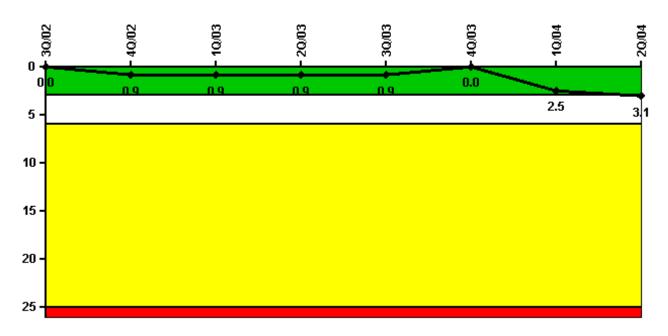
## **Callaway**

#### 2Q/2004 Performance Indicators

Licensee's General Comments: none

## Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

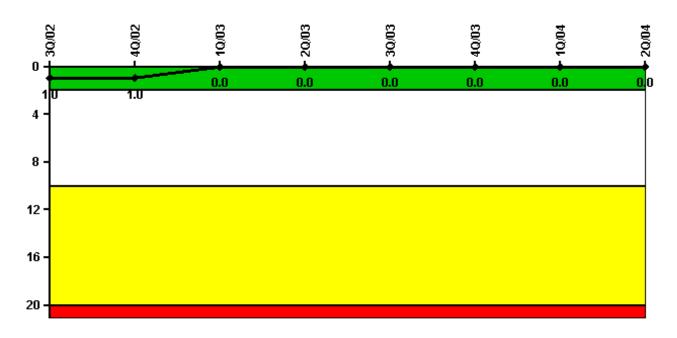
#### Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Unplanned scrams	0	1.0	0	0	0	0	3.0	0
Critical hours	2208.0	1323.0	1929.0	2148.5	2208.0	2143.5	1844.9	670.7
Indicator value	0	0.9	0.9	0.9	0.9	0	2.5	3.1

Licensee Comments:

2Q/04: Callaway Plant has crossed the Green-White threshold for this performance indicator as of the second quarter 2004 data submittal. The cause of this condition is the occurrence of three unplanned reactor trips in the first quarter 2004 combined with a reduced number of critical hours resulting from maintenance and refueling outages. This issue has been entered into the Callaway corrective action program.

## Scrams with Loss of Normal Heat Removal

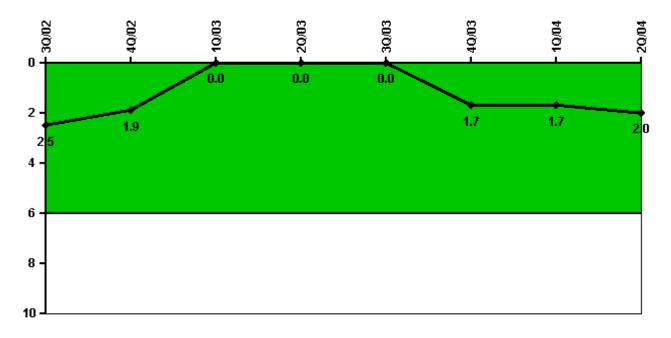


Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Scrams	0	0	0	0	0	0	0	0
Indicator value	1.0	1.0	0	0	0	0	0	О

# Unplanned Power Changes per 7000 Critical Hrs

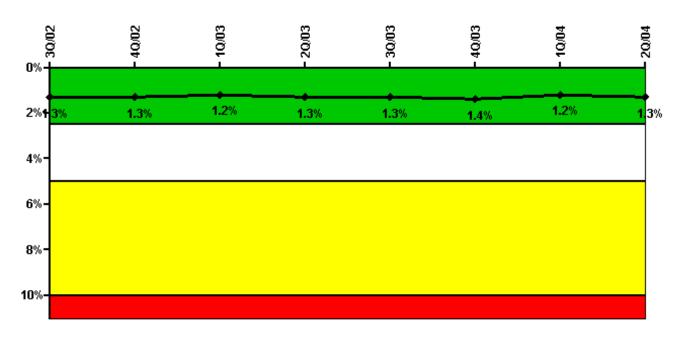


Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/02	4Q/02	10/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Unplanned power changes	0	0	0	0	0	2.0	0	0
Critical hours	2208.0	1323.0	1929.0	2148.5	2208.0	2143.5	1844.9	670.7
Indicator value	2.5	1.9	О	О	О	1.7	1.7	2.0

