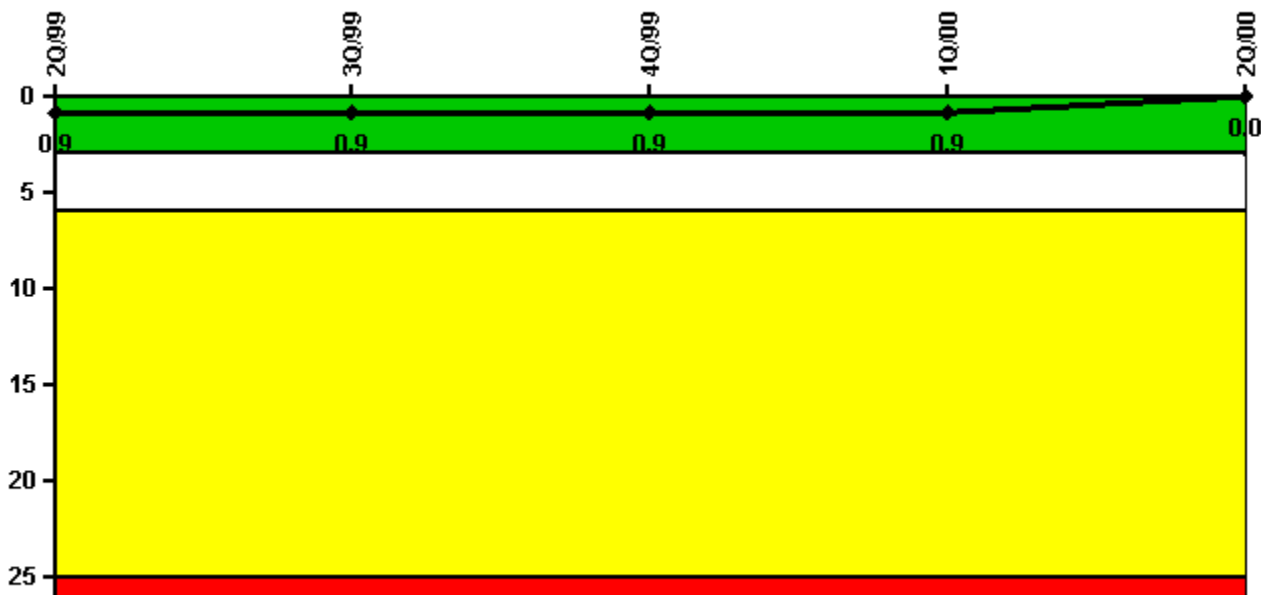


### Palo Verde 2

#### 2Q/2000 Performance Indicators

Licensee's General Comments: none

#### Unplanned Scrams per 7000 Critical Hrs



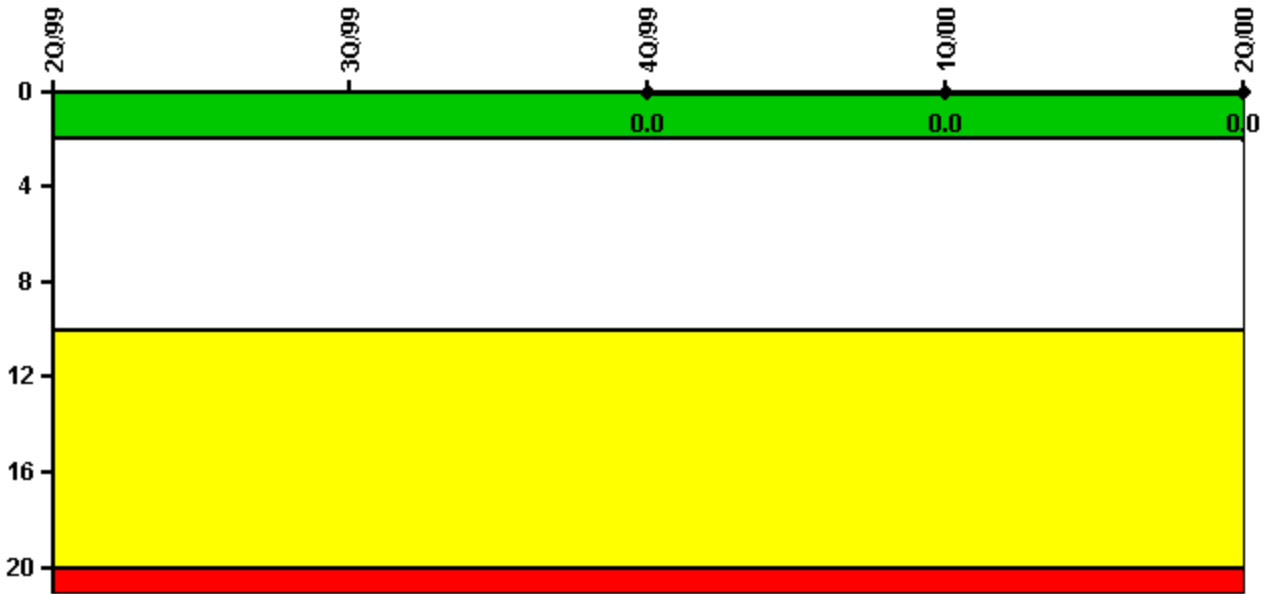
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

#### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Unplanned scrams	1.0	0	0	0	0
Critical hours	1437.6	2208.0	2208.0	2025.6	2184.0
<b>Indicator value</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>	<b>0</b>

