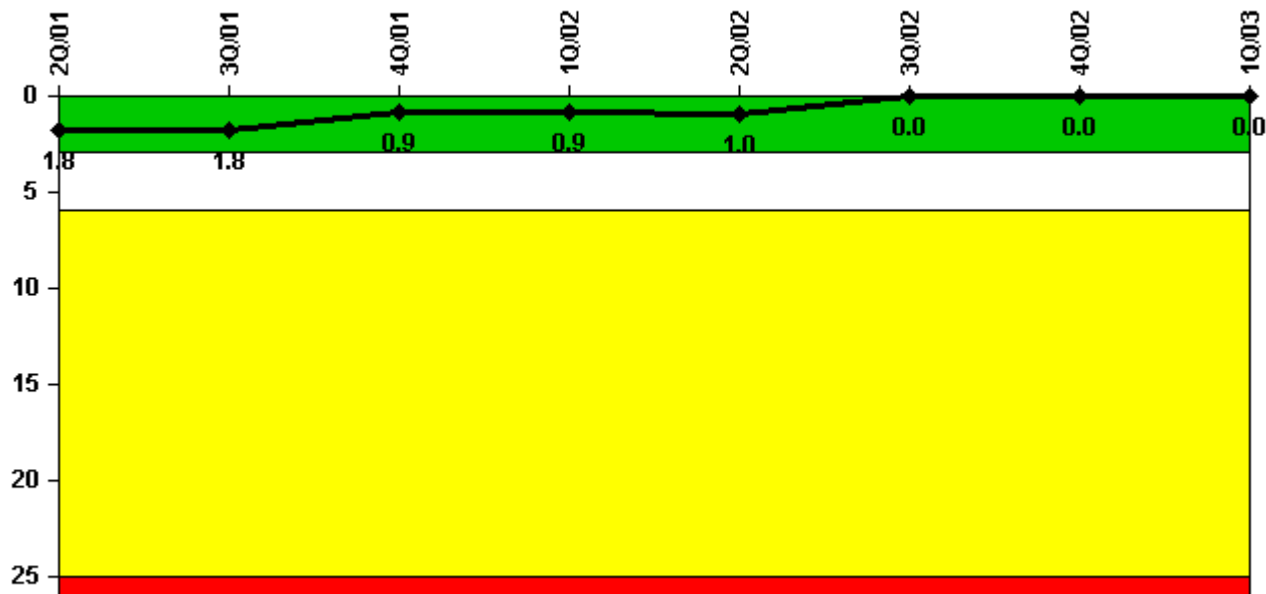


# Palo Verde 2

## 1Q/2003 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



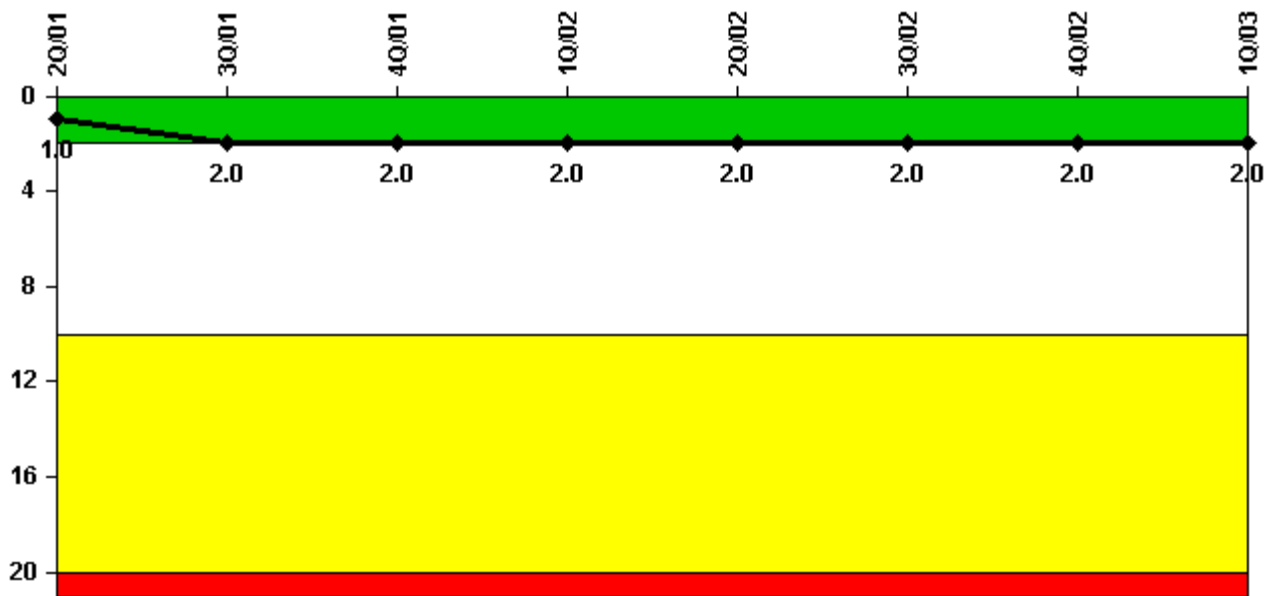
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Unplanned scrams	0	1.0	0	0	0	0	0	0
Critical hours	2184.0	2174.4	1508.9	1776.0	1818.0	2208.0	2208.0	2160.0
Indicator value	1.8	1.8	0.9	0.9	1.0	0	0	0

