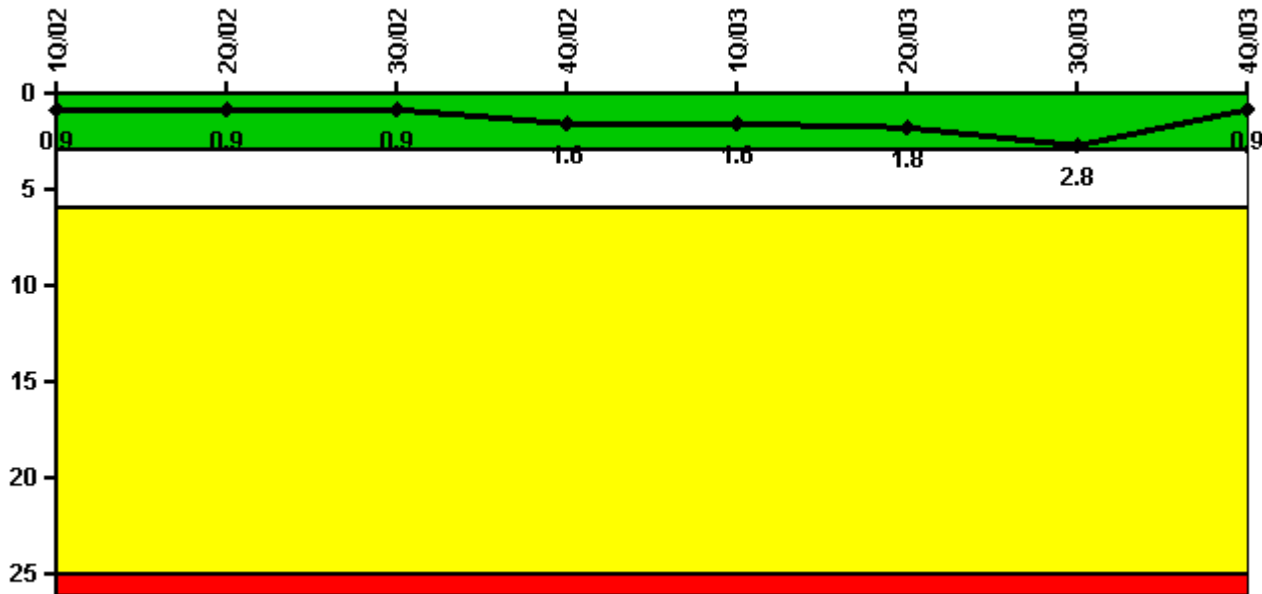


# Fermi 2

## 4Q/2003 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



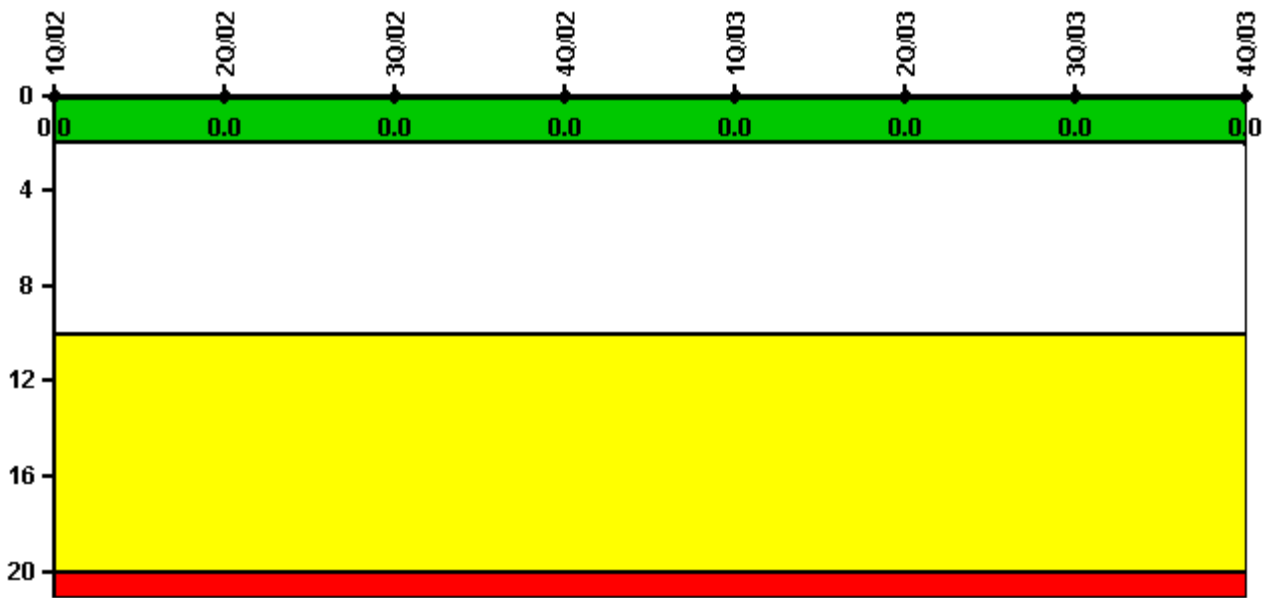
**Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0**

**Notes**

| Unplanned Scrams per 7000 Critical Hrs | 1Q/02  | 2Q/02  | 3Q/02  | 4Q/02  | 1Q/03  | 2Q/03  | 3Q/03  | 4Q/03  |
|--|--------|--------|--------|--------|--------|--------|--------|--------|
| Unplanned scrams                       | 0      | 0      | 0      | 2.0    | 0      | 0      | 1.0    | 0      |
| Critical hours                         | 2160.0 | 2183.0 | 2208.0 | 2094.9 | 2086.6 | 1307.5 | 2010.5 | 2209.0 |
|  |        |        |        |        |        |        |        |        |
| Indicator value                        | 0.9    | 0.9    | 0.9    | 1.6    | 1.6    | 1.8    | 2.8    | 0.9    |