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



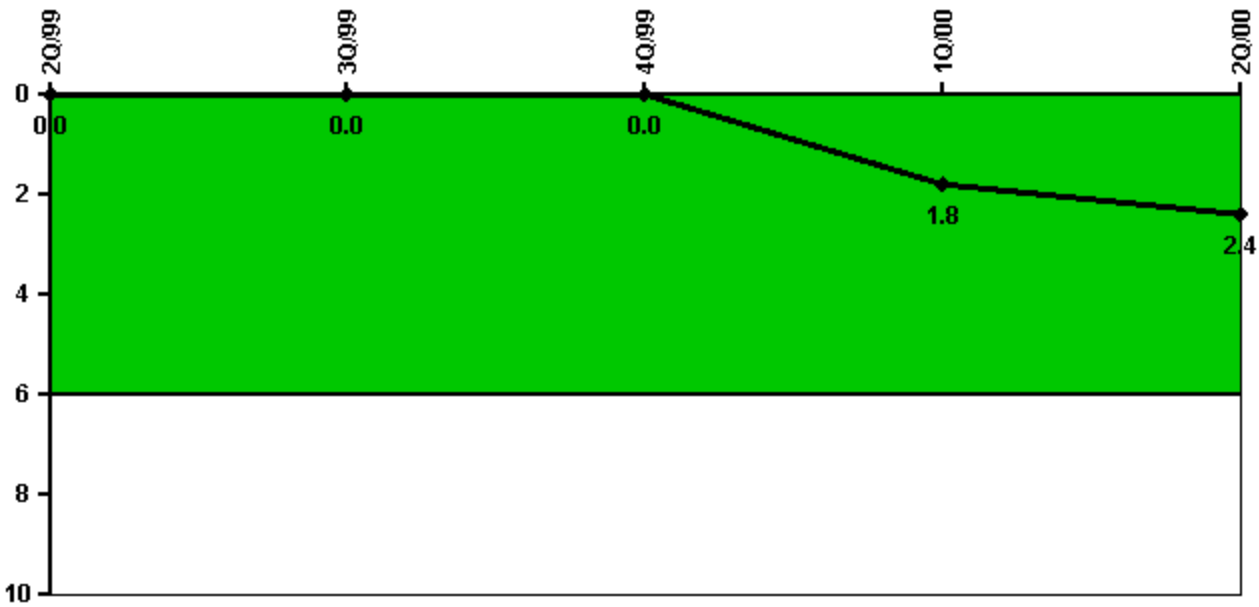
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Scrams	0	0	0	0	0
Indicator value			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/99	3Q/99	4Q/99	1Q/00	2Q/00
Unplanned power changes	0	0	0	2.0	1.0
Critical hours	1437.6	2208.0	2208.0	2025.6	2184.0
Indicator value	0	0	0	1.8	2.4

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



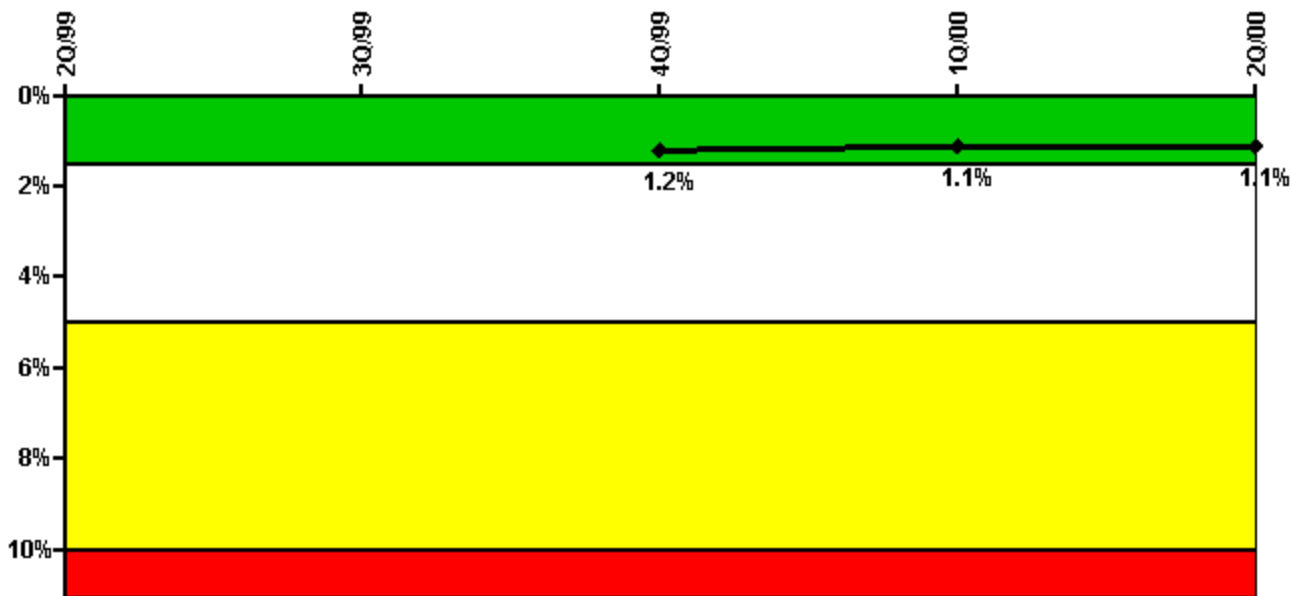
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Emergency AC Power	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
<b>Train 1</b>					
Planned unavailable hours	0	64.80	0	25.90	0.65
Unplanned unavailable hours	0	0	5.87	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2184.00	2208.00	2208.00	2184.00	2184.00
<b>Train 2</b>					
Planned unavailable hours	0	0	18.83	0	24.67
Unplanned unavailable hours	0	2.08	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2184.00	2208.00	2208.00	2184.00	2184.00
<b>Indicator value</b>			<b>0.7%</b>	<b>0.7%</b>	<b>0.7%</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)	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
<b>Train 1</b>					
Planned unavailable hours	2.82	24.57	4.40	14.79	9.18
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	2.07	6.52	0.32	2.56	13.10
Effective Reset hours	0	0	0	0	0
Required hours	1437.60	2208.00	2208.00	2025.60	2184.00
<b>Train 2</b>					
Planned unavailable hours	3.66	7.95	10.46	5.35	24.26
Unplanned unavailable hours	0	5.23	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	1437.60	2208.00	2208.00	2025.60	2184.00
<b>Indicator value</b>			1.2%	1.1%	1.1%

