

## Surry 2

### 1Q/2002 Performance Indicators

Licensee's General Comments: none

#### Unplanned Scrams per 7000 Critical Hrs



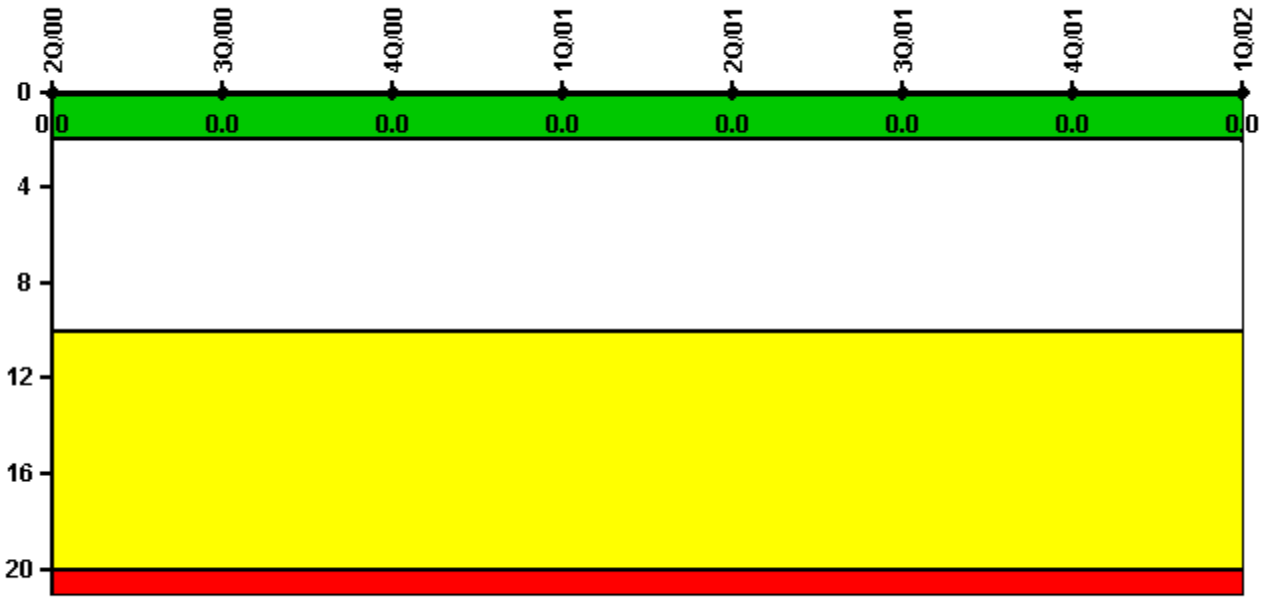
**Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0**

#### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2183.0	2208.0	1484.7	2122.9	1947.6	2208.0	1950.6	1968.9
Indicator value	0.8	0	0	0	0	0	0	0

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



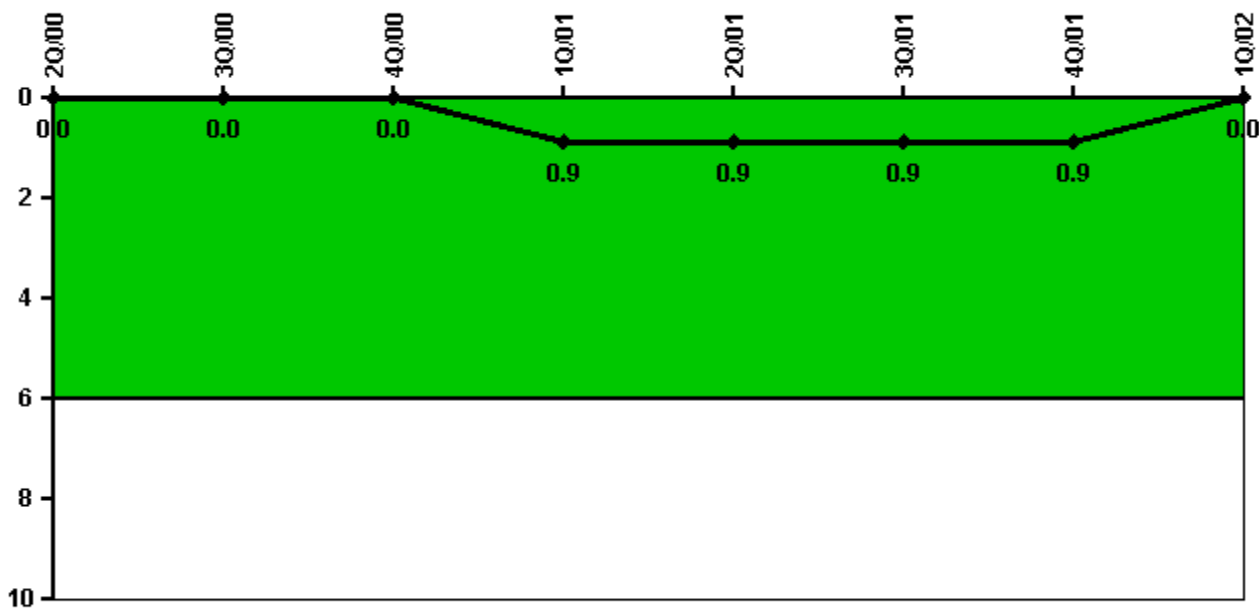
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
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



