

### Palo Verde 1

#### 3Q/2001 Performance Indicators

Licensee's General Comments: none

#### Unplanned Scrams per 7000 Critical Hrs



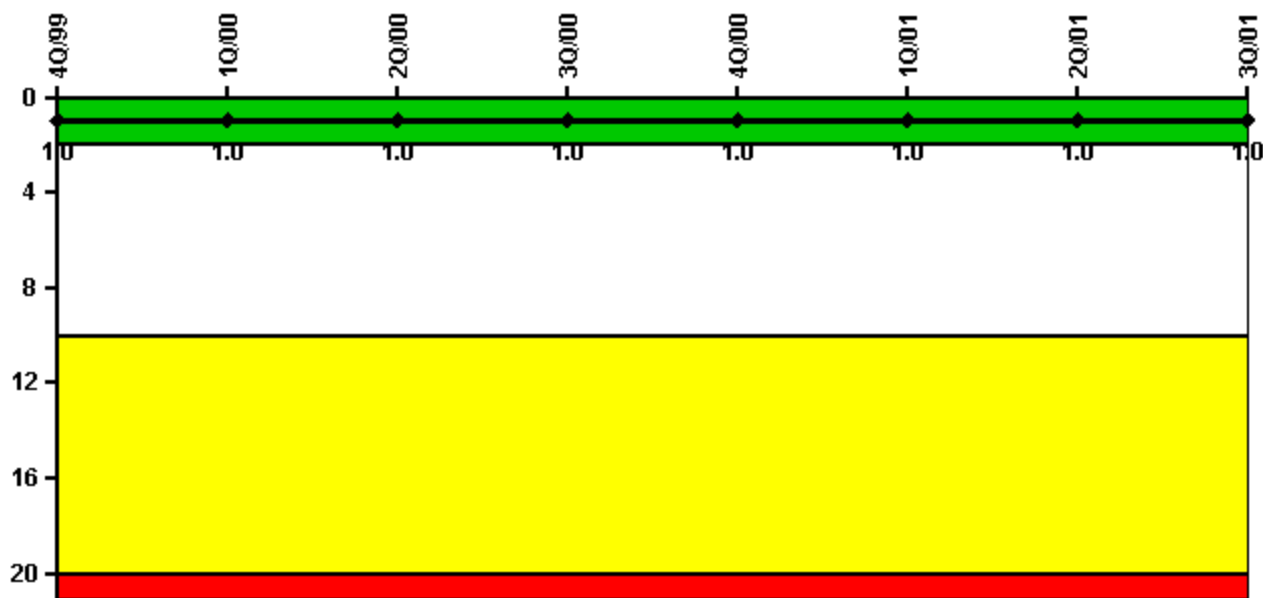
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

#### Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	1339.1	2184.0	2184.0	2208.0	2208.0	2136.0	1187.0	2208.0
<b>Indicator value</b>	<b>0.9</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

### Scrams with Loss of Normal Heat Removal



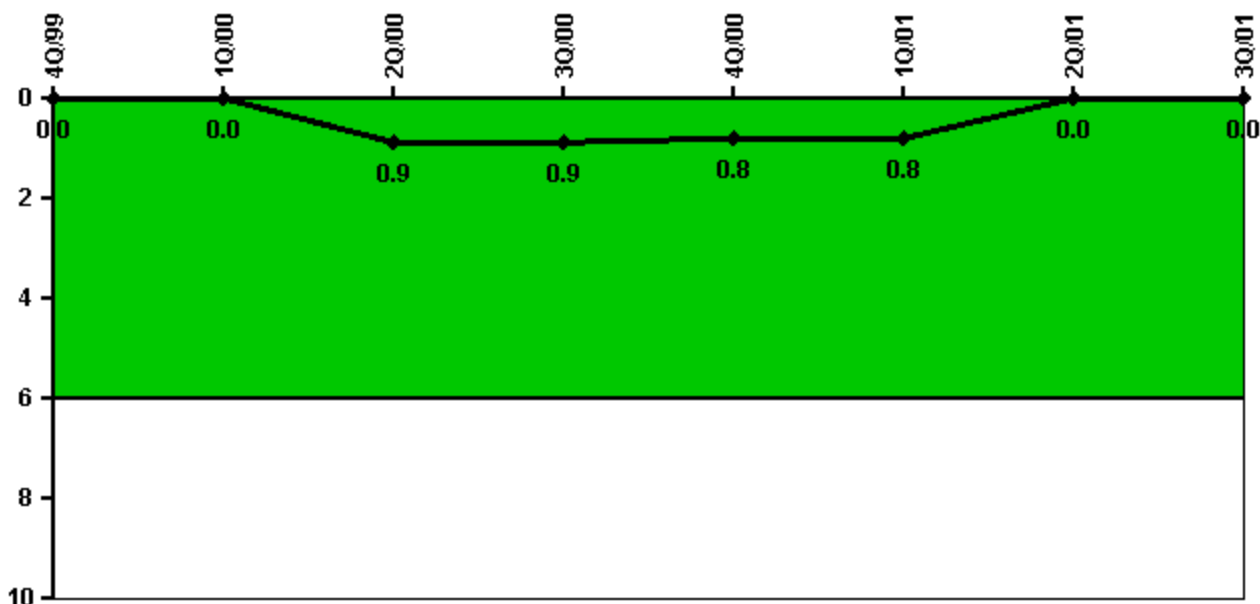
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### Notes

Scrams with Loss of Normal Heat Removal	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Scrams	0	0	0	0	0	0	0	0
Indicator value	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



