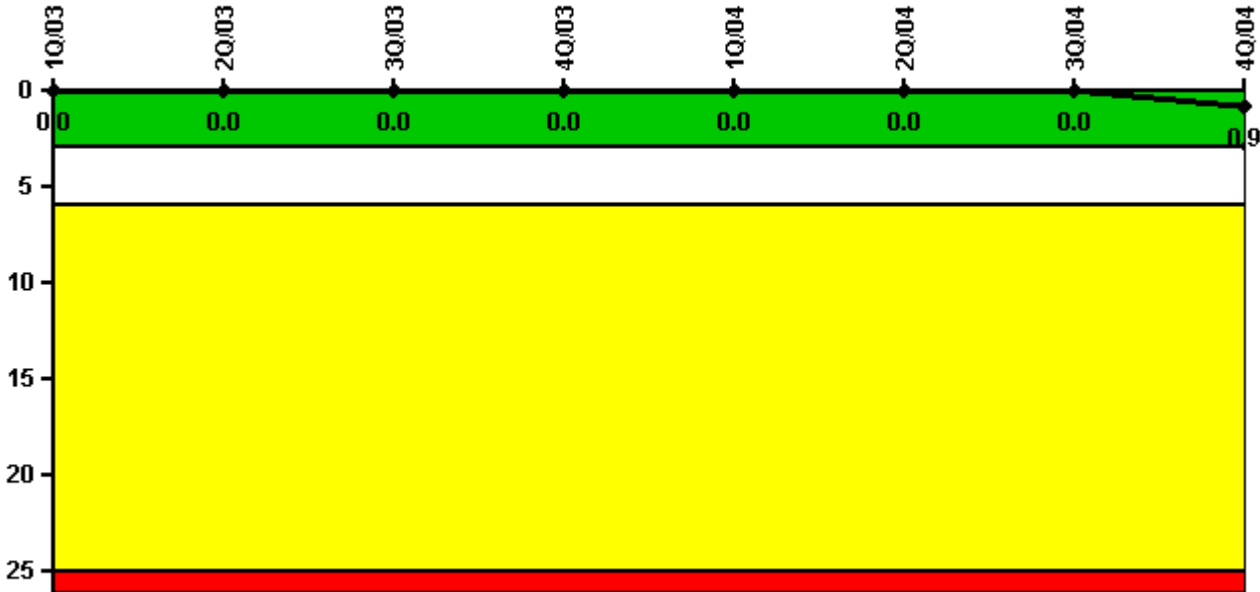


## Catawba 2

### 4Q/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	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Unplanned scrams	0	0	0	0	0	0	0	1.0
Critical hours	1548.5	2183.0	2208.0	2209.0	2184.0	2183.0	1733.2	1611.7
Indicator value	0	0	0	0	0	0	0	0.9

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



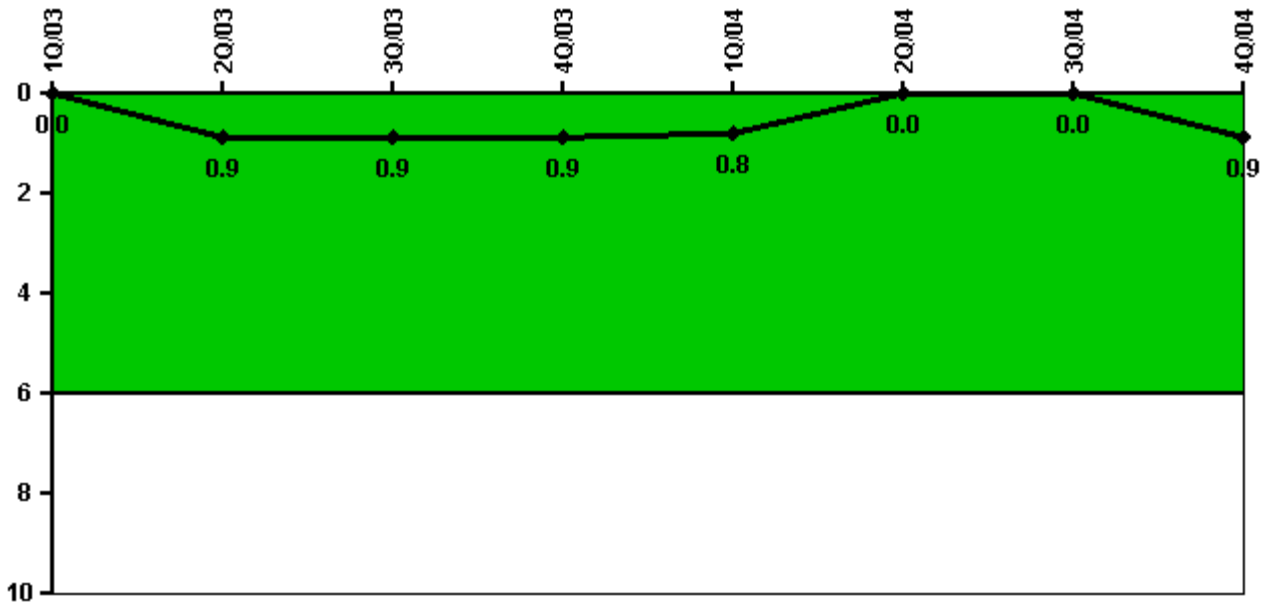
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/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



