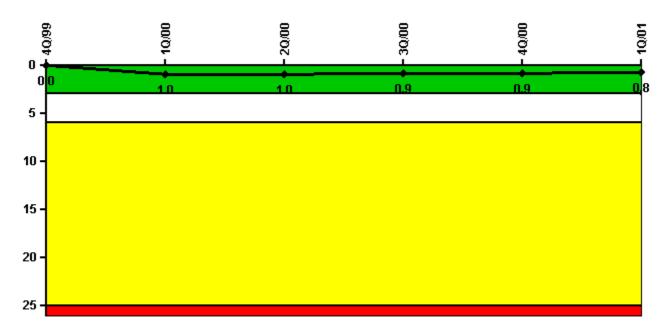
## **Arkansas Nuclear 1**

#### 1Q/2001 Performance Indicators

Licensee's General Comments: none

## Unplanned Scrams per 7000 Critical Hrs

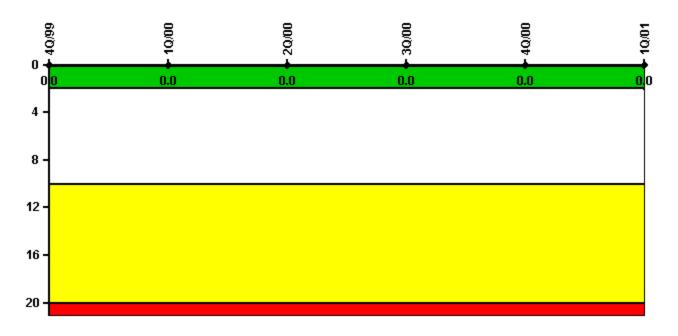


Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

#### Notes

| Unplanned Scrams per 7000 Critical Hrs | 4Q/99  | 1Q/00  | 2Q/00  | 3Q/00  | 4Q/00  | 1Q/01  |
|--|--------|--------|--------|--------|--------|--------|
| Unplanned scrams                       | 0      | 1.0    | 0      | 0      | 0      | 1.0    |
| Critical hours                         | 2004.8 | 1186.3 | 2183.0 | 2208.0 | 2209.0 | 1766.6 |
|  |        |        |        |        |        |        |
| Indicator value                        | 0      | 1.0    | 1.0    | 0.9    | 0.9    | 0.8    |

## Scrams with Loss of Normal Heat Removal

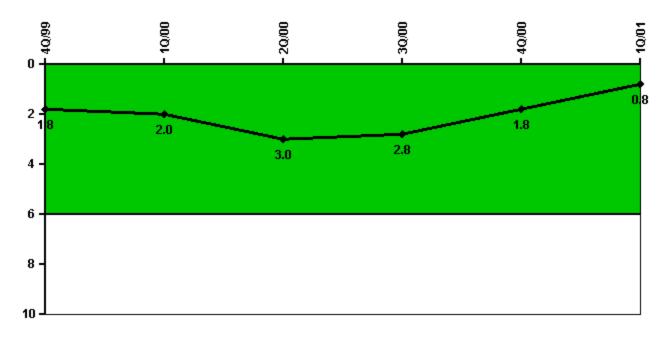


Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

### Notes

| Scrams with Loss of Normal Heat Removal | 4Q/99 | 1Q/00 | 2Q/00 | 3Q/00 | 4Q/00 | 1Q/01 |
|---|-------|-------|-------|-------|-------|-------|
| Scrams                                  | 0     | 0     | 0     | 0     | 0     | 0     |
|   |       |       |       |       |       |       |
| Indicator value                         | 0     | 0     | 0     | 0     | 0     | 0     |