Licensee Comments: none

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



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

#### Notes

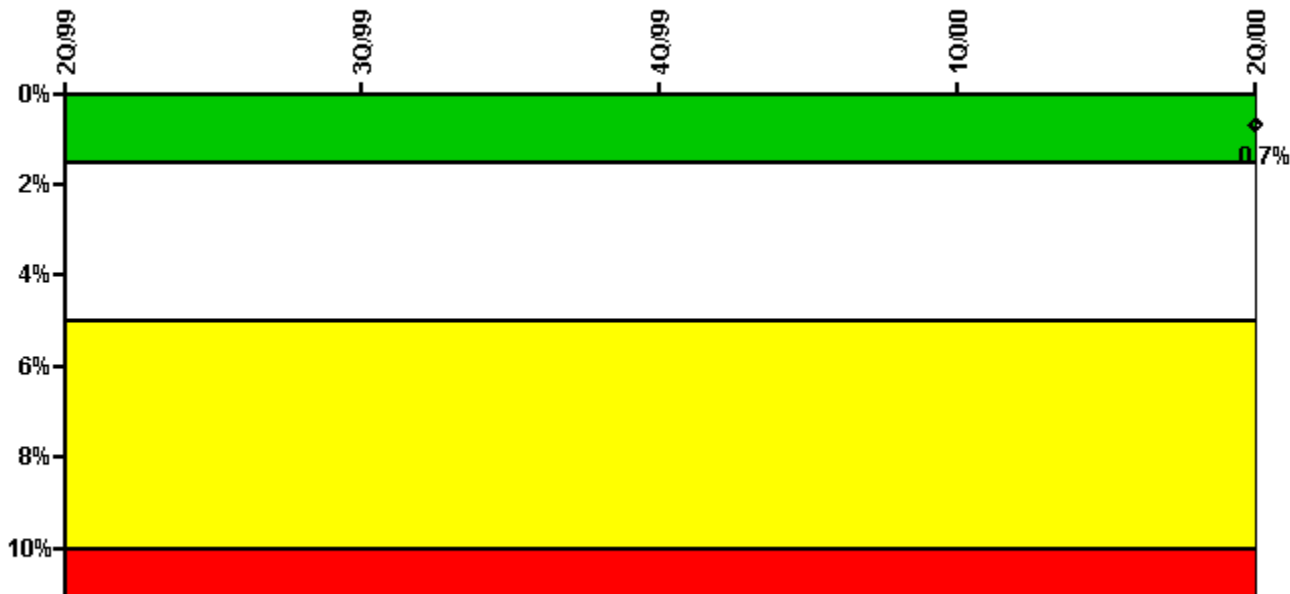
Safety System Unavailability, Heat Removal System (AFW)	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
<b>Train 1</b>					
Planned unavailable hours	1.62	23.84	1.30	16.06	3.99
Unplanned unavailable hours	1.92	5.35	0	13.98	21.97
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	366.76	0
Required hours	1437.60	2208.00	2208.00	2025.60	2184.00
<b>Train 2</b>					
Planned unavailable hours	1.50	0	9.96	1.27	9.60
Unplanned unavailable hours	0	5.23	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	1437.60	2208.00	2208.00	2025.60	2184.00
<b>Train 3</b>					
Planned unavailable hours	0.65	0.32	0.62	3.88	0.97
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	1437.60	2208.00	2208.00	2025.60	2184.00
<b>Indicator value</b>			<b>1.0%</b>	<b>0.5%</b>	<b>0.5%</b>

Licensee Comments: none

Effective Reset Comments:

1Q/00: Previously reset hours were reset under the new process.

### 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/99	3Q/99	4Q/99	1Q/00	2Q/00
<b>Train 1</b>					
Planned unavailable hours	31.00	31.90	15.69	16.81	11.51
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	1509.62	2208.00	2208.00	2184.00	2184.00
<b>Train 2</b>					
Planned unavailable hours	16.06	1.82	14.16	9.68	48.68
Unplanned unavailable hours	0	5.23	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	1509.62	2208.00	2208.00	2184.00	2184.00
<b>Train 3</b>					
Planned unavailable hours	0	0	0	0	0
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	244.87	0	0	0	0
<b>Train 4</b>					
Planned unavailable hours	0	0	0	0	0
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	220.52	0	0	0	0