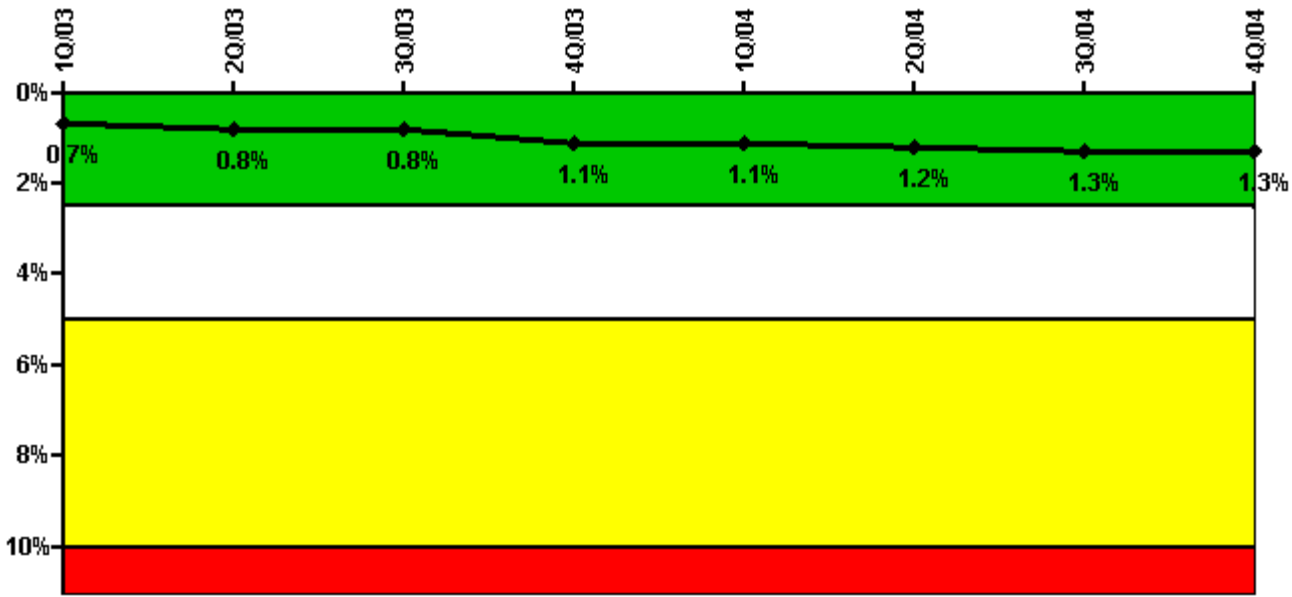
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Unplanned power changes	0	1.0	0	0	0	0	0	1.0
Critical hours	1548.5	2183.0	2208.0	2209.0	2184.0	2183.0	1733.2	1611.7
Indicator value	0	0.9	0.9	0.9	0.8	0	0	0.9

