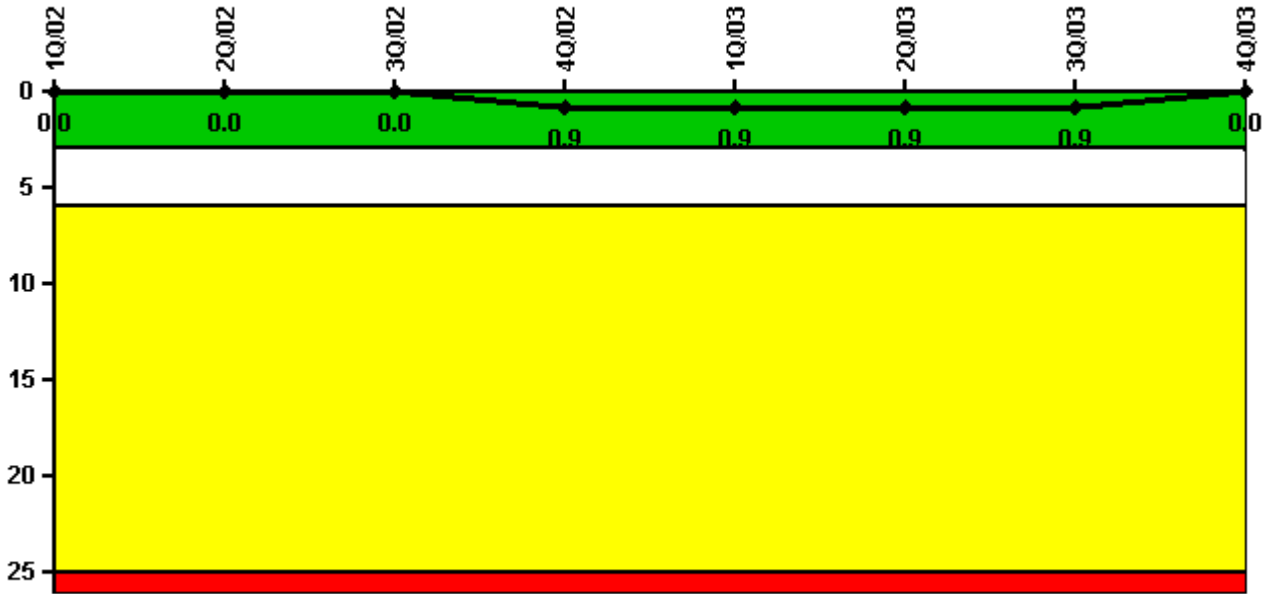


# Callaway

## 4Q/2003 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



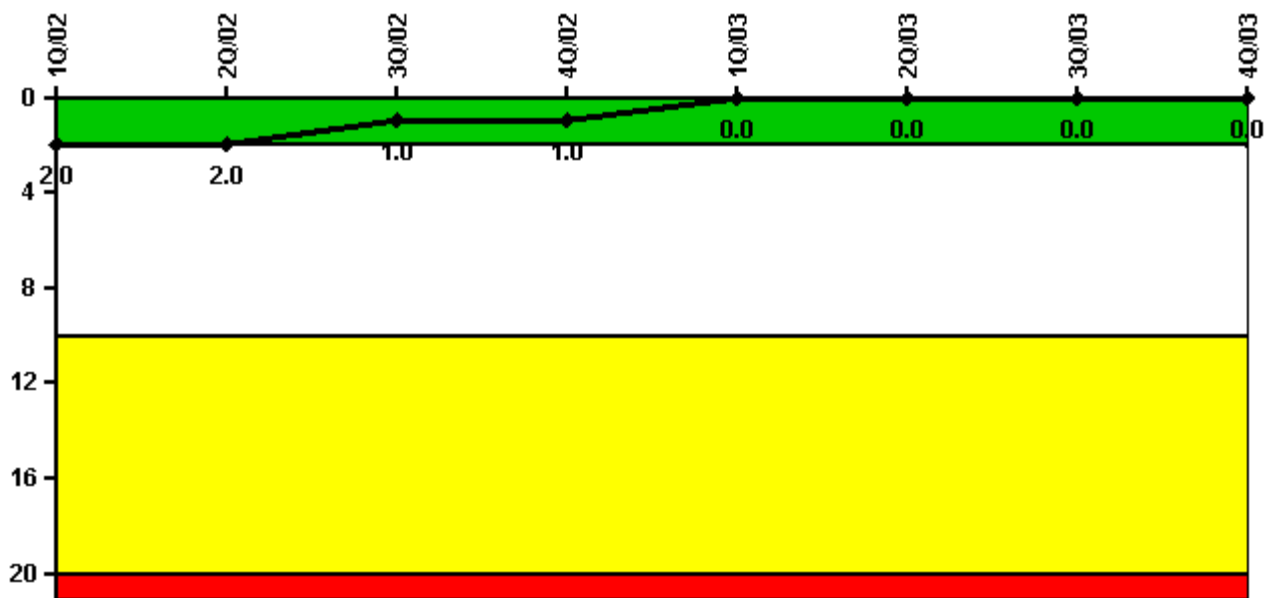
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Unplanned scrams	0	0	0	1.0	0	0	0	0
Critical hours	1840.0	2183.0	2208.0	1323.0	1929.0	2148.5	2208.0	2143.5
Indicator value	0	0	0	0.9	0.9	0.9	0.9	0

