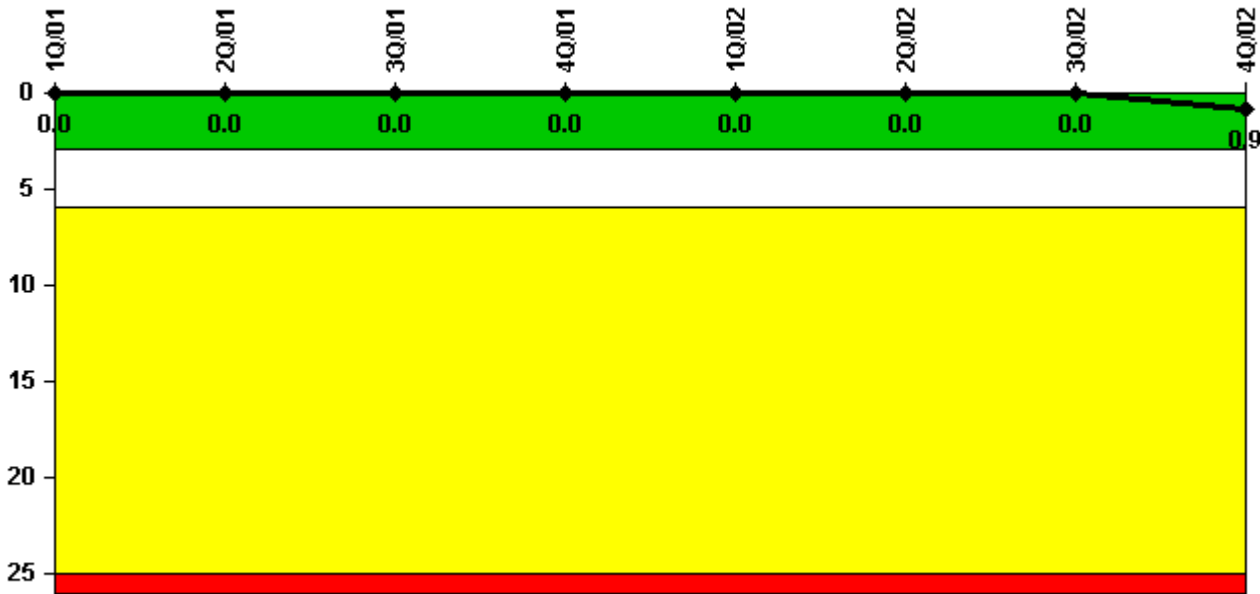


Surry 2

4Q/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	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Unplanned scrams	0	0	0	0	0	0	0	1.0
Critical hours	2122.9	1947.6	2208.0	1950.6	1968.9	1716.0	2208.0	2172.7
Indicator value	0	0	0	0	0	0	0	0.9

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



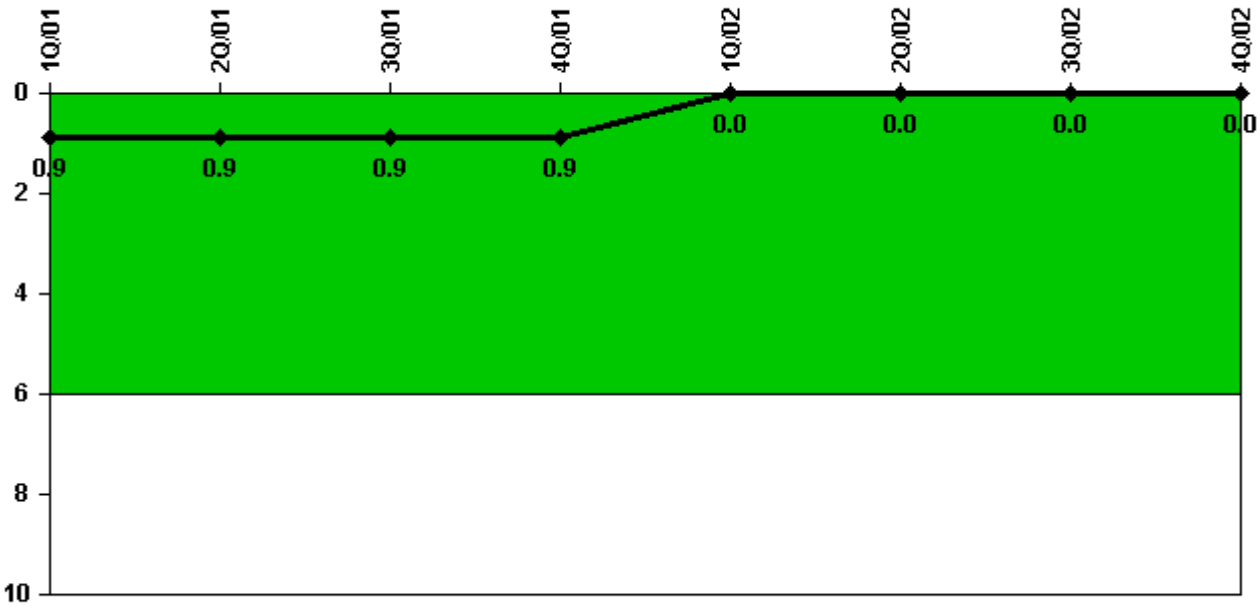
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
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



