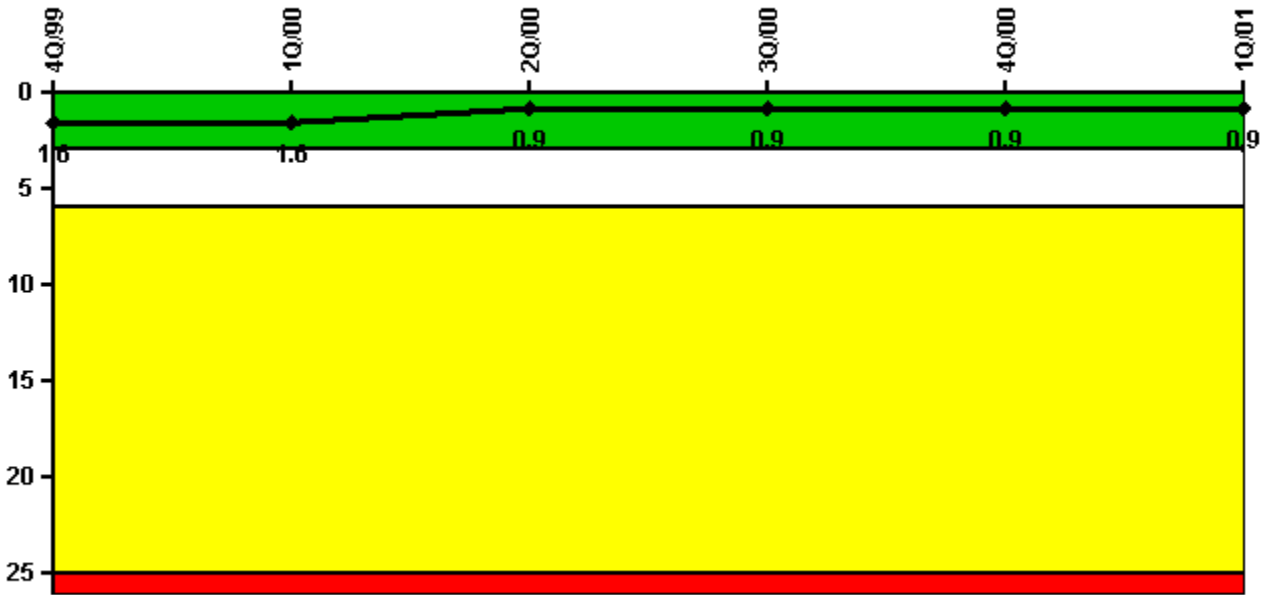


Limerick 1

1Q/2001 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

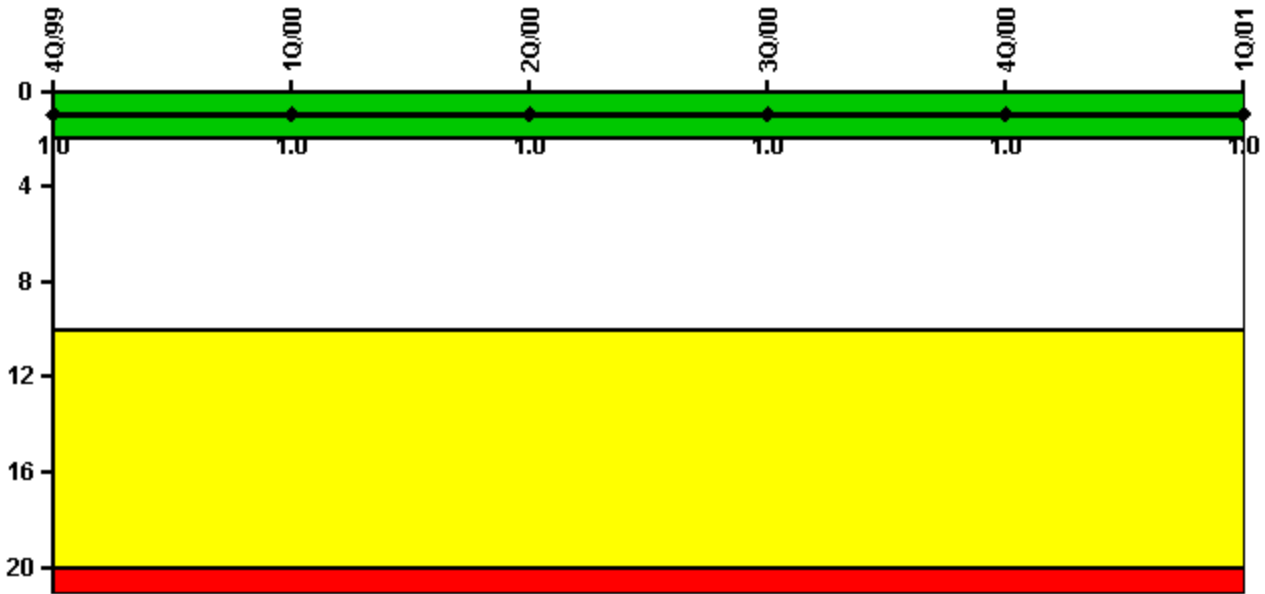
Notes

Unplanned Scrams per 7000 Critical Hrs	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Unplanned scrams	0	0	1.0	0	0	0
Critical hours	2209.0	2127.8	1589.0	2208.0	2181.2	2142.6
Indicator value	1.6	1.6	0.9	0.9	0.9	0.9

Licensee Comments:

1Q/01: Reactor was not critical the whole month because of a 24.1 hour maintenance outage,1M36

