9.6   | 9.6   | 10.6  | 9.2   | 11.2  | 9.4   | 9.2   | 9.2   | 10.4  |

Licensee Comments: none

### Drill/Exercise Performance



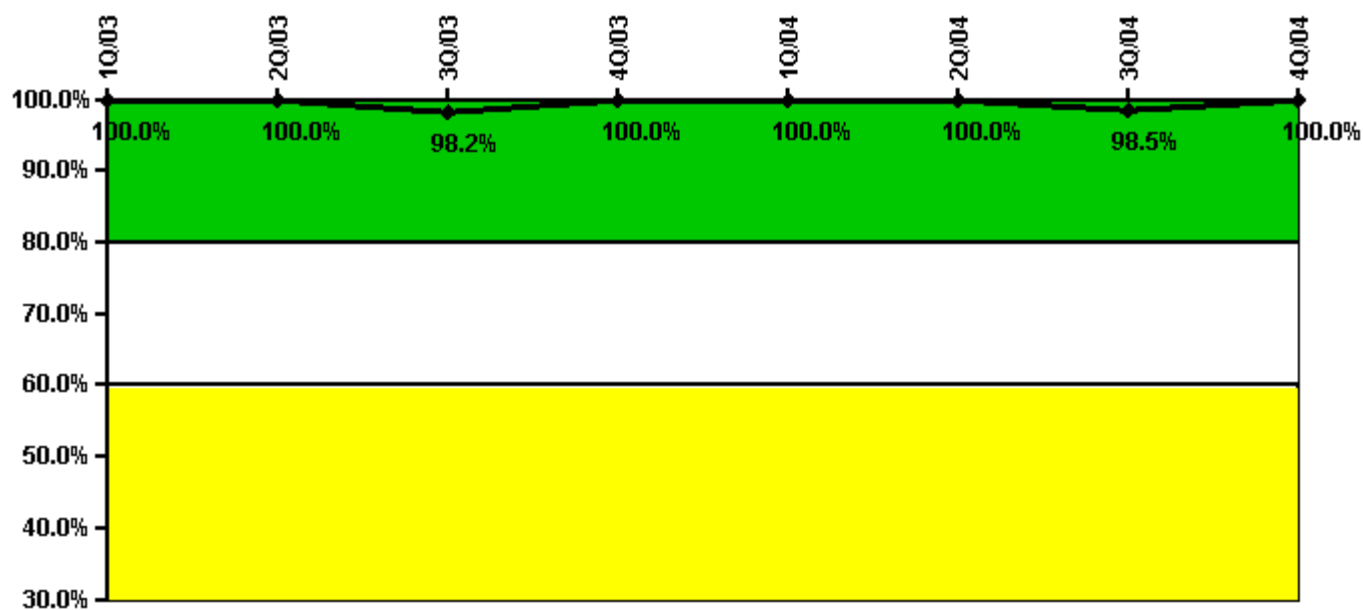
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

| Drill/Exercise Performance | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 | 1Q/04 | 2Q/04 | 3Q/04 | 4Q/04 |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Successful opportunities   | 11.0  | 36.0  | 8.0   | 141.0 | 18.0  | 45.0  | 73.0  | 103.0 |
| Total opportunities        | 12.0  | 38.0  | 8.0   | 148.0 | 20.0  | 46.0  | 74.0  | 107.0 |
| Indicator value            | 93.2% | 94.2% | 95.6% | 95.3% | 94.7% | 95.2% | 96.1% | 96.0% |

Licensee Comments: none

### ERO Drill Participation



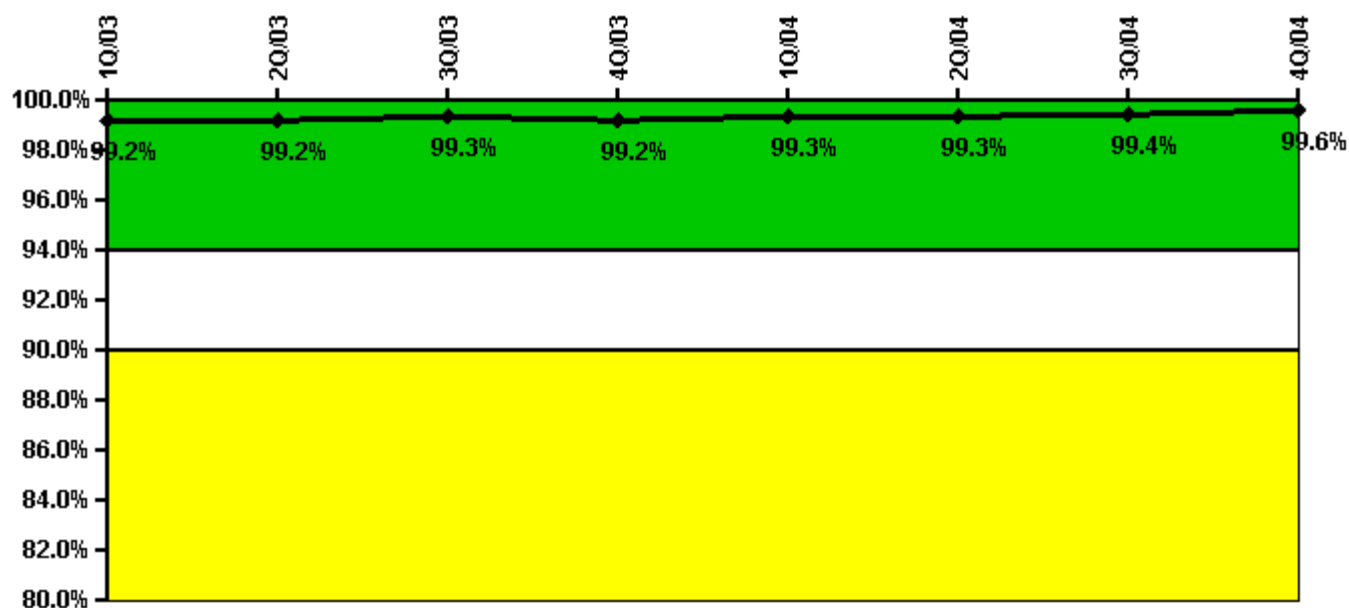
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