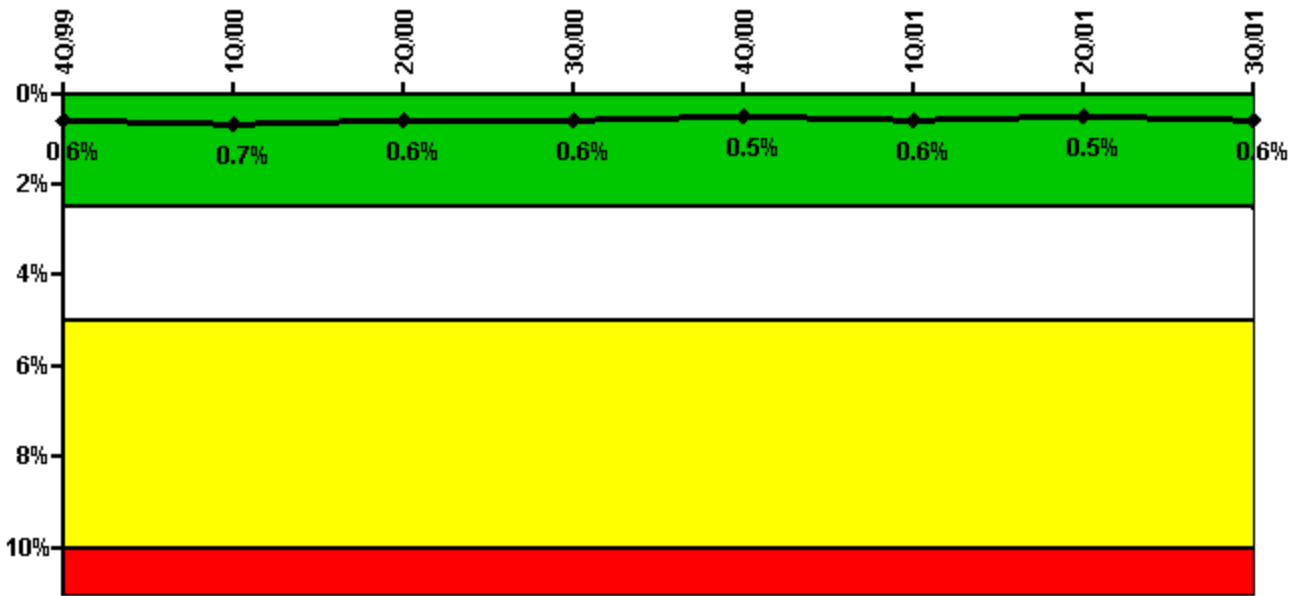
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Unplanned power changes	0	0	1.0	0	0	0	0	0
Critical hours	1339.1	2184.0	2184.0	2208.0	2208.0	2136.0	1187.0	2208.0
Indicator value	0	0	0.9	0.9	0.8	0.8	0	0

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



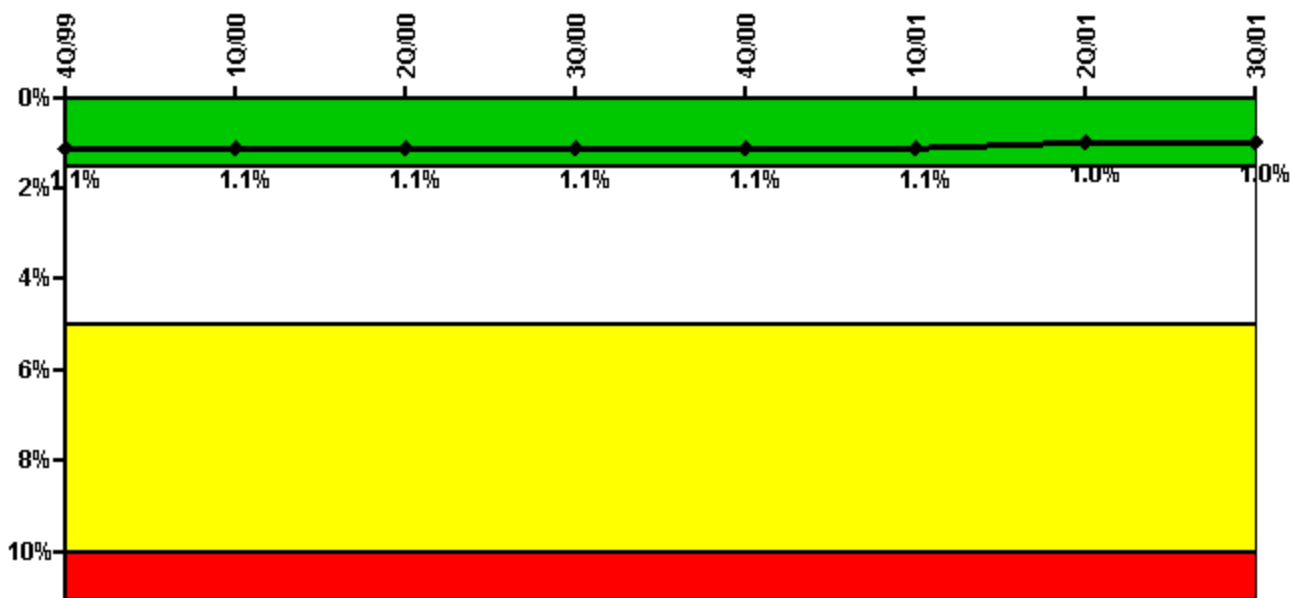
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Emergency AC Power	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
<b>Train 1</b>								
Planned unavailable hours	0	35.35	1.32	17.37	0	18.63	1.27	21.58
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	2208.00	2184.00	2184.00	2208.00	2208.00	2160.00	2184.00	2208.00
<b>Train 2</b>								
Planned unavailable hours	0	22.28	0	20.62	6.30	15.20	0	47.65
Unplanned unavailable hours	0	10.34	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	2208.00	2184.00	2184.00	2208.00	2208.00	2160.00	2184.00	2208.00
<b>Indicator value</b>	<b>0.6%</b>	<b>0.7%</b>	<b>0.6%</b>	<b>0.6%</b>	<b>0.5%</b>	<b>0.6%</b>	<b>0.5%</b>	<b>0.6%</b>