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



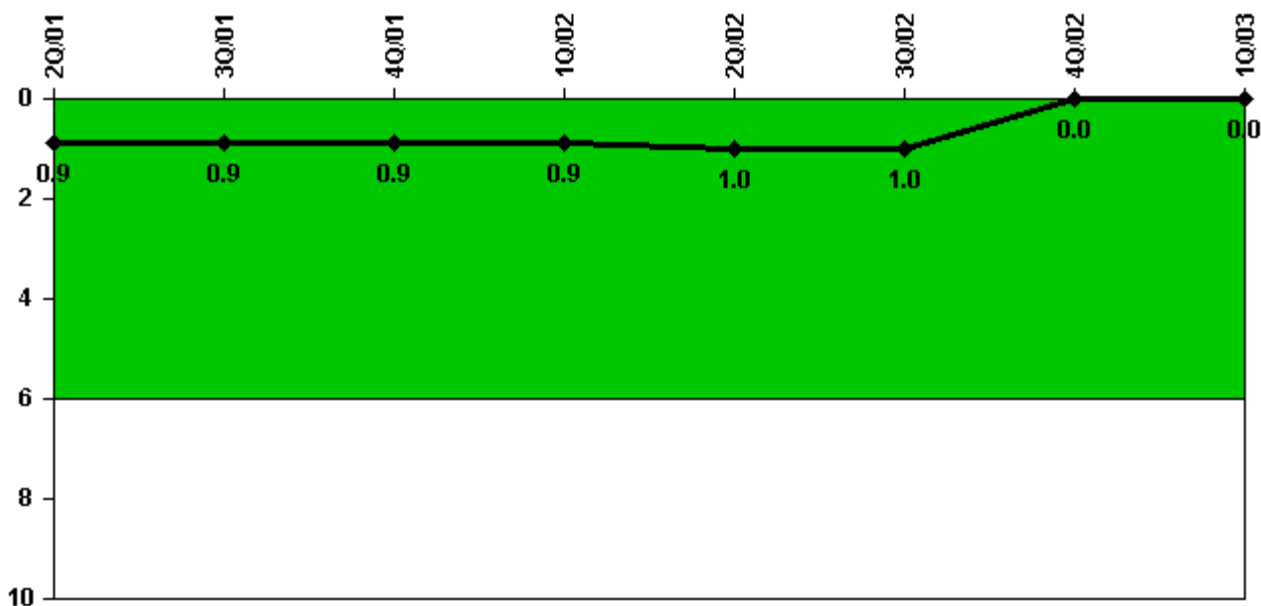
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Scrams	0	1.0	0	0	0	0	0	0
Indicator value	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



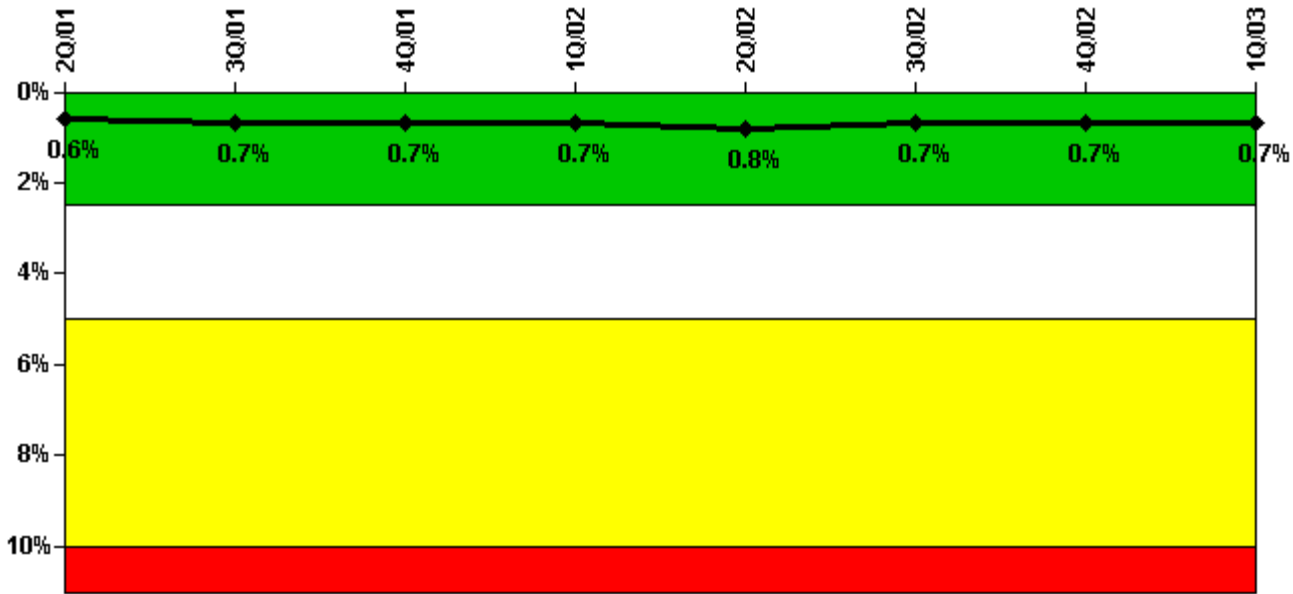
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Unplanned power changes	0	0	1.0	0	0	0	0	0
Critical hours	2184.0	2174.4	1508.9	1776.0	1818.0	2208.0	2208.0	2160.0
Indicator value	0.9	0.9	0.9	0.9	1.0	1.0	0	0