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



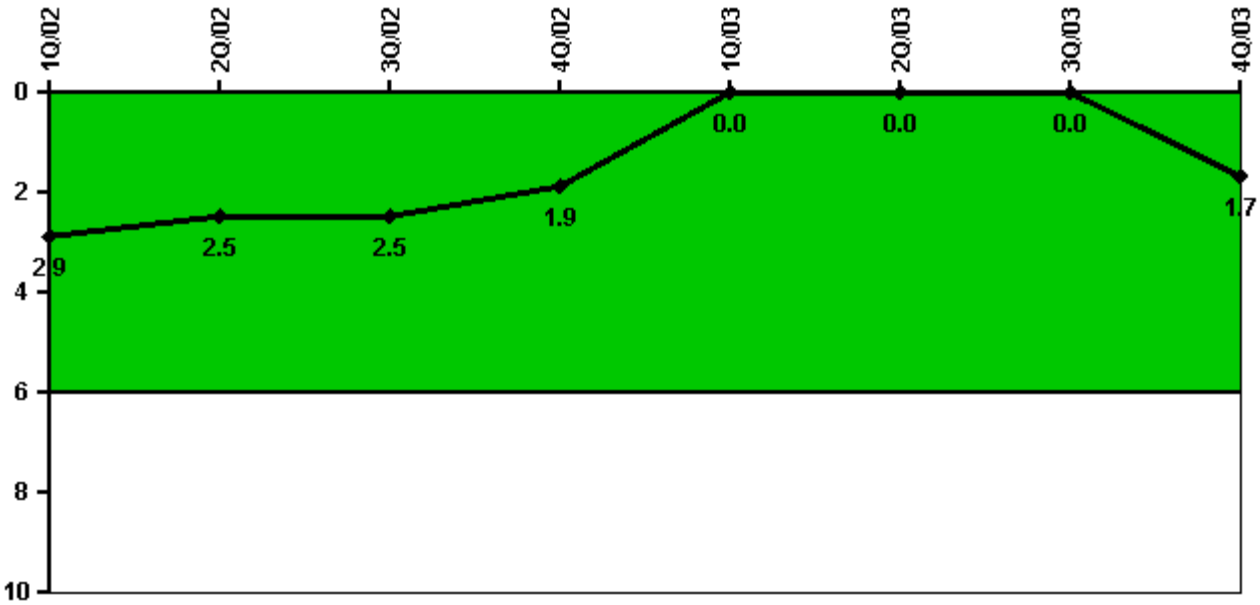
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Scrams	0	0	0	0	0	0	0	0
Indicator value	2.0	2.0	1.0	1.0	0	0	0	0

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



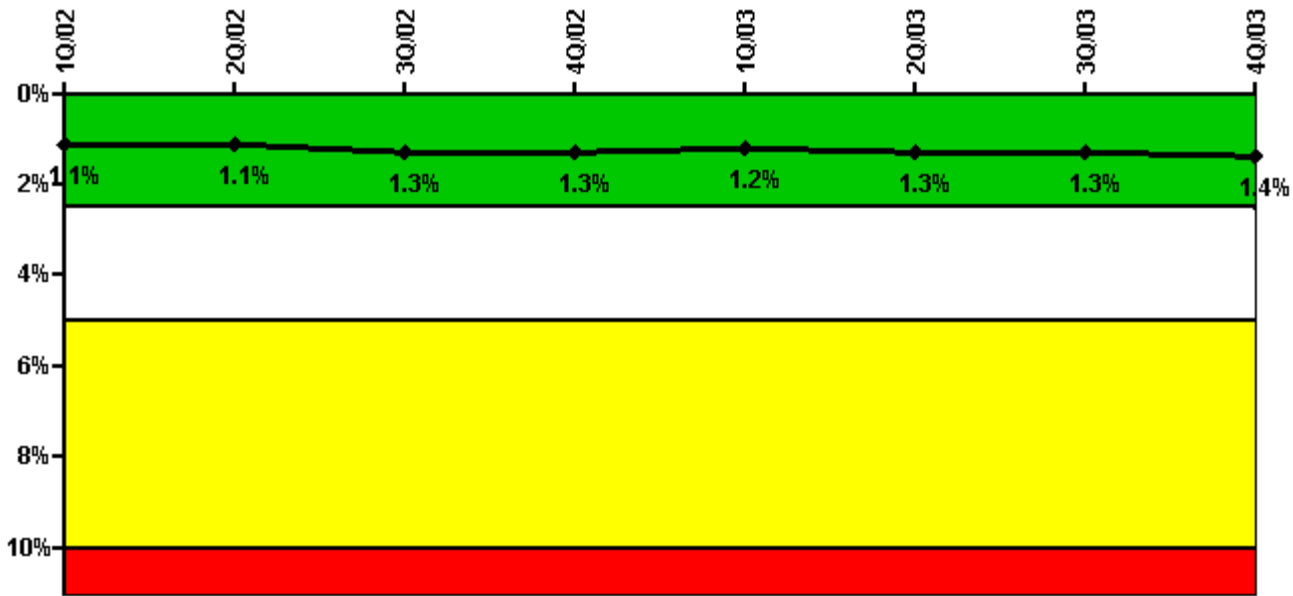
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Unplanned power changes	2.0	0	0	0	0	0	0	2.0
Critical hours	1840.0	2183.0	2208.0	1323.0	1929.0	2148.5	2208.0	2143.5
Indicator value	2.9	2.5	2.5	1.9	0	0	0	1.7