Licensee Comments: none

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



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

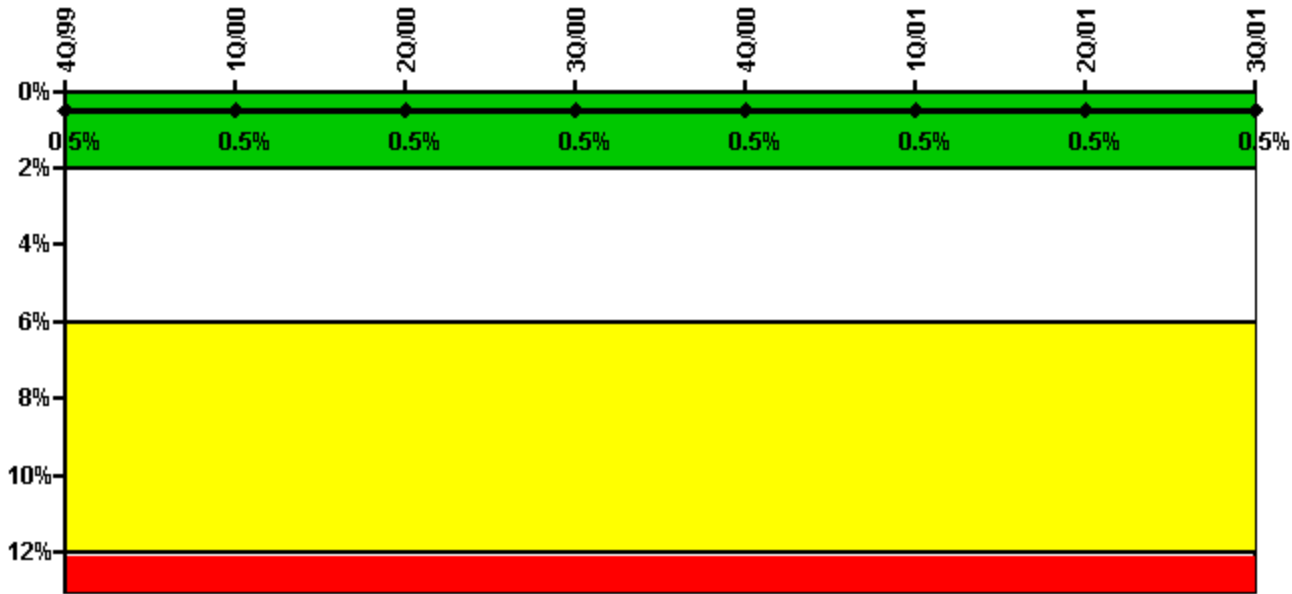
**Notes**

Safety System Unavailability, High Pressure Injection System (HPSI)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
<b>Train 1</b>								
Planned unavailable hours	2.09	21.12	15.34	11.85	7.54	23.28	1.97	15.11
Unplanned unavailable hours	6.80	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	1339.10	2184.00	2184.00	2208.00	2208.00	2136.00	1186.95	2208.00
<b>Train 2</b>								
Planned unavailable hours	10.84	16.75	3.53	17.08	18.21	38.64	22.10	38.95
Unplanned unavailable hours	13.28	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	1339.10	2184.00	2184.00	2208.00	2208.00	2136.00	1186.95	2208.00
<b>Indicator value</b>	<b>1.1%</b>	<b>1.1%</b>	<b>1.1%</b>	<b>1.1%</b>	<b>1.1%</b>	<b>1.1%</b>	<b>1.0%</b>	<b>1.0%</b>

Licensee Comments:

2Q/01: The number of planned unavailability hours for HPSI train "B" was originally incorrectly counted. The number reported in 2Q2001 should have been 22.1 instead of 18.53. The change did not affect the "color" of the indicator.

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



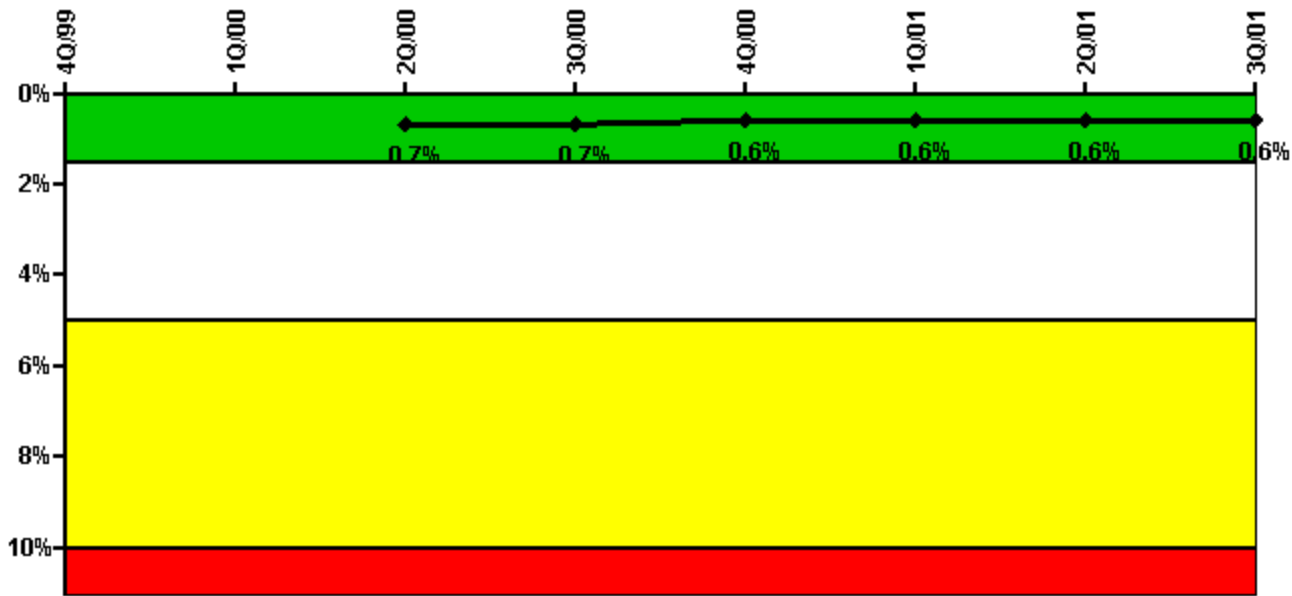
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
<b>Train 1</b>								
Planned unavailable hours	3.60	22.40	9.20	16.05	1.41	18.67	3.66	8.15
Unplanned unavailable hours	6.80	12.00	4.85	0	1.45	0	8.70	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	1339.10	2184.00	2184.00	2208.00	2208.00	2136.00	1186.95	2208.00
<b>Train 2</b>								
Planned unavailable hours	0	13.67	0	10.45	6.30	11.05	0	35.65
Unplanned unavailable hours	13.28	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	1339.10	2184.00	2184.00	2208.00	2208.00	2136.00	1186.95	2208.00
<b>Train 3</b>								
Planned unavailable hours	0.48	0.33	11.43	0.43	0.25	0.45	0.88	0.37
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	1339.10	2184.00	2184.00	2208.00	2208.00	2136.00	1186.95	2208.00
<b>Indicator value</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.5%</b>