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



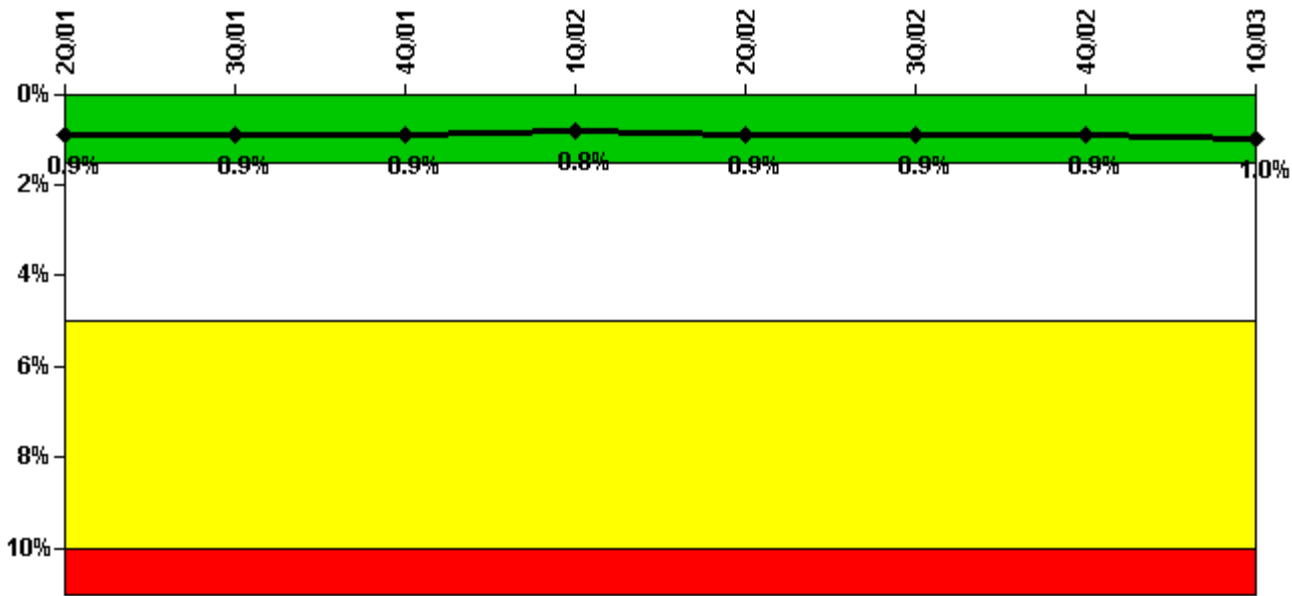
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Emergency AC Power	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
<b>Train 1</b>								
Planned unavailable hours	0	26.88	21.84	0.09	37.86	0.07	17.39	10.21
Unplanned unavailable hours	0	60.07	0	0	0	0	3.27	0.52
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2184.00	2208.00	2208.00	2160.00	2184.00	2208.00	2208.00	2160.00
<b>Train 2</b>								
Planned unavailable hours	0	5.93	0.02	28.13	0.09	20.92	0.06	26.76
Unplanned unavailable hours	0	0	0	0	16.65	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	2184.00	2208.00	2208.00	2160.00	2184.00	2208.00	2208.00	2160.00
Indicator value	0.6%	0.7%	0.7%	0.7%	0.8%	0.7%	0.7%	0.7%

Licensee Comments: none

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



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

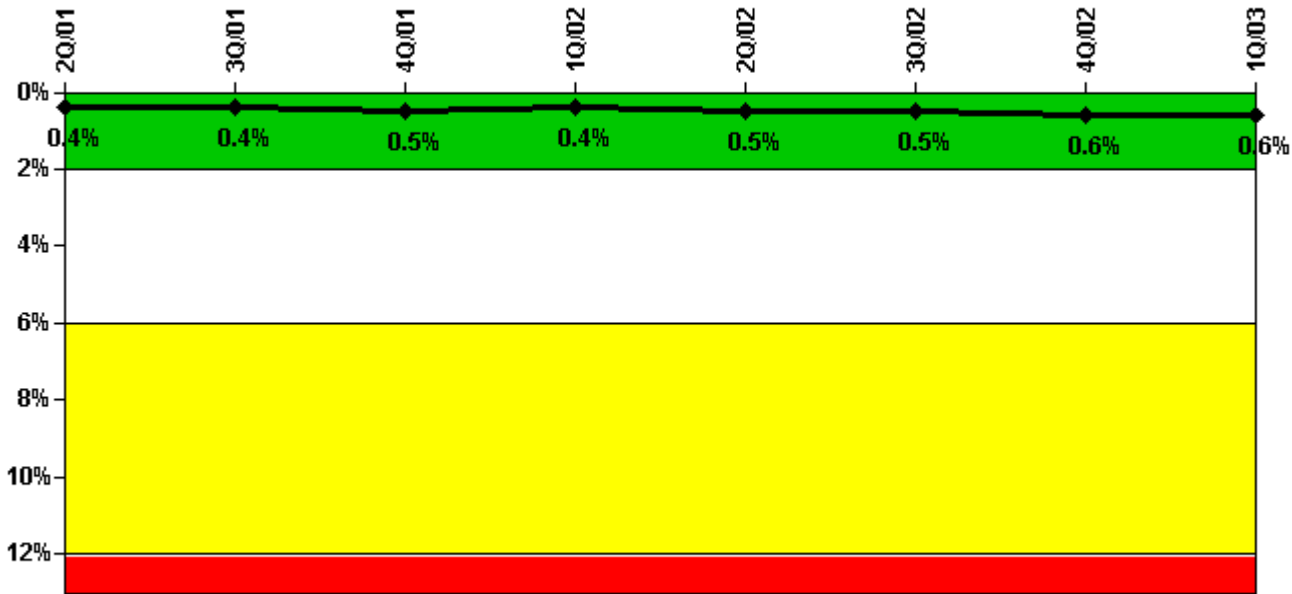
**Notes**

Safety System Unavailability, High Pressure Injection System (HPSI)	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
<b>Train 1</b>								
Planned unavailable hours	0.90	29.17	17.52	13.70	24.62	9.00	11.40	18.55
Unplanned unavailable hours	0	0	0	0	0	0	0	14.45
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2184.00	2174.40	1508.90	1776.02	1818.02	2208.00	2208.00	2160.00
<b>Train 2</b>								
Planned unavailable hours	7.38	7.69	8.35	21.95	22.77	18.08	8.52	23.42
Unplanned unavailable hours	0	0	0	0	0	0	4.23	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	2184.00	2174.40	1508.90	1776.02	1818.02	2208.00	2208.00	2160.00
<b>Indicator value</b>	<b>0.9%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>0.8%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>1.0%</b>

Licensee Comments:

1Q/03: HPSI train 1 accumulated 277.14 T/2 fault exposure hours.