# Unplanned Power Changes per 7000 Critical Hrs

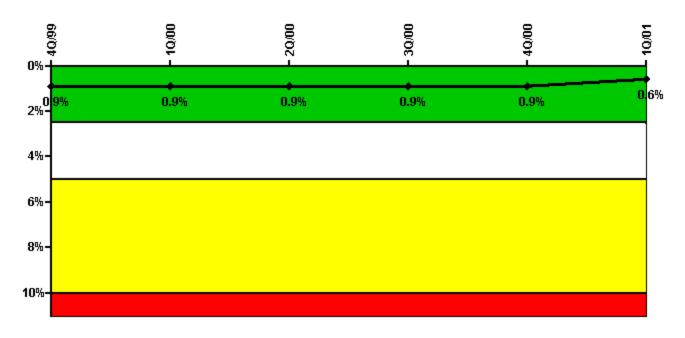


Thresholds: White > 6.0

### Notes

| Unplanned Power Changes per 7000 Critical Hrs | 4Q/99  | 1Q/00  | 2Q/00  | 3Q/00  | 4Q/00  | 1Q/01  |
|---|--------|--------|--------|--------|--------|--------|
| Unplanned power changes                       | 1.0    | 1.0    | 1.0    | 0      | 0      | 0      |
| Critical hours                                | 2004.8 | 1186.3 | 2183.0 | 2208.0 | 2209.0 | 1766.6 |
|   |        |        |        |        |        |        |
| Indicator value                               | 1.8    | 2.0    | 3.0    | 2.8    | 1.8    | 0.8    |

## Safety System Unavailability, Emergency AC Power



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

### Notes

| Safety System Unavailability, Emergency AC Power | 4Q/99   | 1Q/00   | 2Q/00   | 3Q/00   | 4Q/00   | 1Q/01   |
|--|---------|---------|---------|---------|---------|---------|
| Train 1  |         |         |         |         |         |         |
| Planned unavailable hours                        | 0       | 0.83    | 0.62    | 0.65    | 0.58    | 1.80    |
| Unplanned unavailable hours                      | 0       | 0       | 0       | 0       | 0       | 0       |
| Fault exposure hours                             | 0       | 0       | 0       | 0       | 0       | 0       |
| Effective Reset hours                            | 0       | 0       | 0       | 0       | 0       | 0       |
| Required hours                                   | 2041.00 | 2184.00 | 2183.00 | 2208.00 | 2209.00 | 2160.00 |
| Train 2  |         |         |         |         |         |         |
| Planned unavailable hours                        | 0       | 0.80    | 1.08    | 0.83    | 0.68    | 1.17    |
| Unplanned unavailable hours                      | 0       | 0       | 0       | 0       | 0       | 0       |
| Fault exposure hours                             | 0       | 0       | 0       | 0       | 0       | 0       |
| Effective Reset hours                            | 0       | 0       | 0       | 0       | 0       | 0       |
| Required hours                                   | 2041.00 | 2184.00 | 2183.00 | 2208.00 | 2209.00 | 2160.00 |
|  |         |         |         |         |         |         |
| Indicator value                                  | 0.9%    | 0.9%    | 0.9%    | 0.9%    | 0.9%    | 0.6%    |

#### Licensee Comments:

1Q/01: Based on qualified vendor failure analysis and an Arkansas Nuclear One review of a previously reported Emergency Diesel Generator Speed Switch failure on Train 2, it has been determined that the switch failure occurred during calibration efforts after being removed from the engine control cabinet. As such, previously reported fault exposure hours have been removed from Train 2 for January and February.

