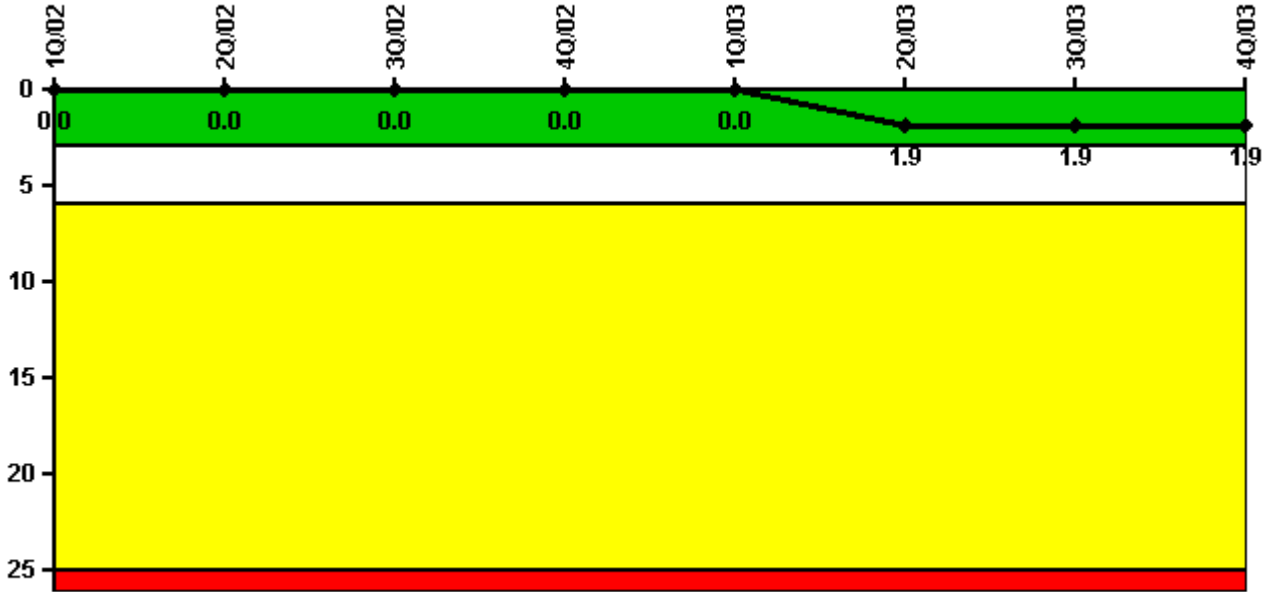


North Anna 1

4Q/2003 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



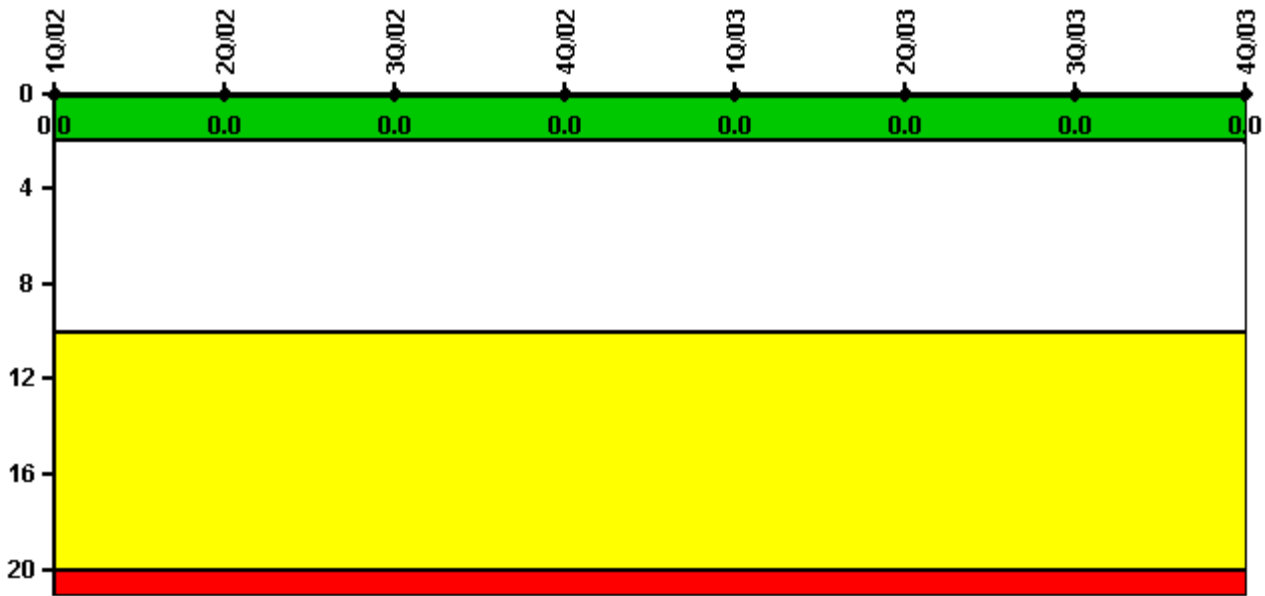
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Unplanned scrams	0	0	0	0	0	2.0	0	0
Critical hours	2160.0	2183.0	2208.0	2209.0	1273.7	1549.9	2208.0	2209.0
Indicator value	0	0	0	0	0	1.9	1.9	1.9

