

# Fort Calhoun

## 3Q/2004 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Unplanned scrams	0	0	0	1.0	0	0	0	0
Critical hours	2209.0	2160.0	2183.0	1773.0	1509.0	2061.7	2040.8	2208.0
Indicator value	0	0	0	0.8	0.9	0.9	0.9	0

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



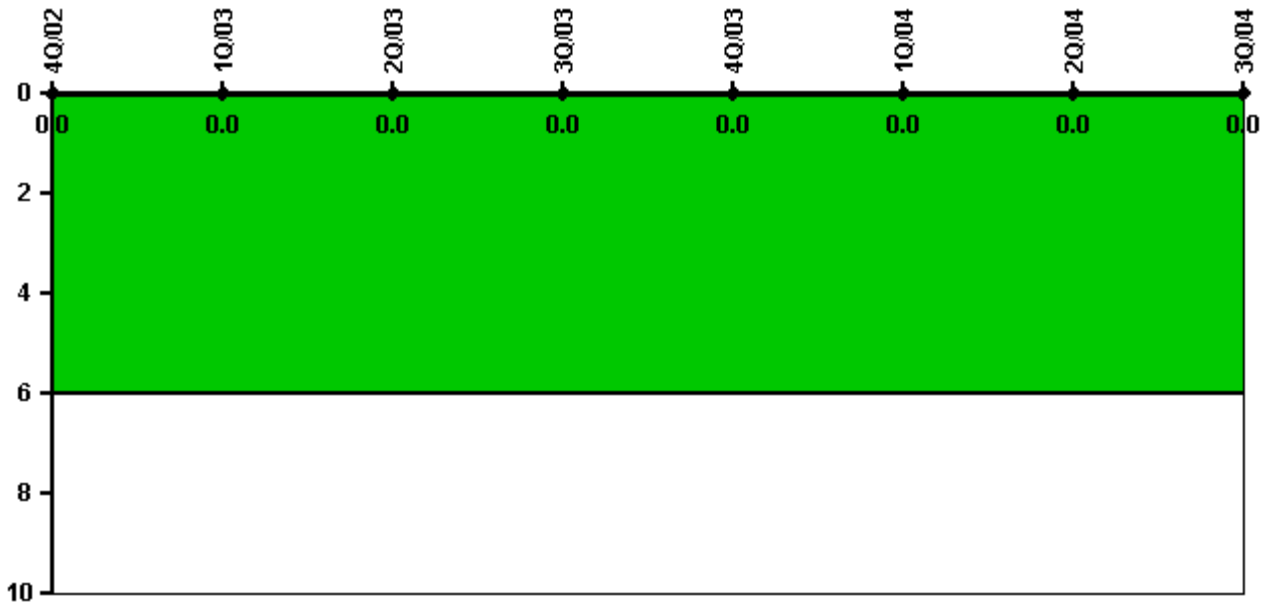
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

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

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



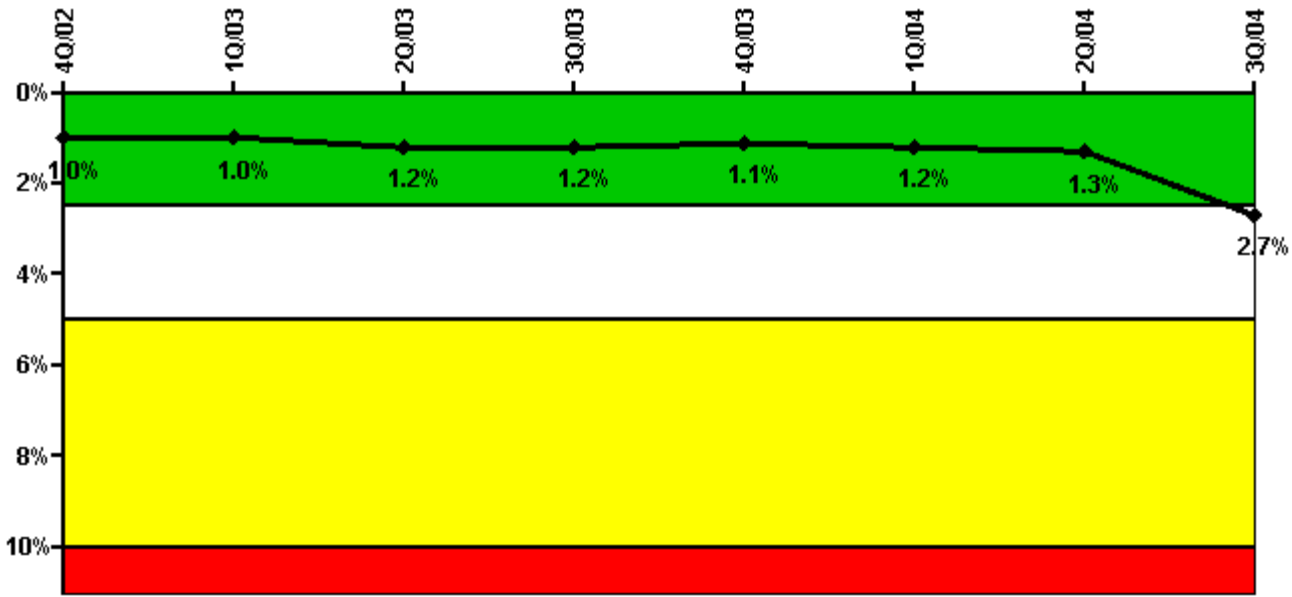
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Unplanned power changes	0	0	0	0	0	0	0	0
Critical hours	2209.0	2160.0	2183.0	1773.0	1509.0	2061.7	2040.8	2208.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



