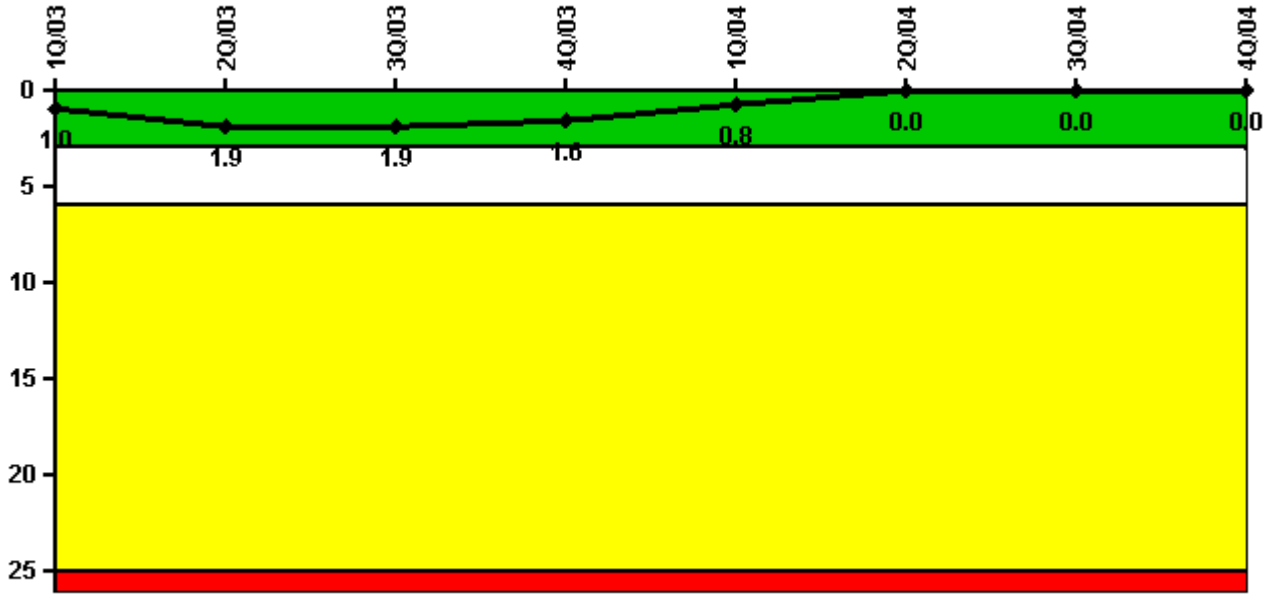


# Comanche Peak 1

## 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	1.0	1.0	0	0	0	0	0	0
Critical hours	2143.6	2111.4	2208.0	2209.0	2076.3	1423.8	2208.0	2209.0
Indicator value	1.0	1.9	1.9	1.6	0.8	0	0	0

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



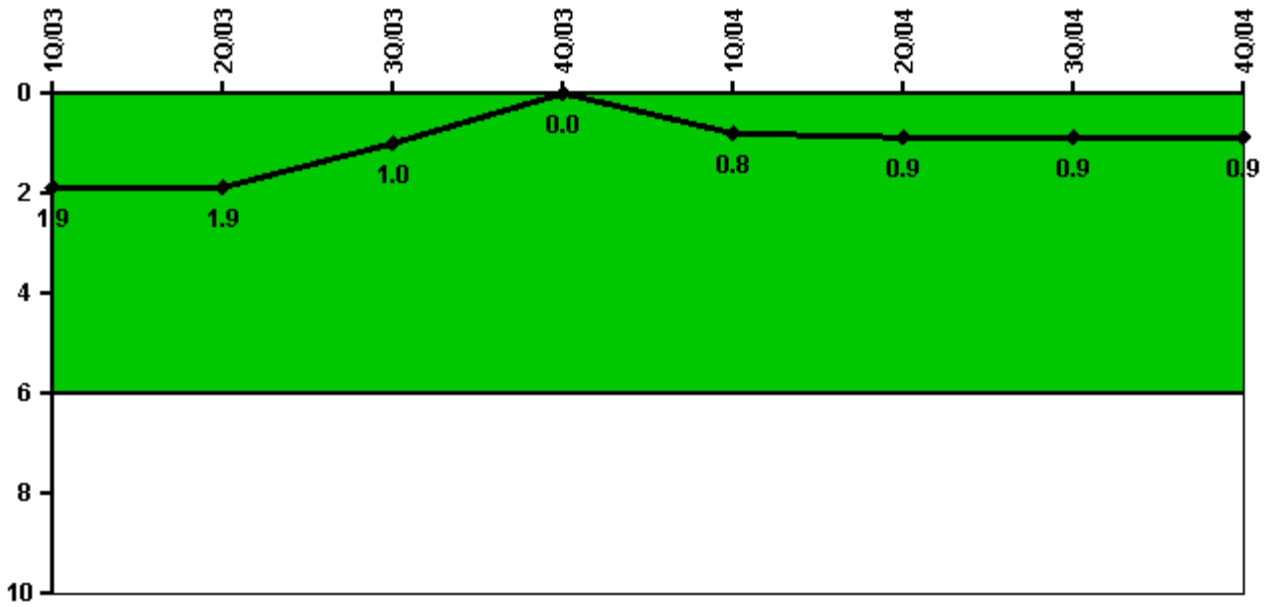
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### 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