# Safety System Unavailability, Emergency AC Power



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

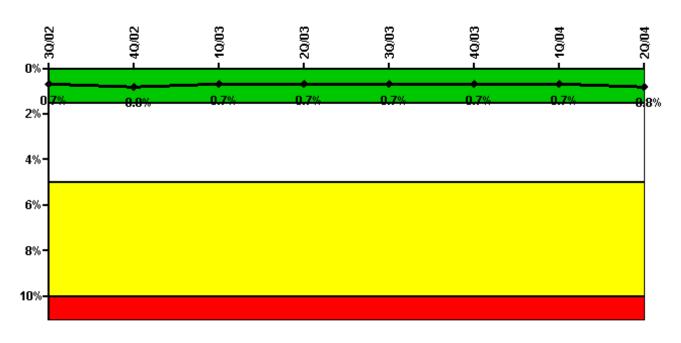
### Notes

Safety System Unavailability, Emergency AC Power	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Train 1								
Planned unavailable hours	43.30	56.00	4.50	3.60	51.70	3.00	3.40	3.90
Unplanned unavailable hours	8.20	0	0	0	0	0	28.00	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	2208.00	1521.20	1970.40	2184.00	2208.00	2208.00	2184.00	1234.35
Train 2								
Planned unavailable hours	32.80	9.10	2.80	38.10	2.00	40.10	1.70	3.10
Unplanned unavailable hours	0	0	11.90	18.10	0	47.70	55.60	11.40
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	1521.20	1970.40	2184.00	2208.00	2208.00	2184.00	1234.35
Indicator value	1.3%	1.3%	1.2%	1.3%	1.3%	1.4%	1.2%	1.3%

Licensee Comments:

1Q/04: Additional unavailability was discovered for this safety system subsequent to the original submittal. The change affects data for the first quarter 2004 and does not result in crossing a threshold or changing the color of the indicator.