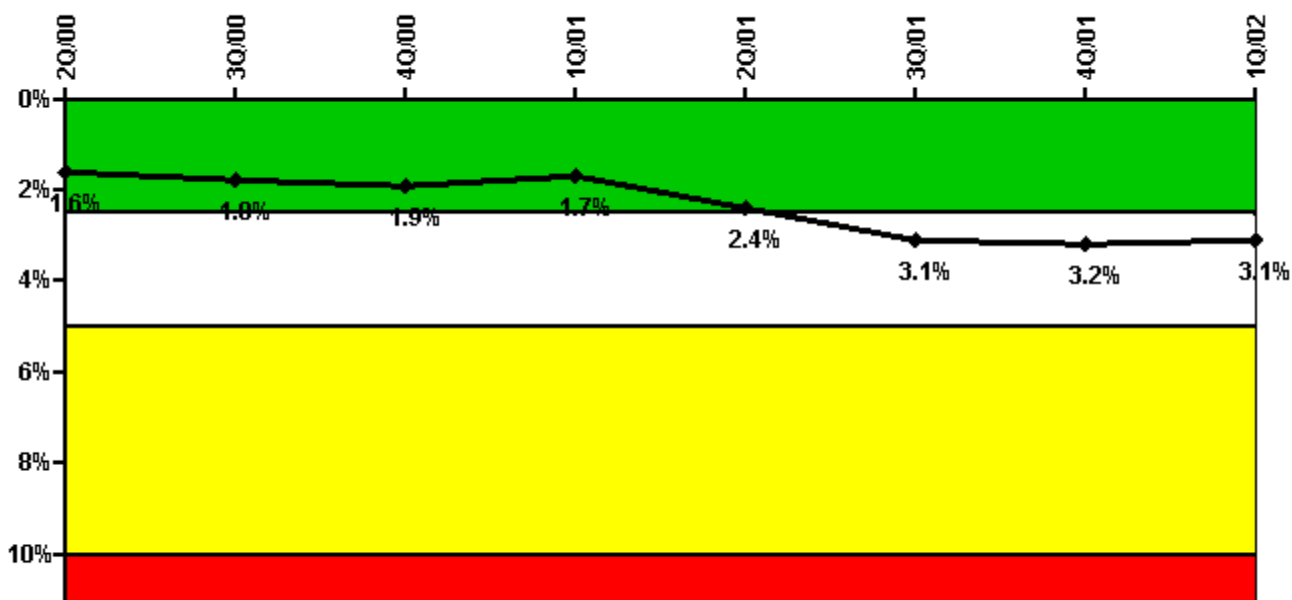
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Unplanned power changes	0	0	0	1.0	0	0	0	0
Critical hours	2183.0	2208.0	1484.7	2122.9	1947.6	2208.0	1950.6	1968.9
Indicator value	0	0	0	0.9	0.9	0.9	0.9	0

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	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
<b>Train 1</b>								
Planned unavailable hours	22.60	71.39	15.07	33.44	10.63	1.20	88.05	13.38
Unplanned unavailable hours	0	18.94	0	0	0	22.32	133.15	8.12
Fault exposure hours	0	0	0	0	0	336.03	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2013.20	2160.00	1988.57	2208.00	2003.98	1978.30
<b>Train 2</b>								
Planned unavailable hours	41.06	33.76	19.60	25.95	15.77	16.18	36.52	5.57
Unplanned unavailable hours	50.20	0	10.30	0	131.35	0.33	0.10	7.18
Fault exposure hours	0	0	0	0	192.03	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2183.00	2208.00	2013.20	2160.00	1988.57	2208.00	2003.98	1978.30
Indicator value	1.6%	1.8%	1.9%	1.7%	2.4%	3.1%	3.2%	3.1%

Licensee Comments: none

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



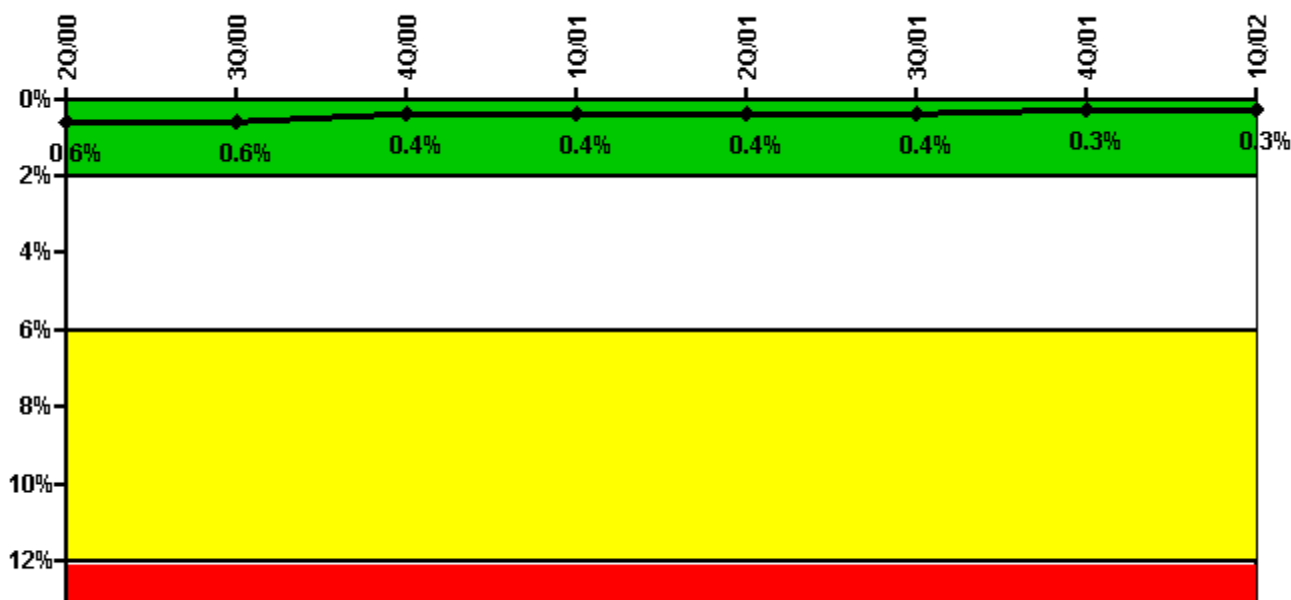
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
<b>Train 1</b>								
Planned unavailable hours	0	2.07	0	0	0	0	0	0
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	2183.00	2208.00	1557.80	2160.00	1993.40	2208.00	2006.00	1968.90
<b>Train 2</b>								
Planned unavailable hours	0	0.92	3.00	0.70	3.10	2.00	0.50	1.20
Unplanned unavailable hours	0	0	0	0	0	4.80	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	2183.00	2208.00	1557.80	2160.00	1993.40	2208.00	2006.00	1968.90
Indicator value	0%	0%	0%	0%	0%	0%	0%	0.1%

