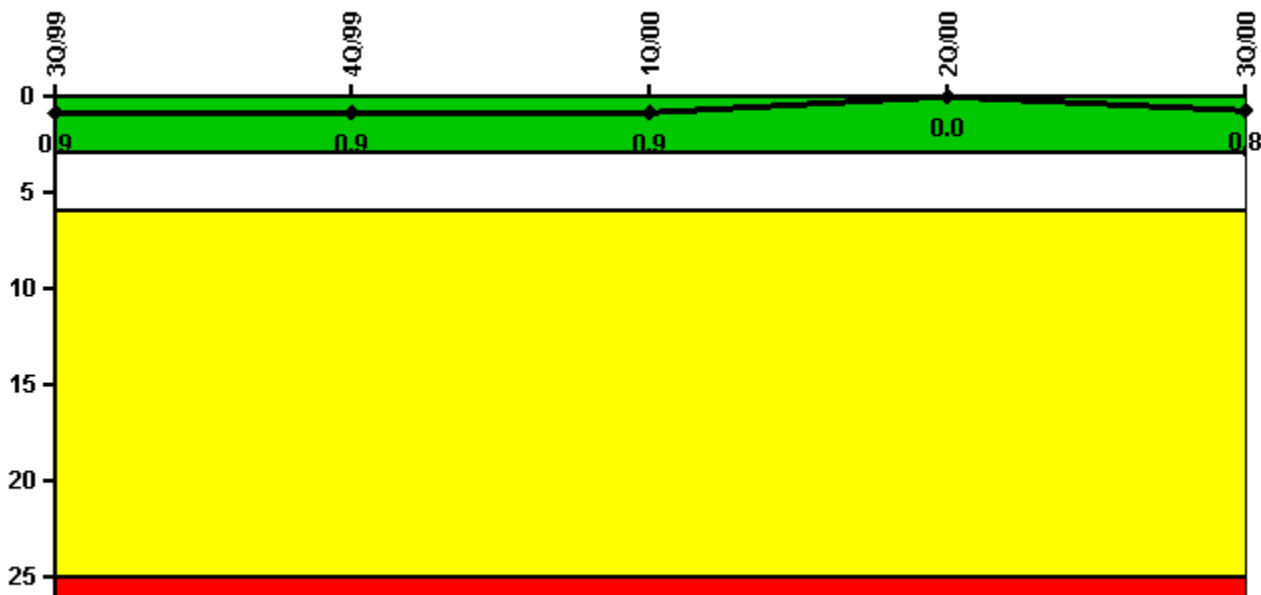## Palo Verde 2

3Q/2000 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs
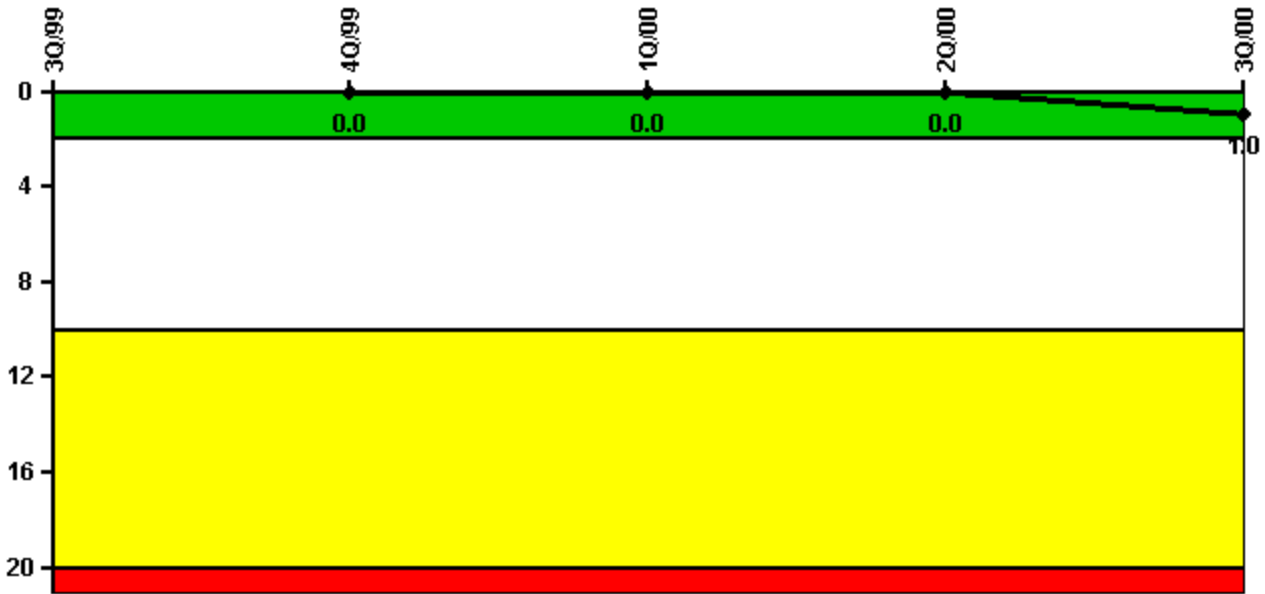

Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Unplanned scrams	0	0	0	0	1.0
Critical hours	2208.0	2208.0	2025.6	2184.0	2170.6
Indicator value	0.9	0.9	0.9	0	0.8

Licensee Comments: none

Scrams with Loss of Normal Heat Removal
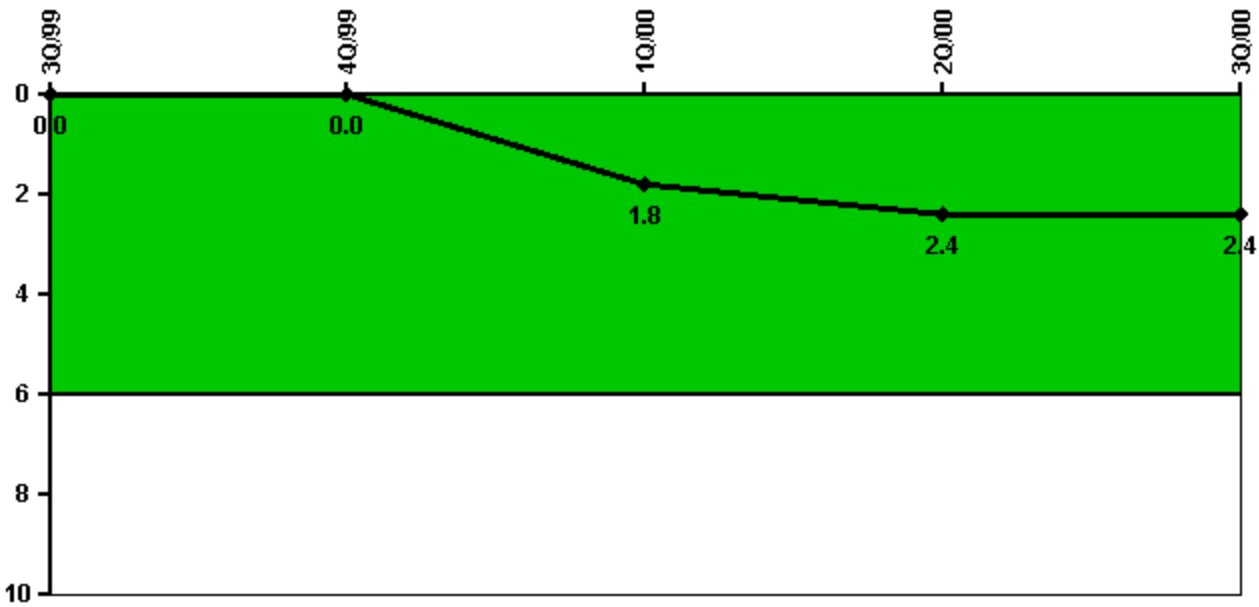

Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Scrams	0	0	0	0	1.0
Indicator value		0	0	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	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Unplanned power changes	0	0	2.0	1.0	0
Critical hours	2208.0	2208.0	2025.6	2184.0	2170.6
Indicator value	0	0	1.8	2.4	2.4

Licensee Comments: none

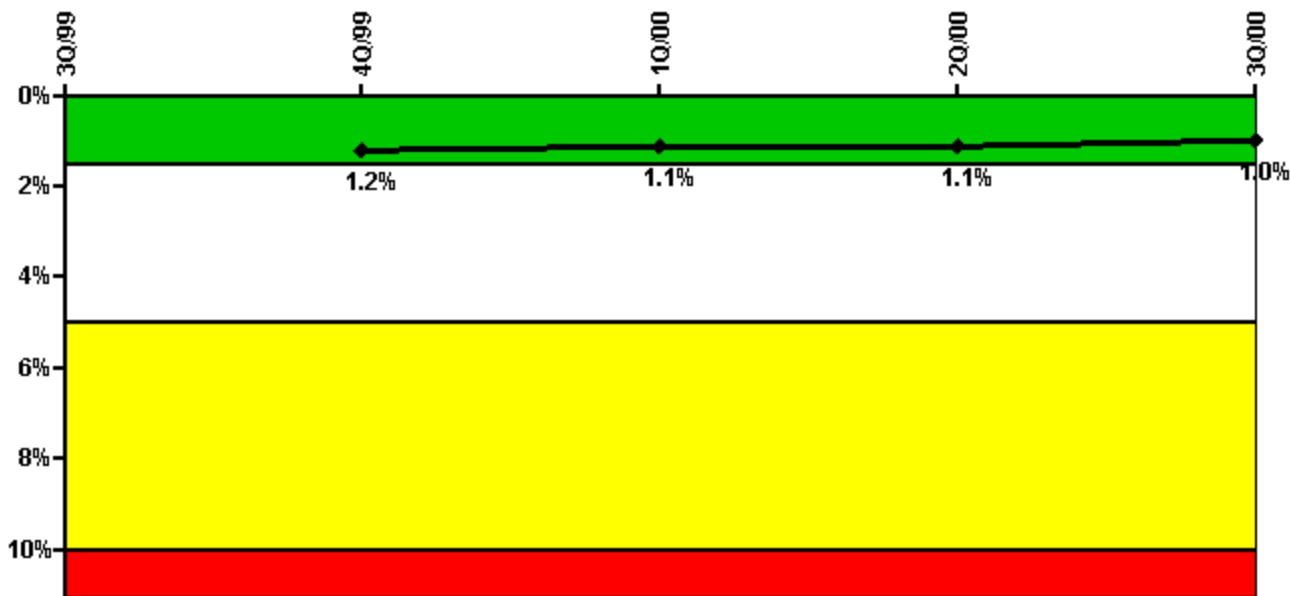## Safety System Unavailability, Emergency AC Power