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



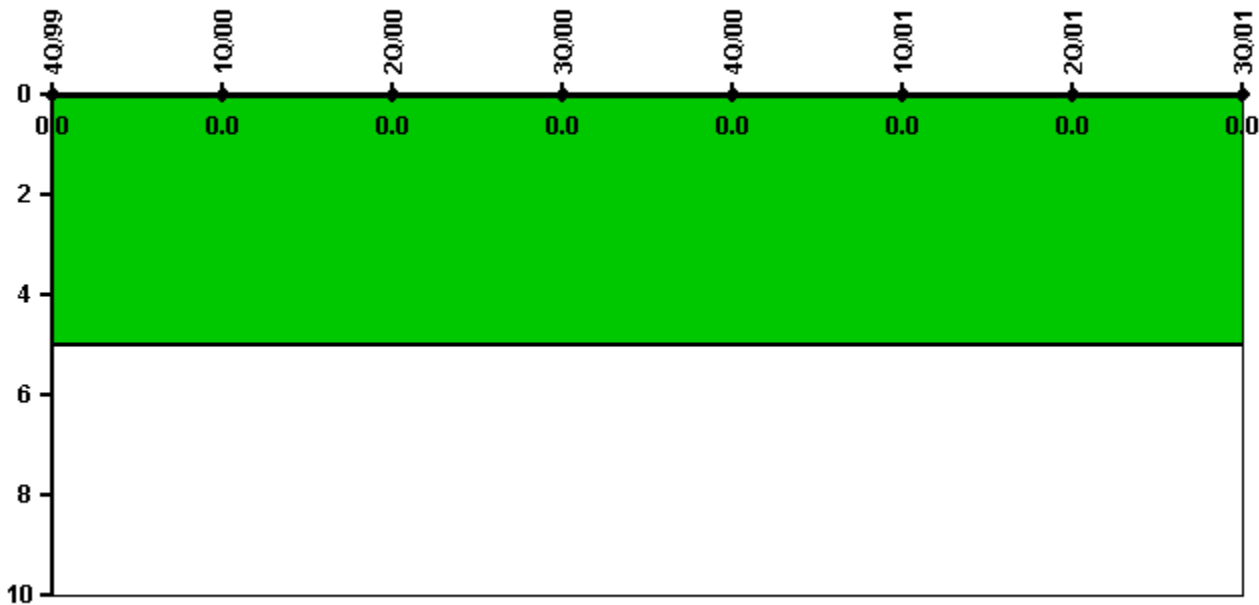
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, Residual Heat Removal System	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
<b>Train 1</b>								
Planned unavailable hours	14.36	39.92	5.82	12.13	9.64	20.38	6.37	13.83
Unplanned unavailable hours	6.80	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	1386.70	2184.00	2184.00	2208.00	2208.00	2157.05	1239.10	2208.00
<b>Train 2</b>								
Planned unavailable hours	9.57	19.73	4.31	11.57	13.91	19.01	9.58	35.83
Unplanned unavailable hours	17.48	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	1386.70	2184.00	2184.00	2208.00	2208.00	2157.05	1239.10	2208.00
<b>Train 3</b>								
Planned unavailable hours	0	0	0	0	0	0	0.28	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	474.75	0	0	0	0	2.95	425.22	0
<b>Train 4</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	463.03	0	0	0	0	0	99.33	0
<b>Indicator value</b>			0.7%	0.7%	0.6%	0.6%	0.6%	0.6%

Licensee Comments: none

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

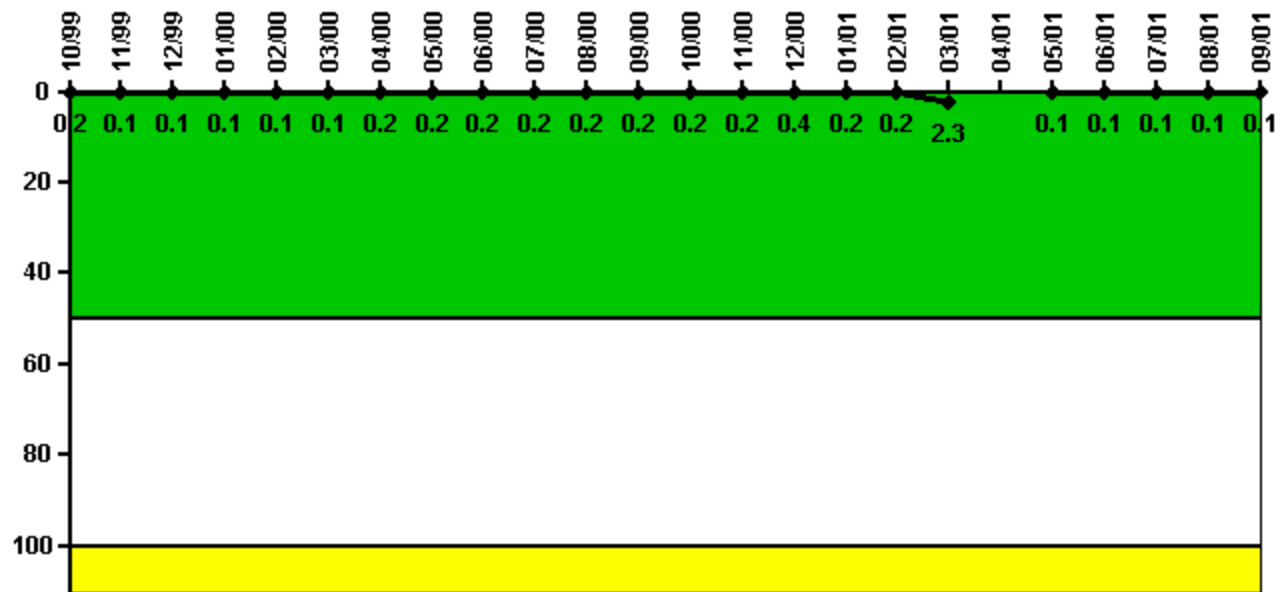
#### Notes

Safety System Functional Failures (PWR)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
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