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

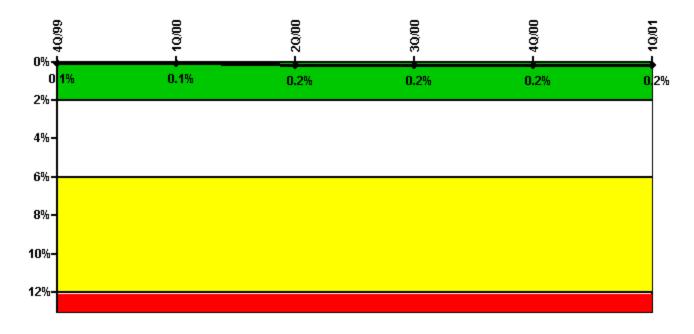


Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

### **Notes**

| Safety System Unavailability, High Pressure Injection System (HPSI) | 4Q/99   | 1Q/00   | 2Q/00   | 3Q/00   | 4Q/00   | 1Q/01   |
|---|---------|---------|---------|---------|---------|---------|
| Train 1   |         |         |         |         |         |         |
| Planned unavailable hours   | 0       | 0       | 5.58    | 13.75   | 0       | 0       |
| Unplanned unavailable hours   | 0       | 0       | 0       | 0       | 0       | 0       |
| Fault exposure hours  | 0       | 0       | 0       | 0       | 0       | 0       |
| Effective Reset hours   | 0       | 0       | 0       | 0       | 0       | 0       |
| Required hours  | 2033.00 | 1326.40 | 2183.00 | 2208.00 | 2209.00 | 1766.60 |
| Train 2   |         |         |         |         |         |         |
| Planned unavailable hours   | 0       | 0       | 0       | 10.88   | 0       | 3.60    |
| Unplanned unavailable hours   | 0       | 0       | 0       | 0       | 0       | 0       |
| Fault exposure hours  | 0       | 0       | 0       | 0       | 0       | 0       |
| Effective Reset hours   | 0       | 0       | 0       | 0       | 0       | 0       |
| Required hours  | 2033.00 | 1326.40 | 2183.00 | 2208.00 | 2209.00 | 1766.60 |
|   |         |         |         |         |         |         |
| Indicator value   | 0.2%    | 0.2%    | 0.2%    | 0.2%    | 0.2%    | 0.2%    |

# Safety System Unavailability, Heat Removal System (AFW)

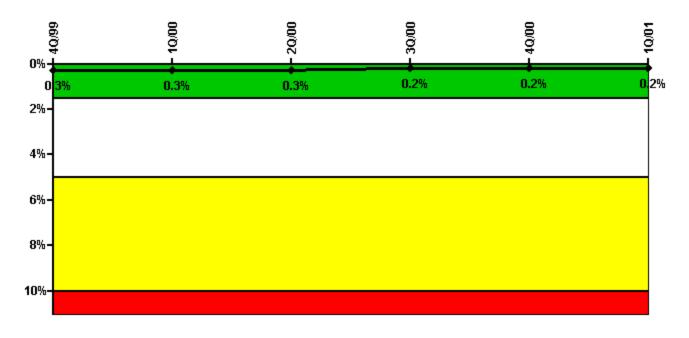


Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

### Notes

| Safety System Unavailability, Heat Removal System (AFW) | 4Q/99   | 1Q/00   | 2Q/00   | 3Q/00   | 4Q/00   | 1Q/01   |
|---|---------|---------|---------|---------|---------|---------|
| Train 1   |         |         |         |         |         |         |
| Planned unavailable hours                               | 12.23   | 12.50   | 17.50   | 0.20    | 0       | 0       |
| Unplanned unavailable hours                             | 0       | 0       | 9.30    | 0       | 0       | 2.30    |
| Fault exposure hours                                    | 0       | 0       | 0       | 0       | 0       | 0       |
| Effective Reset hours                                   | 0       | 0       | 0       | 0       | 0       | 0       |
| Required hours  | 2001.10 | 1328.00 | 2183.00 | 2208.00 | 2209.00 | 1818.10 |
| Train 2   |         |         |         |         |         |         |
| Planned unavailable hours                               | 0       | 0       | 5.50    | 11.20   | 0       | 7.20    |
| Unplanned unavailable hours                             | 0       | 0       | 0       | 0       | 0       | 0       |
| Fault exposure hours                                    | 0       | 0       | 0       | 0       | 0       | 0       |
| Effective Reset hours                                   | 0       | 0       | 0       | 0       | 0       | 0       |
| Required hours  | 2001.10 | 1431.70 | 2183.00 | 2208.00 | 2209.00 | 1821.30 |
|   |         |         |         |         |         |         |
| Indicator value   | 0.1%    | 0.1%    | 0.2%    | 0.2%    | 0.2%    | 0.2%    |