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

Notes

Safety System Unavailability, Emergency AC Power	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Train 1					
Planned unavailable hours	64.80	0	25.90	0.65	21.22
Unplanned unavailable hours	0	5.87	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2208.00	2208.00	2184.00	2184.00	2208.00
Train 2					
Planned unavailable hours	0	18.83	0	24.67	0
Unplanned unavailable hours	2.08	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2208.00	2208.00	2184.00	2184.00	2208.00
Indicator value		0.7%	0.7%	0.7%	0.7%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)
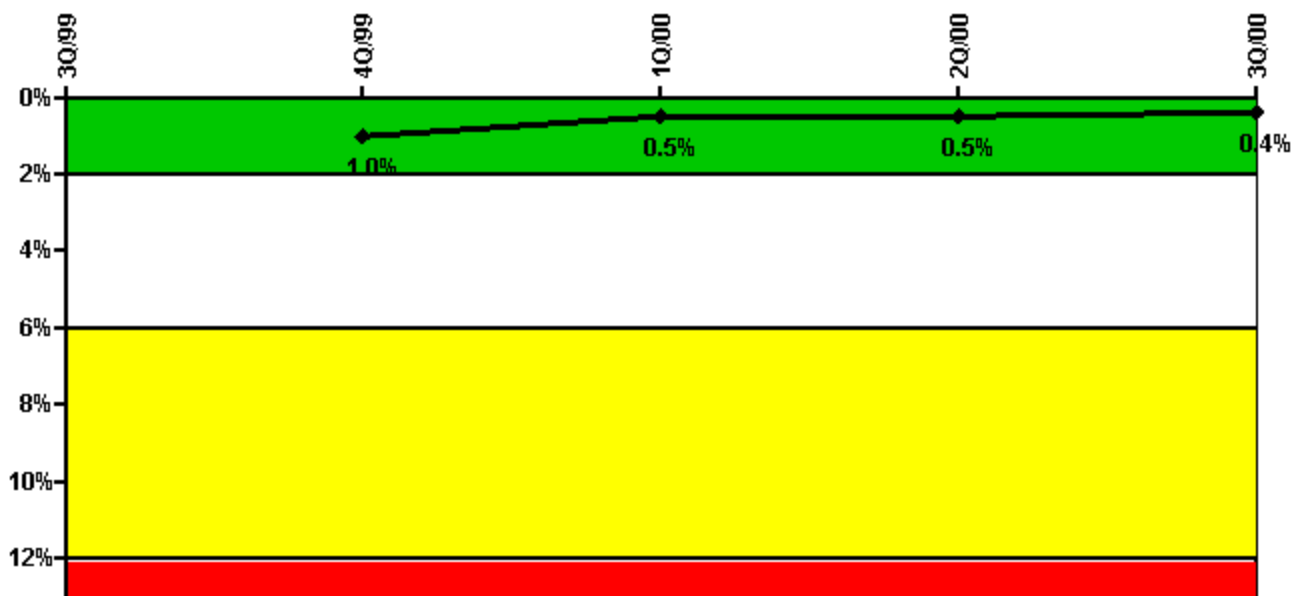

Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Train 1					
Planned unavailable hours	24.57	4.40	14.79	9.18	16.87
Unplanned unavailable hours	0	0	0	0	0
Fault exposure hours	6.52	0.32	2.56	13.10	0
Effective Reset hours	0	0	0	0	0
Required hours	2208.00	2208.00	2025.60	2184.00	2170.55
Train 2					
Planned unavailable hours	7.95	10.46	5.35	24.26	25.23
Unplanned unavailable hours	5.23	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2208.00	2208.00	2025.60	2184.00	2170.55
Indicator value		1.2%	1.1%	1.1%	1.0%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)