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



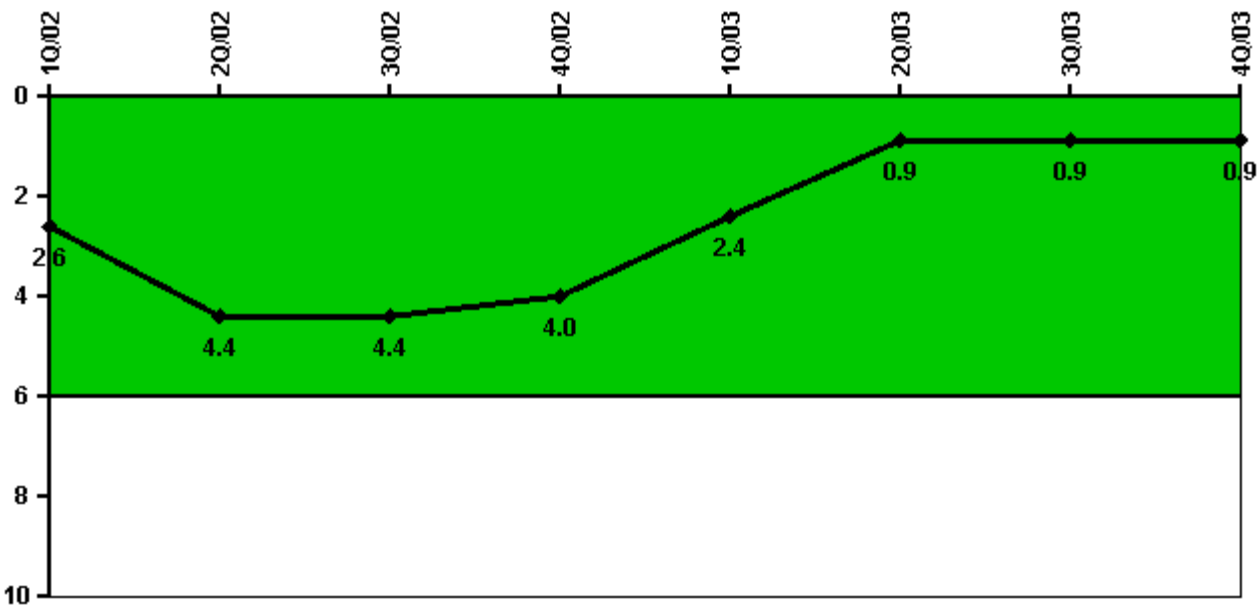
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

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



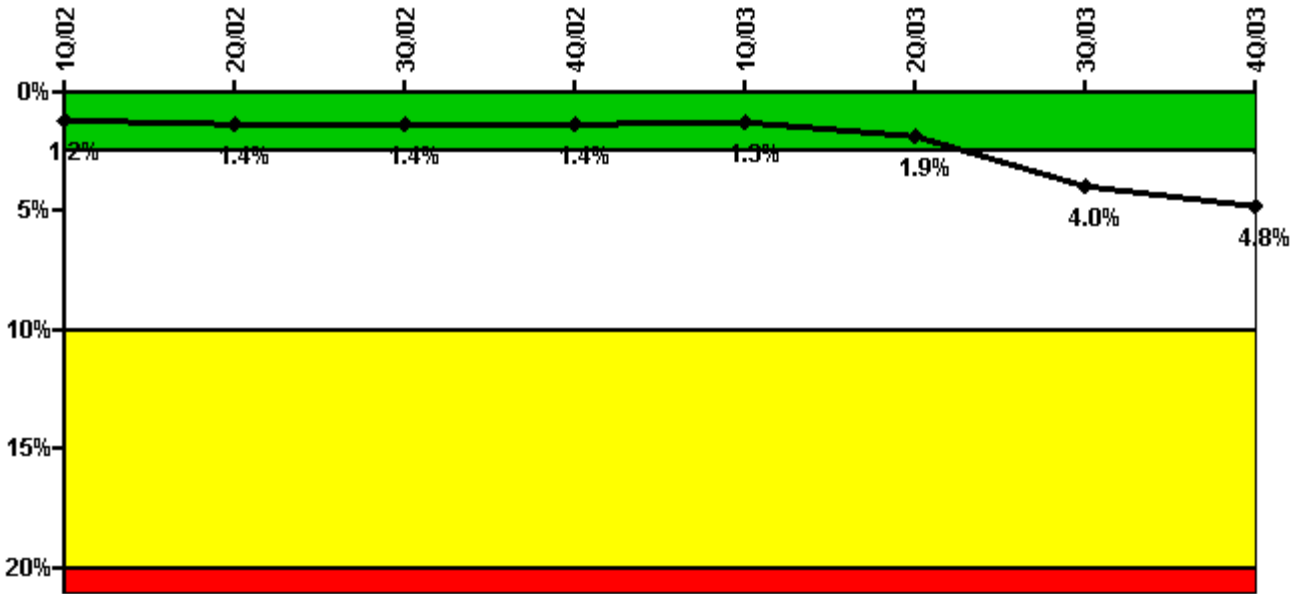
Thresholds: White > 6.0

#### Notes

| Unplanned Power Changes per 7000 Critical Hrs | 1Q/02  | 2Q/02  | 3Q/02  | 4Q/02  | 1Q/03  | 2Q/03  | 3Q/03  | 4Q/03  |
|---|--------|--------|--------|--------|--------|--------|--------|--------|
| Unplanned power changes                       | 3.0    | 2.0    | 0      | 0      | 1.0    | 0      | 0      | 0      |
| Critical hours                                | 2160.0 | 2183.0 | 2208.0 | 2094.9 | 2086.6 | 1307.5 | 2010.5 | 2209.0 |
|   |        |        |        |        |        |        |        |        |
| Indicator value                               | 2.6    | 4.4    | 4.4    | 4.0    | 2.4    | 0.9    | 0.9    | 0.9    |

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/02   | 2Q/02   | 3Q/02   | 4Q/02   | 1Q/03   | 2Q/03   | 3Q/03   | 4Q/03   |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| <b>Train 1</b>  |         |         |         |         |         |         |         |         |
| Planned unavailable hours                               | 6.00    | 35.65   | 52.76   | 7.04    | 38.03   | 8.15    | 28.15   | 9.52    |
| Unplanned unavailable hours                             | 0       | 0       | 0       | 0       | 29.82   | 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 | 2160.00 | 2183.00 | 2208.00 | 2209.00 |
| <b>Train 2</b>  |         |         |         |         |         |         |         |         |
| Planned unavailable hours                               | 5.29    | 145.44  | 11.37   | 16.53   | 17.09   | 2.13    | 0       | 11.47   |
| Unplanned unavailable hours                             | 0       | 0       | 0       | 26.40   | 0       | 0       | 0       | 0       |
| Fault exposure hours                                    | 0       | 0       | 0       | 0       | 0       | 694.00  | 2208.00 | 928.93  |
| Effective Reset hours                                   | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| Required hours  | 2160.00 | 2183.00 | 2208.00 | 2209.00 | 2160.00 | 2183.00 | 2208.00 | 2209.00 |
| <b>Train 3</b>  |         |         |         |         |         |         |         |         |
| Planned unavailable hours                               | 5.82    | 32.67   | 7.72    | 6.95    | 26.45   | 3.55    | 6.09    | 17.49   |
| Unplanned unavailable hours                             | 0       | 8.38    | 1.30    | 0       | 0       | 2.03    | 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 | 2160.00 | 2183.00 | 2208.00 | 2209.00 |
| <b>Train 4</b>  |         |         |         |         |         |         |         |         |
| Planned unavailable hours                               | 18.45   | 56.16   | 23.22   | 7.74    | 24.71   | 8.61    | 8.17    | 5.63    |
| Unplanned unavailable hours                             | 2.10    | 0       | 3.94    | 0       | 0       | 0       | 0       | 0       |
| Fault exposure hours                                    | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| Effective Reset hours                                   | 6142.70 | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| Required hours  | 2160.00 | 2183.00 | 2208.00 | 2209.00 | 2160.00 | 2183.00 | 2208.00 | 2209.00 |

