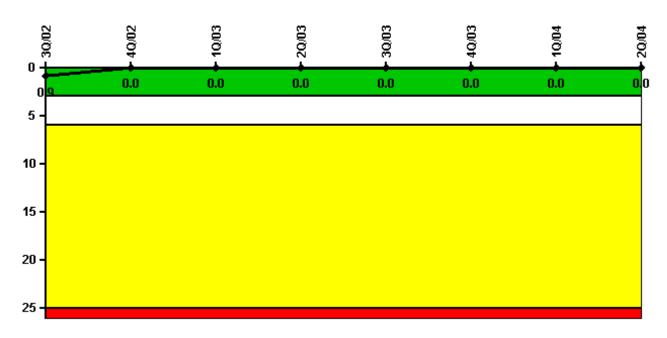
## Catawba 2

### **2Q/2004 Performance Indicators**

Licensee's General Comments: none

## Unplanned Scrams per 7000 Critical Hrs

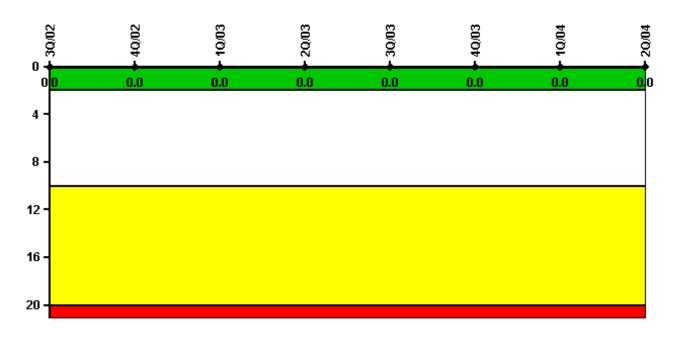


Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

#### 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	0	0	0	0	0	0	0
Critical hours	2208.0	2209.0	1548.5	2183.0	2208.0	2209.0	2184.0	2183.0
Indicator value	0.9	О	0	О	О	О	О	О

## Scrams with Loss of Normal Heat Removal

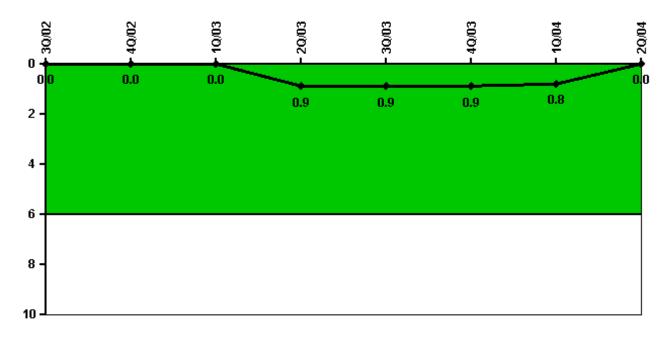


Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

### Notes

Scrams with Loss of Normal Heat Removal	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	20/04
Scrams	0	0	0	0	0	0	0	0
Indicator value	О	О	О	О	О	О	О	О

# Unplanned Power Changes per 7000 Critical Hrs

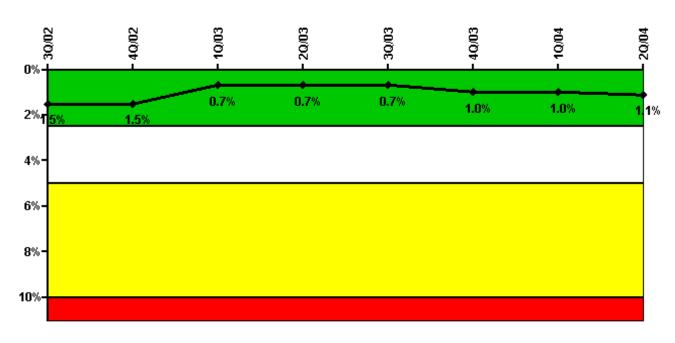


Thresholds: White > 6.0

#### Votes

Unplanned Power Changes per 7000 Critical Hrs	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	10/04	2Q/04
Unplanned power changes	0	0	0	1.0	0	0	0	0
Critical hours	2208.0	2209.0	1548.5	2183.0	2208.0	2209.0	2184.0	2183.0
Indicator value	О	О	О	0.9	0.9	0.9	0.8	0