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



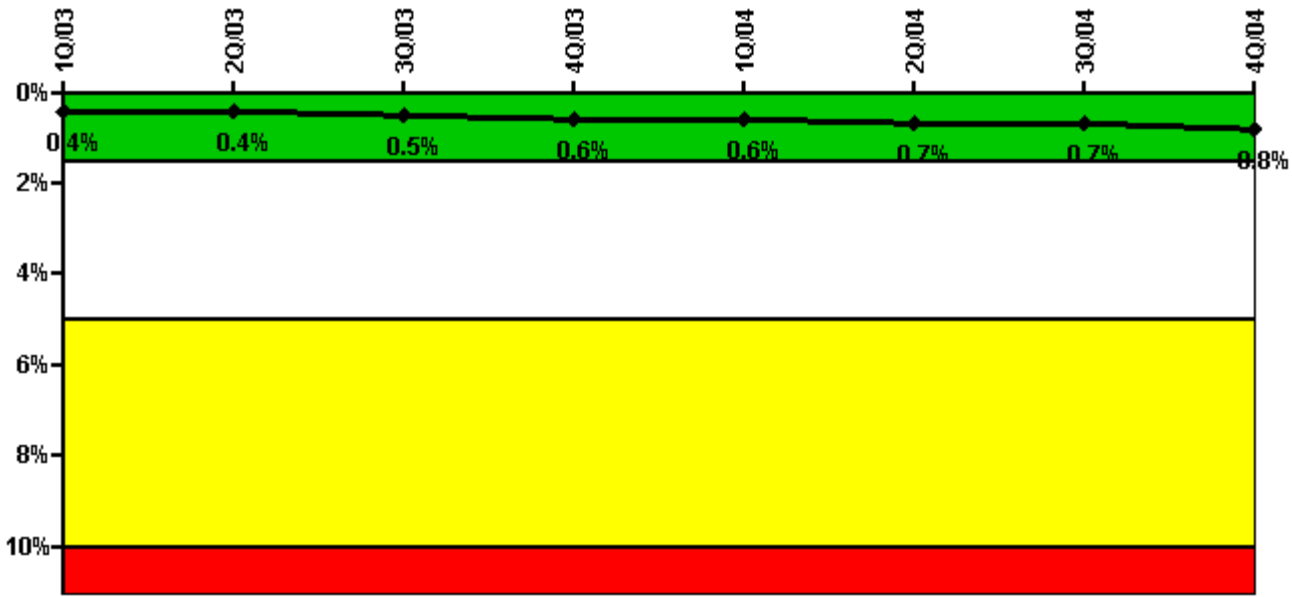
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Emergency AC Power	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
<b>Train 1</b>								
Planned unavailable hours	64.83	3.32	35.29	38.53	4.92	26.00	2.38	3.04
Unplanned unavailable hours	0	0	0	0	5.63	5.68	0.73	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	2184.00	2183.00	2208.00	2209.00
<b>Train 2</b>								
Planned unavailable hours	50.98	38.59	5.29	86.87	3.45	27.30	31.14	6.56
Unplanned unavailable hours	0	0	0	67.08	1.15	1.10	14.73	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	2184.00	2183.00	2208.00	2209.00
<b>Indicator value</b>	<b>0.7%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>1.1%</b>	<b>1.1%</b>	<b>1.2%</b>	<b>1.3%</b>	<b>1.3%</b>

Licensee Comments: none

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



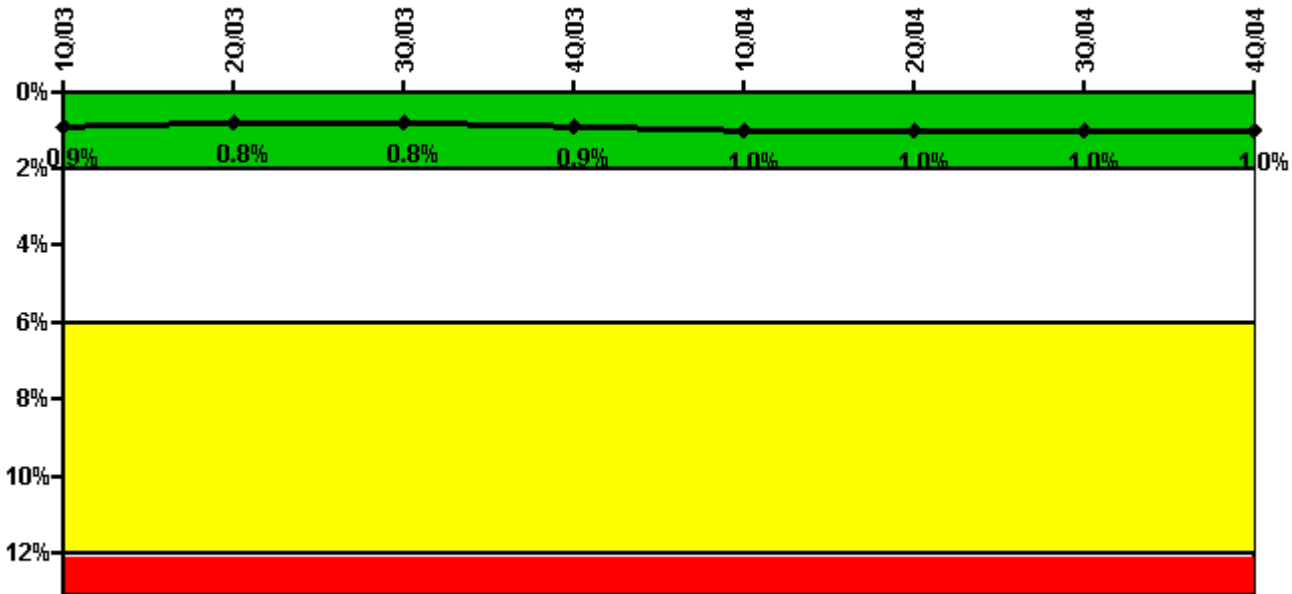
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