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



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

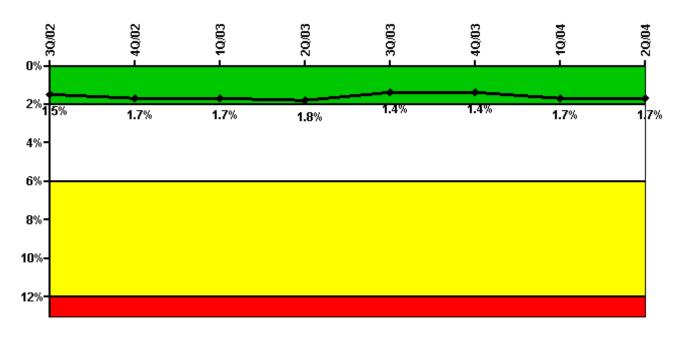
### Notes

3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
4.30	3.10	2.30	26.00	2.50	30.80	4.00	1.00
0.60	0	0	0	0	0	0	5.30
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
2208.00	1491.50	1941.00	2174.80	2208.00	2208.00	2160.00	764.25
2.40	5.20	17.90	74.70	2.10	3.00	11.30	6.80
9.60	1.10	0	0	0	3.90	0	0
0	О	0	0	0	0	0	0
0	0	0	0	0	0	0	0
2208.00	1491.50	1941.00	2174.80	2208.00	2208.00	2160.00	764.25
26.20	2.10	3.00	3.40	42.70	30.80	17.50	1.00
0.60	0	3.30	1.10	0	0	0	5.30
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
2208.00	1491.50	1941.00	2174.80	2208.00	2208.00	2160.00	737.70
2.50	17.00	15.50	19.30	41.70	3.30	13.50	0.20
9.60	1.10	0	0	0	3.90	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
2208.00	1491.50	1941.00	2174.80	2208.00	2208.00	2160.00	737.70
0.7%	0.8%	0.7%	0.7%	0.7%	0.7%	0.7%	0.8%
	4.30 0.60 0 2208.00 2.40 9.60 0 2208.00 26.20 0.60 0 2208.00 2.50 9.60 0 2.50 9.60	4.30 3.10 0.60 0 0 0 0 0 2208.00 1491.50 2.40 5.20 9.60 1.10 0 0 2208.00 1491.50 26.20 2.10 0.60 0 0 0 2208.00 1491.50 2.50 17.00 9.60 1.10 0 0 0 0 2208.00 1491.50	4.30       3.10       2.30         0.60       0       0         0       0       0         0       0       0         0       0       0         2208.00       1491.50       1941.00         2.40       5.20       17.90         9.60       1.10       0         0       0       0         2208.00       1491.50       1941.00         26.20       2.10       3.00         0       0       0         0       0       0         2208.00       1491.50       1941.00         2.50       17.00       15.50         9.60       1.10       0         0       0       0         2208.00       1491.50       1941.00         0       0       0         2208.00       1491.50       1941.00	4.30       3.10       2.30       26.00         0.60       0       0       0         0       0       0       0         0       0       0       0         2208.00       1491.50       1941.00       2174.80         2.40       5.20       17.90       74.70         9.60       1.10       0       0         0       0       0       0         2208.00       1491.50       1941.00       2174.80         26.20       2.10       3.00       3.40         0       0       0       0         0       0       0       0         26.20       2.10       3.00       3.40         0       0       0       0         0       0       0       0         0       0       0       0         2208.00       1491.50       1941.00       2174.80         250       17.00       15.50       19.30         9.60       1.10       0       0         0       0       0       0         0       0       0       0         0       0	4.30         3.10         2.30         26.00         2.50           0.60         0         0         0         0         0           0.60         0         0         0         0         0           0         0         0         0         0         0           208.00         1491.50         1941.00         2174.80         2208.00           2.40         5.20         17.90         74.70         2.10           9.60         1.10         0         0         0           0         0         0         0         0           2208.00         1491.50         1941.00         2174.80         2208.00           2208.00         1491.50         1941.00         2174.80         2208.00           26.20         2.10         3.00         3.40         42.70           0.60         0         3.30         1.10         0           0         0         0         0         0           2208.00         1491.50         1941.00         2174.80         2208.00           2208.00         17.00         15.50         19.30         41.70           9.60         1.10	4.30       3.10       2.30       26.00       2.50       30.80         0.60       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         2208.00       1491.50       1941.00       2174.80       2208.00       2208.00         2.40       5.20       17.90       74.70       2.10       3.00         9.60       1.10       0       0       0       3.90         0       0       0       0       0       0       0         2208.00       1491.50       1941.00       2174.80       2208.00       2208.00         26.20       2.10       3.00       3.40       42.70       30.80         0.60       0       3.30       1.10       0       0         0       0       0       0       0       0         2208.00       1491.50       1941.00       2174.80       2208.00       2208.00         2208.00       1491.50       1941.00       2174.80       2208.00       2208.00         2.50       17.00 </td <td>4.30         3.10         2.30         26.00         2.50         30.80         4.00           0.60         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           2208.00         1491.50         1941.00         2174.80         2208.00         2208.00         2160.00           2.40         5.20         17.90         74.70         2.10         3.00         11.30           9.60         1.10         0         0         0         3.90         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           2208.00         1491.50         1941.00         2174.80         2208.00         2208.00         2160.00           26.20         2.10         3.00         3.40         42.70         30.80         17.50           0.60         0         3.30         1.10<!--</td--></td>	4.30         3.10         2.30         26.00         2.50         30.80         4.00           0.60         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           2208.00         1491.50         1941.00         2174.80         2208.00         2208.00         2160.00           2.40         5.20         17.90         74.70         2.10         3.00         11.30           9.60         1.10         0         0         0         3.90         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           2208.00         1491.50         1941.00         2174.80         2208.00         2208.00         2160.00           26.20         2.10         3.00         3.40         42.70         30.80         17.50           0.60         0         3.30         1.10 </td

Licensee Comments:

1Q/04: Additional unavailability was discovered for this safety system subsequent to the original submittal. The change affects data for the first quarter 2004 and does not result in crossing a threshold or changing the color of the indicator.

