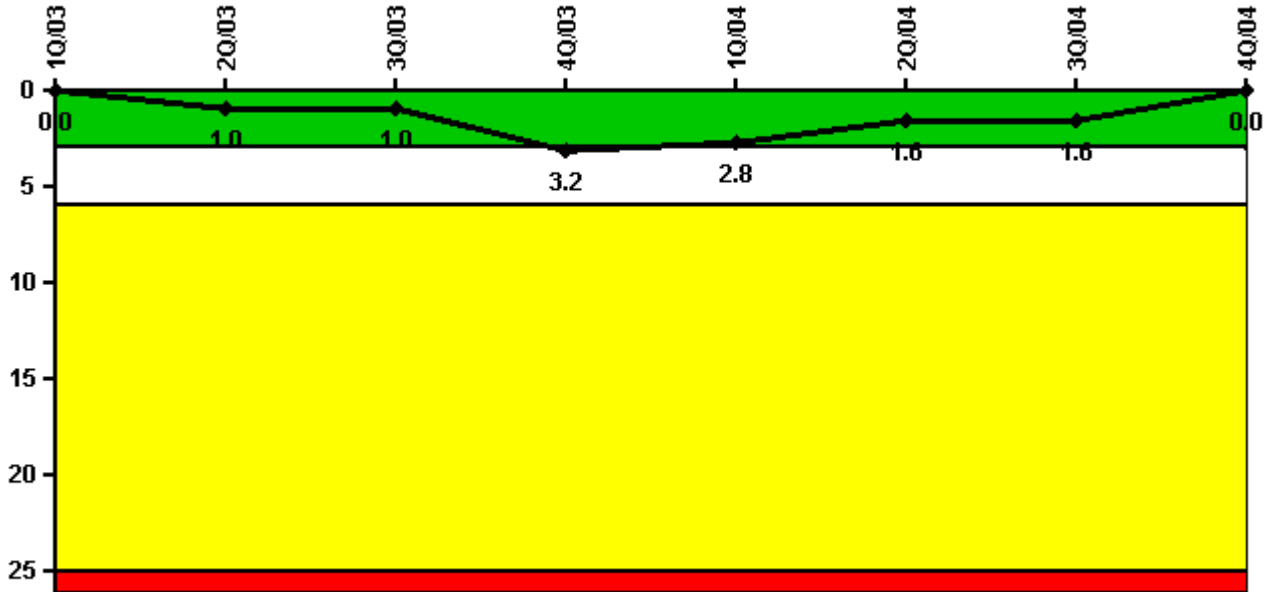


# Cooper

## 4Q/2004 Performance Indicators

Licensee's General Comments: Forced Turbine Outage in October-November

### 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	1.0	0	2.0	0	0	0	0
Critical hours	1296.0	988.6	2208.0	2000.7	2184.0	2183.0	2208.0	1743.0
Indicator value	0	1.0	1.0	3.2	2.8	1.6	1.6	0

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



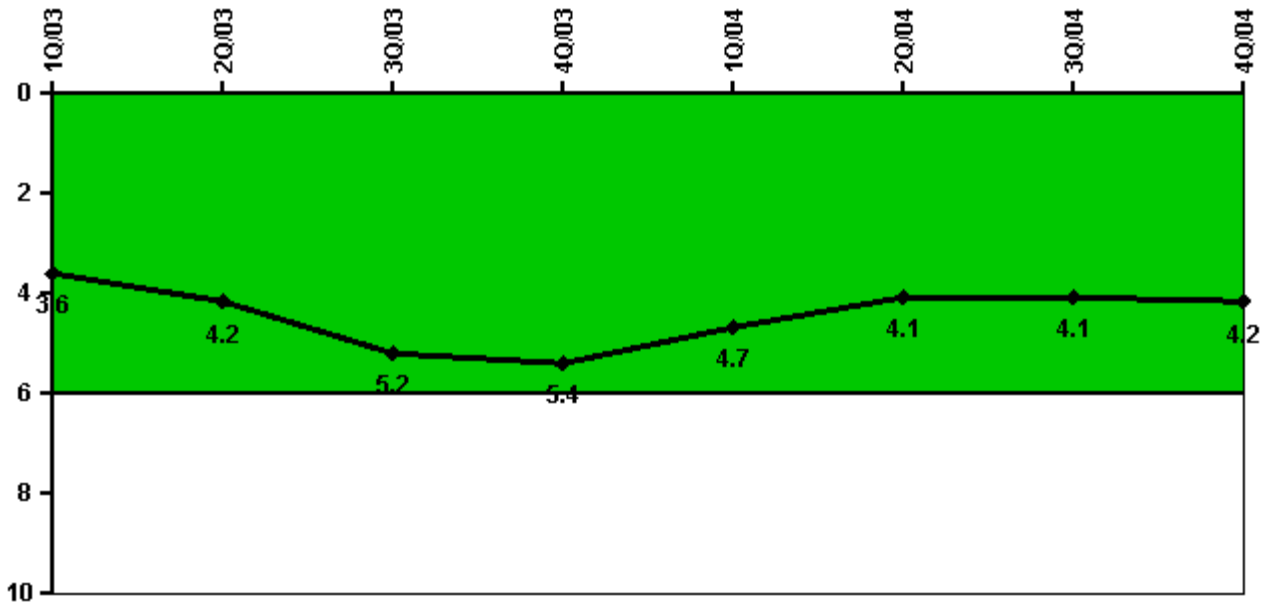
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	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