Scrams with Loss of Normal Heat Removal



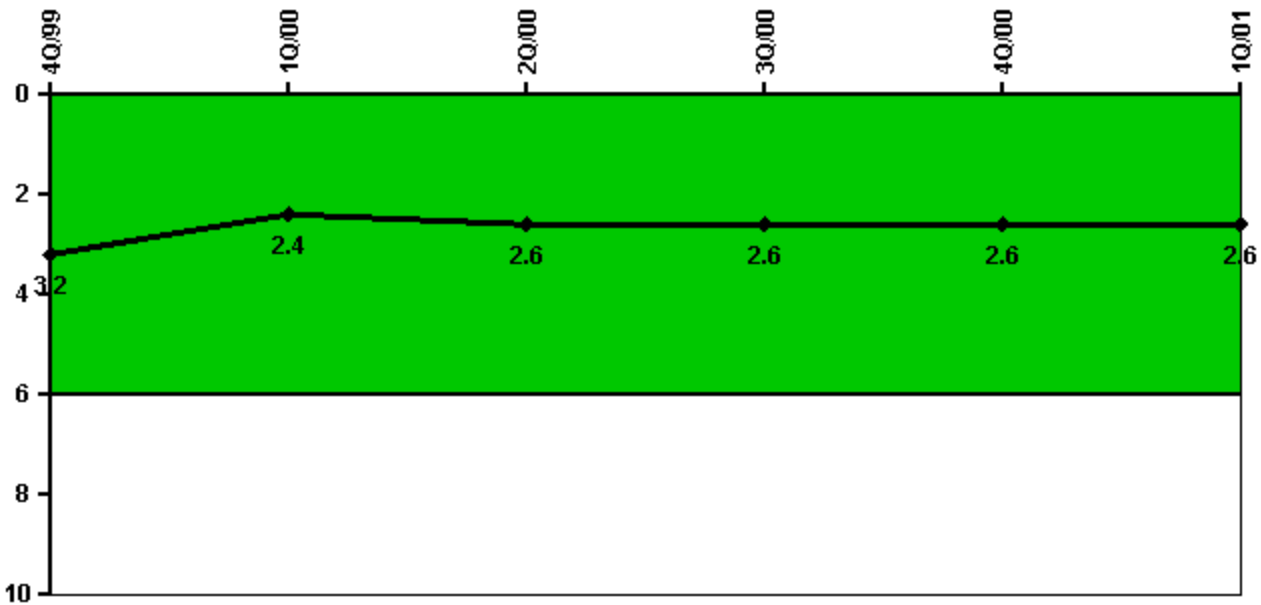
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

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

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



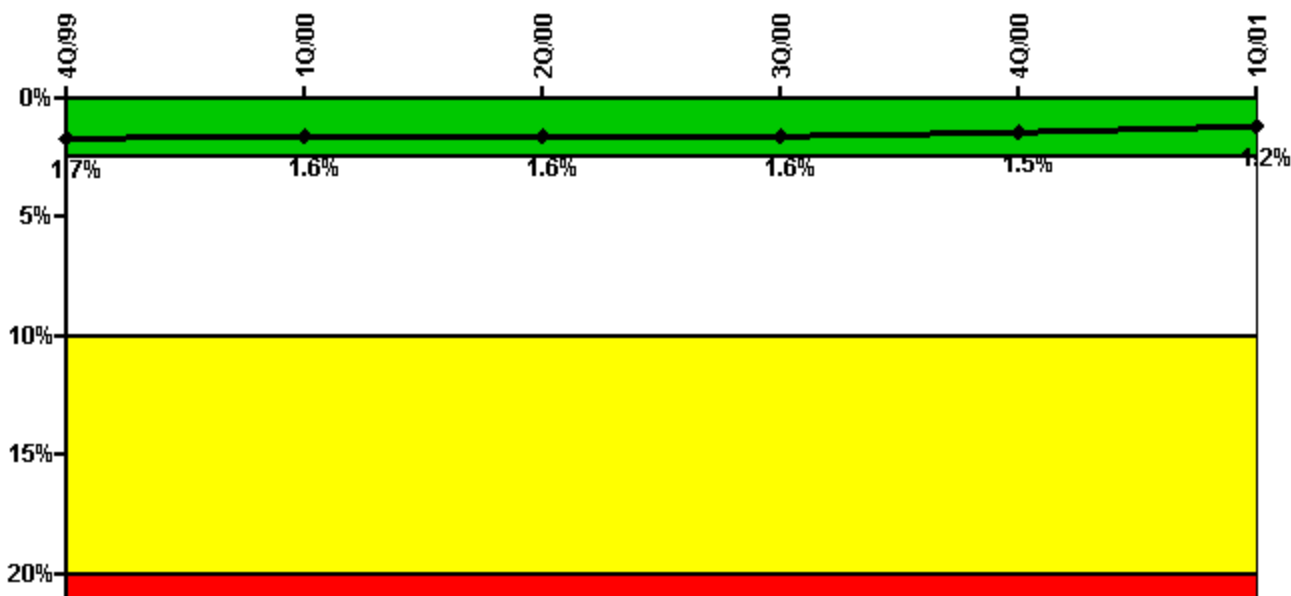
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Unplanned power changes	2.0	0	1.0	0	2.0	0
Critical hours	2209.0	2127.8	1589.0	2208.0	2181.2	2142.6
Indicator value	3.2	2.4	2.6	2.6	2.6	2.6