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



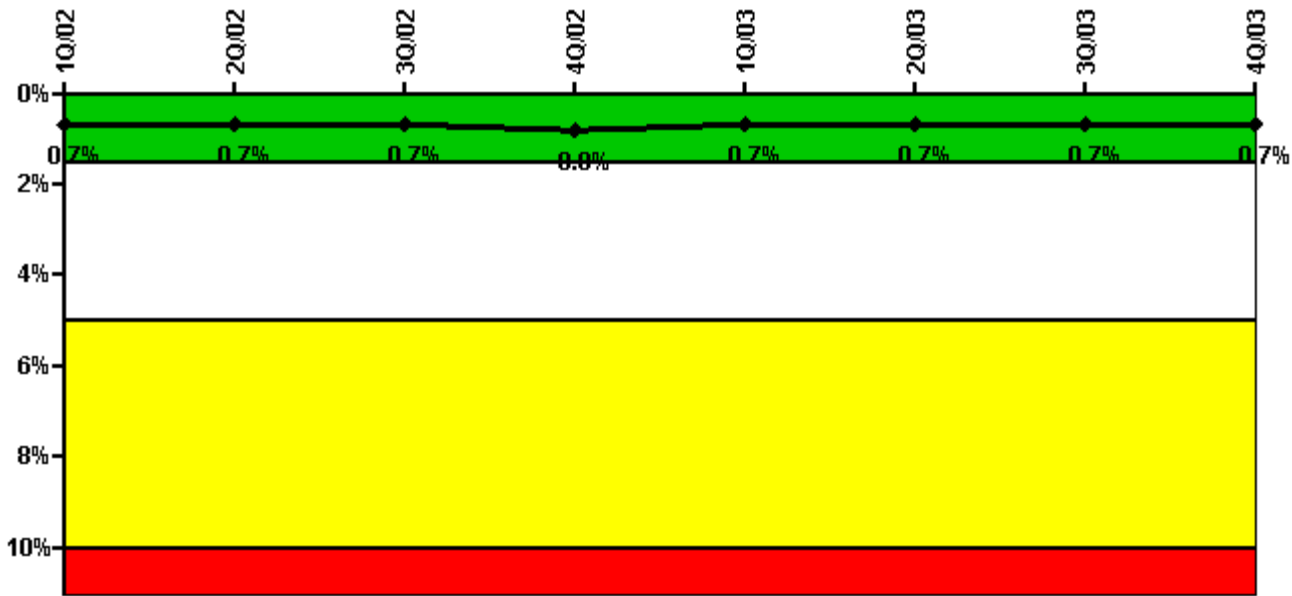
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Emergency AC Power	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
<b>Train 1</b>								
Planned unavailable hours	21.10	6.70	43.30	56.00	4.50	3.60	51.70	3.00
Unplanned unavailable hours	0	0	8.20	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	1849.40	2184.00	2208.00	1521.20	1970.40	2184.00	2208.00	2208.00
<b>Train 2</b>								
Planned unavailable hours	37.00	12.80	32.80	9.10	2.80	38.10	2.00	40.10
Unplanned unavailable hours	0	0.10	0	0	11.90	18.10	0	47.70
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1849.40	2184.00	2208.00	1521.20	1970.40	2184.00	2208.00	2208.00
Indicator value	1.1%	1.1%	1.3%	1.3%	1.2%	1.3%	1.3%	1.4%

Licensee Comments: none

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



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

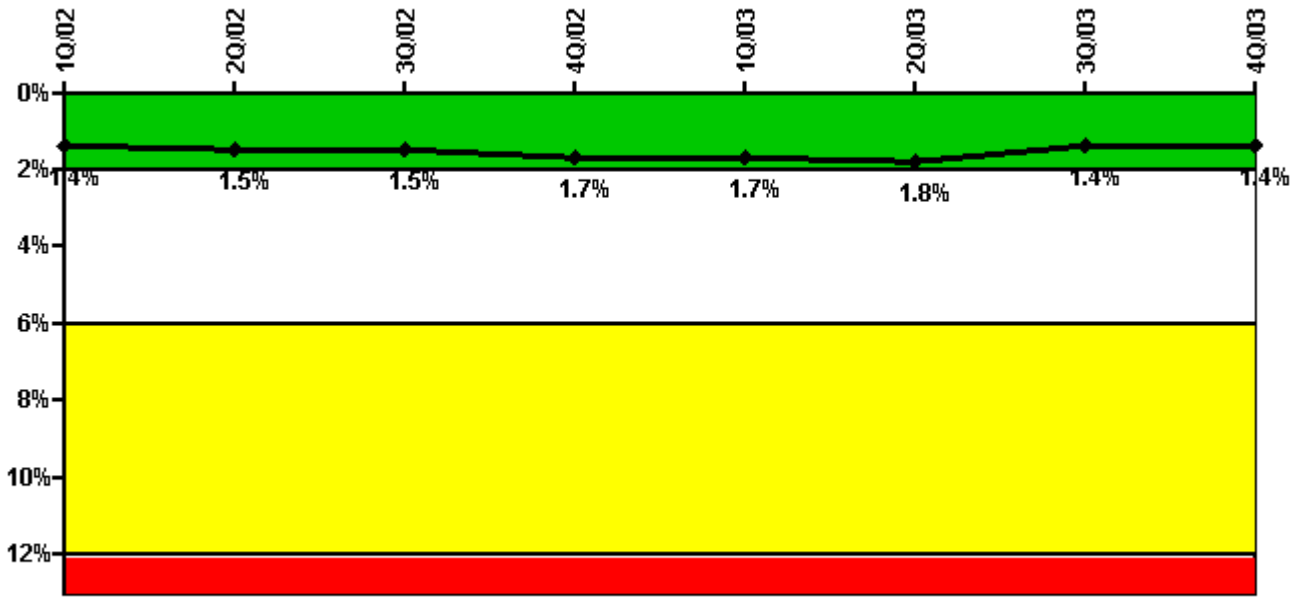
**Notes**

Safety System Unavailability, High Pressure Injection System (HPSI)	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
<b>Train 1</b>								
Planned unavailable hours	6.10	21.30	4.30	3.10	2.30	26.00	2.50	30.80
Unplanned unavailable hours	0	0	0.60	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	1849.40	2184.00	2208.00	1491.50	1941.00	2174.80	2208.00	2208.00
<b>Train 2</b>								
Planned unavailable hours	35.10	4.10	2.40	5.20	17.90	74.70	2.10	3.00
Unplanned unavailable hours	0	0	9.60	1.10	0	0	0	3.90
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	1849.40	2184.00	2208.00	1491.50	1941.00	2174.80	2208.00	2208.00
<b>Train 3</b>								
Planned unavailable hours	4.10	19.00	26.20	2.10	3.00	3.40	42.70	30.80
Unplanned unavailable hours	0	0	0.60	0	3.30	1.10	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	1849.40	2184.00	2208.00	1491.50	1941.00	2174.80	2208.00	2208.00
<b>Train 4</b>								
Planned unavailable hours	21.10	3.80	2.50	17.00	15.50	19.30	41.70	3.30
Unplanned unavailable hours	0	0	9.60	1.10	0	0	0	3.90
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0