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



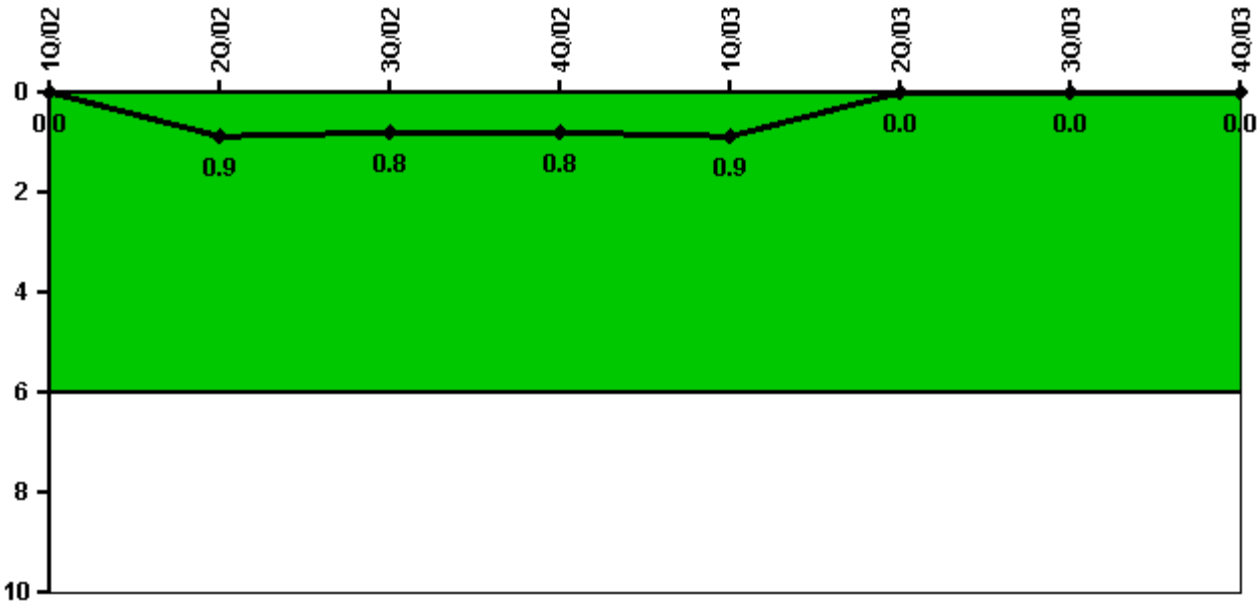
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Scrams	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



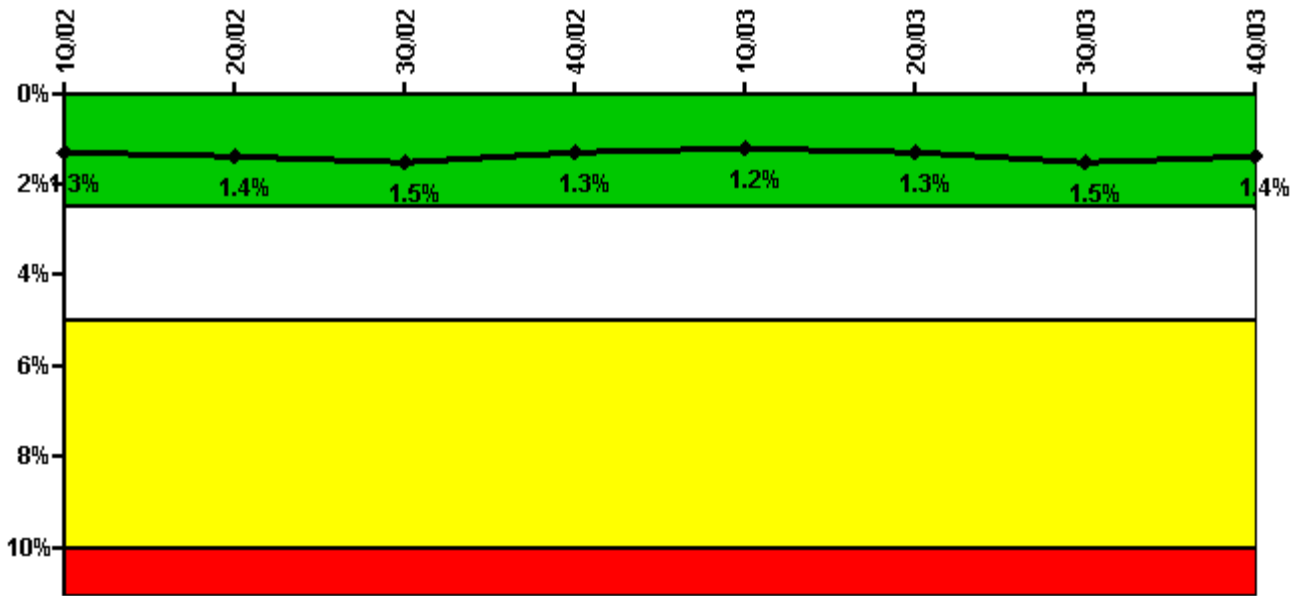
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Unplanned power changes	0	1.0	0	0	0	0	0	0
Critical hours	2160.0	2183.0	2208.0	2209.0	1273.7	1549.9	2208.0	2209.0
Indicator value	0	0.9	0.8	0.8	0.9	0	0	0

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



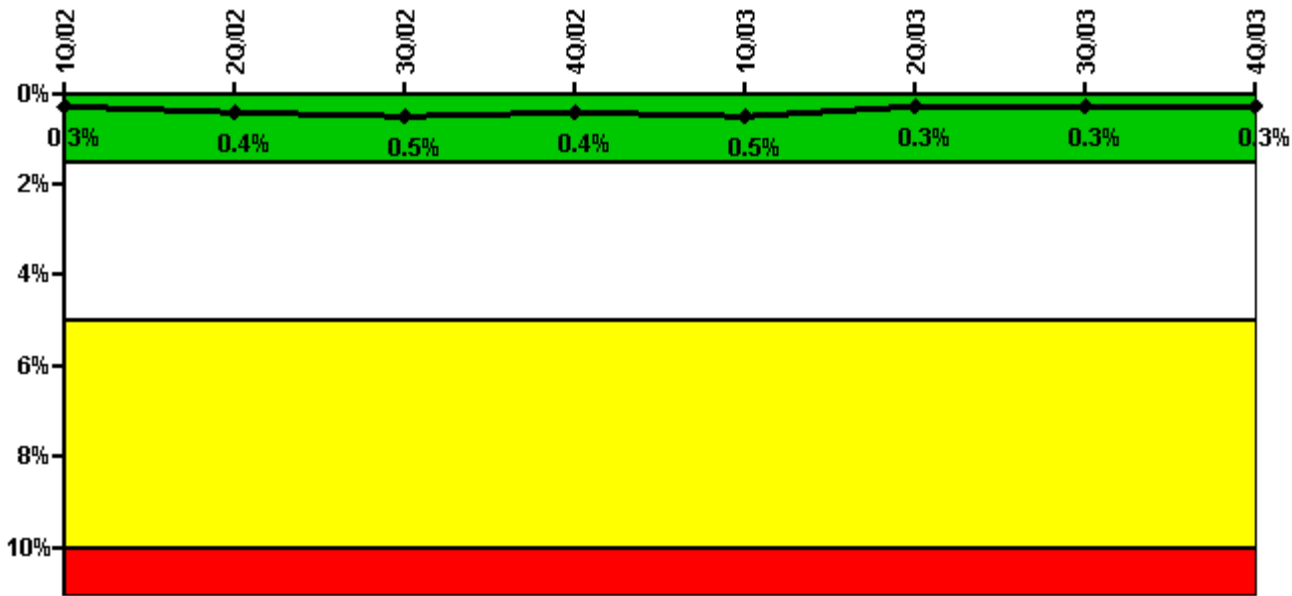
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Train 1								
Planned unavailable hours	5.81	37.82	25.48	7.36	4.61	2.67	50.35	9.10
Unplanned unavailable hours	4.13	0	0	9.67	77.40	23.50	23.00	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	2160.00	2183.00	2208.00	2209.00	1723.64	1677.40	2208.00	2209.00
Train 2								
Planned unavailable hours	20.06	53.49	29.59	10.60	7.69	7.48	54.00	14.39
Unplanned unavailable hours	0	0	0	11.80	0	3.88	0	18.21
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2183.00	2208.00	2209.00	1723.64	1806.70	2208.00	2209.00
Indicator value	1.3%	1.4%	1.5%	1.3%	1.2%	1.3%	1.5%	1.4%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