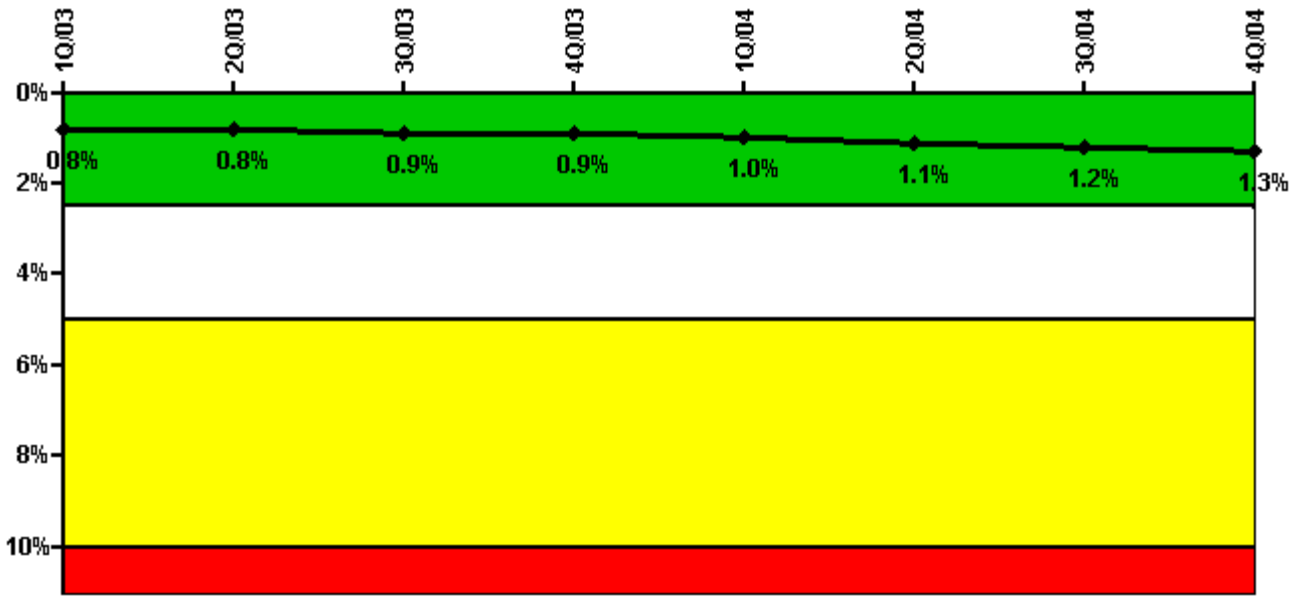
Thresholds: White > 6.0

#### 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	1.0	2.0	1.0	1.0	1.0	2.0	1.0	1.0
Critical hours	1296.0	988.6	2208.0	2000.7	2184.0	2183.0	2208.0	1743.0
Indicator value	3.6	4.2	5.2	5.4	4.7	4.1	4.1	4.2

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



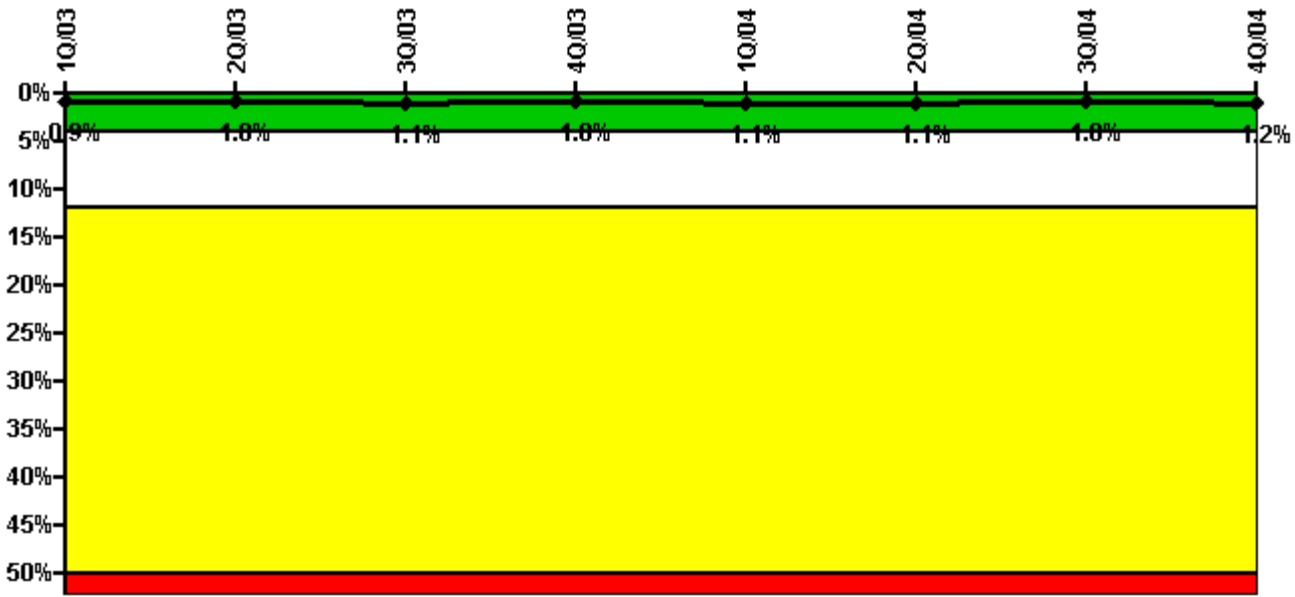
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

