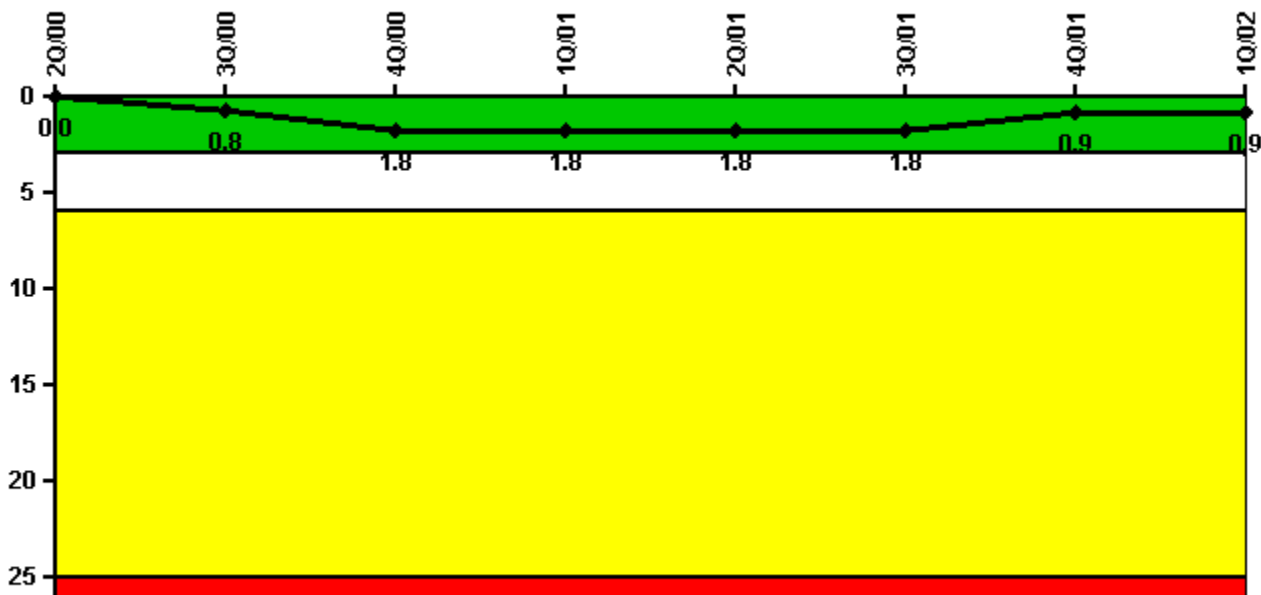


# Palo Verde 2

## 1Q/2002 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



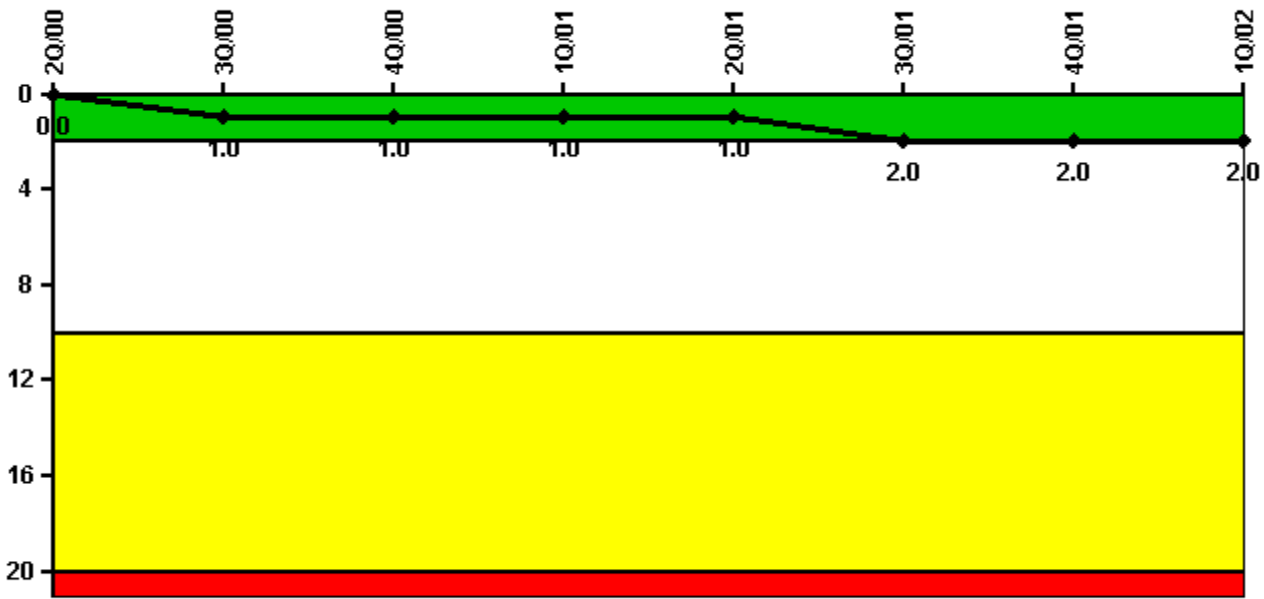
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### 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	1.0	1.0	0	0	1.0	0	0
Critical hours	2184.0	2170.6	1414.7	2160.0	2184.0	2174.4	1508.9	1776.0
Indicator value	0	0.8	1.8	1.8	1.8	1.8	0.9	0.9

