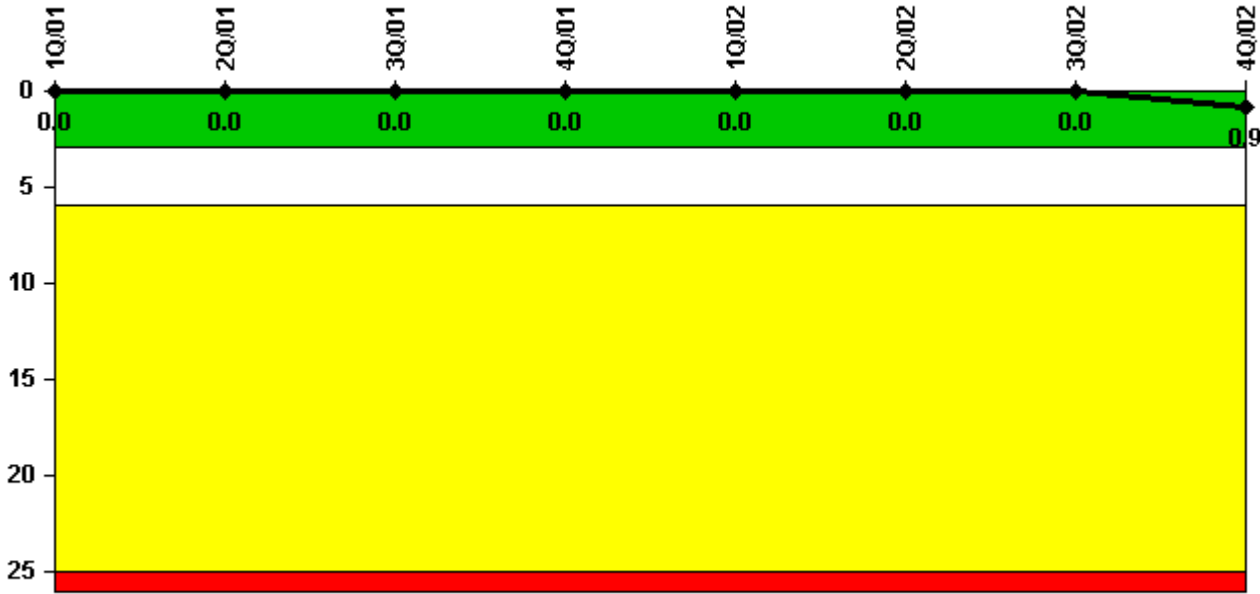


Palo Verde 1

4Q/2002 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



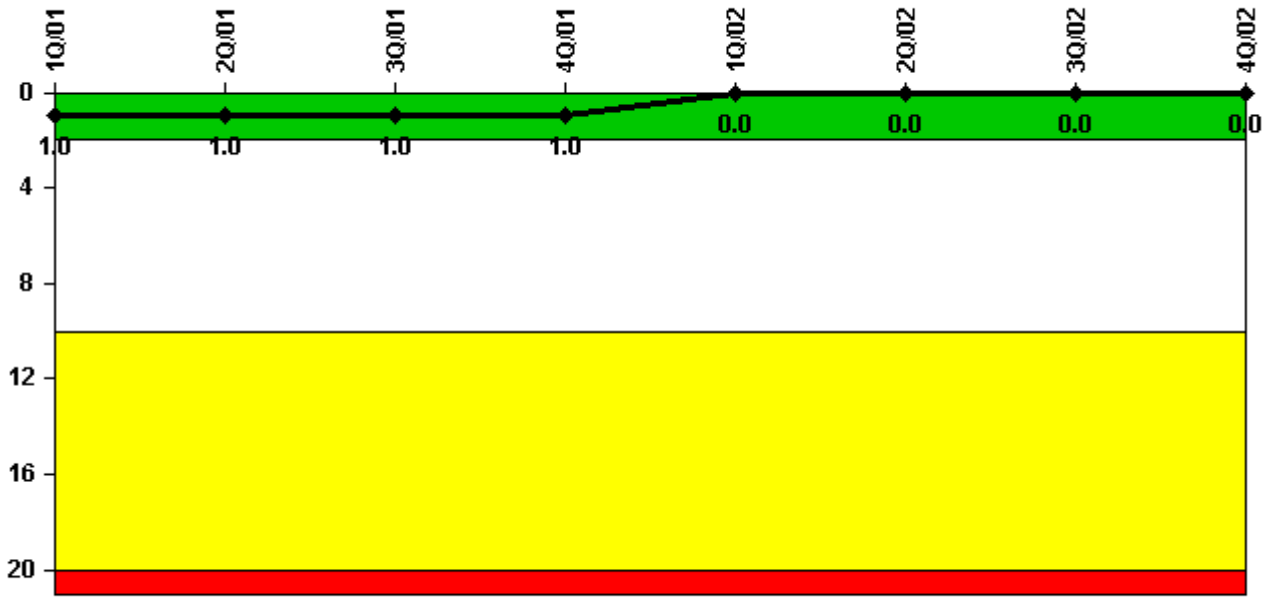
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