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

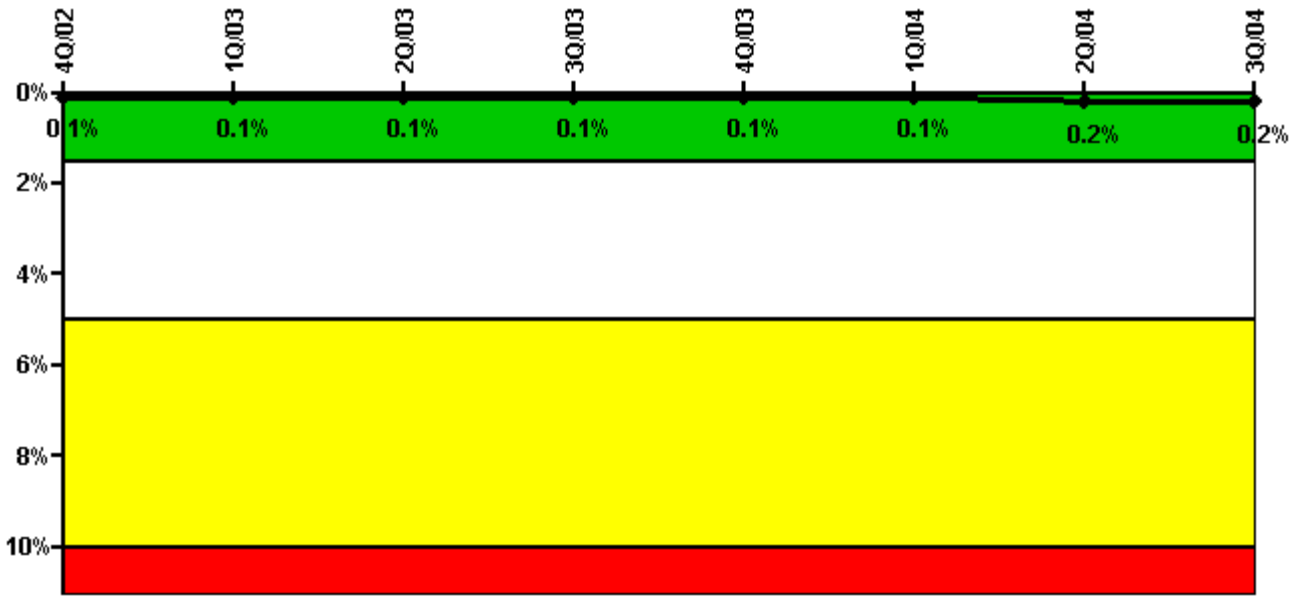
#### Notes

Safety System Unavailability, Emergency AC Power	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
<b>Train 1</b>								
Planned unavailable hours	19.04	19.22	77.77	16.78	21.26	26.73	25.04	94.65
Unplanned unavailable hours	0	0	0	0.98	0	25.27	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00
<b>Train 2</b>								
Planned unavailable hours	23.57	44.40	61.52	15.38	12.82	27.85	25.00	7.78
Unplanned unavailable hours	0	0	0	0.95	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	683.37
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00	2208.00
<b>Indicator value</b>	<b>1.0%</b>	<b>1.0%</b>	<b>1.2%</b>	<b>1.2%</b>	<b>1.1%</b>	<b>1.2%</b>	<b>1.3%</b>	<b>2.7%</b>

#### Licensee Comments:

3Q/04: Diesel generator 2 failed to reach rated voltage during testing on August 18, 2004. Analysis of the failure determined that the fuse that caused the failure had actually failed during testing in July 21, 2004. A detailed analysis of the problem will be submitted in a License Event Report (LER) to be submitted by December 20, 2004.