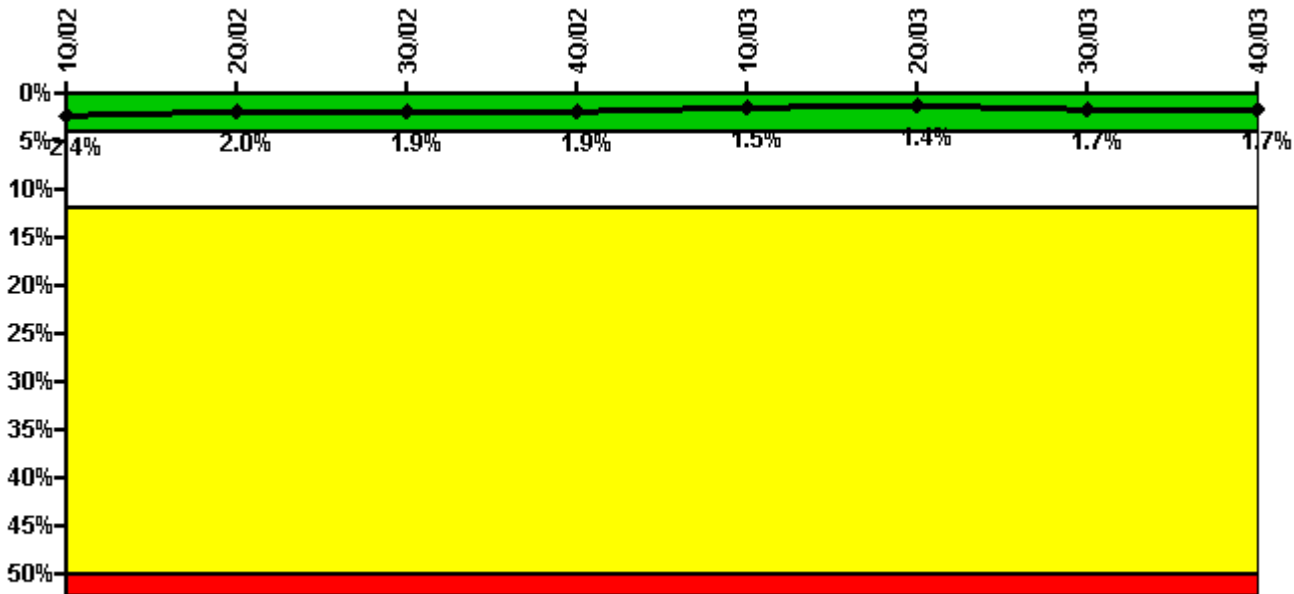
|                 |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|
|                 |      |      |      |      |      |      |      |      |
| Indicator value | 1.2% | 1.4% | 1.4% | 1.4% | 1.3% | 1.9% | 4.0% | 4.8% |

Licensee Comments:

4Q/03: Train 2 {EDG 12} fault exposure hours incurred due to lube oil system pressure switch fitting found not fully made up, impacting seismic qualification. Change report submitted for June through September 2003 data.

3Q/03: EDG 12{Train 2} 237.5 hours of T/2 fault exposure hours due to failed signal generator.

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



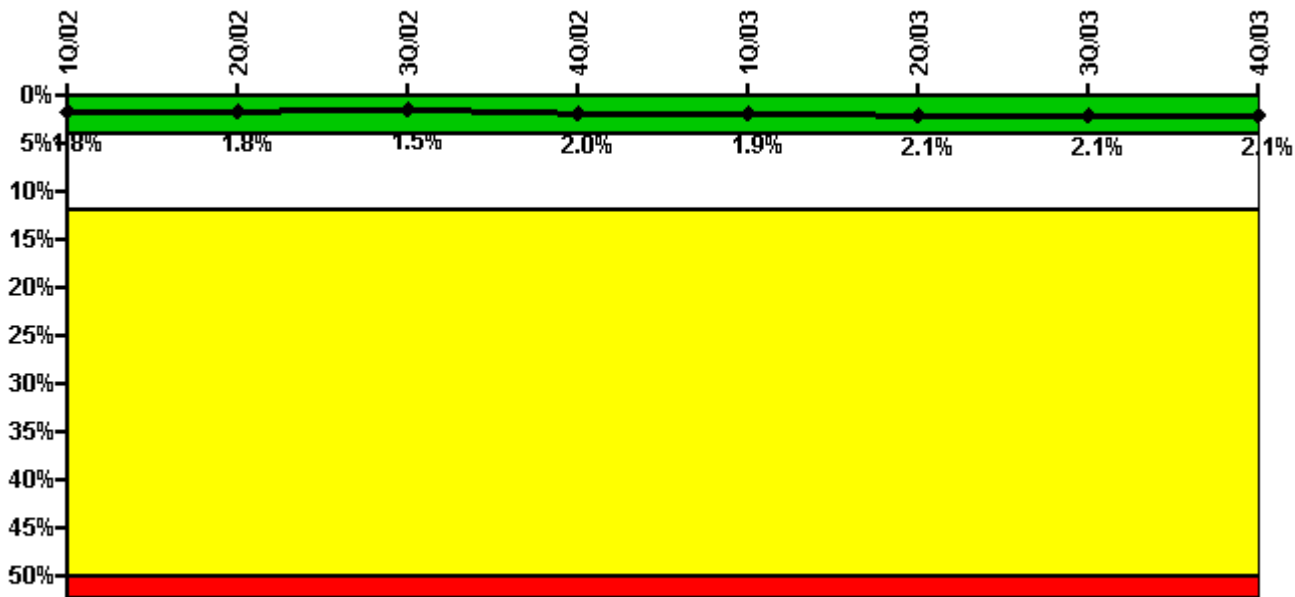
Thresholds: White > 4.0% Yellow > 12.0% Red > 50.0%

### Notes

| Safety System Unavailability, High Pressure Injection System (HPCI) | 1Q/02   | 2Q/02   | 3Q/02   | 4Q/02   | 1Q/03   | 2Q/03   | 3Q/03   | 4Q/03   |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| Train 1   |         |         |         |         |         |         |         |         |
| Planned unavailable hours   | 85.05   | 21.45   | 3.13    | 2.20    | 26.08   | 0       | 66.32   | 3.18    |
| Unplanned unavailable hours   | 15.31   | 0       | 0       | 0       | 0       | 0       | 3.30    | 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 | 2094.90 | 2086.60 | 1307.50 | 2010.50 | 2209.00 |
| Indicator value   | 2.4%    | 2.0%    | 1.9%    | 1.9%    | 1.5%    | 1.4%    | 1.7%    | 1.7%    |