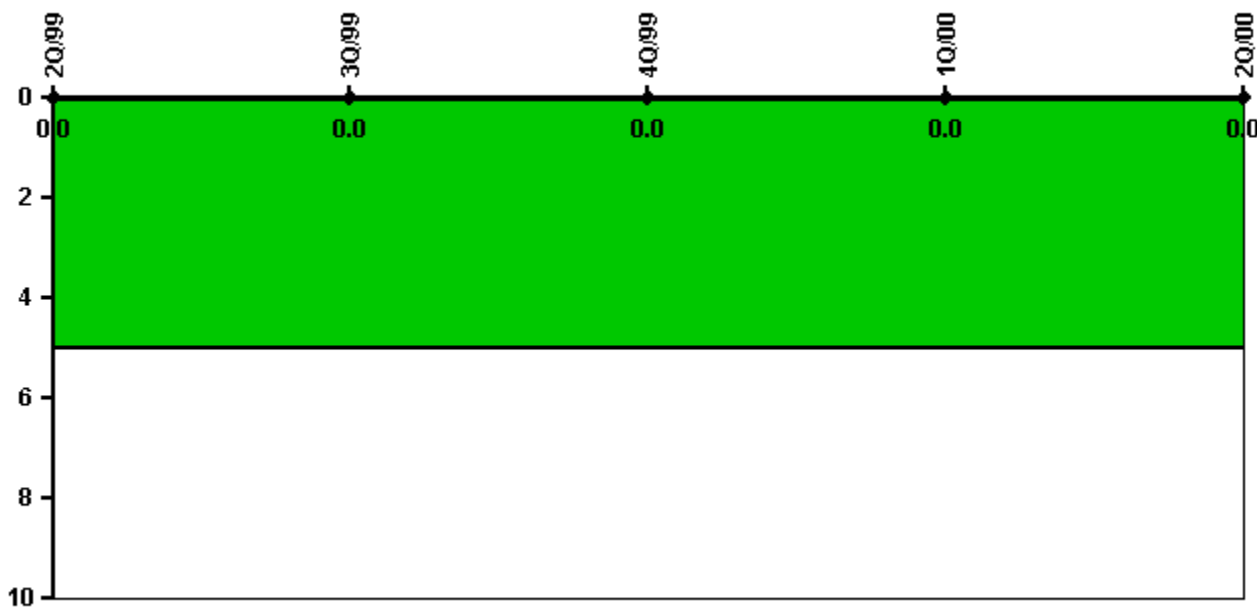
Indicator value					0.7%

Licensee Comments:

1Q/00: Data has been revised for the RHR PI in Quarters 3Q97 through 1Q00 to reflect the methodology specified by FAQ 172. The FAQ 172 methodology essentially split 2 trains of RHR, which were considered required for service at all times, into 4 MODE dependent RHR trains. No thresholds were crossed as a result of the changes. In accordance with the provisions of FAQ 172, Palo Verde collected actual unavailability and required hours for the historical period. In addition to the data revisions in 3Q97 through 1Q00, the RHR comment fields for 1Q97 and 2Q97 have been cleared.

1Q/00: Data has been revised for the RHR PI in Quarters 3Q97 through 1Q00 to reflect the methodology specified by FAQ 172. The FAQ 172 methodology essentially split 2 trains of RHR, which were considered required for service at all times, into 4 MODE dependent RHR trains. No thresholds were crossed as a result of the changes. In accordance with the provisions of FAQ 172, Palo Verde collected actual unavailability and required hours for the historical period. In addition to the data revisions in 3Q97 through 1Q00, the RHR comment fields for 1Q97 and 2Q97 have been cleared.

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

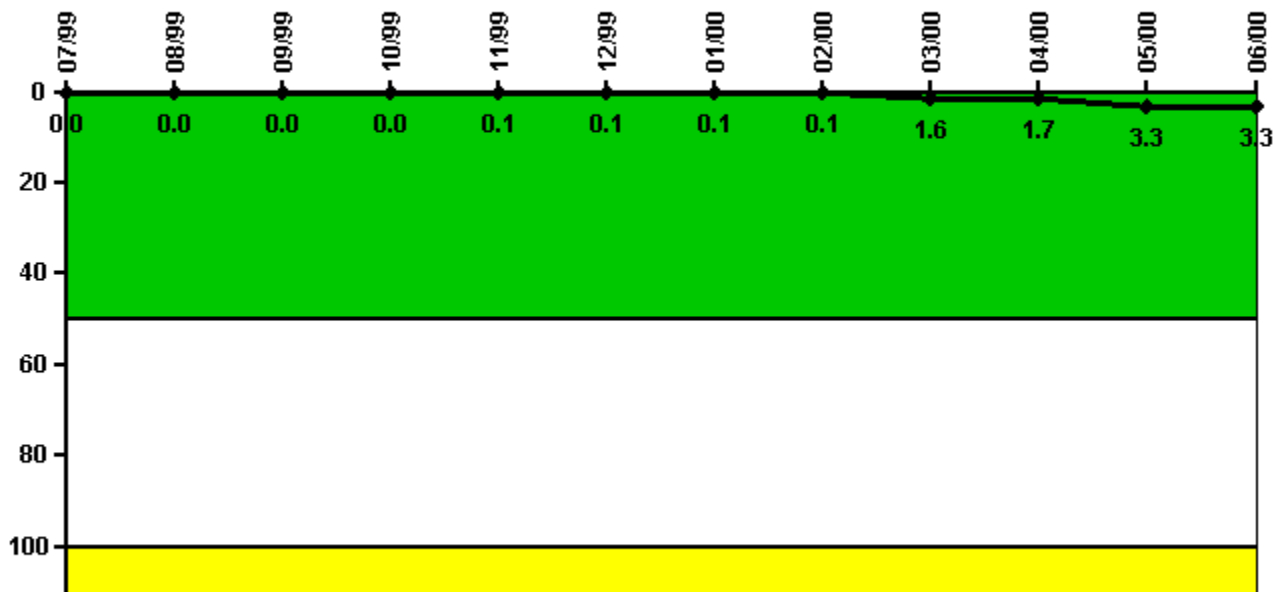
Notes

Safety System Functional Failures (PWR)	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Safety System Functional Failures	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none



### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Activity	7/99	8/99	9/99	10/99	11/99	12/99	1/00	2/00	3/00	4/00	5/00	6/00
Maximum activity	0	0	0	0	0.001000	0.001000	0.001000	0.001000	0.015800	0.017000	0.033000	0.033000
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	0.1	0.1	1.6	1.7	3.3	3.3

