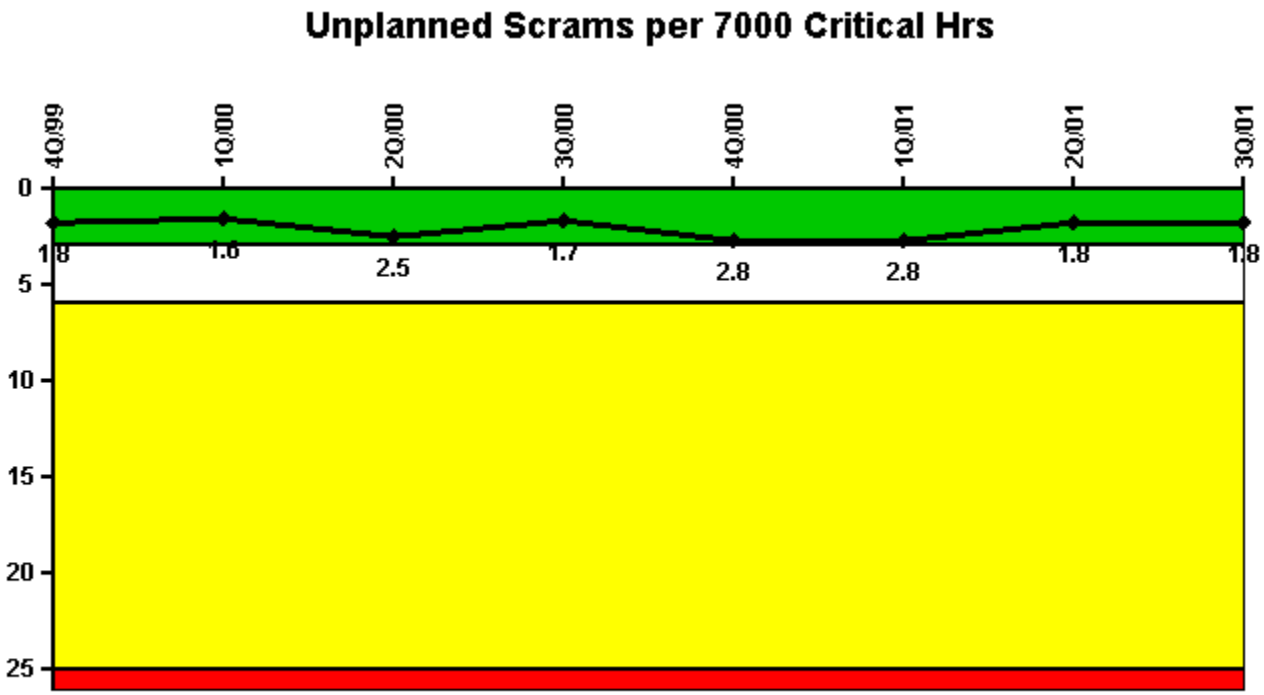
Diablo Canyon 1

3Q/2001 Performance Indicators

Licensee's General Comments: none



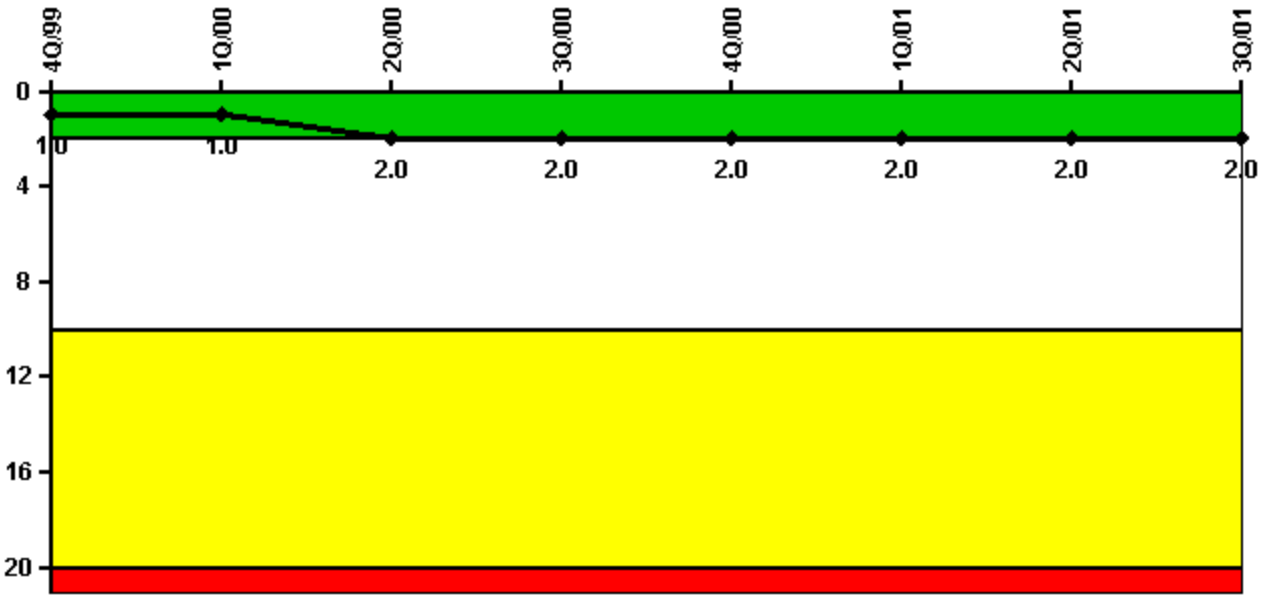
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

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	1.0	0	1.0	0	2.0	0	0	0
Critical hours	2140.8	2184.0	1906.8	2208.0	1299.8	2160.0	2183.0	2208.0
Indicator value	**1.8**	**1.6**	**2.5**	**1.7**	**2.8**	**2.8**	**1.8**	**1.8**

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



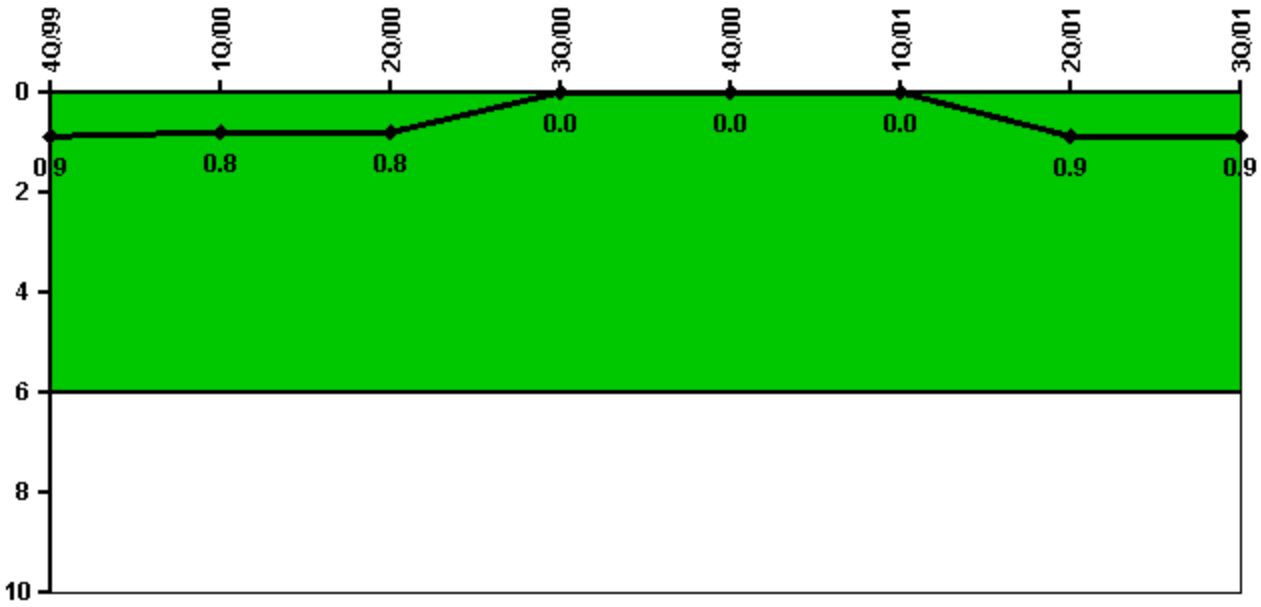
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