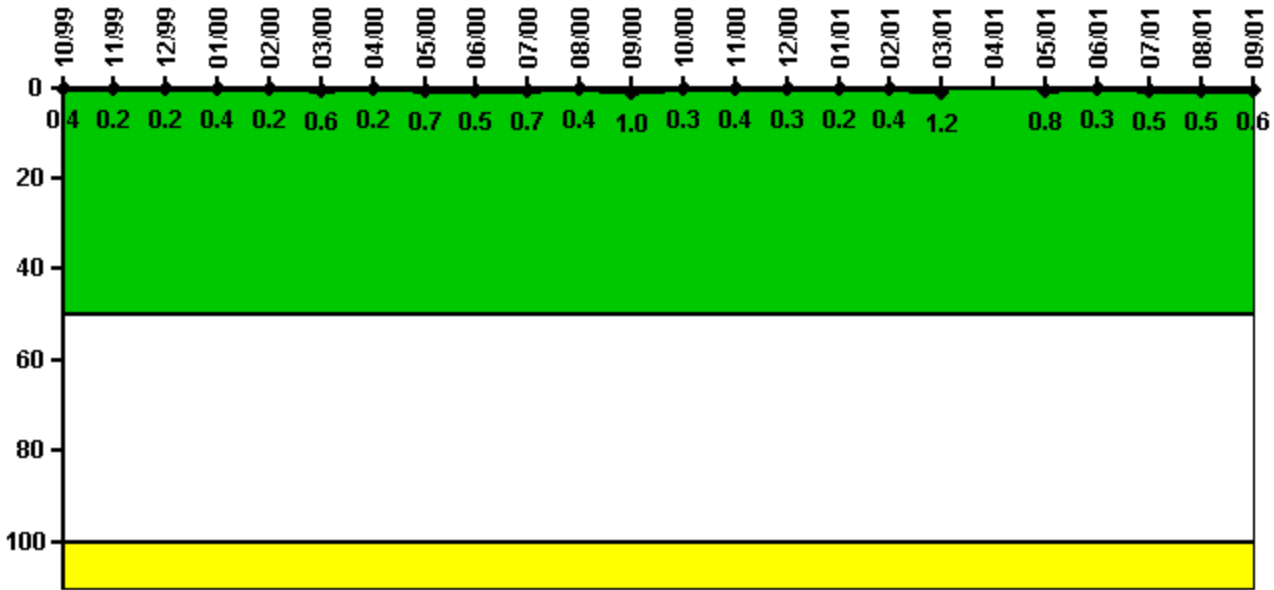
Reactor Coolant System Activity	10/99	11/99	12/99	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00
Maximum activity	0.002000	0.001000	0.001000	0.001000	0.001000	0.001000	0.002000	0.002000	0.002000	0.002000	0.002000	0.002000
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2

Reactor Coolant System Activity	10/00	11/00	12/00	1/01	2/01	3/01	4/01	5/01	6/01	7/01	8/01	9/01
Maximum activity	0.002000	0.002000	0.004000	0.002000	0.002000	0.023000	N/A	0.001000	0.001000	0.001000	0.001000	0.001000
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	N/A	1.0	1.0	1.0	1.0	1.0
Indicator value	0.2	0.2	0.4	0.2	0.2	2.3	N/A	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

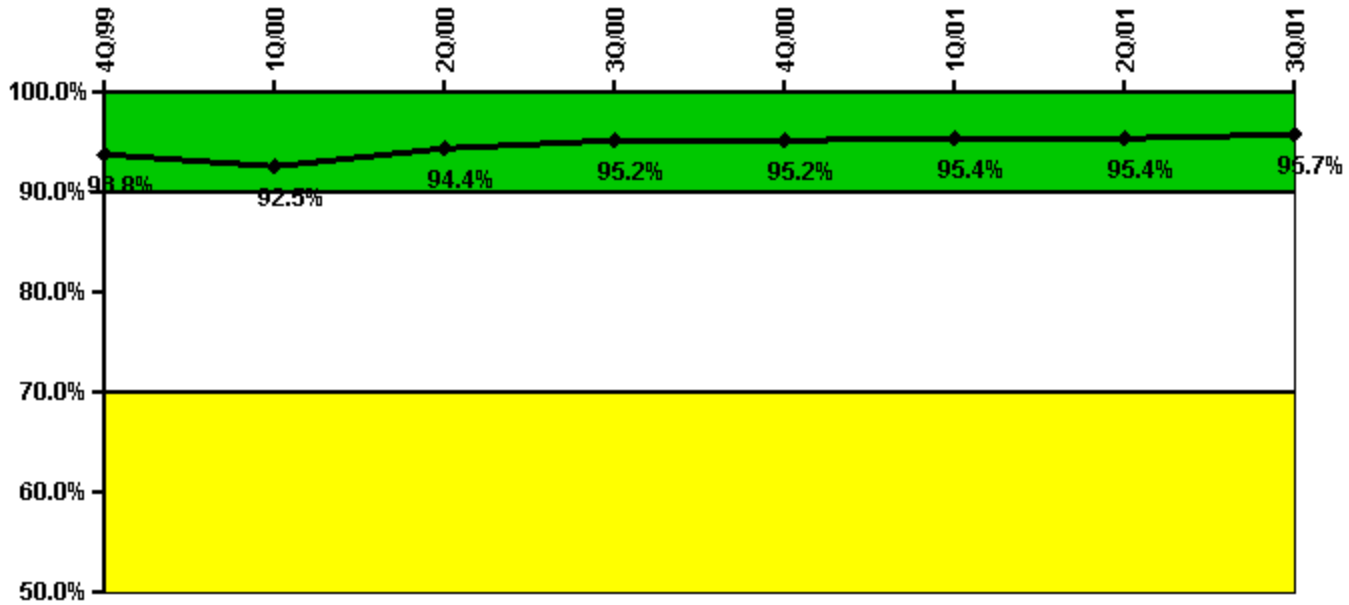
Reactor Coolant System Leakage	10/99	11/99	12/99	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00
Maximum leakage	0.040	0.020	0.020	0.036	0.022	0.056	0.024	0.066	0.050	0.068	0.040	0.097
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.4	0.2	0.2	0.4	0.2	0.6	0.2	0.7	0.5	0.7	0.4	1.0