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



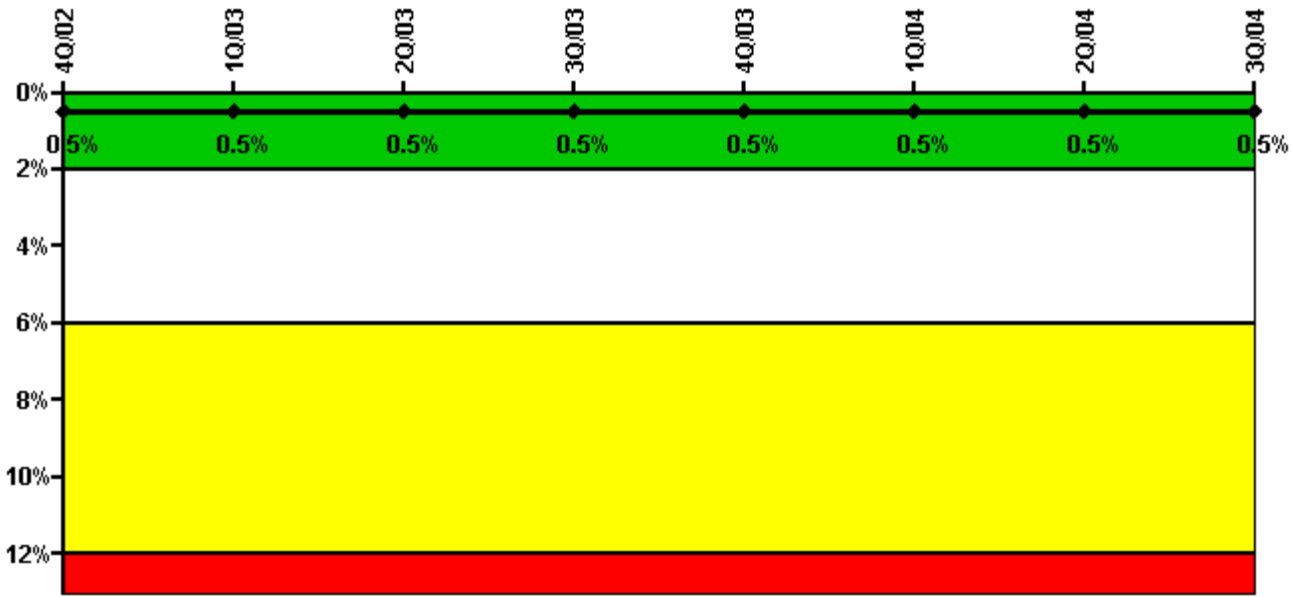
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

**Notes**

Safety System Unavailability, High Pressure Injection System (HPSI)	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
<b>Train 1</b>								
Planned unavailable hours	0.20	0.23	0.20	0.20	0	0	0.02	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	2160.00	2183.00	1773.00	1509.00	2061.00	2058.80	2208.00
<b>Train 2</b>								
Planned unavailable hours	8.00	0.62	12.32	11.90	0.62	11.87	5.65	10.13
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2183.00	1773.00	1509.00	2061.00	2058.80	2208.00
<b>Indicator value</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.2%</b>	<b>0.2%</b>

Licensee Comments: none

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



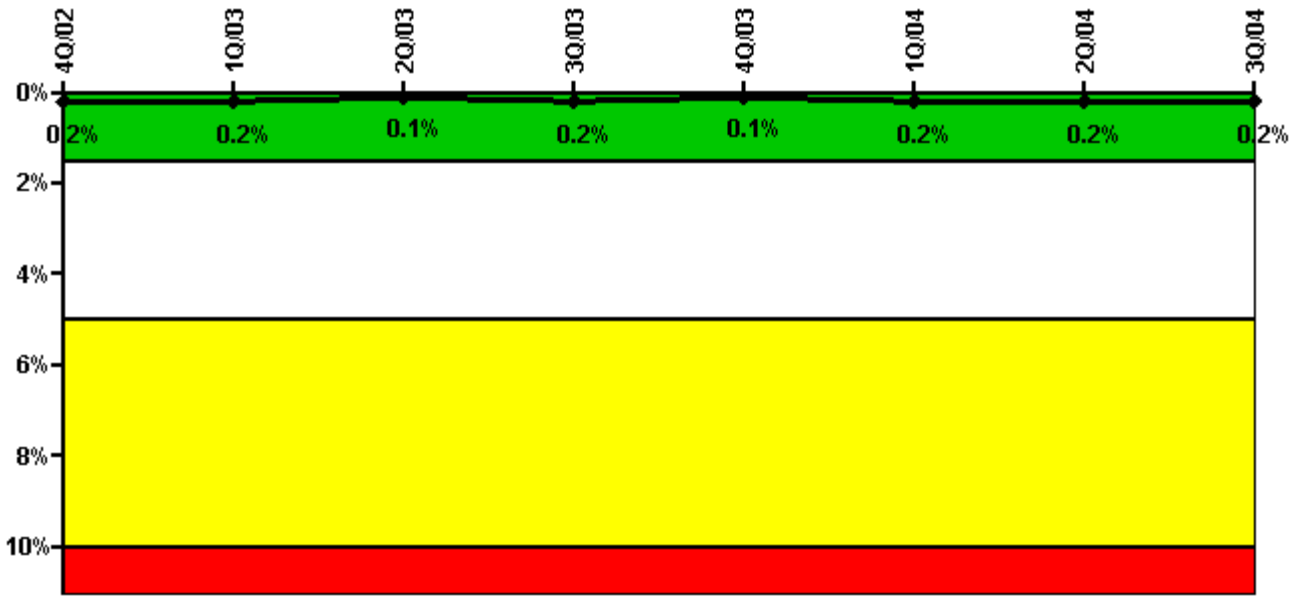
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