**Notes**

Safety System Unavailability, High Pressure Injection System (HPSI)	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
<b>Train 1</b>								
Planned unavailable hours	2.08	3.67	10.85	32.46	6.49	17.81	16.08	12.55
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	1548.50	2183.00	2208.00	2209.00	2184.00	2183.00	1733.20	1598.18
<b>Train 2</b>								
Planned unavailable hours	12.63	17.69	13.67	41.68	13.70	5.64	20.70	12.78
Unplanned unavailable hours	0	0	0	3.50	0	10.43	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	1548.50	2183.00	2208.00	2209.00	2184.00	2183.00	1733.20	1598.18
<b>Train 3</b>								
Planned unavailable hours	1.83	13.82	15.37	31.96	12.62	4.95	4.76	1.87
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	1548.50	2183.00	2208.00	2209.00	2184.00	2183.00	1733.20	1598.18
<b>Train 4</b>								
Planned unavailable hours	12.33	32.84	29.84	41.13	3.45	14.48	13.72	12.78
Unplanned unavailable hours	0	0	0	3.50	0	10.43	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	1548.50	2183.00	2208.00	2209.00	2184.00	2183.00	1733.20	1598.18
<b>Indicator value</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.5%</b>	<b>0.6%</b>	<b>0.6%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.8%</b>

Licensee Comments: none

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



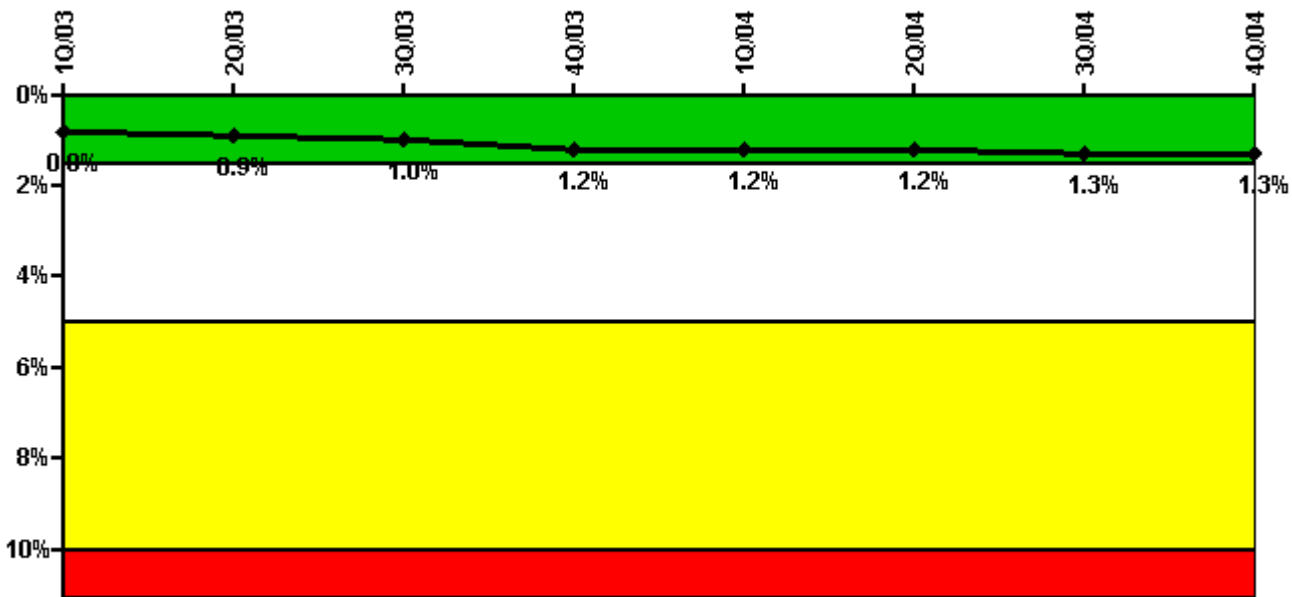
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

### Notes

Safety System Unavailability, Heat Removal System (AFW)	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
<b>Train 1</b>								
Planned unavailable hours	23.70	14.59	24.27	33.93	8.18	11.28	9.40	2.12
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	1591.60	2183.00	2208.00	2209.00	2184.00	2183.00	1737.50	1711.20
<b>Train 2</b>								
Planned unavailable hours	46.10	18.87	26.56	69.10	35.48	8.46	25.92	22.75
Unplanned unavailable hours	0	0	0	3.50	0	10.43	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	1591.60	2183.00	2208.00	2209.00	2184.00	2183.00	1737.50	1711.20
<b>Train 3</b>								
Planned unavailable hours	7.02	19.47	13.17	12.60	12.48	9.43	4.68	0
Unplanned unavailable hours	1.83	0	0	0	0	0	7.42	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	1591.60	2183.00	2208.00	2209.00	2184.00	2183.00	1737.50	1711.20
<b>Indicator value</b>	<b>0.9%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>0.9%</b>	<b>1.0%</b>	<b>1.0%</b>	<b>1.0%</b>	<b>1.0%</b>