Reactor Coolant System Leakage	10/00	11/00	12/00	1/01	2/01	3/01	4/01	5/01	6/01	7/01	8/01	9/01
Maximum leakage	0.030	0.038	0.028	0.021	0.043	0.123	N/A	0.078	0.032	0.046	0.046	0.057
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	N/A	10.0	10.0	10.0	10.0	10.0
Indicator value	0.3	0.4	0.3	0.2	0.4	1.2	N/A	0.8	0.3	0.5	0.5	0.6

Licensee Comments: none

### Drill/Exercise Performance



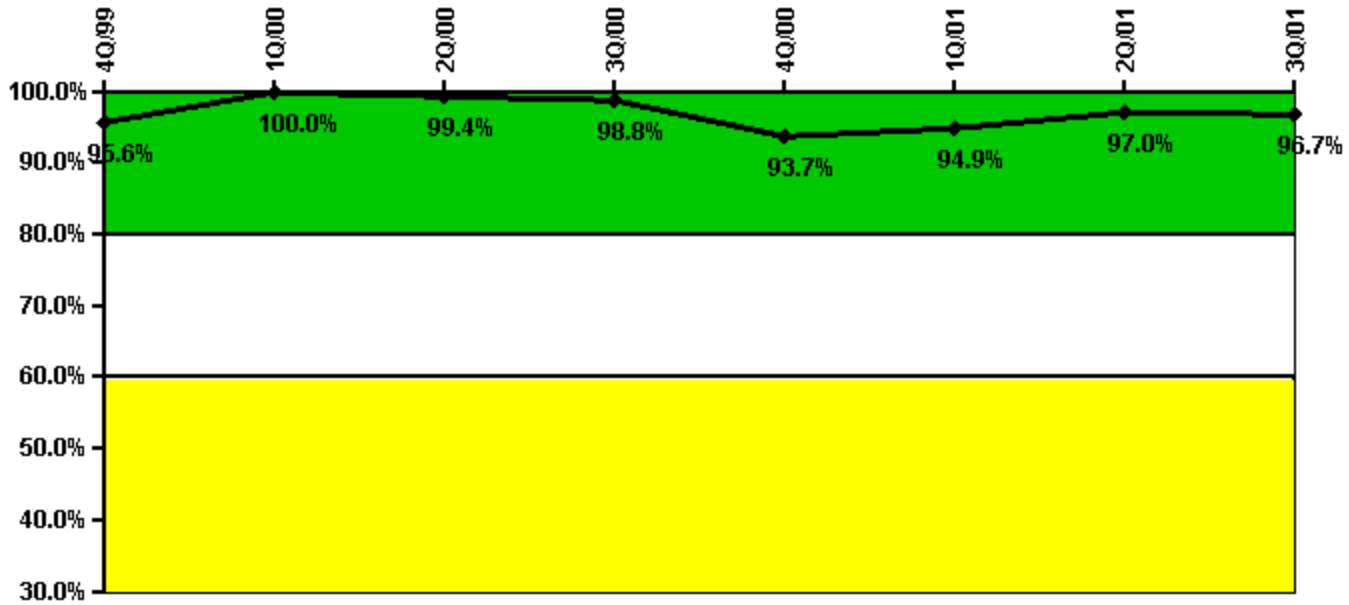
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Successful opportunities	3.0	29.0	22.0	95.0	0	20.0	0	9.0
Total opportunities	3.0	32.0	22.0	100.0	0	20.0	0	9.0
Indicator value	93.8%	92.5%	94.4%	95.2%	95.2%	95.4%	95.4%	95.7%

Licensee Comments: none

### ERO Drill Participation



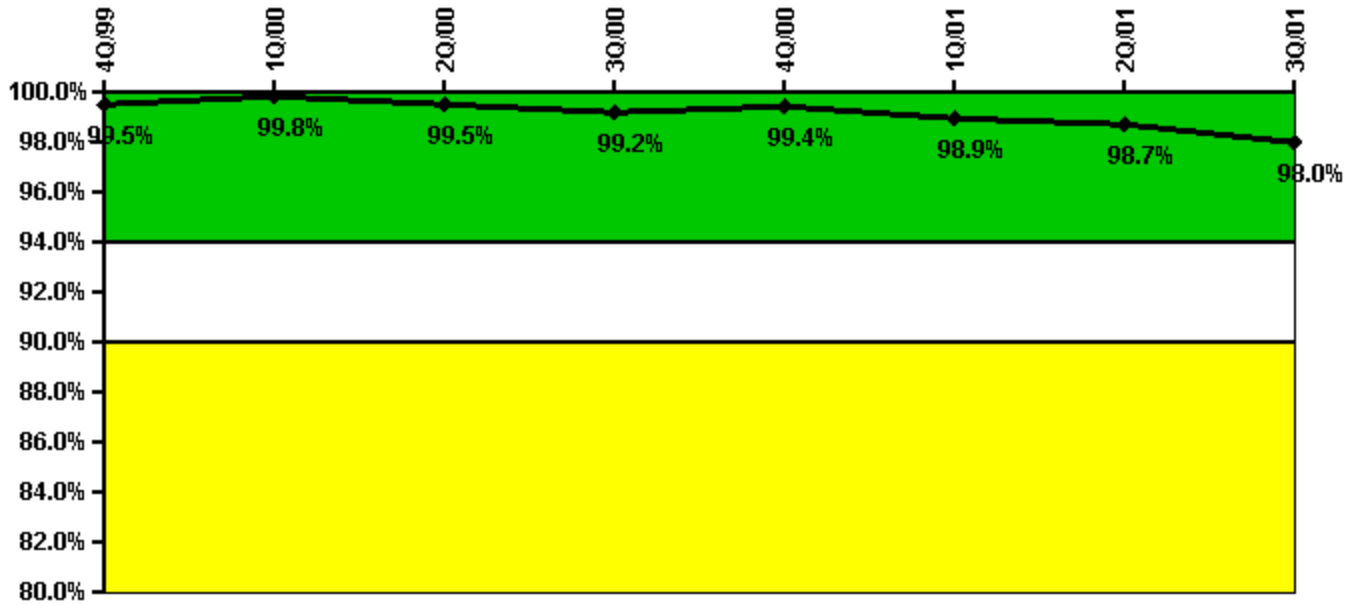
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Participating Key personnel	65.0	132.0	166.0	165.0	163.0	166.0	160.0	176.0
Total Key personnel	68.0	132.0	167.0	167.0	174.0	175.0	165.0	182.0
Indicator value	95.6%	100.0%	99.4%	98.8%	93.7%	94.9%	97.0%	96.7%