Licensee Comments: none

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



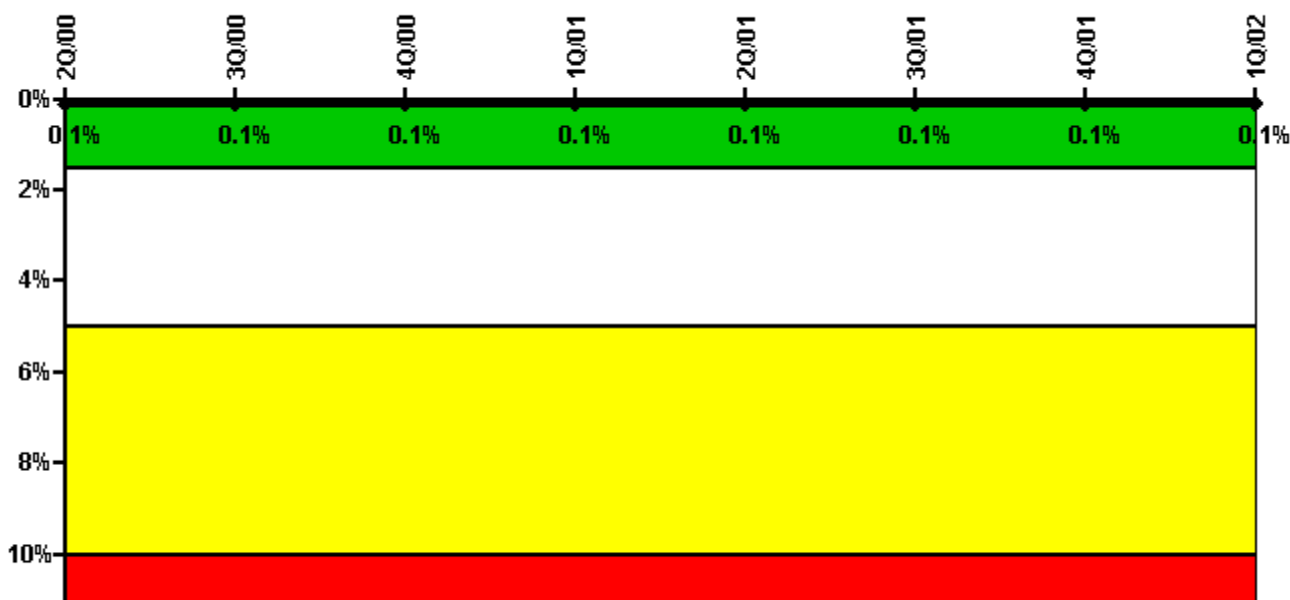
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

#### Notes

Safety System Unavailability, Heat Removal System (AFW)	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
<b>Train 1</b>								
Planned unavailable hours	10.90	0.85	9.90	4.30	1.10	10.60	1.30	9.30
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	2183.00	2208.00	1557.80	2160.00	1993.40	2208.00	2006.00	1968.90
<b>Train 2</b>								
Planned unavailable hours	11.30	1.48	0	16.50	1.40	1.40	1.50	0.60
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	2183.00	2208.00	1557.80	2160.00	1993.40	2208.00	2006.00	1968.90
<b>Train 3</b>								
Planned unavailable hours	1.50	5.48	2.30	1.70	9.50	2.10	1.30	11.90
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	2183.00	2208.00	1557.80	2160.00	1993.40	2208.00	2006.00	1968.90
<b>Indicator value</b>	<b>0.6%</b>	<b>0.6%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.3%</b>	<b>0.3%</b>

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



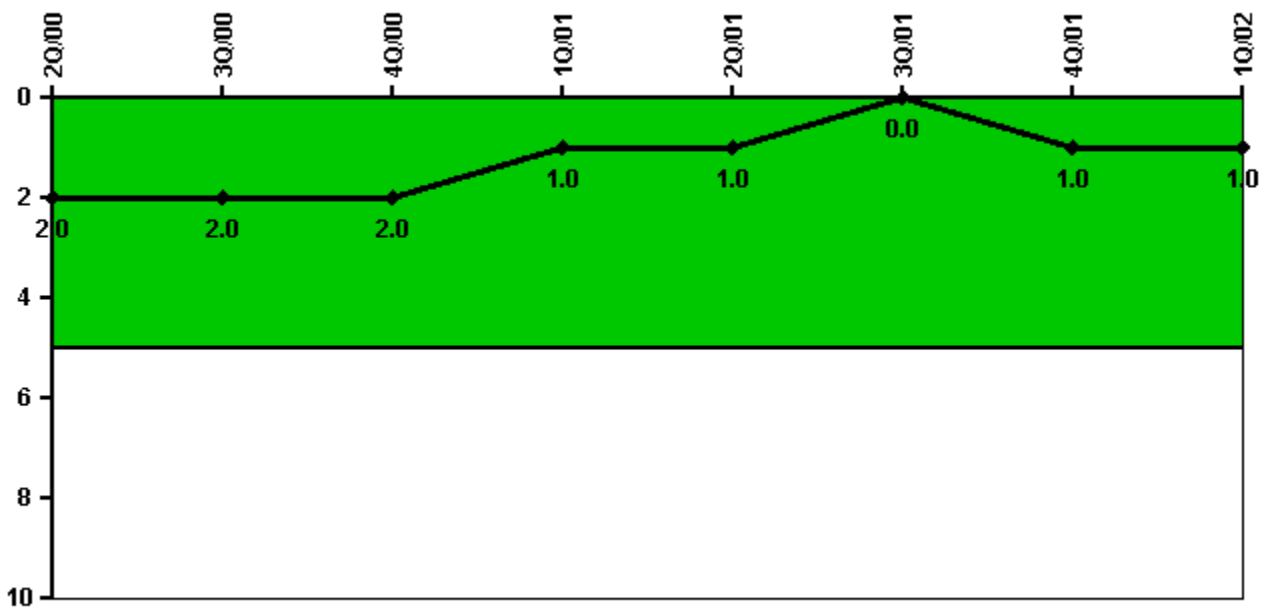
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Residual Heat Removal System	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
<b>Train 1</b>								
Planned unavailable hours	0.60	0.05	0	11.30	0.10	1.10	0	10.80
Unplanned unavailable hours	1.80	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	2183.00	2208.00	1557.80	2160.00	1993.40	2208.00	2209.00	1968.90
<b>Train 2</b>								
Planned unavailable hours	1.70	0.44	0	2.80	0.70	10.30	0.60	1.90
Unplanned unavailable hours	1.70	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	2183.00	2208.00	1557.80	2160.00	1993.40	2208.00	2209.00	1968.90
<b>Train 3</b>								
Planned unavailable hours	0	9.68	1.65	0	0.30	0	0	10.00
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	2183.00	2208.00	2013.20	2160.00	1993.40	2208.00	2209.00	2160.00
<b>Train 4</b>								
Planned unavailable hours	0	9.60	0.06	0	0.40	0	0	10.20
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	2183.00	2208.00	2013.20	2160.00	1993.40	2208.00	2209.00	2160.00
<b>Indicator value</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>