Licensee Comments: none

Safety System Unavailability, Emergency AC Power, >2EDG



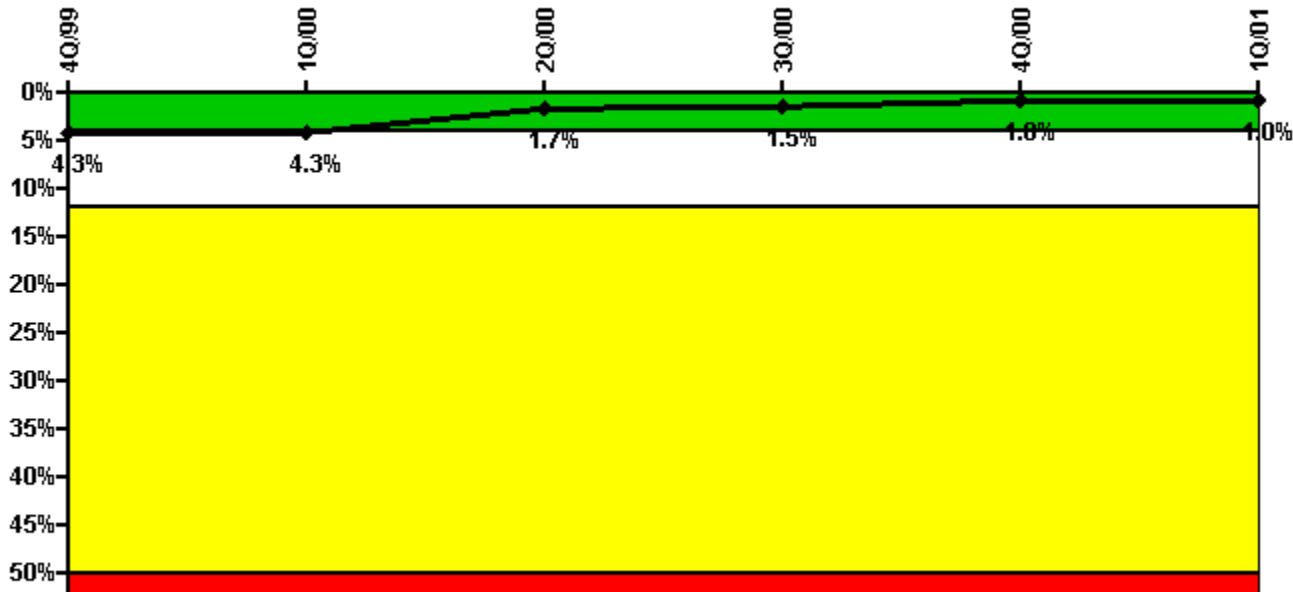
Thresholds: White > 2.5% Yellow > 10.0% Red > 20.0%

Notes

Safety System Unavailability, Emergency AC Power, >2EDG	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Train 1						
Planned unavailable hours	0	2.42	0	0	0	0
Unplanned unavailable hours	0	0	0	0	0	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	2208.00	2184.00	1906.26	2208.00	2209.00	2160.00
Train 2						
Planned unavailable hours	0	0	0	0	0.43	0.82
Unplanned unavailable hours	0	14.65	0	0	0	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	2208.00	2184.00	1906.26	2208.00	2209.00	2160.00
Train 3						
Planned unavailable hours	0	10.61	0	0	0	0.41
Unplanned unavailable hours	0	9.79	0	0.66	0	4.77
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	2208.00	2184.00	1906.26	2208.00	2209.00	2160.00
Train 4						
Planned unavailable hours	0	17.23	0	0	0.41	7.47
Unplanned unavailable hours	0	0	0	0	0.13	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	2208.00	2184.00	1906.26	2208.00	2209.00	2160.00
Indicator value	1.7%	1.6%	1.6%	1.6%	1.5%	1.2%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPCI)



Thresholds: White > 4.0% Yellow > 12.0% Red > 50.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPCI)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Train 1						
Planned unavailable hours	0	30.20	0	0	2.90	1.60
Unplanned unavailable hours	0	0	1.30	0	0	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	652.50	0	0	0
Required hours	2209.00	2127.80	1589.00	2208.00	2181.20	2142.60
Indicator value	4.3%	4.3%	1.7%	1.5%	1.0%	1.0%

Licensee Comments:

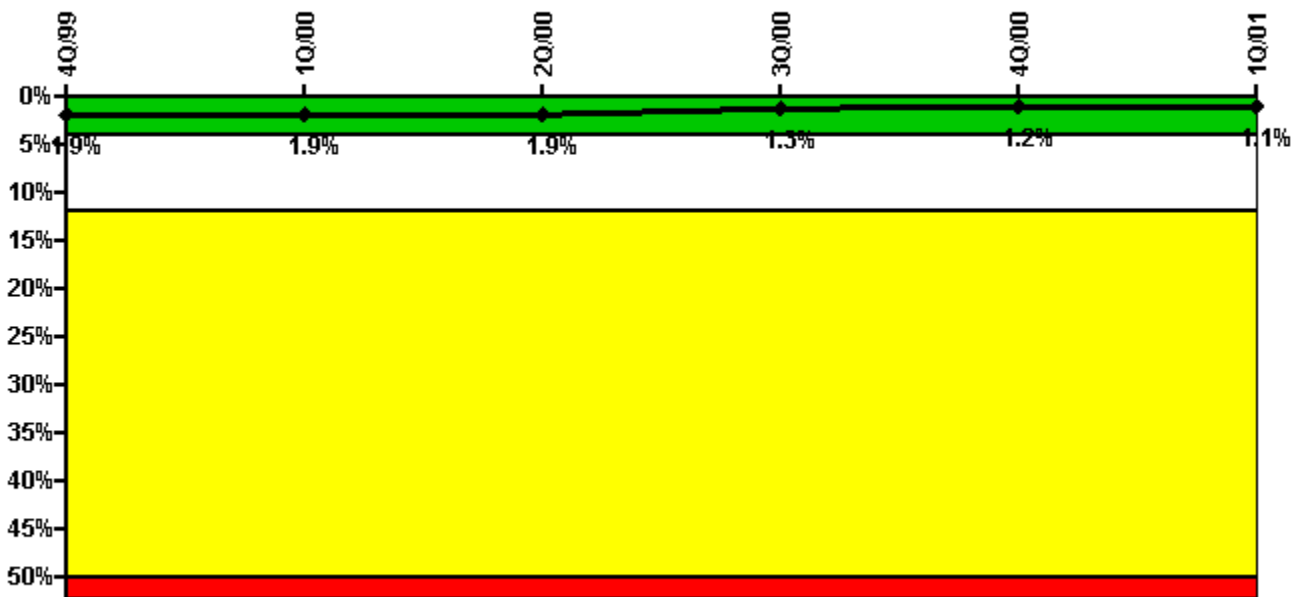
2Q/99: 184.6 hours fault exposure unavailability from May, 1999 and 467.9 hours fault exposure unavailability from June, 1999 have been removed from this PI. These fault exposure hours were the result of a HPCI failure to start that occurred in June, 1999 due to EG-R corrosion. These fault exposure hours are being removed from the PI because 4 quarters have elapsed from the time of discovery and the following criteria of NEI 99-02, Revision 0, section 2.2 have been met: 1) The fault exposure hours associated with this item are greater than 336 hours. 2) Corrective actions to prevent recurrence of EG-R binding have been implemented. 3) NRC Inspection Report 05000352/2000-1; 05000353/2000-1 concluded that "...corrective actions for the June 1999 Unit 1 HPCI system failure were appropriate and had been implemented in a timely manner. No additional supplemental inspection is required for this issue."