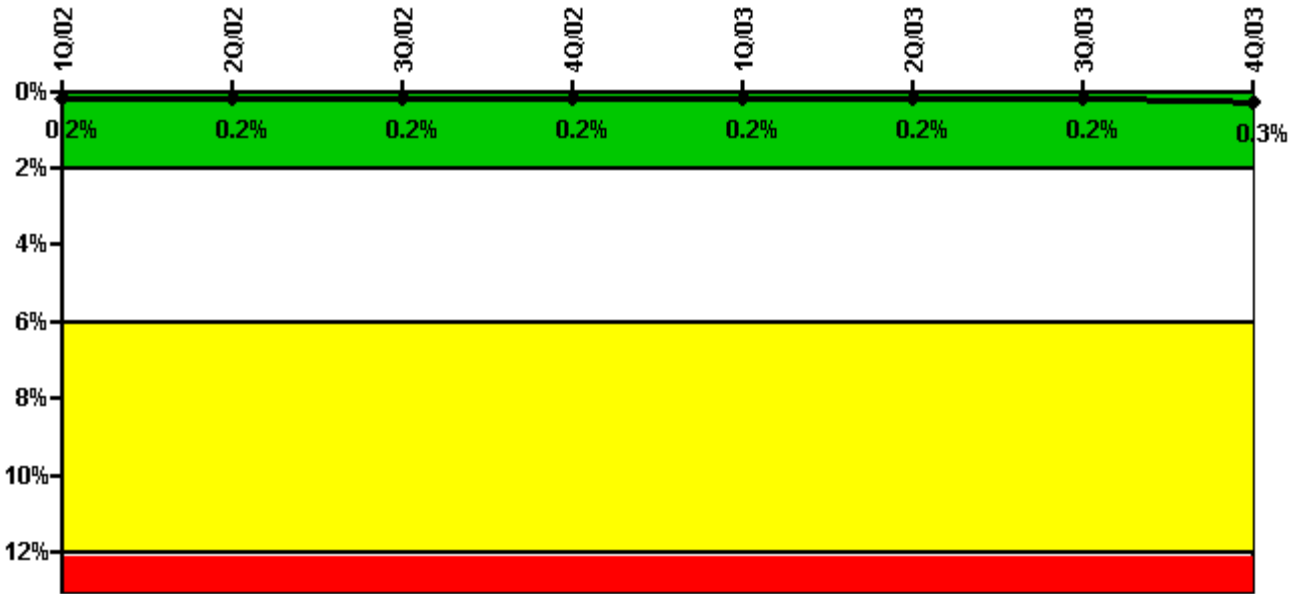
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Train 1								
Planned unavailable hours	3.27	0.73	0.87	4.29	0	2.37	2.53	1.43
Unplanned unavailable hours	0	42.98	0	0.65	3.08	0.12	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	2160.00	2183.00	2208.00	2209.00	1285.22	1836.99	2208.00	2209.00
Train 2								
Planned unavailable hours	0.75	2.83	3.22	2.15	18.40	0.93	2.97	1.95
Unplanned unavailable hours	0	42.98	0	0	6.45	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	2160.00	2183.00	2208.00	2209.00	1285.22	1836.99	2208.00	2209.00
Indicator value	0.3%	0.4%	0.5%	0.4%	0.5%	0.3%	0.3%	0.3%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



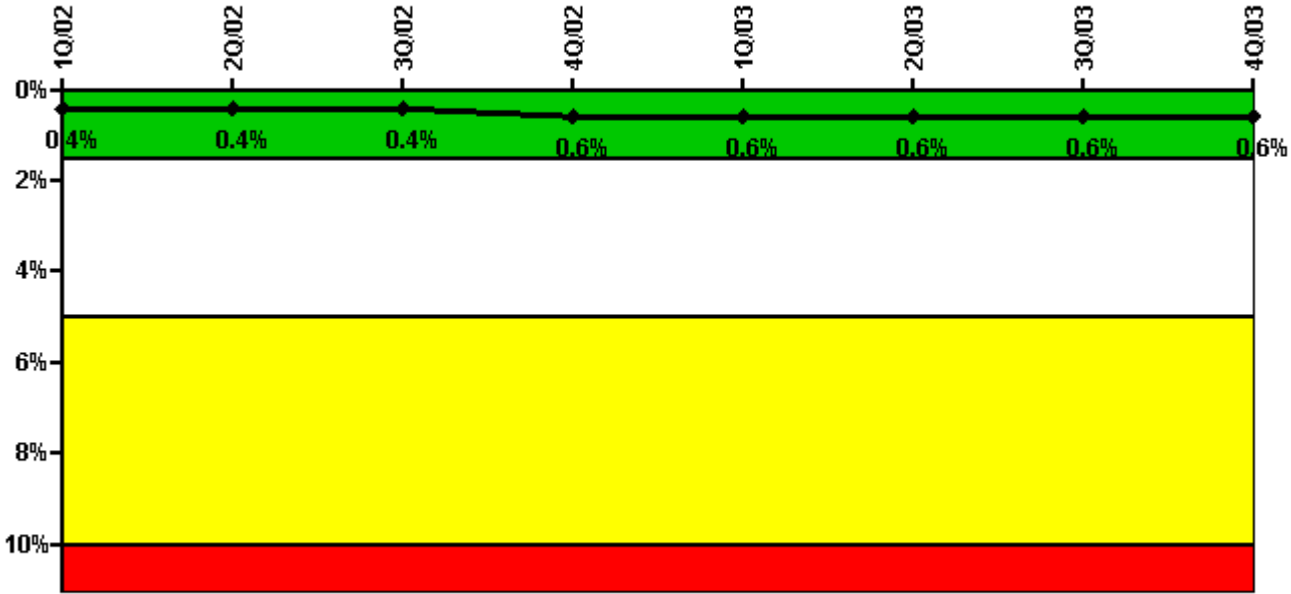
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Train 1								
Planned unavailable hours	6.95	1.17	3.20	7.57	0.35	4.50	1.50	12.67
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	2160.00	2183.00	2208.00	2209.00	1285.22	1836.99	2208.00	2209.00
Train 2								
Planned unavailable hours	4.75	0.83	6.05	2.28	12.18	0	3.41	11.13
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	2160.00	2183.00	2208.00	2209.00	1285.22	1836.99	2208.00	2209.00
Train 3								
Planned unavailable hours	4.43	5.15	4.28	4.80	0.33	9.81	10.45	6.48
Unplanned unavailable hours	0	0	0	0	0	3.27	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	2160.00	2183.00	2208.00	2209.00	1283.17	1829.18	2208.00	2209.00
Indicator value	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.3%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