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

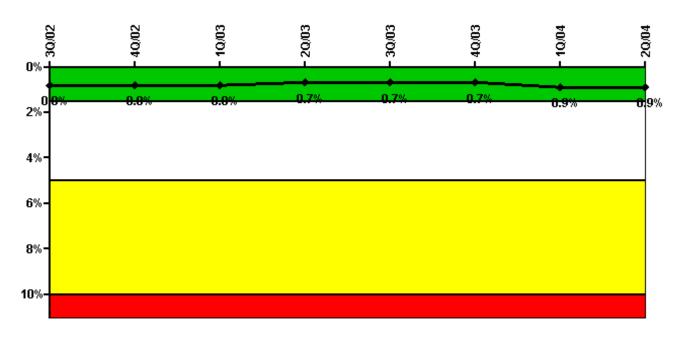


Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

#### Notes

3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
37.80	21.60	5.00	24.40	1.40	5.80	0	0
0.90	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
2208.00	1491.50	1941.00	2174.80	2208.00	2208.00	2136.00	737.70
14.00	24.40	27.40	19.70	1.00	21.00	7.90	0
0	0	0	7.30	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
2208.00	1491.50	1941.00	2174.80	2208.00	2208.00	2136.00	737.70
2.70	36.50	42.60	5.10	4.80	3.20	28.20	2.80
0	97.30	15.20	45.00	0	0	195.00	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
2208.00	1491.50	1941.00	2174.80	2208.00	2208.00	2136.00	737.70
1.5%	1.7%	1.7%	1.8%	1.4%	1.4%	1.7%	1.7%
	37.80 0.90 0 2208.00 14.00 0 0 2208.00 0 0 2208.00	37.80 21.60 0.90 0 0 0 2208.00 1491.50 14.00 0 0 0 2208.00 1491.50 2.70 36.50 0 97.30 0 0 2208.00 1491.50	37.80     21.60     5.00       0.90     0     0       0     0     0       0     0     0       0     0     0       2208.00     1491.50     1941.00       14.00     24.40     27.40       0     0     0       0     0     0       2208.00     1491.50     1941.00       2.70     36.50     42.60       0     97.30     15.20       0     0     0       2208.00     1491.50     1941.00       2208.00     1491.50     1941.00	37.80       21.60       5.00       24.40         0.90       0       0       0         0       0       0       0         0       0       0       0         2208.00       1491.50       1941.00       2174.80         14.00       24.40       27.40       19.70         0       0       0       7.30         0       0       0       0         2208.00       1491.50       1941.00       2174.80         2208.00       1491.50       1941.00       5.10         0       97.30       15.20       45.00         0       0       0       0         2208.00       1491.50       1941.00       2174.80	37.80       21.60       5.00       24.40       1.40         0.90       0       0       0       0       0         0       0       0       0       0       0       0         2208.00       1491.50       1941.00       2174.80       2208.00       1.00         14.00       24.40       27.40       19.70       1.00         0       0       0       7.30       0         0       0       0       0       0         0       0       0       0       0         2208.00       1491.50       1941.00       2174.80       2208.00         22708.00       15.10       4.80         0       97.30       15.20       45.00       0         0       0       0       0       0         2208.00       1491.50       1941.00       2174.80       2208.00	37.80         21.60         5.00         24.40         1.40         5.80           0.90         0         0         0         0         0         0         0           0.90         0         0         0         0         0         0         0         0           0	37.80         21.60         5.00         24.40         1.40         5.80         0           0.90         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           2208.00         1491.50         1941.00         2174.80         2208.00         2208.00         2136.00           14.00         24.40         27.40         19.70         1.00         21.00         7.90           0         0         0         0         0         0         0         0         0           0