**Notes**

Safety System Unavailability, Heat Removal System (AFW)	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
<b>Train 1</b>								
Planned unavailable hours	5.08	13.60	21.68	5.90	6.05	6.65	7.93	9.78
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2183.00	1773.00	1509.00	2076.00	2058.80	2208.00
<b>Train 2</b>								
Planned unavailable hours	7.24	27.10	12.00	12.00	4.93	16.18	12.65	8.95
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2183.00	1773.00	1509.00	2076.00	2058.80	2208.00
<b>Indicator value</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



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

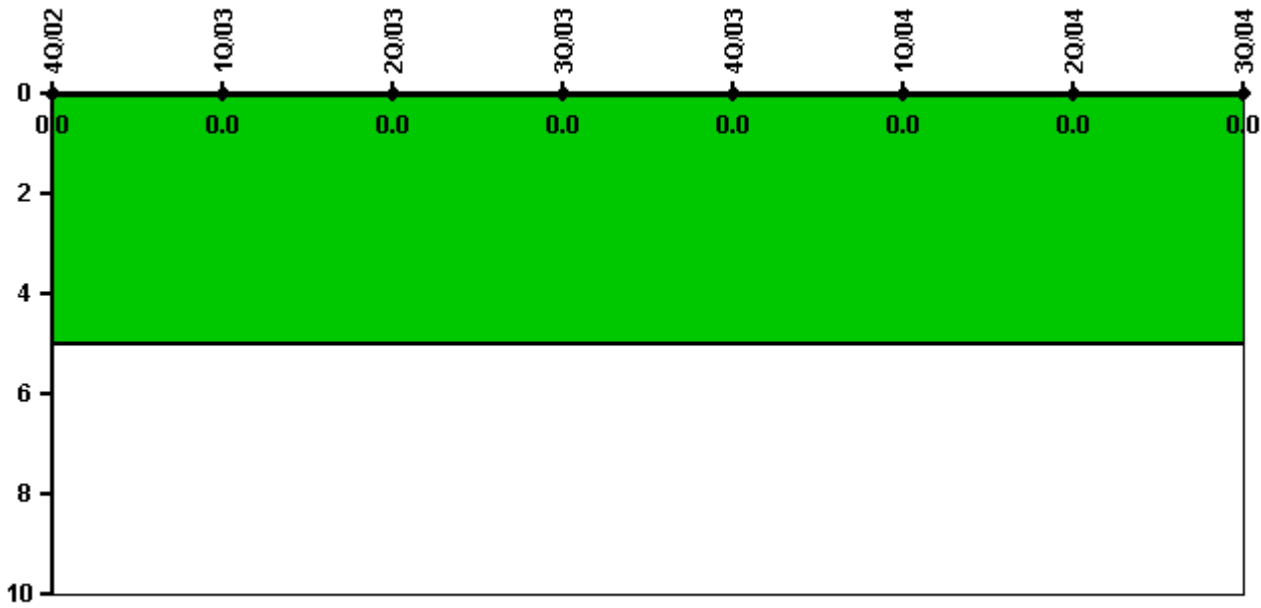
**Notes**

Safety System Unavailability, Residual Heat Removal System	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
<b>Train 1</b>								
Planned unavailable hours	0.40	11.87	11.42	38.03	10.70	37.62	12.25	0.40
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2209.00	2160.00	2183.00	1773.00	1509.00	2061.00	2058.80	2208.00
<b>Train 2</b>								
Planned unavailable hours	0.40	0.23	0.20	1.48	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	2209.00	2160.00	2183.00	1773.00	1509.00	2061.00	2058.80	2208.00
<b>Train 3</b>								
Planned unavailable hours	0	0	0	1.40	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	0	306.50	220.00	107.90	93.50	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	0	306.50	220.00	107.90	93.50	0
<b>Indicator value</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.1%</b>	<b>0.2%</b>	<b>0.1%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>

Licensee Comments:

3Q/03: A review of the standards indicated that our interpretation of the indicator was too conservative. The station did not properly credit installed shutdown cooling equipment in the indicator in October of 2003. The 45.9 hours of outage time previously indicated is being removed.