Licensee Comments: none

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



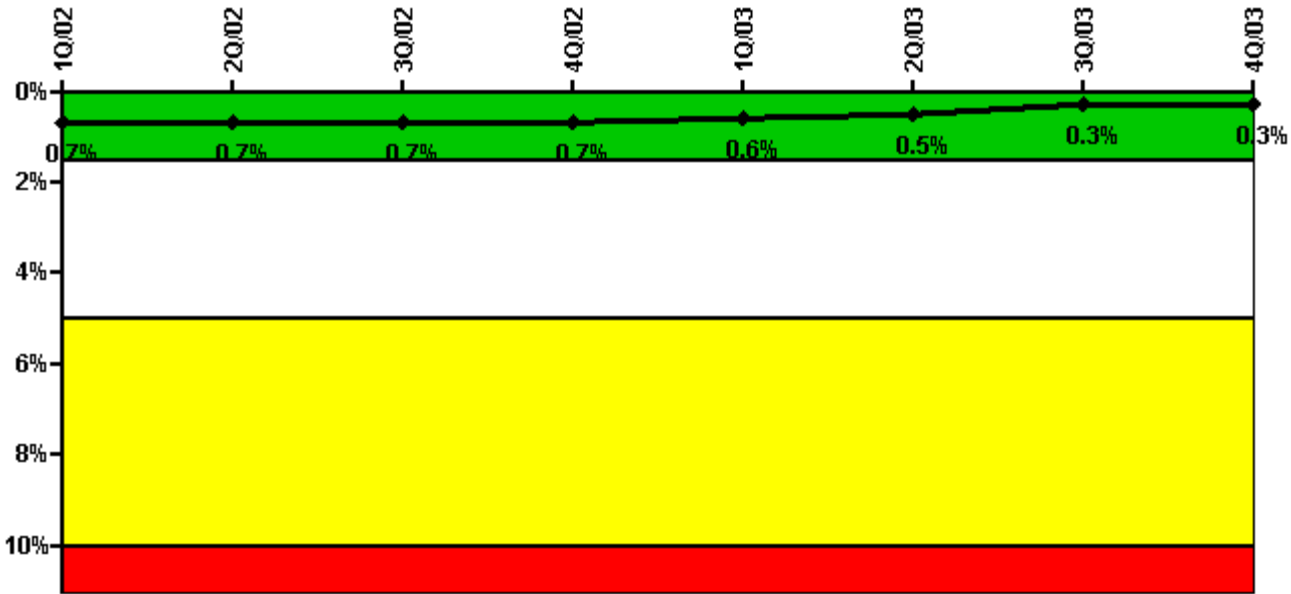
Thresholds: White > 4.0% Yellow > 12.0% Red > 50.0%

#### Notes

| Safety System Unavailability, Heat Removal System (RCIC) | 1Q/02   | 2Q/02   | 3Q/02   | 4Q/02   | 1Q/03   | 2Q/03   | 3Q/03   | 4Q/03   |
|--|---------|---------|---------|---------|---------|---------|---------|---------|
| Train 1  |         |         |         |         |         |         |         |         |
| Planned unavailable hours                                | 37.45   | 1.98    | 2.83    | 127.80  | 14.21   | 57.48   | 7.98    | 2.52    |
| Unplanned unavailable hours                              | 2.87    | 0       | 0       | 0       | 0       | 0       | 0       | 2.92    |
| 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 | 2094.90 | 2086.60 | 1307.50 | 2010.50 | 2209.00 |
| Indicator value  | 1.8%    | 1.8%    | 1.5%    | 2.0%    | 1.9%    | 2.1%    | 2.1%    | 2.1%    |

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



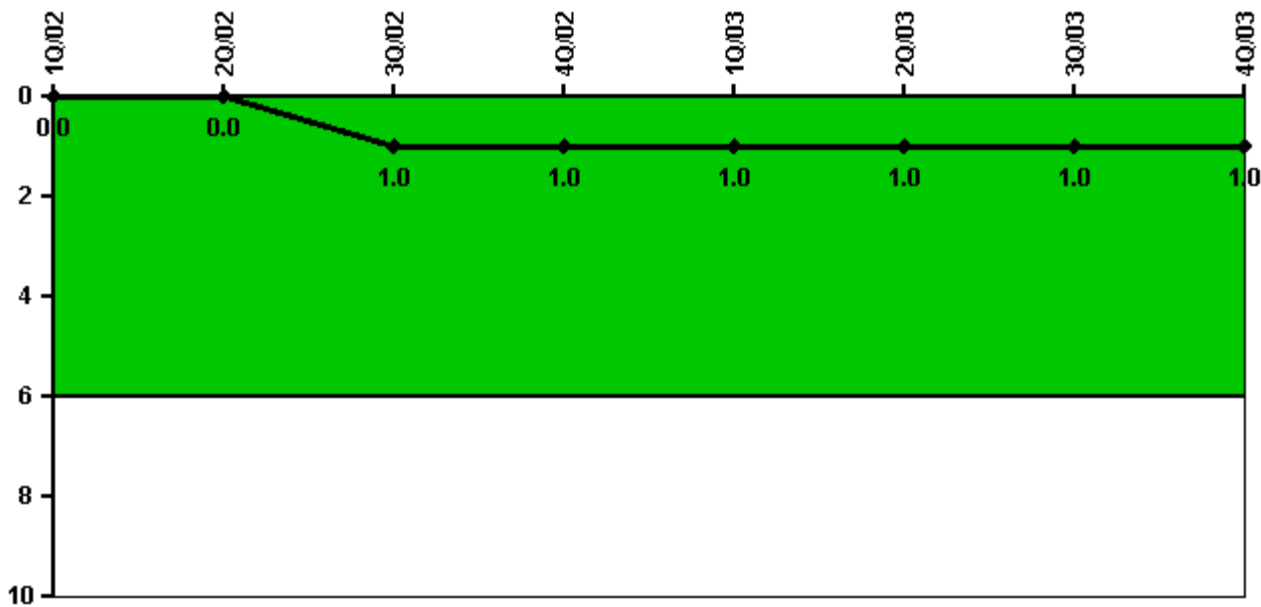
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

**Notes**

| Safety System Unavailability, Residual Heat Removal System | 1Q/02       | 2Q/02       | 3Q/02       | 4Q/02       | 1Q/03       | 2Q/03       | 3Q/03       | 4Q/03       |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Train 1</b>   |             |             |             |             |             |             |             |             |
| Planned unavailable hours                                  | 2.10        | 0.67        | 19.08       | 3.13        | 0.88        | 0           | 13.76       | 0.62        |
| Unplanned unavailable hours                                | 0           | 0           | 0           | 0           | 0           | 0           | 0           | 0.15        |
| 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     | 2160.00     | 2183.00     | 2208.00     | 2209.00     |
| <b>Train 2</b>   |             |             |             |             |             |             |             |             |
| Planned unavailable hours                                  | 12.66       | 17.74       | 1.20        | 1.50        | 9.05        | 0           | 8.85        | 1.70        |
| 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     | 2160.00     | 2183.00     | 2208.00     | 2209.00     |
|  |             |             |             |             |             |             |             |             |
| <b>Indicator value</b>                                     | <b>0.7%</b> | <b>0.7%</b> | <b>0.7%</b> | <b>0.7%</b> | <b>0.6%</b> | <b>0.5%</b> | <b>0.3%</b> | <b>0.3%</b> |