### Safety System Unavailability, Residual Heat Removal System



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

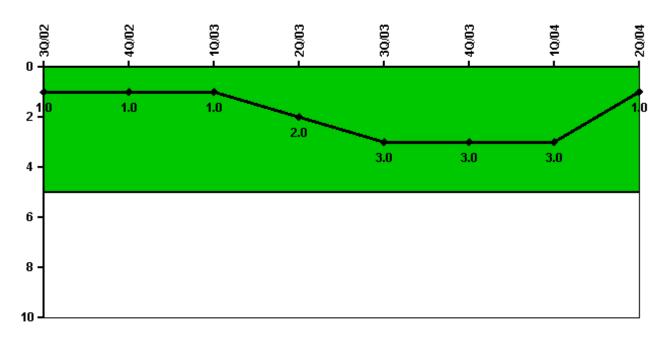
#### Notes

Safety System Unavailability, Residual Heat Removal System	3Q/02	40/02	1Q/03	2Q/03	3Q/03	4Q/03	10/04	20/04
Train 1								
Planned unavailable hours	10.40	4.40	19.00	3.40	1.70	29.90	79.90	8.40
Unplanned unavailable hours	0.60	0.80	0	0	0	0	0	5.30
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2073.50	2160.00	2184.00	2208.00	2208.00	2160.00	1171.70
Train 2								
Planned unavailable hours	1.60	8.70	25.30	19.80	25.50	2.80	11.00	0.30
Unplanned unavailable hours	21.70	1.10	0	0	0	3.90	0	26.70
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2073.50	2160.00	2184.00	2208.00	2208.00	2160.00	1171.70
Indicator value	0.8%	0.8%	0.8%	0.7%	0.7%	0.7%	0.9%	0.9%

Licensee Comments:

1Q/04: Additional unavailability was discovered for this safety system subsequent to the original submittal. The change affects data for the first quarter 2004 and does not result in crossing a threshold or changing the color of the indicator.

# Safety System Functional Failures (PWR)

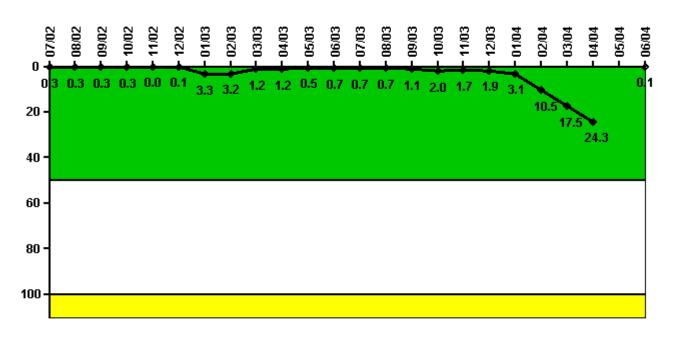


Thresholds: White > 5.0

#### Notes

Safety System Functional Failures (PWR)	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	10/04	2Q/04
Safety System Functional Failures	0	0	0	2	1	0	0	0
Indicator value	1	1	1	2	3	3	3	1