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	1.0	0	1.0	0	0	0	0	0
Indicator value	**1.0**	**1.0**	**2.0**	**2.0**	**2.0**	**2.0**	**2.0**	**2.0**

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



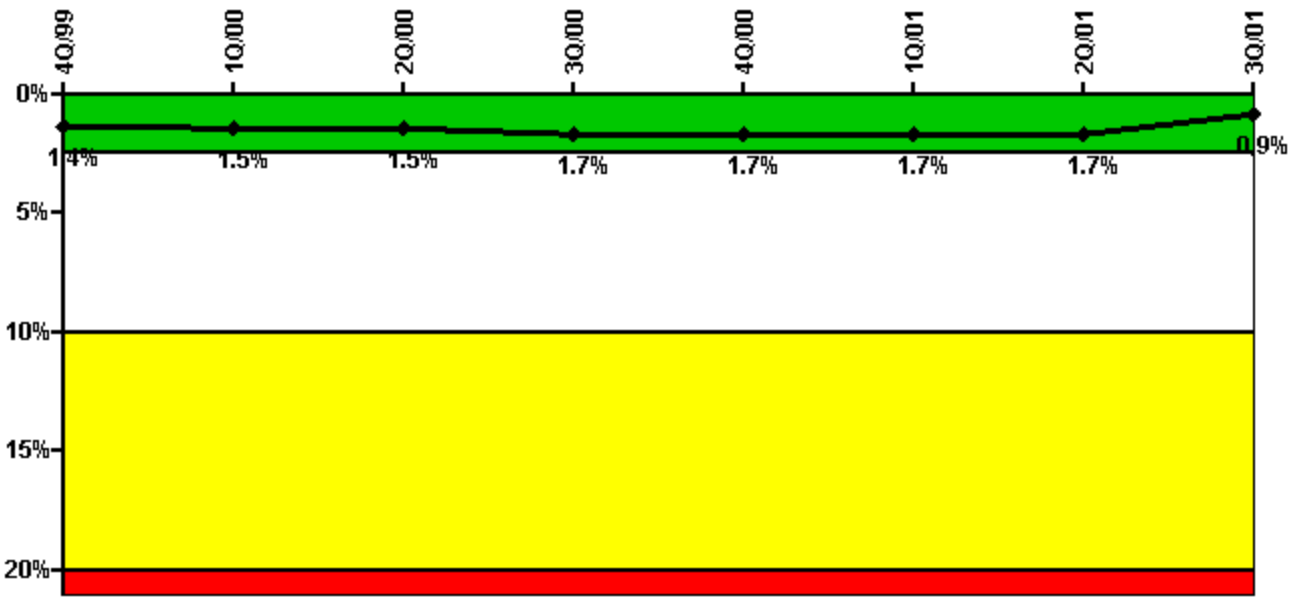
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Unplanned power changes	0	0	0	0	0	0	1.0	0
Critical hours	2140.8	2184.0	1906.8	2208.0	1299.8	2160.0	2183.0	2208.0
Indicator value	**0.9**	**0.8**	**0.8**	**0**	**0**	**0**	**0.9**	**0.9**

Licensee Comments: none

Safety System Unavailability, Emergency AC Power, >2EDG



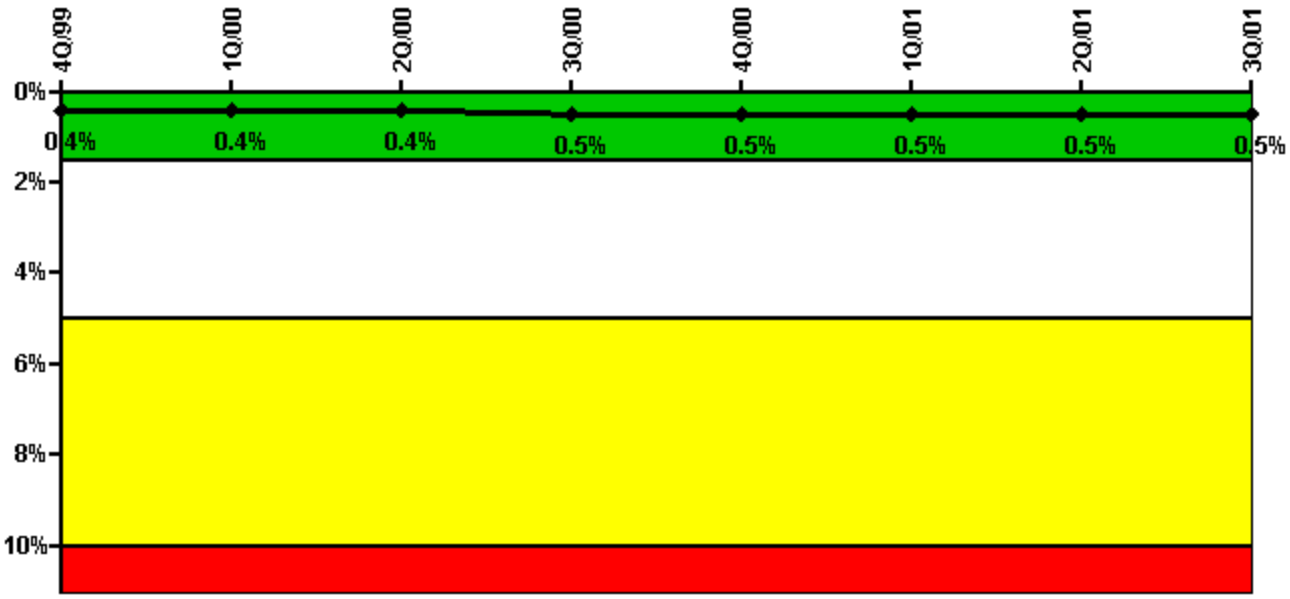
Thresholds: White > 2.5% Yellow > 10.0% Red > 20.0%

Notes

Safety System Unavailability, Emergency AC Power, >2EDG	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Train 1								
Planned unavailable hours	1.40	0.17	0.10	67.20	0.10	0.80	2.30	16.90
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	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Train 2								
Planned unavailable hours	0	1.18	51.80	4.50	0.10	0.50	1.40	32.20
Unplanned unavailable hours	0	0	0	4.00	0	50.90	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	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Train 3								
Planned unavailable hours	1.60	0.10	11.20	50.00	16.00	0.90	26.60	0.10
Unplanned unavailable hours	0	20.50	0	13.90	21.40	14.40	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	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Indicator value	**1.4%**	**1.5%**	**1.5%**	**1.7%**	**1.7%**	**1.7%**	**1.7%**	**0.9%**