Required hours	1849.40	2184.00	2208.00	1491.50	1941.00	2174.80	2208.00	2208.00
Indicator value	0.7%	0.7%	0.7%	0.8%	0.7%	0.7%	0.7%	0.7%

Licensee Comments: none

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



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

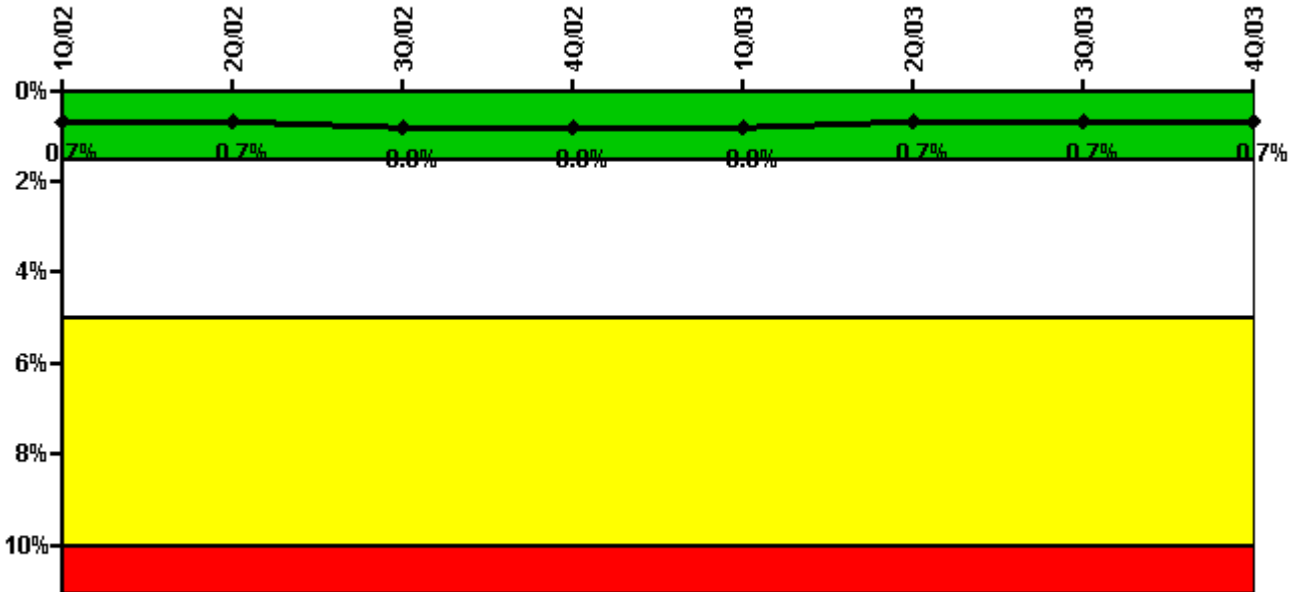
### Notes

Safety System Unavailability, Heat Removal System (AFW)	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
<b>Train 1</b>								
Planned unavailable hours	19.20	3.80	37.80	21.60	5.00	24.40	1.40	5.80
Unplanned unavailable hours	0	0	0.90	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	1849.40	2184.00	2208.00	1491.50	1941.00	2174.80	2208.00	2208.00
<b>Train 2</b>								
Planned unavailable hours	2.60	1.70	14.00	24.40	27.40	19.70	1.00	21.00
Unplanned unavailable hours	13.80	0	0	0	0	7.30	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	1849.40	2184.00	2208.00	1491.50	1941.00	2174.80	2208.00	2208.00
<b>Train 3</b>								

Planned unavailable hours	3.30	45.80	2.70	36.50	42.60	5.10	4.80	3.20
Unplanned unavailable hours	14.70	0	0	97.30	15.20	45.00	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	1849.40	2184.00	2208.00	1491.50	1941.00	2174.80	2208.00	2208.00
Indicator value	1.4%	1.5%	1.5%	1.7%	1.7%	1.8%	1.4%	1.4%