Effective Reset Comments:

2Q/00: 184.6 hours fault exposure unavailability from May, 1999 and 467.9 hours fault exposure unavailability from June, 1999 have been removed from this PI. These fault exposure hours were the result of a HPCI failure to start that occurred in June, 1999 due to EG-R corrosion. These fault exposure hours are being removed from the PI because 4 quarters have elapsed from the time of discovery and the following criteria of NEI 99-02, Revision 0, section 2.2 have been met: 1) The fault exposure hours associated with this item are greater than 336 hours. 2) Corrective actions to prevent recurrence of EG-R binding have been implemented. 3) NRC Inspection Report 05000352/2000-1;

05000353/2000-1 concluded that "...corrective actions for the June 1999 Unit 1 HPCI system failure were appropriate and had been implemented in a timely manner. No additional supplemental inspection is required for this issue."

Safety System Unavailability, Heat Removal System (RCIC)



Thresholds: White > 4.0% Yellow > 12.0% Red > 50.0%

Notes

Safety System Unavailability, Heat Removal System (RCIC)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Train 1						
Planned unavailable hours	3.40	8.80	1.90	7.10	4.10	7.70
Unplanned unavailable hours	0	4.40	0	0	2.10	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	2209.00	2127.80	1589.00	2208.00	2181.20	2142.60
Indicator value	1.9%	1.9%	1.9%	1.3%	1.2%	1.1%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



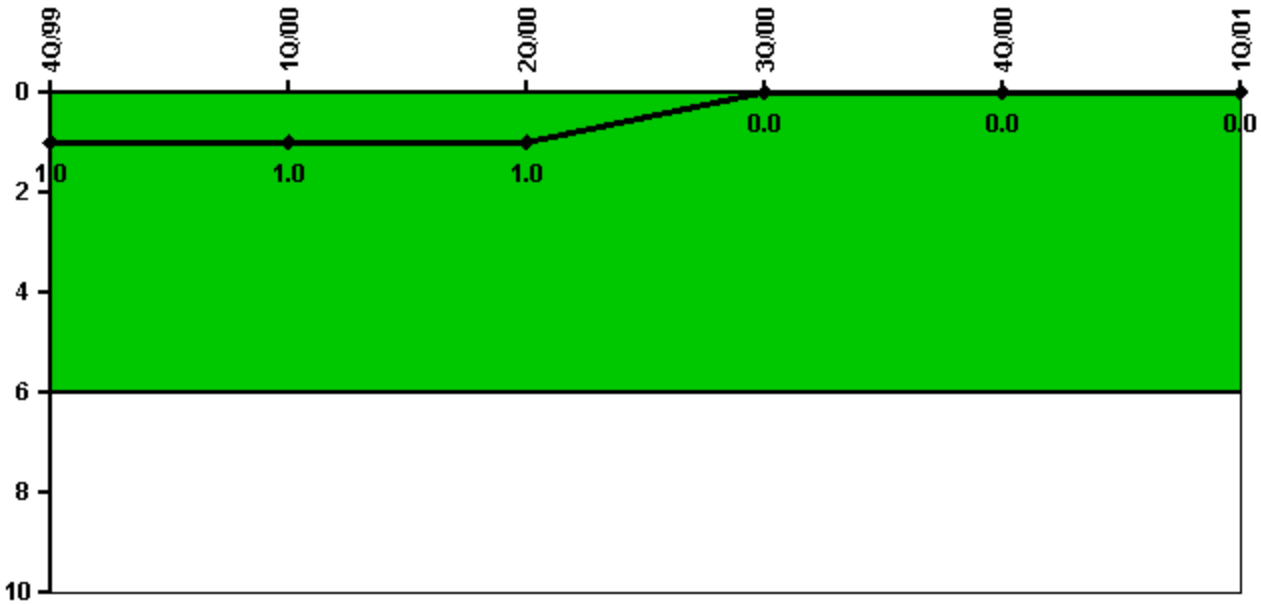
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Residual Heat Removal System	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Train 1						
Planned unavailable hours	0	19.82	0	0	3.90	25.55
Unplanned unavailable hours	0	0	0	0	13.07	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00
Train 2						
Planned unavailable hours	42.80	21.85	0	0	34.10	0
Unplanned unavailable hours	1.00	21.00	0	0	0	0
Fault exposure hours	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0
Required hours	2209.00	2184.00	2183.00	2208.00	2209.00	2160.00
Indicator value	1.0%	1.1%	0.9%	0.8%	0.7%	0.6%