# Safety System Unavailability, Residual Heat Removal System

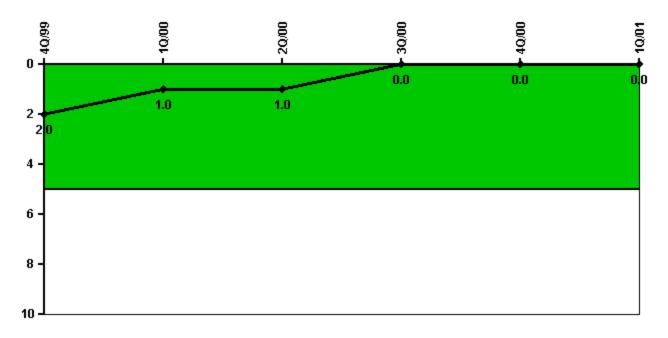


Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

### Notes

| Safety System Unavailability, Residual Heat Removal System | 4Q/99   | 1Q/00   | 2Q/00   | 3Q/00   | 4Q/00   | 1Q/01   |
|--|---------|---------|---------|---------|---------|---------|
| Train 1  |         |         |         |         |         |         |
| Planned unavailable hours                                  | 0       | 15.10   | 0       | 0       | 1.83    | 0       |
| Unplanned unavailable hours                                | 0       | 0       | 0       | 0       | 0       | 0       |
| Fault exposure hours                                       | 0       | 0       | 0       | 0       | 0       | 0       |
| Effective Reset hours                                      | 0       | 0       | 0       | 0       | 0       | 0       |
| Required hours   | 2209.00 | 2184.00 | 2183.00 | 2208.00 | 2209.00 | 2160.00 |
| Train 2  |         |         |         |         |         |         |
| Planned unavailable hours                                  | 0       | 0       | 0.10    | 18.60   | 2.20    | 0       |
| Unplanned unavailable hours                                | 0       | 0       | 0       | 0       | 0       | 28.25   |
| Fault exposure hours                                       | 0       | 0       | 0       | 0       | 0       | 0       |
| Effective Reset hours                                      | 0       | 0       | 0       | 0       | 0       | 0       |
| Required hours   | 2209.00 | 2184.00 | 2183.00 | 2208.00 | 2209.00 | 2160.00 |
|  |         |         |         |         |         |         |
| Indicator value  | 0.3%    | 0.3%    | 0.3%    | 0.2%    | 0.2%    | 0.2%    |

# Safety System Functional Failures (PWR)

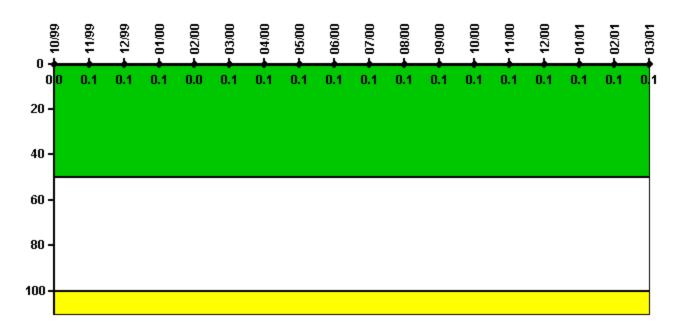


Thresholds: White > 5.0

### Notes

| Safety System Functional Failures (PWR) | 4Q/99 | 1Q/00 | 2Q/00 | 3Q/00 | 4Q/00 | 1Q/01 |
|---|-------|-------|-------|-------|-------|-------|
| Safety System Functional Failures       | 0     | 0     | 0     | 0     | 0     | 0     |
|   |       |       |       |       |       |       |
| Indicator value                         | 2     | 1     | 1     | 0     | 0     | 0     |