Licensee Comments: none

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

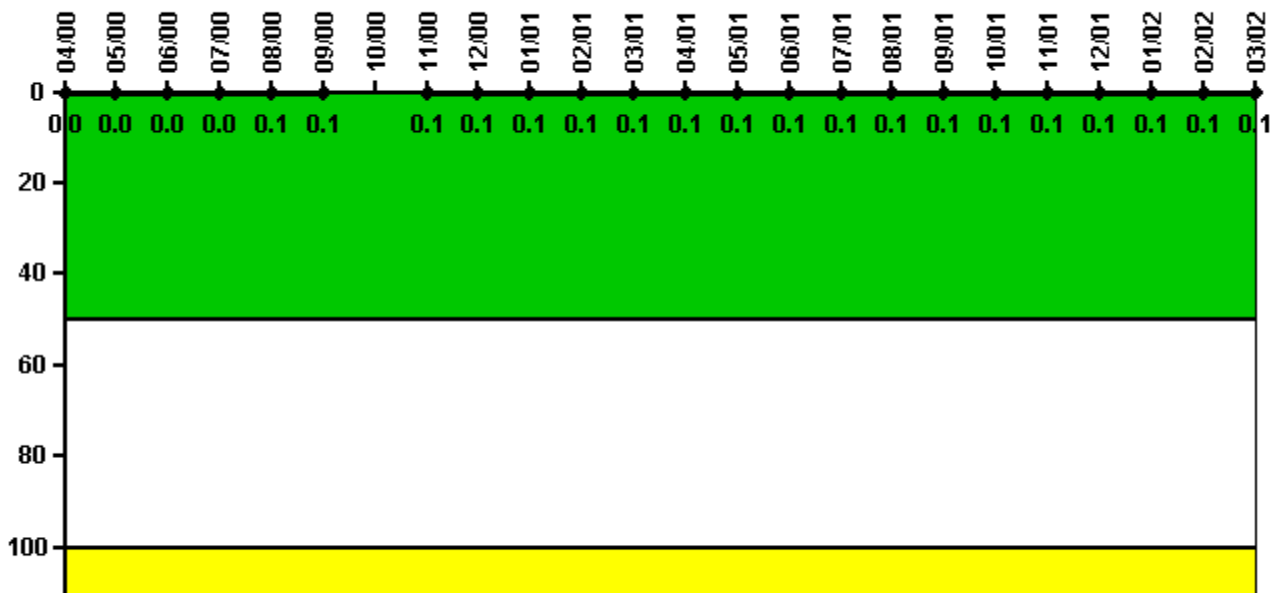
#### Notes

Safety System Functional Failures (PWR)	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Safety System Functional Failures	0	1	0	0	0	0	1	0
Indicator value	2	2	2	1	1	0	1	1

Licensee Comments: none



### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

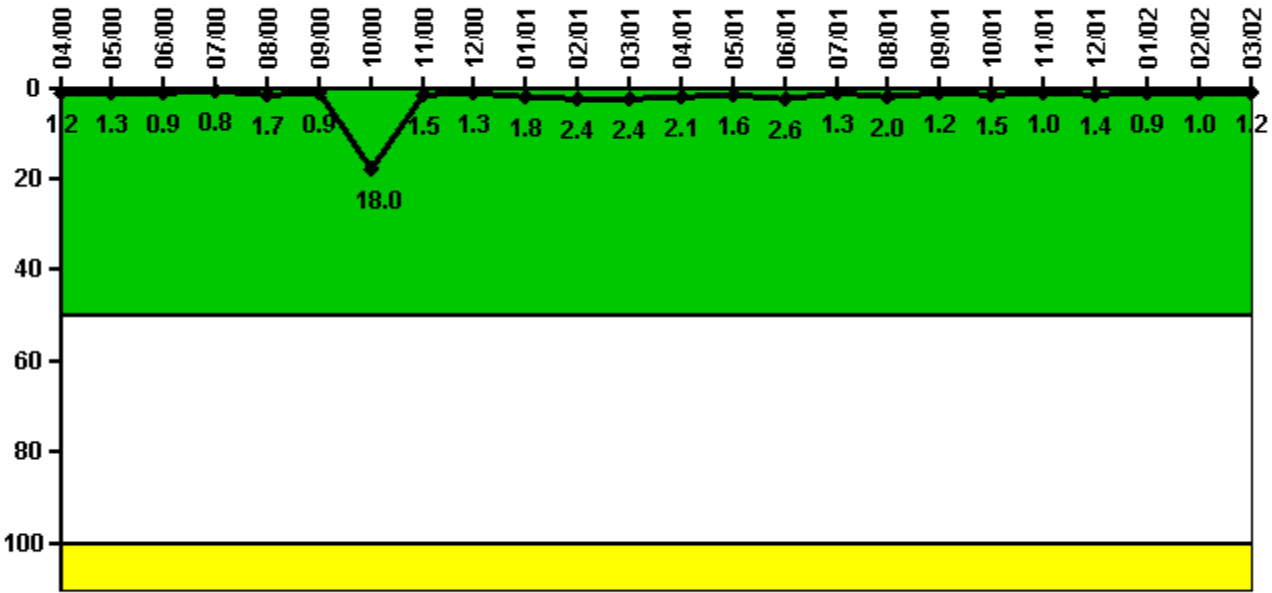
Reactor Coolant System Activity	4/00	5/00	6/00	7/00	8/00	9/00	10/00	11/00	12/00	1/01	2/01	3/01
Maximum activity	0.000430	0.000441	0.000475	0.000453	0.000738	0.000552	N/A	0.000842	0.000834	0.000951	0.000951	0.000914
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0	0	0	0.1	0.1	N/A	0.1	0.1	0.1	0.1	0.1