# **Reactor Coolant System Activity**



Thresholds: White > 50.0 Yellow > 100.0

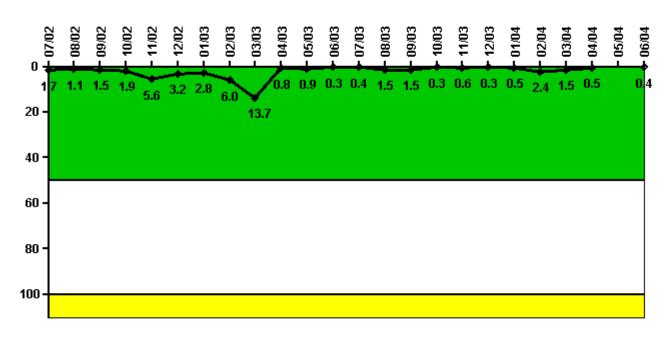
#### Notes

Reactor Coolant System Activity	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/0	03 6/	03
Maximum activity	0.002520	0.002810	0.002660	0.003400	0.000440	0.000850	0.009890	0.009710	0.003540	0.003530	0.0013	90 0.0019	70
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	0.3	0.3	0.3	0.3	C	).3	0.3
Indicator value	0.3	0.3	0.3	0.3	0	0.1	3.3	3.2	1.2	1.2	O	.5 (	0.7
Reactor Coolant System Activity	7/03	8/03	9/03	10/03	11/03	12/03	1/04	2/04	3/04	4/04	5/04	6/04	
Maximum activity	0.002100	0.002000	0.003200	0.005990	0.005120	0.005810	0.009300	0.031500	0.052600	0.073000	N/A	0.000690	
Technical specification limit	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.0	1.0	
			]										

#### Licensee Comments:

6/04: RCS Activity data is unavailable for the month of May 2004 due to refueling outage conditions not requiring the calculation of this data. The Administrative Limit of 0.3 micro-curies per gram dose equivalent I-131 has been lifted with the implementation of Callaway Operating License Amendment 159 on May 5, 2004. The technical specification dose equivalent I-131 limit as of that date is 1.0 micro-curie per gram.

# **Reactor Coolant System Leakage**



Thresholds: White > 50.0 Yellow > 100.0

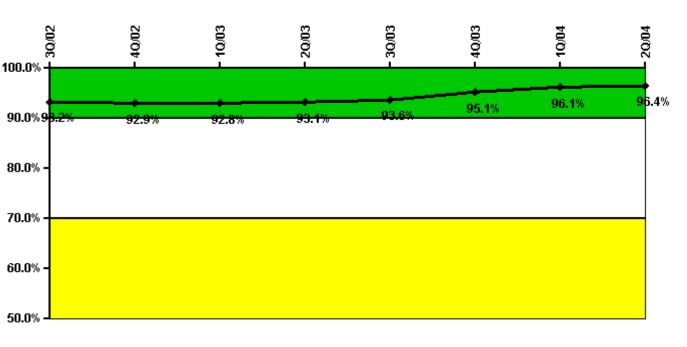
#### Notes

Reactor Coolant System Leakage	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03	4/03	5/03	6/03
Maximum leakage	0.173	0.105	0.148	0.193	0.555	0.321	0.280	0.601	1.365	0.078	0.087	0.028
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	1.7	1.1	1.5	1.9	5.6	3.2	2.8	6.0	13.7	0.8	0.9	0.3
Reactor Coolant System Leakage	7/03	8/03	9/03	10/03	11/03	12/03	1/04	2/04	3/04	4/04	5/04	6/04
Maximum leakage	0.042	0.145	0.148	0.031	0.060	0.025	0.045	0.236	0.145	0.047	N/A	0.040
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

Licensee Comments:

6/04: RCS Identified Leakage data is unavailable for the month of May 2004 due to refueling outage conditions not requiring the calculation of this data.

# **Drill/Exercise Performance**

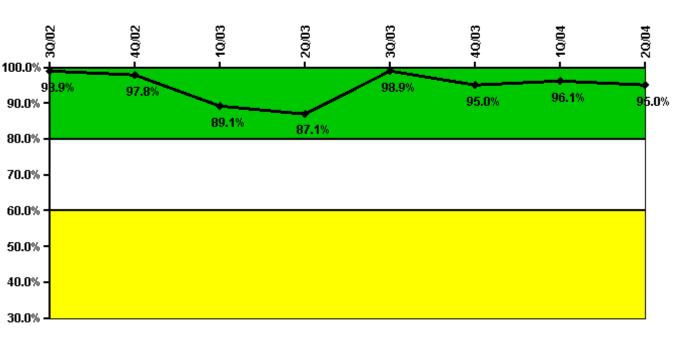


Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Successful opportunities	38.0	6.0	35.0	12.0	84.0	35.0	28.0	0
Total opportunities	41.0	6.0	36.0	12.0	88.0	36.0	28.0	0
Indicator value	93.2%	92.9%	92.8%	93.1%	93.6%	95.1%	96.1%	96.4%