# **Reactor Coolant System Activity**

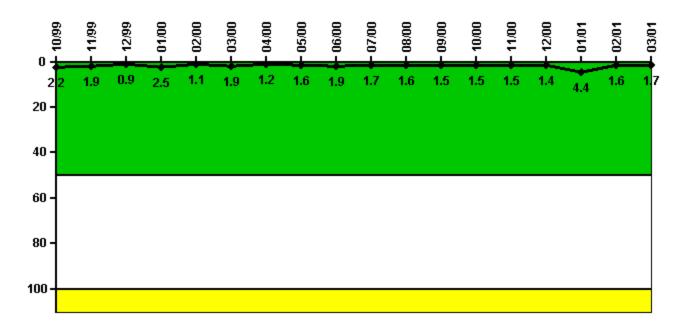


Thresholds: White > 50.0 Yellow > 100.0

#### Notes

| Reactor Coolant System Activity | 10/99    | 11/99    | 12/99    | 1/00     | 2/00     | 3/00     | 4/00     | 5/00     | 6/00     | 7/00     | 8/00     | 9/00     |
|---------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Maximum activity                | 0.001710 | 0.001770 | 0.001900 | 0.001910 | 0.001440 | 0.002030 | 0.002040 | 0.002300 | 0.002360 | 0.002420 | 0.002610 | 0.002780 |
| Technical specification limit   | 3.5      | 3.5      | 3.5      | 3.5      | 3.5      | 3.5      | 3.5      | 3.5      | 3.5      | 3.5      | 3.5      | 3.5      |
|                                 |          |          |          |          |          |          |          |          |          |          |          |          |
| Indicator value                 | 0        | 0.1      | 0.1      | 0.1      | 0        | 0.1      | 0.1      | 0.1      | 0.1      | 0.1      | 0.1      | 0.1      |
| Reactor Coolant System Activity | 10/00    | 11/00    | 12/00    | 1/01     | 2/01     | 3/01     |          |          |          |          |          |          |
| Maximum activity                | 0.002720 | 0.002840 | 0.003020 | 0.003100 | 0.003170 | 0.003710 |          |          |          |          |          |          |
|                                 |          |          |          |          |          |          |          |          |          |          |          |          |
| Technical specification limit   | 3.5      | 3.5      | 3.5      | 3.5      | 3.5      | 3.5      |          |          |          |          |          |          |
| Technical specification limit   | 3.5      | 3.5      | 3.5      | 3.5      | 3.5      | 3.5      |          |          |          |          |          |          |

## Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

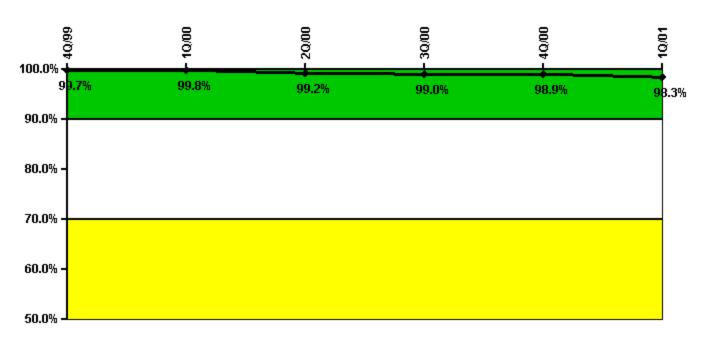
#### Notes

| Reactor Coolant System Leakage | 10/99 | 11/99 | 12/99  | 1/00          | 2/00  | 3/00  | 4/00  | 5/00  | 6/00  | 7/00  | 8/00  | 9/00  |
|--------------------------------|-------|-------|--------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum leakage                | 0.221 | 0.188 | 0.089  | 0.250         | 0.110 | 0.190 | 0.116 | 0.162 | 0.190 | 0.167 | 0.158 | 0.149 |
| 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                | 2.2   | 1.9   | 0.9    | 2.5           | 1.1   | 1.9   | 1.2   | 1.6   | 1.9   | 1.7   | 1.6   | 1.5   |
| Reactor Coolant System Leakage | 10/00 | 11/00 | 12/00  | 1/01          | 2/01  | 3/01  |       |       |       |       |       |       |
| Maximum leakage                | 0.153 | 0.145 | 0.141  | 0.438         | 0.161 | 0.165 |       |       |       |       |       |       |
| Technical specification limit  | 10.0  | 10.0  | 10.0   | 10.0          | 10.0  | 10.0  |       |       |       |       |       |       |
|                                |       |       |        |               |       |       |       |       |       |       |       |       |
|                                |       |       | $\Box$ | $\overline{}$ | -     | -     |       |       |       |       |       |       |

#### Licensee Comments:

3/01: An internal review of 1st quarter 2001 data revealed that a January leakrate performed at low power should have been counted as the highest RCS leakrate for the month. As such, the maximum January 2001 RCS Leakrate was revised from 0.197 to 0.438 GPM.