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



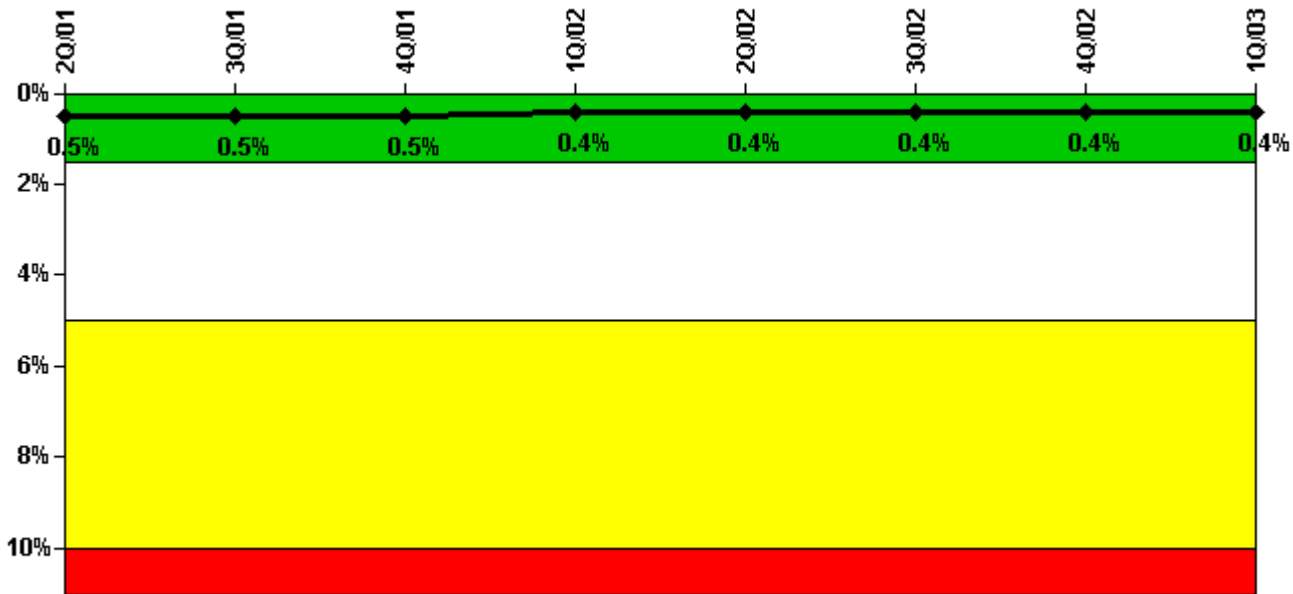
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

#### Notes

Safety System Unavailability, Heat Removal System (AFW)	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
<b>Train 1</b>								
Planned unavailable hours	1.13	17.19	19.76	0.63	33.74	1.45	20.53	10.93
Unplanned unavailable hours	0	0	14.52	0	4.37	38.89	32.32	8.35
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2184.00	2174.40	1508.90	1776.02	1818.02	2208.00	2208.00	2160.00
<b>Train 2</b>								
Planned unavailable hours	1.02	5.50	1.40	10.90	1.43	16.72	1.43	11.15
Unplanned unavailable hours	0	0	0	0	0	0	4.23	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	2184.00	2174.40	1508.90	1776.02	1818.02	2208.00	2208.00	2160.00
<b>Train 3</b>								
Planned unavailable hours	0.55	0.67	0.94	0	0.78	0.87	0.63	0.90
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	2184.00	2174.40	1508.90	1776.02	1818.02	2208.00	2208.00	2160.00
Indicator value	0.4%	0.4%	0.5%	0.4%	0.5%	0.5%	0.6%	0.6%

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



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

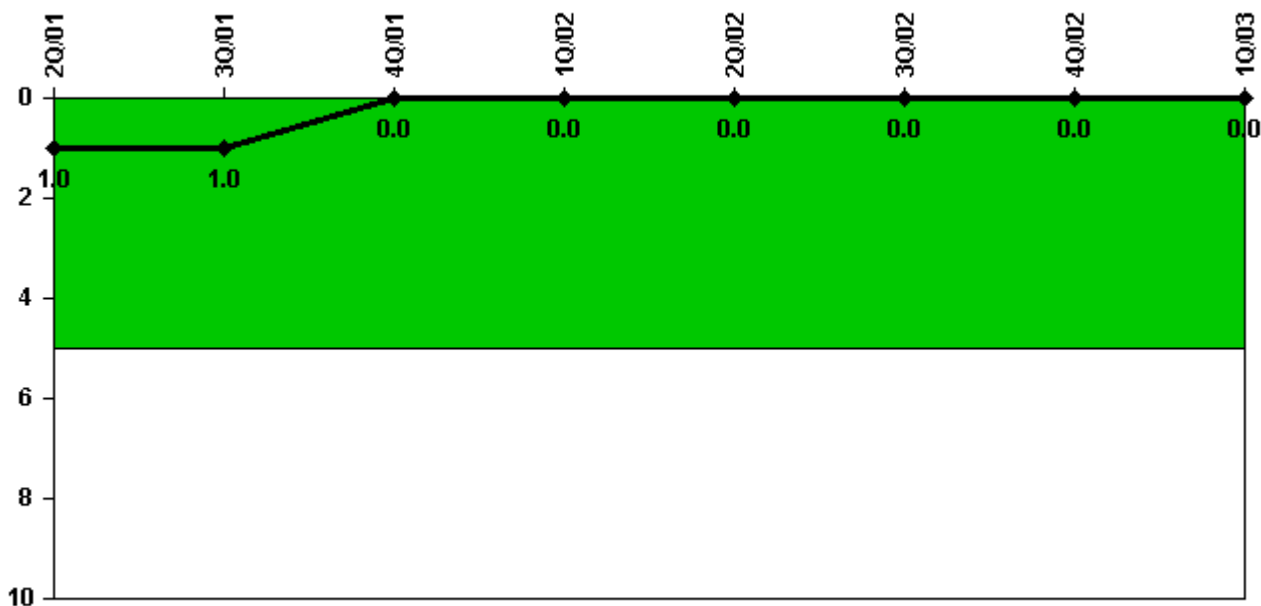
#### Notes

Safety System Unavailability, Residual Heat Removal System	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
<b>Train 1</b>								
Planned unavailable hours	2.33	25.86	37.19	9.95	23.66	2.90	13.93	11.27
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	2184.00	2208.00	1567.70	1785.00	1851.77	2208.00	2208.00	2160.00
<b>Train 2</b>								
Planned unavailable hours	2.70	10.09	7.83	26.74	8.53	26.66	3.70	21.64
Unplanned unavailable hours	0	0	0	0	0	0	4.23	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	2184.00	2208.00	1567.70	1785.00	1851.77	2208.00	2208.00	2160.00
<b>Train 3</b>								
Planned unavailable hours	0	0	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	0	0	356.70	49.58	216.18	0	0	0
<b>Train 4</b>								