#### 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	0	14.72	16.12	17.97	4.72	28.40	5.43	24.57
Unplanned unavailable hours	0	0	0	0	66.50	0	0	23.75
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	0	6.07	4.25	52.73	7.20	29.57	81.48	20.03
Unplanned unavailable hours	0	0	9.53	0	27.75	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	2208.00	2209.00
<b>Indicator value</b>	<b>0.8%</b>	<b>0.8%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>1.0%</b>	<b>1.1%</b>	<b>1.2%</b>	<b>1.3%</b>

Licensee Comments: none

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



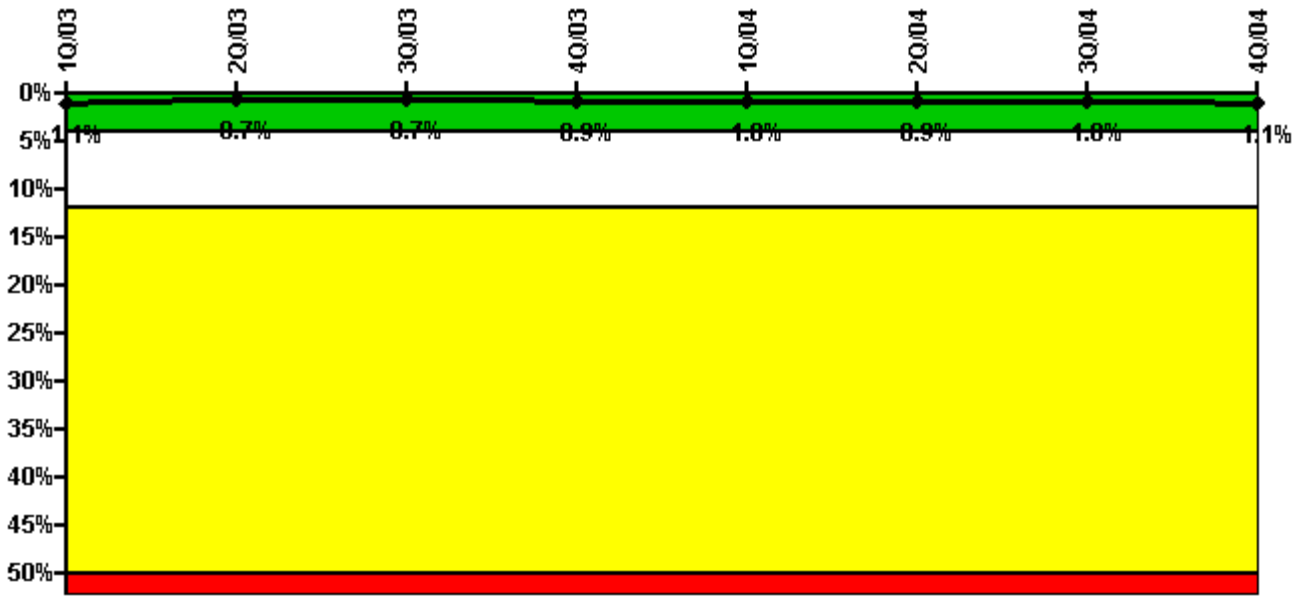
Thresholds: White > 4.0% Yellow > 12.0% Red > 50.0%

**Notes**

Safety System Unavailability, High Pressure Injection System (HPCI)	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
<b>Train 1</b>								
Planned unavailable hours	1.22	12.82	18.48	17.70	22.93	2.42	1.66	62.12
Unplanned unavailable hours	0	2.13	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	1299.40	941.33	2208.00	2002.37	2184.00	2183.00	2208.00	1741.76
<b>Indicator value</b>	<b>0.9%</b>	<b>1.0%</b>	<b>1.1%</b>	<b>1.0%</b>	<b>1.1%</b>	<b>1.1%</b>	<b>1.0%</b>	<b>1.2%</b>