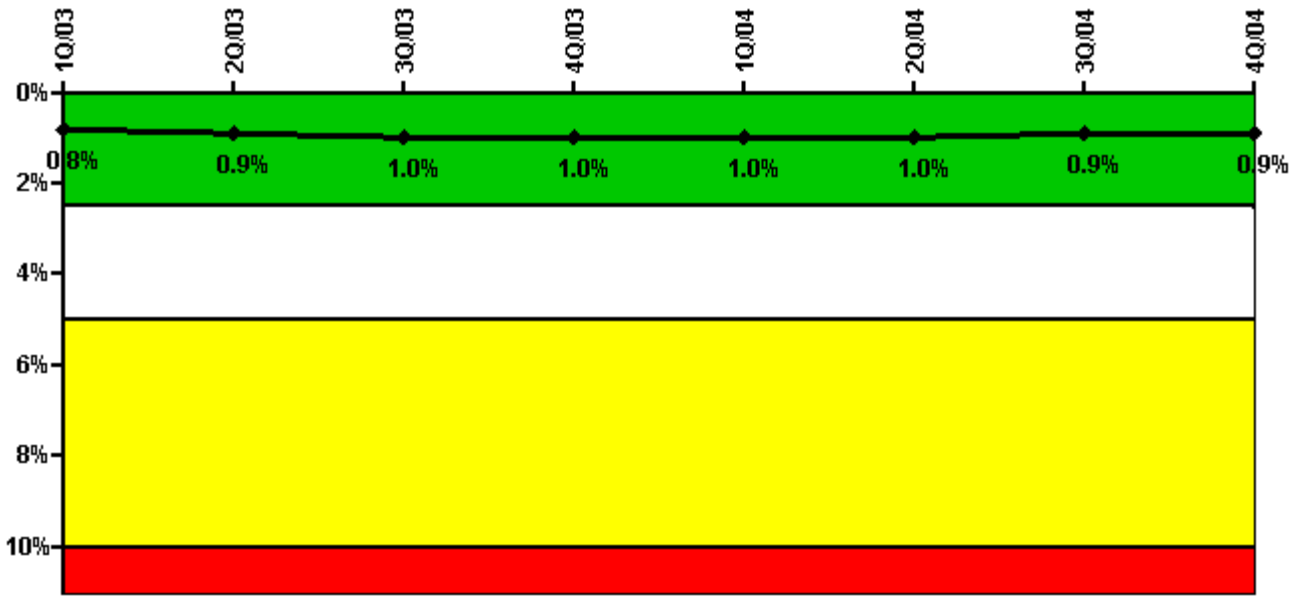
Thresholds: White > 6.0

#### 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	0	0	0	0	1.0	0	0	0
Critical hours	2143.6	2111.4	2208.0	2209.0	2076.3	1423.8	2208.0	2209.0
Indicator value	1.9	1.9	1.0	0	0.8	0.9	0.9	0.9