Licensee Comments: none

### Scrams with Loss of Normal Heat Removal



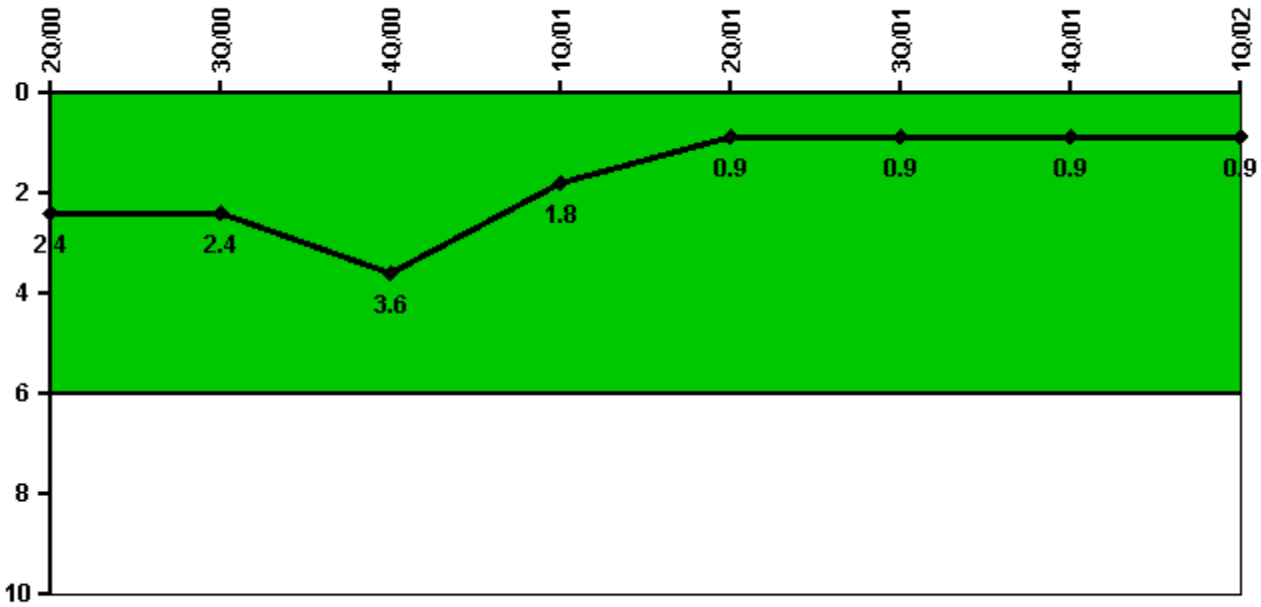
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

#### 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	1.0	0	0	0	1.0	0	0
Indicator value	0	1.0	1.0	1.0	1.0	2.0	2.0	2.0

Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



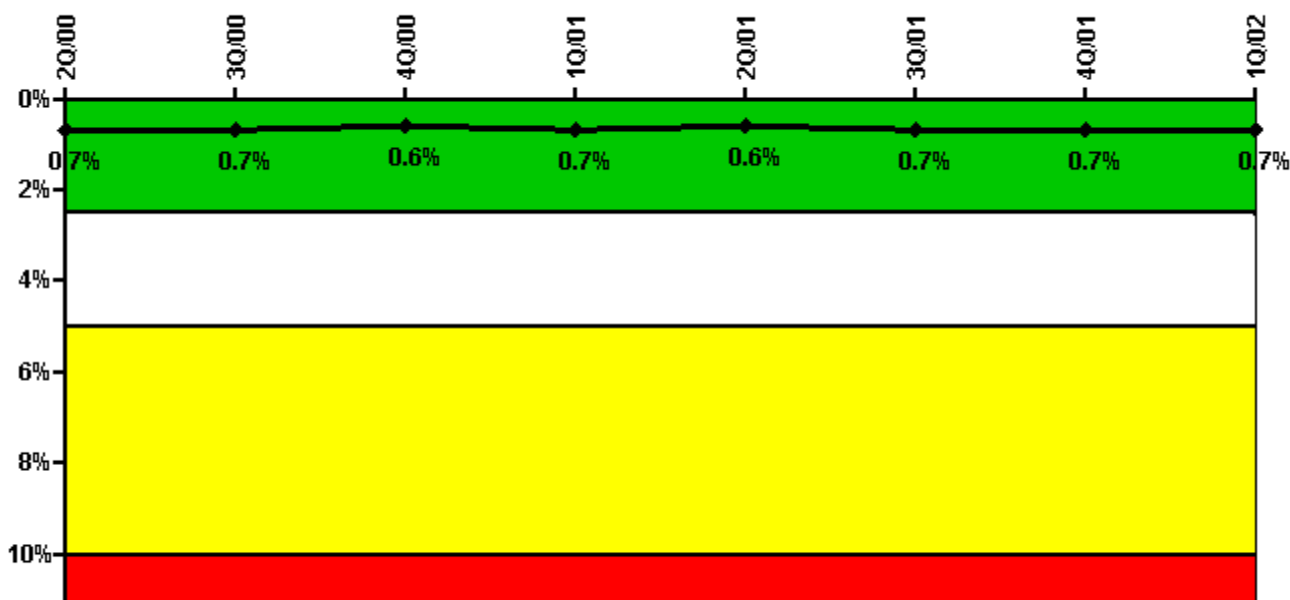
Thresholds: White > 6.0

#### Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Unplanned power changes	1.0	0	1.0	0	0	0	1.0	0
Critical hours	2184.0	2170.6	1414.7	2160.0	2184.0	2174.4	1508.9	1776.0
Indicator value	2.4	2.4	3.6	1.8	0.9	0.9	0.9	0.9

Licensee Comments: none

### Safety System Unavailability, Emergency AC Power



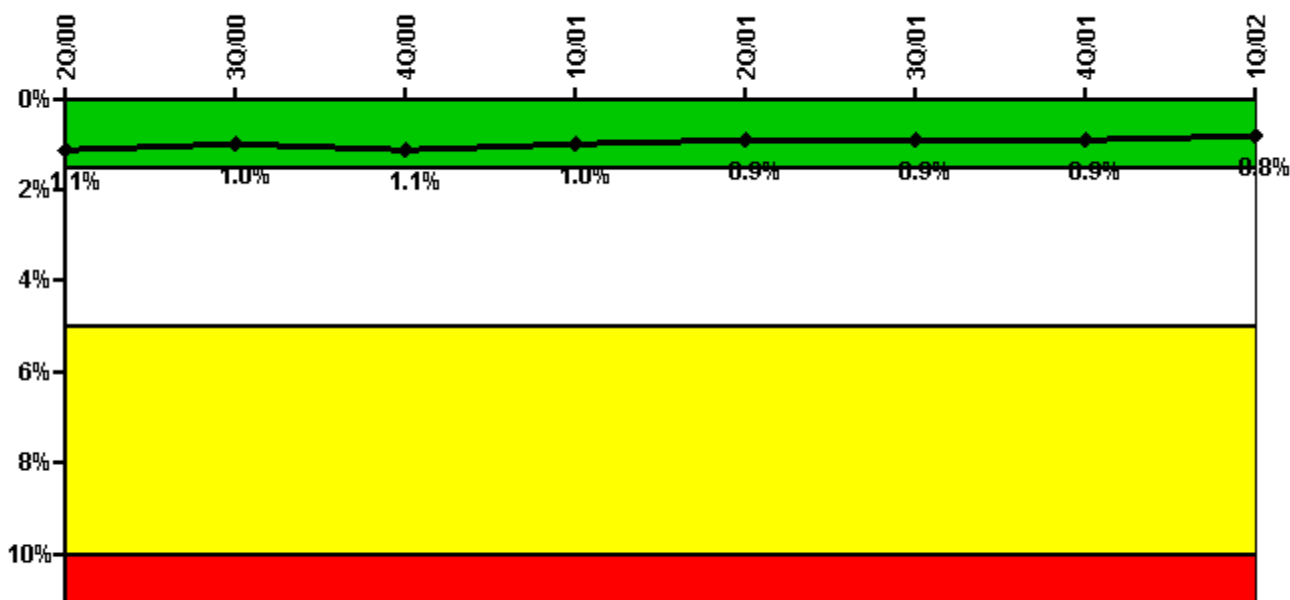
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