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



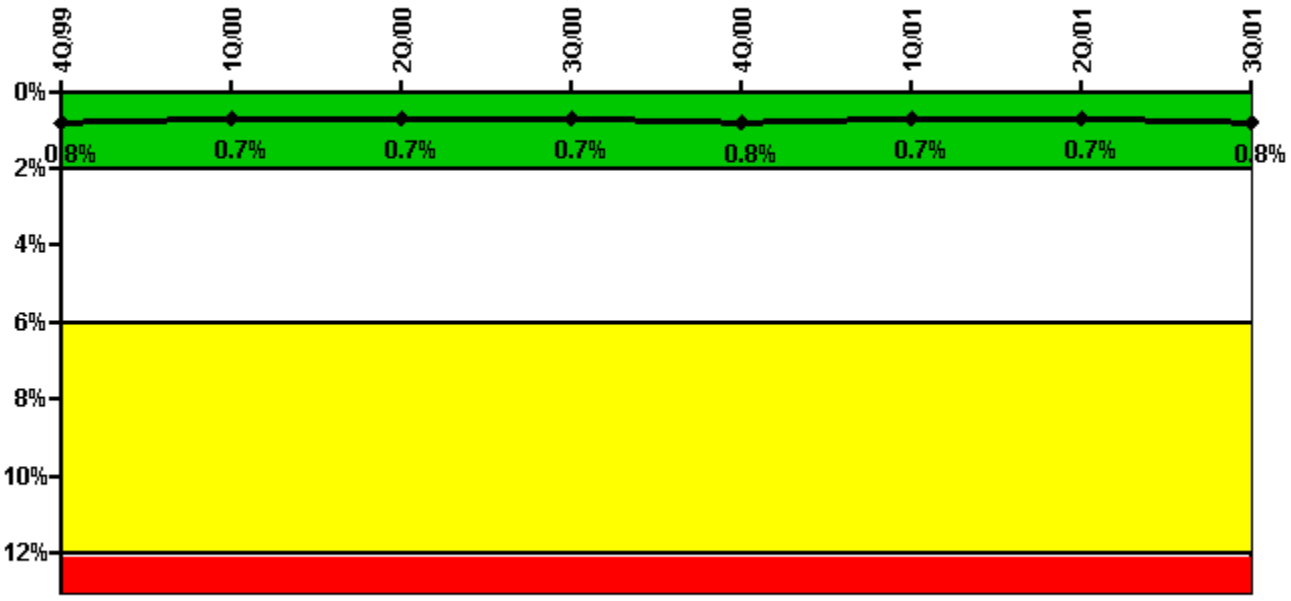
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

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
Train 1								
Planned unavailable hours	0	0	44.50	0	4.80	13.40	43.70	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	2140.80	2184.00	1906.80	2208.00	1299.80	2160.00	2183.00	2208.00
Train 2								
Planned unavailable hours	5.00	0	0	12.10	6.40	24.90	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	2140.80	2184.00	1906.80	2208.00	1299.80	2160.00	2183.00	2208.00
Train 3								
Planned unavailable hours	0.40	18.92	0.10	13.00	0.30	1.20	9.82	0.10
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	2140.80	2184.00	1906.80	2208.00	1299.80	2160.00	2183.00	2208.00
Train 4								
Planned unavailable hours	0.10	1.03	26.20	0.45	11.00	1.20	0.10	12.00
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	2140.80	2184.00	1906.80	2208.00	1299.80	2160.00	2183.00	2208.00
Indicator value	**0.4%**	**0.4%**	**0.4%**	**0.5%**	**0.5%**	**0.5%**	**0.5%**	**0.5%**

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



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

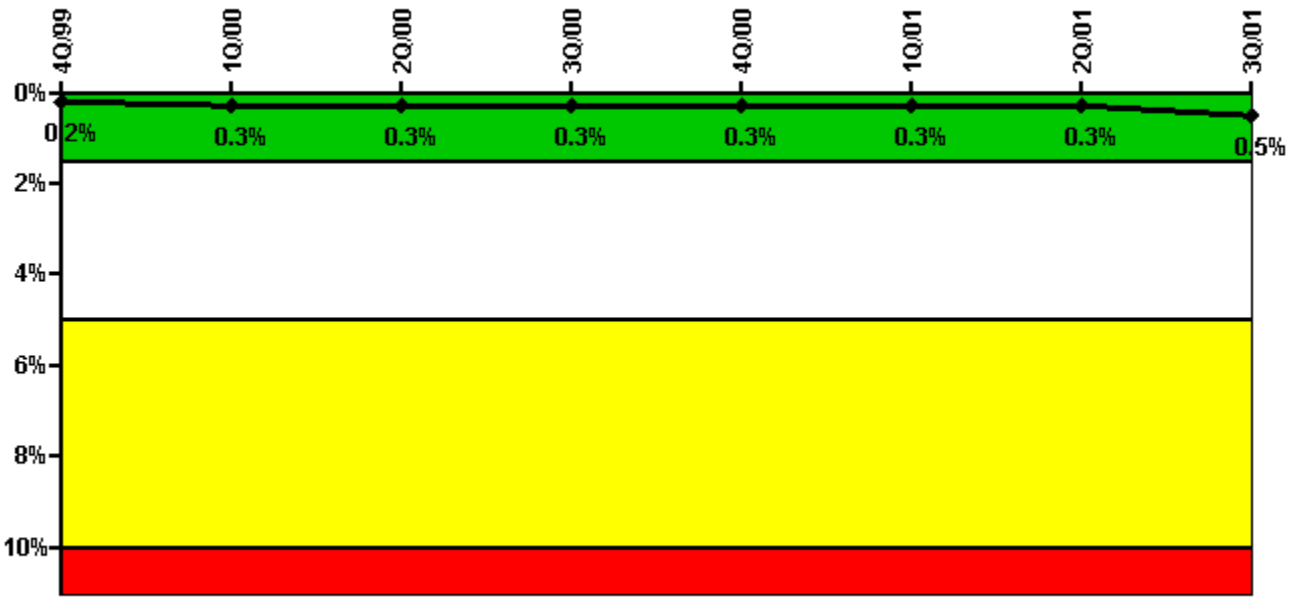
Notes

Safety System Unavailability, Heat Removal System (AFW)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Train 1								
Planned unavailable hours	7.40	18.10	22.60	36.00	47.50	2.50	19.20	7.60
Unplanned unavailable hours	0	43.15	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	2140.80	2184.00	1906.80	2208.00	1299.80	2160.00	2183.00	2208.00
Train 2								
Planned unavailable hours	5.40	12.22	1.10	3.60	18.70	2.40	4.60	32.20
Unplanned unavailable hours	0	0	0	0	35.40	0	0.40	16.20
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2140.80	2184.00	1906.80	2208.00	1299.80	2160.00	2183.00	2208.00
Train 3								
Planned unavailable hours	1.10	1.28	10.40	3.40	0.50	15.40	0	26.30
Unplanned unavailable hours	0	0	0	0	0	0	3.20	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	2140.80	2184.00	1906.80	2208.00	1299.80	2160.00	2183.00	2208.00
Indicator value	**0.8%**	**0.7%**	**0.7%**	**0.7%**	**0.8%**	**0.7%**	**0.7%**	**0.8%**

Licensee Comments:

2Q/01: The number of 2Q01 unavailability hours for Trains 2 and 3 were decreased by 17.3 hours and 7.2 hours, respectively, to reflect a reduction in unavailability time attributed to a line flushing evolution performed during 2Q01. The entire period during which the flushing activities were occurring was erroneously assigned as unavailability hours when, in fact, the actual unavailability time was substantially less. The flushing was required to remove pump suction line impurities attributed to in-leakage from a backup water source. The changes do not affect other quarters or the color of the PI.