Licensee Comments: none

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



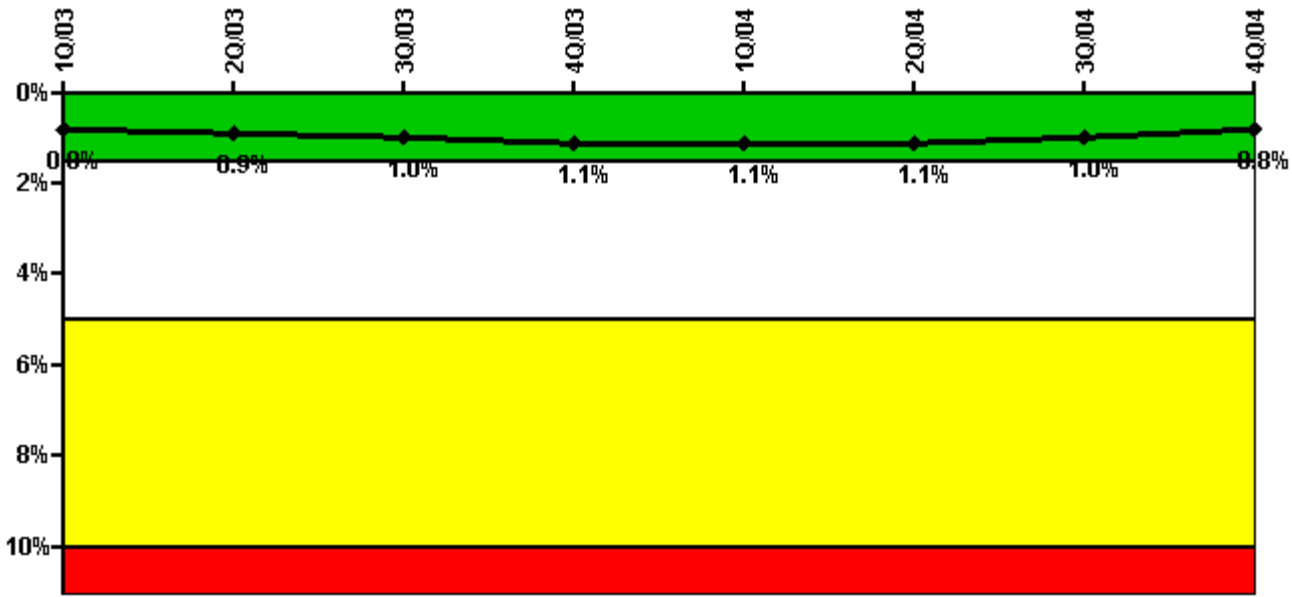
Thresholds: White > 4.0% Yellow > 12.0% Red > 50.0%

#### Notes

Safety System Unavailability, Heat Removal System (RCIC)	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
<b>Train 1</b>								
Planned unavailable hours	1.35	2.45	2.84	41.63	10.29	1.07	22.17	31.79
Unplanned unavailable hours	0	0	0	7.87	3.33	0	1.60	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	1299.40	941.33	2208.00	2002.37	2184.00	2183.00	2208.00	1741.76
<b>Indicator value</b>	<b>1.1%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.9%</b>	<b>1.0%</b>	<b>0.9%</b>	<b>1.0%</b>	<b>1.1%</b>

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



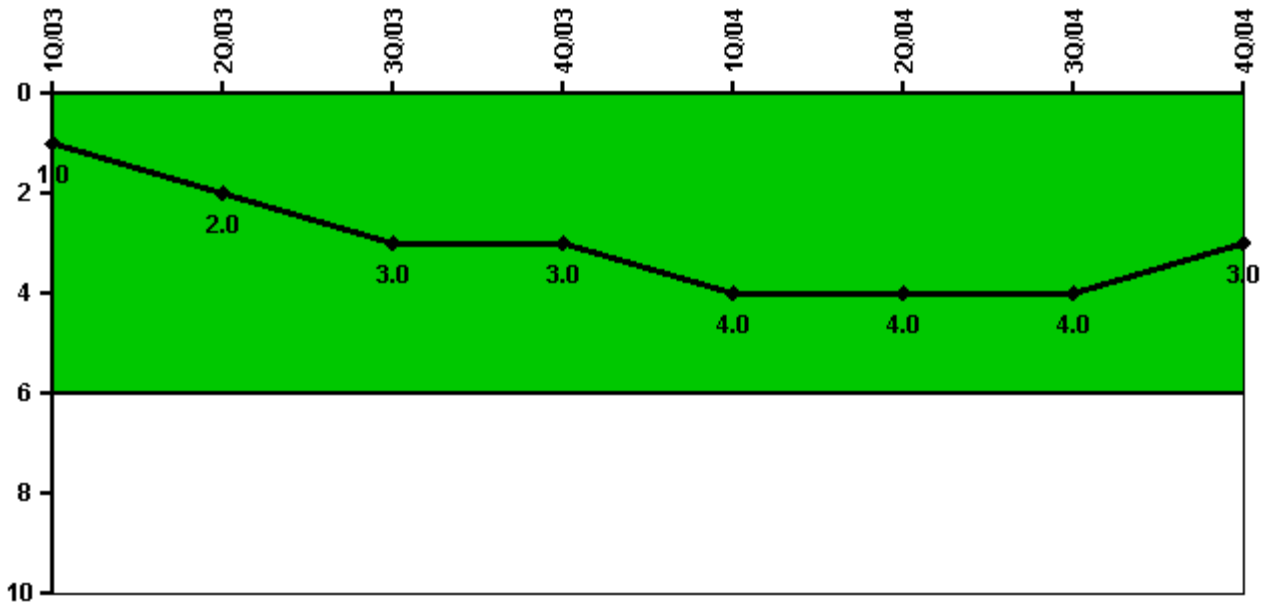
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