Reactor Coolant System Activity	4/01	5/01	6/01	7/01	8/01	9/01	10/01	11/01	12/01	1/02	2/02	3/02
Maximum activity	0.001100	0.000977	0.001190	0.001180	0.001020	0.001060	0.001100	0.001140	0.001190	0.001140	0.001160	0.001350
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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

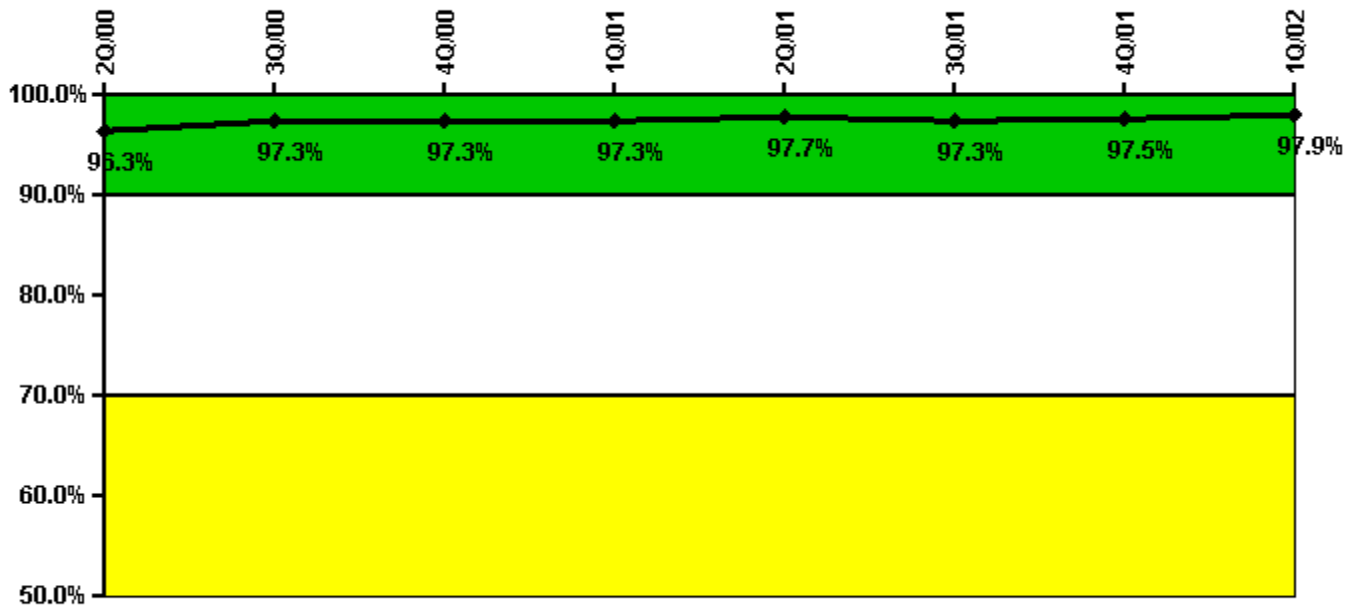
Reactor Coolant System Leakage	4/00	5/00	6/00	7/00	8/00	9/00	10/00	11/00	12/00	1/01	2/01	3/01
Maximum leakage	0.120	0.130	0.090	0.080	0.170	0.090	1.800	0.150	0.130	0.180	0.240	0.240
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	1.2	1.3	0.9	0.8	1.7	0.9	18.0	1.5	1.3	1.8	2.4	2.4

Reactor Coolant System Leakage	4/01	5/01	6/01	7/01	8/01	9/01	10/01	11/01	12/01	1/02	2/02	3/02
Maximum leakage	0.210	0.160	0.260	0.130	0.200	0.120	0.150	0.100	0.140	0.090	0.100	0.120
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	2.1	1.6	2.6	1.3	2.0	1.2	1.5	1.0	1.4	0.9	1.0	1.2

Licensee Comments: none

### Drill/Exercise Performance



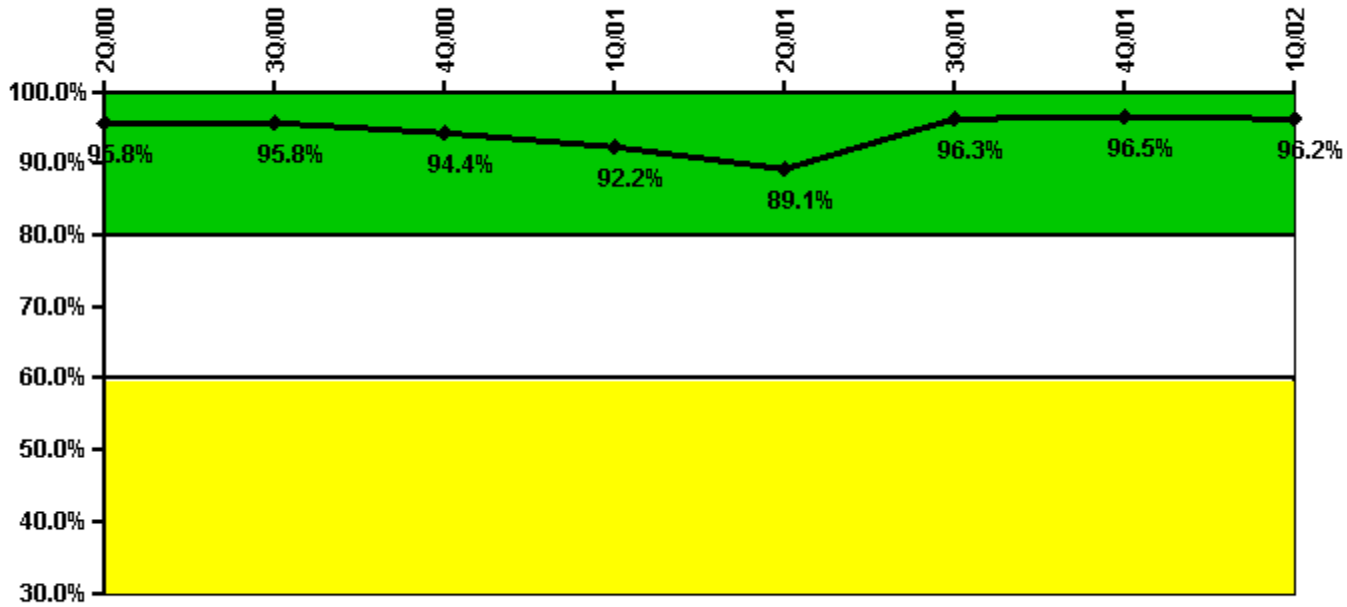
Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Successful opportunities	7.0	72.0	0	0	49.0	39.0	27.0	40.0
Total opportunities	7.0	72.0	0	0	51.0	41.0	28.0	40.0
Indicator value	96.3%	97.3%	97.3%	97.3%	97.7%	97.3%	97.5%	97.9%