Licensee Comments: none

### Reactor Coolant System Leakage



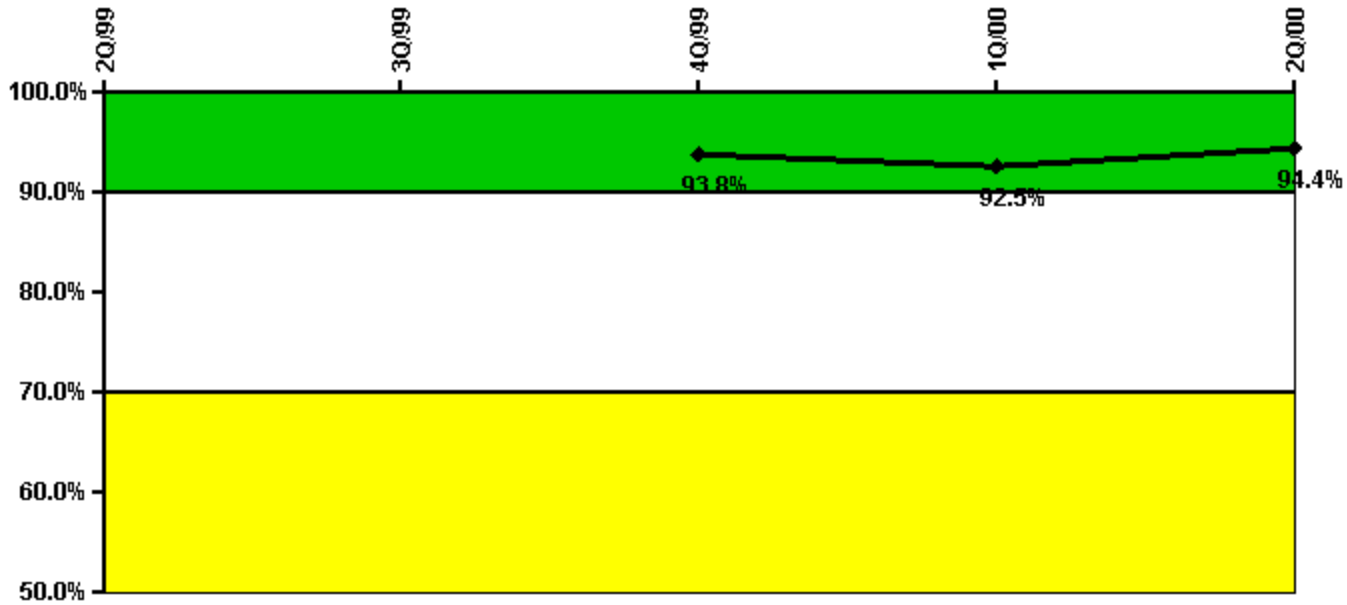
Thresholds: White > 50.0 Yellow > 100.0

#### Notes

Reactor Coolant System Leakage	7/99	8/99	9/99	10/99	11/99	12/99	1/00	2/00	3/00	4/00	5/00	6/00
Maximum leakage	0.120	0.030	0.040	0.010	0.020	0.160	0.111	0.035	0.027	0.026	0.031	0.166
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	0.3	0.4	0.1	0.2	1.6	1.1	0.4	0.3	0.3	0.3	1.7

Licensee Comments: none

### Drill/Exercise Performance



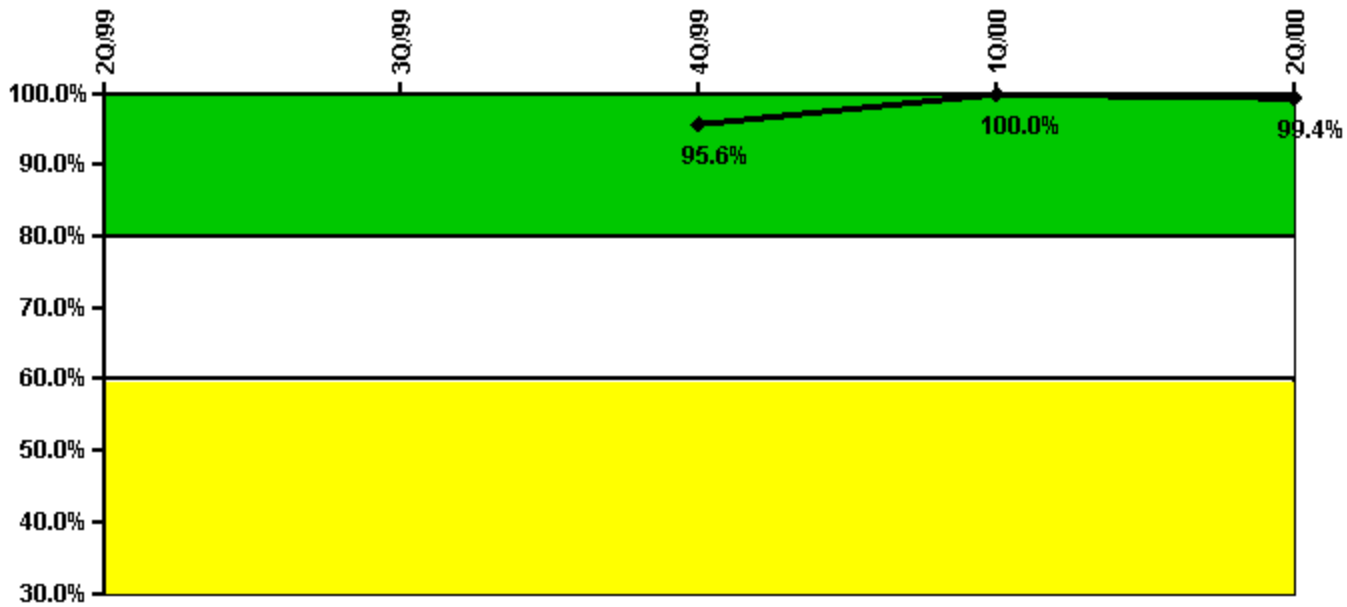
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Successful opportunities	0	17.0	3.0	29.0	22.0
Total opportunities	0	18.0	3.0	32.0	22.0
Indicator value			93.8%	92.5%	94.4%