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	2136.0	1187.0	2208.0	2208.0	2160.0	2184.0	2136.0	1450.1
Indicator value	0	0	0	0	0	0	0	0.9

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



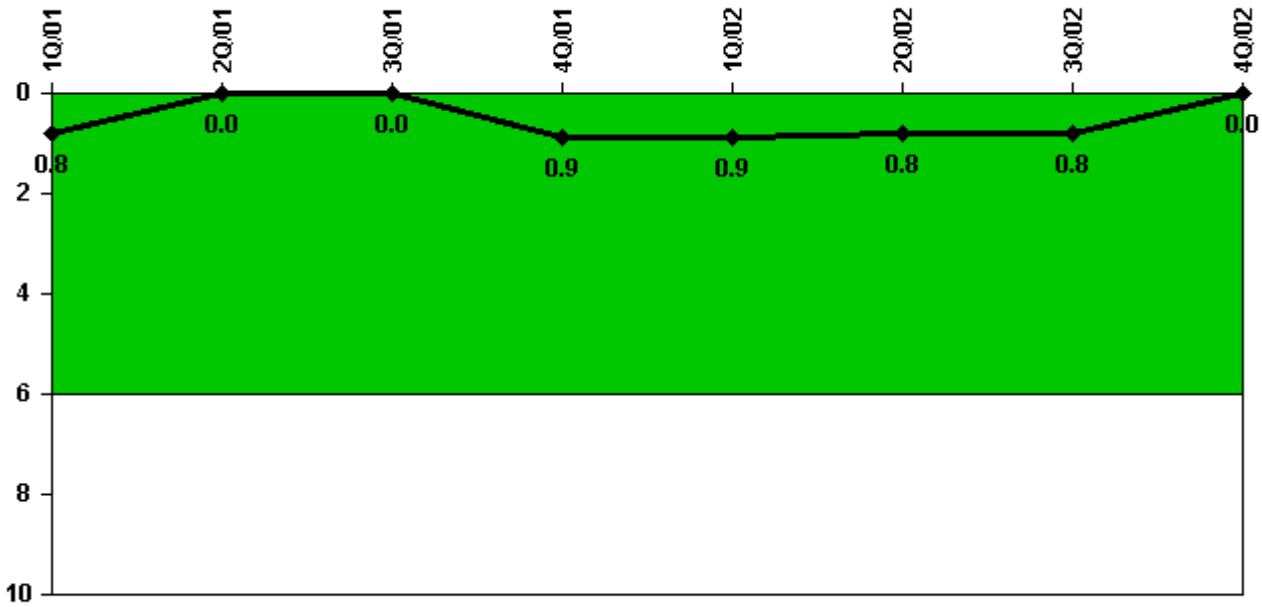
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

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	1.0	1.0	1.0	1.0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



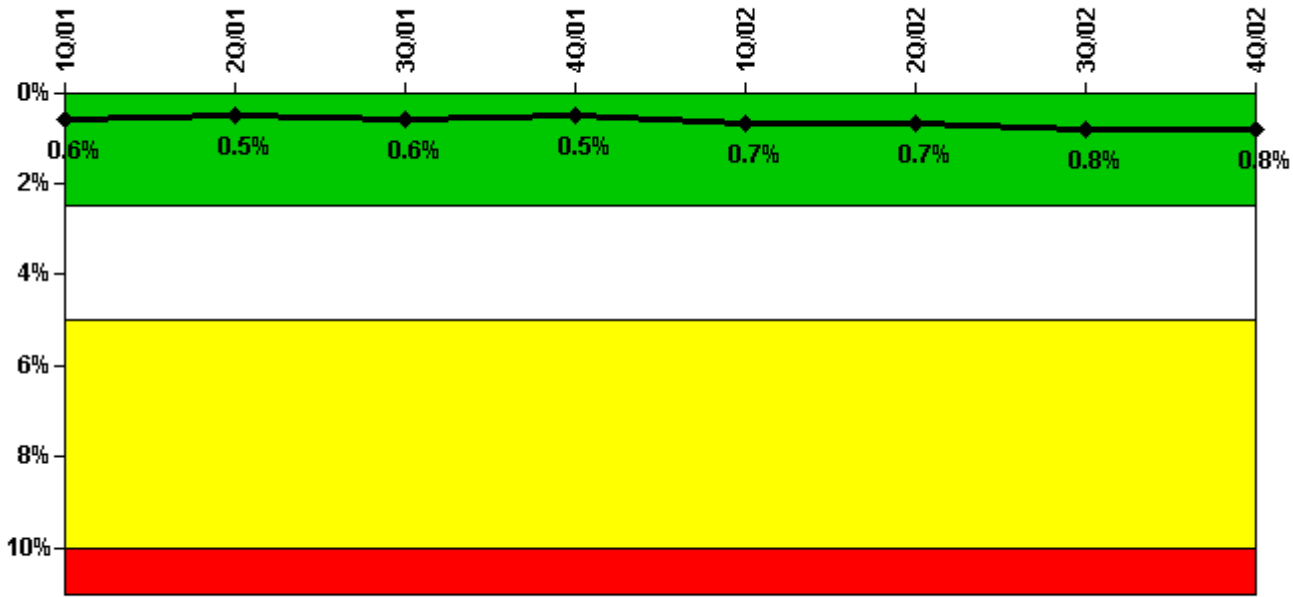
Thresholds: White > 6.0

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	0	0	0	1.0	0	0	0	0
Critical hours	2136.0	1187.0	2208.0	2208.0	2160.0	2184.0	2136.0	1450.1
Indicator value	0.8	0	0	0.9	0.9	0.8	0.8	0