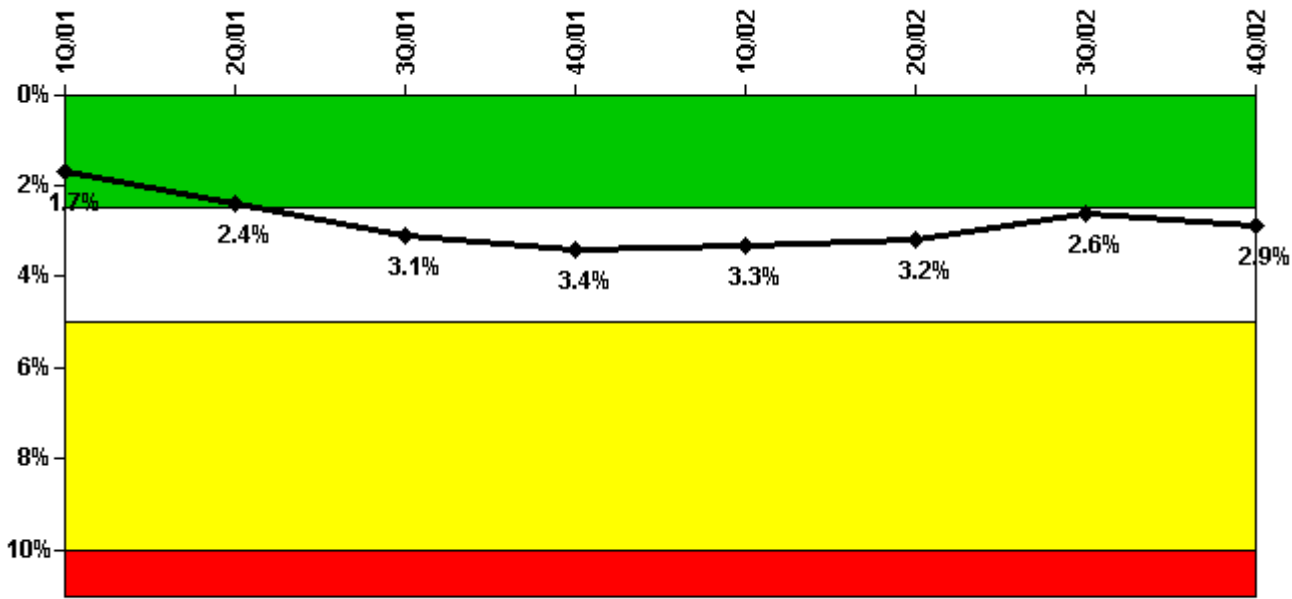
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Unplanned power changes	1.0	0	0	0	0	0	0	0
Critical hours	2122.9	1947.6	2208.0	1950.6	1968.9	1716.0	2208.0	2172.7
Indicator value	0.9	0.9	0.9	0.9	0	0	0	0

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



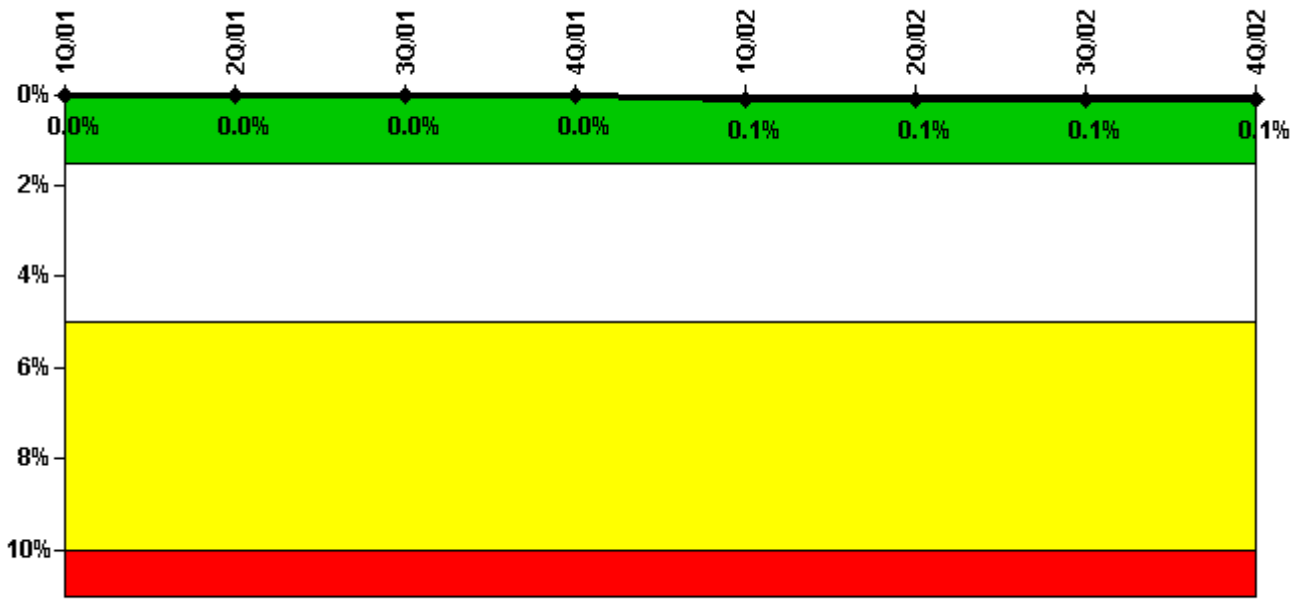
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, Emergency AC Power	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Train 1								
Planned unavailable hours	33.44	17.17	8.00	94.71	23.48	12.57	20.43	11.90
Unplanned unavailable hours	0	0	28.76	135.10	10.50	0.32	0	0
Fault exposure hours	0	0	336.03	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	336.03	0
Required hours	2160.00	1993.43	2208.00	2005.98	1978.30	1791.42	2208.00	2209.00
Train 2								
Planned unavailable hours	25.95	10.02	30.93	44.59	15.60	25.40	22.58	138.18
Unplanned unavailable hours	0	131.35	3.53	12.57	7.37	0	9.50	85.35
Fault exposure hours	0	192.03	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	1993.43	2208.00	2005.98	1978.30	1791.42	2208.00	2209.00
Indicator value	1.7%	2.4%	3.1%	3.4%	3.3%	3.2%	2.6%	2.9%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