Safety System Unavailability, Residual Heat Removal System



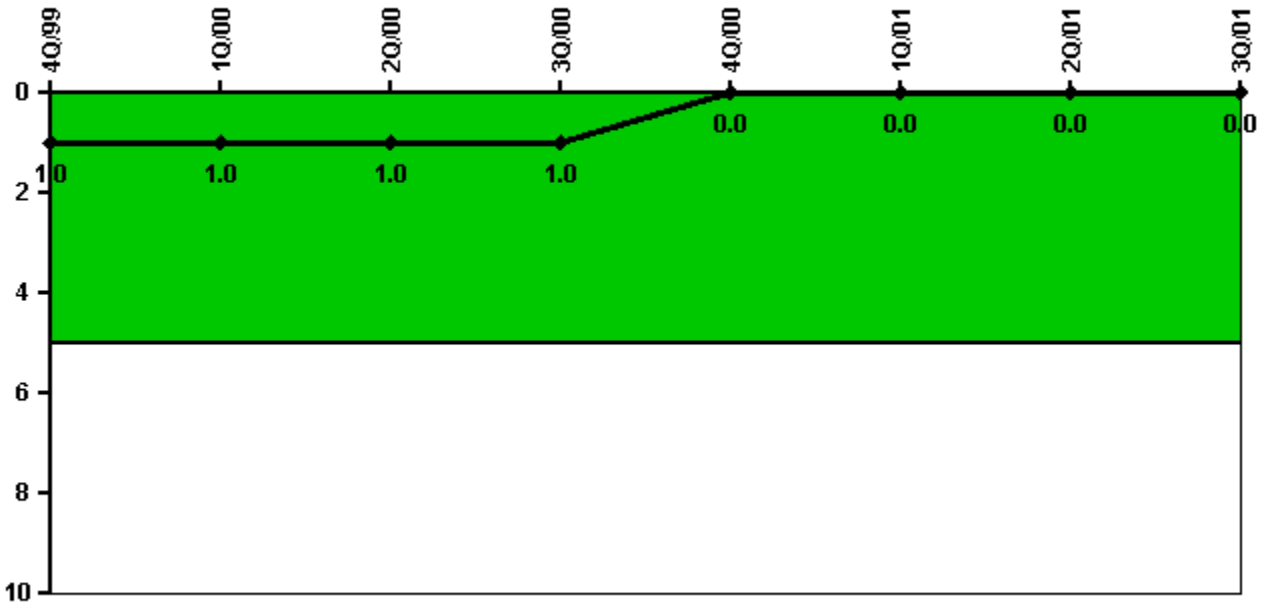
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Train 1								
Planned unavailable hours	2.60	1.08	26.10	0.45	13.10	0.90	0.30	11.60
Unplanned unavailable hours	0	0	0	0	0	0	0	6.70
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2140.80	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Train 2								
Planned unavailable hours	0.30	2.77	22.10	0.25	0	10.40	0.60	72.10
Unplanned unavailable hours	0	0	0	0	0	0	0	9.50
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2140.80	2184.00	2183.00	2208.00	2209.00	2160.00	2183.00	2208.00
Indicator value	**0.2%**	**0.3%**	**0.3%**	**0.3%**	**0.3%**	**0.3%**	**0.3%**	**0.5%**

Licensee Comments: none

Safety System Functional Failures (PWR)