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



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

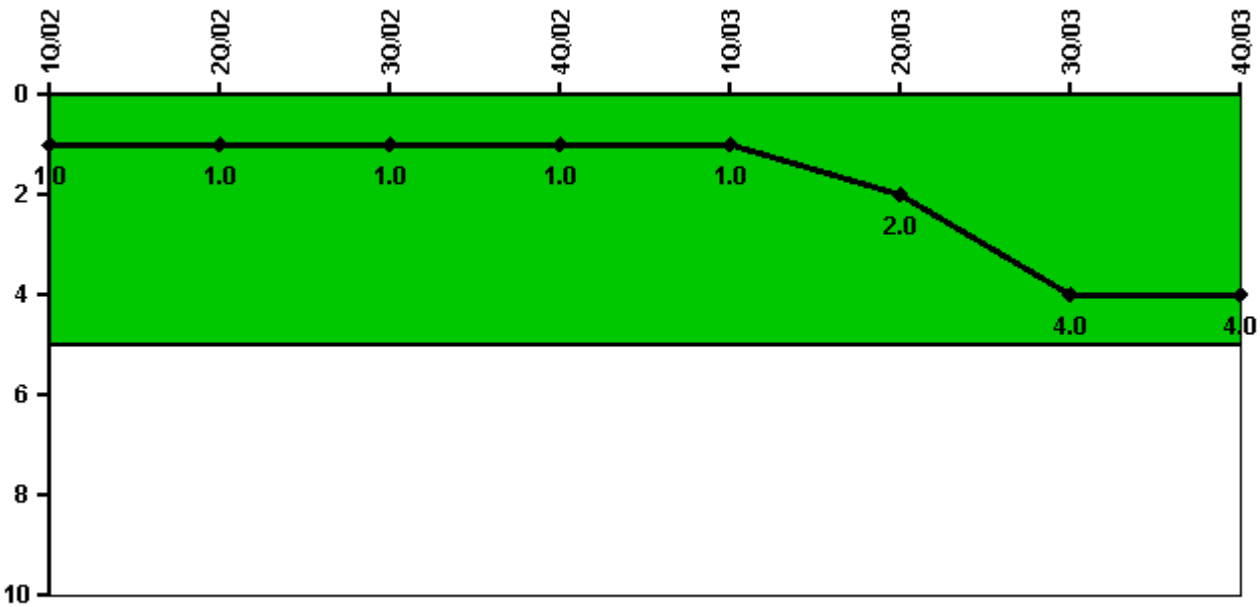
### Notes

Safety System Unavailability, Residual Heat Removal System	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
<b>Train 1</b>								
Planned unavailable hours	4.80	30.30	10.40	4.40	19.00	3.40	1.70	29.90
Unplanned unavailable hours	0	0	0.60	0.80	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	2184.00	2208.00	2073.50	2160.00	2184.00	2208.00	2208.00
<b>Train 2</b>								
Planned unavailable hours	20.40	24.40	1.60	8.70	25.30	19.80	25.50	2.80
Unplanned unavailable hours	0	0	21.70	1.10	0	0	0	3.90

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	2184.00	2208.00	2073.50	2160.00	2184.00	2208.00	2208.00
Indicator value	0.7%	0.7%	0.8%	0.8%	0.8%	0.7%	0.7%	0.7%

Licensee Comments: none

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

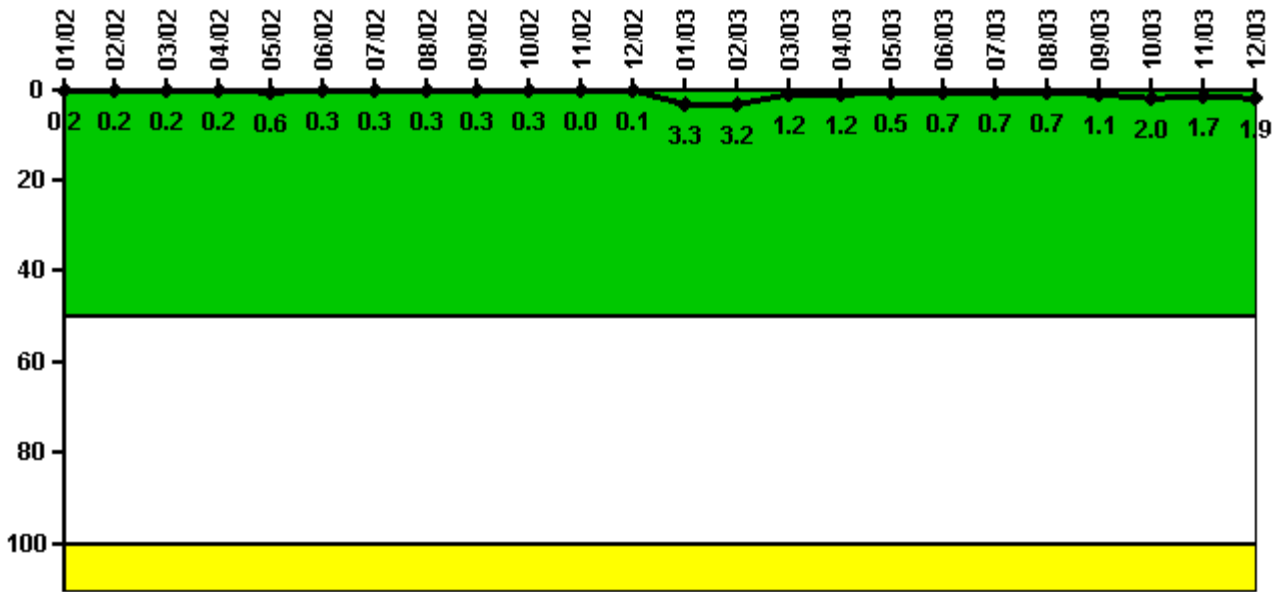
### Notes

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

Licensee Comments: none



### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Activity	1/02	2/02	3/02	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02
Maximum activity	0.001960	0.001890	0.002290	0.002130	0.005510	0.002530	0.002520	0.002810	0.002660	0.003400	0.000440	0.000850
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.2	0.2	0.2	0.2	0.6	0.3	0.3	0.3	0.3	0.3	0	0.1