## **Drill/Exercise Performance**

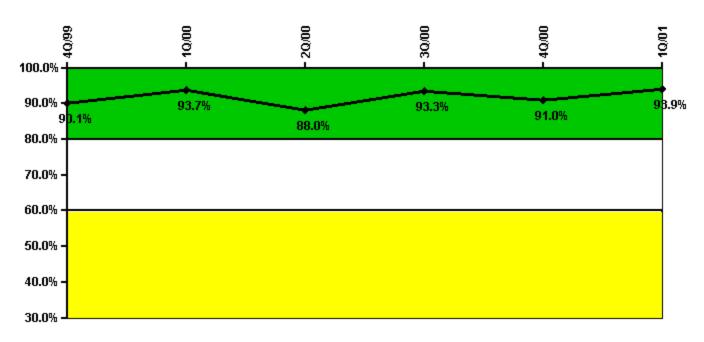


Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

| Drill/Exercise Performance | 4Q/99 | 1Q/00 | 2Q/00 | 3Q/00 | 4Q/00 | 1Q/01 |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Successful opportunities   | 35.0  | 96.0  | 82.0  | 55.0  | 16.0  | 37.0  |
| Total opportunities        | 35.0  | 96.0  | 85.0  | 56.0  | 16.0  | 40.0  |
|                            |       |       |       |       |       |       |
| Indicator value            | 99.7% | 99.8% | 99.2% | 99.0% | 98.9% | 98.3% |

## **ERO Drill Participation**



Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

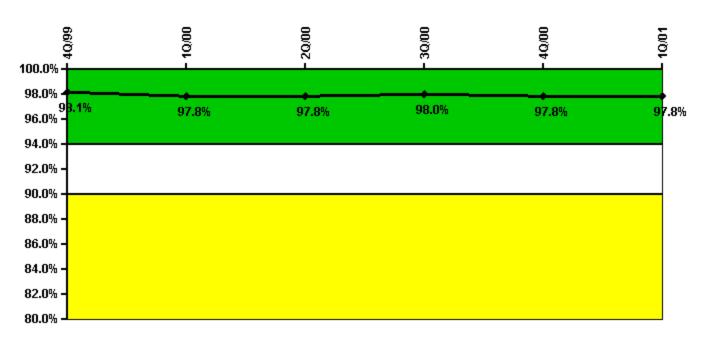
| ERO Drill Participation     | 4Q/99 | 1Q/00 | 2Q/00 | 3Q/00 | 4Q/00 | 1Q/01 |
|-----------------------------|-------|-------|-------|-------|-------|-------|
| Participating Key personnel | 109.0 | 118.0 | 88.0  | 98.0  | 101.0 | 107.0 |
| Total Key personnel         | 121.0 | 126.0 | 100.0 | 105.0 | 111.0 | 114.0 |
|                             |       |       |       |       |       |       |
| Indicator value             | 90.1% | 93.7% | 88.0% | 93.3% | 91.0% | 93.9% |

#### Licensee Comments:

3Q/00: After internal assessment and review, Q3/2000 data was revised from 103 to 98 ERO members participating. This change did not affect the indicator color.

2Q/00: After internal assessment and review, Q2/2000 data was revised from 92 to 88 ERO members participating. This change did not affect the indicator color.