Licensee Comments: none

### ERO Drill Participation



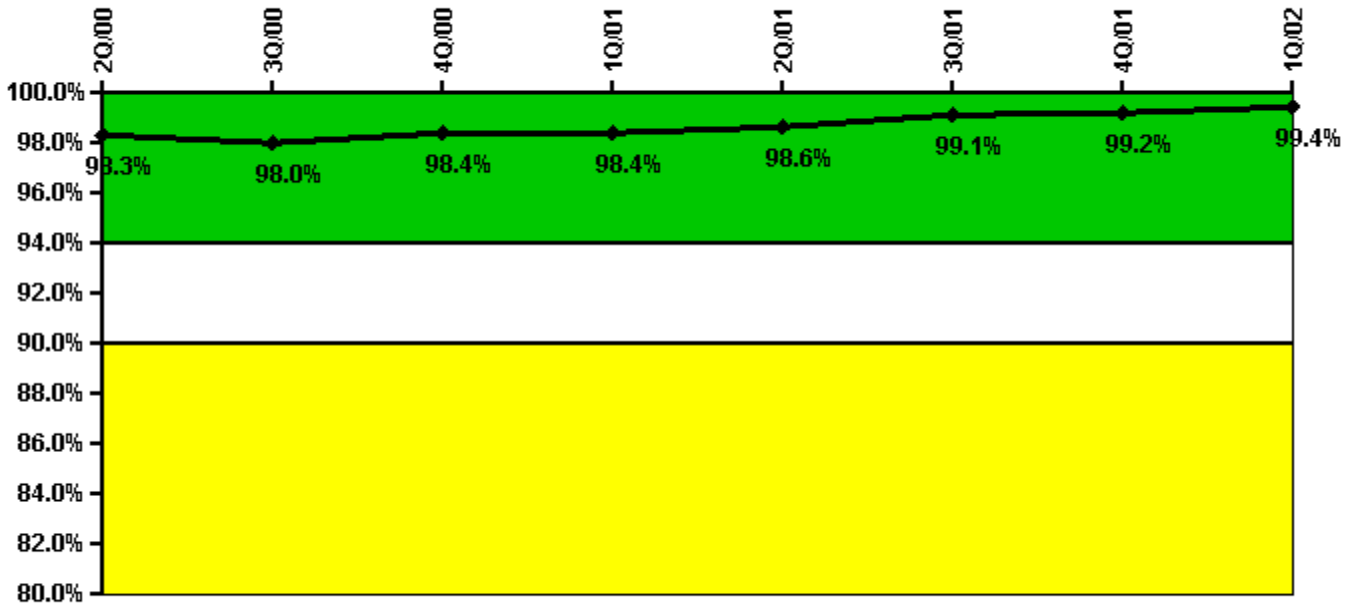
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Participating Key personnel	158.0	161.0	136.0	119.0	123.0	129.0	137.0	126.0
Total Key personnel	165.0	168.0	144.0	129.0	138.0	134.0	142.0	131.0
Indicator value	95.8%	95.8%	94.4%	92.2%	89.1%	96.3%	96.5%	96.2%

Licensee Comments: none

### Alert & Notification System



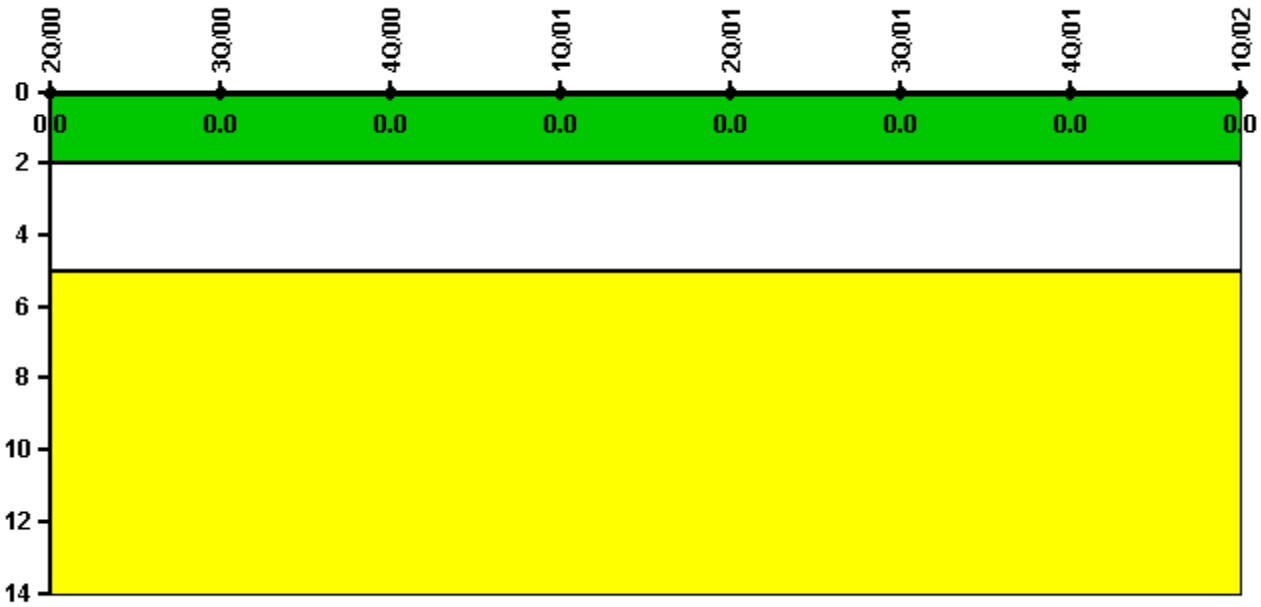
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Successful siren-tests	441	437	444	442	507	447	508	518
Total sirens-tests	448	448	448	448	512	448	512	520
Indicator value	98.3%	98.0%	98.4%	98.4%	98.6%	99.1%	99.2%	99.4%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