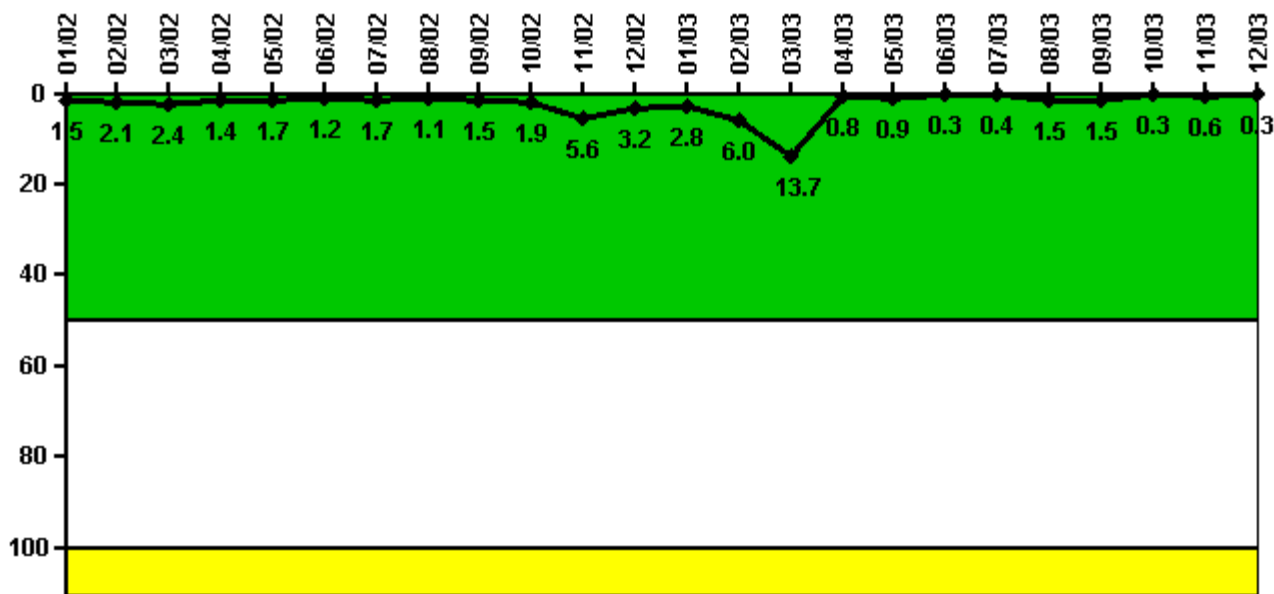
  

Reactor Coolant System Activity	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03
Maximum activity	0.009890	0.009710	0.003540	0.003530	0.001390	0.001970	0.002100	0.002000	0.003200	0.005990	0.005120	0.005810
Technical specification limit	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Indicator value	3.3	3.2	1.2	1.2	0.5	0.7	0.7	0.7	1.1	2.0	1.7	1.9

Licensee Comments:

12/03: An Administrative Limit of 0.3 micro Curies per gram dose equivalent I-131 has been established in response to the Accident Analysis issue documented in LER 2003-03. This issue has been entered into the Callaway corrective action program.

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

**Notes**

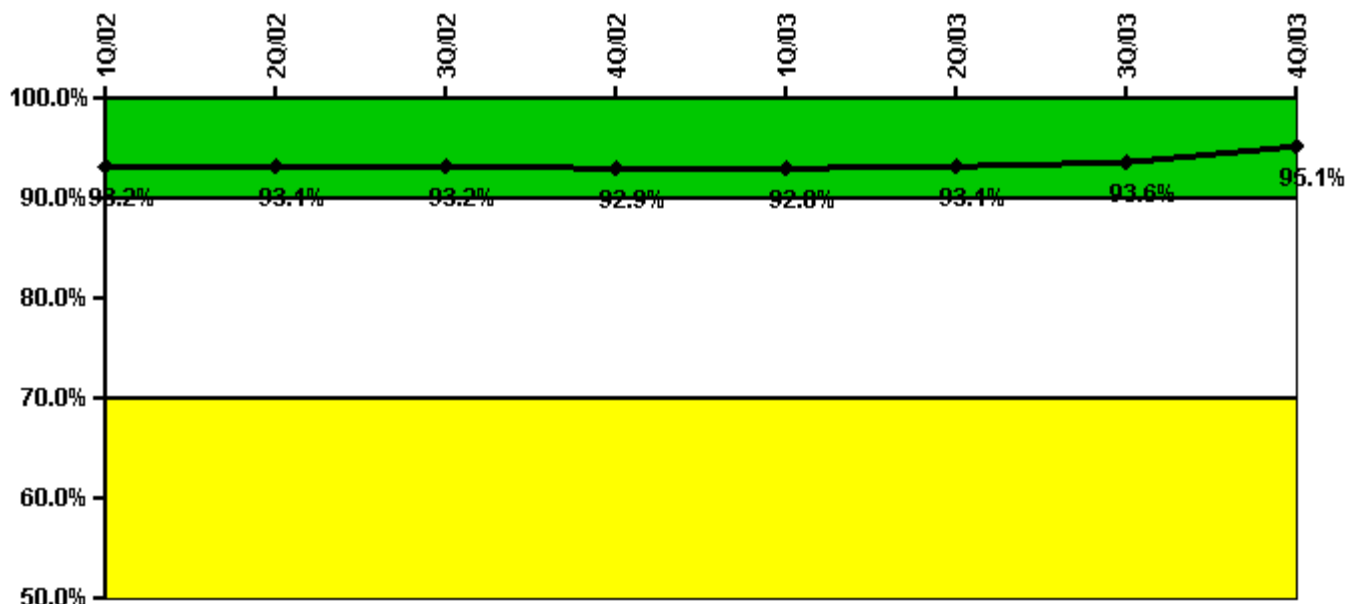
Reactor Coolant System Leakage	1/02	2/02	3/02	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02
Maximum leakage	0.154	0.208	0.244	0.135	0.174	0.119	0.173	0.105	0.148	0.193	0.555	0.321
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.5	2.1	2.4	1.4	1.7	1.2	1.7	1.1	1.5	1.9	5.6	3.2

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	0.280	0.601	1.365	0.078	0.087	0.028	0.042	0.145	0.148	0.031	0.060	0.025
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	2.8	6.0	13.7	0.8	0.9	0.3	0.4	1.5	1.5	0.3	0.6	0.3