#### 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	0.65	21.22	0	20.62	0	26.88	21.84	0.09
Unplanned unavailable hours	0	0	0	9.12	0	60.07	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
<b>Train 2</b>								
Planned unavailable hours	24.67	0	0	21.48	0	5.93	0.02	28.13
Unplanned unavailable hours	0	0	0	6.50	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	2208.00	2160.00	2184.00	2208.00	2208.00	2160.00
Indicator value	0.7%	0.7%	0.6%	0.7%	0.6%	0.7%	0.7%	0.7%

Licensee Comments: none

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



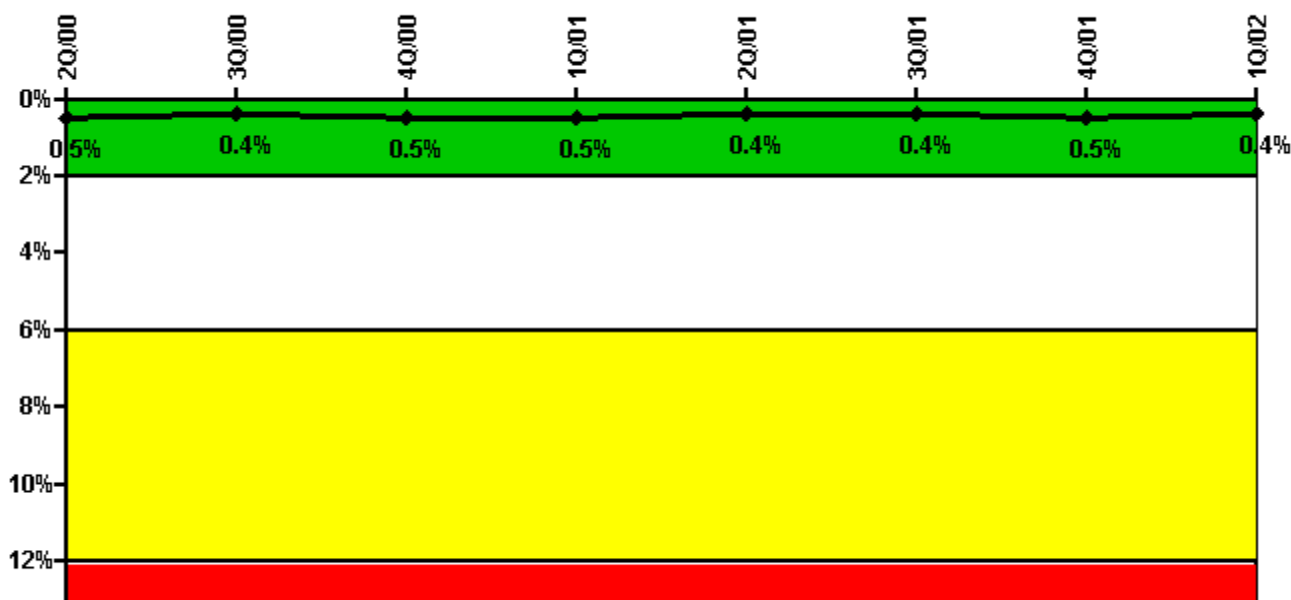
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

#### Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
<b>Train 1</b>								
Planned unavailable hours	9.18	16.87	18.20	15.27	0.90	29.17	17.52	13.70
Unplanned unavailable hours	0	0	0	0	0	0	0	0
Fault exposure hours	13.10	0	29.57	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2184.00	2170.55	1414.68	2160.00	2184.00	2174.40	1508.90	1776.02
<b>Train 2</b>								
Planned unavailable hours	24.26	25.23	31.28	13.42	7.38	7.69	8.35	21.95
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	2170.55	1414.68	2160.00	2184.00	2174.40	1508.90	1776.02
Indicator value	1.1%	1.0%	1.1%	1.0%	0.9%	0.9%	0.9%	0.8%

Licensee Comments: none

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



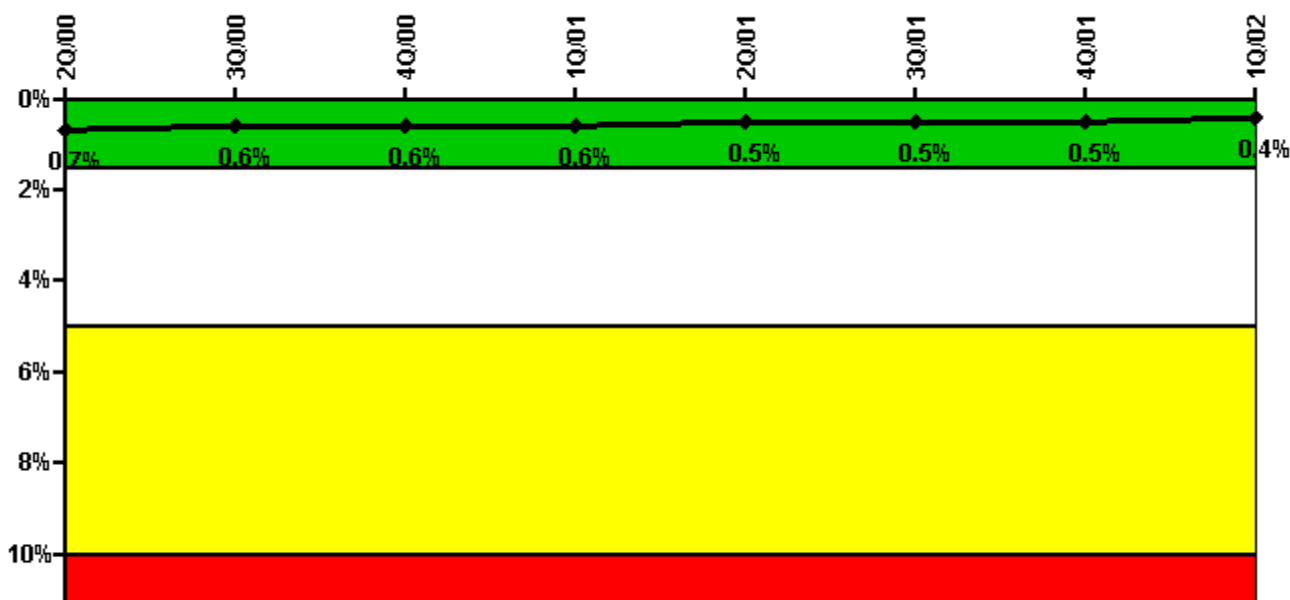
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