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



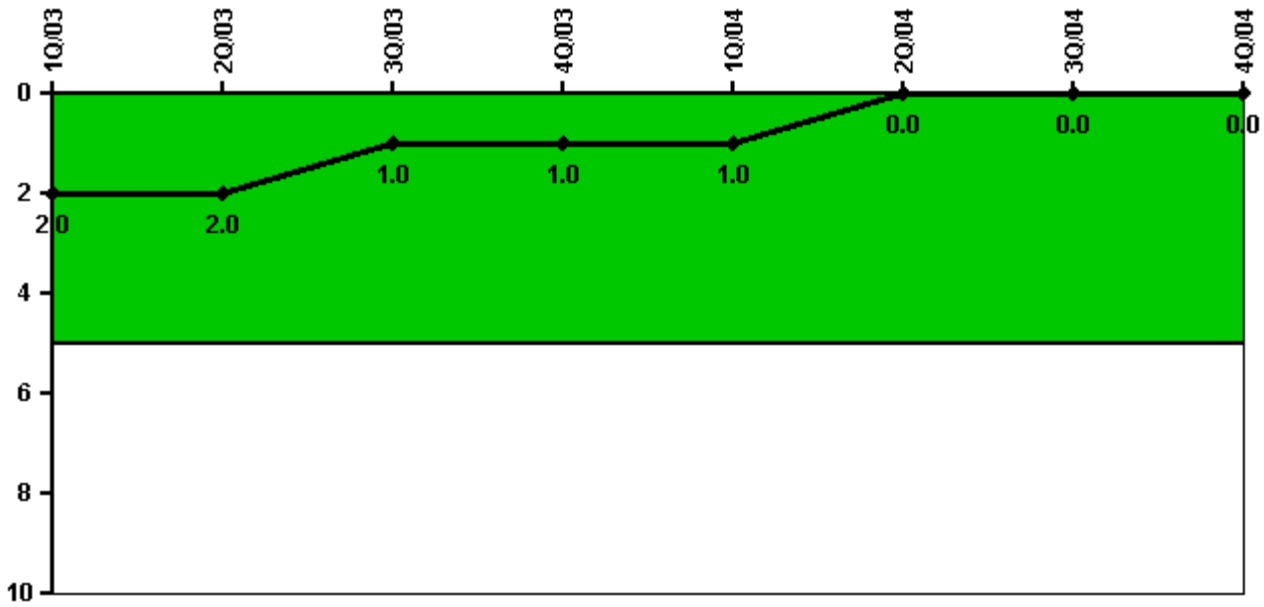
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Residual Heat Removal System	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
<b>Train 1</b>								
Planned unavailable hours	2.18	3.64	25.45	32.33	30.94	5.40	11.89	2.20
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	2184.00	2183.00	1904.10	2209.00
<b>Train 2</b>								
Planned unavailable hours	63.08	86.84	25.61	69.23	3.45	20.15	29.38	17.18
Unplanned unavailable hours	0	0	0	3.50	0	10.43	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	2184.00	2183.00	1904.10	2209.00
<b>Indicator value</b>	<b>0.8%</b>	<b>0.9%</b>	<b>1.0%</b>	<b>1.2%</b>	<b>1.2%</b>	<b>1.2%</b>	<b>1.3%</b>	<b>1.3%</b>