**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	21.42	26.82	0	0	1.08	0	7.55	0
Unplanned unavailable hours	0	0	0	33.34	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	2208.00	2209.00
<b>Train 2</b>								
Planned unavailable hours	50.50	15.58	0	21.92	1.15	0	10.08	0
Unplanned unavailable hours	0	0	64.50	0	0	0	0	0.27
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>0.8%</b>	<b>0.9%</b>	<b>1.0%</b>	<b>1.1%</b>	<b>1.1%</b>	<b>1.1%</b>	<b>1.0%</b>	<b>0.8%</b>

Licensee Comments: none

### Safety System Functional Failures (BWR)



Thresholds: White > 6.0

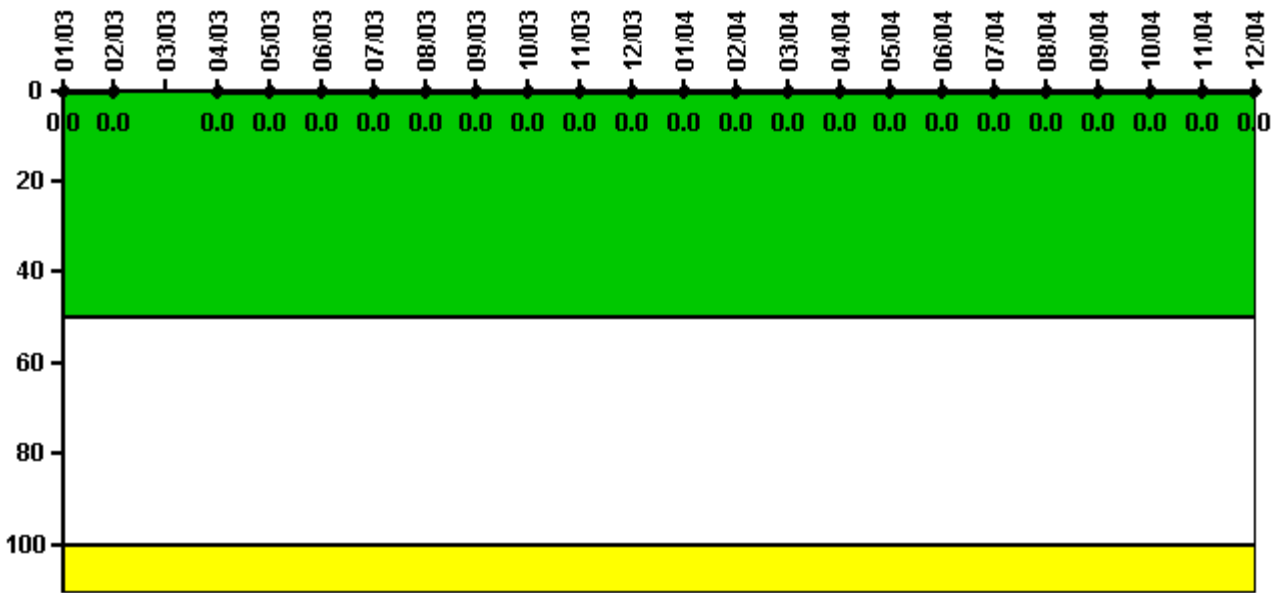
#### Notes

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

Licensee Comments: none



### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

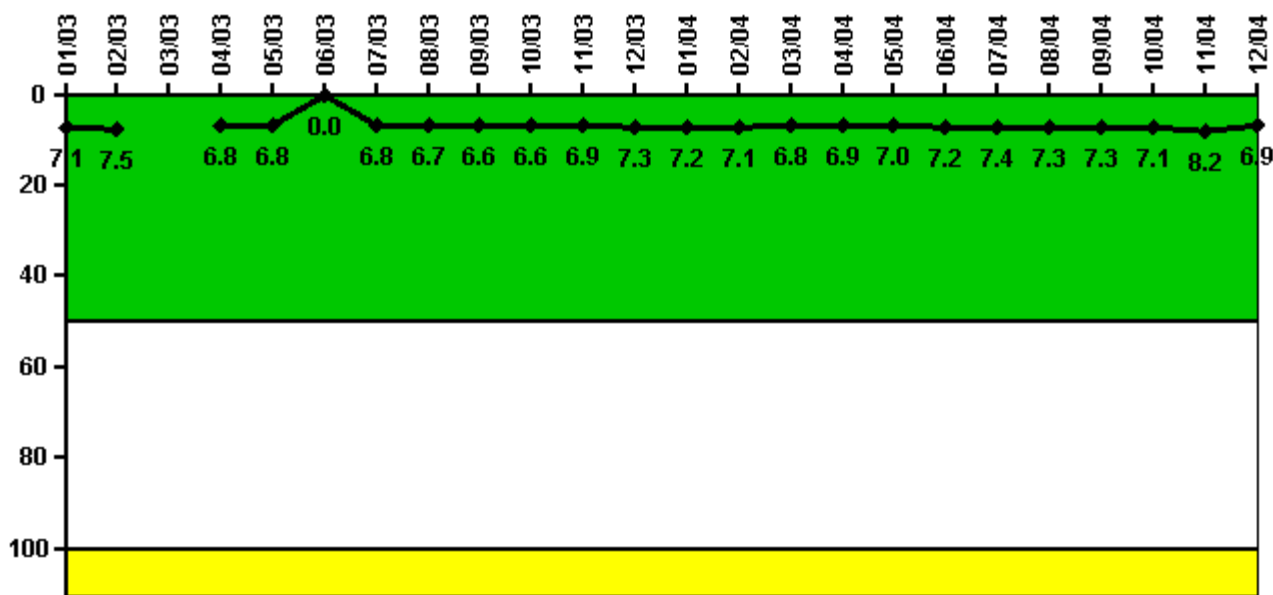
Reactor Coolant System Activity	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03
Maximum activity	0.000050	0.000021	N/A	0.000023	0.000042	0.000008	0.000014	0.000010	0.000023	0.000019	0.000053	0.000043
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	N/A	0	0	0	0	0	0	0	0	0

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	0.000036	0.000025	0.000018	0.000038	0.000026	0.000023	0.000027	0.000026	0.000022	0.000023	0.000031	0.000022
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