#### 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	3.99	13.50	31.48	13.52	1.13	17.19	19.76	0.63
Unplanned unavailable hours	21.97	0	13.97	0	0	0	14.52	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	2170.55	1414.68	2160.00	2184.00	2174.40	1508.90	1776.02
<b>Train 2</b>								
Planned unavailable hours	9.60	0.60	0.40	13.28	1.02	5.50	1.40	10.90
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	2170.55	1414.68	2160.00	2184.00	2174.40	1508.90	1776.02
<b>Train 3</b>								
Planned unavailable hours	0.97	6.47	10.27	0.42	0.55	0.67	0.94	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	2184.00	2170.55	1414.68	2160.00	2184.00	2174.40	1508.90	1776.02
<b>Indicator value</b>	<b>0.5%</b>	<b>0.4%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.5%</b>	<b>0.4%</b>

Licensee Comments: none

### Safety System Unavailability, Residual Heat Removal System



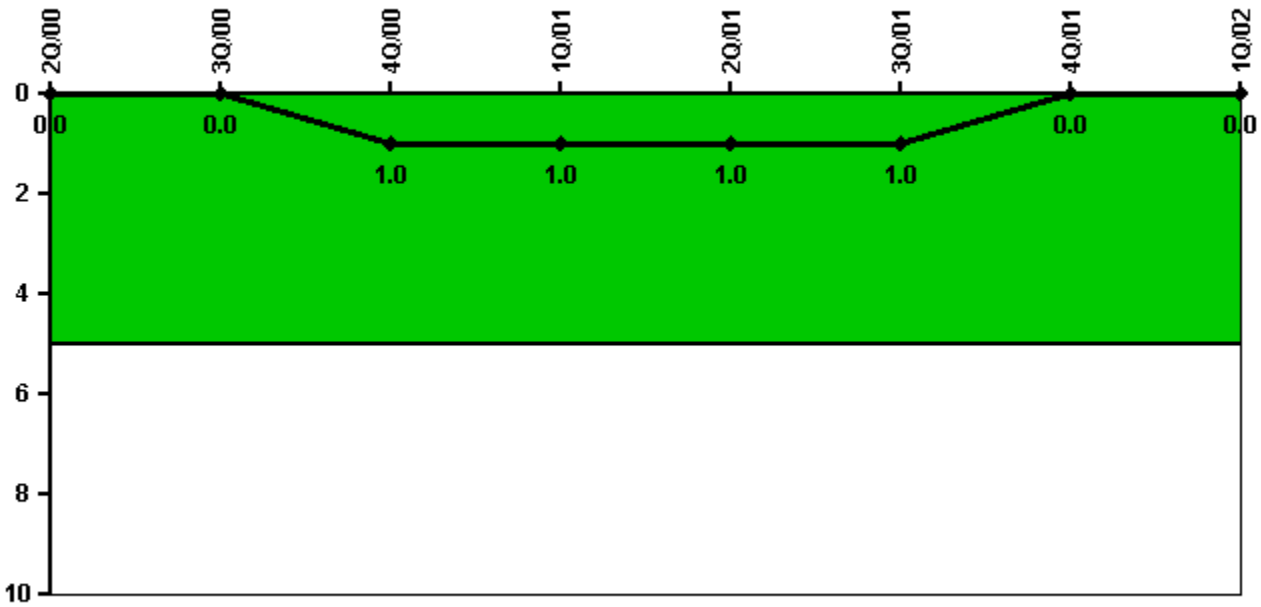
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

#### 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	11.51	27.48	21.16	14.62	2.33	25.86	37.19	9.95
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	1440.51	2160.00	2184.00	2208.00	1567.70	1785.00
<b>Train 2</b>								
Planned unavailable hours	48.68	11.65	5.25	21.73	2.70	10.09	7.83	26.74
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	1440.51	2160.00	2184.00	2208.00	1567.70	1785.00
<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	357.28	0	0	0	356.70	49.58
<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	0	0	298.75	0	0	0	469.78	212.75
Indicator value	0.7%	0.6%	0.6%	0.6%	0.5%	0.5%	0.5%	0.4%

Licensee Comments: none

### Safety System Functional Failures (PWR)



Thresholds: White > 5.0

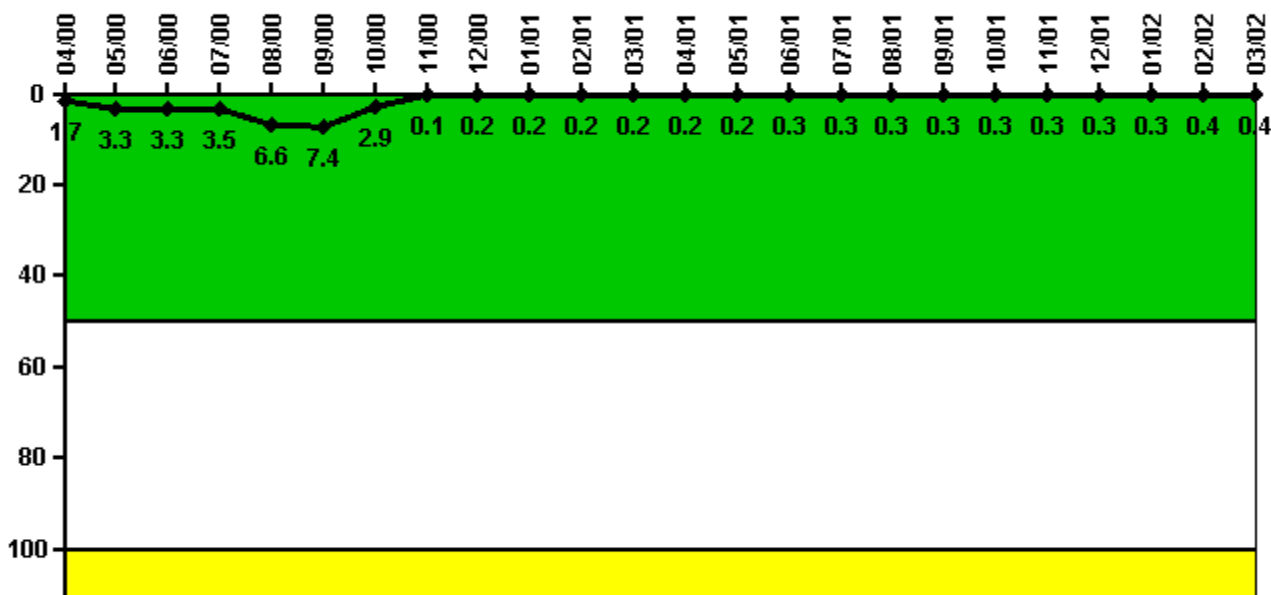
#### Notes

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	0	1	0	0	0	0	0
Indicator value	0	0	1	1	1	1	0	0