Licensee Comments: none

Safety System Unavailability, Emergency AC Power



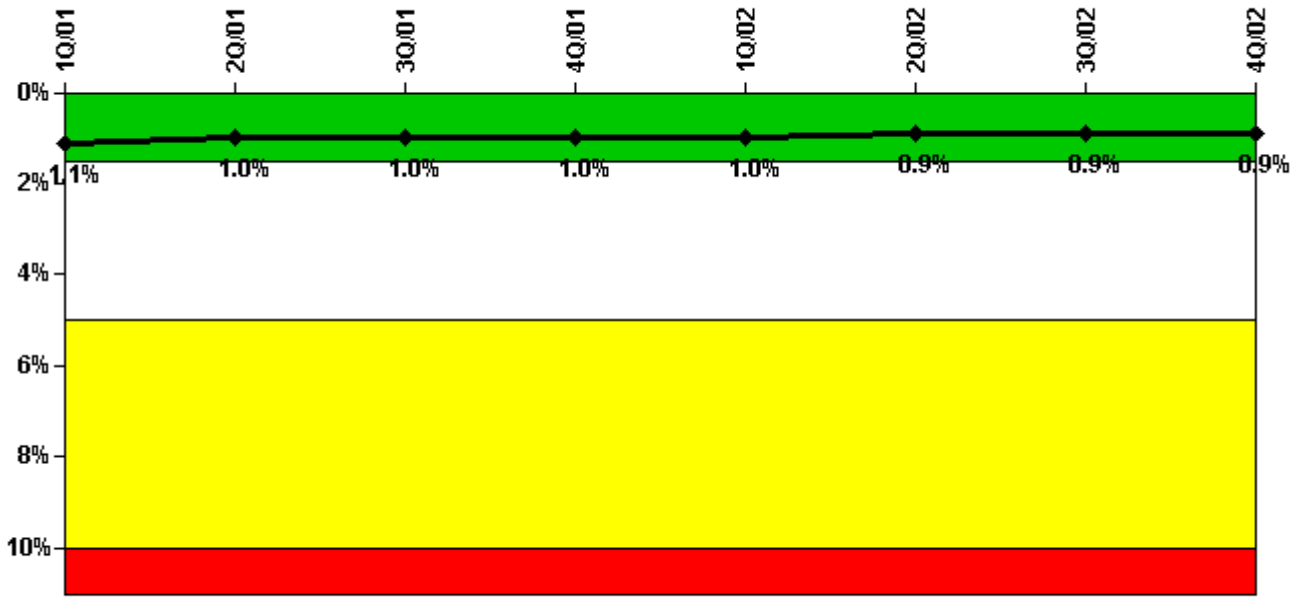
Thresholds: White > 2.5% Yellow > 5.0% Red > 10.0%

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	18.63	1.27	21.58	0.08	68.78	0.04	28.09	20.35
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	2184.00	2208.00	2208.00	2160.00	2184.00	2208.00	2208.00
Train 2								
Planned unavailable hours	15.20	0	47.65	0.02	14.26	24.90	0.06	18.19
Unplanned unavailable hours	0	0	0	0	0	27.92	0	0
Fault exposure hours	0	0	0	0	0	15.82	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2160.00	2184.00	2208.00	2208.00	2160.00	2184.00	2208.00	2208.00
Indicator value	0.6%	0.5%	0.6%	0.5%	0.7%	0.7%	0.8%	0.8%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