# **Alert & Notification System**

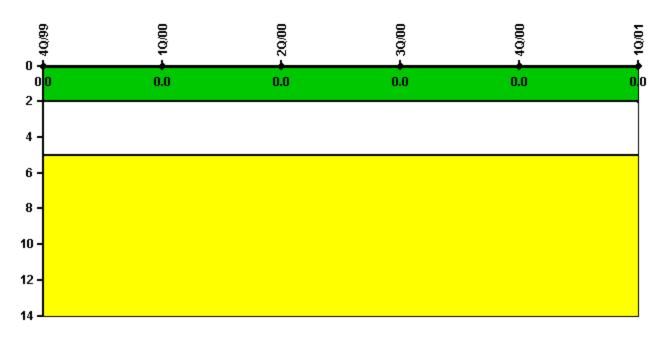


Thresholds: White < 94.0% Yellow < 90.0%

### Notes

| Alert & Notification System | 4Q/99 | 1Q/00 | 2Q/00 | 3Q/00 | 4Q/00 | 1Q/01 |
|-----------------------------|-------|-------|-------|-------|-------|-------|
| Successful siren-tests      | 143   | 144   | 145   | 144   | 142   | 144   |
| Total sirens-tests          | 147   | 147   | 147   | 147   | 147   | 147   |
|                             |       |       |       |       |       |       |
| Indicator value             | 98.1% | 97.8% | 97.8% | 98.0% | 97.8% | 97.8% |

# Occupational Exposure Control Effectiveness

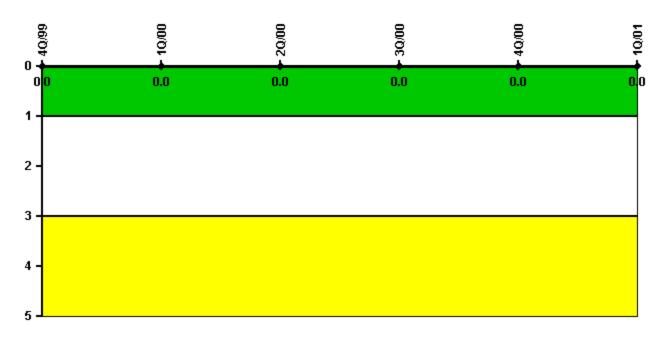


Thresholds: White > 2.0 Yellow > 5.0

### Notes

| Occupational Exposure Control Effectiveness | 4Q/99 | 1Q/00 | 2Q/00 | 3Q/00 | 4Q/00 | 1Q/01 |
|---|-------|-------|-------|-------|-------|-------|
| High radiation area occurrences             | 0     | 0     | 0     | 0     | 0     | 0     |
| Very high radiation area occurrences        | 0     | 0     | 0     | 0     | 0     | 0     |
| Unintended exposure occurrences             | 0     | 0     | 0     | 0     | 0     | 0     |
| Indicator value                             | 0     | 0     | 0     | 0     | 0     | 0     |

# **RETS/ODCM Radiological Effluent**

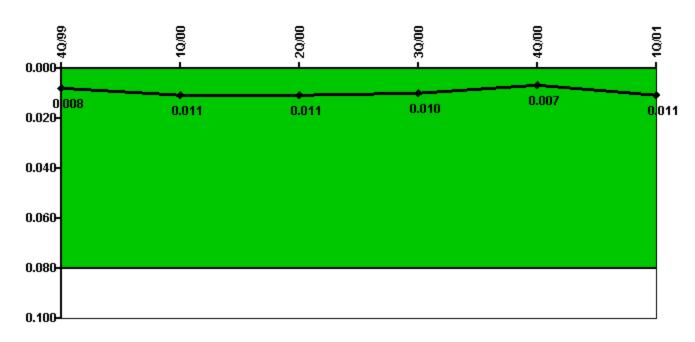


Thresholds: White > 1.0 Yellow > 3.0

### Notes

| RETS/ODCM Radiological Effluent | 4Q/99 | 1Q/00 | 2Q/00 | 3Q/00 | 4Q/00 | 1Q/01 |
|---------------------------------|-------|-------|-------|-------|-------|-------|
| RETS/ODCM occurrences           | 0     | 0     | 0     | 0     | 0     | 0     |
|                                 |       |       |       |       |       |       |
| Indicator value                 | 0     | 0     | 0     | 0     | 0     | 0     |