Licensee Comments: none

Safety System Functional Failures (BWR)



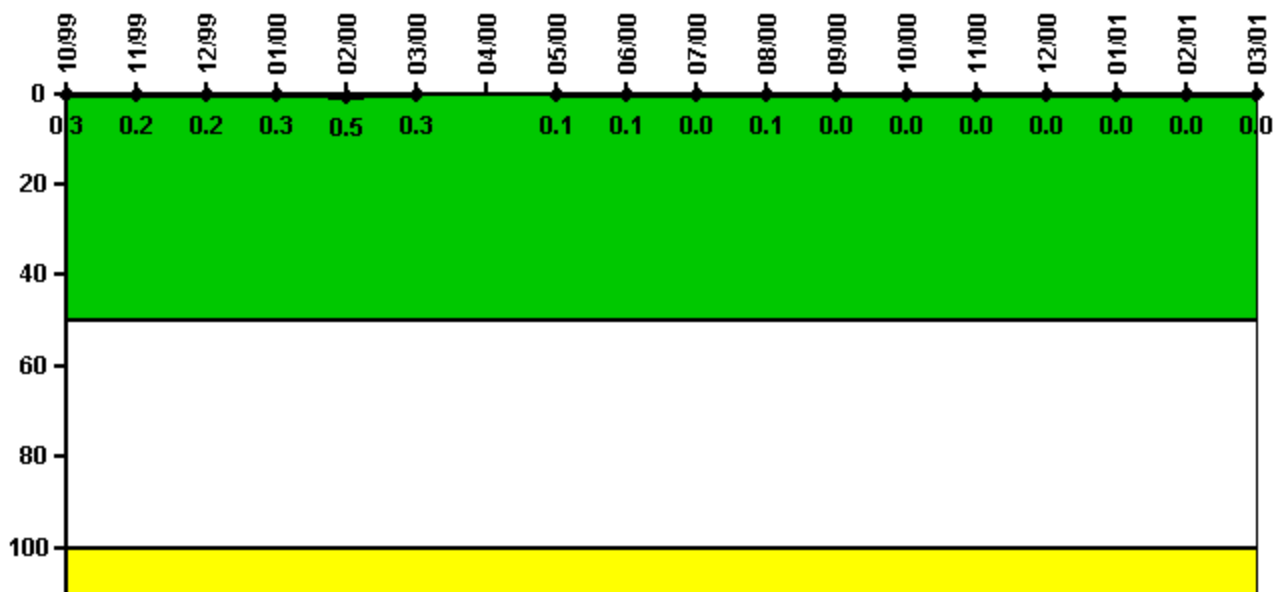
Thresholds: White > 6.0

Notes

Safety System Functional Failures (BWR)	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Safety System Functional Failures	0	0	0	0	0	0
Indicator value	1	1	1	0	0	0

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

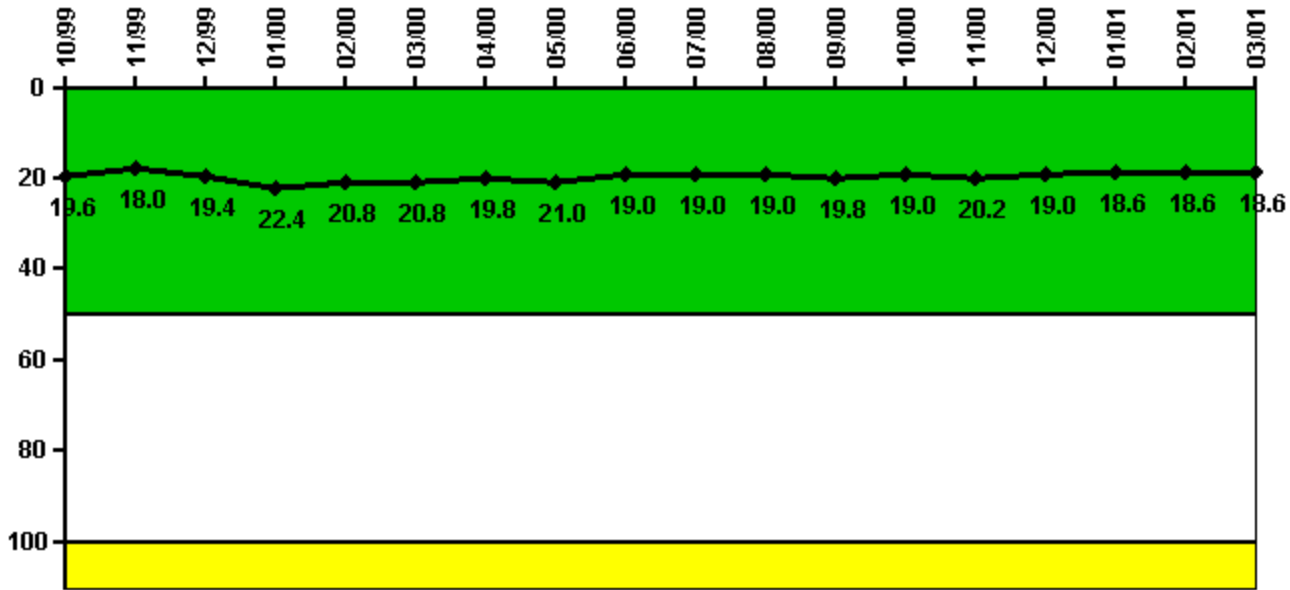
Notes

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	0.000503	0.000493	0.000475	0.000508	0.000914	0.000605	N/A	0.000125	0.000101	0.000073	0.000100	0.000091
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0.3	0.2	0.2	0.3	0.5	0.3	N/A	0.1	0.1	0	0.1	0

Reactor Coolant System Activity	10/00	11/00	12/00	1/01	2/01	3/01
Maximum activity	0.000072	0.000052	0.000036	0.000039	0.000029	0.000032
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