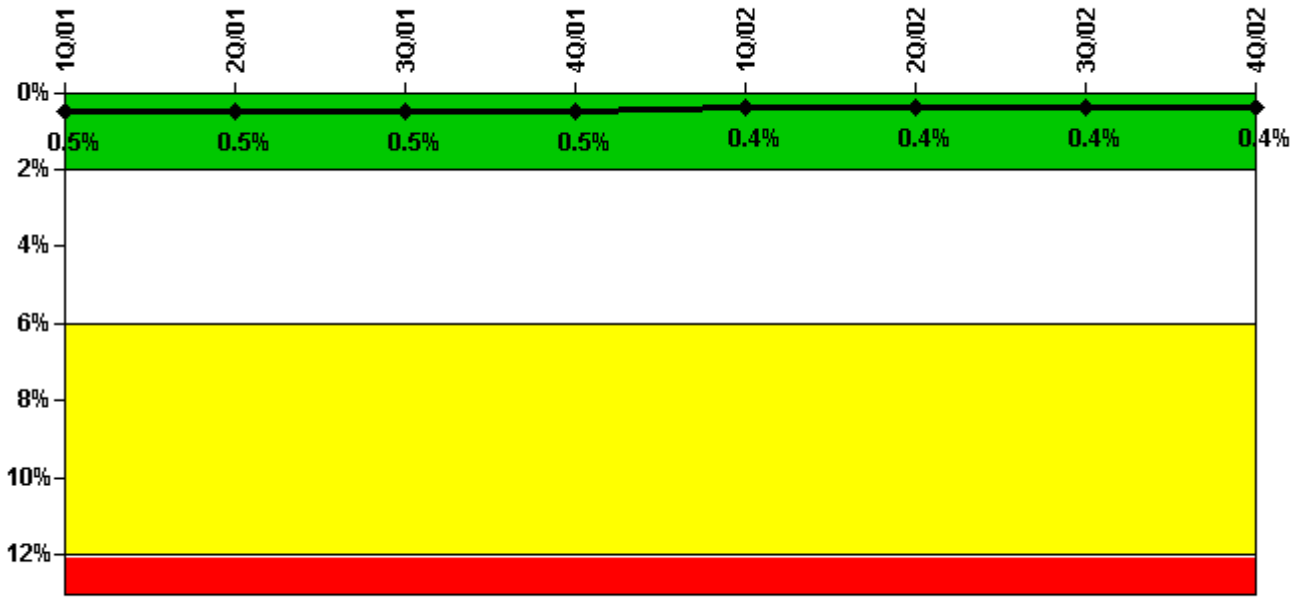
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

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	23.28	1.97	15.11	2.57	16.45	12.78	28.53	12.75
Unplanned unavailable hours	0	0	0	13.38	0	0	2.58	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	2136.00	1186.95	2208.00	2208.00	2160.00	2184.00	2136.00	1450.11
Train 2								
Planned unavailable hours	38.64	22.10	38.95	10.71	21.63	15.77	8.98	23.22
Unplanned unavailable hours	0	0	0	0	0	0	1.85	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	2136.00	1186.95	2208.00	2208.00	2160.00	2184.00	2136.00	1450.11
Indicator value	1.1%	1.0%	1.0%	1.0%	1.0%	0.9%	0.9%	0.9%

Licensee Comments: none

Safety System Unavailability, Heat Removal System (AFW)



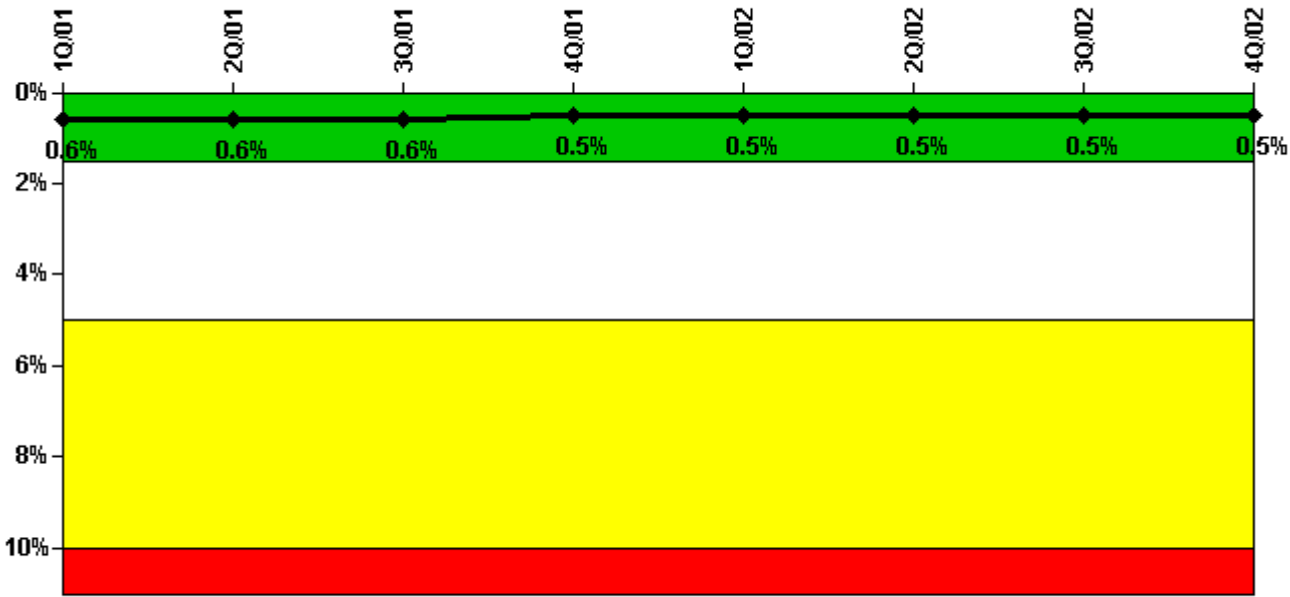
Thresholds: White > 2.0% Yellow > 6.0% Red > 12.0%