## Safety System Unavailability, Emergency AC Power



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

### Notes

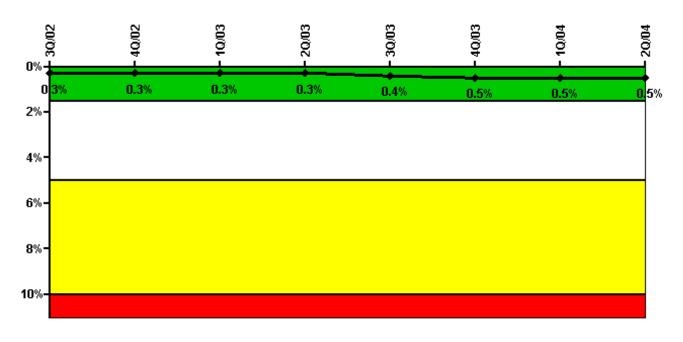
Safety System Unavailability, Emergency AC Power	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Train 1								
Planned unavailable hours	0	38.71	63.00	0	33.42	33.07	0	21.20
Unplanned unavailable hours	0.77	0	0	0	0	0	5.63	5.68
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00
Train 2								
Planned unavailable hours	0	12.57	48.75	35.15	1.65	85.04	0	23.35
Unplanned unavailable hours	3.00	0	0	0	0	67.08	1.15	1.10
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	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00
Indicator value	1.5%	1.5%	0.7%	0.7%	0.7%	1.0%	1.0%	1.1%

Licensee Comments:

2Q/04: This data does not include unavailability due to SSPS testing. Historical Mitigating System Safety System unavailability will be amended after a thorough accuracy review based on FAQ 290. No change in threshold will occur as a result of the amended data. (Comment 2Q2004)

4Q/03: 2.42 hours planned unavailable hours was inadvertently omitted from November, 2003; PIP C-04-2479. (Revised 2Q2004)

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



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

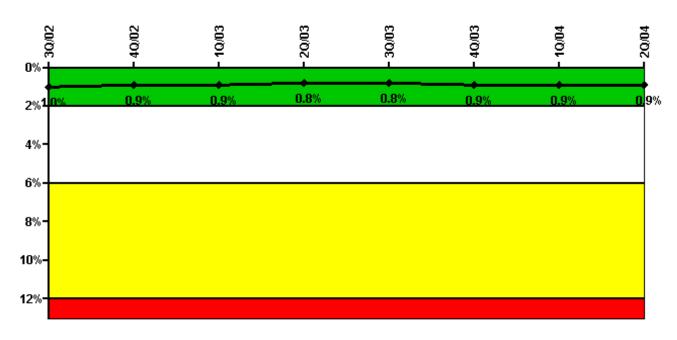
### Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Train 1								
Planned unavailable hours	0.25	8.68	0.25	0.35	8.98	27.00	1.57	15.01
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	2208.00	2209.00	1548.50	2183.00	2208.00	2209.00	2184.00	2183.00
Train 2								
Planned unavailable hours	9.30	1.58	10.40	14.25	10.03	39.85	10.25	3.66
Unplanned unavailable hours	18.02	0	0	0	0	3.50	0	10.43
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	2209.00	1548.50	2183.00	2208.00	2209.00	2184.00	2183.00
Train 3								
Planned unavailable hours	2.50	13.90	0	10.50	13.50	26.50	7.70	2.15
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	2208.00	2209.00	1548.50	2183.00	2208.00	2209.00	2184.00	2183.00
Train 4								
Planned unavailable hours	4.20	10.80	10.10	29.40	26.20	39.30	0	12.50
Unplanned unavailable hours	17.60	0	0	0	0	3.50	0	10.43
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	2209.00	1548.50	2183.00	2208.00	2209.00	2184.00	2183.00
Indicator value	0.3%	0.3%	0.3%	0.3%	0.4%	0.5%	0.5%	0.5%

Licensee Comments:

- 2Q/04: This data does not include unavailability due to SSPS testing. Historical Mitigating System Safety System unavailability will be amended after a thorough accuracy review based on FAQ 290. No change in threshold will occur as a result of the amended data. (Comment 2Q2004)
- 4Q/03: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)
- 3Q/03: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)
- 2Q/03: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)
- 1Q/03: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)
- 4Q/02: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)
- 3Q/02: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)
- 2Q/02: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)
- 1Q/02: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)
- 4Q/01: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)
- 3Q/01: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)
- 2Q/01: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)
- 1Q/01: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)