Licensee Comments: none

### Safety System Functional Failures (BWR)



Thresholds: White > 6.0

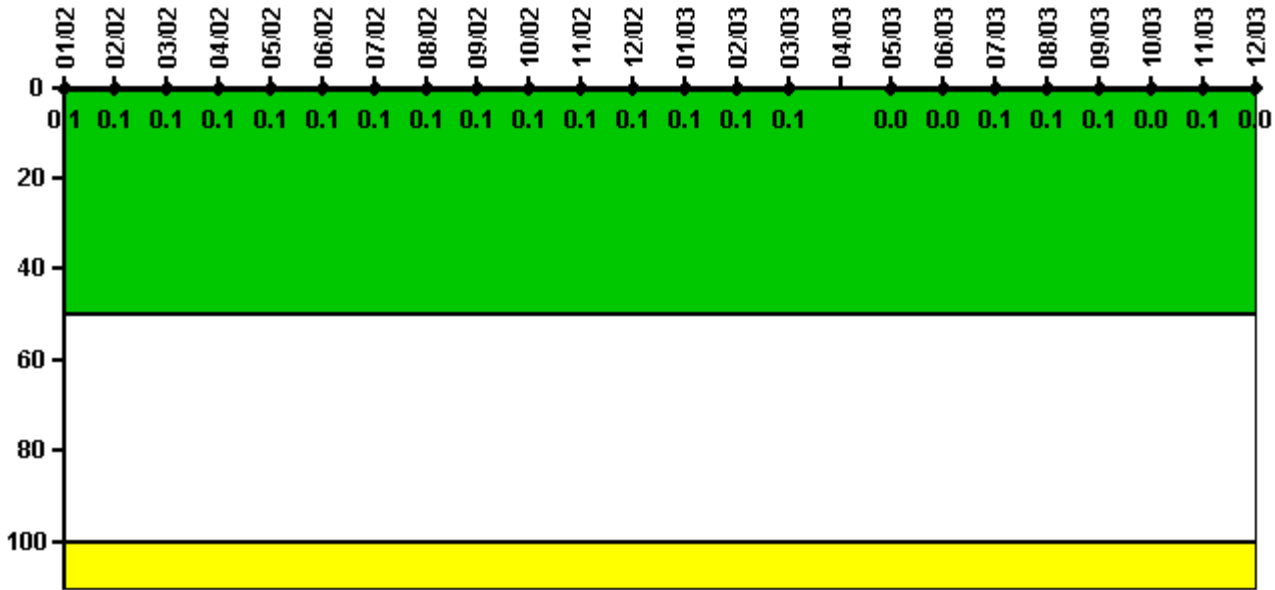
#### Notes

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

Licensee Comments: none



### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

**Notes**

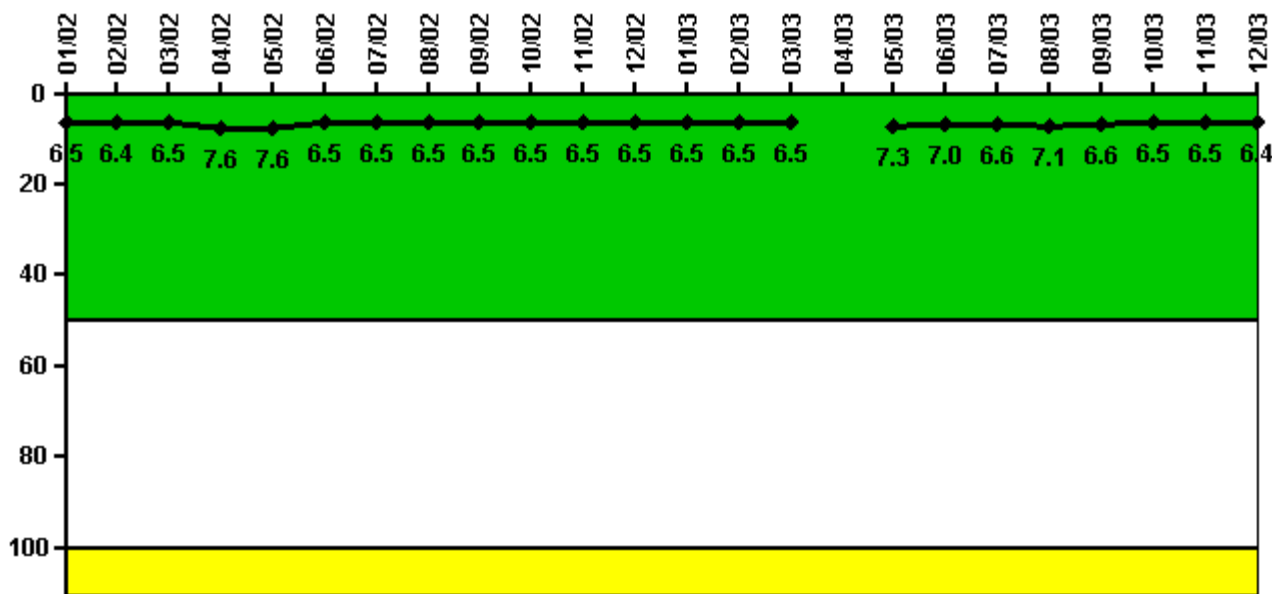
| Reactor Coolant System Activity | 1/02     | 2/02     | 3/02     | 4/02     | 5/02     | 6/02     | 7/02     | 8/02     | 9/02     | 10/02    | 11/02    | 12/02    |
|---------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Maximum activity                | 0.000267 | 0.000201 | 0.000291 | 0.000174 | 0.000178 | 0.000198 | 0.000208 | 0.000184 | 0.000196 | 0.000173 | 0.000211 | 0.000169 |
| 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                 | 0.1      | 0.1      | 0.1      | 0.1      | 0.1      | 0.1      | 0.1      | 0.1      | 0.1      | 0.1      | 0.1      | 0.1      |

| 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                | 0.000144 | 0.000178 | 0.000168 | N/A  | 0.000080 | 0.000084 | 0.000123 | 0.000124 | 0.000135 | 0.000092 | 0.000129 | 0.000094 |
| 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                 | 0.1      | 0.1      | 0.1      | N/A  | 0        | 0        | 0.1      | 0.1      | 0.1      | 0        | 0.1      | 0        |