Licensee Comments: none

### Drill/Exercise Performance



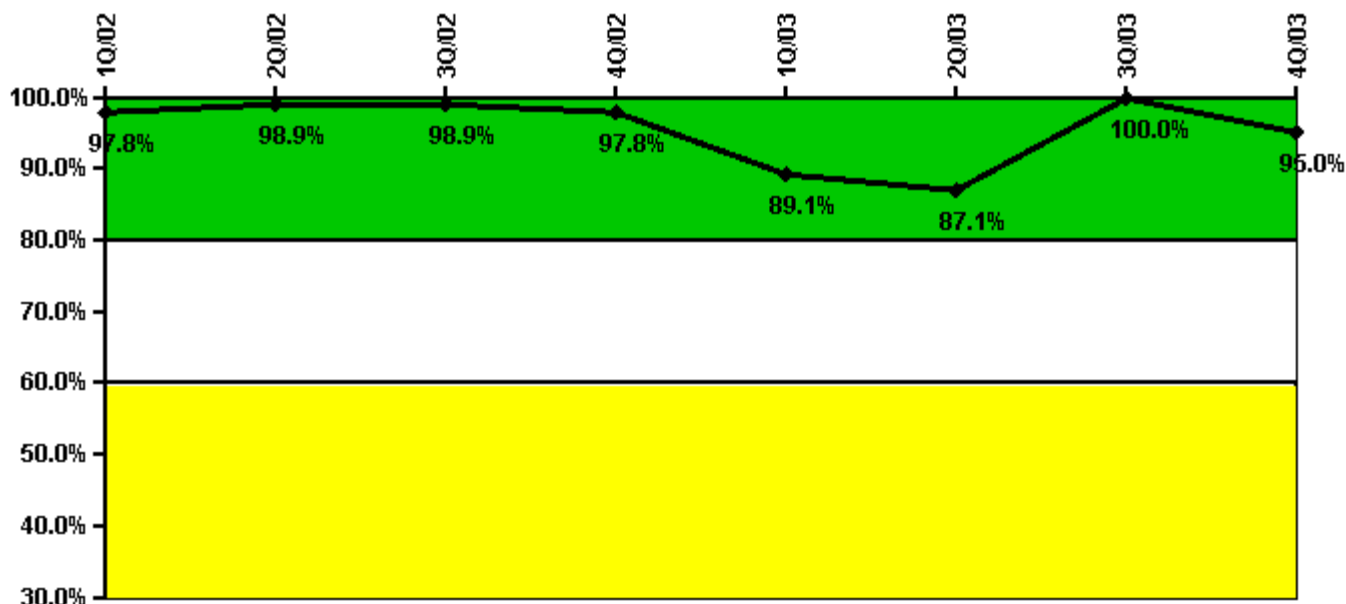
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Successful opportunities	51.0	33.0	38.0	6.0	35.0	12.0	84.0	35.0
Total opportunities	55.0	35.0	41.0	6.0	36.0	12.0	88.0	36.0
Indicator value	93.2%	93.1%	93.2%	92.9%	92.8%	93.1%	93.6%	95.1%

Licensee Comments: none

### ERO Drill Participation



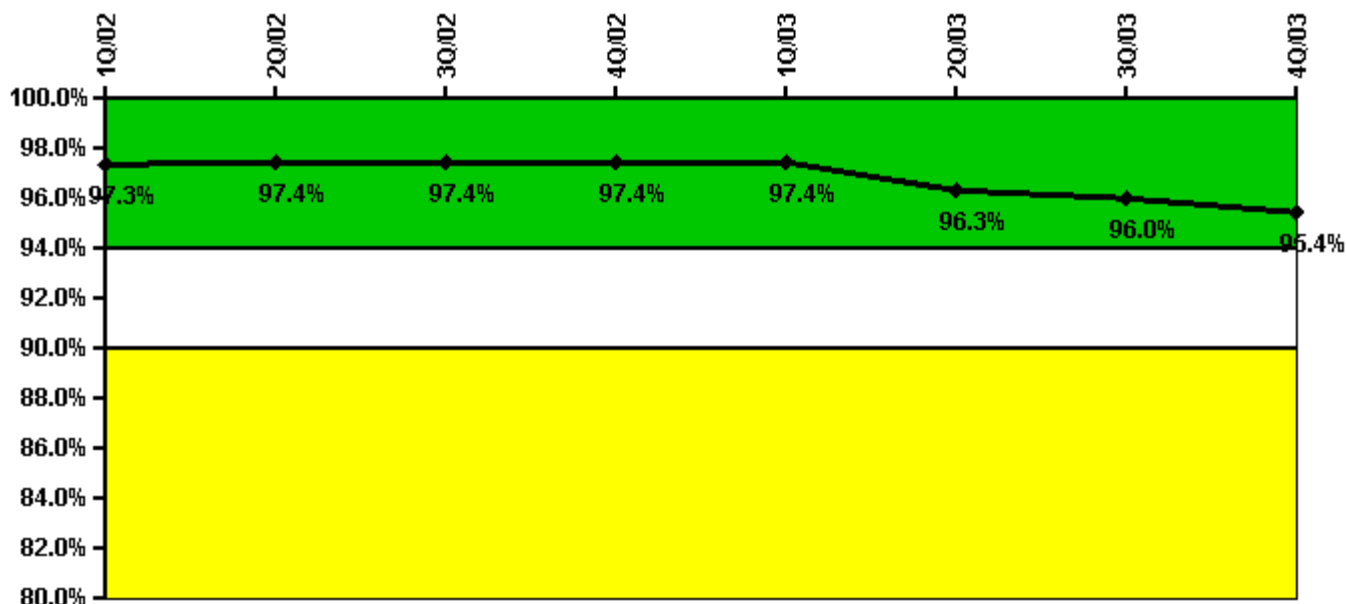
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Participating Key personnel	87.0	88.0	91.0	87.0	82.0	81.0	92.0	96.0
Total Key personnel	89.0	89.0	92.0	89.0	92.0	93.0	92.0	101.0
Indicator value	97.8%	98.9%	98.9%	97.8%	89.1%	87.1%	100.0%	95.0%