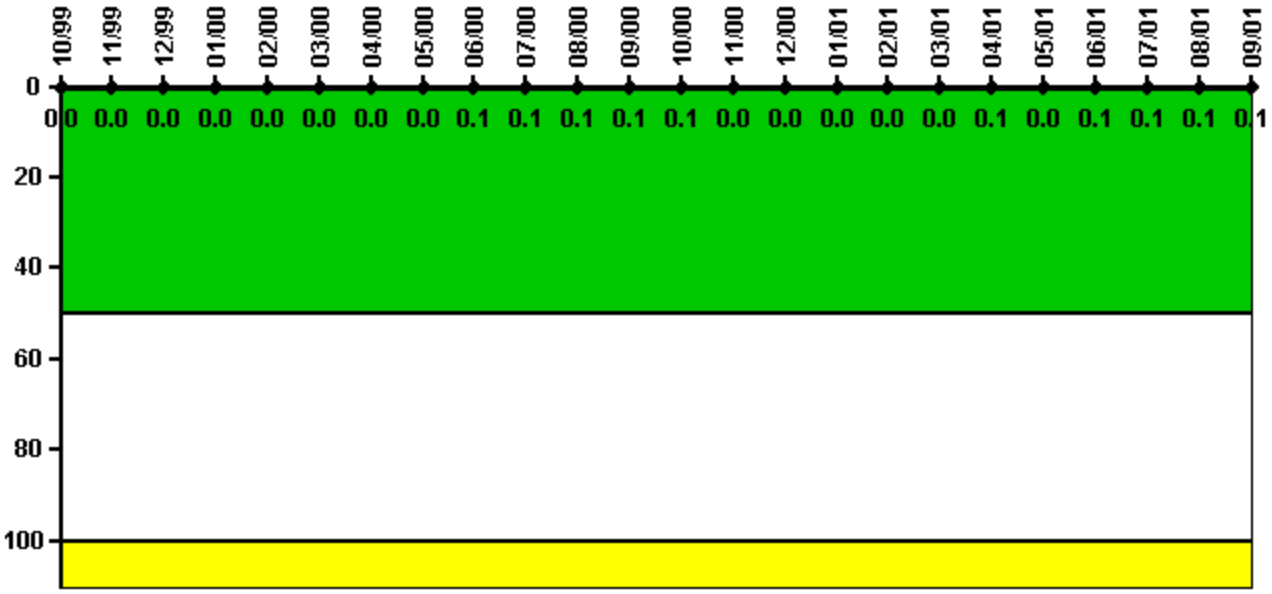
Thresholds: White > 5.0

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

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

Notes

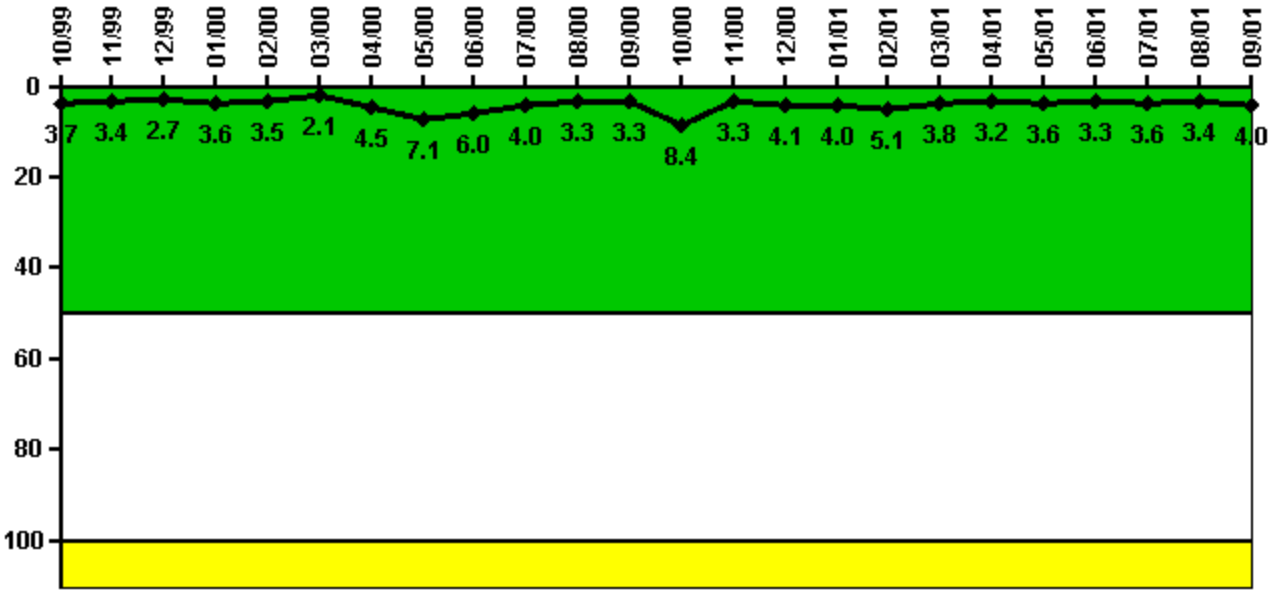
Reactor Coolant System Activity	10/99	11/99	12/99	1/00	2/00	3/00	4/00	5/00	6/00	7/00	8/00	9/00
Maximum activity	0.000412	0.000364	0.000444	0.000424	0.000495	0.000482	0.000408	0.000486	0.000605	0.000567	0.000608	0.000562
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.7	0.7	0.7
Indicator value	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.1**	**0.1**	**0.1**	**0.1**

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	0.000621	0.000222	0.000254	0.000265	0.000285	0.000350	0.000368	0.000340	0.000414	0.000476	0.000631	0.000407
Technical specification limit	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Indicator value	**0.1**	**0**	**0**	**0**	**0**	**0**	**0.1**	**0**	**0.1**	**0.1**	**0.1**	**0.1**

Licensee Comments:

9/01: The limits for RCS dose equivalent I-131 specific activity are being administratively controlled at lower values (varies based on RCS letdown flow rate) than the Technical Specification limit of 1.0 micro Curies per gram. The reduced limits are to compensate for nonconservatisms identified in a vendor's calculation for iodine appearance rates utilized in accident dose analyses. The reduced limits will remain in effect until affected analyses are revised.

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	0.365	0.340	0.270	0.357	0.349	0.214	0.454	0.705	0.602	0.397	0.332	0.327
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	**3.7**	**3.4**	**2.7**	**3.6**	**3.5**	**2.1**	**4.5**	**7.1**	**6.0**	**4.0**	**3.3**	**3.3**

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	0.839	0.325	0.405	0.398	0.509	0.379	0.317	0.360	0.327	0.357	0.339	0.395
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	**8.4**	**3.3**	**4.1**	**4.0**	**5.1**	**3.8**	**3.2**	**3.6**	**3.3**	**3.6**	**3.4**	**4.0**

Licensee Comments:

9/01: Each RCS leakage flow rate value has been increased by 0.035 gpm to account for zinc acetate flow that is periodically injected into the RCS for corrosion control purposes. This flow rate was inadvertently excluded from the PI calculation methodology. This change affects all data submittals for this PI and is therefore being incorporated into each PI data submittal since the start of the ROP in April 2000. The change did not result in a color change for this PI for any quarter.

6/01: Each RCS leakage flow rate value has been increased by 0.035 gpm to account for zinc acetate flow that is periodically injected into the RCS for corrosion control purposes. This flow rate was inadvertently excluded from the PI calculation methodology. This change affects all data submittals for this PI and is therefore being incorporated into each PI data submittal since the start of the ROP in April 2000. The change did not result in a color change for this PI for any quarter.

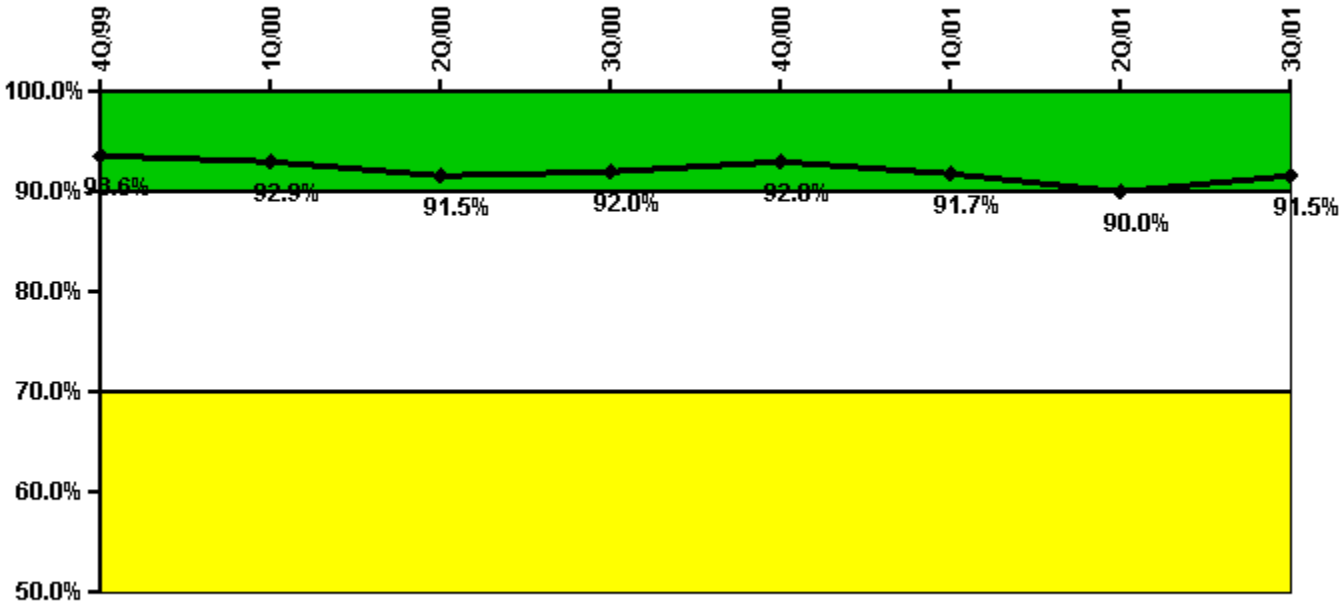
3/01: Each RCS leakage flow rate value has been increased by 0.035 gpm to account for zinc acetate flow that is periodically injected into the RCS for corrosion control purposes. This flow rate was inadvertently excluded from the PI calculation methodology. This change affects all data submittals for this PI and is therefore being incorporated into each PI data submittal since the start of the ROP in April 2000. The change did not result in a color change for this PI for any quarter.