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



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

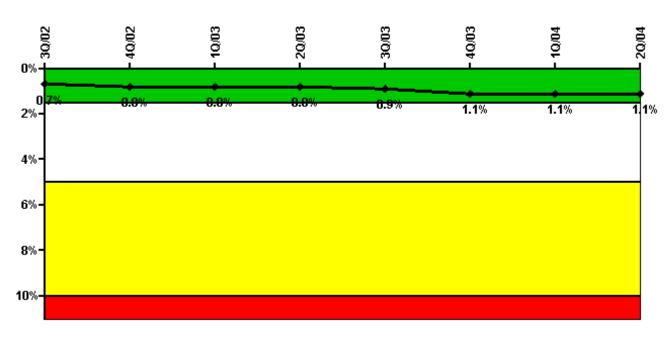
### Notes

Safety System Unavailability, Heat Removal System (AFW)	3Q/02	4Q/02	1Q/03	20/03	3Q/03	4Q/03	10/04	20/04
Train 1								
Planned unavailable hours	8.67	39.08	21.87	11.27	22.40	28.47	3.26	8.48
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	2208.00	2209.00	1591.60	2183.00	2208.00	2209.00	2184.00	2183.00
Train 2								
Planned unavailable hours	47.84	1.93	43.87	15.43	22.92	67.27	32.03	6.48
Unplanned unavailable hours	0	1.07	0	0	0	3.50	0	10.43
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	2209.00	1591.60	2183.00	2208.00	2209.00	2184.00	2183.00
Train 3								
Planned unavailable hours	13.92	0.68	7.02	19.47	13.17	12.60	12.48	9.43
Unplanned unavailable hours	0	14.75	1.83	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	2208.00	2209.00	1591.60	2183.00	2208.00	2209.00	2184.00	2183.00
Indicator value	1.0%	0.9%	0.9%	0.8%	0.8%	0.9%	0.9%	0.9%

#### Licensee Comments:

2Q/04: This data does not include unavailability due to SSPS testing. Historical Mitigating System Safety System unavailability will be amended after a thorough accuracy review based on FAQ 290. No change in threshold will occur as a result of the amended data. (Comment 2Q2004)

## Safety System Unavailability, Residual Heat Removal System



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
0.30	23.52	0.35	0.32	23.58	26.87	26.02	2.60
0	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	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00
0	26.85	60.75	83.40	21.97	67.40	0	18.17
58.80	0	0	0	0	3.50	0	10.43
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
2208.00	2209.00	2160.00	2183.00	2208.00	2209.00	2184.00	2183.00
0.7%	0.8%	0.8%	0.8%	0.9%	1.1%	1.1%	1.1%
	0.30 0 0 0 2208.00 0 58.80 0 0	0.30 23.52 0 0 0 0 0 2208.00 2209.00 58.80 0 0 0 2208.00 2209.00 2208.00 2209.00	0.30     23.52     0.35       0     0     0       0     0     0       0     0     0       0     0     0       2208.00     2209.00     2160.00       0     26.85     60.75       58.80     0     0       0     0     0       0     0     0       2208.00     2209.00     2160.00       2208.00     2209.00     2160.00	0.30         23.52         0.35         0.32           0         0         0         0           0         0         0         0           0         0         0         0           0         0         0         0           2208.00         2209.00         2160.00         2183.00           0         26.85         60.75         83.40           58.80         0         0         0           0         0         0         0           2208.00         2209.00         2160.00         2183.00           2208.00         2209.00         2160.00         2183.00	0.30         23.52         0.35         0.32         23.58           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           2208.00         2209.00         2160.00         2183.00         2208.00           0         26.85         60.75         83.40         21.97           58.80         0         0         0         0           0         0         0         0         0           0         0         0         0         0           2208.00         2160.00         2183.00         2208.00	0.30         23.52         0.35         0.32         23.58         26.87           0	0.30         23.52         0.35         0.32         23.58         26.87         26.02           0 </td

Licensee Comments:

2Q/04: This data does not include unavailability due to SSPS testing. Historical Mitigating System Safety System unavailability will be amended after a thorough accuracy review based on FAQ 290. No change in threshold will occur as a result of the amended data. (Comment 2Q2004)

4Q/03: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)

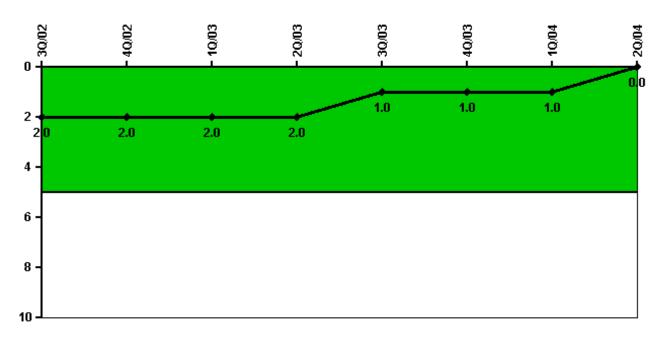
3Q/03: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)