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



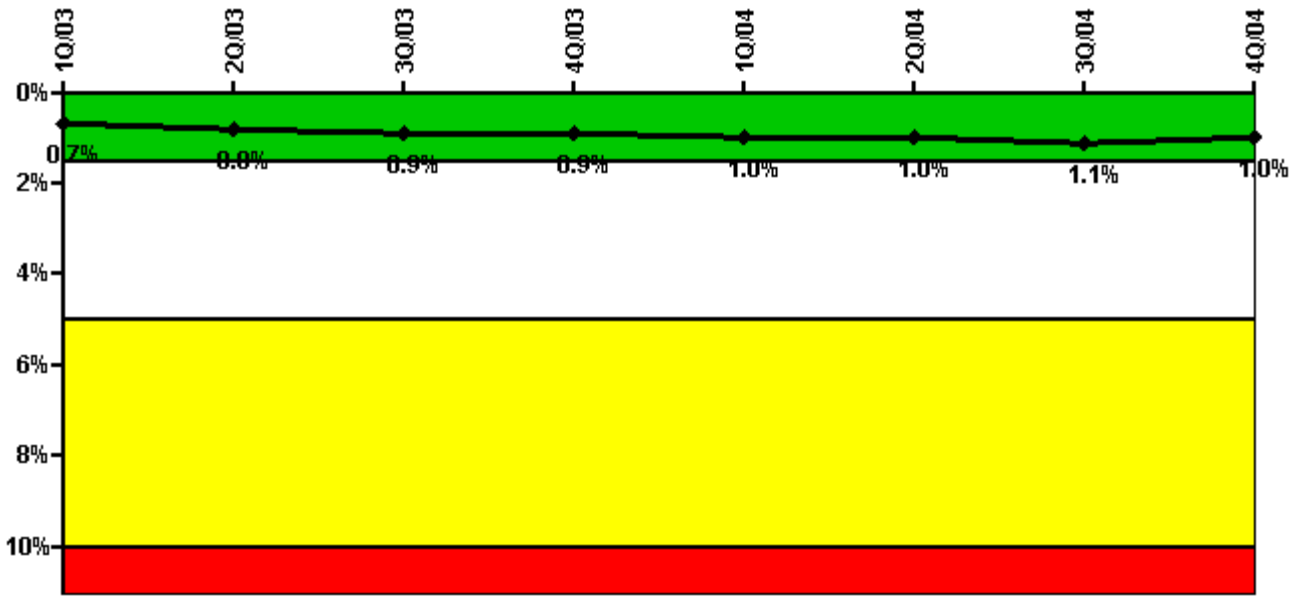
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

#### 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	12.10	36.30	33.50	6.40	15.50	31.40	6.70	9.30
Unplanned unavailable hours	28.80	0	0	0	0	2.00	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	29.90	56.90	6.20	6.00	14.50	3.60	10.70	6.80
Unplanned unavailable hours	0	17.50	0	0	10.10	0	0	15.90
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>1.0%</b>	<b>1.0%</b>	<b>1.0%</b>	<b>0.9%</b>	<b>0.9%</b>

Licensee Comments: none

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



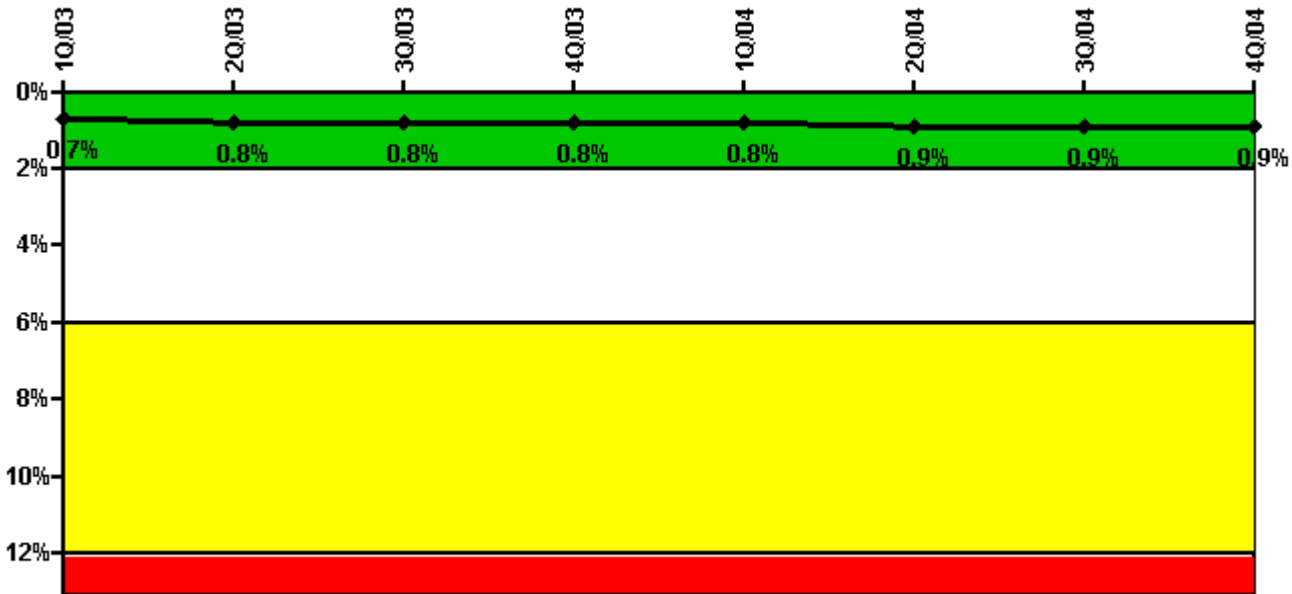
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