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

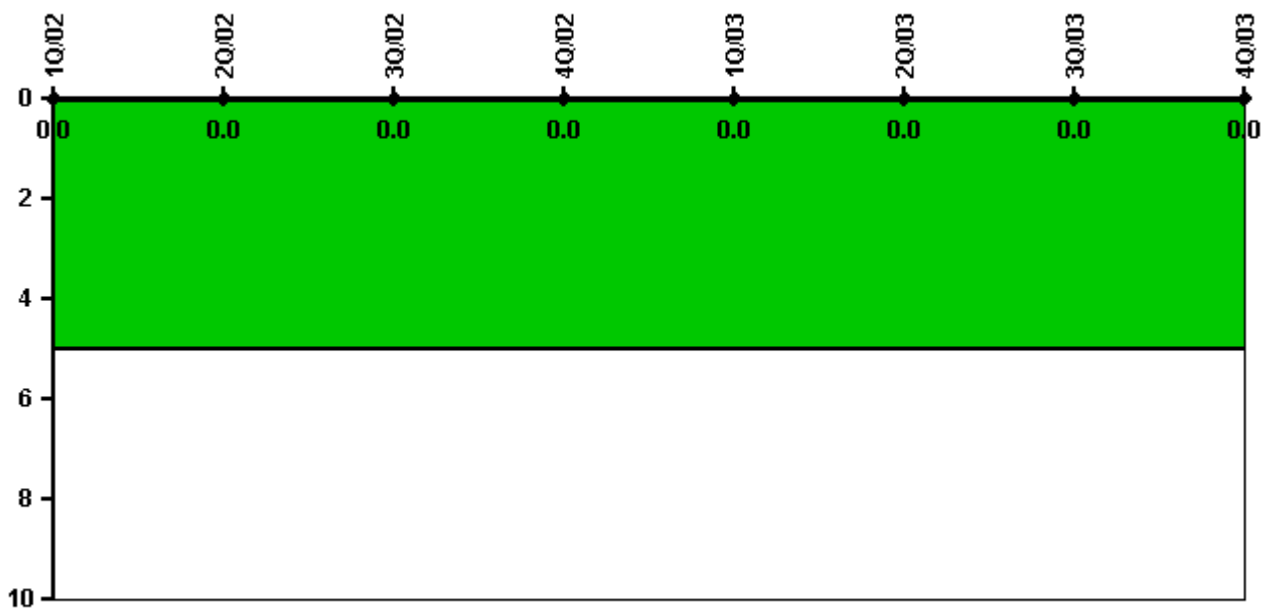
Notes

Safety System Unavailability, Residual Heat Removal System	10/02	20/02	30/02	40/02	10/03	20/03	30/03	40/03
Train 1								
Planned unavailable hours	21.96	15.32	19.39	2.75	0	4.65	16.60	28.03
Unplanned unavailable hours	0	0	0	52.33	2.50	1.82	1.65	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	2160.00	2183.00	2208.00	2209.00	1287.27	1844.79	2208.00	2209.00
Train 2								
Planned unavailable hours	37.47	17.60	10.86	10.03	9.97	1.73	7.56	23.37
Unplanned unavailable hours	33.18	0	0	57.50	67.18	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	2160.00	2183.00	2208.00	2209.00	1287.27	1844.79	2208.00	2209.00
Train 3								
Planned unavailable hours	0	0	0	37.17	3.20	0	10.15	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	2160.00	2183.00	2208.00	2209.00	1414.64	2106.56	2208.00	2209.00
Train 4								
Planned unavailable hours	0	0	0	0	2.98	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	2160.00	2183.00	2208.00	2209.00	1414.64	2106.56	2208.00	2209.00
Indicator value	0.4%	0.4%	0.4%	0.6%	0.6%	0.6%	0.6%	0.6%

Licensee Comments: none

Safety System Functional Failures (PWR)