Licensee Comments: none

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

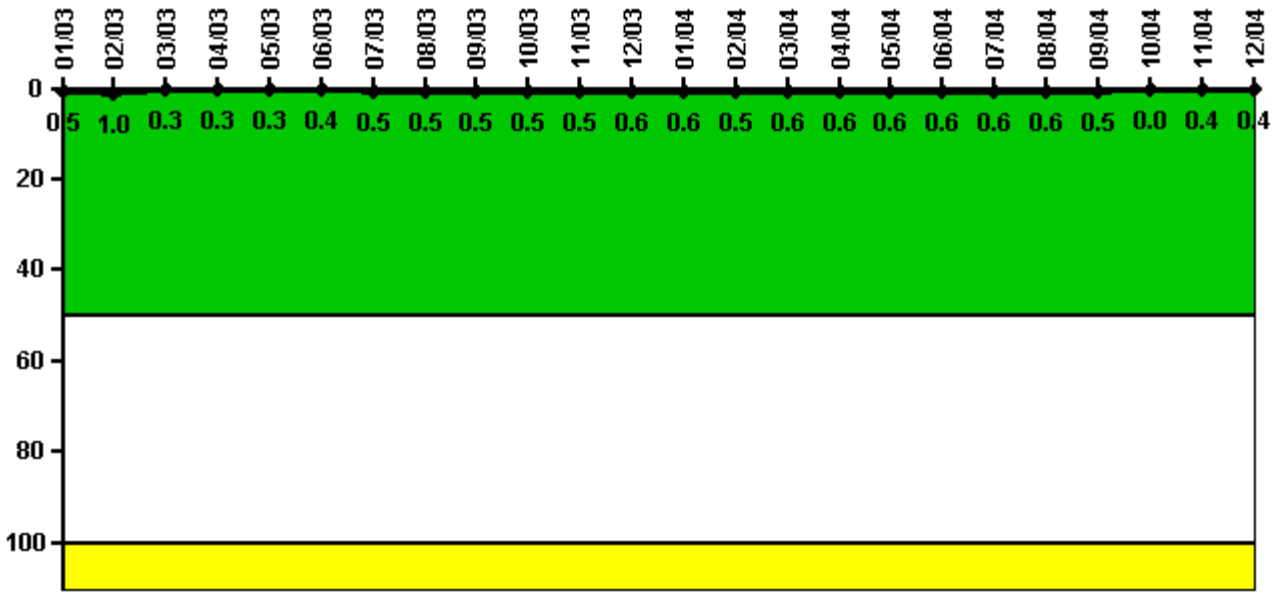
#### Notes

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

Licensee Comments: none



### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

**Notes**

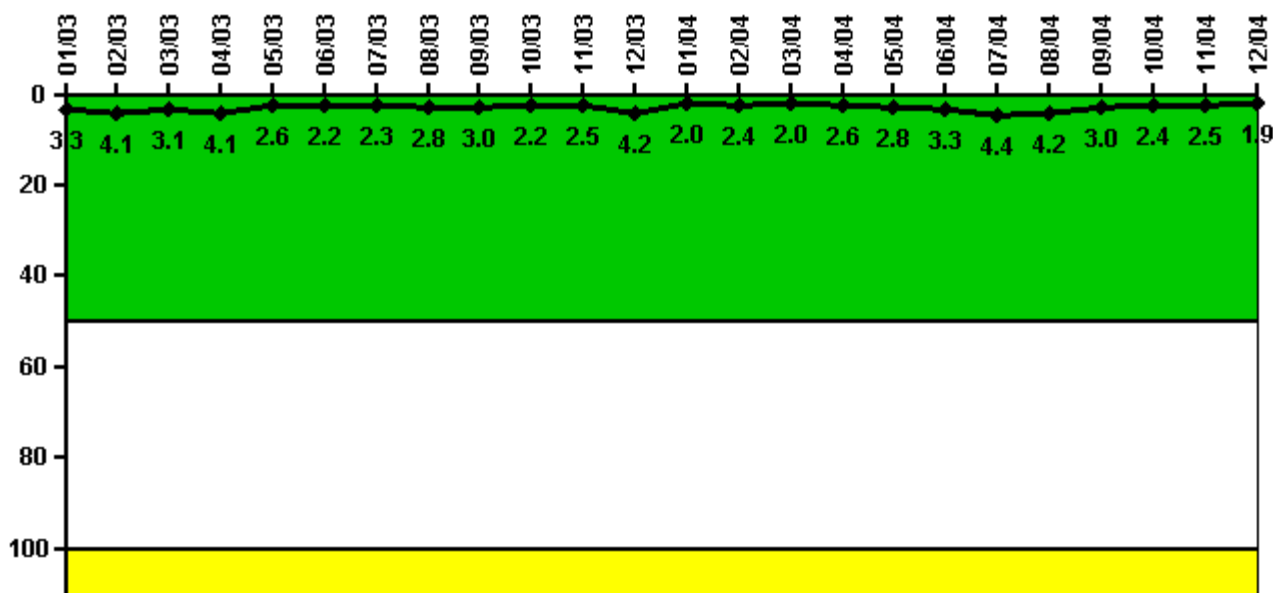
Reactor Coolant System Activity	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03
Maximum activity	0.000340	0.000622	0.000170	0.000190	0.000213	0.000245	0.000290	0.000310	0.000310	0.000341	0.000340	0.000353
Technical specification limit	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Indicator value	0.5	1.0	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.6

Reactor Coolant System Activity	1/04	2/04	3/04	4/04	5/04	6/04	7/04	8/04	9/04	10/04	11/04	12/04
Maximum activity	0.000352	0.000344	0.000405	0.000357	0.000376	0.000392	0.000368	0.000373	0.000299	0	0.000229	0.000252
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	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0	0.4	0.4