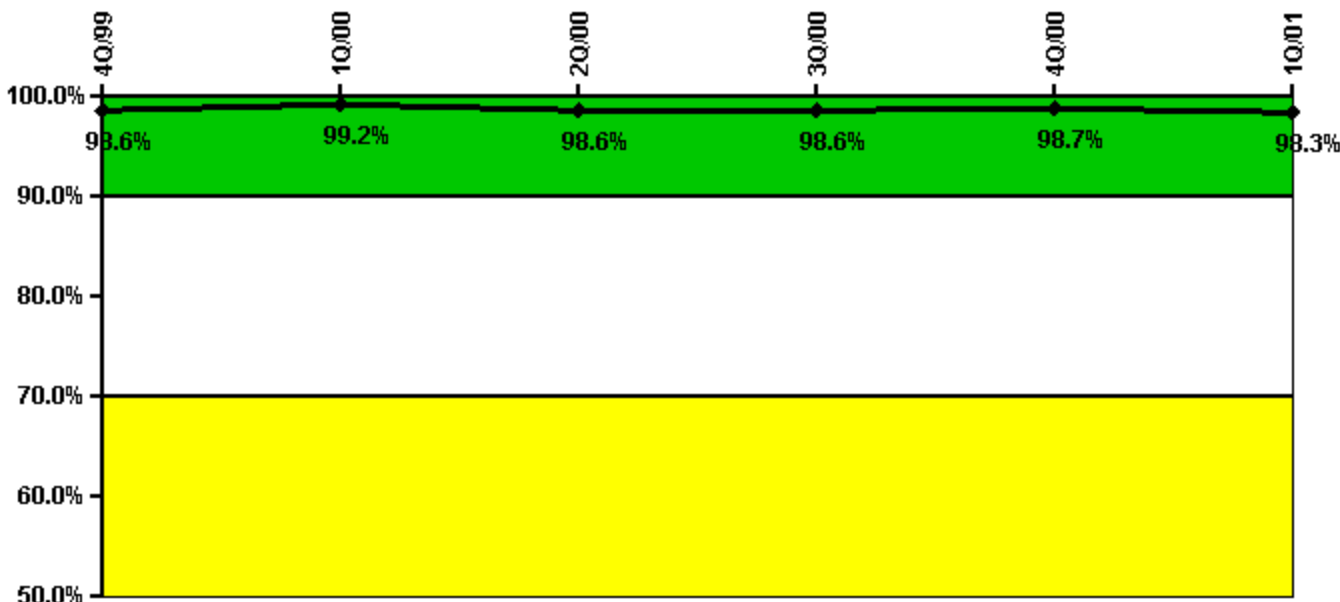
Notes

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	4.900	4.500	4.850	5.600	5.200	5.200	4.960	5.260	4.760	4.760	4.760	4.960
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	19.6	18.0	19.4	22.4	20.8	20.8	19.8	21.0	19.0	19.0	19.0	19.8

Reactor Coolant System Leakage	10/00	11/00	12/00	1/01	2/01	3/01
Maximum leakage	4.760	5.060	4.760	4.660	4.660	4.660
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	19.0	20.2	19.0	18.6	18.6	18.6

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
Successful opportunities	11.0	67.0	9.0	0	18.0	32.0
Total opportunities	11.0	67.0	10.0	0	18.0	33.0
Indicator value	98.6%	99.2%	98.6%	98.6%	98.7%	98.3%

Licensee Comments:

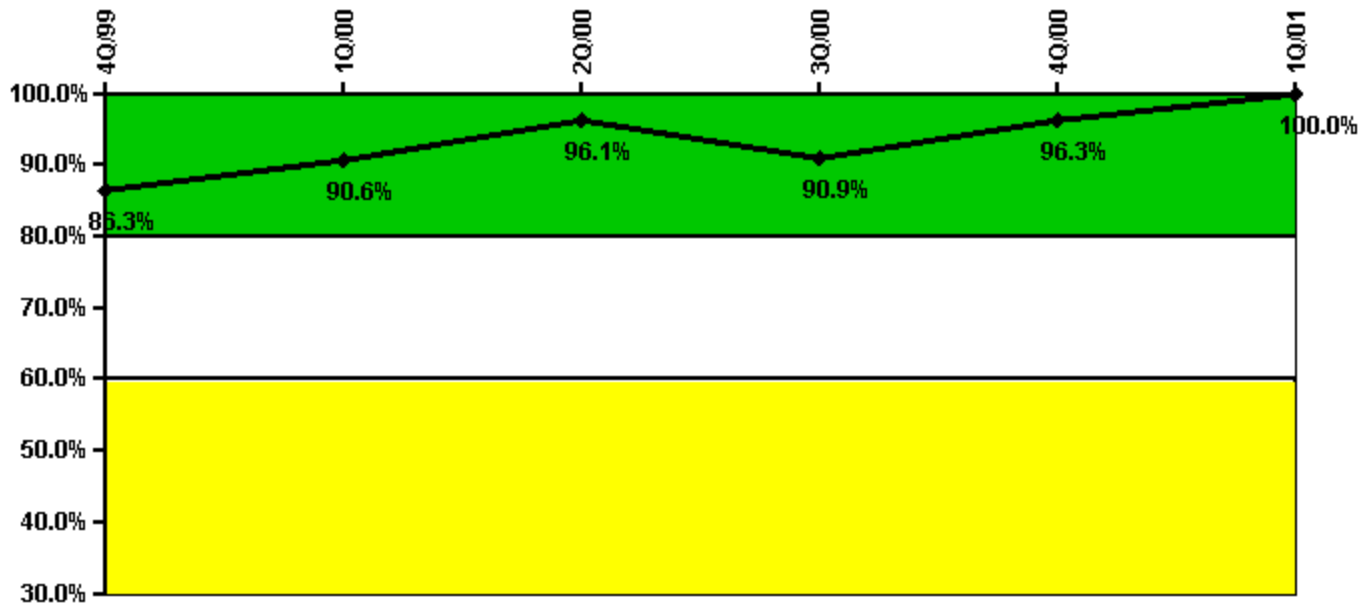
1Q/01: A total of 6 opportunities were removed from the database for drills covering the period of 06/14/2000 to 2/15/2001 because they were determined to be invalid notification opportunities. TL..... An opportunity previously classified successful has been conservatively determined to be unsuccessful due to uncertainty in the evaluation process. TL