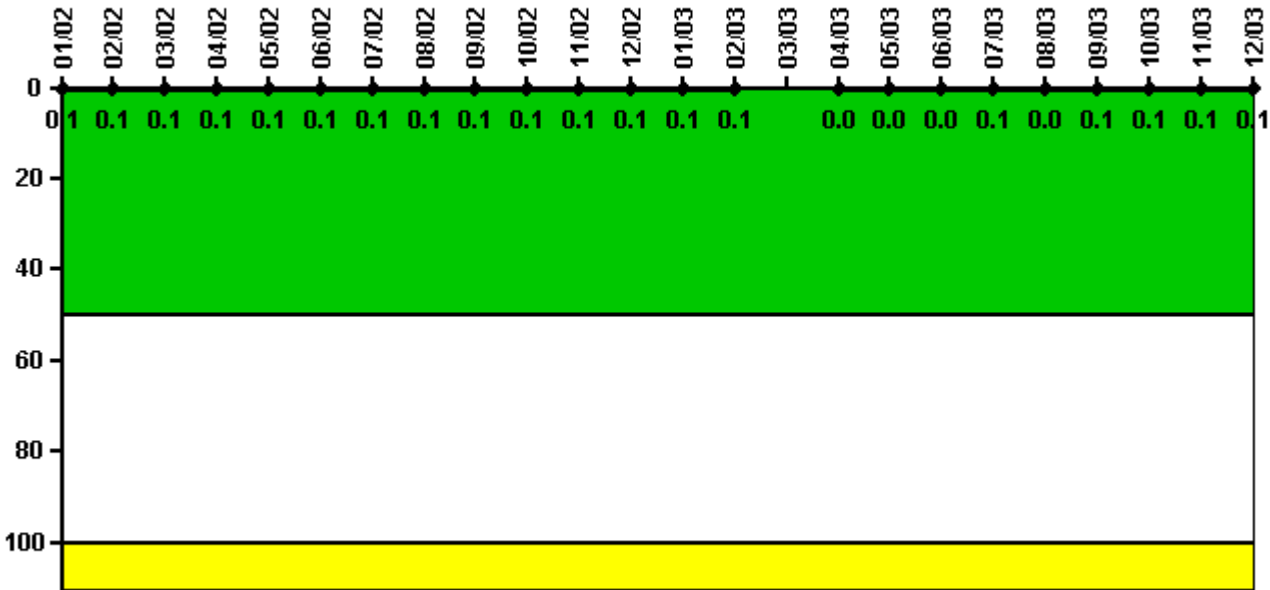
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
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

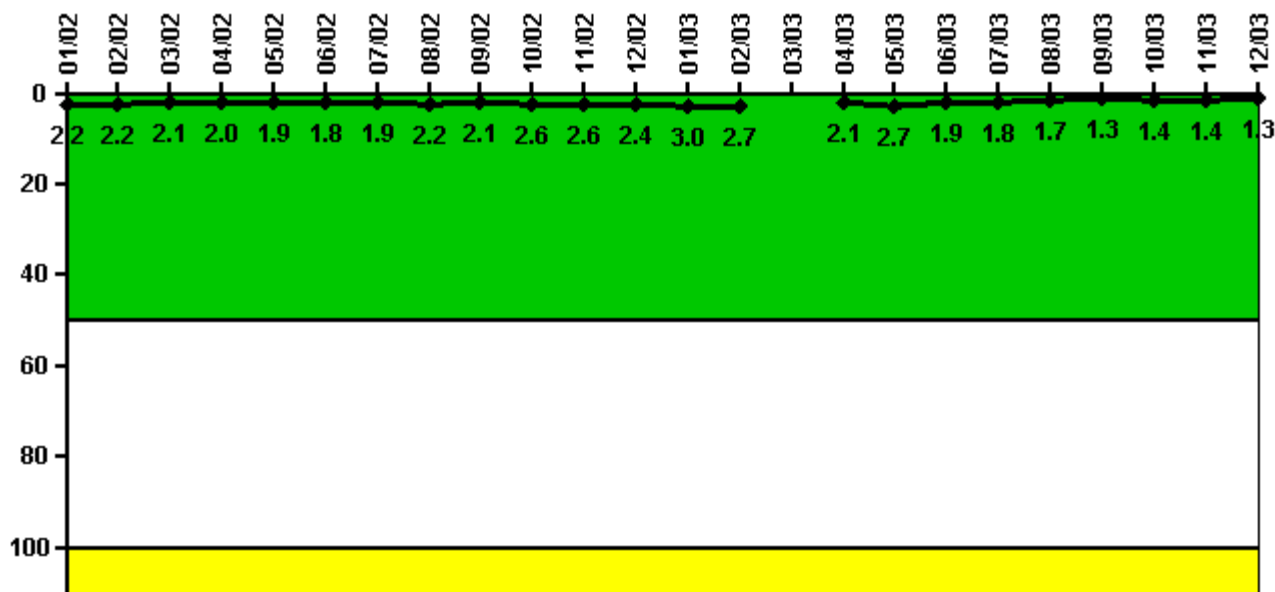
Notes

Reactor Coolant System Activity	1/02	2/02	3/02	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02
Maximum activity	0.000582	0.000582	0.000584	0.000660	0.000684	0.000637	0.000684	0.000769	0.000872	0.000815	0.000797	0.000852
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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Reactor Coolant System Activity	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03
Maximum activity	0.000809	0.000947	N/A	0.000412	0.000495	0.000410	0.000513	0.000458	0.000705	0.000527	0.000559	0.000534
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	0.1	0.1	N/A	0	0	0	0.1	0	0.1	0.1	0.1	0.1