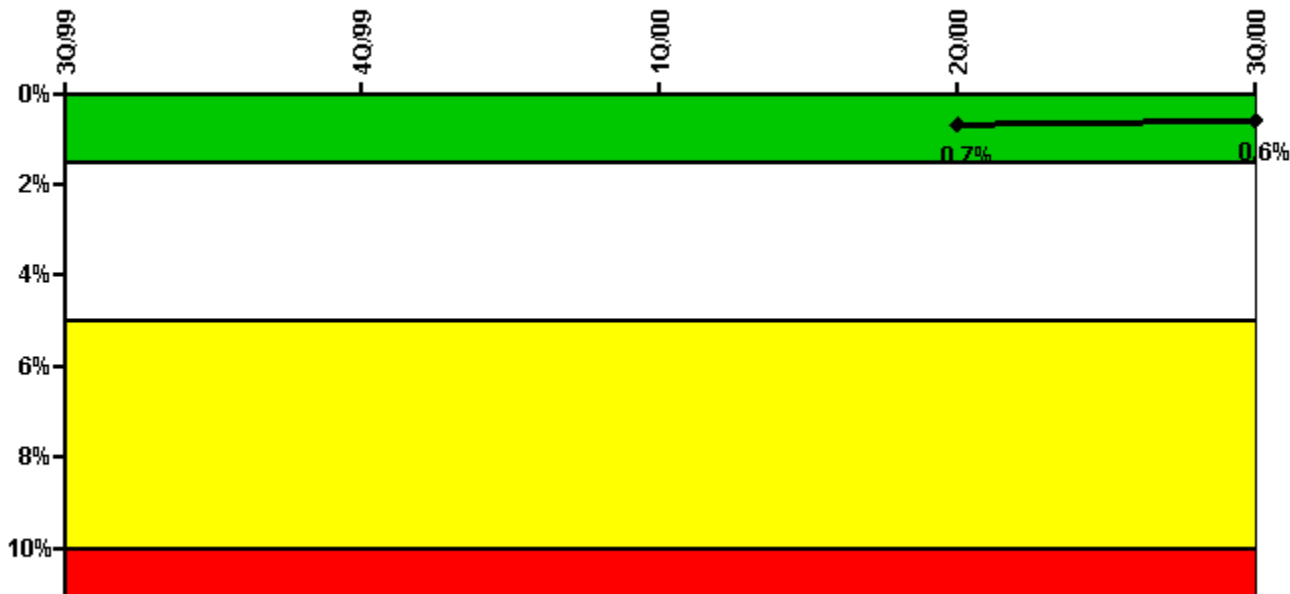Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Train 1					
Planned unavailable hours	23.84	1.30	16.06	3.99	13.50
Unplanned unavailable hours	5.35	0	13.98	21.97	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	366.76	0	0
Required hours	2208.00	2208.00	2025.60	2184.00	2170.55
Train 2					
Planned unavailable hours	0	9.96	1.27	9.60	0.60
Unplanned unavailable hours	5.23	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2208.00	2208.00	2025.60	2184.00	2170.55
Train 3					
Planned unavailable hours	0.32	0.62	3.88	0.97	6.47
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	2208.00	2208.00	2025.60	2184.00	2170.55
Indicator value		1.0%	0.5%	0.5%	0.4%

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	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Train 1					
Planned unavailable hours	31.90	15.69	16.81	11.51	27.48
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	2208.00	2208.00	2184.00	2184.00	2208.00
Train 2					
Planned unavailable hours	1.82	14.16	9.68	48.68	11.65
Unplanned unavailable hours	5.23	0	0	0	0
Fault exposure hours	0	0	0	0	0
Effective Reset hours	0	0	0	0	0
Required hours	2208.00	2208.00	2184.00	2184.00	2208.00
Train 3					
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	0	0	0	0	0
Train 4					
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	0	0	0	0	0