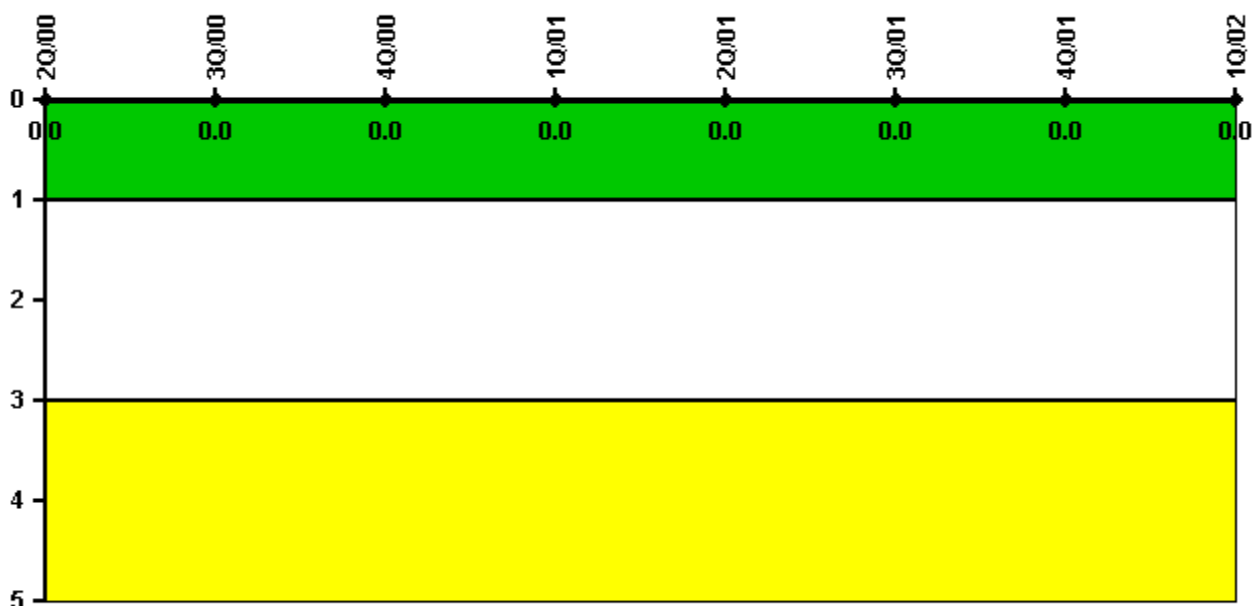
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
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
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

### RETS/ODCM Radiological Effluent



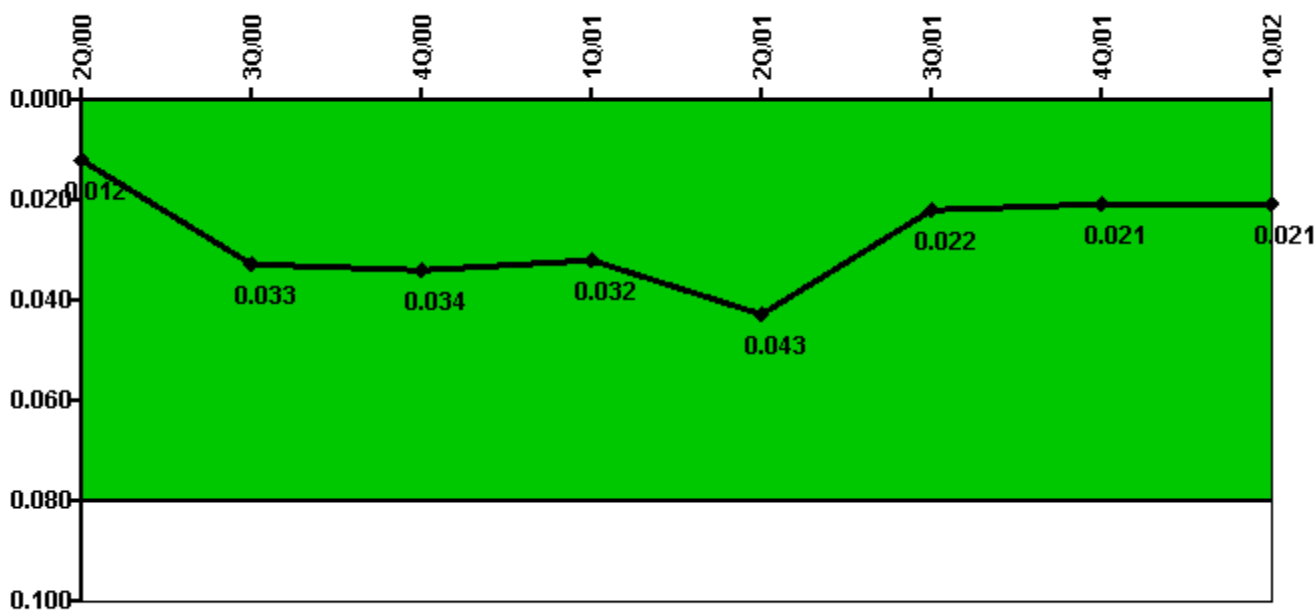
Thresholds: White > 1.0 Yellow > 3.0

#### Notes

RETS/ODCM Radiological Effluent	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
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