4Q/00: A total of 6 opportunities were removed from the database for drills covering the period of 06/14/2000 to 2/15/2001 because they were determined to be invalid notification opportunities.TL Through Review of data for November drill it was discovered that there was one more opportunity and success for the Nov.15, 2000 drill, thus this data has been updated to reflect this math error. Thus, the PI number has been changed from 20 out of 20 to 21 out of 21. MNF.

4Q/00: Through Review of data for November drill it was discovered that there was one more opportunity and success for the Nov.15, 2000 drill, thus this data has been updated to reflect this math error. Thus, the PI number has been changed from 20 out of 20 to 21 out of 21. MNF.

2Q/00: A total of 6 opportunities were removed from the database for drills covering the period of 06/14/2000 to 2/15/2001 because they were determined to be invalid notification opportunities.

ERO Drill Participation



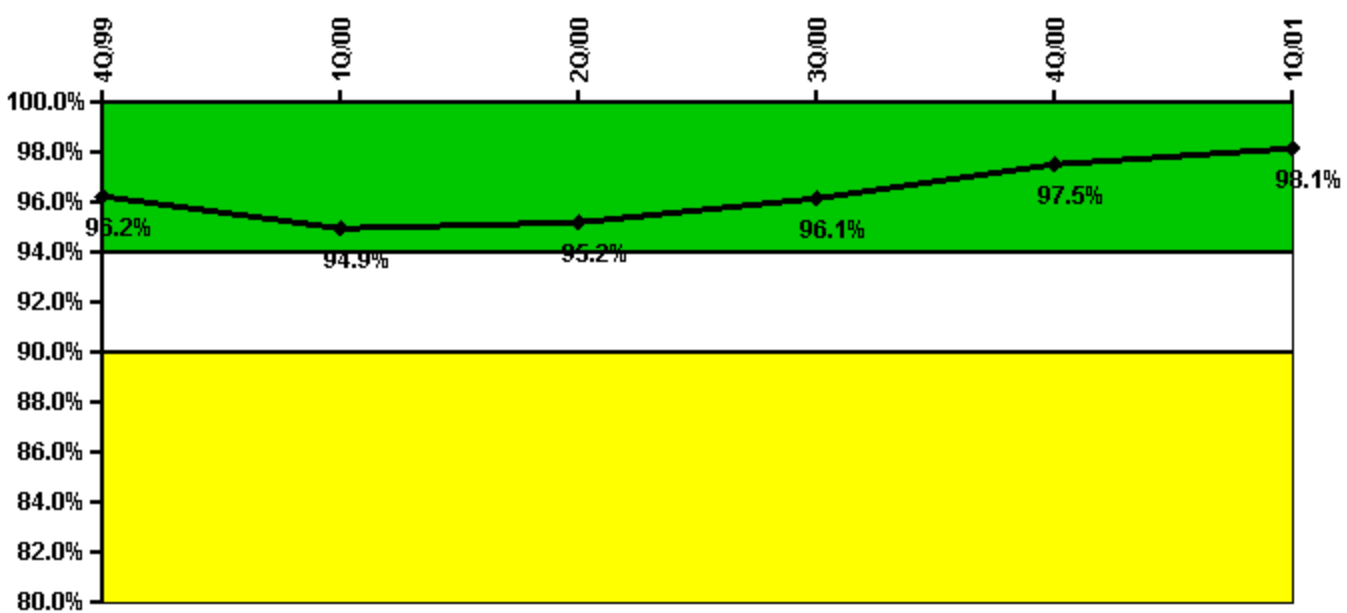
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
Participating Key personnel	44.0	48.0	49.0	50.0	52.0	59.0
Total Key personnel	51.0	53.0	51.0	55.0	54.0	59.0
Indicator value	86.3%	90.6%	96.1%	90.9%	96.3%	100.0%

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
Successful siren-tests	467	459	954	2561	4391	2125
Total sirens-tests	495	495	990	2640	4455	2145
Indicator value	96.2%	94.9%	95.2%	96.1%	97.5%	98.1%