Indicator value								0.7%	0.6%	

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.
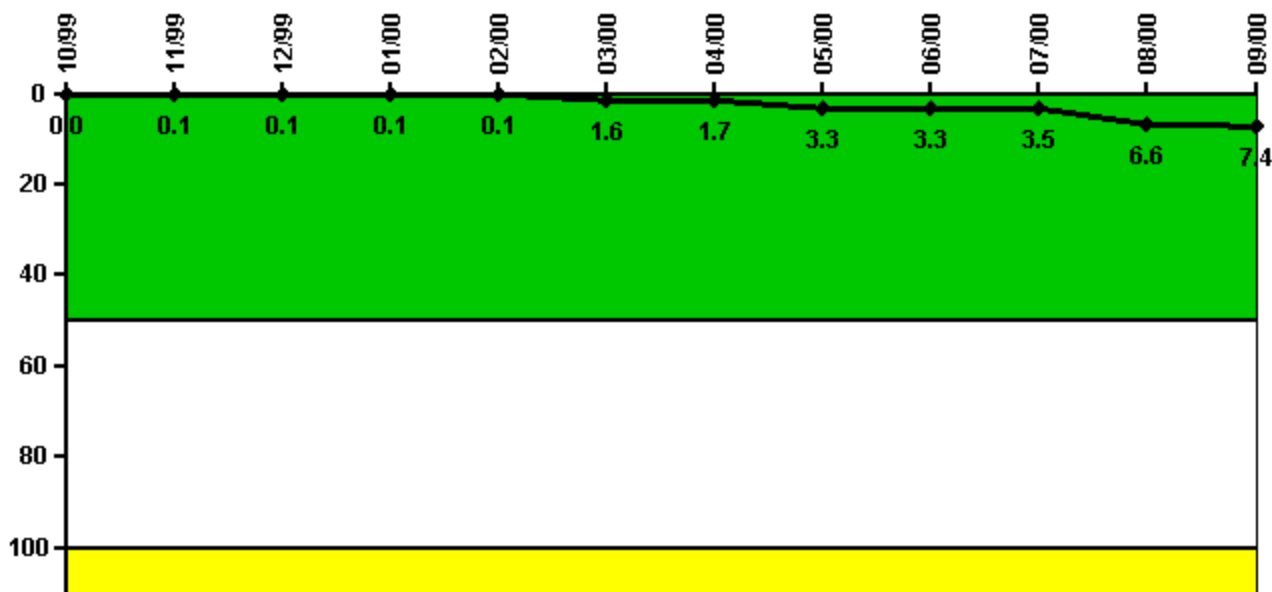
Safety System Functional Failures (PWR)
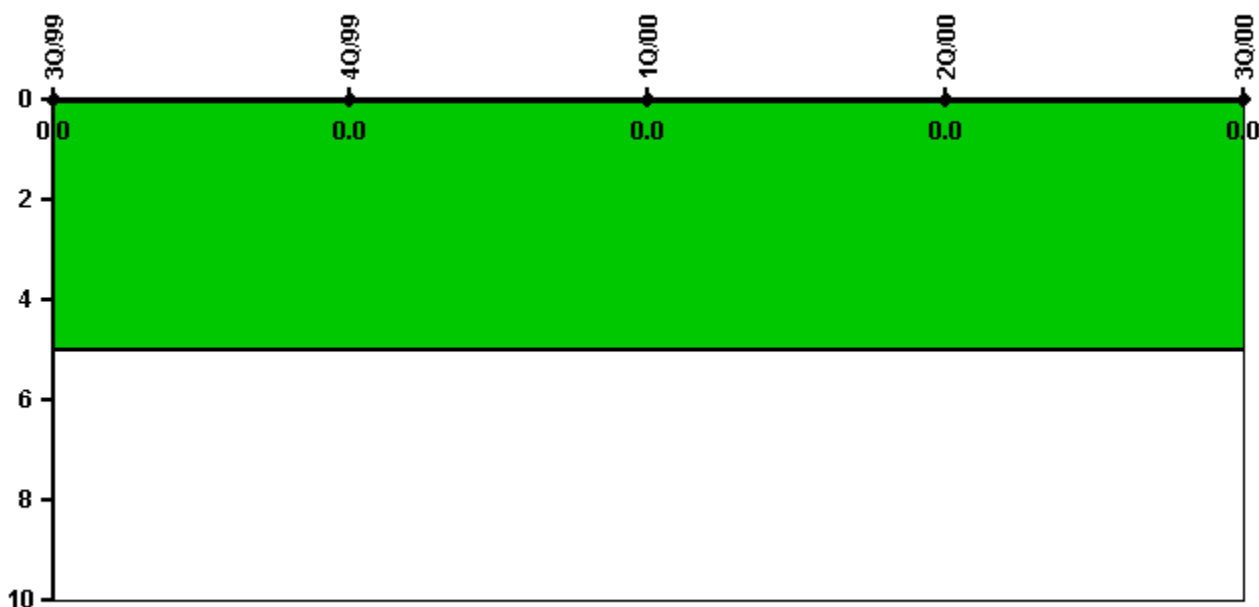
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	3Q/99	4Q/99	1Q/00	2Q/00	3Q/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	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	0.001000	0.001000	0.001000	0.001000	0.015800	0.017000	0.033000	0.033000	0.035000	0.066000	0.074000
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	0.1	0.1	0.1	0.1	1.6	1.7	3.3	3.3	3.5	6.6	7.4

Licensee Comments: none

Reactor Coolant System Leakage
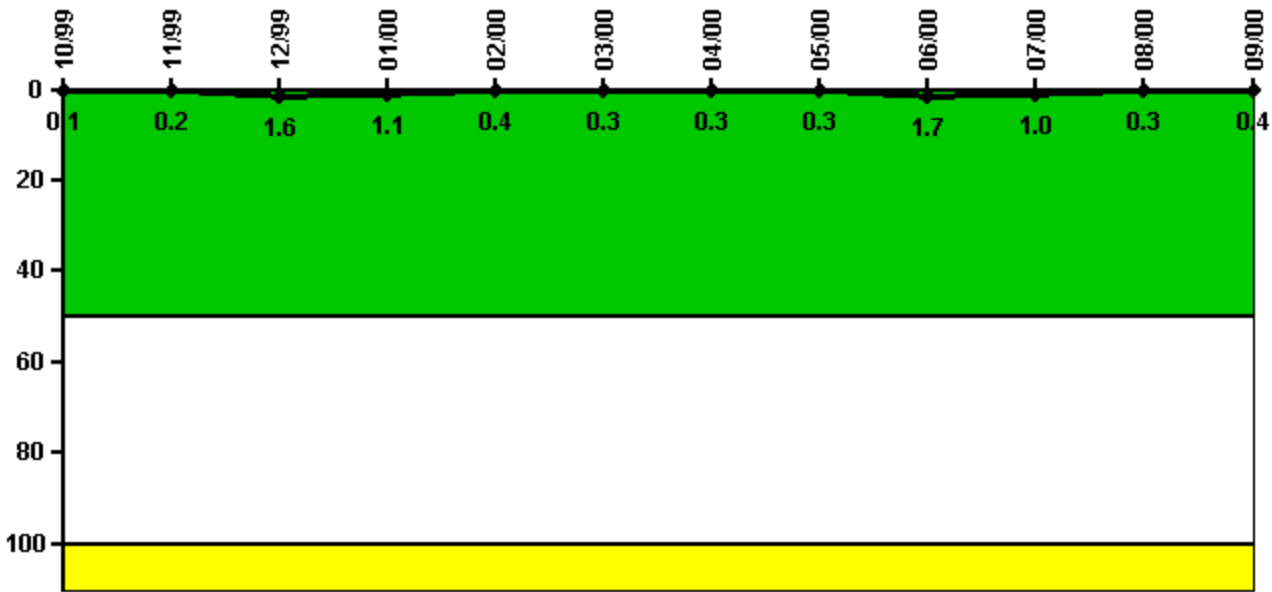
Thresholds: White > 50.0 Yellow > 100.0