Licensee Comments: none

### ERO Drill Participation



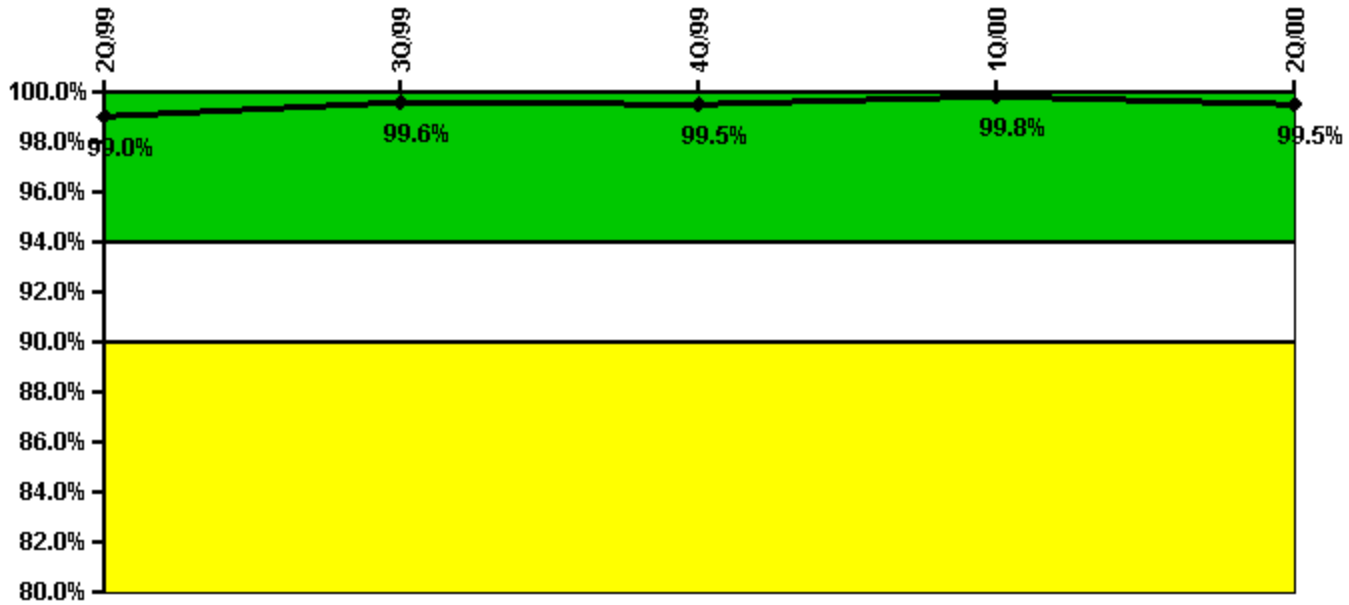
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Participating Key personnel			65.0	132.0	166.0
Total Key personnel			68.0	132.0	167.0
Indicator value			95.6%	100.0%	99.4%

Licensee Comments: none

### Alert & Notification System



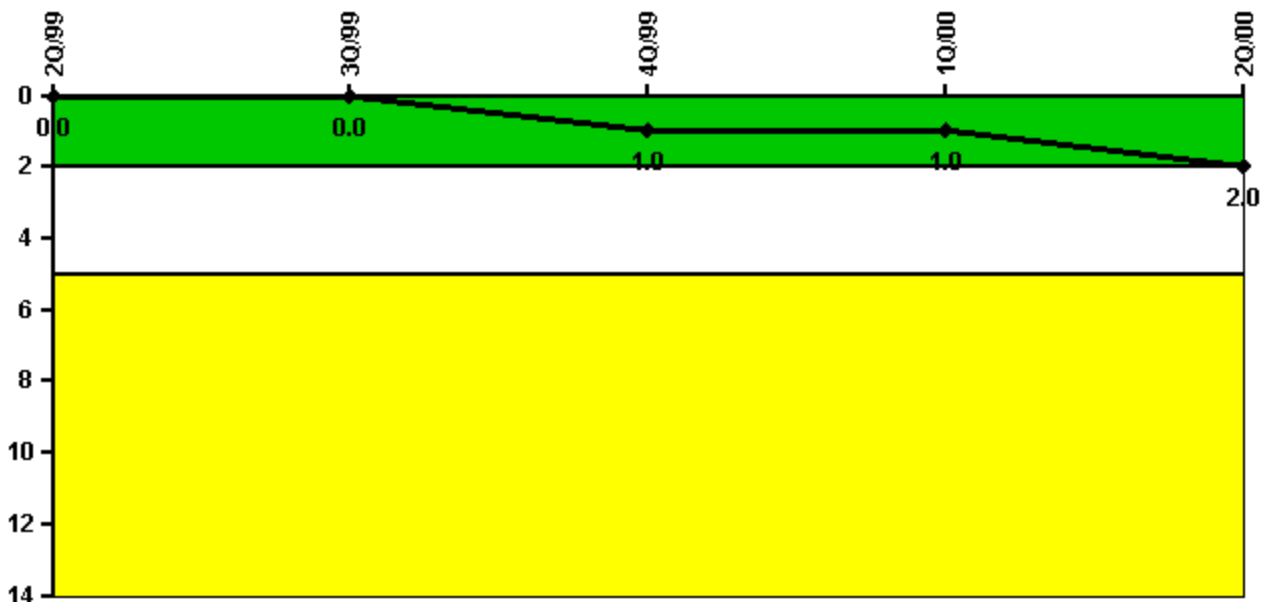
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Successful siren-tests	390	351	426	390	385
Total sirens-tests	390	351	429	390	390
Indicator value	99.0%	99.6%	99.5%	99.8%	99.5%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