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

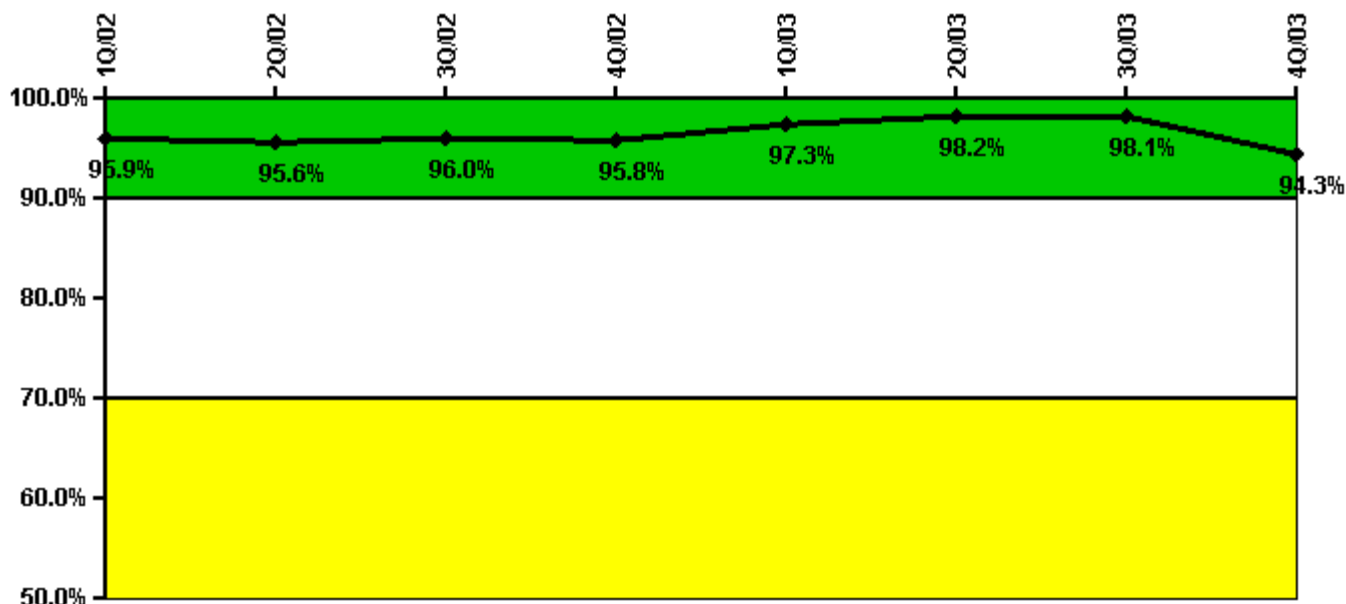
Notes

Reactor Coolant System Leakage	1/02	2/02	3/02	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02
Maximum leakage	0.222	0.222	0.213	0.201	0.191	0.175	0.192	0.215	0.207	0.263	0.257	0.235
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	2.2	2.2	2.1	2.0	1.9	1.8	1.9	2.2	2.1	2.6	2.6	2.4

Reactor Coolant System Leakage	1/03	2/03	3/03	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03
Maximum leakage	0.299	0.267	N/A	0.212	0.272	0.192	0.179	0.173	0.135	0.140	0.136	0.132
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	3.0	2.7	N/A	2.1	2.7	1.9	1.8	1.7	1.3	1.4	1.4	1.3

Licensee Comments: none

Drill/Exercise Performance



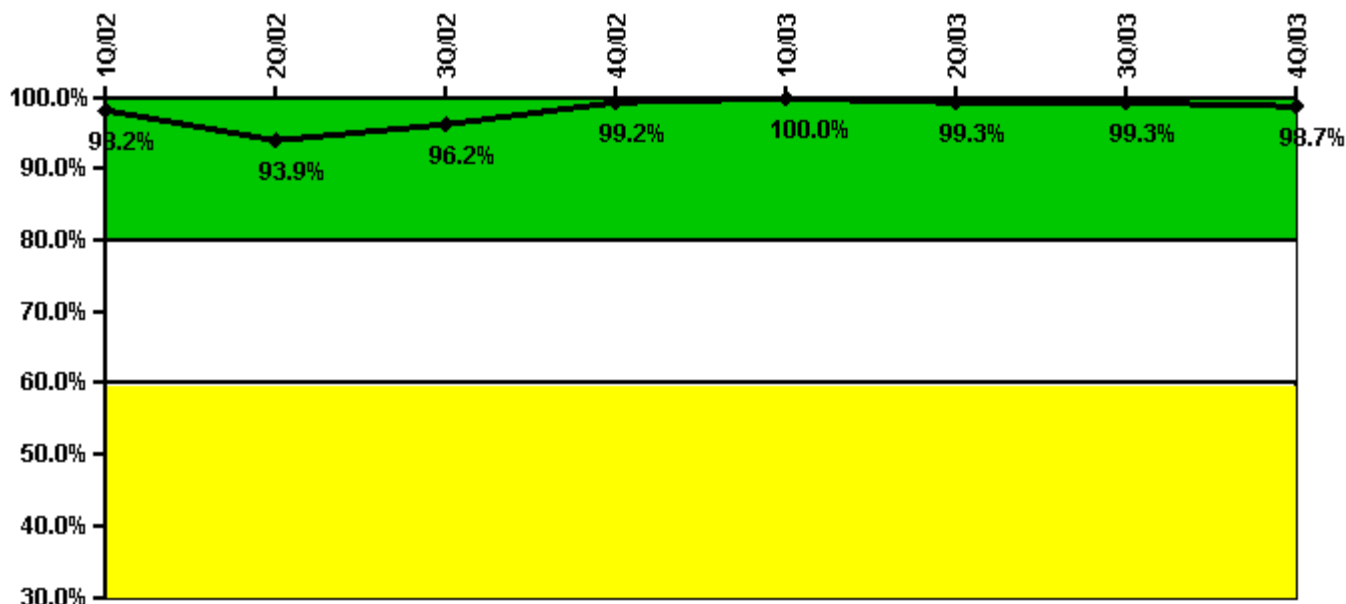
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Successful opportunities	39.0	14.0	21.0	10.0	30.0	108.0	3.0	25.0
Total opportunities	41.0	15.0	21.0	10.0	32.0	108.0	3.0	35.0
Indicator value	95.9%	95.6%	96.0%	95.8%	97.3%	98.2%	98.1%	94.3%