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	0.010	0.020	0.160	0.111	0.035	0.027	0.026	0.031	0.166	0.102	0.033	0.036
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	0.1	0.2	1.6	1.1	0.4	0.3	0.3	0.3	1.7	1.0	0.3	0.4

Licensee Comments: none

Drill/Exercise Performance
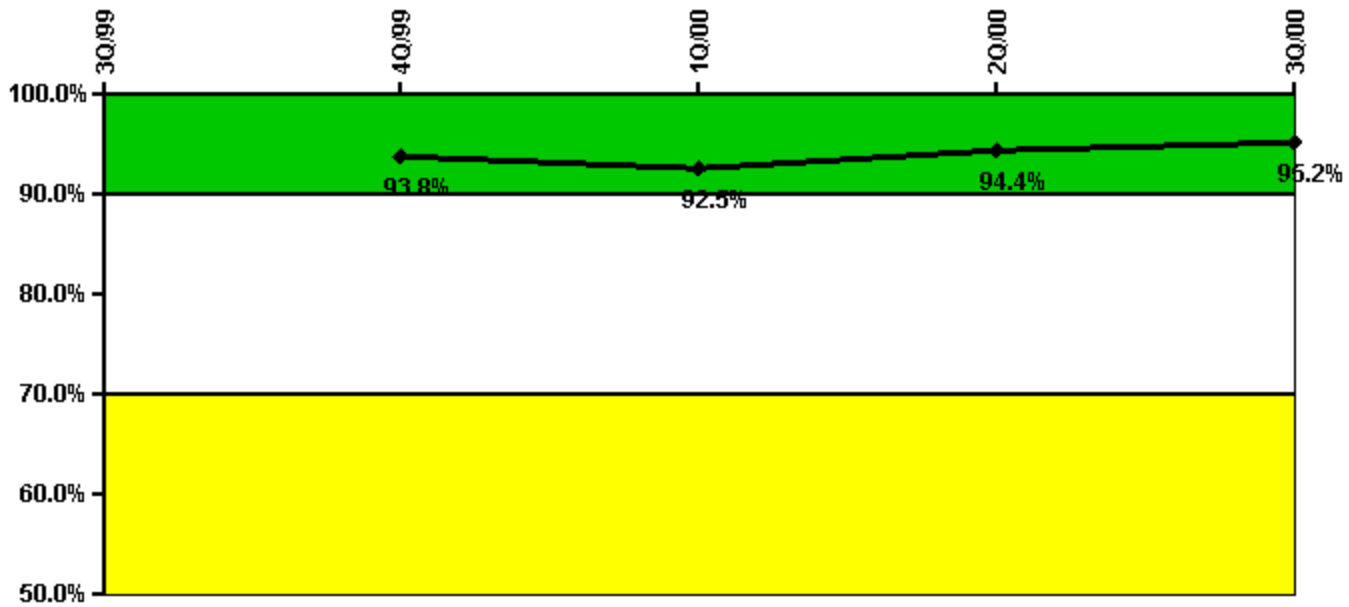
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Successful opportunities	17.0	3.0	29.0	22.0	95.0
Total opportunities	18.0	3.0	32.0	22.0	100.0
Indicator value		93.8%	92.5%	94.4%	95.2%

Licensee Comments: none

ERO Drill Participation
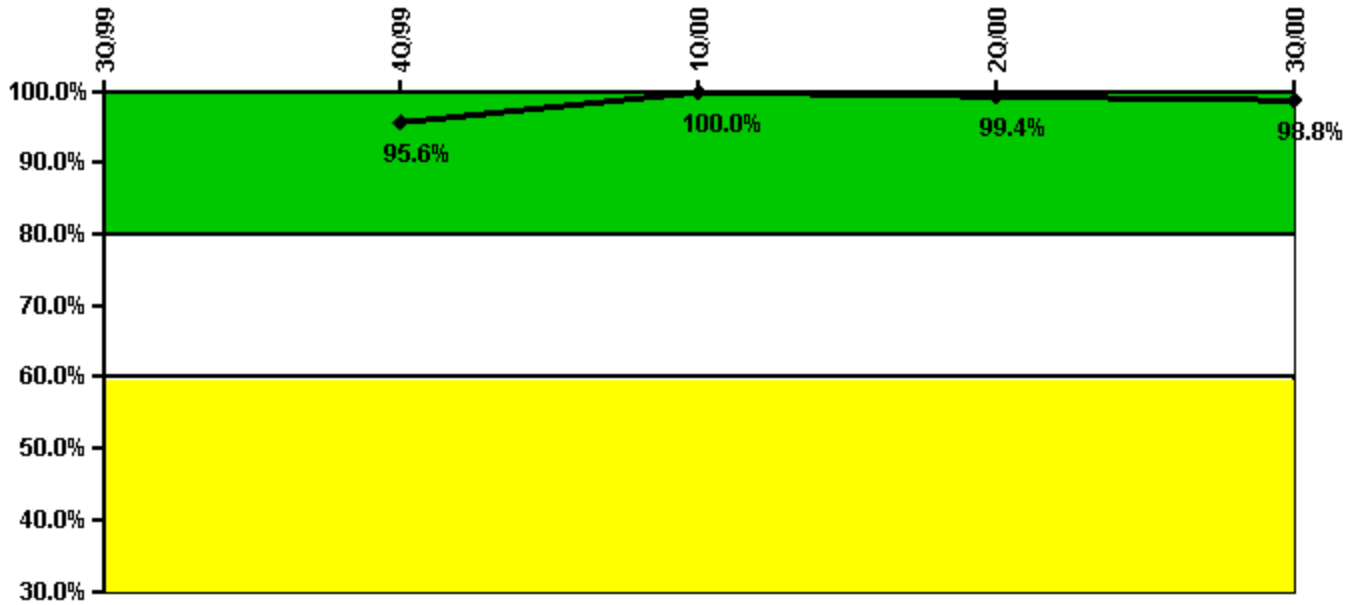
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Participating Key personnel		65.0	132.0	166.0	165.0
Total Key personnel		68.0	132.0	167.0	167.0
Indicator value		95.6%	100.0%	99.4%	98.8%