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

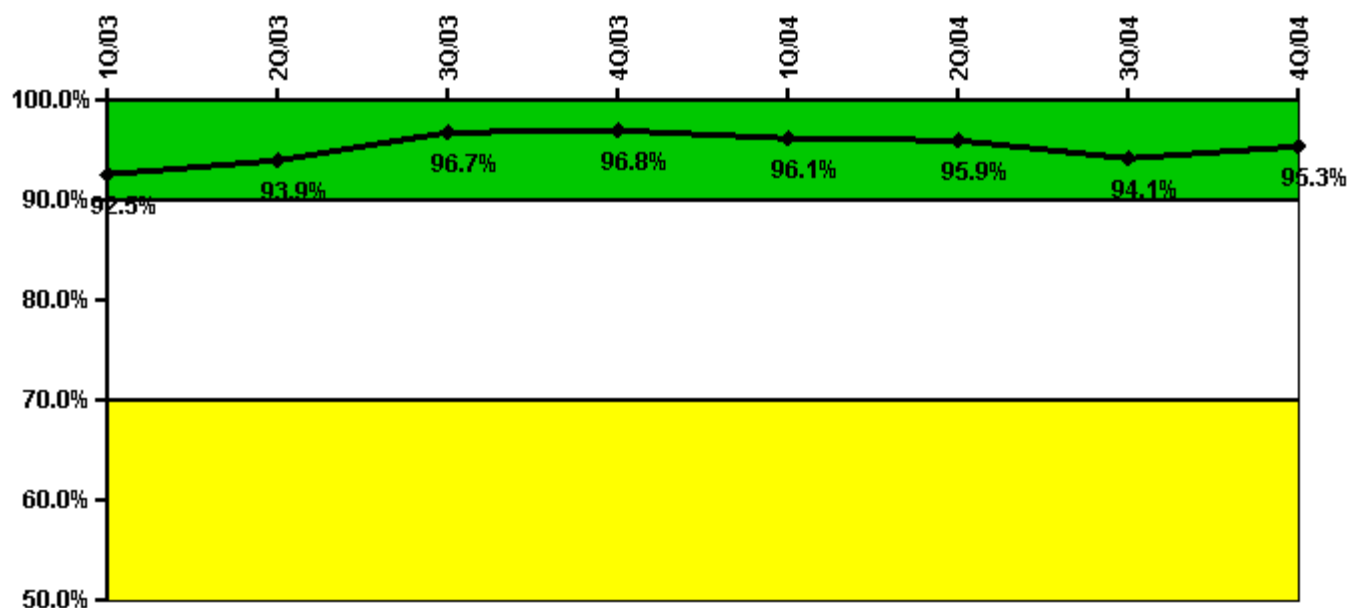
Reactor Coolant System Leakage	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03
Maximum leakage	0.332	0.409	0.314	0.406	0.260	0.220	0.230	0.276	0.302	0.223	0.245	0.418
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	3.3	4.1	3.1	4.1	2.6	2.2	2.3	2.8	3.0	2.2	2.5	4.2

Reactor Coolant System Leakage	1/04	2/04	3/04	4/04	5/04	6/04	7/04	8/04	9/04	10/04	11/04	12/04
Maximum leakage	0.197	0.241	0.202	0.264	0.278	0.328	0.444	0.423	0.298	0.235	0.251	0.192
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	2.0	2.4	2.0	2.6	2.8	3.3	4.4	4.2	3.0	2.4	2.5	1.9

Licensee Comments: none

### Drill/Exercise Performance



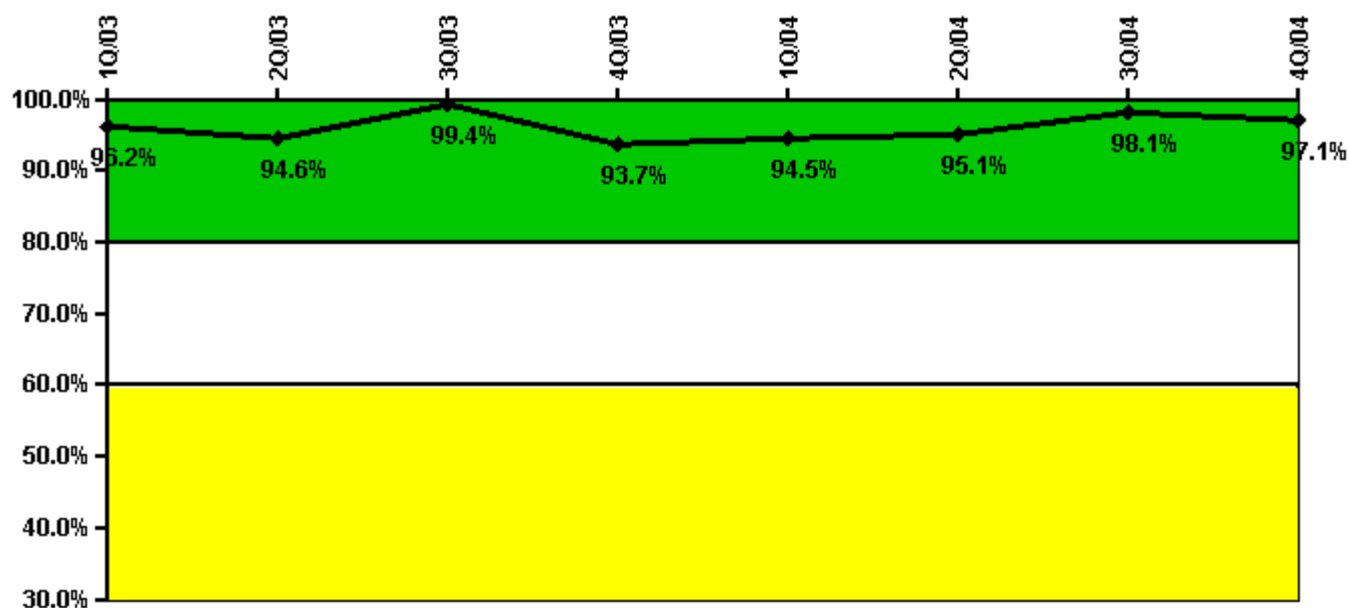
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Successful opportunities	18.0	78.0	80.0	22.0	25.0	19.0	66.0	15.0
Total opportunities	18.0	78.0	82.0	22.0	28.0	20.0	76.0	15.0
Indicator value	92.5%	93.9%	96.7%	96.8%	96.1%	95.9%	94.1%	95.3%