Licensee Comments: none

### Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

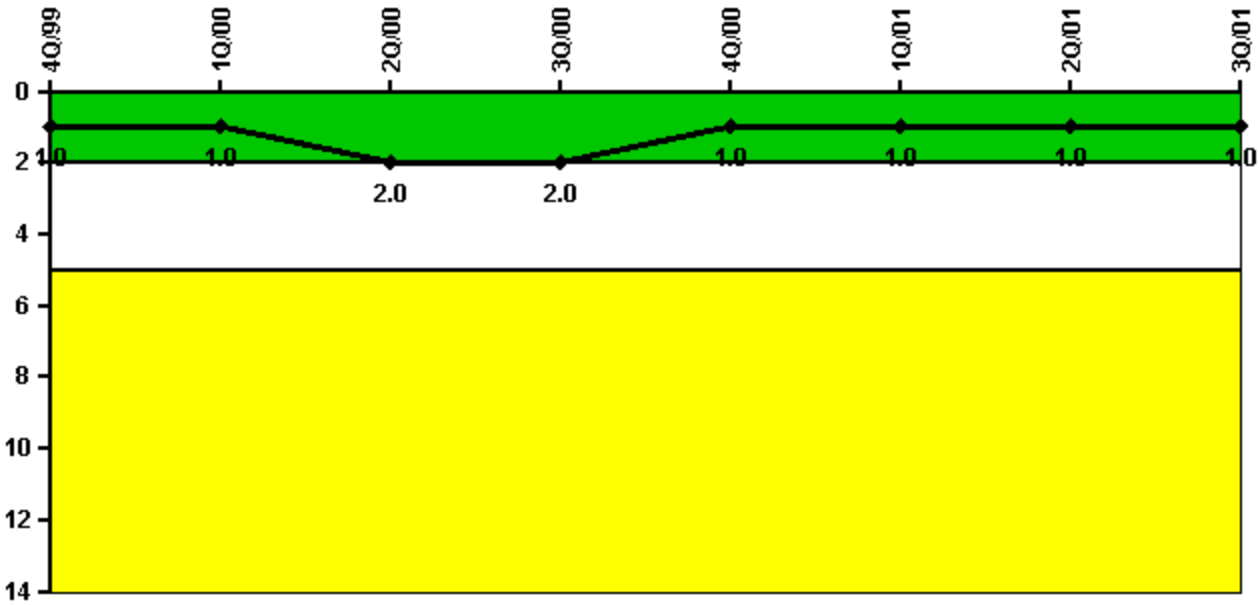
#### Notes

Alert & Notification System	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Successful siren-tests	426	390	385	347	467	382	382	375
Total sirens-tests	429	390	390	351	468	390	390	390
Indicator value	99.5%	99.8%	99.5%	99.2%	99.4%	98.9%	98.7%	98.0%

Licensee Comments:

3Q/01: The number of successful ANS siren tests was originally incorrectly counted. The number reported in the 3Q2001 should have been 375 instead of 376. The change did not affect the "color" of the indicator.

### Occupational Exposure Control Effectiveness



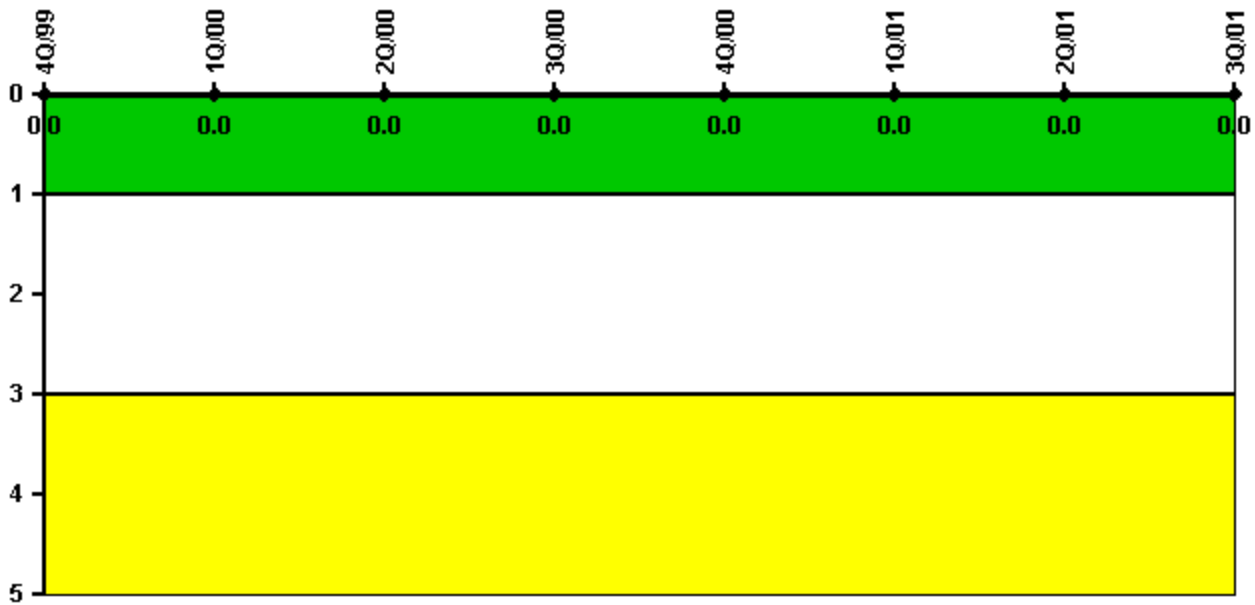
Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Occupational Exposure Control Effectiveness	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
High radiation area occurrences	1	0	1	0	0	0	1	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>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>