Licensee Comments: none



### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

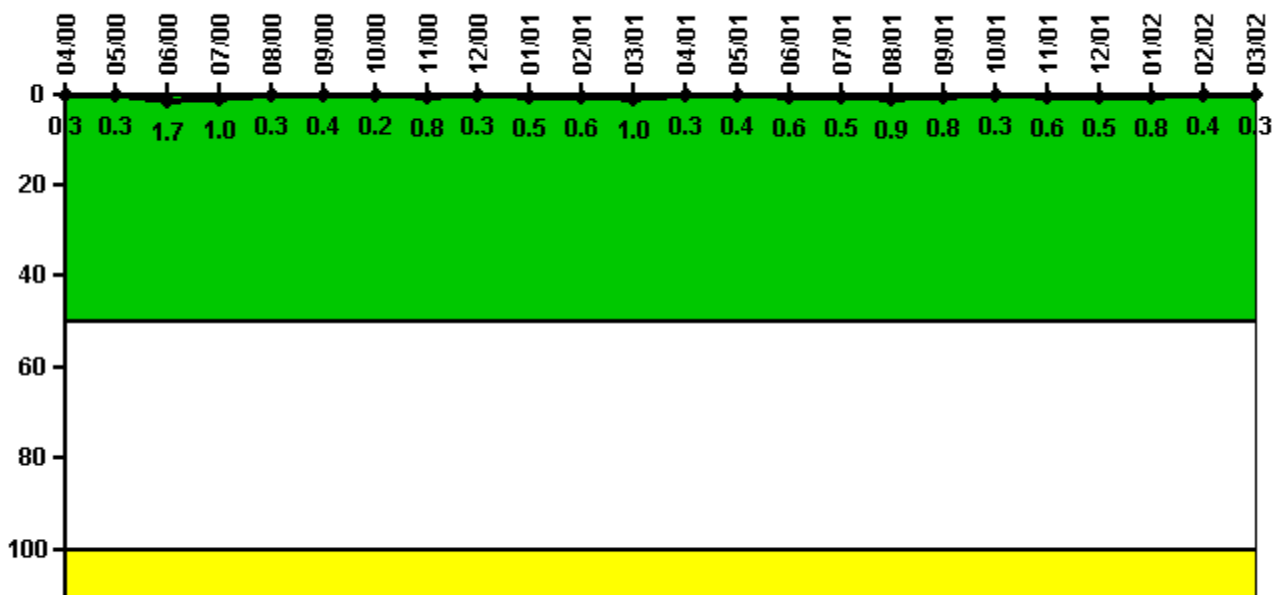
Reactor Coolant System Activity	4/00	5/00	6/00	7/00	8/00	9/00	10/00	11/00	12/00	1/01	2/01	3/01
Maximum activity	0.017000	0.033000	0.033000	0.035000	0.066000	0.074000	0.029000	0.001000	0.002000	0.002000	0.002000	0.002000
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	1.7	3.3	3.3	3.5	6.6	7.4	2.9	0.1	0.2	0.2	0.2	0.2

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

Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

#### Notes

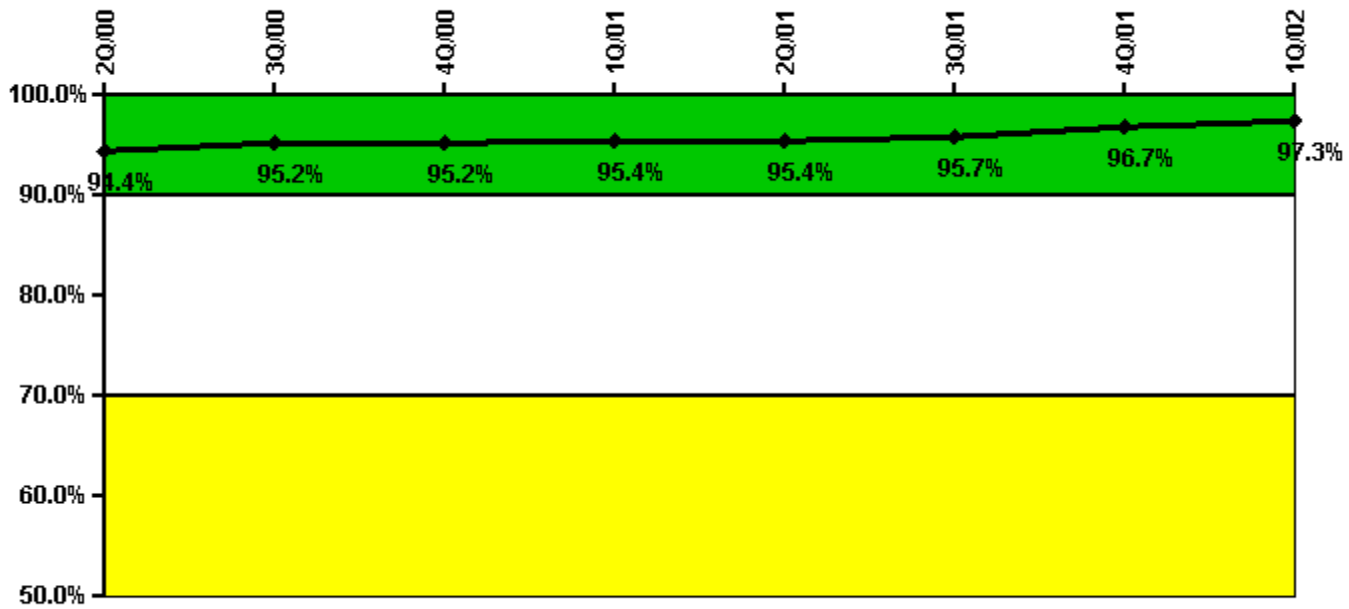
Reactor Coolant System Leakage	4/00	5/00	6/00	7/00	8/00	9/00	10/00	11/00	12/00	1/01	2/01	3/01
Maximum leakage	0.026	0.031	0.166	0.102	0.033	0.036	0.019	0.077	0.029	0.051	0.059	0.099
Technical specification limit	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.3	0.3	1.7	1.0	0.3	0.4	0.2	0.8	0.3	0.5	0.6	1.0