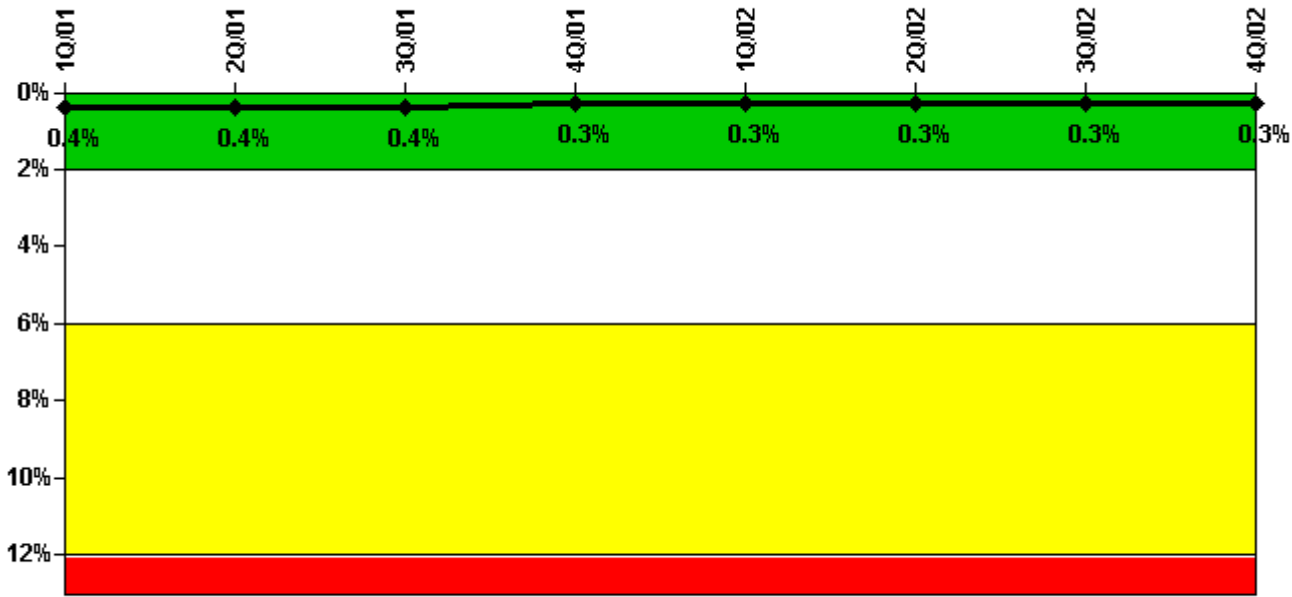
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Train 1								
Planned unavailable hours	0	0	0	0	0	0.80	0	1.84
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	1993.40	2208.00	2006.00	1968.90	1716.00	2208.00	2209.00
Train 2								
Planned unavailable hours	0.70	3.10	2.00	0.50	1.20	1.85	3.46	12.16
Unplanned unavailable hours	0	0	4.80	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	1993.40	2208.00	2006.00	1968.90	1716.00	2208.00	2209.00
Indicator value	0%	0%	0%	0%	0.1%	0.1%	0.1%	0.1%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



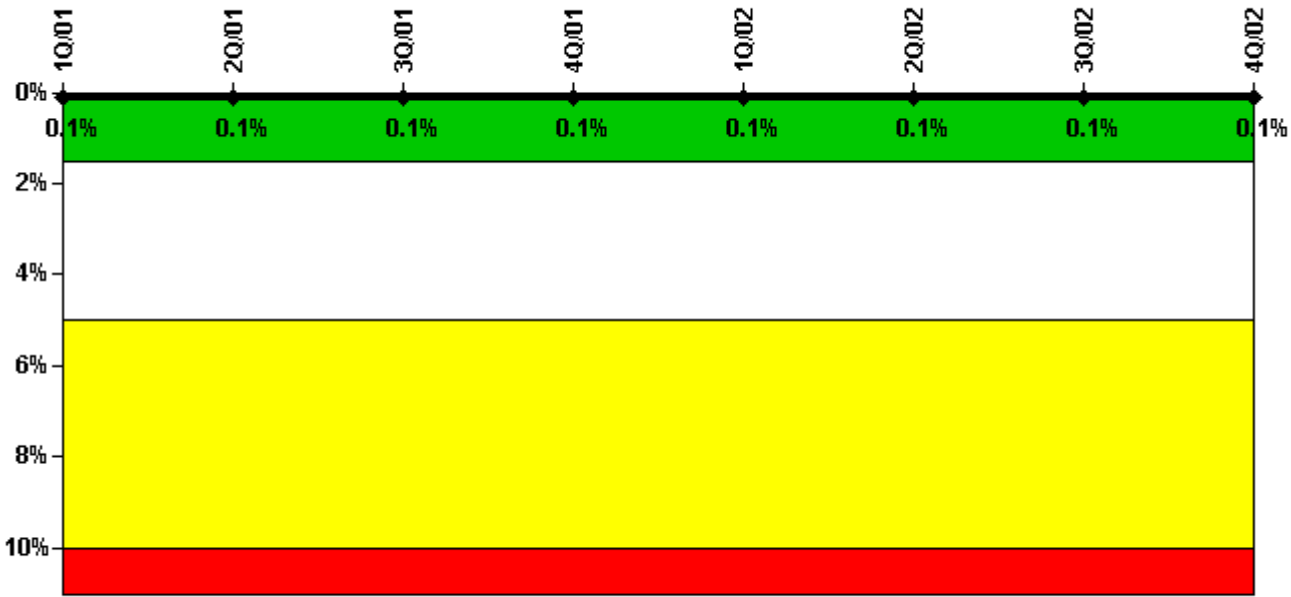
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

Notes

Safety System Unavailability, Heat Removal System (AFW)	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Train 1								
Planned unavailable hours	4.30	1.10	10.60	1.30	9.30	14.70	0.68	1.60
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	1993.40	2208.00	2006.00	1968.90	1716.00	2208.00	2209.00
Train 2								
Planned unavailable hours	16.50	1.40	1.40	1.50	0.60	8.70	0.95	0.82
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	1993.40	2208.00	2006.00	1968.90	1716.00	2208.00	2209.00
Train 3								
Planned unavailable hours	1.70	9.50	2.10	1.30	11.90	1.20	1.20	1.80
Unplanned unavailable hours	0	0	0	0	0	3.80	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	1993.40	2208.00	2006.00	1968.90	1716.00	2208.00	2209.00
Indicator value	0.4%	0.4%	0.4%	0.3%	0.3%	0.3%	0.3%	0.3%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