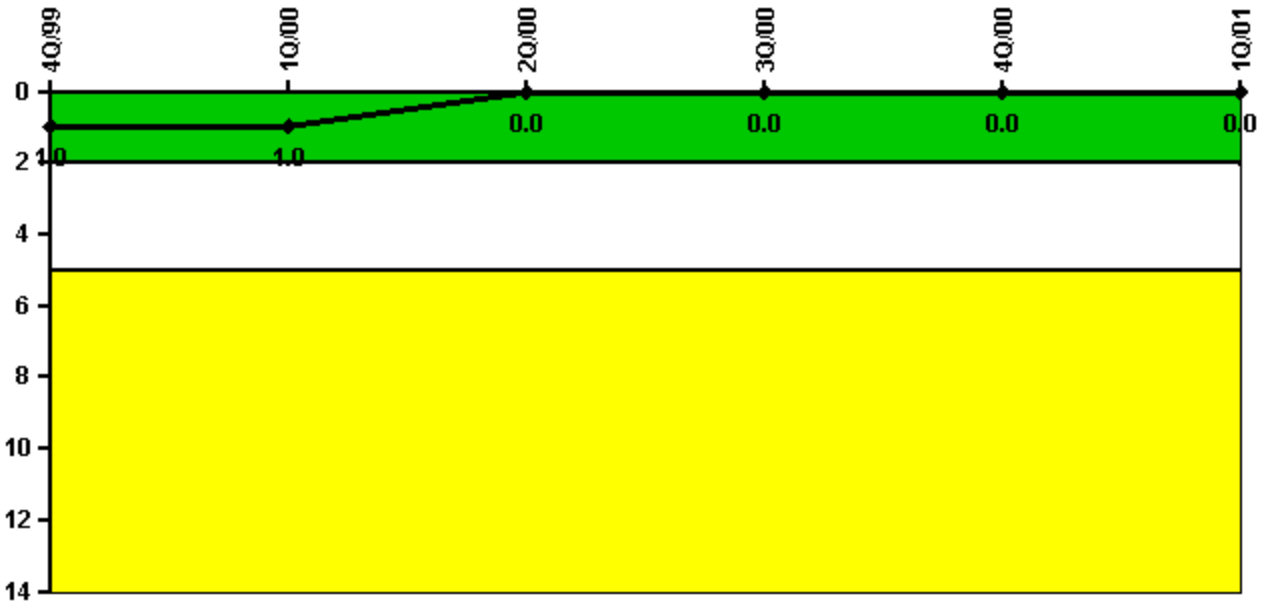
Licensee Comments:

2Q/00: Limerick siren performance percentages have changed due to inadequate maintenance practices, which resulted in degraded siren performance. The percentage change did not cause a change in the overall PI color. All sirens have been inspected and appropriate corrective actions have been taken to correct identified deficiencies. Accelerated testing frequencies continue and good overall siren performance has been restored.

1Q/00: Limerick siren performance percentages have changed due to inadequate maintenance practices, which resulted in degraded siren performance. The percentage change did not cause a change in the overall PI color. All sirens have been inspected and appropriate corrective actions have been taken to correct identified deficiencies. Accelerated testing frequencies continue and good overall siren performance has been restored.

1Q/00: Limerick siren performance percentages have changed due to inadequate maintenance practices, which resulted in degraded siren performance. The percentage change did not cause a change in the overall PI color. All sirens have been inspected and appropriate corrective actions have been taken to correct identified deficiencies. Accelerated testing frequencies continue and good overall siren performance has been restored.

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
High radiation area occurrences	0	0	0	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0
Indicator value	1	1	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



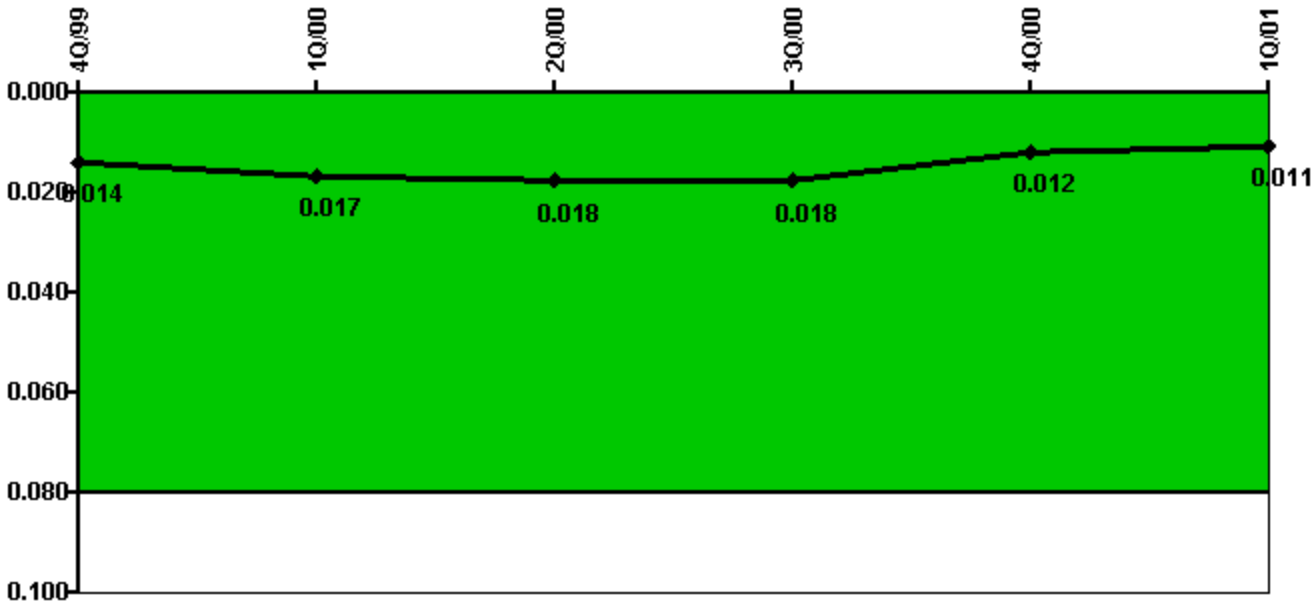
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	4Q/99	1Q/00	2Q/00	3Q/00	4Q/00	1Q/01
RETS/ODCM occurrences	0	0	0	0	0	0
Indicator value	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
IDS compensatory hours	357.70	143.40	63.20	29.50	81.70	85.50
CCTV compensatory hours	0	17.6	36.4	16.1	7.9	45.5
IDS normalization factor	2.35	2.35	2.35	2.35	2.35	2.35
CCTV normalization factor	1.2	1.2	1.2	1.2	1.2	1.2
Index Value	0.014	0.017	0.018	0.018	0.012	0.011

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
Program failures	0	0	0	0	0	0
Indicator value	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
Program Failures	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0

Licensee Comments: none

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

Last Modified: March 28, 2002