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

Licensee Comments: none

### Drill/Exercise Performance



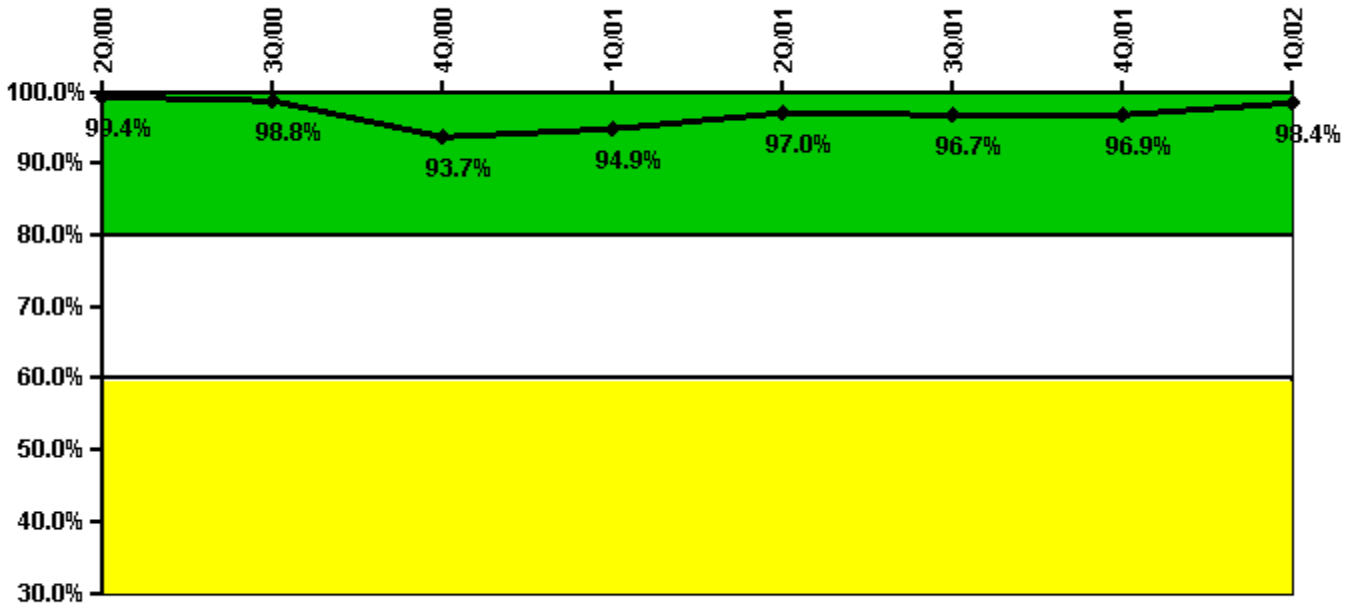
Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Successful opportunities	22.0	95.0	0	20.0	0	9.0	86.0	19.0
Total opportunities	22.0	100.0	0	20.0	0	9.0	87.0	20.0
Indicator value	94.4%	95.2%	95.2%	95.4%	95.4%	95.7%	96.7%	97.3%

Licensee Comments: none

### ERO Drill Participation



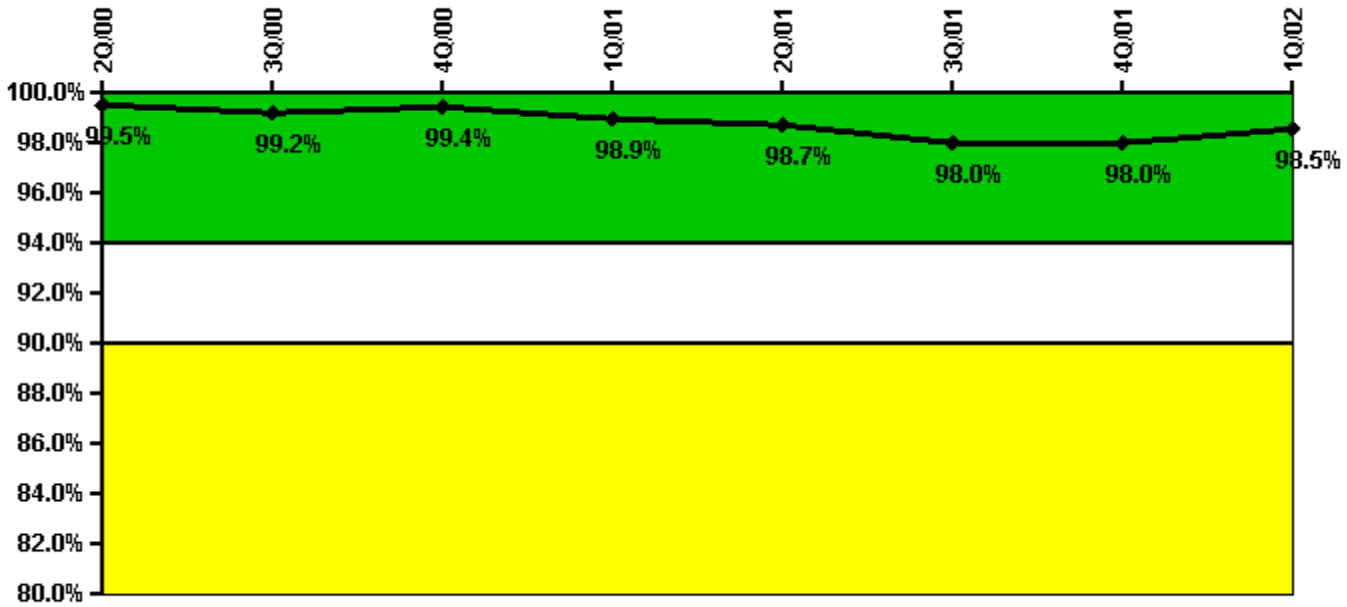
Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Participating Key personnel	166.0	165.0	163.0	166.0	160.0	176.0	188.0	188.0
Total Key personnel	167.0	167.0	174.0	175.0	165.0	182.0	194.0	191.0
Indicator value	99.4%	98.8%	93.7%	94.9%	97.0%	96.7%	96.9%	98.4%