Planned unavailable hours	0	0	0	0	0.02	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	0	0	469.78	212.75	109.90	0	0	0
Indicator value	0.5%	0.5%	0.5%	0.4%	0.4%	0.4%	0.4%	0.4%

Licensee Comments: none

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

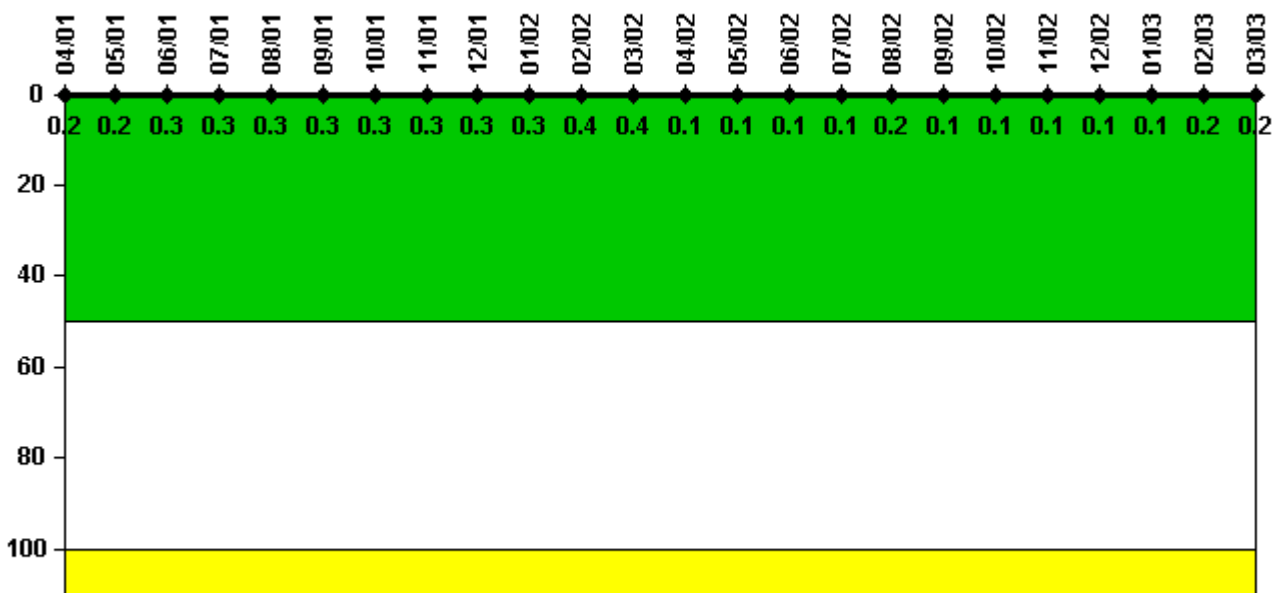
#### Notes

Safety System Functional Failures (PWR)	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Safety System Functional Failures	0	0	0	0	0	0	0	0
Indicator value	1	1	0	0	0	0	0	0

Licensee Comments: none



### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

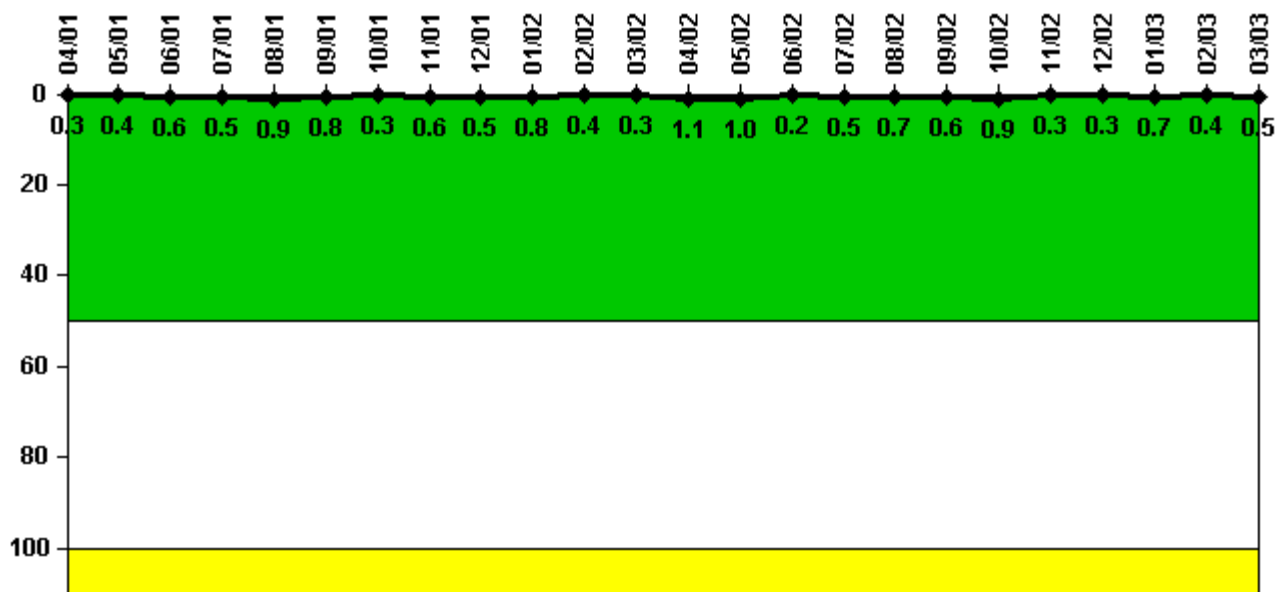
Reactor Coolant System Activity	4/01	5/01	6/01	7/01	8/01	9/01	10/01	11/01	12/01	1/02	2/02	3/02
Maximum activity	0.002000	0.002000	0.003000	0.003000	0.003000	0.003000	0.003000	0.003000	0.003000	0.003000	0.004000	0.004000
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4