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

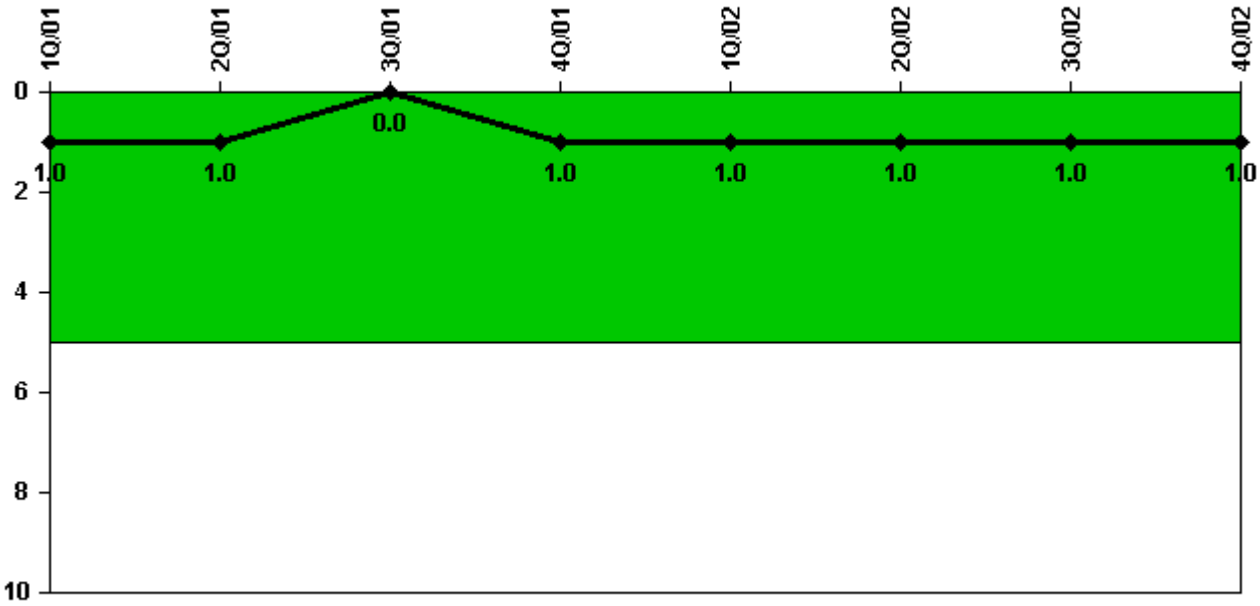
Notes

Safety System Unavailability, Residual Heat Removal System	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Train 1								
Planned unavailable hours	11.30	0.10	1.10	0	10.80	0.47	0.83	5.79
Unplanned unavailable hours	0	0	0	0	0	0	0	0.25
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	1993.40	2208.00	2209.00	1968.90	1716.00	2208.00	2209.00
Train 2								
Planned unavailable hours	2.80	0.70	10.30	0.60	1.90	0	0.88	23.45
Unplanned unavailable hours	0	0	0	0	0	0.40	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	2160.00	1993.40	2208.00	2209.00	1968.90	1716.00	2208.00	2209.00
Train 3								
Planned unavailable hours	0	0.30	0	0	10.00	0	0	0
Unplanned unavailable hours	0	0	0	0	0	5.85	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	1993.40	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
Train 4								
Planned unavailable hours	0	0.40	0	0	10.20	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	1993.40	2208.00	2209.00	2160.00	2183.00	2208.00	2209.00
Indicator value	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

Licensee Comments:

4Q/02: Low Head Safety Injection system valve in train 1 was mispositioned as described in Licensee Event Report 50-281/2002-002-00 resulting in 84 hours of T/2 fault exposure hours.

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

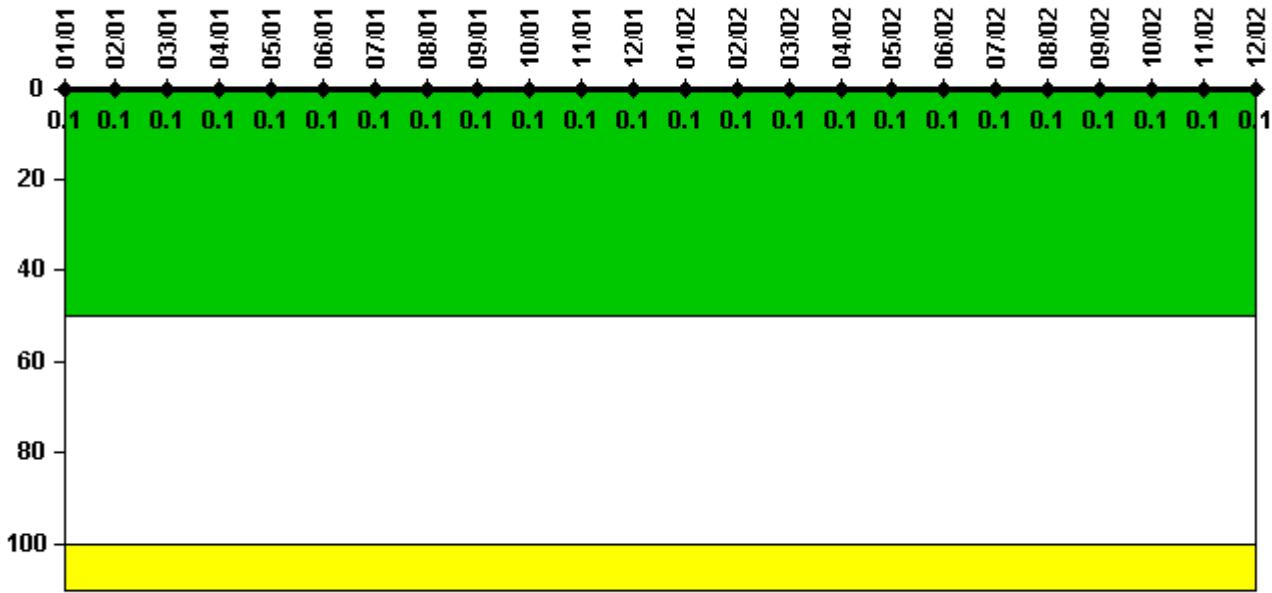
Notes

Safety System Functional Failures (PWR)	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Safety System Functional Failures	0	0	0	1	0	0	0	1
Indicator value	1	1	0	1	1	1	1	1

Licensee Comments:

4Q/02: Refer to Licensee Event Report 50-281/2002-002-00

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

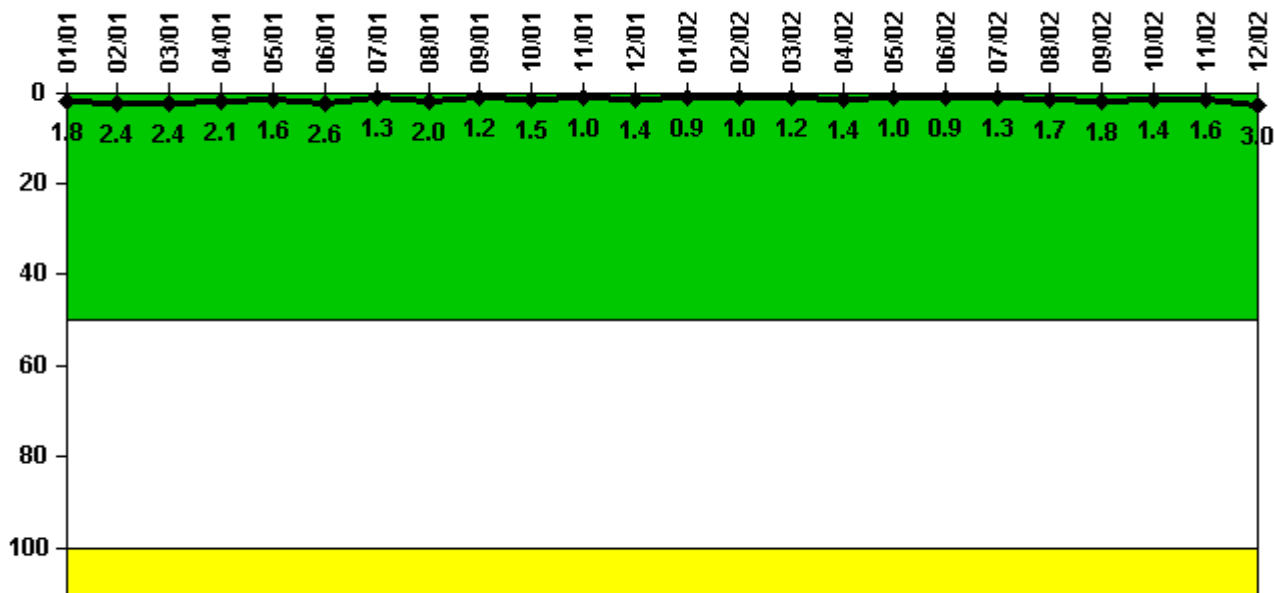
Notes

Reactor Coolant System Activity	1/01	2/01	3/01	4/01	5/01	6/01	7/01	8/01	9/01	10/01	11/01	12/01
Maximum activity	0.000951	0.000951	0.000914	0.001100	0.000977	0.001190	0.001180	0.001020	0.001060	0.001100	0.001140	0.001190
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	1/02	2/02	3/02	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02
Maximum activity	0.001140	0.001160	0.001350	0.000611	0.000791	0.000651	0.000748	0.000720	0.000722	0.000729	0.000738	0.000758
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

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

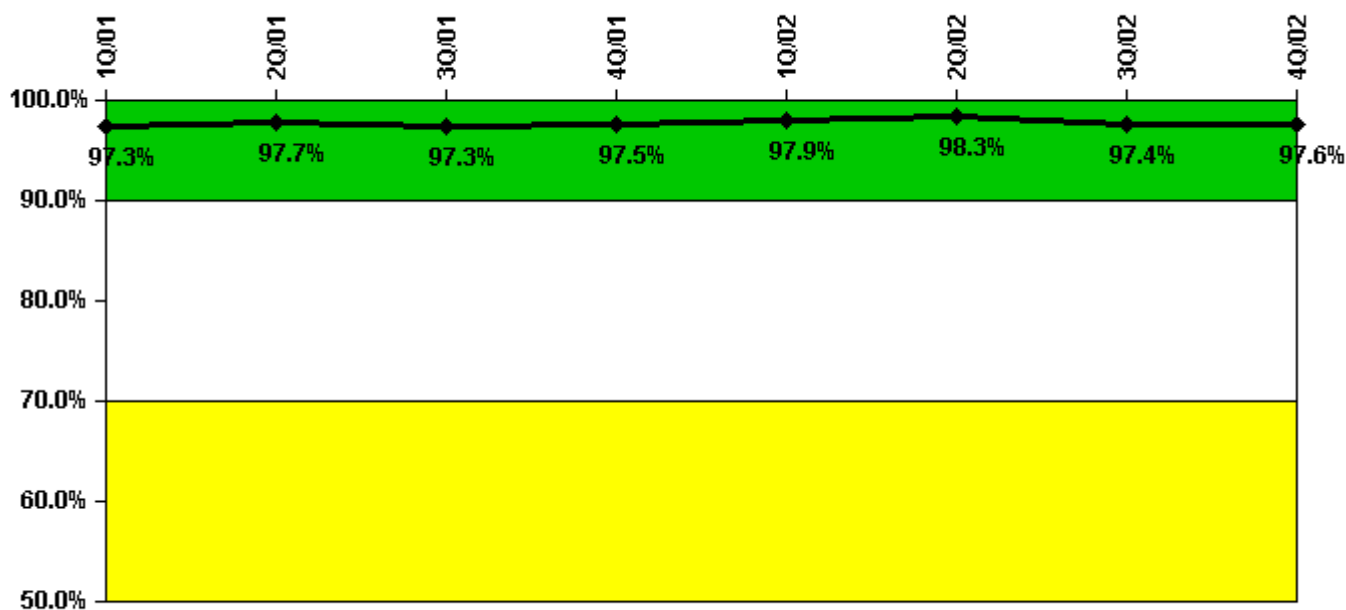
Notes

Reactor Coolant System Leakage	1/01	2/01	3/01	4/01	5/01	6/01	7/01	8/01	9/01	10/01	11/01	12/01
Maximum leakage	0.180	0.240	0.240	0.210	0.160	0.260	0.130	0.200	0.120	0.150	0.100	0.140
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	1.8	2.4	2.4	2.1	1.6	2.6	1.3	2.0	1.2	1.5	1.0	1.4

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	0.090	0.100	0.120	0.140	0.100	0.090	0.130	0.170	0.180	0.140	0.160	0.300
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	0.9	1.0	1.2	1.4	1.0	0.9	1.3	1.7	1.8	1.4	1.6	3.0