Licensee Comments: none

Alert & Notification System
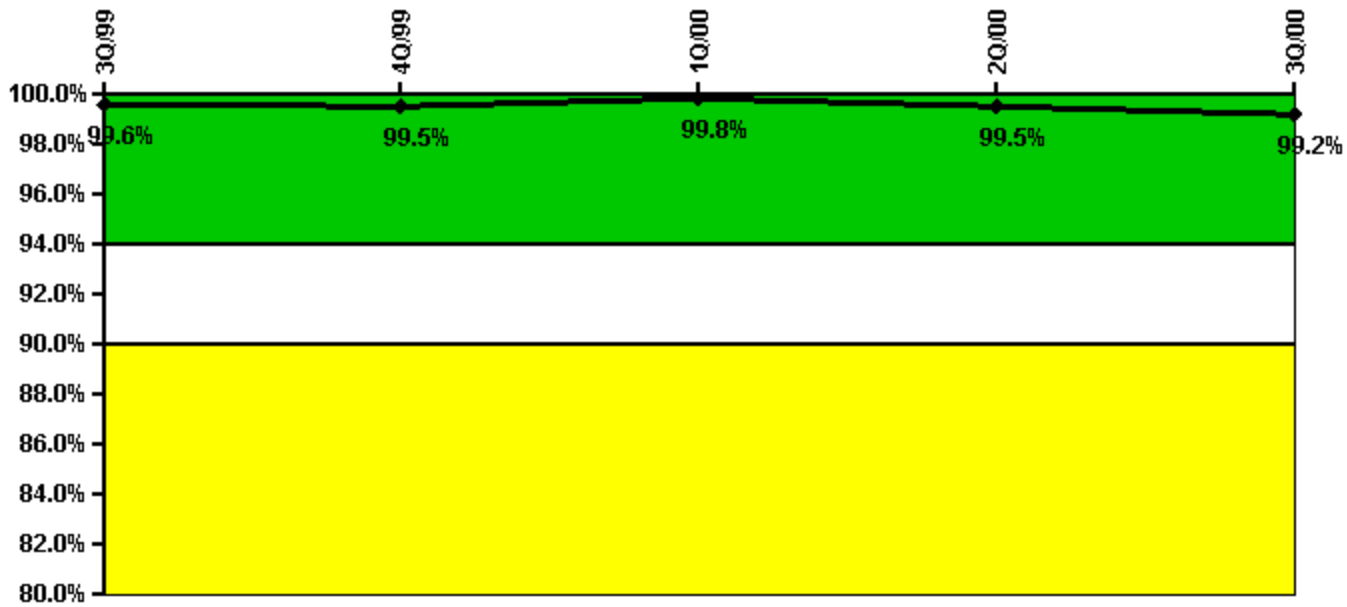
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
Successful siren-tests	351	426	390	385	347
Total sirens-tests	351	429	390	390	351
Indicator value	99.6%	99.5%	99.8%	99.5%	99.2%