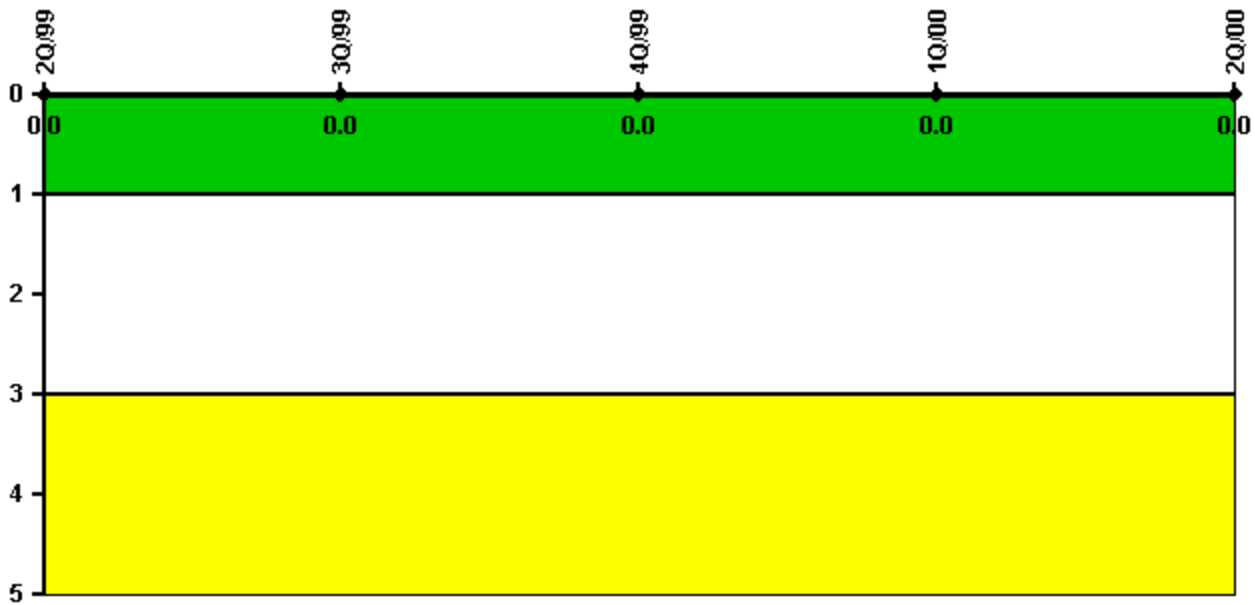
#### Notes

Occupational Exposure Control Effectiveness	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
High radiation area occurrences	0	0	1	0	1
Very high radiation area occurrences	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>

#### Licensee Comments:

2Q/00: During a routine tour of the Unit 3 "B" LPSI Pump Room on 5/4/00, a hot spot was identified on a cyclone separator reading 1,200 mrem/hr at one foot. The event was documented and placed in the corrective action system. The associated corrective action documents were subsequently reviewed during an NRC inspection and the event was characterized by the NRC as a failure to perform adequate surveys of the cyclone separator resulting in untimely LHRA posting of this area. A PI data change is being made to acknowledge the NRC finding. The data change did not affect the color of the performance indicator.

### RETS/ODCM Radiological Effluent



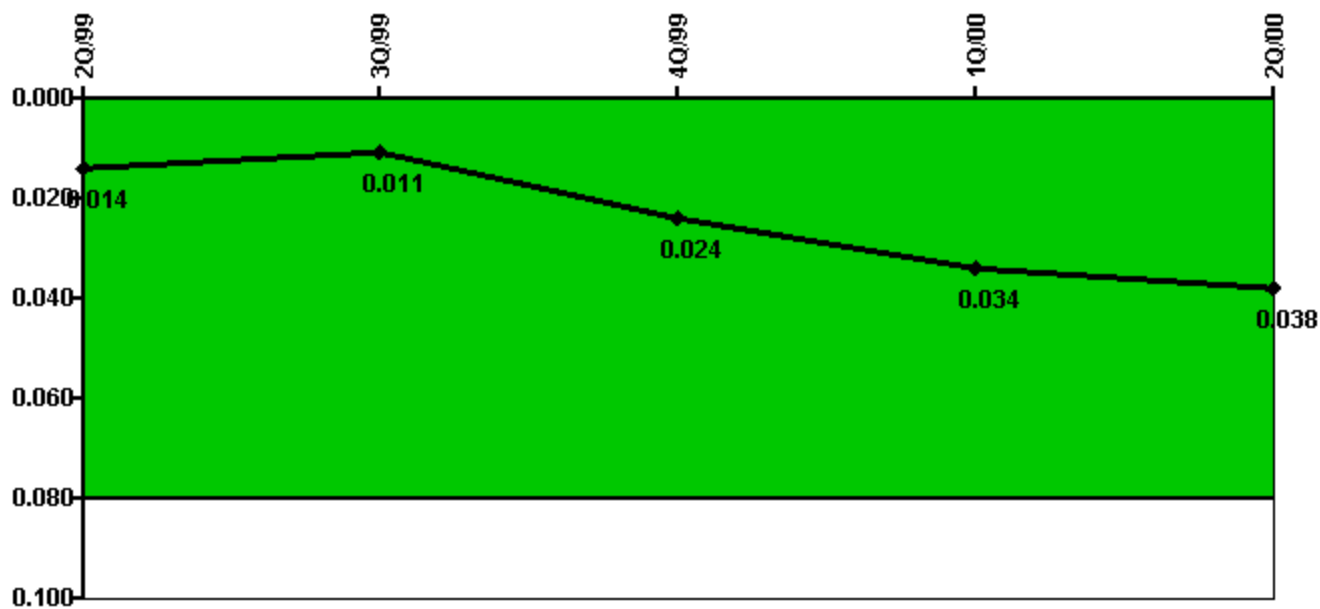
Thresholds: White > 1.0 Yellow > 3.0

#### Notes

RETS/ODCM Radiological Effluent	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
RETS/ODCM occurrences	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none