Licensee Comments: none

### Alert & Notification System



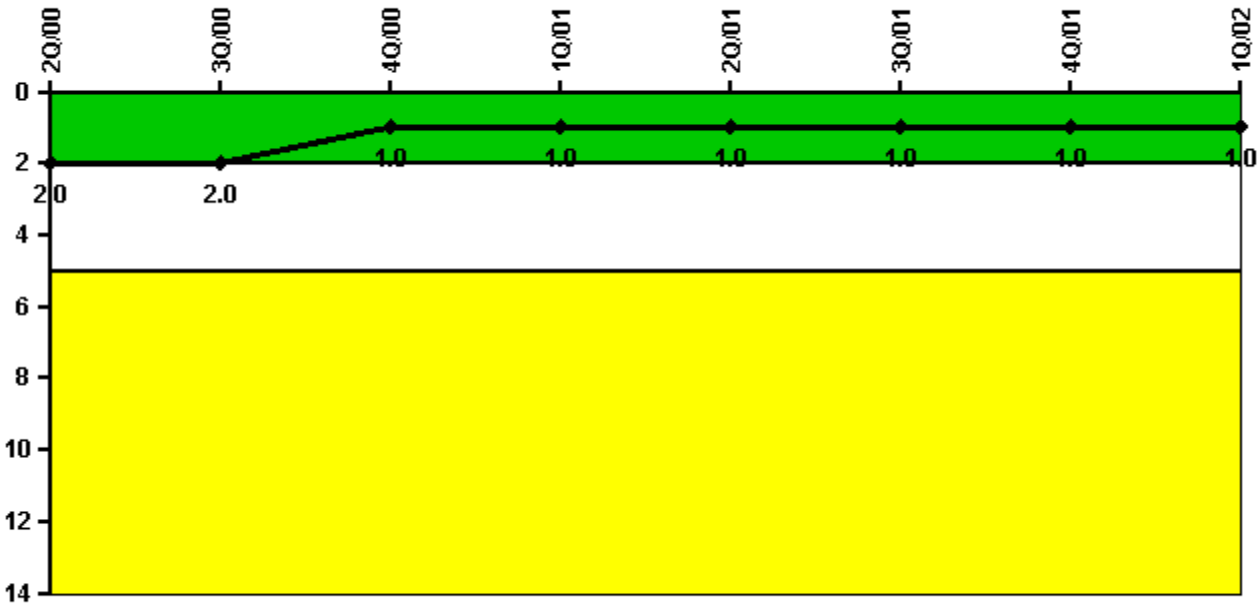
Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

Alert & Notification System	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
Successful siren-tests	385	347	467	382	382	375	466	390
Total sirens-tests	390	351	468	390	390	390	468	390
Indicator value	99.5%	99.2%	99.4%	98.9%	98.7%	98.0%	98.0%	98.5%

Licensee Comments: none

### Occupational Exposure Control Effectiveness



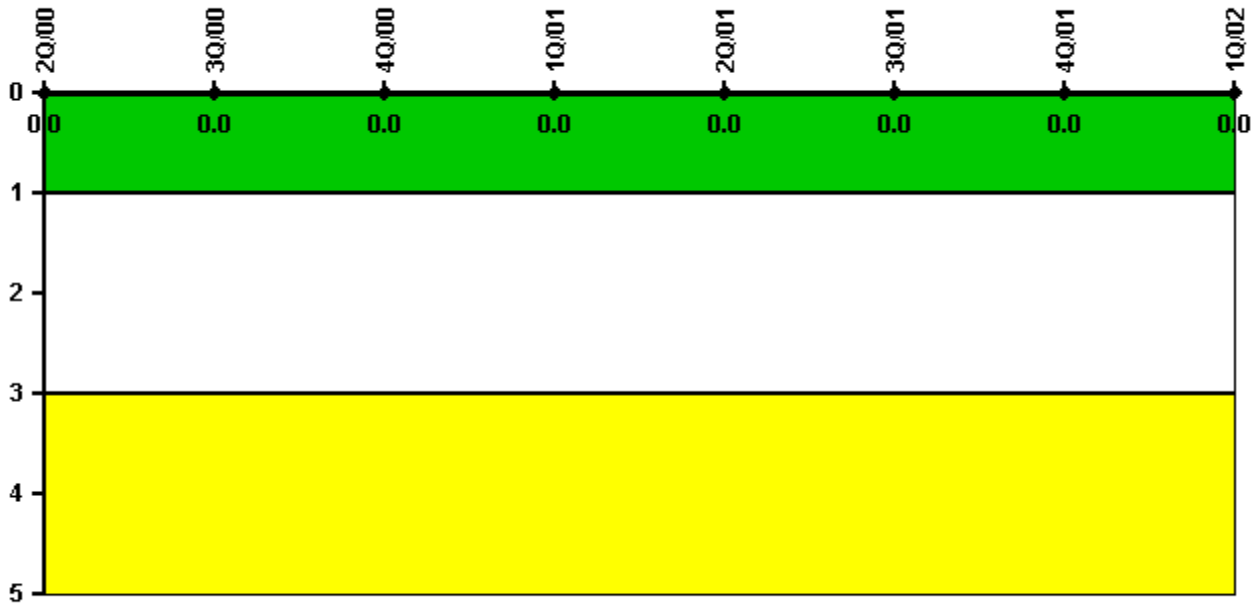
Thresholds: White > 2.0 Yellow > 5.0

#### 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	1	0	0	0	1	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	2	2	1	1	1	1	1	1