Reactor Coolant System Activity	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03
Maximum activity	0.001000	0.001000	0.001000	0.001000	0.002000	0.001000	0.001000	0.001000	0.001000	0.001000	0.002000	0.002000
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	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2

Licensee Comments: none

### Reactor Coolant System Leakage



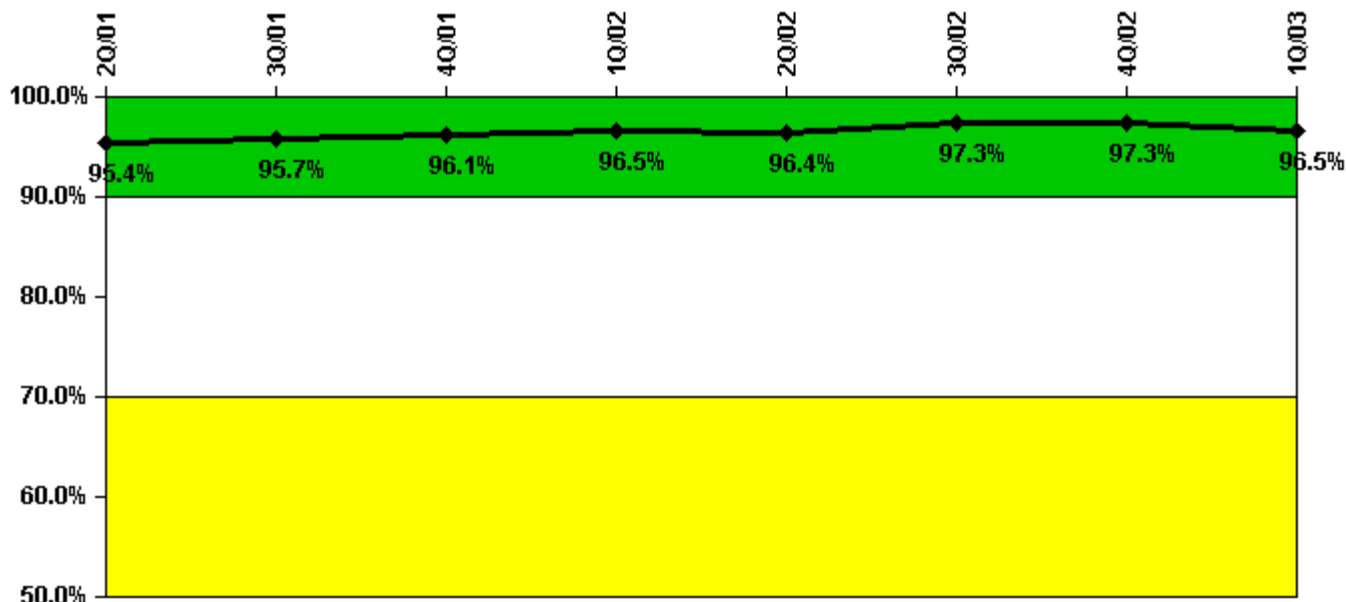
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

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	0.034	0.035	0.061	0.047	0.090	0.075	0.030	0.056	0.053	0.078	0.039	0.030
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	0.3	0.4	0.6	0.5	0.9	0.8	0.3	0.6	0.5	0.8	0.4	0.3
Reactor Coolant System Leakage	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03
Maximum leakage	0.107	0.100	0.024	0.046	0.071	0.056	0.085	0.032	0.034	0.071	0.037	0.045
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	1.1	1.0	0.2	0.5	0.7	0.6	0.9	0.3	0.3	0.7	0.4	0.5

Licensee Comments: none

### Drill/Exercise Performance



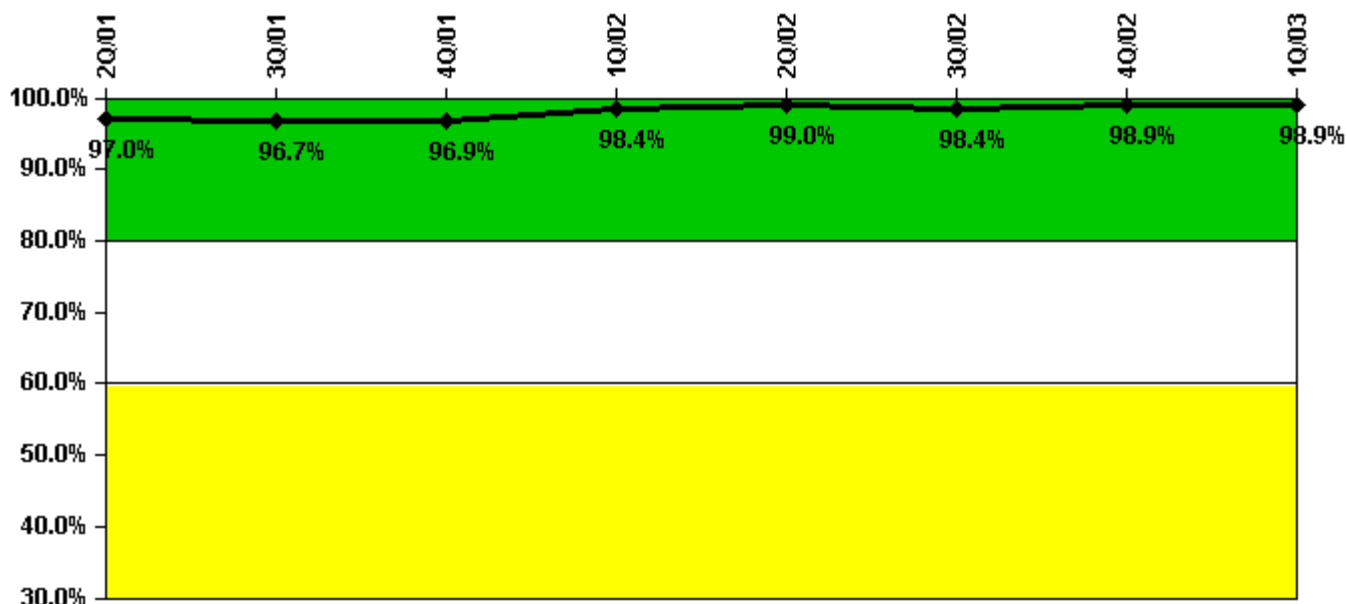
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Successful opportunities	0	9.0	198.0	19.0	8.0	108.0	137.0	14.0
Total opportunities	0	9.0	205.0	20.0	8.0	110.0	141.0	18.0
Indicator value	95.4%	95.7%	96.1%	96.5%	96.4%	97.3%	97.3%	96.5%