Licensee Comments: none

Drill/Exercise Performance



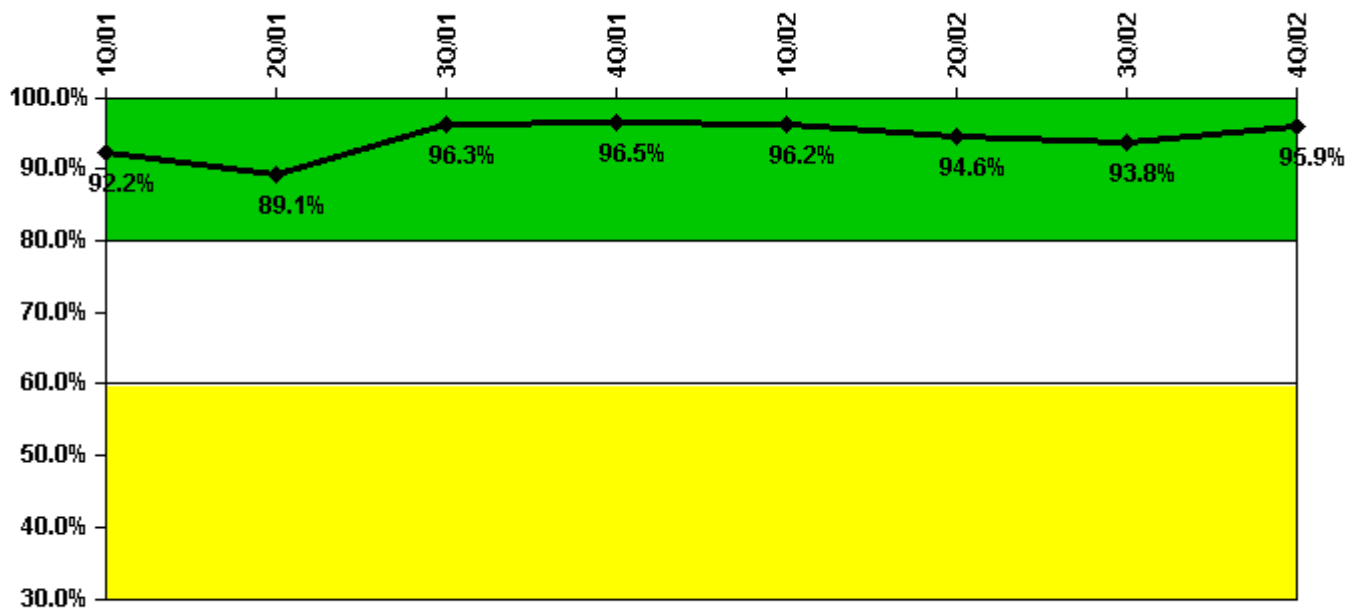
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Successful opportunities	0	49.0	39.0	27.0	40.0	55.0	54.0	18.0
Total opportunities	0	51.0	41.0	28.0	40.0	55.0	56.0	18.0
Indicator value	97.3%	97.7%	97.3%	97.5%	97.9%	98.3%	97.4%	97.6%

Licensee Comments: none

ERO Drill Participation



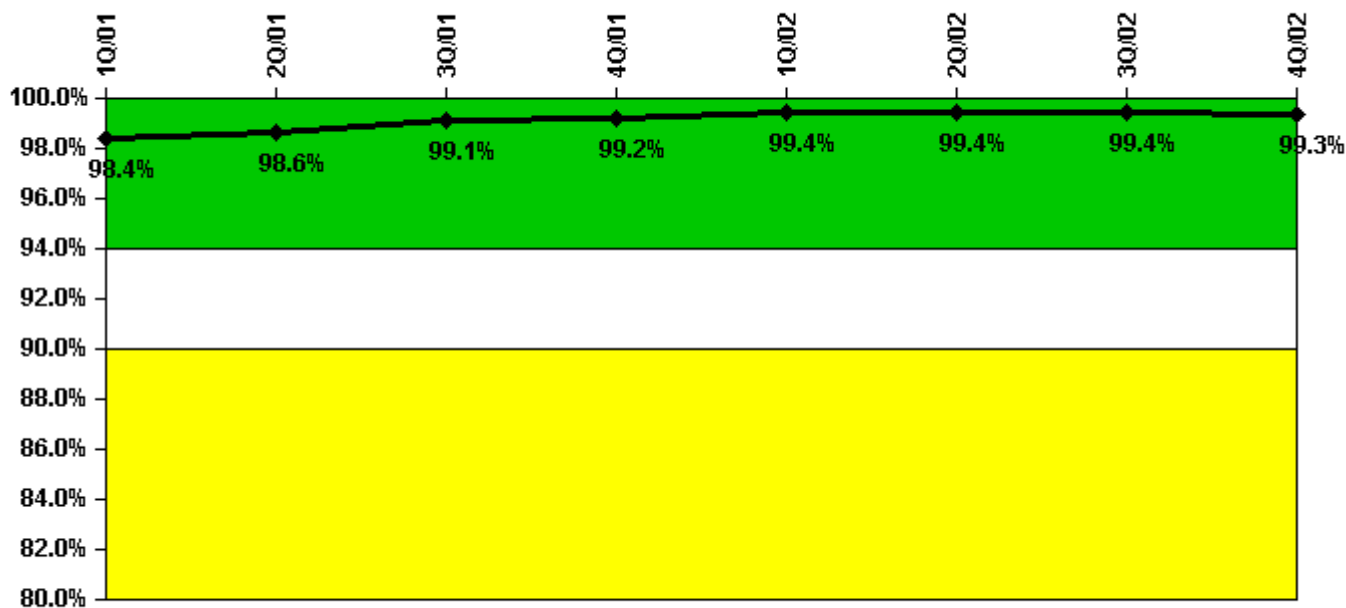
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Participating Key personnel	119.0	123.0	129.0	137.0	126.0	141.0	135.0	140.0
Total Key personnel	129.0	138.0	134.0	142.0	131.0	149.0	144.0	146.0
Indicator value	92.2%	89.1%	96.3%	96.5%	96.2%	94.6%	93.8%	95.9%