2Q/03: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of

previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)

- 1Q/03: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)
- 4Q/02: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)
- 3Q/02: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)
- 2Q/02: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)
- 1Q/02: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)
- 4Q/01: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)
- 3Q/01: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)
- 2Q/01: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)
- 1Q/01: This revision applies to the comment section only; no change is being made to data values. Data revisions submitted 1Q2004 were made to account for unavailability associated with auxiliary safeguards testing which had inadvertently been left out of previously reported data, instead of being revised to include no-mode hours. (Revised 2Q2004)

# Safety System Functional Failures (PWR)

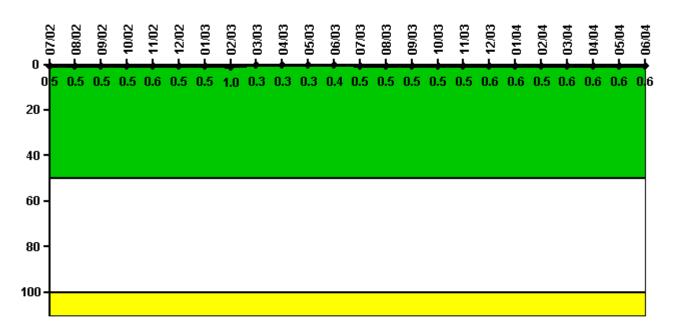


Thresholds: White > 5.0

#### Notes

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

## **Reactor Coolant System Activity**

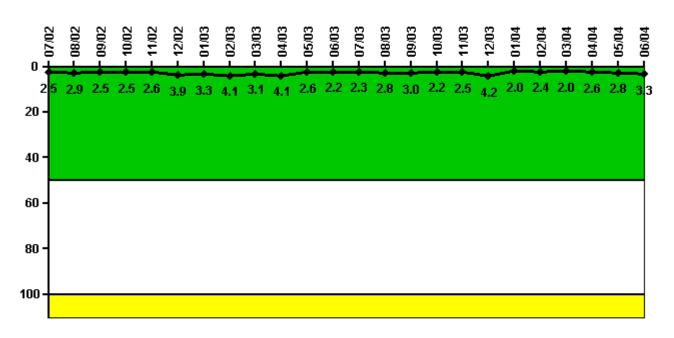


Thresholds: White > 50.0 Yellow > 100.0

### 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	5/03	6/03
Maximum activity	0.000330	0.000320	0.000340	0.000350	0.000380	0.000350	0.000340	0.000622	0.000170	0.000190	0.000213	0.000245
Technical specification limit	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Indicator value	0.5	0.5	0.5	0.5	0.6	0.5	0.5	1.0	0.3	0.3	0.3	0.4
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	0.000290	0.000310	0.000310	0.000341	0.000340	0.000353	0.000352	0.000344	0.000405	0.000357	0.000376	0.000392
Technical specification limit	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Indicator value	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.6	0.6	0.6

## **Reactor Coolant System Leakage**

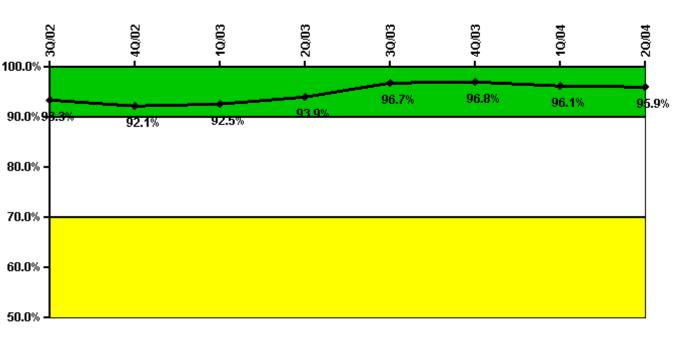


Thresholds: White > 50.0 Yellow > 100.0

#### 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	0.250	0.288	0.251	0.253	0.256	0.387	0.332	0.409	0.314	0.406	0.260	0.220
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	2.5	2.9	2.5	2.5	2.6	3.9	3.3	4.1	3.1	4.1	2.6	2.2
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	0.230	0.276	0.302	0.223	0.245	0.418	0.197	0.241	0.202	0.264	0.278	0.328
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	2.3	2.8	3.0	2.2	2.5	4.2	2.0	2.4	2.0	2.6	2.8	3.3