**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	16.00	60.20	14.80	20.10	41.60	24.00	4.70	7.20
Unplanned unavailable hours	5.60	7.60	0	0	9.60	2.00	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	2143.60	2111.40	2208.00	2209.00	2076.30	1423.75	2208.00	2209.00
<b>Train 2</b>								
Planned unavailable hours	40.50	44.40	55.90	3.20	33.60	3.10	42.60	9.10
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	2143.60	2111.40	2208.00	2209.00	2076.30	1423.75	2208.00	2209.00
<b>Train 3</b>								
Planned unavailable hours	16.40	51.20	2.10	5.90	28.70	24.00	11.20	7.70
Unplanned unavailable hours	5.60	4.10	0.50	0	9.60	2.00	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	2143.60	2111.40	2208.00	2209.00	2076.30	1423.75	2208.00	2209.00
<b>Train 4</b>								
Planned unavailable hours	30.90	35.10	15.10	6.00	21.70	10.70	24.70	9.10
Unplanned unavailable hours	0.40	0	0.80	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	2143.60	2111.40	2208.00	2209.00	2076.30	1423.75	2208.00	2209.00
<b>Indicator value</b>	<b>0.7%</b>	<b>0.8%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>1.0%</b>	<b>1.0%</b>	<b>1.1%</b>	<b>1.0%</b>

Licensee Comments: none

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



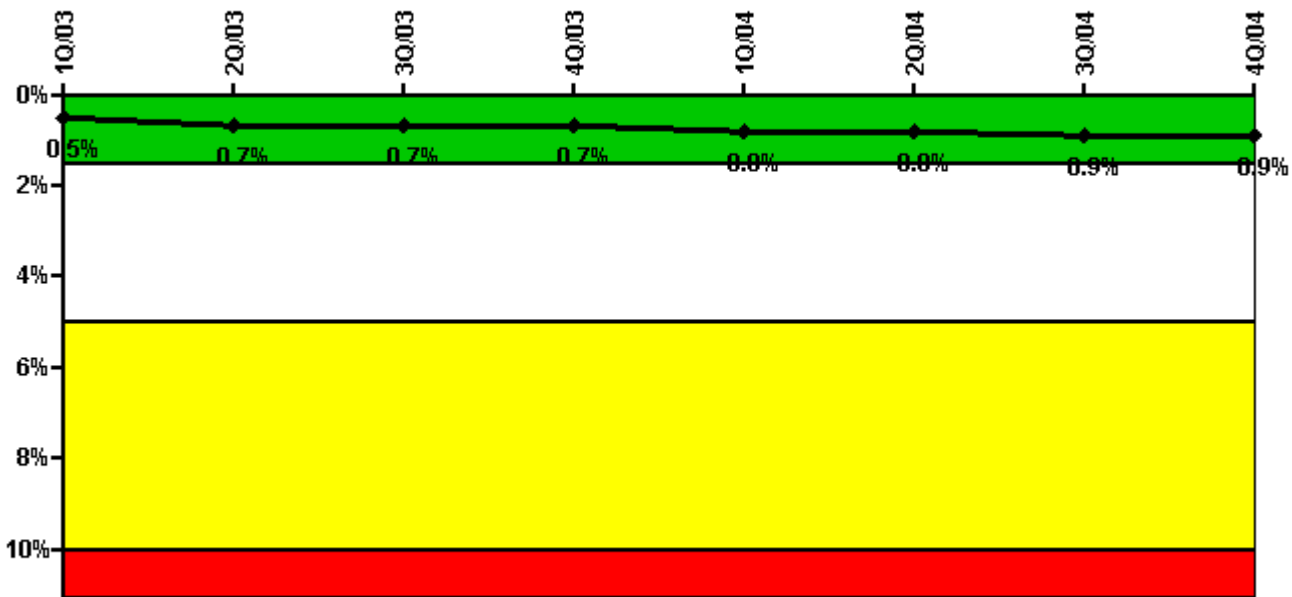
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

### 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	17.90	21.20	6.00	5.00	14.60	14.40	3.90	2.60
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	2143.60	2111.40	2208.00	2209.00	2076.30	1423.75	2208.00	2209.00
<b>Train 2</b>								
Planned unavailable hours	21.70	44.80	11.80	7.20	53.80	25.50	13.80	13.80
Unplanned unavailable hours	5.60	4.10	0	0	9.60	2.00	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	2143.60	2111.40	2208.00	2209.00	2076.30	1423.75	2208.00	2209.00
<b>Train 3</b>								
Planned unavailable hours	20.20	43.60	14.20	5.20	35.50	3.00	33.00	11.20
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	2143.60	2111.40	2208.00	2209.00	2076.30	1423.75	2208.00	2209.00
<b>Indicator value</b>	<b>0.7%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>0.9%</b>