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	18.67	3.66	8.15	0.75	10.98	1.05	12.51	18.22
Unplanned unavailable hours	0	8.70	0	13.38	0	0	2.58	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	2136.00	1186.95	2208.00	2208.00	2160.00	2184.00	2136.00	1450.11
Train 2								
Planned unavailable hours	11.05	0	35.65	1.40	7.20	8.08	0.60	10.15
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	2136.00	1186.95	2208.00	2208.00	2160.00	2184.00	2136.00	1450.11
Train 3								
Planned unavailable hours	0.45	0.88	0.37	0.23	0.25	0.62	1.15	0.62
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	2136.00	1186.95	2208.00	2208.00	2160.00	2184.00	2136.00	1450.11
Indicator value	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%	0.4%	0.4%

Licensee Comments: none

Safety System Unavailability, Residual Heat Removal System



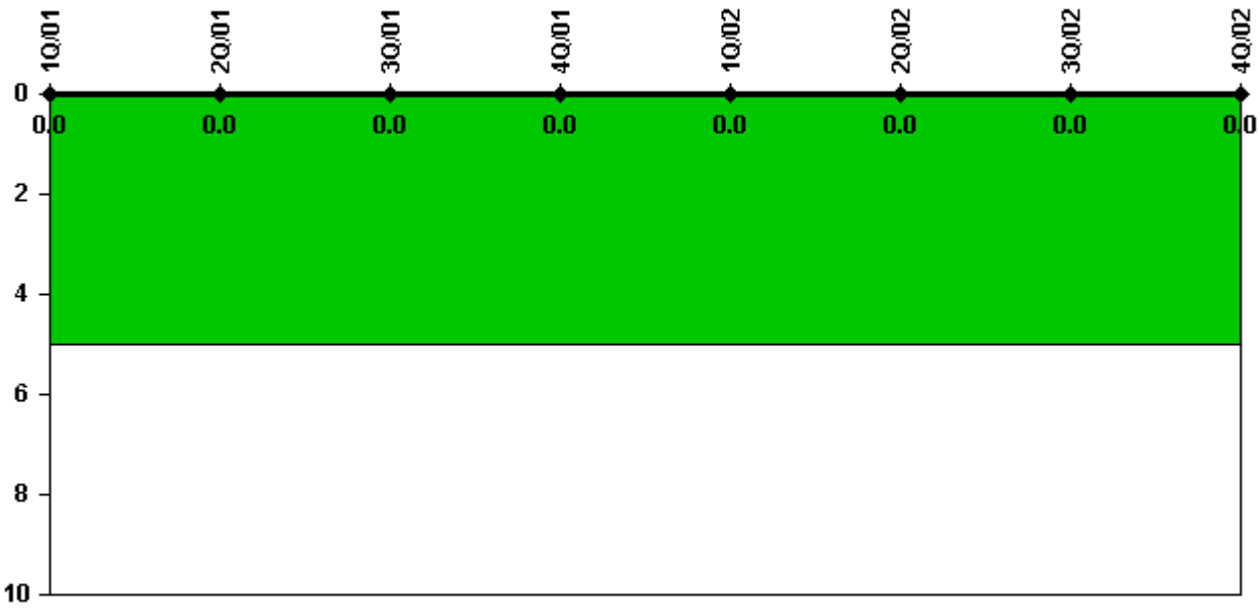
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

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	20.38	6.37	13.83	5.32	18.17	3.10	33.90	17.93
Unplanned unavailable hours	0	0	0	13.38	0	0	2.58	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	2157.05	1239.10	2208.00	2208.00	2160.00	2184.00	2147.85	1551.82
Train 2								
Planned unavailable hours	19.01	9.58	35.83	2.87	13.00	10.55	17.08	16.30
Unplanned unavailable hours	0	0	0	0	25.42	0	1.85	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	2157.05	1239.10	2208.00	2208.00	2160.00	2184.00	2147.85	1551.82
Train 3								
Planned unavailable hours	0	0.28	0	0	0	0	0.02	0
Unplanned unavailable hours	0	0	0	0	0	0	0.95	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	2.95	425.22	0	0	0	0	45.67	212.52
Train 4								
Planned unavailable hours	0	0	0	0	0	0	0	0.02
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	0	99.33	0	0	0	0	50.52	331.02
Indicator value	0.6%	0.6%	0.6%	0.5%	0.5%	0.5%	0.5%	0.5%

Licensee Comments: none

Safety System Functional Failures (PWR)