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

**Notes**

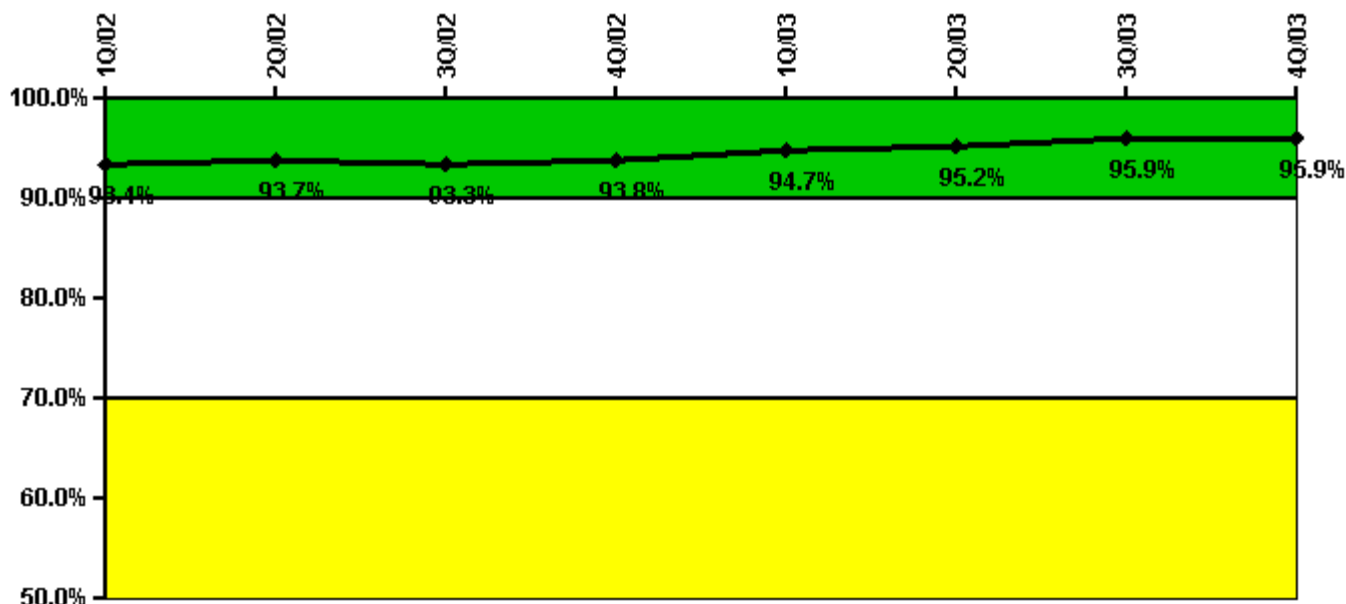
| Reactor Coolant System Leakage | 1/02  | 2/02  | 3/02  | 4/02  | 5/02  | 6/02  | 7/02  | 8/02  | 9/02  | 10/02 | 11/02 | 12/02 |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum leakage                | 1.620 | 1.610 | 1.630 | 1.900 | 1.890 | 1.630 | 1.630 | 1.620 | 1.630 | 1.630 | 1.620 | 1.620 |
| 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                | 6.5   | 6.4   | 6.5   | 7.6   | 7.6   | 6.5   | 6.5   | 6.5   | 6.5   | 6.5   | 6.5   | 6.5   |

| 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                | 1.630 | 1.630 | 1.630 | N/A  | 1.830 | 1.750 | 1.640 | 1.770 | 1.650 | 1.620 | 1.620 | 1.610 |
| 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                | 6.5   | 6.5   | 6.5   | N/A  | 7.3   | 7.0   | 6.6   | 7.1   | 6.6   | 6.5   | 6.5   | 6.4   |

Licensee Comments: none

### Drill/Exercise Performance



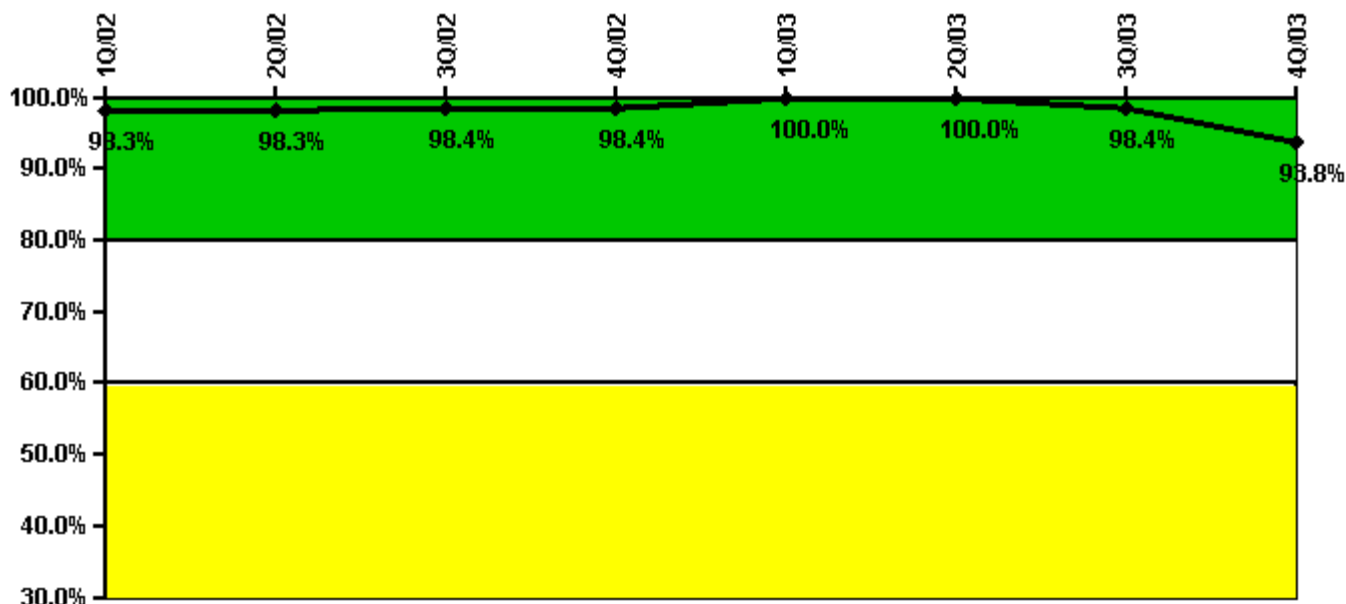
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

| Drill/Exercise Performance | 1Q/02 | 2Q/02 | 3Q/02 | 4Q/02 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Successful opportunities   | 42.0  | 51.0  | 145.0 | 10.0  | 64.0  | 28.0  | 149.0 | 0     |
| Total opportunities        | 46.0  | 51.0  | 154.0 | 10.0  | 65.0  | 28.0  | 156.0 | 0     |
|                            |       |       |       |       |       |       |       |       |
| Indicator value            | 93.4% | 93.7% | 93.3% | 93.8% | 94.7% | 95.2% | 95.9% | 95.9% |