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

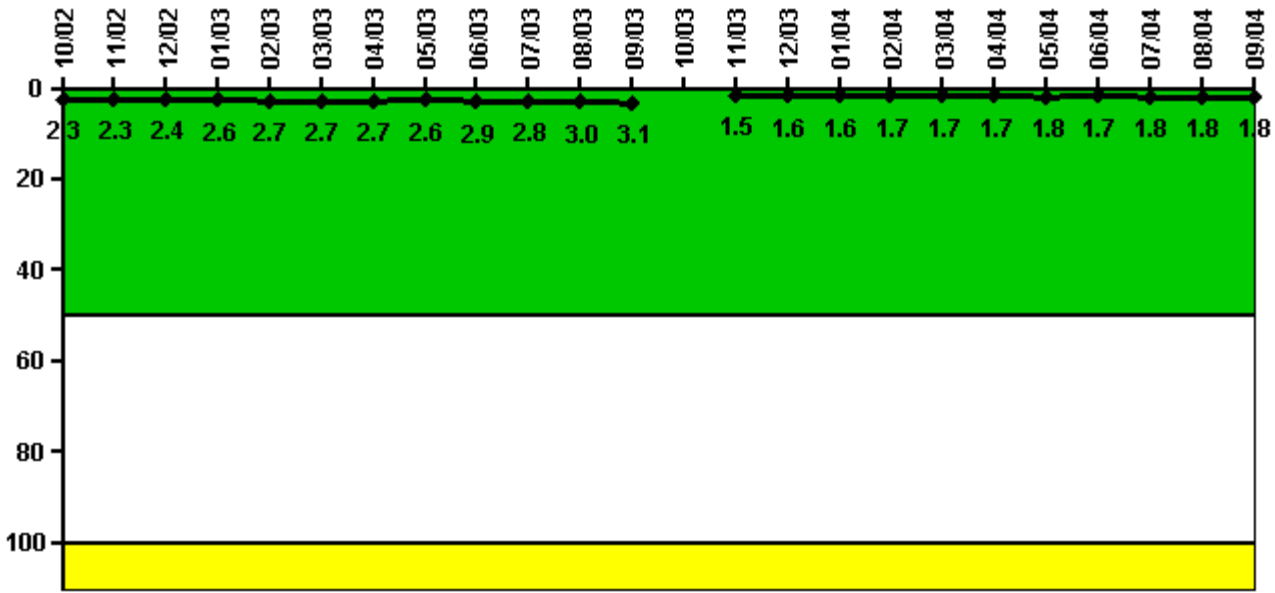
### Notes

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

Licensee Comments: none



### Reactor Coolant System Activity



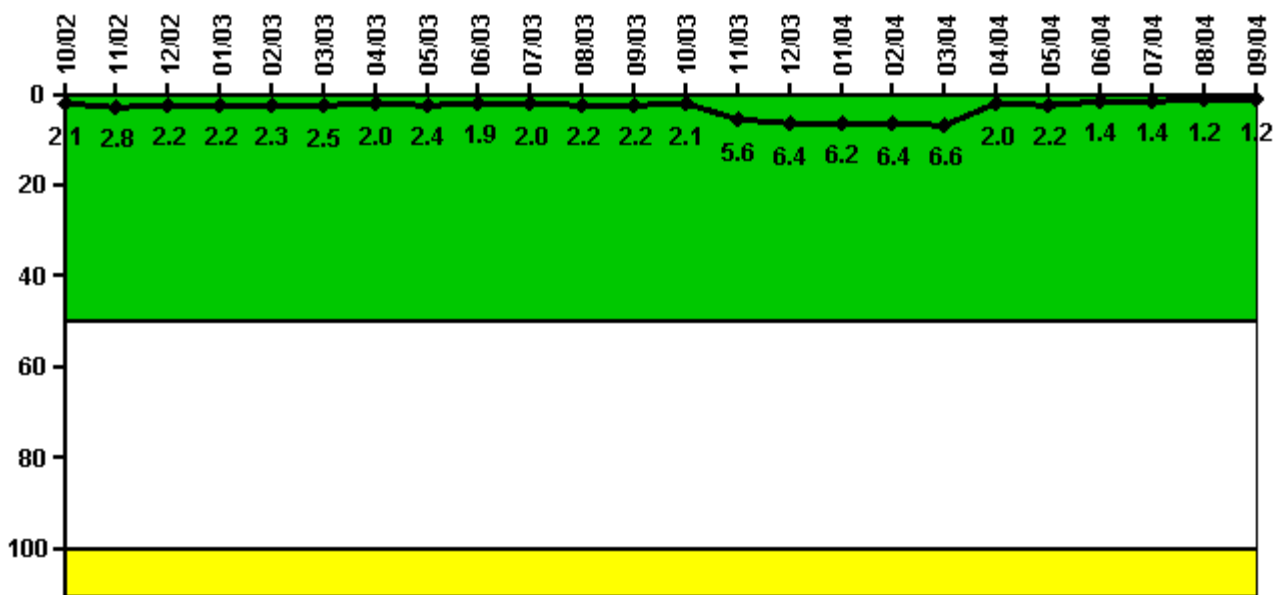
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Activity	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03
Maximum activity	0.022800	0.023100	0.024000	0.025900	0.027000	0.026800	0.026800	0.025700	0.028600	0.027800	0.029900	0.030500
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	2.3	2.3	2.4	2.6	2.7	2.7	2.7	2.6	2.9	2.8	3.0	3.1
Reactor Coolant System Activity	10/03	11/03	12/03	1/04	2/04	3/04	4/04	5/04	6/04	7/04	8/04	9/04
Maximum activity	N/A	0.015000	0.015600	0.015500	0.016600	0.016500	0.016900	0.017700	0.017400	0.018200	0.018200	0.018300
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	1.5	1.6	1.6	1.7	1.7	1.7	1.8	1.7	1.8	1.8	1.8