Licensee Comments: none

ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

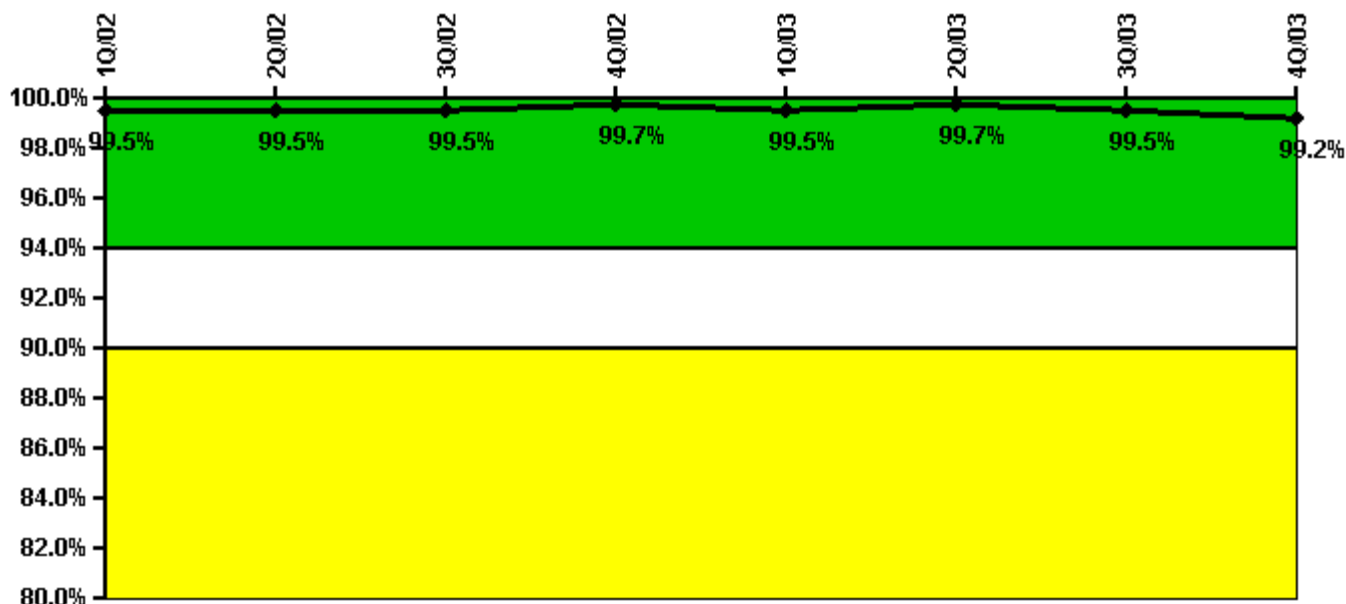
Notes

ERO Drill Participation	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Participating Key personnel	112.0	123.0	127.0	127.0	124.0	151.0	152.0	150.0
Total Key personnel	114.0	131.0	132.0	128.0	124.0	152.0	153.0	152.0
Indicator value	98.2%	93.9%	96.2%	99.2%	100.0%	99.3%	99.3%	98.7%

Licensee Comments:

4Q/03: Total "Participating" and "Total Key" personnel reduced by 1 from 2003-06 thru 2003-11 after it was discovered that the individual had been trained but not evaluated.

Alert & Notification System



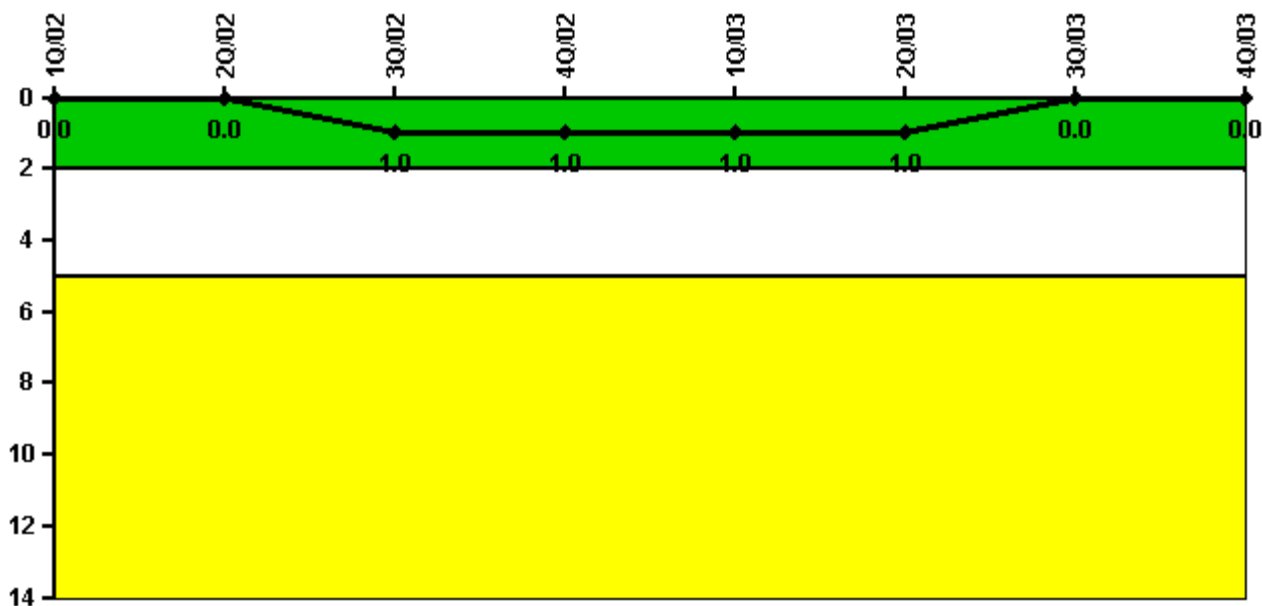
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
Successful siren-tests	434	432	431	434	431	436	436	435
Total sirens-tests	434	434	434	434	434	436	441	441
Indicator value	99.5%	99.5%	99.5%	99.7%	99.5%	99.7%	99.5%	99.2%

Licensee Comments: none

Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
High radiation area occurrences	0	0	1	0	0	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	0	0	1	1	1	1	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



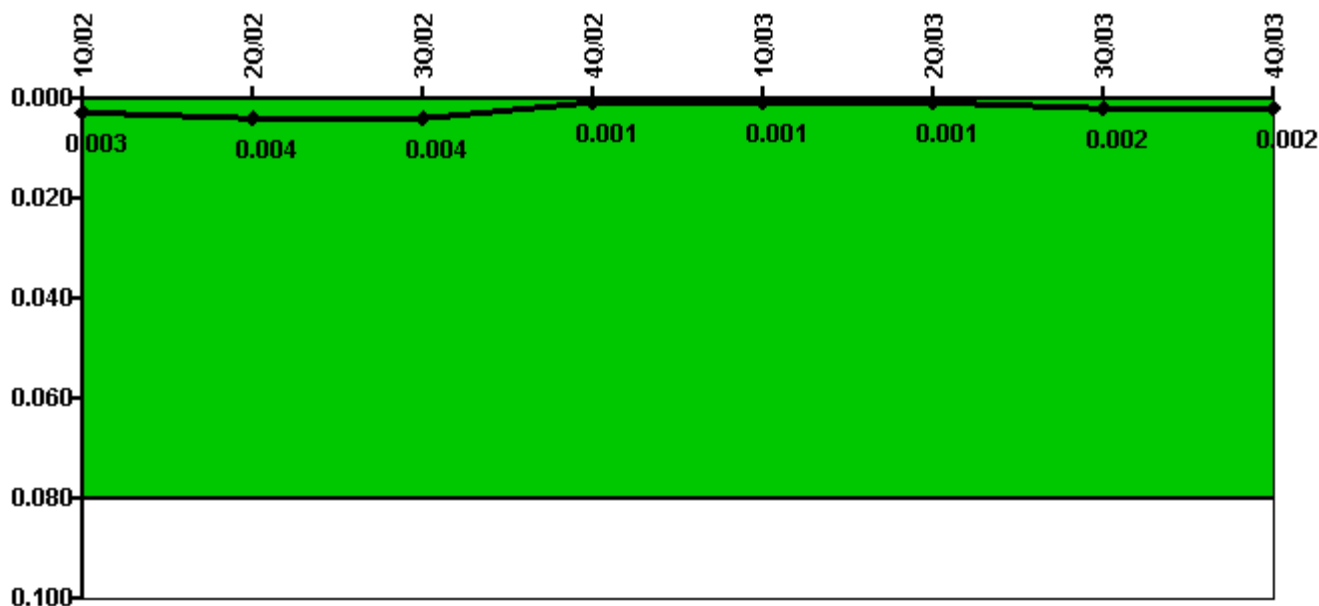
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
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