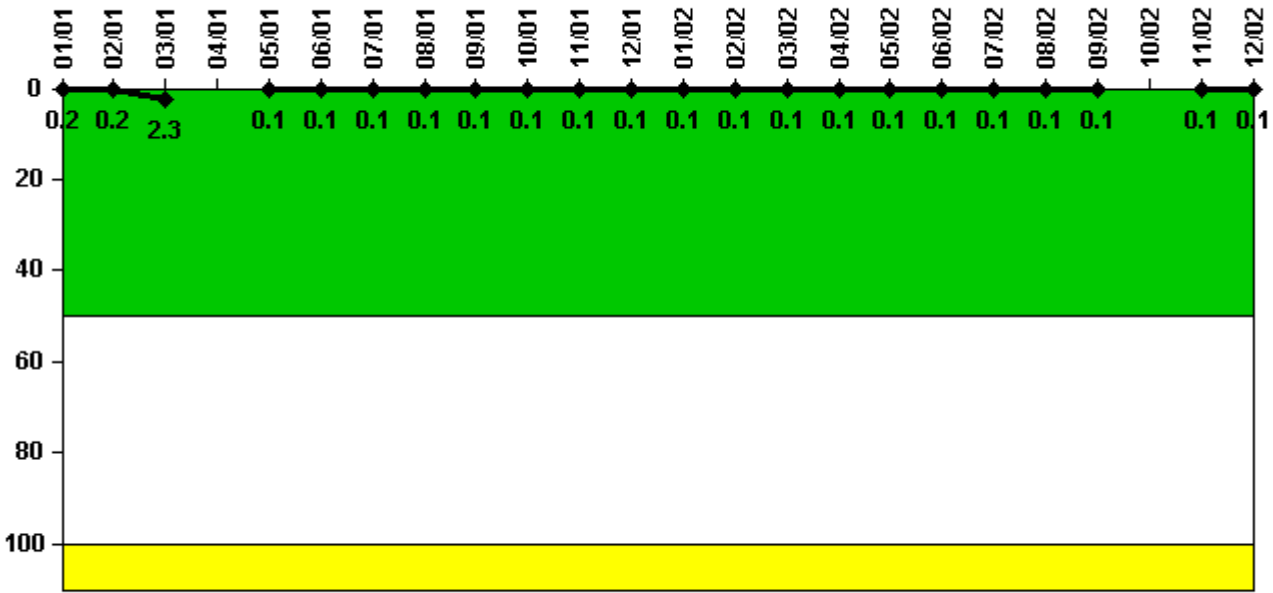
Thresholds: White > 5.0

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	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

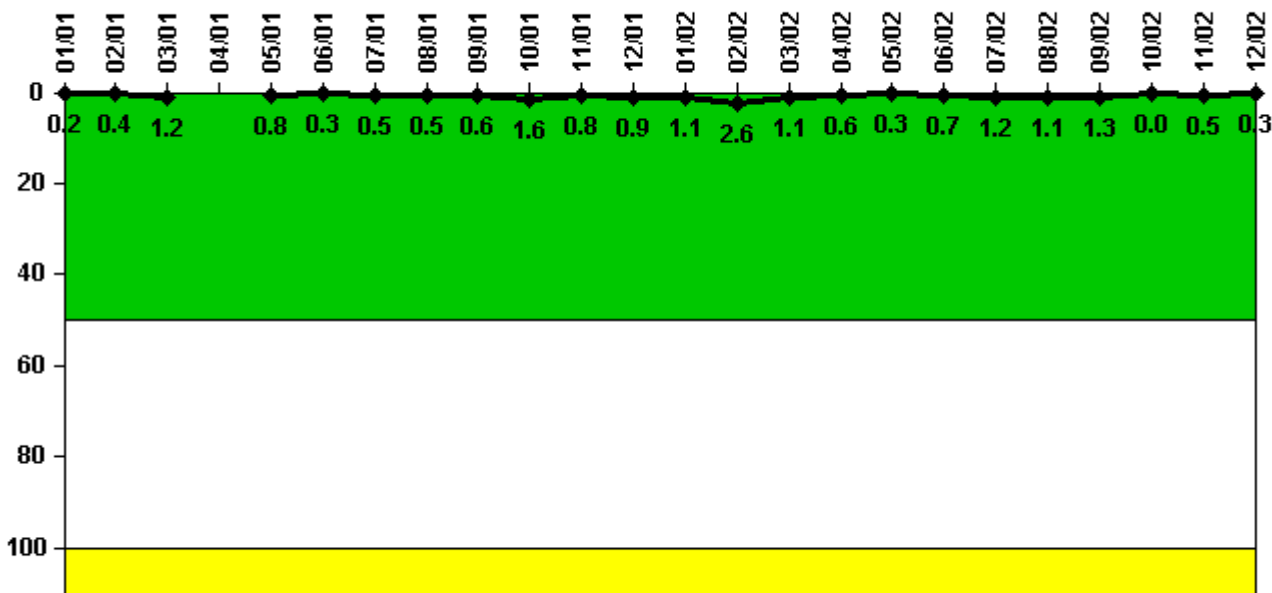
Reactor Coolant System Activity	1/01	2/01	3/01	4/01	5/01	6/01	7/01	8/01	9/01	10/01	11/01	12/01
Maximum activity	0.002000	0.002000	0.023000	N/A	0.001000	0.001000	0.001000	0.001000	0.001000	0.001000	0.001000	0.001000
Technical specification limit	1.0	1.0	1.0	N/A	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.2	0.2	2.3	N/A	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	0.001000	0.001000	0.001000	0.001000	0.001000	0.001000	0.001000	0.001000	0.001000	N/A	0.001000	0.001000
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	N/A	1.0	1.0
Indicator value	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	N/A	0.1	0.1

Licensee Comments:

12/02: Unit 1 was in a refueling outage during the month of October - no Technical Specification RCS activity samples were required.