Licensee Comments: none

### ERO Drill Participation



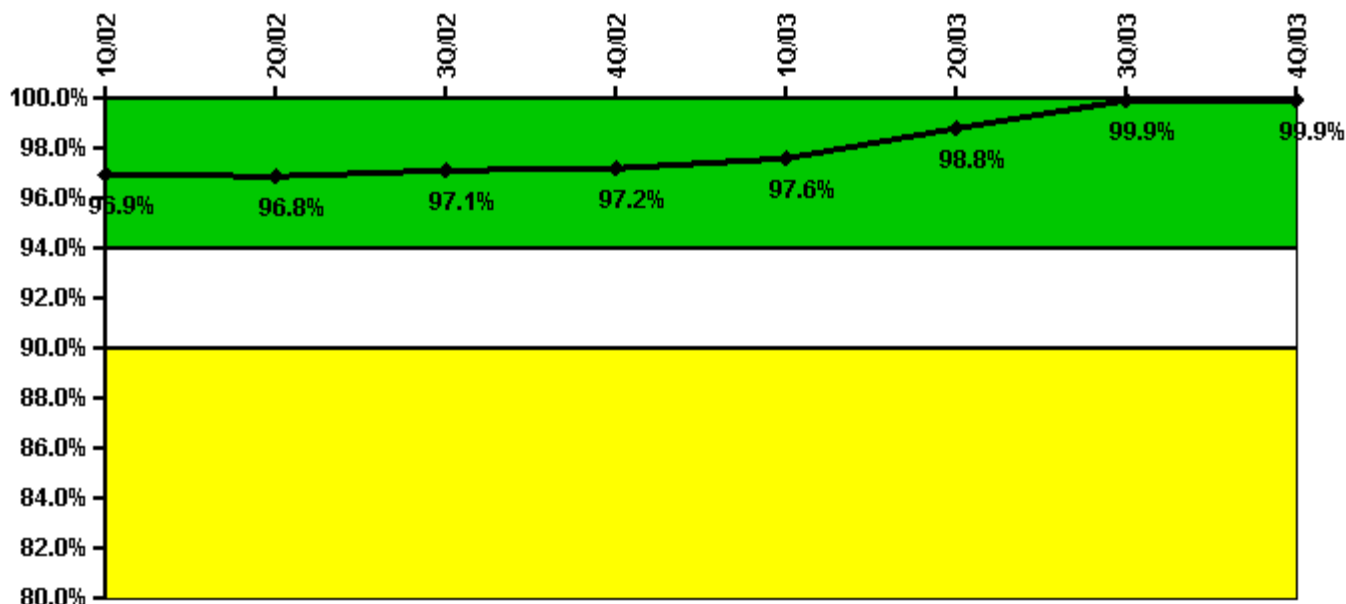
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

| ERO Drill Participation     | 1Q/02 | 2Q/02 | 3Q/02 | 4Q/02 | 1Q/03  | 2Q/03  | 3Q/03 | 4Q/03 |
|-----------------------------|-------|-------|-------|-------|--------|--------|-------|-------|
| Participating Key personnel | 59.0  | 58.0  | 61.0  | 60.0  | 60.0   | 60.0   | 63.0  | 61.0  |
| Total Key personnel         | 60.0  | 59.0  | 62.0  | 61.0  | 60.0   | 60.0   | 64.0  | 65.0  |
|                             |       |       |       |       |        |        |       |       |
| Indicator value             | 98.3% | 98.3% | 98.4% | 98.4% | 100.0% | 100.0% | 98.4% | 93.8% |

Licensee Comments: none

### Alert & Notification System



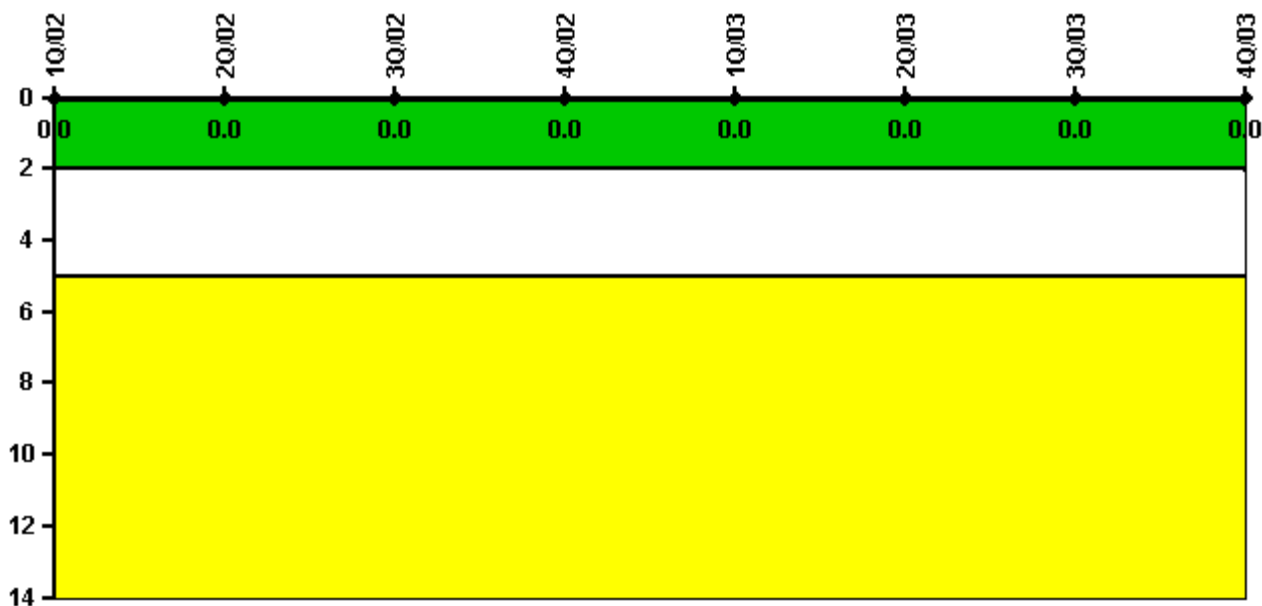
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

| Alert & Notification System | 1Q/02 | 2Q/02 | 3Q/02 | 4Q/02 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Successful siren-tests      | 344   | 341   | 198   | 181   | 185   | 186   | 186   | 186   |
| Total sirens-tests          | 354   | 354   | 206   | 181   | 186   | 186   | 186   | 186   |
|                             |       |       |       |       |       |       |       |       |
| Indicator value             | 96.9% | 96.8% | 97.1% | 97.2% | 97.6% | 98.8% | 99.9% | 99.9% |

Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

| Occupational Exposure Control Effectiveness | 1Q/02 | 2Q/02 | 3Q/02 | 4Q/02 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|
| 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