## **Protected Area Security Performance Index**



Thresholds: White > 0.080

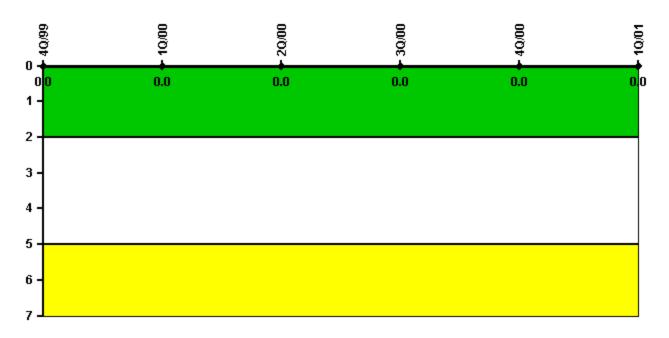
#### Notes

| Protected Area Security Performance Index | 4Q/99  | 1Q/00 | 2Q/00 | 3Q/00 | 4Q/00 | 1Q/01  |
|---|--------|-------|-------|-------|-------|--------|
| IDS compensatory hours                    | 106.30 | 63.20 | 17.90 | 21.60 | 39.50 | 196.90 |
| CCTV compensatory hours                   | 13.9   | 14.5  | 1.5   | 27.0  | 4.5   | 2.5    |
| IDS normalization factor                  | 1.65   | 1.70  | 1.70  | 1.70  | 1.70  | 1.70   |
| CCTV normalization factor                 | 1.0    | 1.1   | 1.1   | 1.1   | 1.1   | 1.1    |
|   |        |       |       |       |       |        |
| Index Value                               | 0.008  | 0.011 | 0.011 | 0.010 | 0.007 | 0.011  |

Licensee Comments:

3Q/00: After internal assessment and review, the Q3/2000 data was revised to include 5.5 IDS hours in July, an added 2 hours IDS in August, and an added 11 CCTV hours in August. These changes did not affect indicator color.

# **Personnel Screening Program**

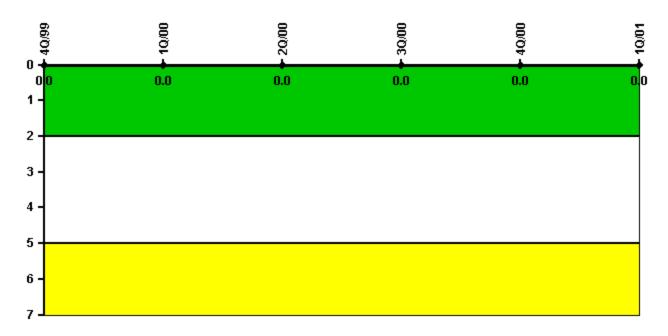


Thresholds: White > 2.0 Yellow > 5.0

### Notes

| Personnel Screening Program | 4Q/99 | 1Q/00 | 2Q/00 | 3Q/00 | 4Q/00 | 1Q/01 |
|-----------------------------|-------|-------|-------|-------|-------|-------|
| Program failures            | 0     | 0     | 0     | 0     | 0     | 0     |
|                             |       |       |       |       |       |       |
| Indicator value             | 0     | 0     | 0     | 0     | 0     | 0     |

## FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

### Notes

| FFD/Personnel Reliability | 4Q/99 | 1Q/00 | 2Q/00 | 3Q/00 | 4Q/00 | 1Q/01 |
|---------------------------|-------|-------|-------|-------|-------|-------|
| Program Failures          | 0     | 0     | 0     | 0     | 0     | 0     |
|                           |       |       |       |       |       |       |
| Indicator value           | 0     | 0     | 0     | 0     | 0     | 0     |

Licensee Comments: none

A PI Summary | Inspection Findings Summary | Action Matrix Summary | Reactor Oversight Process

Last Modified: March 28, 2002