Licensee Comments: none

### Reactor Coolant System Leakage



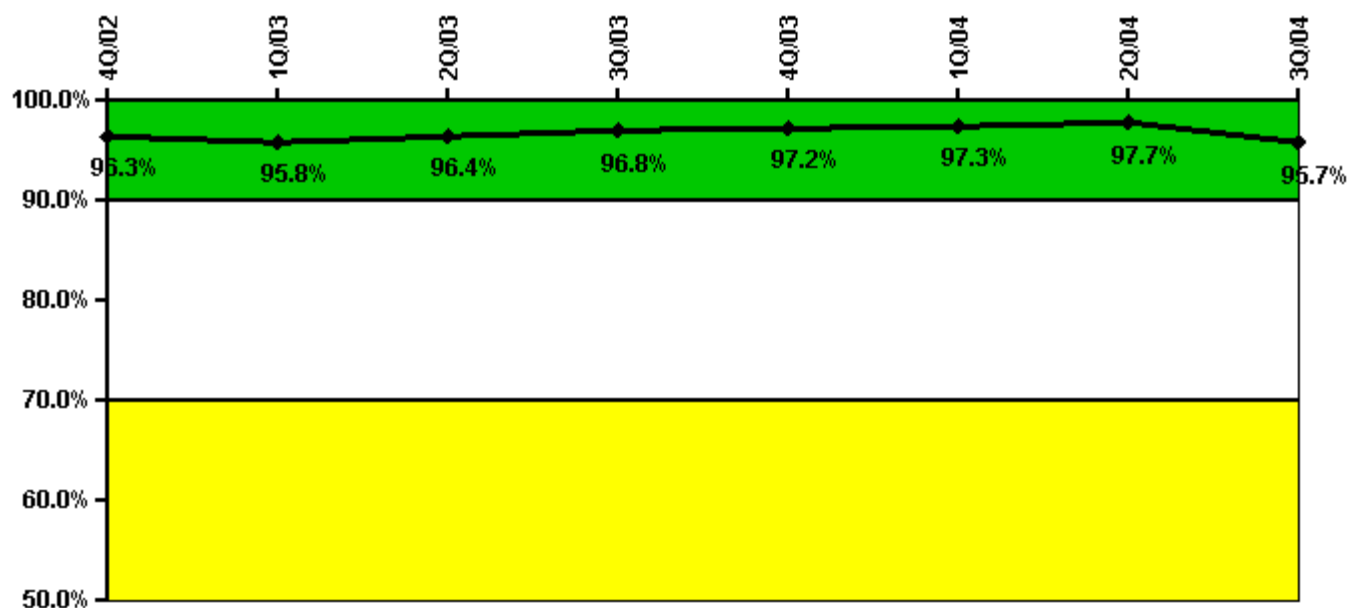
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Leakage	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03
Maximum leakage	0.210	0.276	0.216	0.223	0.230	0.248	0.204	0.241	0.186	0.202	0.223	0.215
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	2.1	2.8	2.2	2.2	2.3	2.5	2.0	2.4	1.9	2.0	2.2	2.2
Reactor Coolant System Leakage	10/03	11/03	12/03	1/04	2/04	3/04	4/04	5/04	6/04	7/04	8/04	9/04
Maximum leakage	0.213	0.557	0.636	0.624	0.640	0.664	0.195	0.216	0.136	0.143	0.122	0.120
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	2.1	5.6	6.4	6.2	6.4	6.6	2.0	2.2	1.4	1.4	1.2	1.2

Licensee Comments: none

### Drill/Exercise Performance



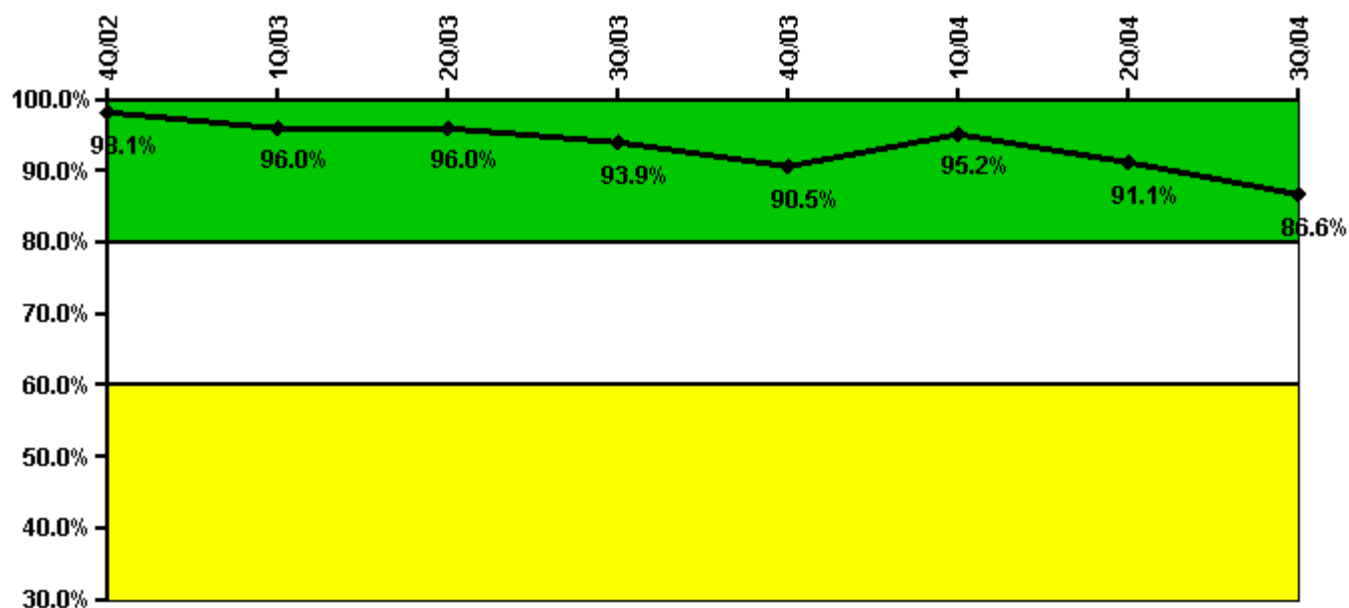
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Successful opportunities	10.0	7.0	15.0	3.0	10.0	36.0	4.0	4.0
Total opportunities	10.0	8.0	16.0	3.0	10.0	37.0	4.0	5.0
Indicator value	96.3%	95.8%	96.4%	96.8%	97.2%	97.3%	97.7%	95.7%