Licensee Comments: none

### RETS/ODCM Radiological Effluent



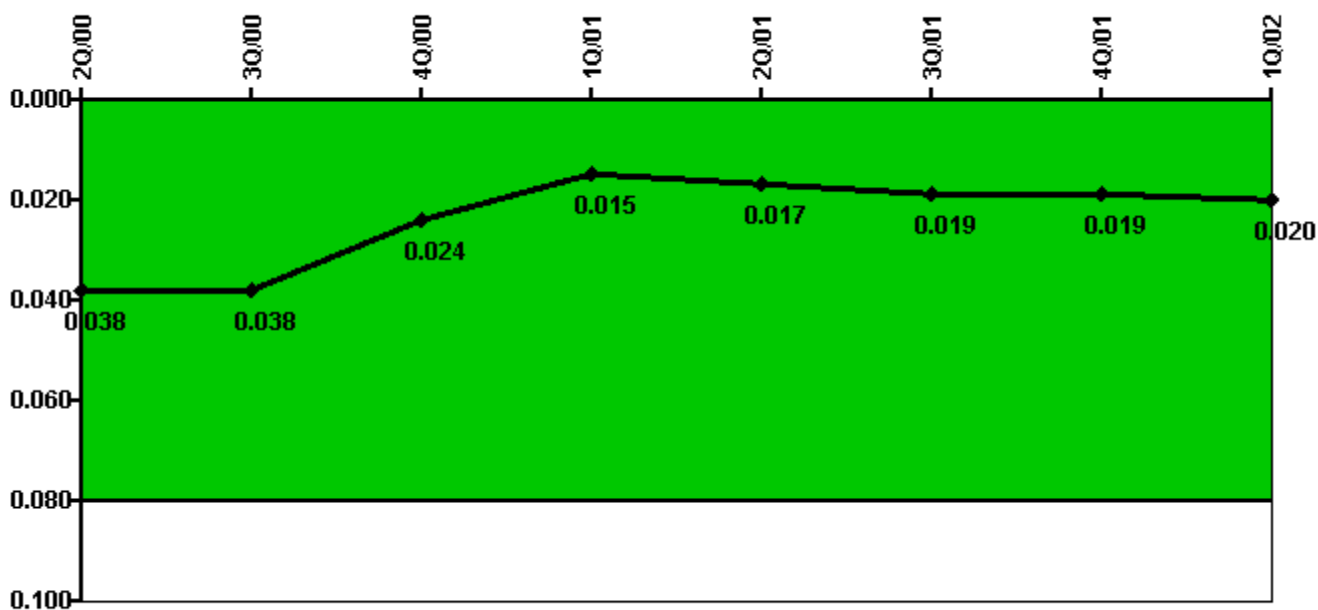
Thresholds: White > 1.0 Yellow > 3.0

#### 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

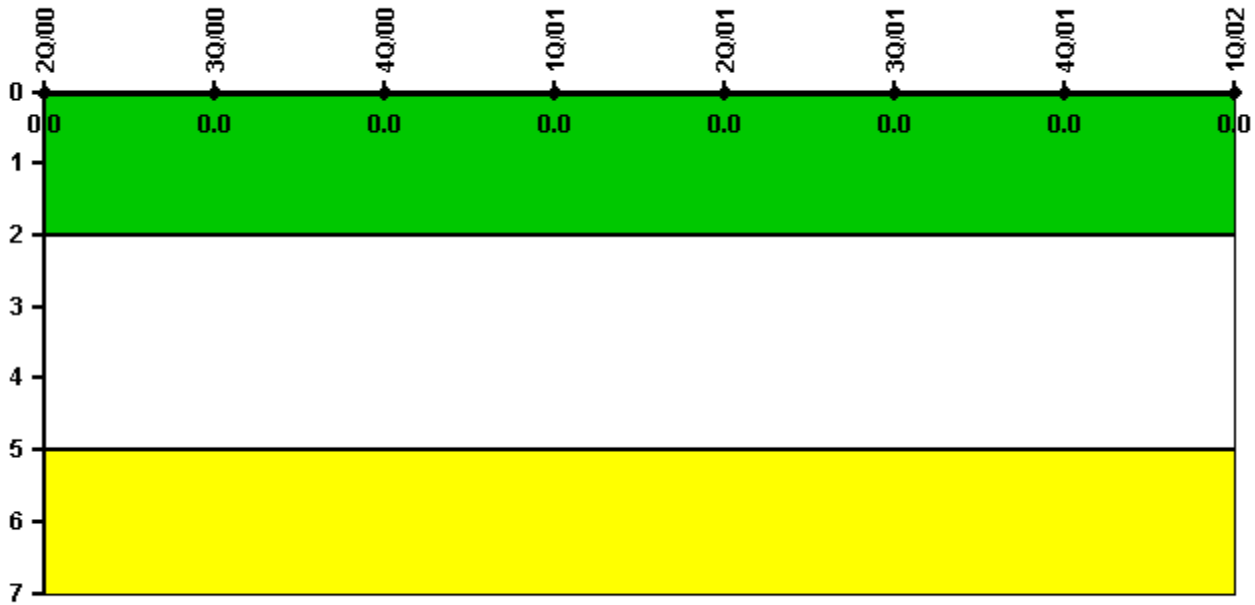
#### Notes

Protected Area Security Performance Index	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02
IDS compensatory hours	79.20	85.60	95.20	71.50	109.90	71.00	65.30	87.00
CCTV compensatory hours	76.7	8.5	1.3	19.8	82.6	69.5	14.6	39.4
IDS normalization factor	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85
CCTV normalization factor	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
<b>Index Value</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>	<b>0.019</b>	<b>0.020</b>

Licensee Comments: none



### Personnel Screening Program



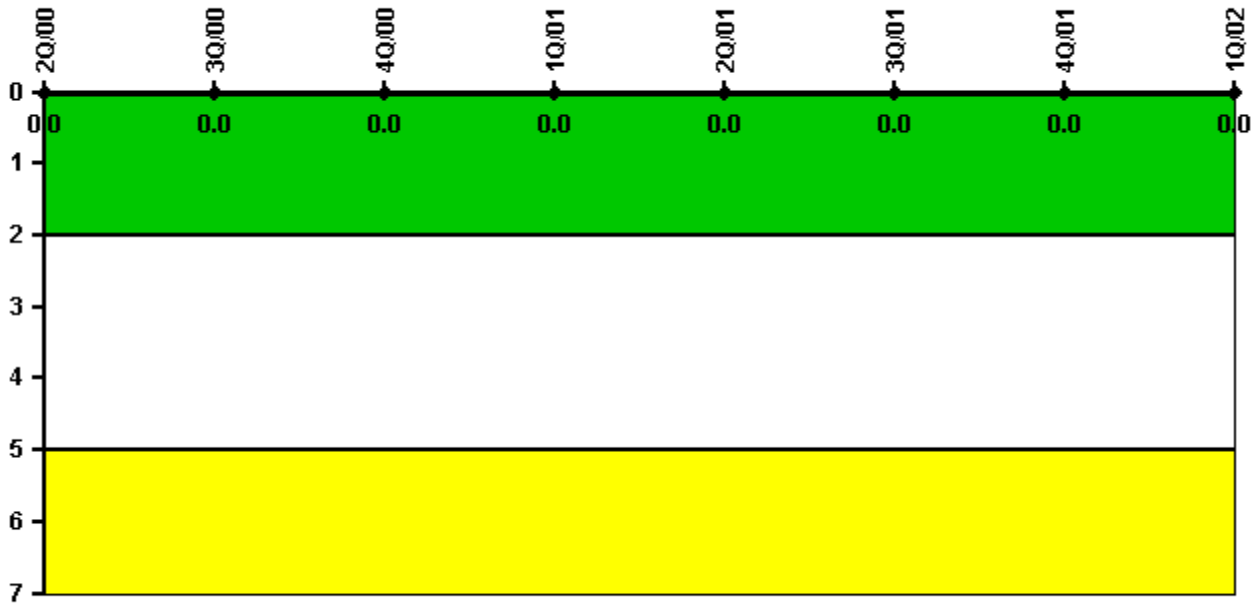
Thresholds: White > 2.0 Yellow > 5.0

#### 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