### Reactor Coolant System Leakage



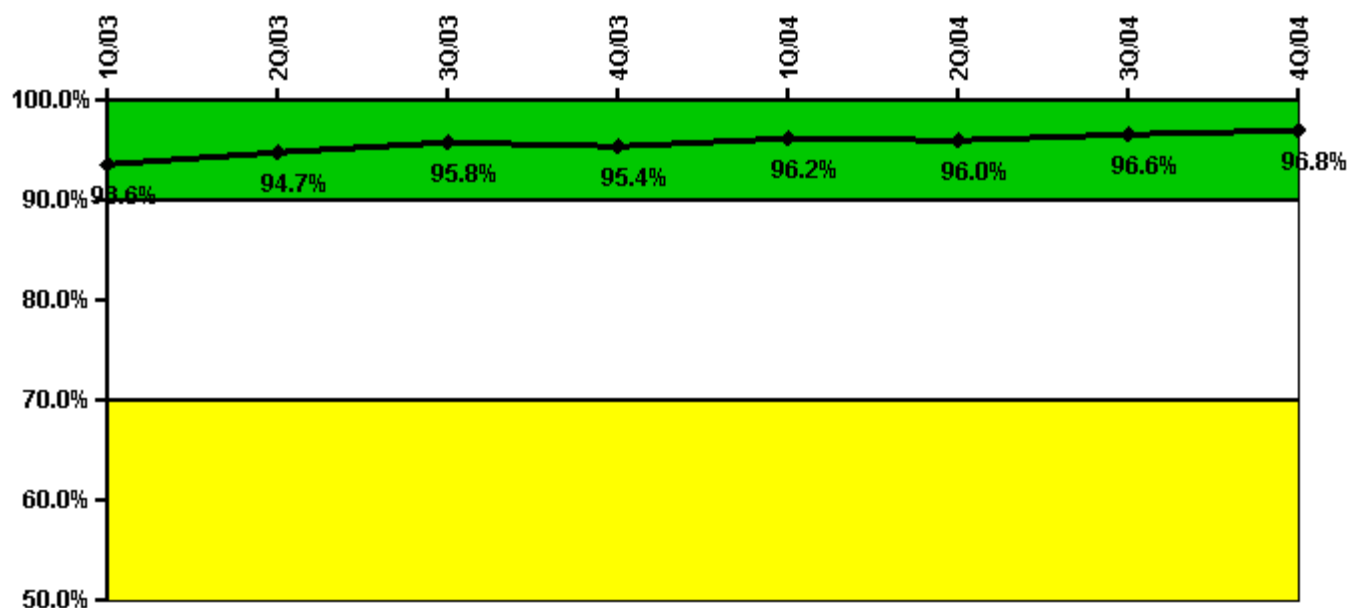
Thresholds: White > 50.0 Yellow > 100.0

#### 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	2.130	2.252	N/A	2.030	2.030	0	2.030	2.000	1.980	1.980	2.080	2.180
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Indicator value	7.1	7.5	N/A	6.8	6.8	0	6.8	6.7	6.6	6.6	6.9	7.3
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	2.168	2.123	2.030	2.060	2.100	2.160	2.223	2.192	2.180	2.144	2.454	2.060