Licensee Comments: none

### Alert & Notification System



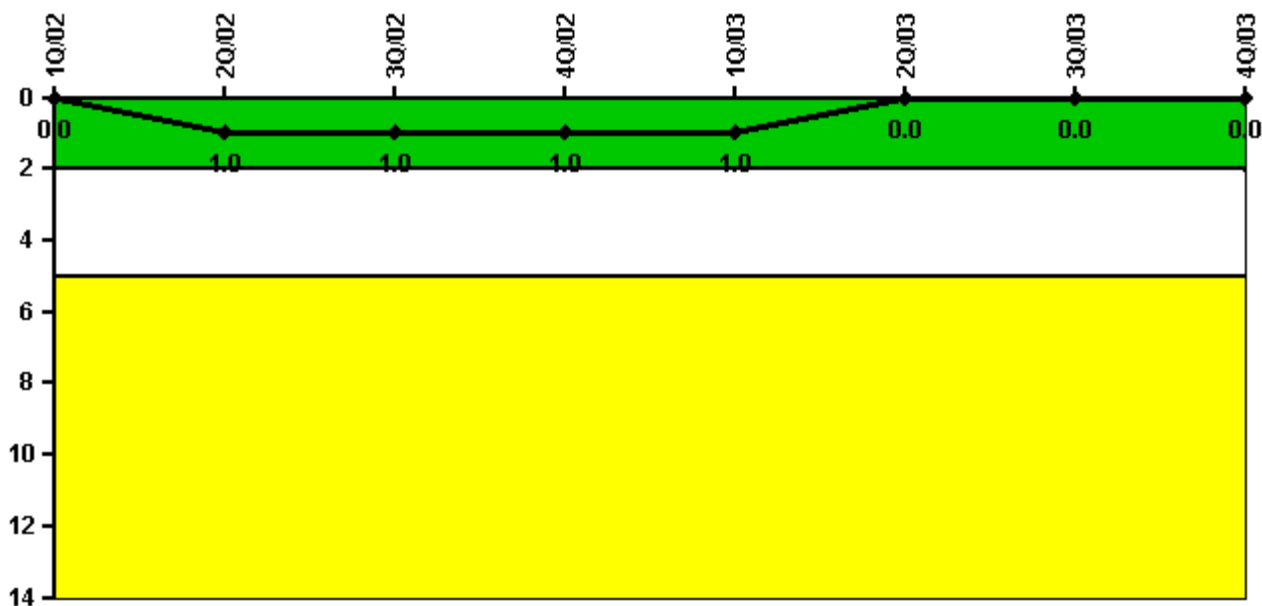
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Successful siren-tests	84	84	86	85	84	80	85	83
Total sirens-tests	87	87	87	87	87	87	87	87
Indicator value	97.3%	97.4%	97.4%	97.4%	97.4%	96.3%	96.0%	95.4%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
High radiation area occurrences	0	1	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
Indicator value	0	1	1	1	1	0	0	0

Licensee Comments: none

### RETS/ODCM Radiological Effluent



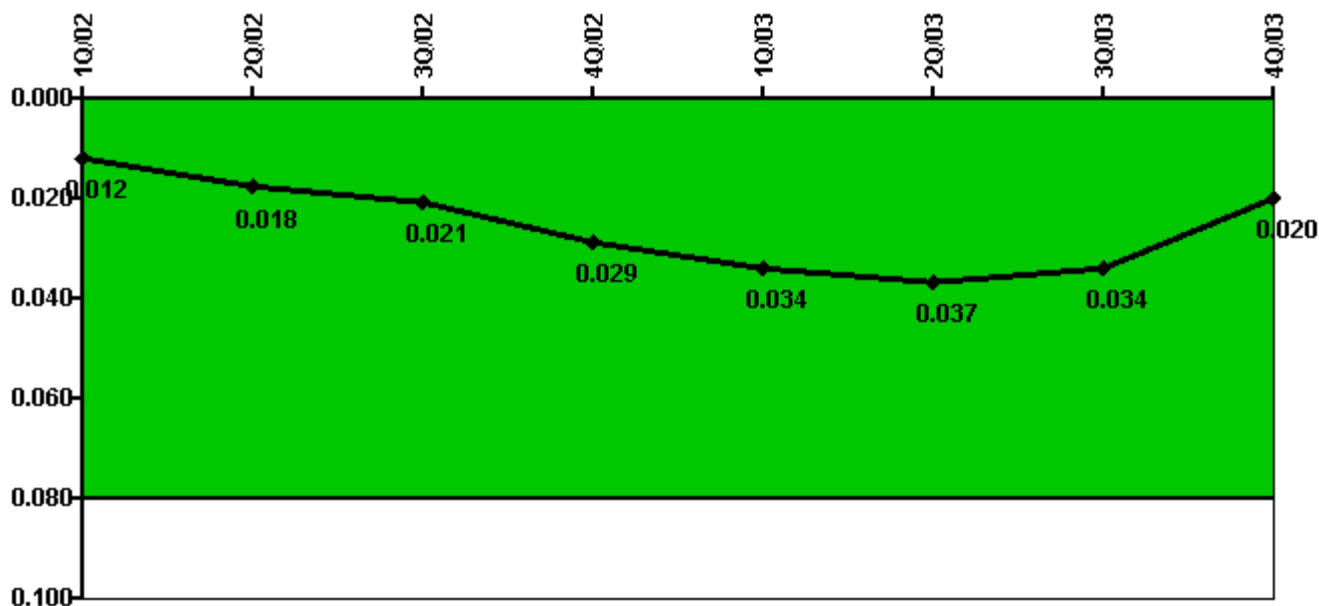
Thresholds: White > 1.0 Yellow > 3.0

#### Notes

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

Licensee Comments: none

### Protected Area Security Performance Index



Thresholds: White > 0.080

#### Notes

Protected Area Security Performance Index	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
IDS compensatory hours	6.30	218.30	81.30	331.70	14.50	24.70	61.50	1.10
CCTV compensatory hours	1.1	12.6	35.4	2.5	85.6	194.1	0	0
IDS normalization factor	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	0.012	0.018	0.021	0.029	0.034	0.037	0.034	0.020

Licensee Comments: none



### Personnel Screening Program



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Personnel Screening Program	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Program failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

### FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

FFD/Personnel Reliability	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Program Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

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Last Modified: January 23, 2004