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



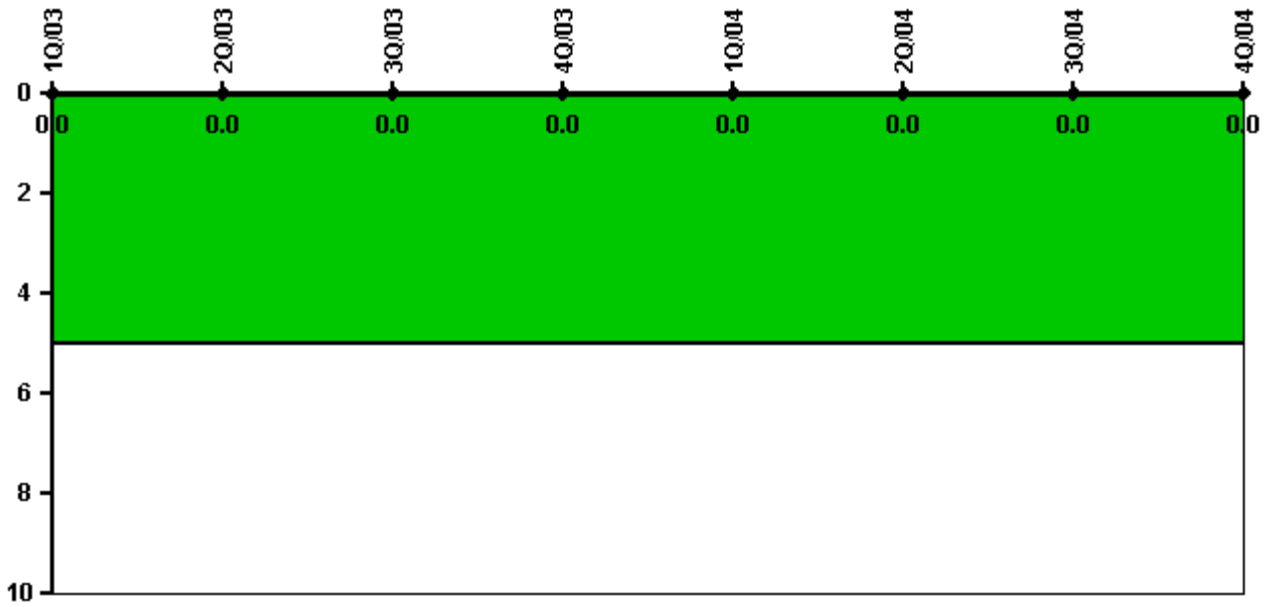
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

#### 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	12.10	44.10	2.80	7.10	44.90	26.80	12.30	7.90
Unplanned unavailable hours	5.60	4.10	0	0	9.60	2.00	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	24.60	49.70	14.20	12.30	20.40	5.20	25.80	26.00
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	2208.00	2209.00
<b>Indicator value</b>	<b>0.5%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>0.9%</b>	<b>0.9%</b>