Licensee Comments: none

### ERO Drill Participation



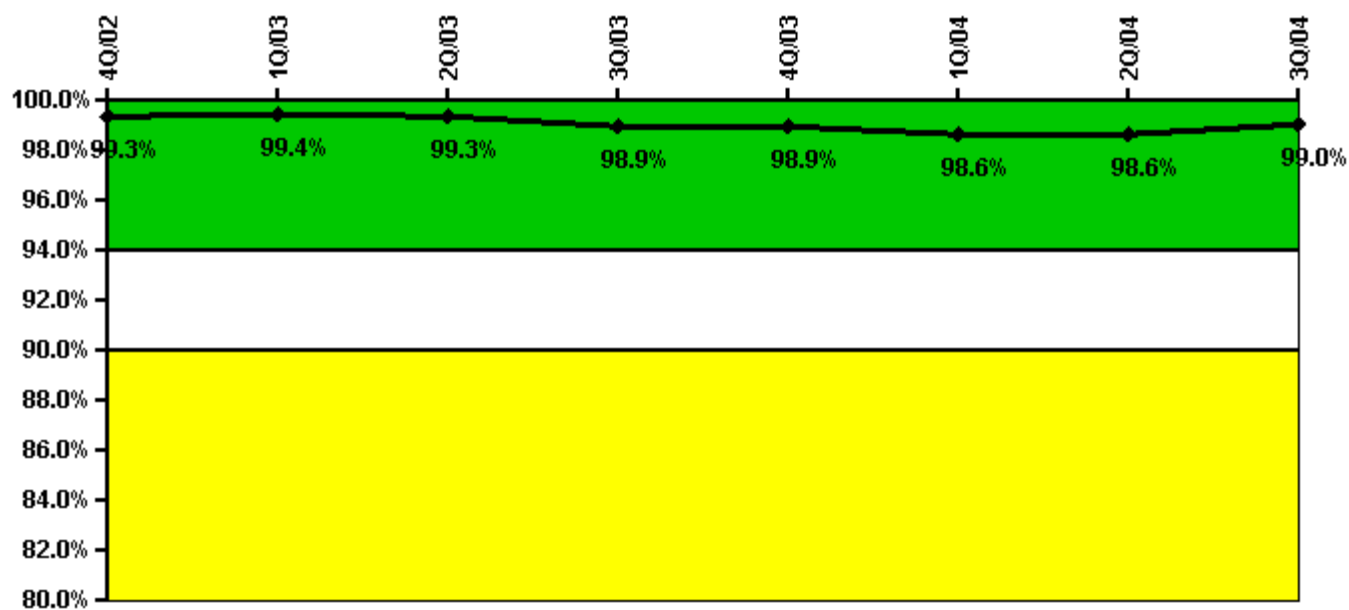
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Participating Key personnel	101.0	97.0	95.0	92.0	95.0	99.0	92.0	84.0
Total Key personnel	103.0	101.0	99.0	98.0	105.0	104.0	101.0	97.0
Indicator value	98.1%	96.0%	96.0%	93.9%	90.5%	95.2%	91.1%	86.6%