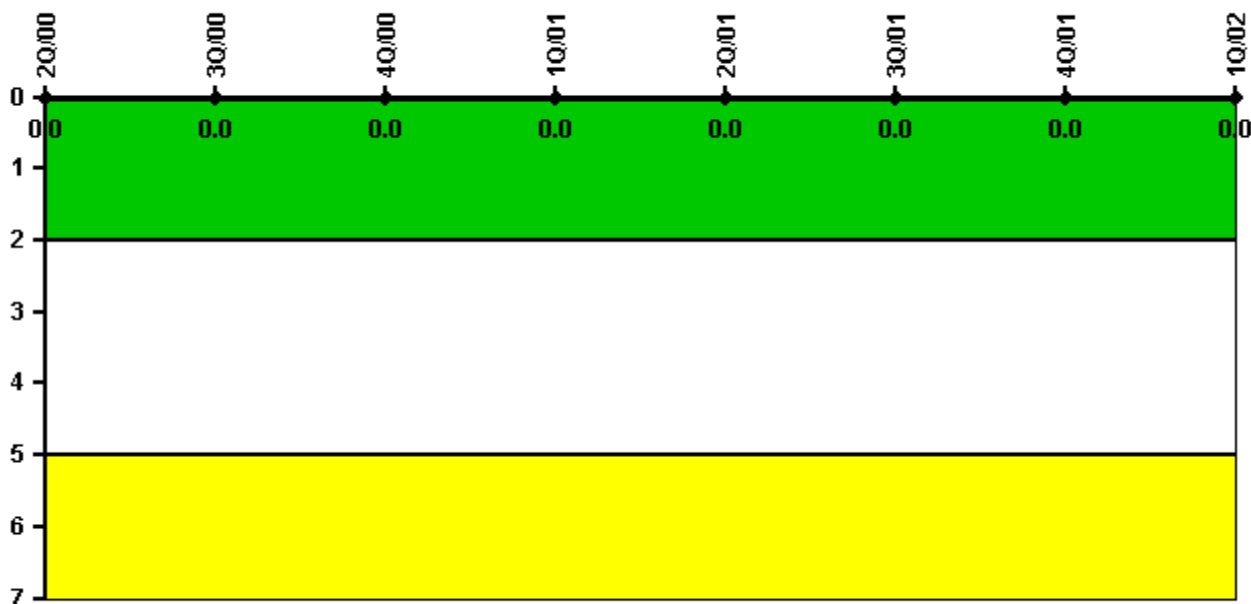
Protected Area Security Performance Index	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
IDS compensatory hours	59.41	515.21	16.10	0	256.52	125.73	0	0
CCTV compensatory hours	0	0	0	0	0	0	0	0
IDS normalization factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
<b>Index Value</b>	<b>0.012</b>	<b>0.033</b>	<b>0.034</b>	<b>0.032</b>	<b>0.043</b>	<b>0.022</b>	<b>0.021</b>	<b>0.021</b>

#### Licensee Comments:

1Q/02: The Protected Area perimeter threat assessment function at Surry is primarily provided by armed response personnel in towers. This performance data reflects one CCTV camera which covers the part of the perimeter not covered by a tower. Also, during an internal company audit, minor discrepancies were found in data submitted for several quarters in 2000 and 2001. Data was corrected with no change in color.



### Personnel Screening Program



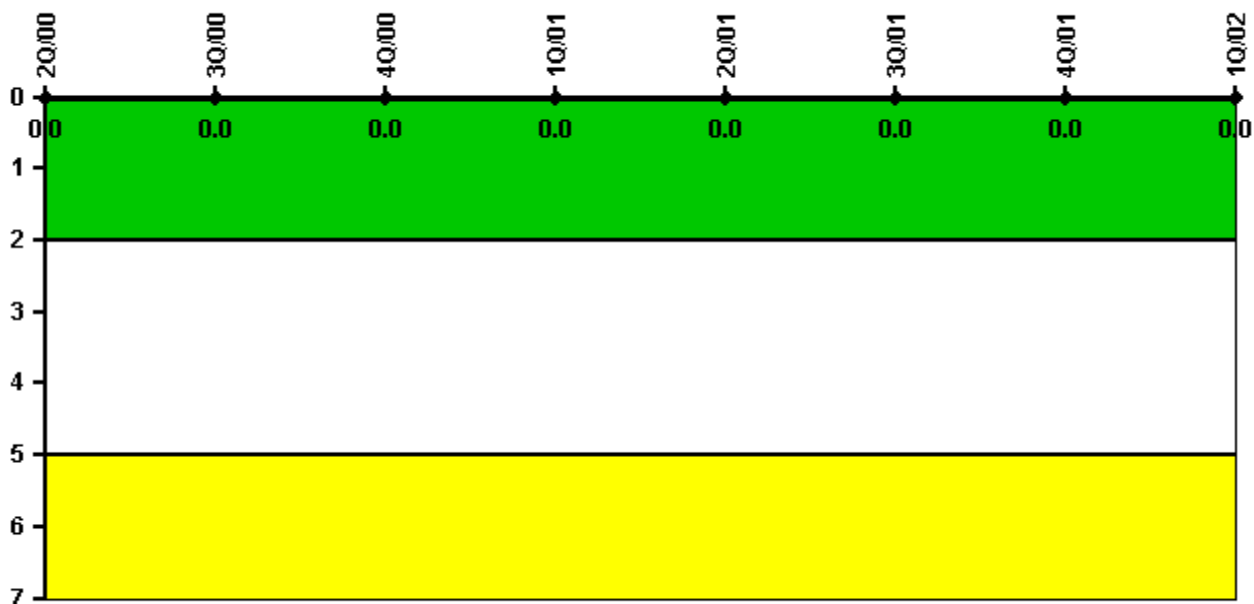
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Personnel Screening Program	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
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	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Program Failures	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

▲ [PI Summary](#) | [Inspection Findings Summary](#) | [Reactor Oversight Process](#)

Last Modified: May 1, 2002