Licensee Comments: none

### ERO Drill Participation



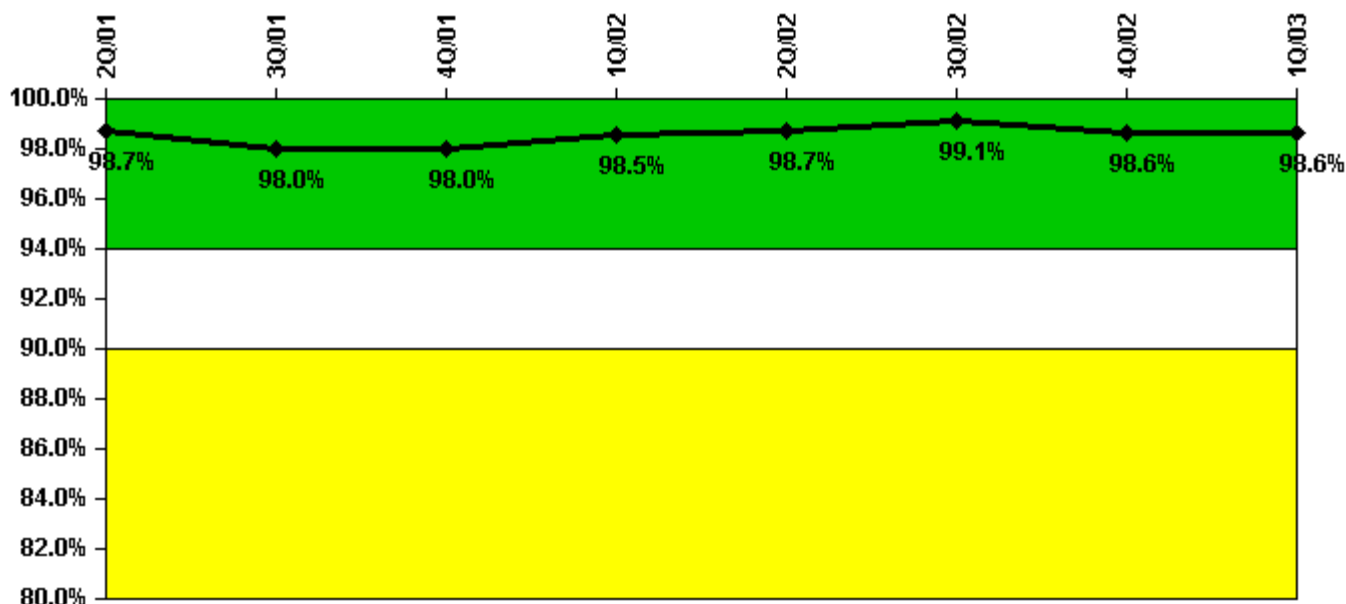
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Participating Key personnel	160.0	176.0	188.0	188.0	191.0	190.0	183.0	181.0
Total Key personnel	165.0	182.0	194.0	191.0	193.0	193.0	185.0	183.0
Indicator value	97.0%	96.7%	96.9%	98.4%	99.0%	98.4%	98.9%	98.9%

Licensee Comments: none

### Alert & Notification System



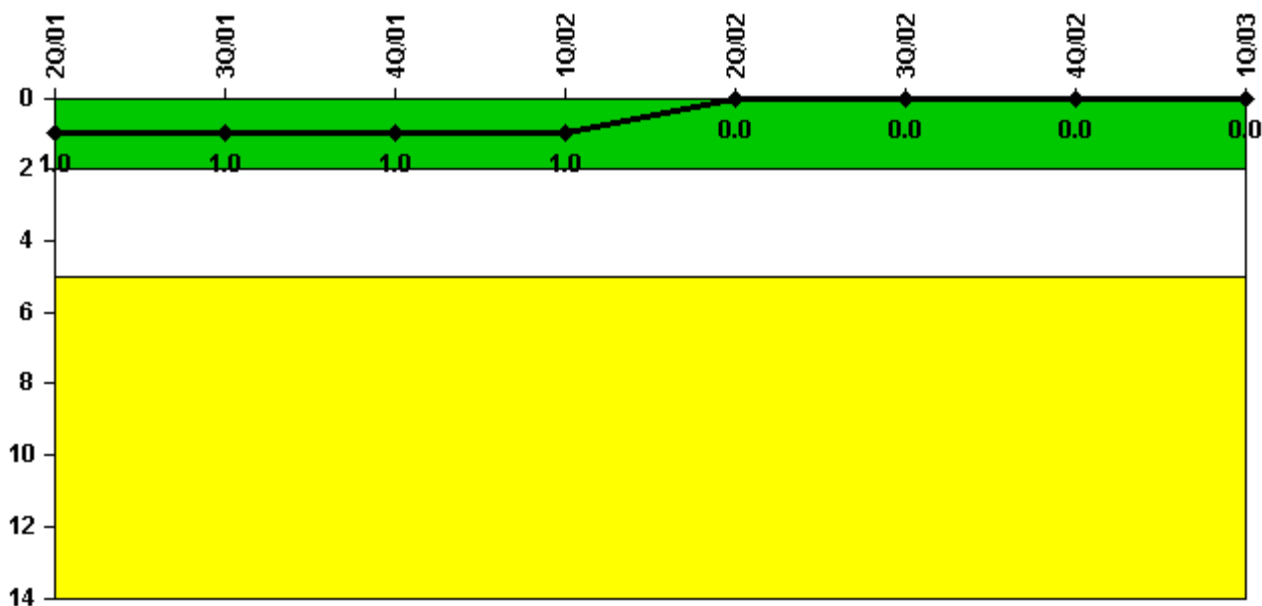
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
Successful siren-tests	382	375	466	390	383	351	459	307
Total sirens-tests	390	390	468	390	387	360	468	307
Indicator value	98.7%	98.0%	98.0%	98.5%	98.7%	99.1%	98.6%	98.6%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
High radiation area occurrences	1	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	1	1	1	1	0	0	0	0