Licensee Comments: none

### Alert & Notification System



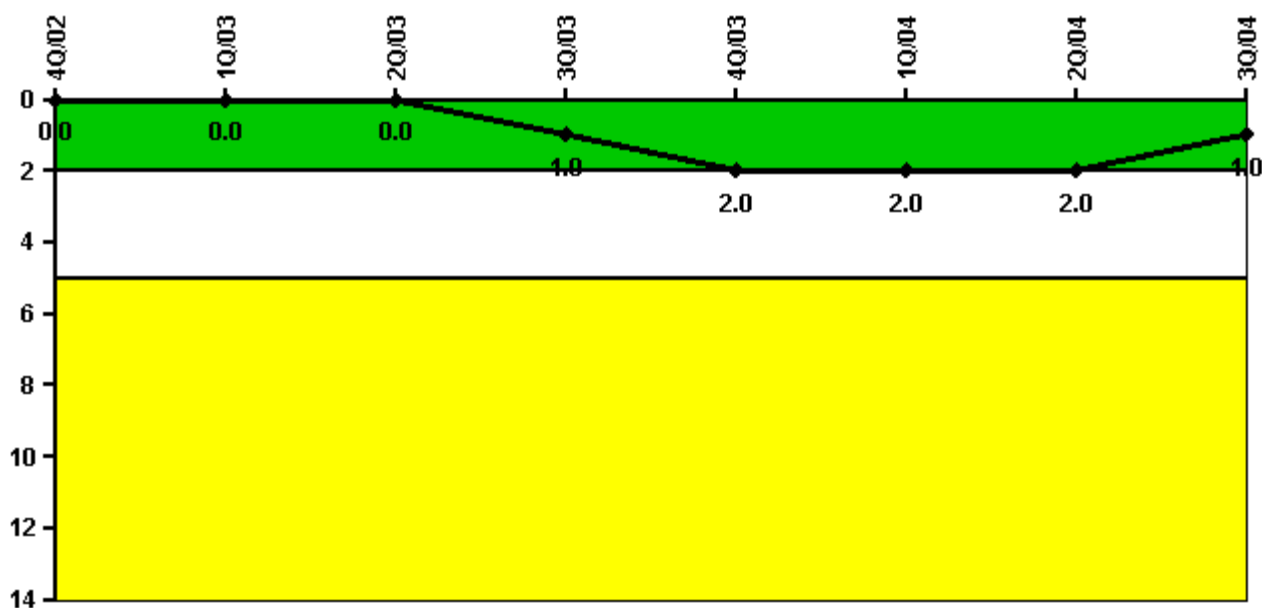
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
Successful siren-tests	704	804	700	888	703	797	699	900
Total sirens-tests	707	807	707	909	707	808	707	909
Indicator value	99.3%	99.4%	99.3%	98.9%	98.9%	98.6%	98.6%	99.0%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



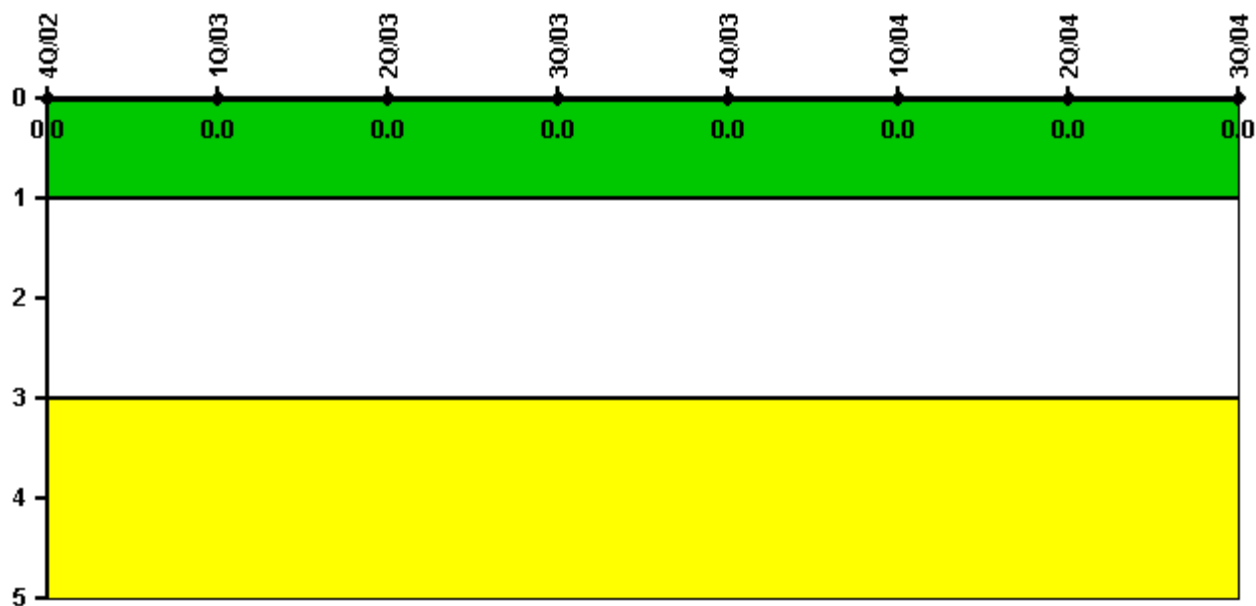
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
High radiation area occurrences	0	0	0	1	1	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>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>

Licensee Comments: none

### RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

#### Notes

RETS/ODCM Radiological Effluent	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

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

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

Last Modified: October 25, 2004