### Protected Area Security Performance Index



Thresholds: White > 0.080

#### Notes

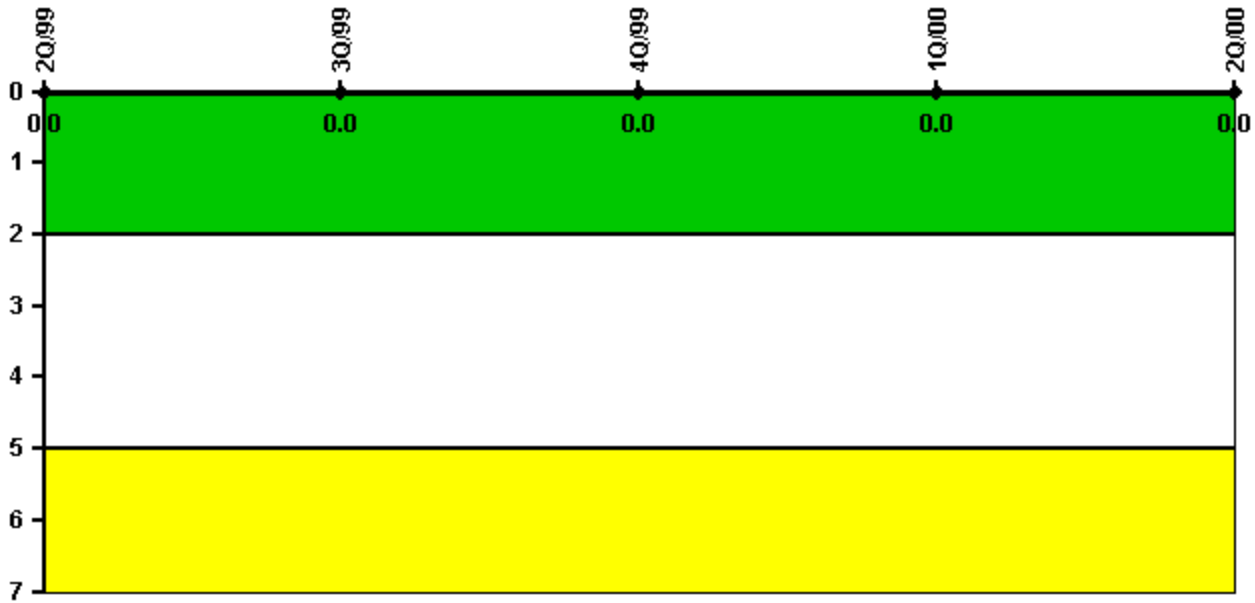
Protected Area Security Performance Index	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
IDS compensatory hours	76.70	55.20	220.10	326.60	79.20
CCTV compensatory hours	0	17.8	225.3	35.2	76.7
IDS normalization factor	1.85	1.85	1.85	1.85	1.85
CCTV normalization factor	1.4	1.4	1.4	1.2	1.2
<b>Index Value</b>	<b>0.014</b>	<b>0.011</b>	<b>0.024</b>	<b>0.034</b>	<b>0.038</b>

#### Licensee Comments:

2Q/00: Due to a self-assessment finding, the number of cameras used in the CCTV Normalization Factor has been conservatively reduced from 41 to 36 and a FAQ has been submitted to clarify the correct value. The previous use of 41 cameras in the CCTV Normalization Factor was not willful, has minimal effect on the calculated PA Security Equipment Performance Index and would not have caused the PI to change color. (1Q2000 & 2Q2000)



### Personnel Screening Program



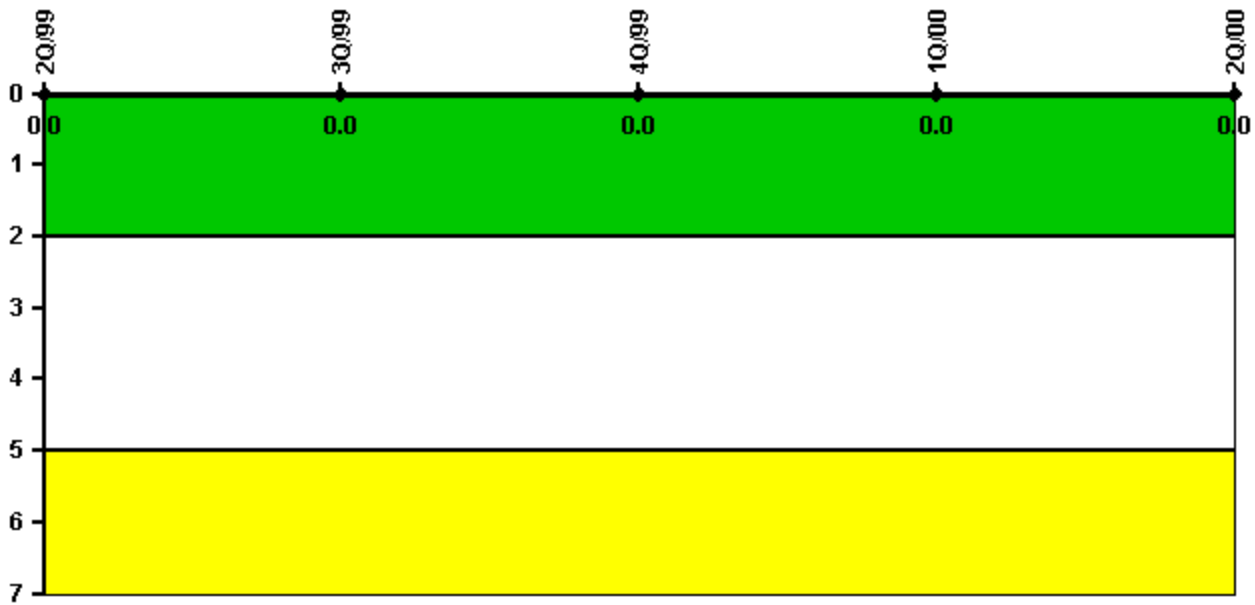
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Personnel Screening Program	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Program failures	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none

### FFD/Personnel Reliability



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

FFD/Personnel Reliability	2Q/99	3Q/99	4Q/99	1Q/00	2Q/00
Program Failures	0	0	0	0	0
Indicator value	0	0	0	0	0

Licensee Comments: none

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

Last Modified: April 1, 2002