Licensee Comments: none

### RETS/ODCM Radiological Effluent



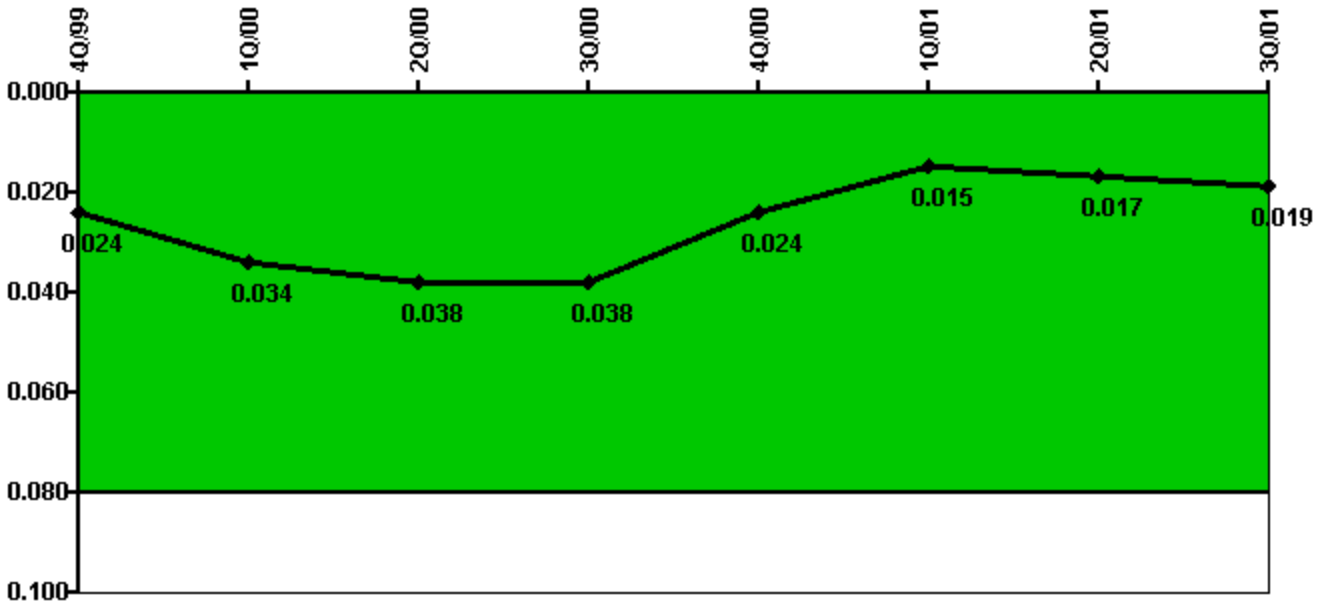
Thresholds: White > 1.0 Yellow > 3.0

#### Notes

RETS/ODCM Radiological Effluent	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
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

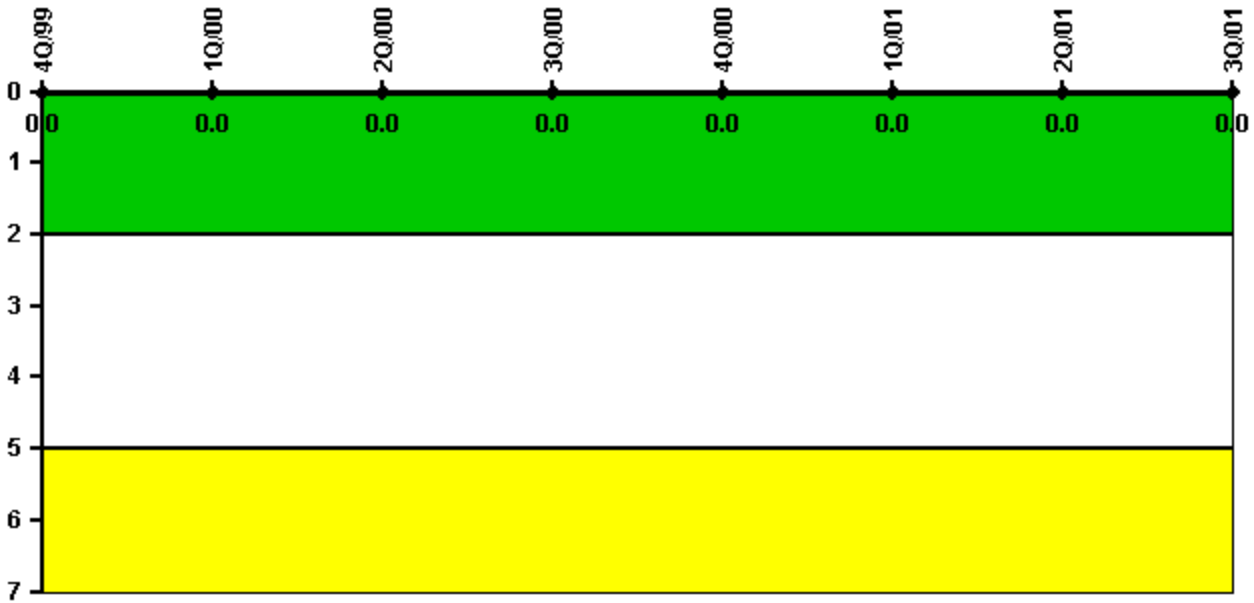
#### Notes

Protected Area Security Performance Index	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
IDS compensatory hours	220.10	326.60	79.20	85.60	95.20	71.50	109.90	71.00
CCTV compensatory hours	225.3	35.2	76.7	8.5	1.3	19.8	82.6	69.5
IDS normalization factor	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85
CCTV normalization factor	1.4	1.2	1.2	1.2	1.2	1.2	1.2	1.2
<b>Index Value</b>	<b>0.024</b>	<b>0.034</b>	<b>0.038</b>	<b>0.038</b>	<b>0.024</b>	<b>0.015</b>	<b>0.017</b>	<b>0.019</b>

Licensee Comments: none



### Personnel Screening Program



Thresholds: White > 2.0 Yellow > 5.0

#### Notes

Personnel Screening Program	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
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	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
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](#) | [Action Matrix Summary](#) | [Reactor Oversight Process](#)

Last Modified: March 26, 2002