12/00: Each RCS leakage flow rate value has been increased by 0.035 gpm to account for zinc acetate flow that is periodically injected into the RCS for corrosion control purposes. This flow rate was inadvertently excluded from the PI calculation methodology. This change affects all data submittals for this PI and is therefore being incorporated into each PI data submittal since the start of the ROP in April 2000. The change did not result in a color change for this PI for any quarter.

9/00: Each RCS leakage flow rate value has been increased by 0.035 gpm to account for zinc acetate flow that is periodically injected into the RCS for corrosion control purposes. This flow rate was inadvertently excluded from the PI calculation methodology. This change affects all data submittals for this PI and is therefore being incorporated into each PI data submittal since the start of the ROP in April 2000. The change did not result in a color change for this PI for any quarter.

6/00: Each RCS leakage flow rate value has been increased by 0.035 gpm to account for zinc acetate flow that is periodically injected into the RCS for corrosion control purposes. This flow rate was inadvertently excluded from the PI calculation methodology. This change affects all data submittals for this PI and is therefore being incorporated into each PI data submittal since the start of the ROP in April 2000. The change did not result in a color change for this PI for any quarter.

Drill/Exercise Performance



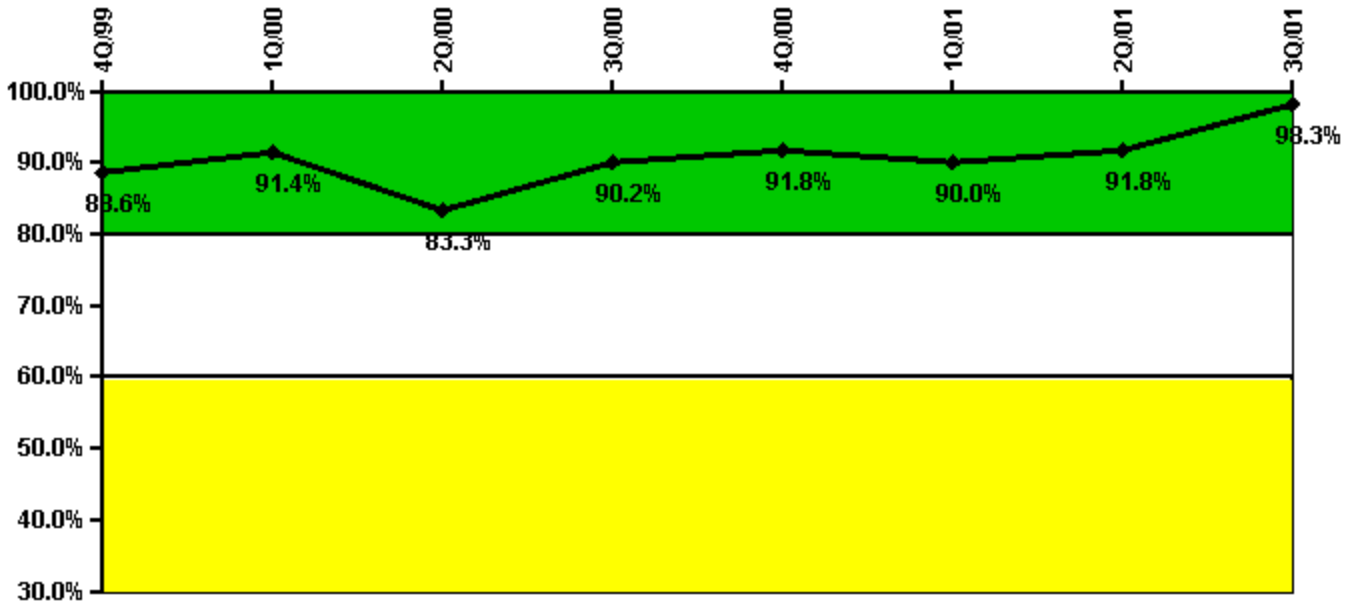
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Successful opportunities	10.0	24.0	28.0	21.0	10.0	36.0	21.0	23.0
Total opportunities	10.0	27.0	33.0	23.0	10.0	40.0	23.0	23.0
Indicator value	**93.6%**	**92.9%**	**91.5%**	**92.0%**	**92.8%**	**91.7%**	**90.0%**	**91.5%**

Licensee Comments: none

ERO Drill Participation



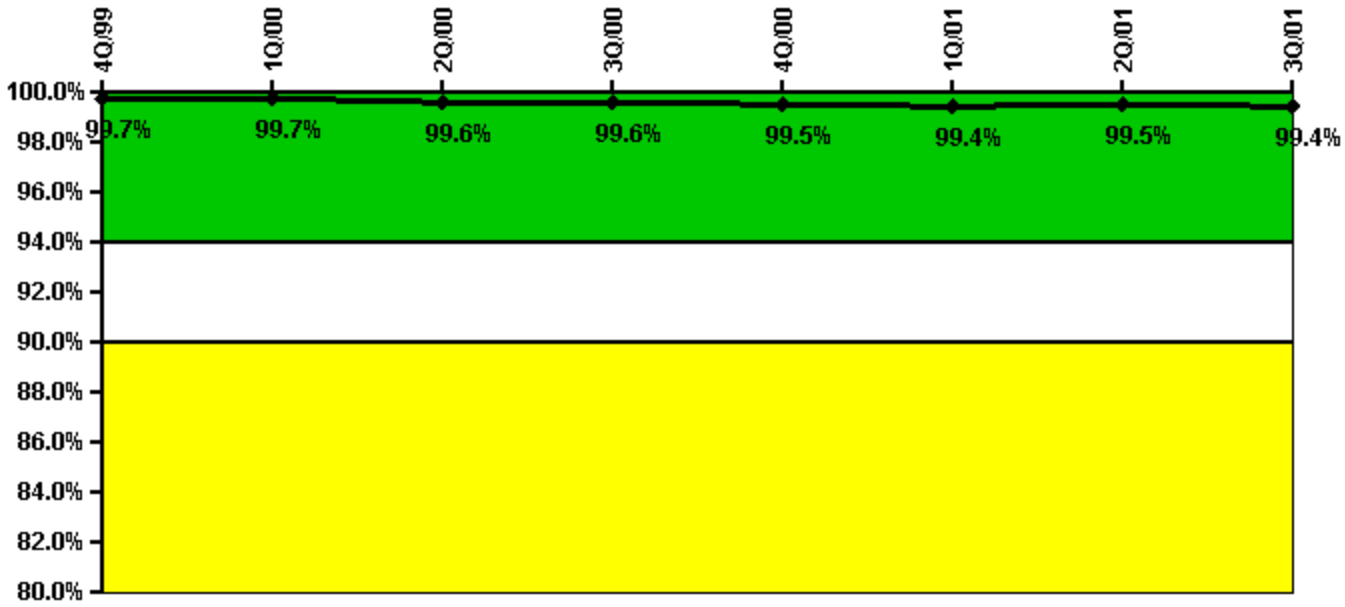
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Participating Key personnel	62.0	53.0	50.0	55.0	56.0	54.0	56.0	59.0
Total Key personnel	70.0	58.0	60.0	61.0	61.0	60.0	61.0	60.0
Indicator value	**88.6%**	**91.4%**	**83.3%**	**90.2%**	**91.8%**	**90.0%**	**91.8%**	**98.3%**