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

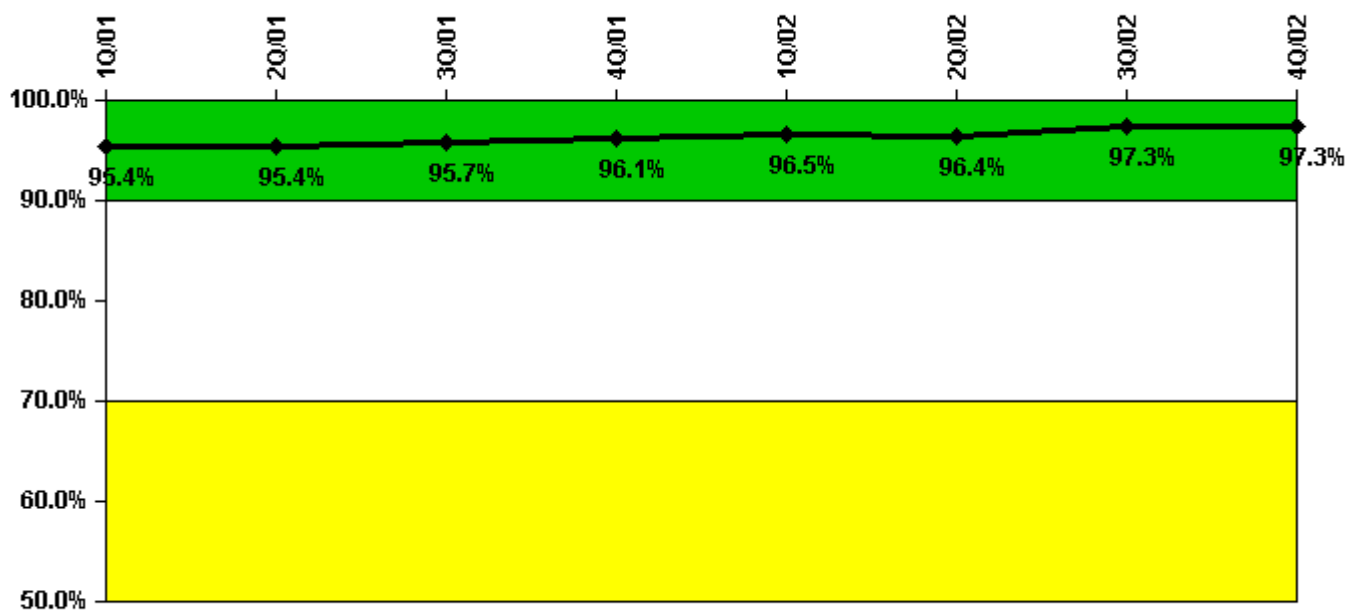
Notes

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	0.021	0.043	0.123	N/A	0.078	0.032	0.046	0.046	0.057	0.164	0.075	0.088
Technical specification limit	10.0	10.0	10.0	N/A	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Indicator value	0.2	0.4	1.2	N/A	0.8	0.3	0.5	0.5	0.6	1.6	0.8	0.9

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	0.107	0.261	0.108	0.056	0.030	0.069	0.115	0.107	0.126	0	0.047	0.034
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	1.1	2.6	1.1	0.6	0.3	0.7	1.2	1.1	1.3	0	0.5	0.3