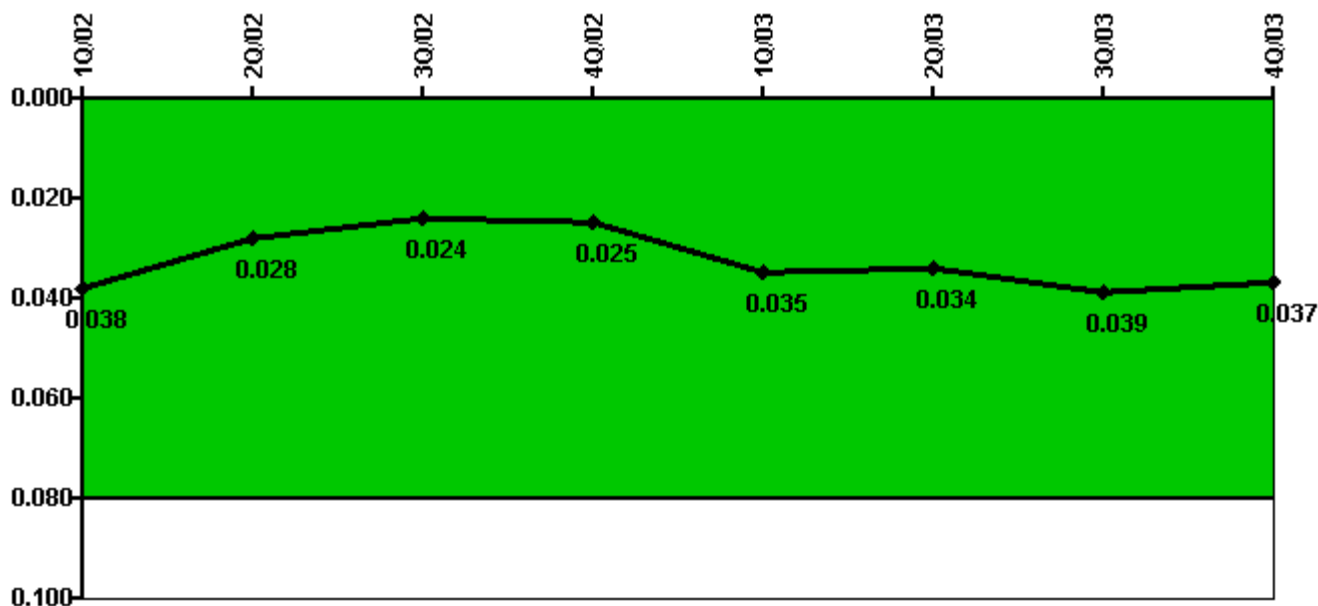
Thresholds: White > 1.0 Yellow > 3.0

#### Notes

| RETS/ODCM Radiological Effluent | 1Q/02 | 2Q/02 | 3Q/02 | 4Q/02 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| 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

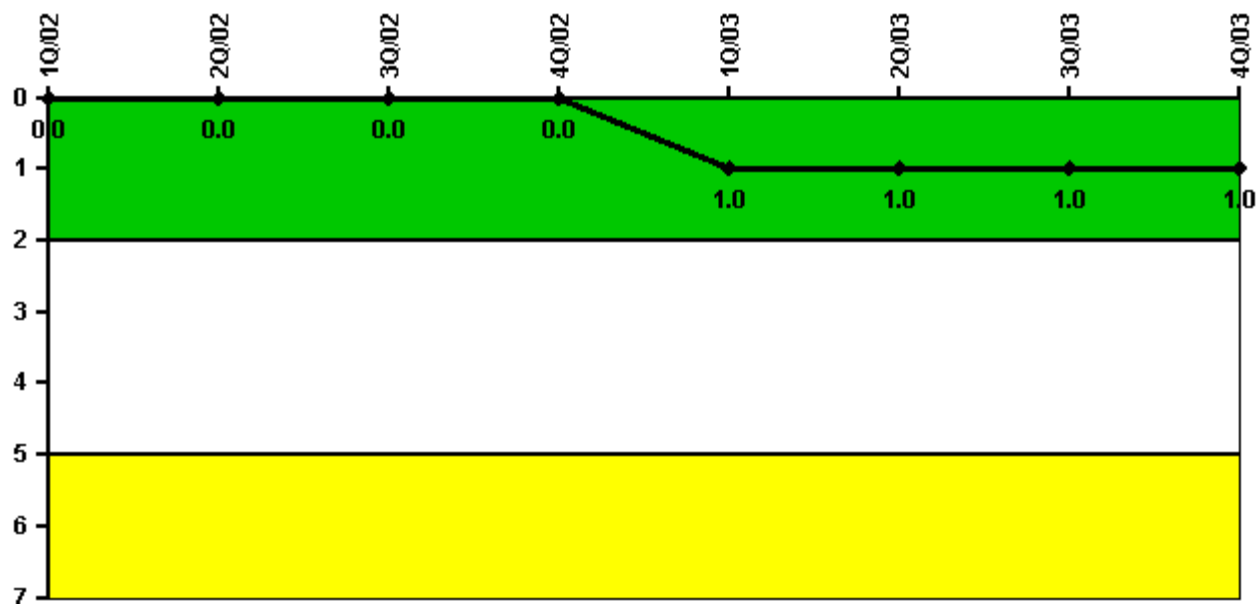
#### Notes

| Protected Area Security Performance Index | 1Q/02  | 2Q/02  | 3Q/02  | 4Q/02  | 1Q/03  | 2Q/03  | 3Q/03  | 4Q/03  |
|---|--------|--------|--------|--------|--------|--------|--------|--------|
| IDS compensatory hours                    | 237.63 | 161.07 | 142.80 | 139.82 | 605.38 | 135.40 | 311.73 | 118.28 |
| CCTV compensatory hours                   | 4.5    | 18.6   | 7.9    | 41.3   | 0.8    | 4.9    | 2.8    | 32.3   |
| IDS normalization factor                  | 1.90   | 1.90   | 1.90   | 1.90   | 1.90   | 1.90   | 1.90   | 1.90   |
| CCTV normalization factor                 | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    |
|   |        |        |        |        |        |        |        |        |
| Index Value                               | 0.038  | 0.028  | 0.024  | 0.025  | 0.035  | 0.034  | 0.039  | 0.037  |

Licensee Comments: none



### Personnel Screening Program



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

| Personnel Screening Program | 1Q/02 | 2Q/02 | 3Q/02 | 4Q/02 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Program failures            | 0     | 0     | 0     | 0     | 1     | 0     | 0     | 0     |
|                             |       |       |       |       |       |       |       |       |
| Indicator value             | 0     | 0     | 0     | 0     | 1     | 1     | 1     | 1     |

Licensee Comments: none

### FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

| FFD/Personnel Reliability | 1Q/02 | 2Q/02 | 3Q/02 | 4Q/02 | 1Q/03 | 2Q/03 | 3Q/03 | 4Q/03 |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| 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: January 23, 2004