Licensee Comments: none

Alert & Notification System



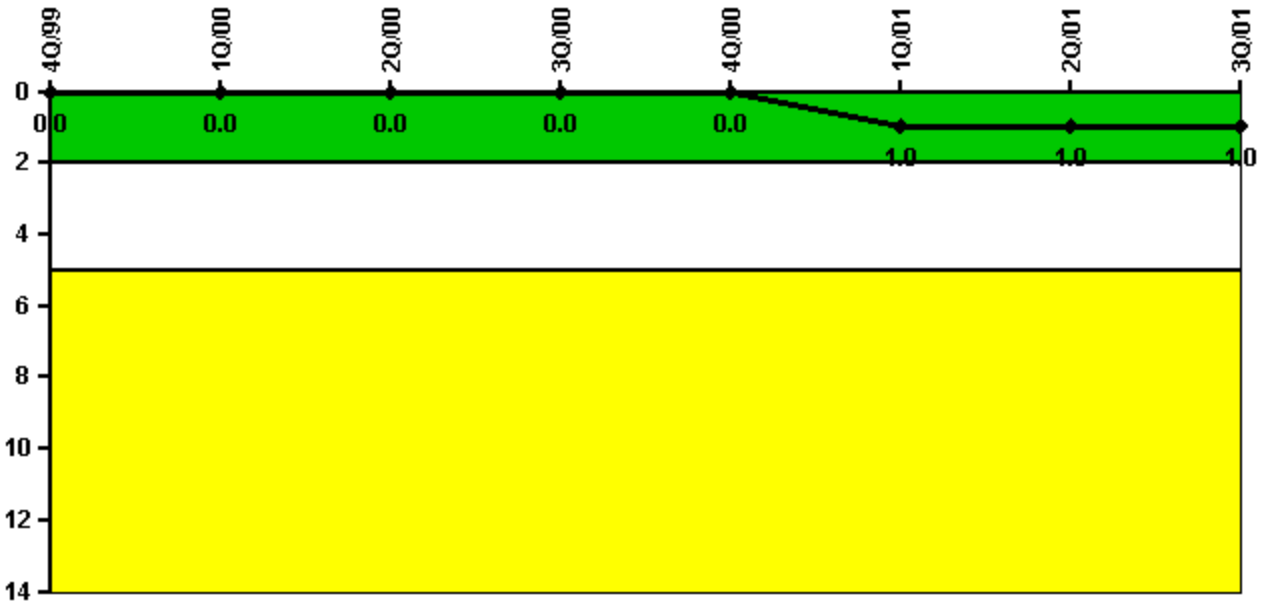
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01	2Q/01	3Q/01
Successful siren-tests	1179	912	1040	1175	1044	909	1043	1171
Total sirens-tests	1179	917	1048	1179	1048	917	1048	1179
Indicator value	**99.7%**	**99.7%**	**99.6%**	**99.6%**	**99.5%**	**99.4%**	**99.5%**	**99.4%**

Licensee Comments: none

Occupational Exposure Control Effectiveness



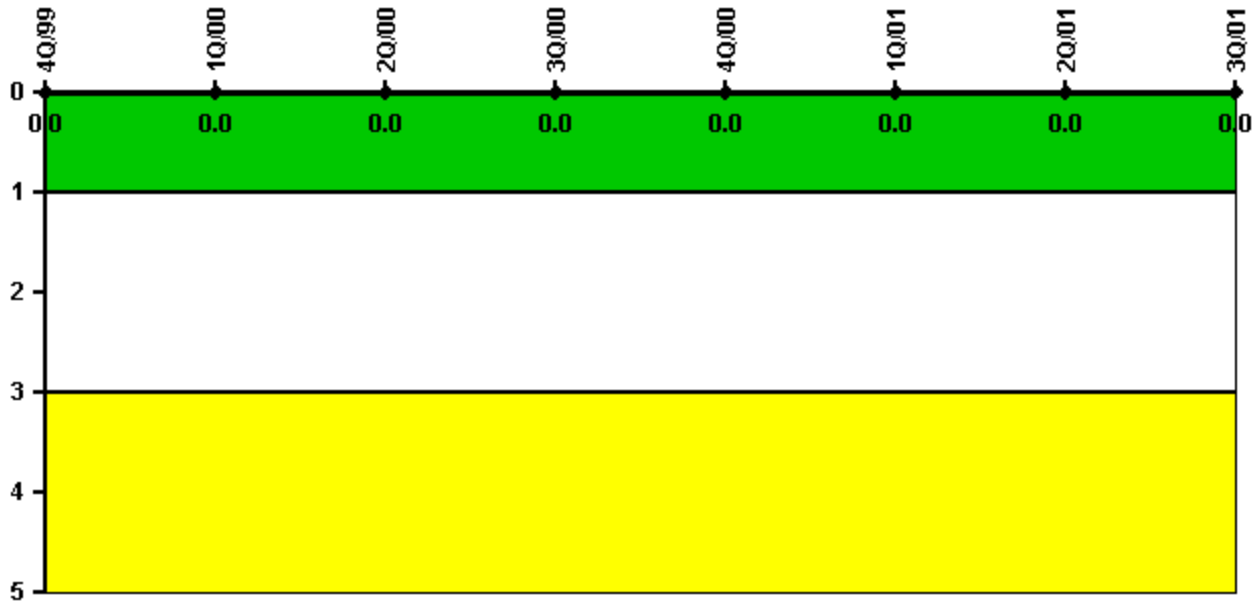
Thresholds: White > 2.0 Yellow > 5.0

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	0	0	0	0	0	1	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**	**1**	**1**	**1**