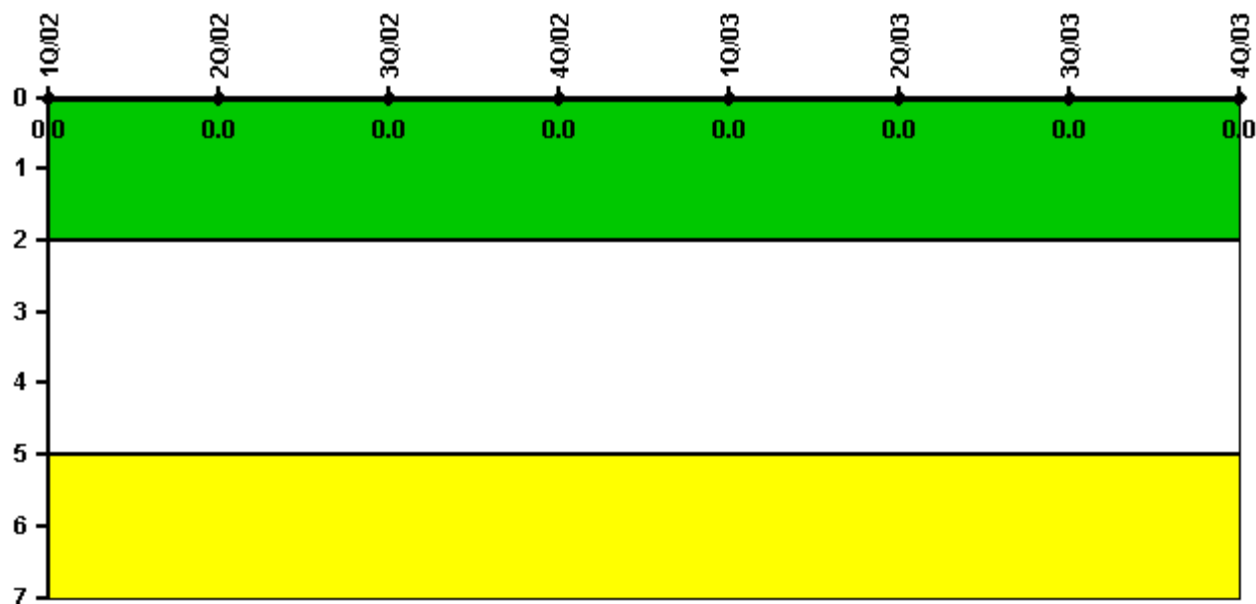
Thresholds: White > 0.080

Notes

Protected Area Security Performance Index	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
IDS compensatory hours	0	4.90	1.90	2.50	3.50	0	21.90	4.00
CCTV compensatory hours	0	0	10.2	0	0	0	0	0
IDS normalization factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	0.003	0.004	0.004	0.001	0.001	0.001	0.002	0.002

Licensee Comments: none

Personnel Screening Program



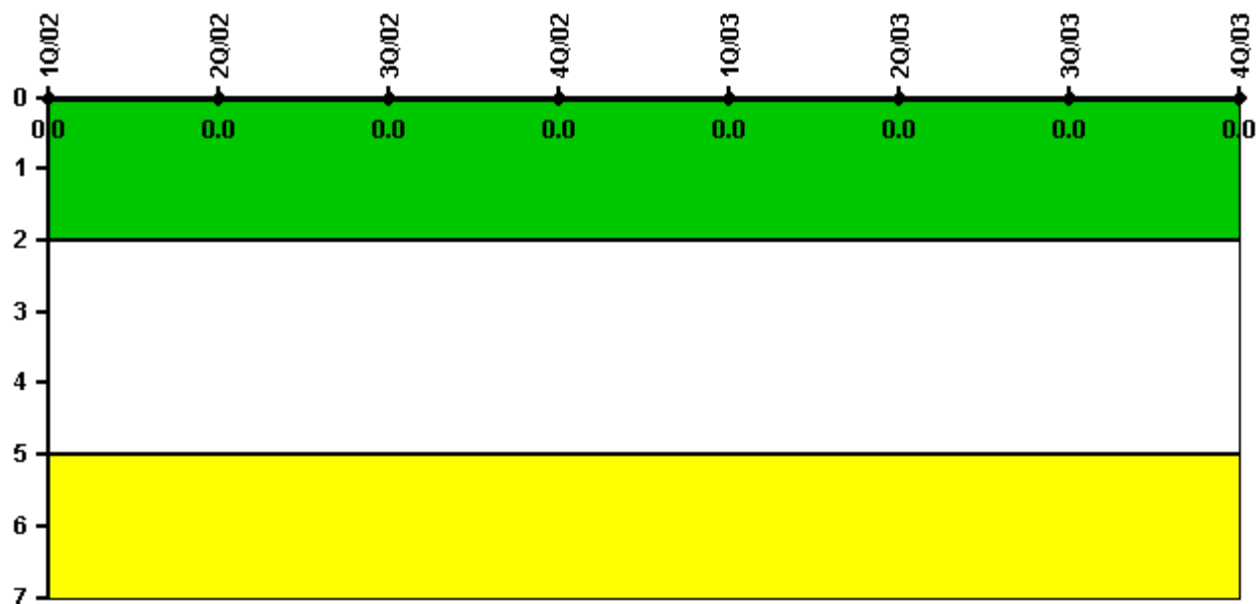
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
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	1Q/02	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03
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: January 23, 2004