Licensee Comments: none

### ERO Drill Participation



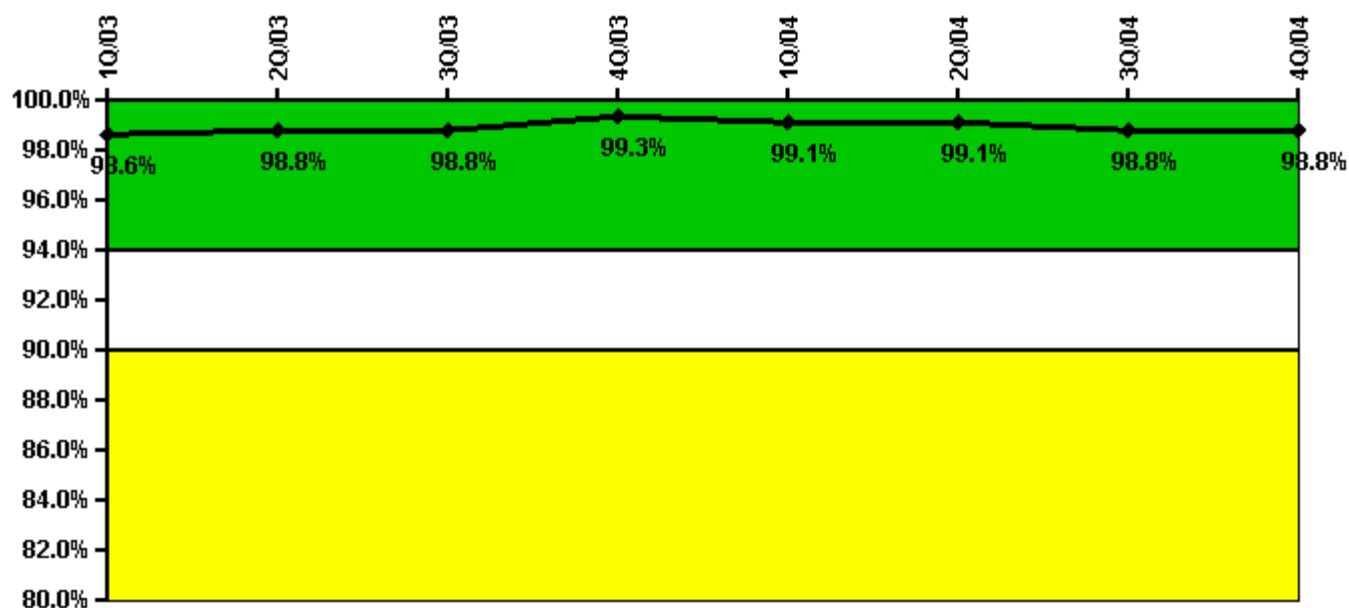
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Participating Key personnel	177.0	175.0	159.0	149.0	154.0	154.0	156.0	133.0
Total Key personnel	184.0	185.0	160.0	159.0	163.0	162.0	159.0	137.0
Indicator value	96.2%	94.6%	99.4%	93.7%	94.5%	95.1%	98.1%	97.1%

Licensee Comments: none

### Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Successful siren-tests	2220	2386	2457	2375	2383	2384	2494	2394
Total sirens-tests	2225	2403	2492	2388	2403	2403	2560	2403
Indicator value	98.6%	98.8%	98.8%	99.3%	99.1%	99.1%	98.8%	98.8%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

**Notes**

Occupational Exposure Control Effectiveness	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
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
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

### RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

#### Notes

RETS/ODCM Radiological Effluent	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/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: March 9, 2005