Licensee Comments: none

RETS/ODCM Radiological Effluent



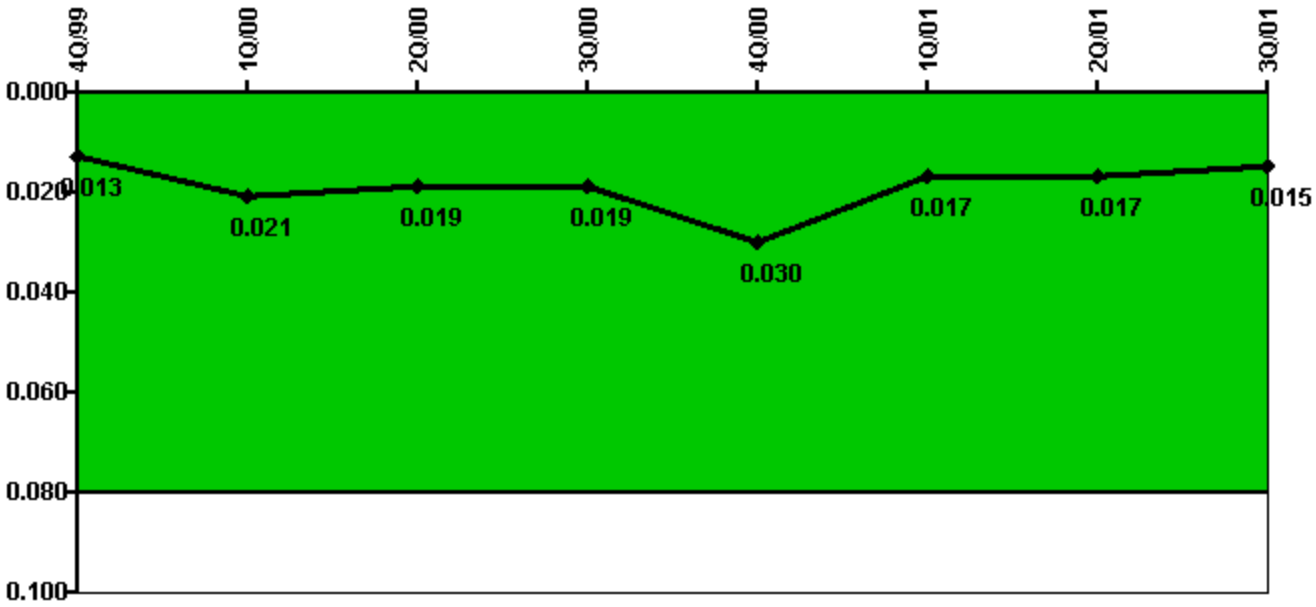
Thresholds: White > 1.0 Yellow > 3.0

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



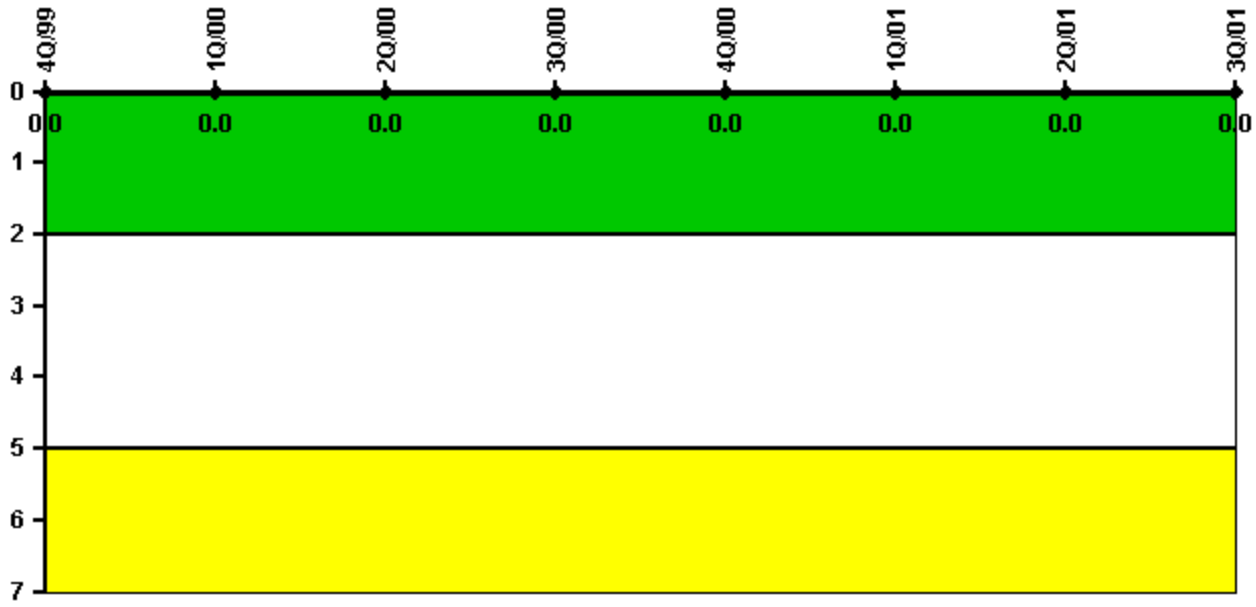
Thresholds: White > 0.080

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	67.00	573.00	35.75	51.87	31.37	3.87	15.33	24.48
CCTV compensatory hours	0	0	0	14.9	267.1	22.4	2.6	1.8
IDS normalization factor	2.25	2.30	2.30	2.30	2.30	2.30	2.30	2.30
CCTV normalization factor	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Index Value	**0.013**	**0.021**	**0.019**	**0.019**	**0.030**	**0.017**	**0.017**	**0.015**

Licensee Comments: none

Personnel Screening Program

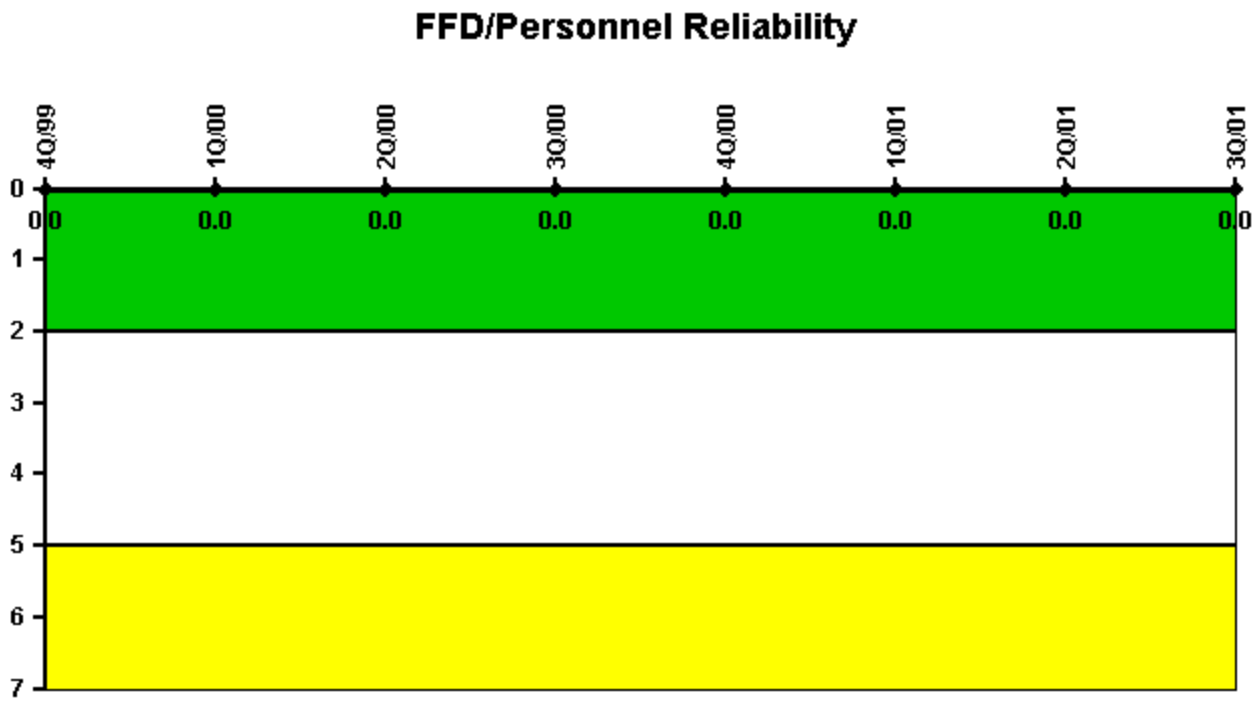


Thresholds: White > 2.0 Yellow > 5.0

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



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