Licensee Comments: none

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

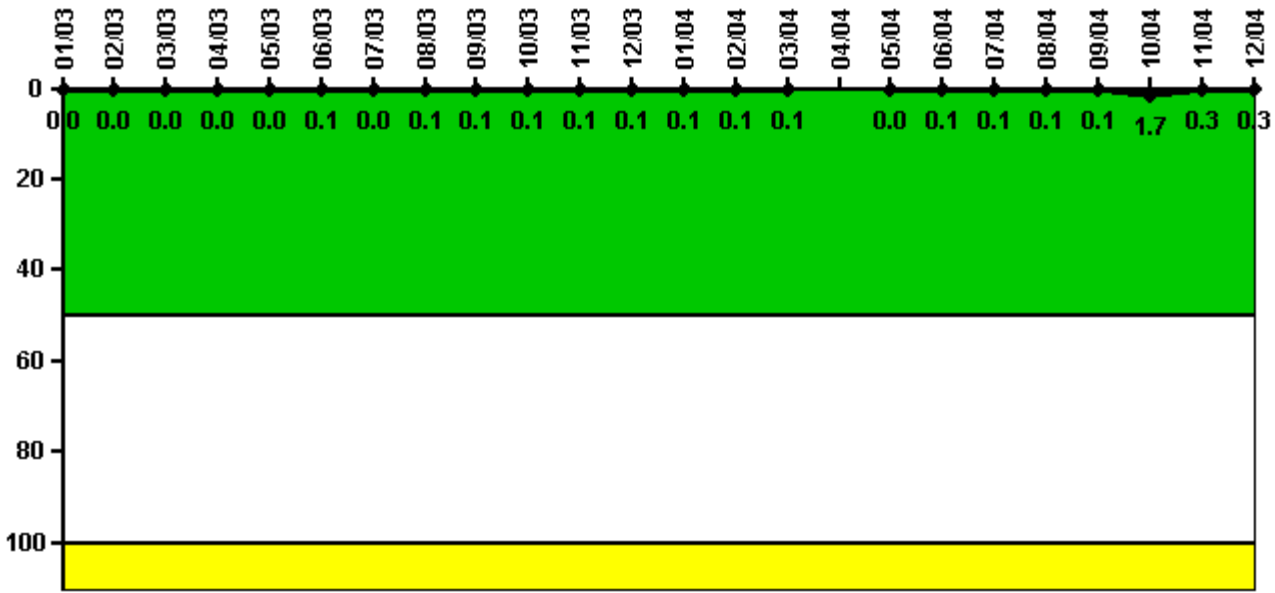
#### Notes

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	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none



### Reactor Coolant System Activity



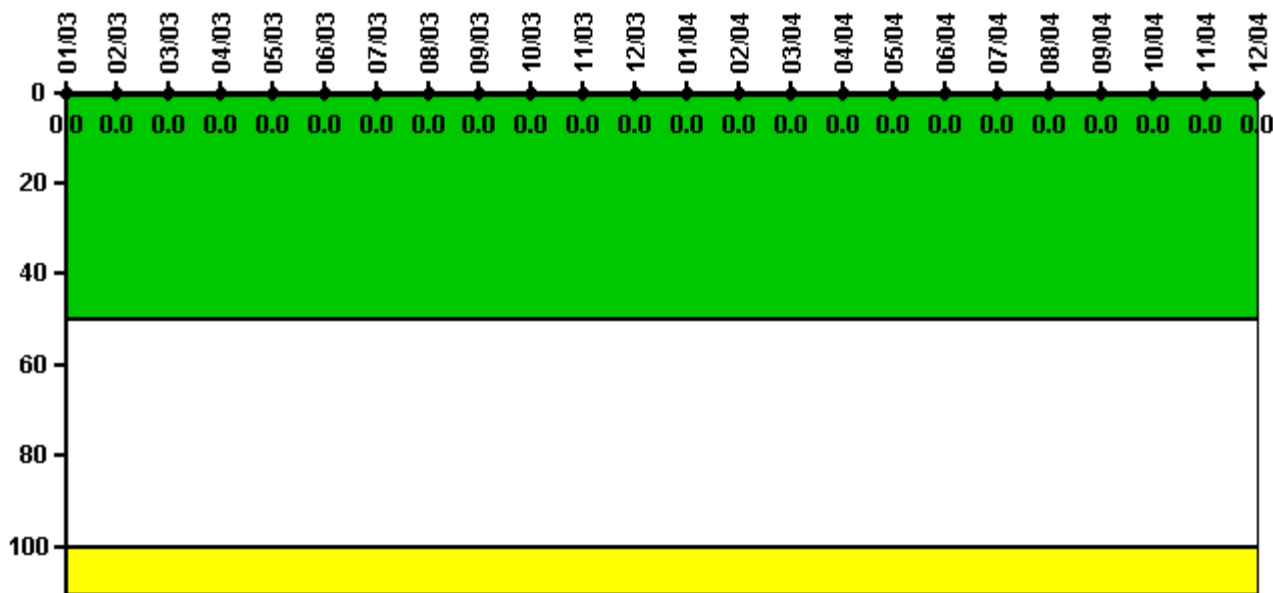
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Activity	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	0.000170	0.000201	0.000177	0.000208	0.000195	0.000243	0.000216	0.000240	0.000232	0.000249	0.000243	0.000251
Technical specification limit	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Indicator value	0	0	0	0	0	0.1	0	0.1	0.1	0.1	0.1	0.1
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	0.000258	0.000278	0.000287	N/A	0.000207	0.000239	0.000244	0.000283	0.000308	0.007790	0.001420	0.001419
Technical specification limit	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Indicator value	0.1	0.1	0.1	N/A	0	0.1	0.1	0.1	0.1	1.7	0.3	0.3