# **ERO Drill Participation**

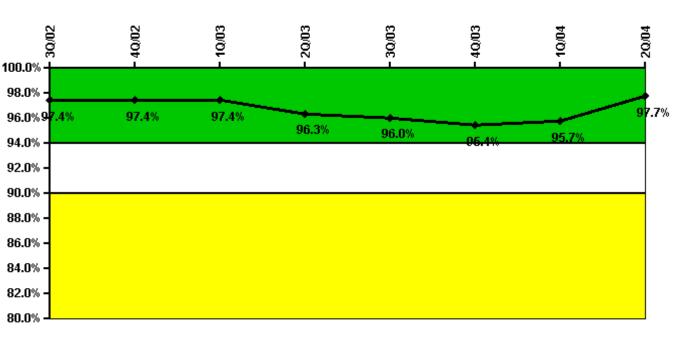


Thresholds: White < 80.0% Yellow < 60.0%

### Notes

ERO Drill Participation	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	10/04	2Q/04
Participating Key personnel	91.0	87.0	82.0	81.0	91.0	96.0	99.0	95.0
Total Key personnel	92.0	89.0	92.0	93.0	92.0	101.0	103.0	100.0
Indicator value	98.9%	97.8%	89.1%	87.1%	98.9%	95.0%	96.1%	95.0%

# **Alert & Notification System**

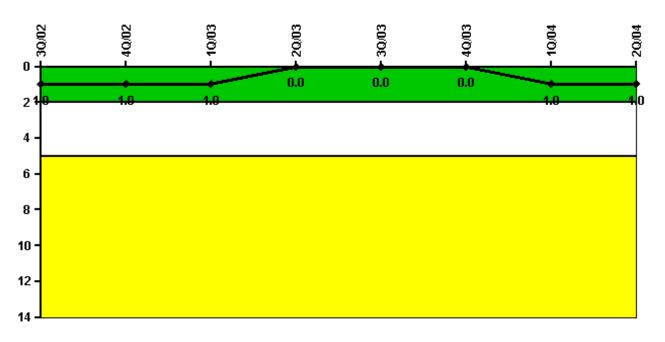


Thresholds: White < 94.0% Yellow < 90.0%

### Notes

Alert & Notification System	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Successful siren-tests	86	85	84	80	85	83	85	87
Total sirens-tests	87	87	87	87	87	87	87	87
Indicator value	97.4%	97.4%	97.4%	96.3%	96.0%	95.4%	95.7%	97.7%

# **Occupational Exposure Control Effectiveness**

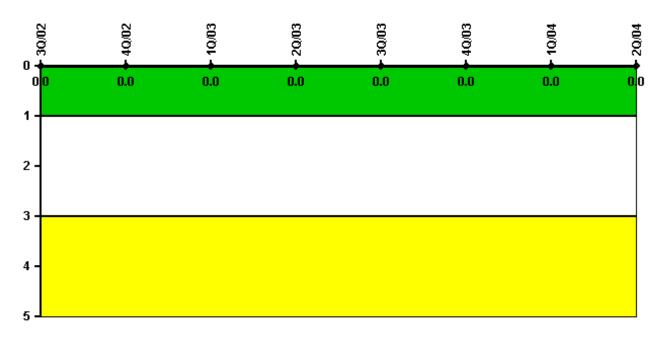


Thresholds: White > 2.0 Yellow > 5.0

### Notes

Occupational Exposure Control Effectiveness	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
High radiation area occurrences	0	0	0	0	0	0	1	0
Very high radiation area occurrences	0	0	0	О	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	1	1	1	0	0	0	1	1

# **RETS/ODCM Radiological Effluent**



Thresholds: White > 1.0 Yellow > 3.0

#### Votes

RETS/ODCM Radiological Effluent	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	20/04
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	О	0	0	0	0	0	0	О

Licensee Comments: none

Physical Protection information not publicly available.

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

Last Modified: September 8, 2004