Licensee Comments: none

Alert & Notification System



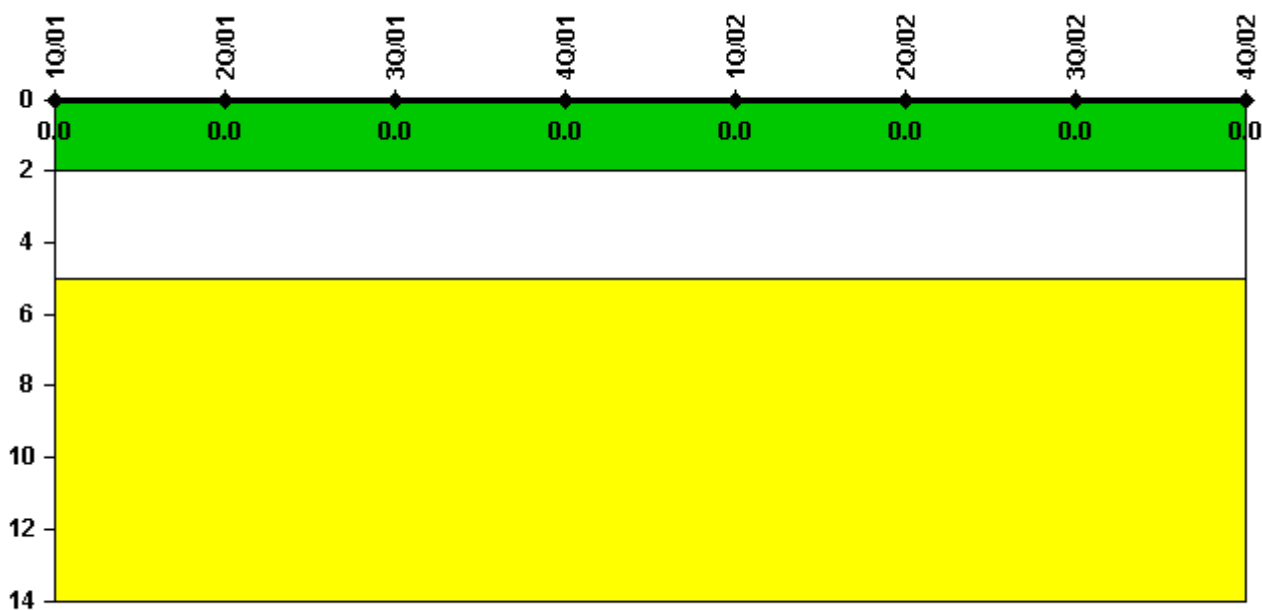
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Successful siren-tests	442	507	447	508	518	515	453	514
Total sirens-tests	448	512	448	512	520	520	455	520
Indicator value	98.4%	98.6%	99.1%	99.2%	99.4%	99.4%	99.4%	99.3%

Licensee Comments: none

Occupational Exposure Control Effectiveness



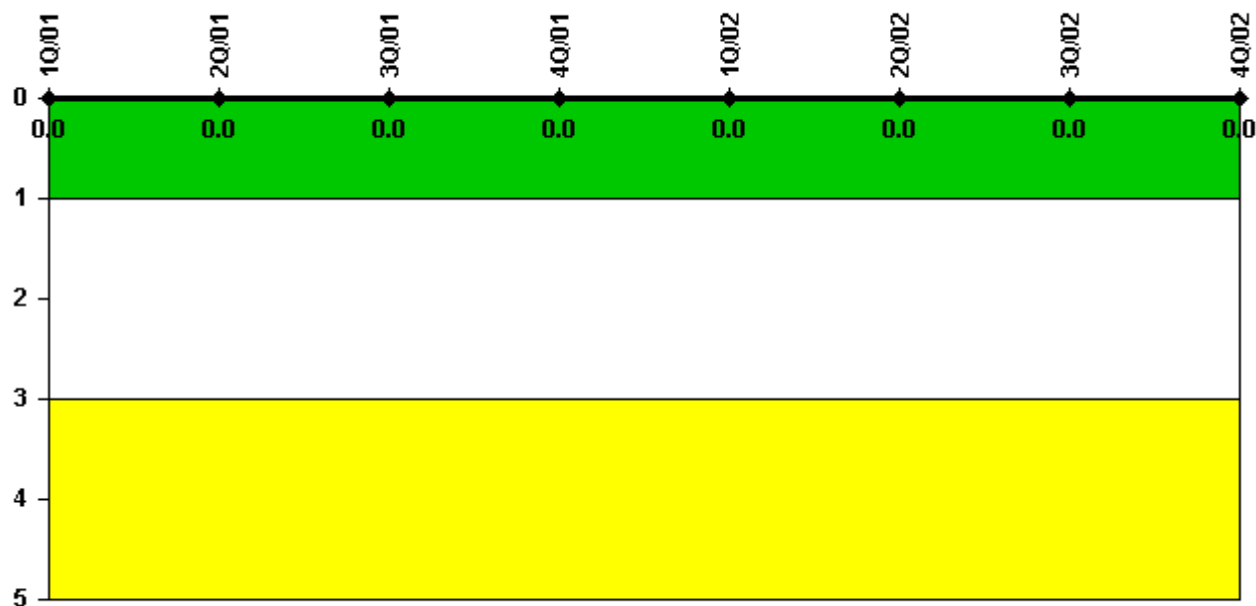
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
High radiation area occurrences	0	0	0	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	0	0	0	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



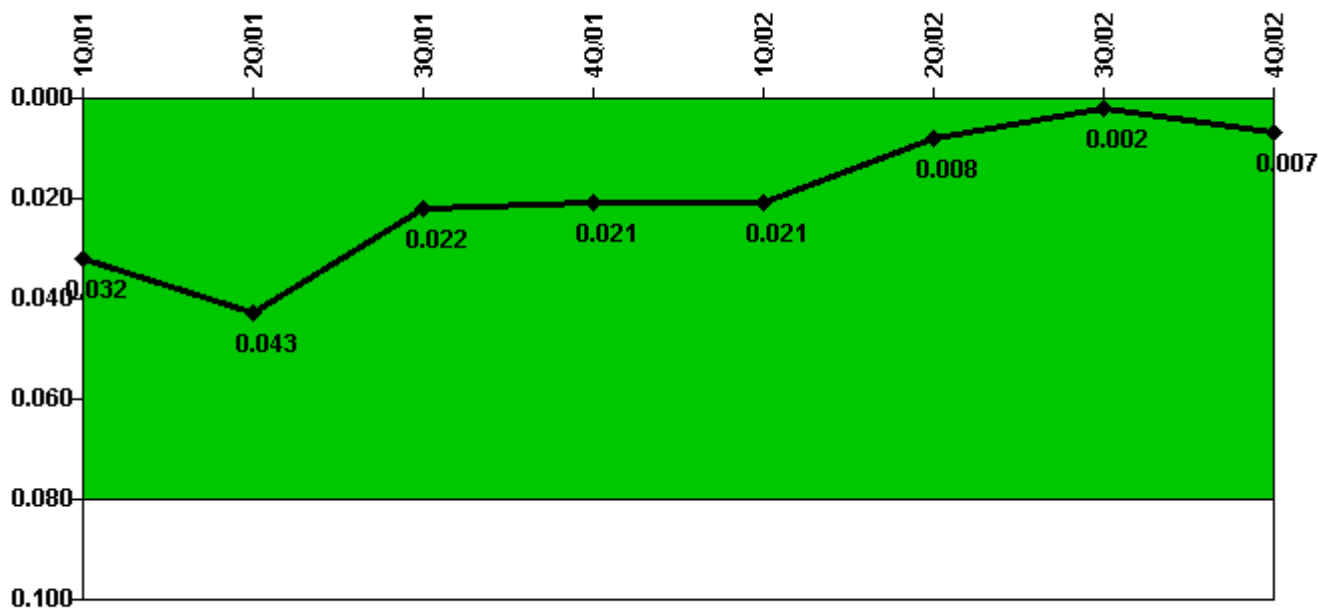
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/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