## **Drill/Exercise Performance**

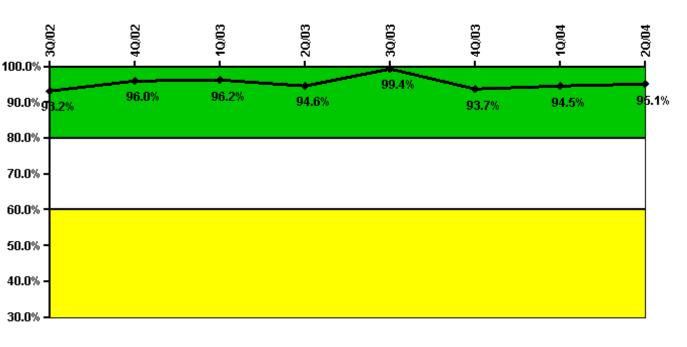


Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	3Q/02	4Q/02	10/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Successful opportunities	71.0	40.0	18.0	78.0	80.0	22.0	25.0	19.0
Total opportunities	74.0	46.0	18.0	78.0	82.0	22.0	28.0	20.0
Indicator value	93.3%	92.1%	92.5%	93.9%	96.7%	96.8%	96.1%	95.9%

## **ERO Drill Participation**

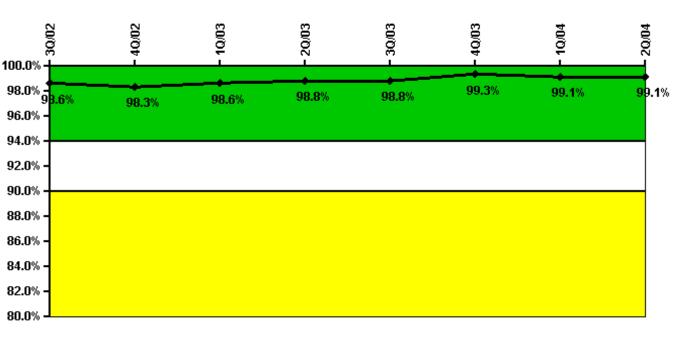


Thresholds: White < 80.0% Yellow < 60.0%

### Notes

ERO Drill Participation	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04
Participating Key personnel	177.0	192.0	177.0	175.0	159.0	149.0	154.0	154.0
Total Key personnel	190.0	200.0	184.0	185.0	160.0	159.0	163.0	162.0
Indicator value	93.2%	96.0%	96.2%	94.6%	99.4%	93.7%	94.5%	95.1%

## **Alert & Notification System**

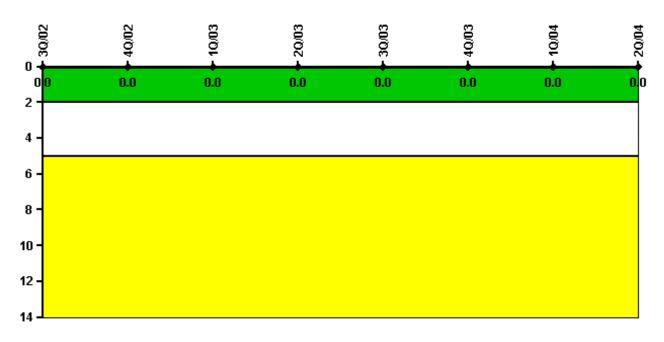


Thresholds: White < 94.0% Yellow < 90.0%

### Notes

Alert & Notification System	3Q/02	4Q/02	10/03	2Q/03	3Q/03	4Q/03	10/04	2Q/04
Successful siren-tests	2251	2248	2220	2386	2457	2375	2383	2384
Total sirens-tests	2281	2302	2225	2403	2492	2388	2403	2403
Indicator value	98.6%	98.3%	98.6%	98.8%	98.8%	99.3%	99.1%	99.1%

# Occupational Exposure Control Effectiveness

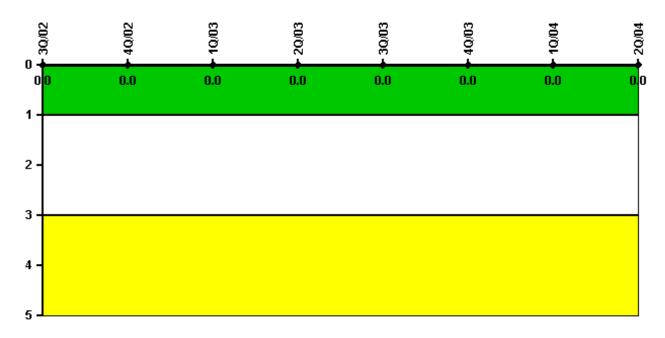


Thresholds: White > 2.0 Yellow > 5.0

#### 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	0	0
Very high radiation area occurrences	0	0	0	О	0	О	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
Indicator value	О	О	О	О	О	О	О	О

## **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	2Q/04
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	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