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Indicator value	7.2	7.1	6.8	6.9	7.0	7.2	7.4	7.3	7.3	7.1	8.2	6.9

Licensee Comments: none

### Drill/Exercise Performance



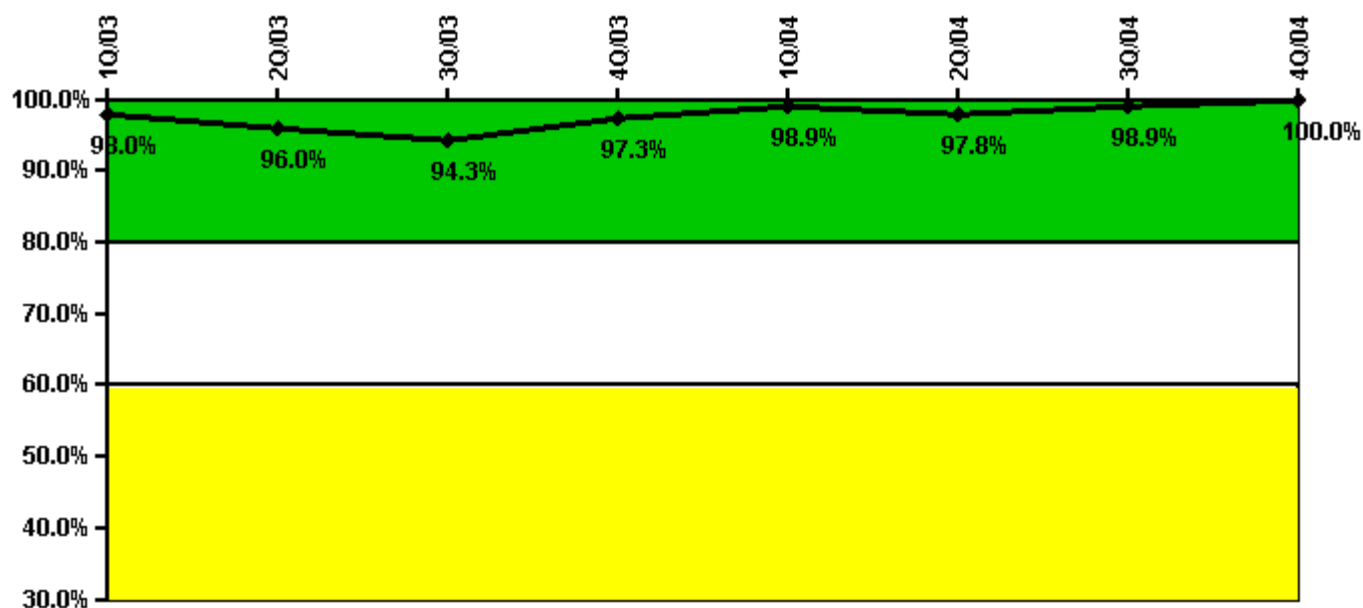
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Successful opportunities	3.0	2.0	58.0	116.0	24.0	2.0	71.0	23.0
Total opportunities	3.0	2.0	60.0	122.0	24.0	3.0	72.0	23.0
Indicator value	93.6%	94.7%	95.8%	95.4%	96.2%	96.0%	96.6%	96.8%