Licensee Comments: none

### RETS/ODCM Radiological Effluent



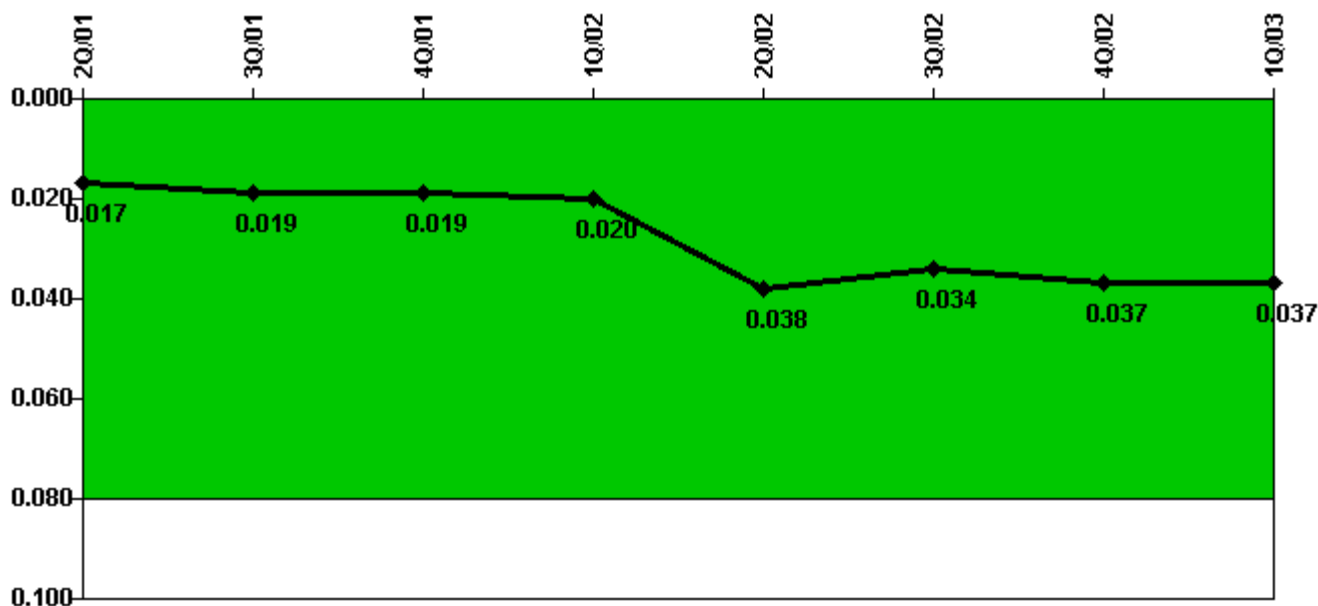
Thresholds: White > 1.0 Yellow > 3.0

#### Notes

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

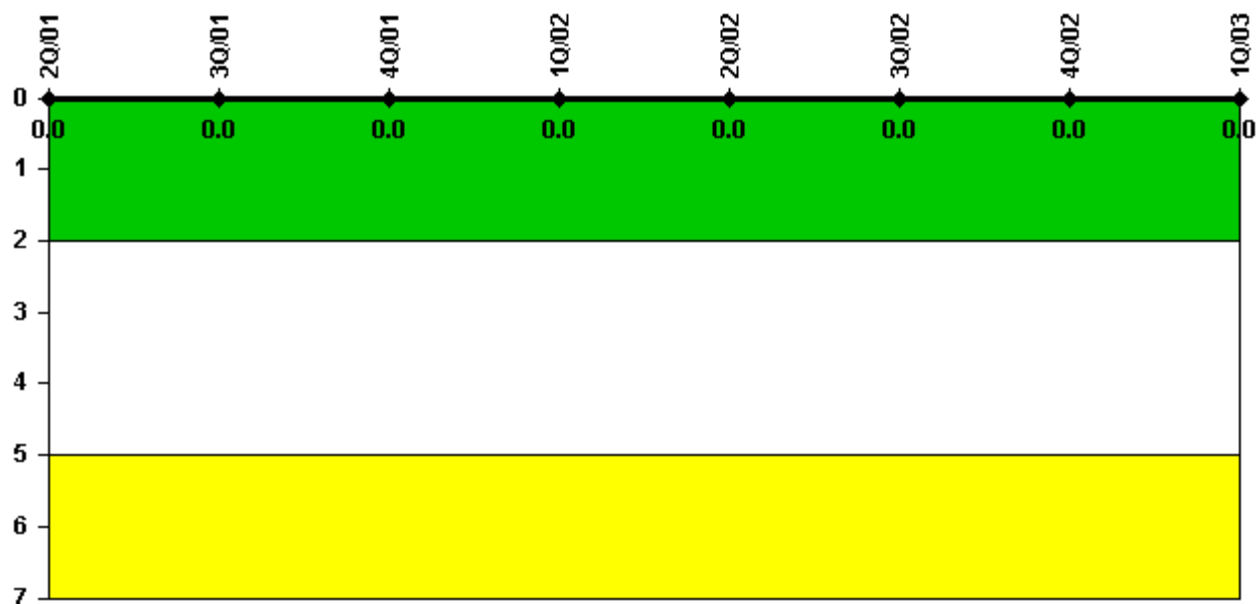
#### Notes

Protected Area Security Performance Index	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03
IDS compensatory hours	109.90	71.00	65.30	87.00	804.00	92.60	86.90	141.60
CCTV compensatory hours	82.6	69.5	14.6	39.4	0	34.1	58.4	10.4
IDS normalization factor	1.85	1.85	1.85	1.85	1.85	2.00	2.00	2.00
CCTV normalization factor	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Index Value	0.017	0.019	0.019	0.020	0.038	0.034	0.037	0.037

Licensee Comments: none



### Personnel Screening Program



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Personnel Screening Program	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/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	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02	1Q/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: April 22, 2003