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

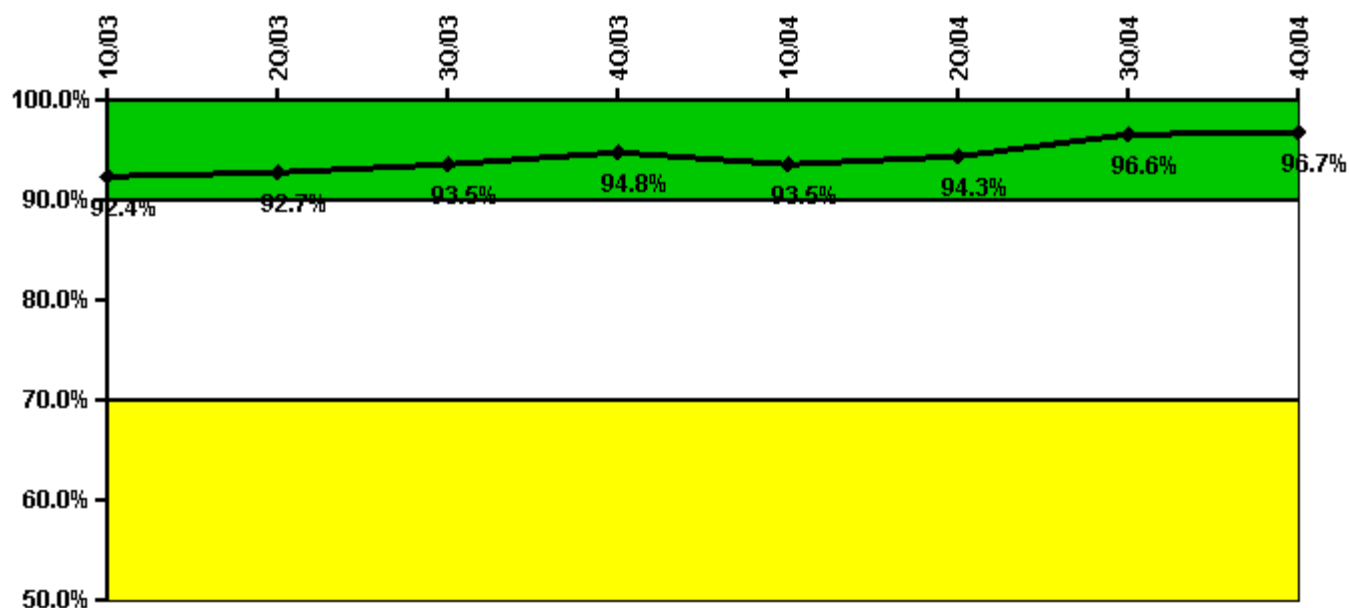
Reactor Coolant System Leakage	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03
Maximum leakage	0	0	0	0	0	0	0	0	0	0	0	0
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0

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	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

### Drill/Exercise Performance



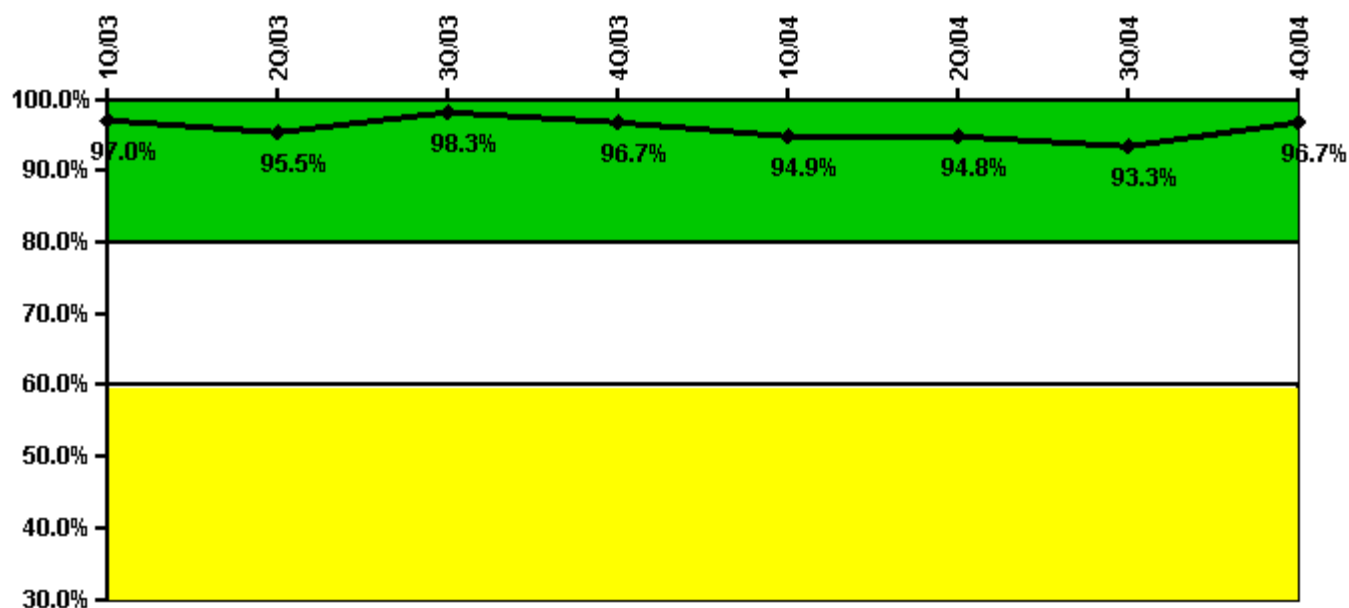
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Successful opportunities	9.0	6.0	52.0	12.0	7.0	6.0	76.0	6.0
Total opportunities	10.0	6.0	54.0	12.0	10.0	6.0	76.0	6.0
Indicator value	92.4%	92.7%	93.5%	94.8%	93.5%	94.3%	96.6%	96.7%