Licensee Comments: none

Occupational Exposure Control Effectiveness
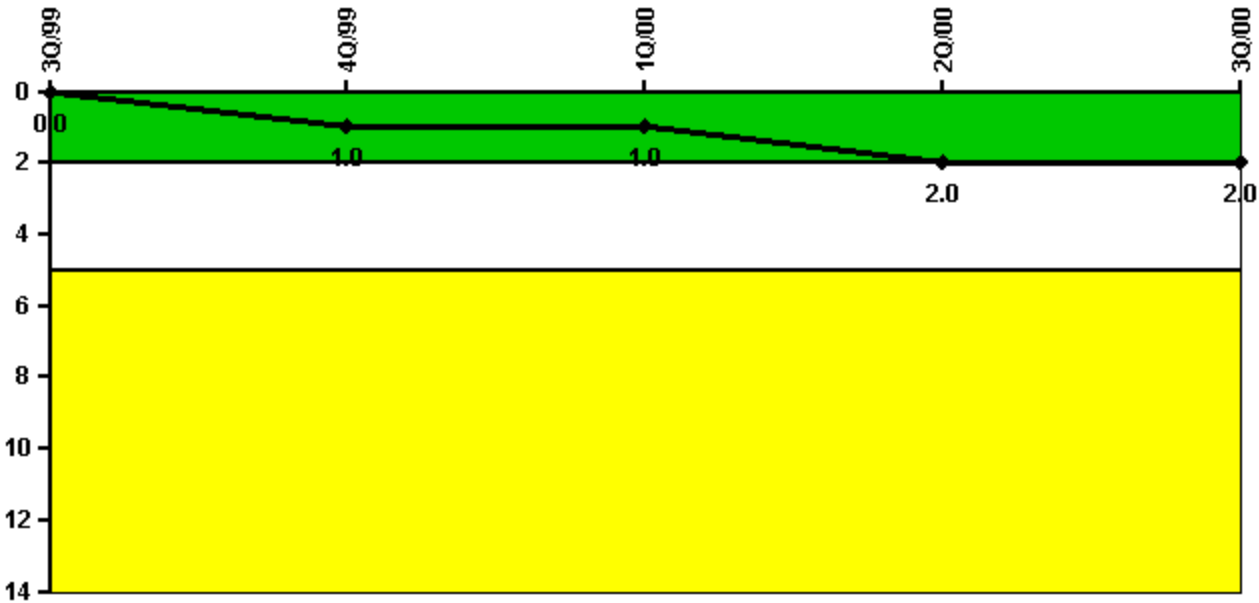
Thresholds: White > 2.0 Yellow > 5.0

Notes

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

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.
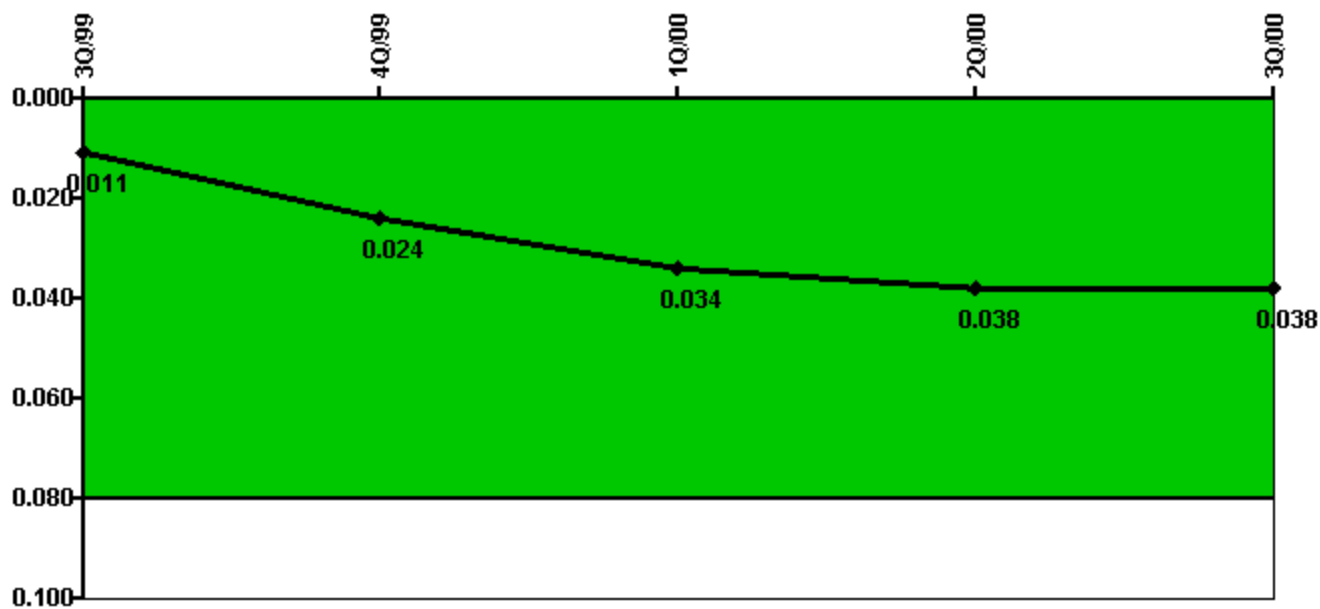
RETS/ODCM Radiological Effluent

Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	3Q/99	4Q/99	1Q/00	2Q/00	3Q/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	3Q/99	4Q/99	1Q/00	2Q/00	3Q/00
IDS compensatory hours	55.20	220.10	326.60	79.20	85.60
CCTV compensatory hours	17.8	225.3	35.2	76.7	8.5
IDS normalization factor	1.85	1.85	1.85	1.85	1.85
CCTV normalization factor	1.4	1.4	1.2	1.2	1.2
Index Value	0.011	0.024	0.034	0.038	0.038

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	3Q/99	4Q/99	1Q/00	2Q/00	3Q/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	3Q/99	4Q/99	1Q/00	2Q/00	3Q/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: March 29, 2002