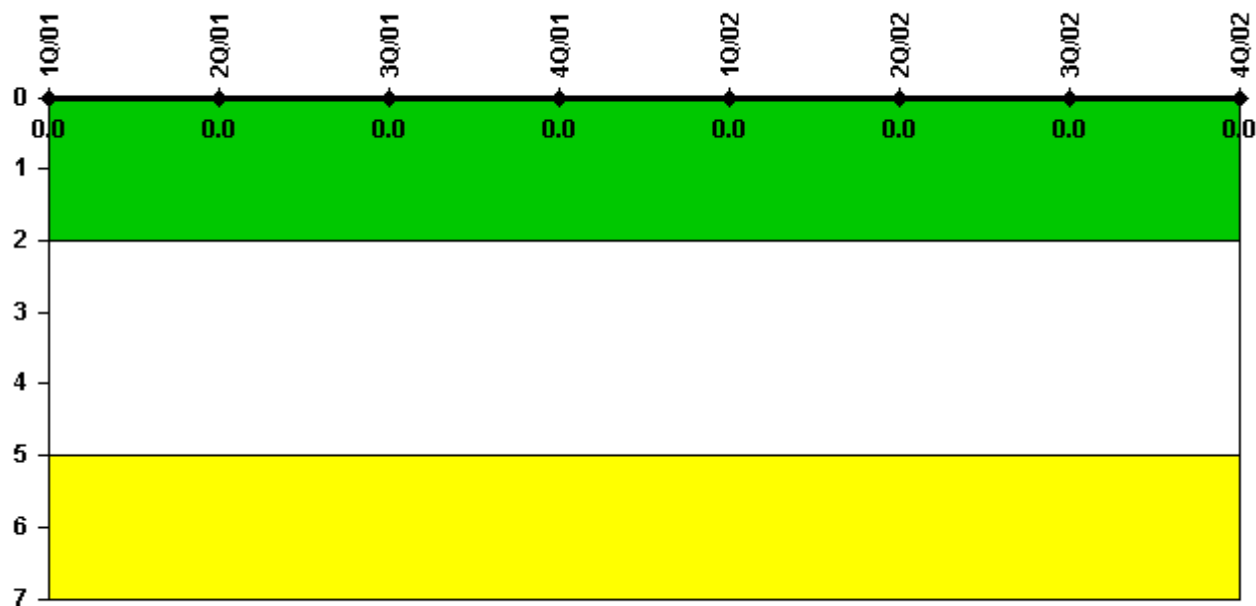


Thresholds: White > 0.080

Notes

Protected Area Security Performance Index	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
IDS compensatory hours	0	256.52	125.73	0	0	13.26	27.25	83.20
CCTV compensatory hours	0	0	0	0	0	0	0	0
IDS normalization factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
CCTV normalization factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Index Value	0.032	0.043	0.022	0.021	0.021	0.008	0.002	0.007

Personnel Screening Program



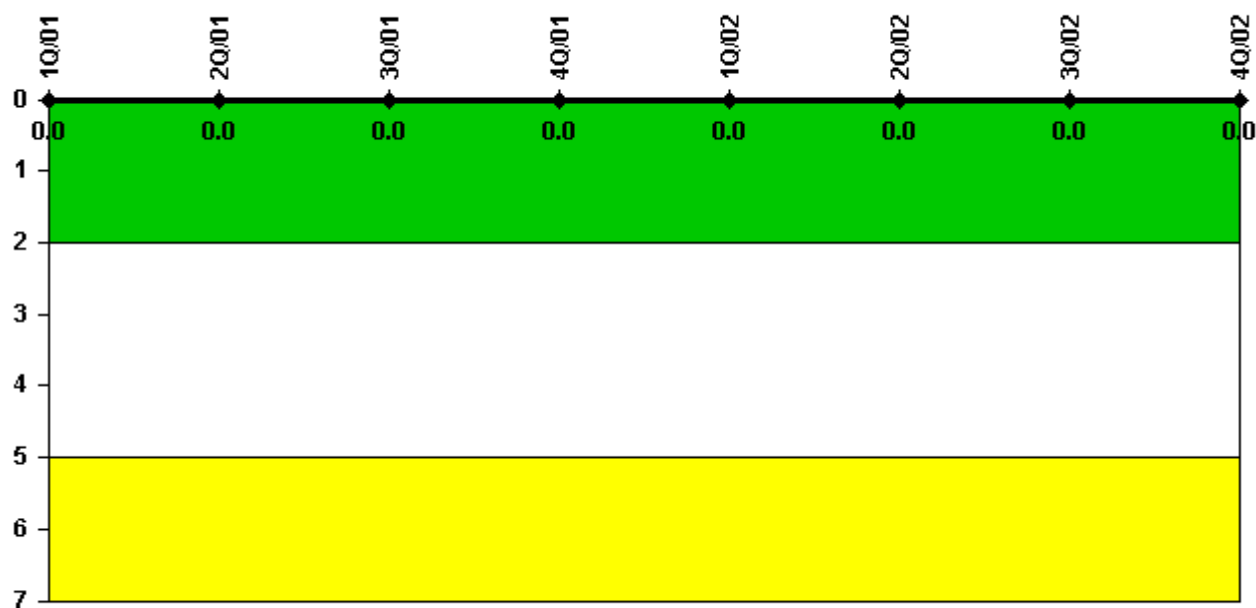
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/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	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/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: January 30, 2003