Licensee Comments: none

### ERO Drill Participation



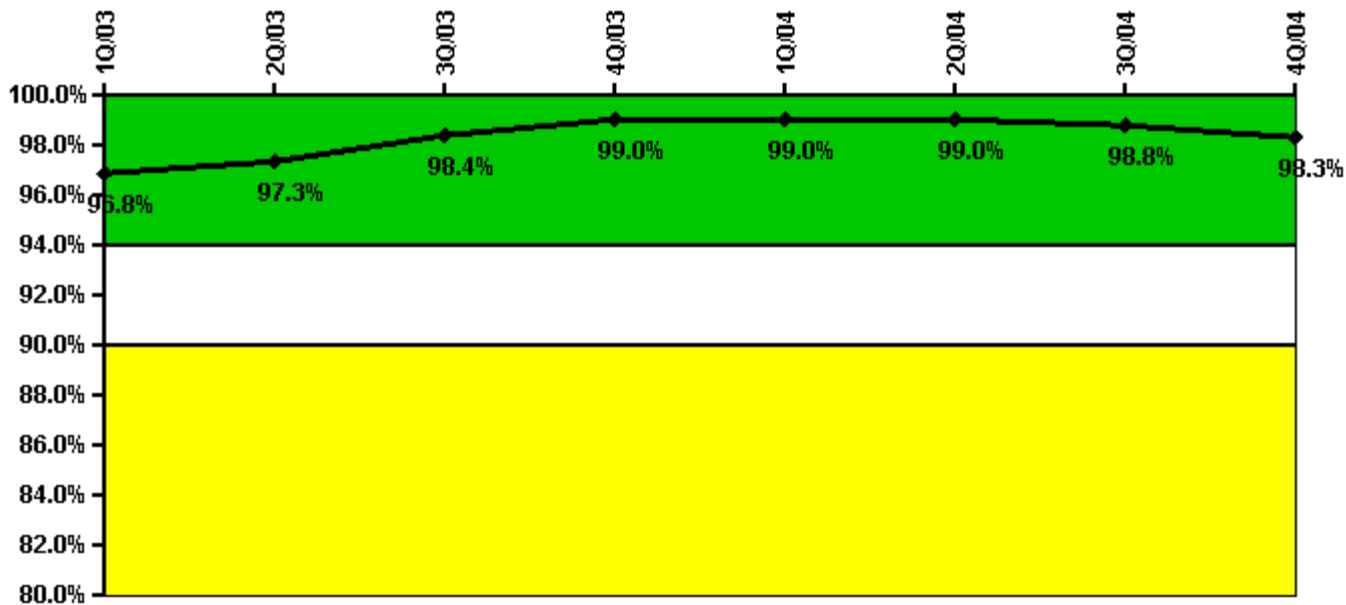
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04	2Q/04	3Q/04	4Q/04
Participating Key personnel	64.0	64.0	59.0	58.0	56.0	55.0	56.0	58.0
Total Key personnel	66.0	67.0	60.0	60.0	59.0	58.0	60.0	60.0
Indicator value	97.0%	95.5%	98.3%	96.7%	94.9%	94.8%	93.3%	96.7%

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	203	206	206	206	206	209	207	208
Total sirens-tests	207	207	207	208	210	210	210	214
Indicator value	96.8%	97.3%	98.4%	99.0%	99.0%	99.0%	98.8%	98.3%

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