| ERO Drill Participation     | 1Q/03  | 2Q/03  | 3Q/03 | 4Q/03  | 1Q/04  | 2Q/04  | 3Q/04 | 4Q/04  |
|-----------------------------|--------|--------|-------|--------|--------|--------|-------|--------|
| Participating Key personnel | 53.0   | 54.0   | 55.0  | 58.0   | 62.0   | 67.0   | 66.0  | 66.0   |
| Total Key personnel         | 53.0   | 54.0   | 56.0  | 58.0   | 62.0   | 67.0   | 67.0  | 66.0   |
| Indicator value             | 100.0% | 100.0% | 98.2% | 100.0% | 100.0% | 100.0% | 98.5% | 100.0% |

Licensee Comments: none

### Alert & Notification System



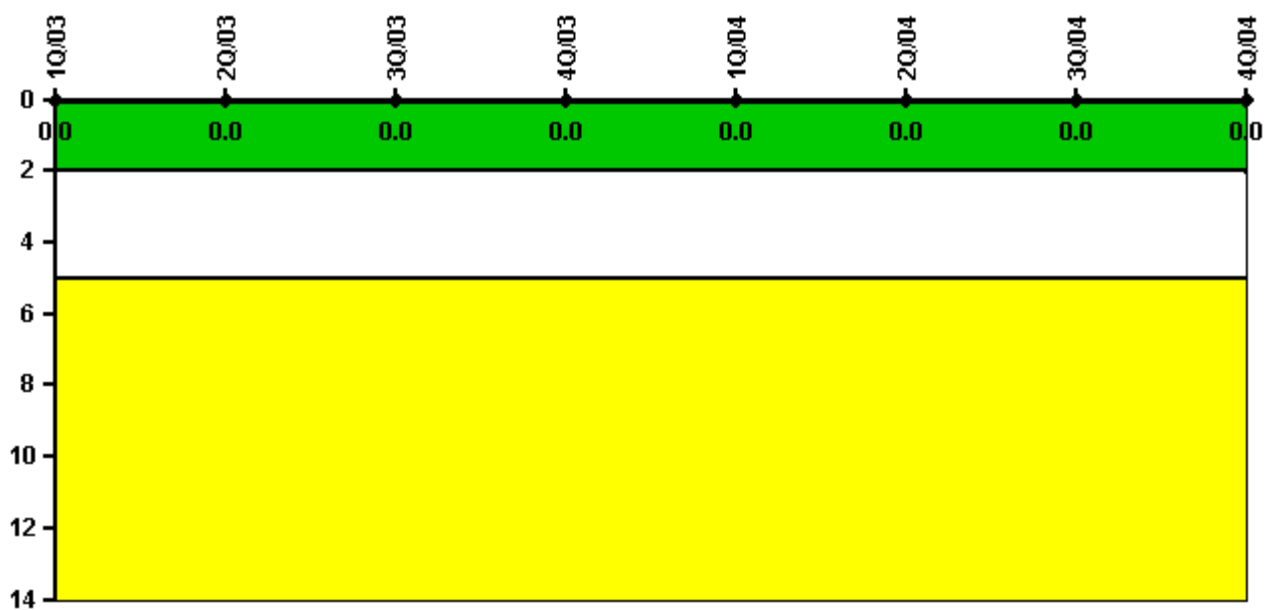
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

| Alert & Notification System | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 | 1Q/04 | 2Q/04 | 3Q/04 | 4Q/04 |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Successful siren-tests      | 2133  | 2126  | 2129  | 2127  | 2134  | 2130  | 2140  | 2140  |
| Total sirens-tests          | 2145  | 2145  | 2145  | 2145  | 2145  | 2145  | 2145  | 2145  |
| Indicator value             | 99.2% | 99.2% | 99.3% | 99.2% | 99.3% | 99.3% | 99.4% | 99.6% |

Licensee Comments: none

### Occupational Exposure Control Effectiveness



**Thresholds: White > 2.0 Yellow > 5.0**

**Notes**

| Occupational Exposure Control Effectiveness | 1Q/03    | 2Q/03    | 3Q/03    | 4Q/03    | 1Q/04    | 2Q/04    | 3Q/04    | 4Q/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        |
| <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 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 | 1Q/04 | 2Q/04 | 3Q/04 | 4Q/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: March 9, 2005