Licensee Comments: none

### ERO Drill Participation



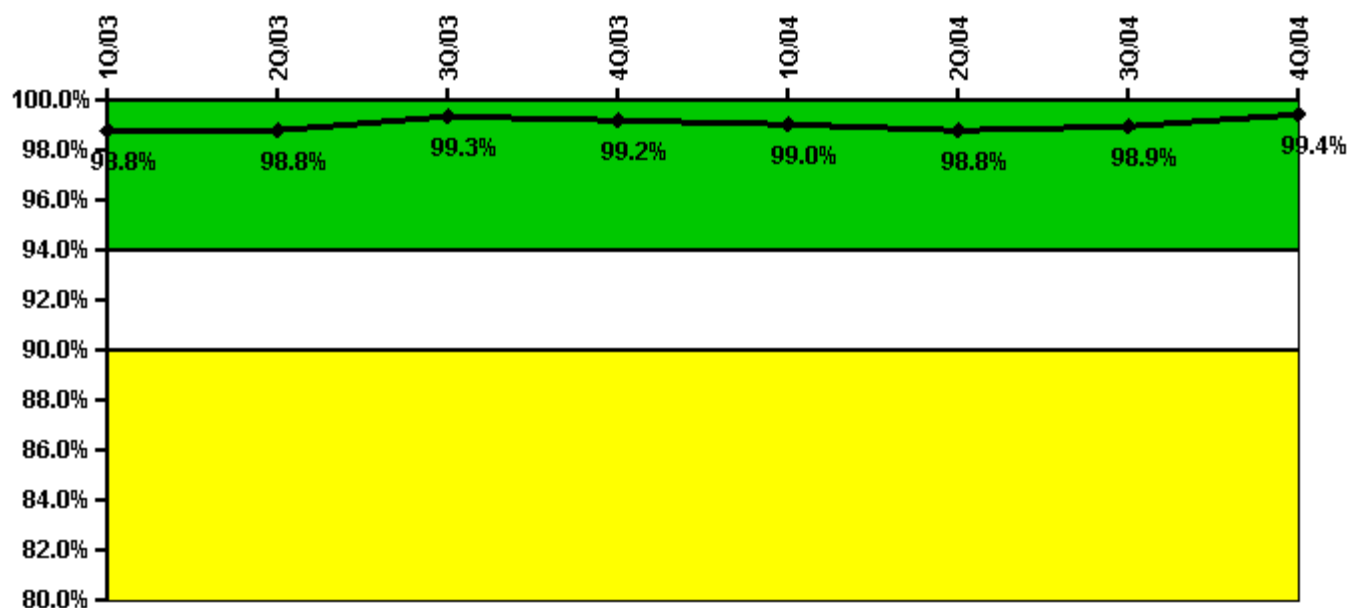
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Participating Key personnel	96.0	95.0	99.0	107.0	90.0	87.0	87.0	90.0
Total Key personnel	98.0	99.0	105.0	110.0	91.0	89.0	88.0	90.0
Indicator value	98.0%	96.0%	94.3%	97.3%	98.9%	97.8%	98.9%	100.0%

Licensee Comments: none

### Alert & Notification System



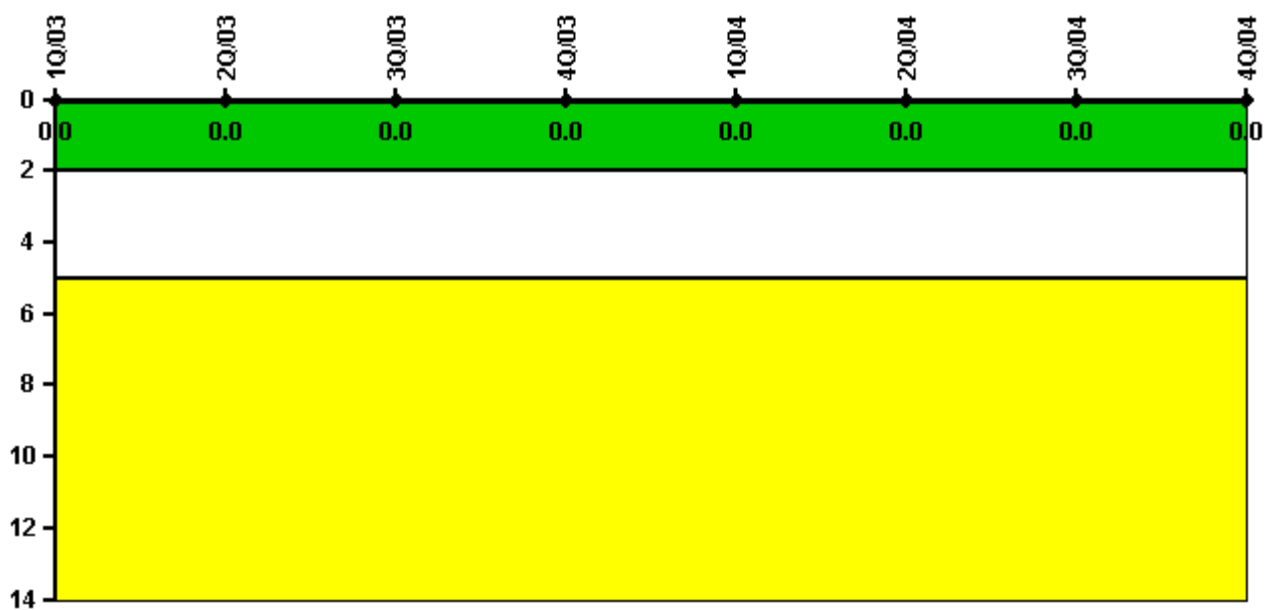
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Successful siren-tests	143	144	144	166	142	143	239	311
Total sirens-tests	144	144	144	170	144	144	240	312
Indicator value	98.8%	98.8%	99.3%	99.2%	99.0%	98.8%	98.9%	99.4%

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