Licensee Comments: none

Drill/Exercise Performance



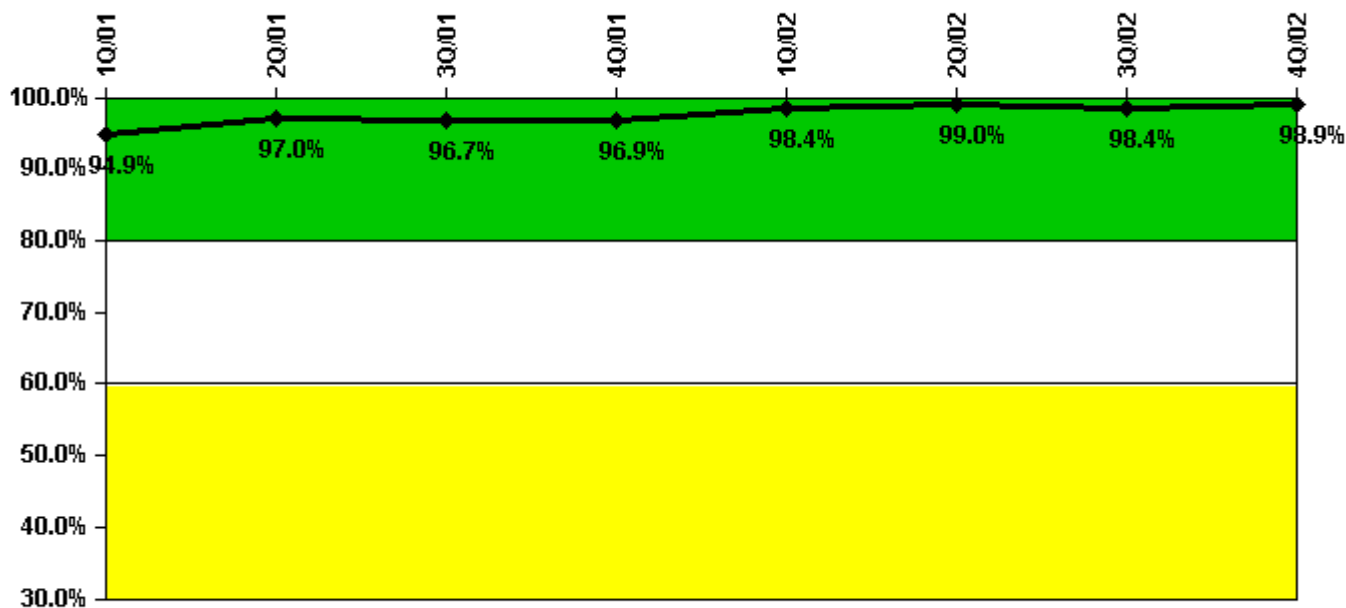
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Successful opportunities	20.0	0	9.0	198.0	19.0	8.0	108.0	137.0
Total opportunities	20.0	0	9.0	205.0	20.0	8.0	110.0	141.0
Indicator value	95.4%	95.4%	95.7%	96.1%	96.5%	96.4%	97.3%	97.3%

Licensee Comments: none

ERO Drill Participation



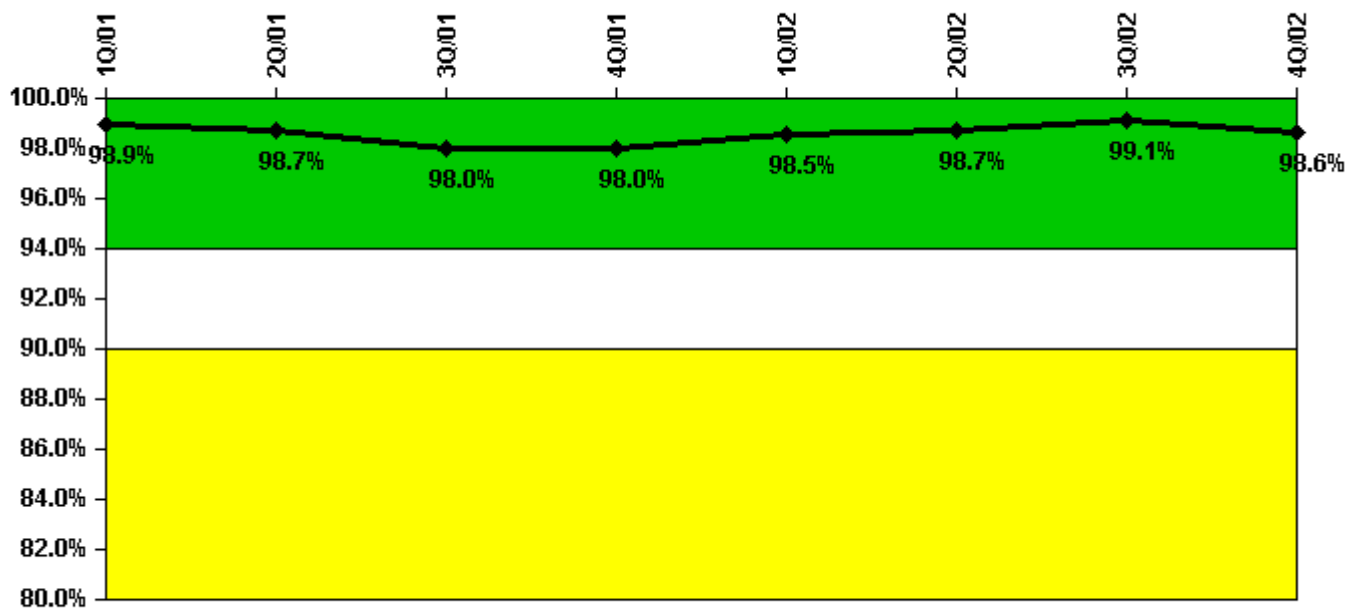
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Participating Key personnel	166.0	160.0	176.0	188.0	188.0	191.0	190.0	183.0
Total Key personnel	175.0	165.0	182.0	194.0	191.0	193.0	193.0	185.0
Indicator value	94.9%	97.0%	96.7%	96.9%	98.4%	99.0%	98.4%	98.9%

Licensee Comments: none

Alert & Notification System



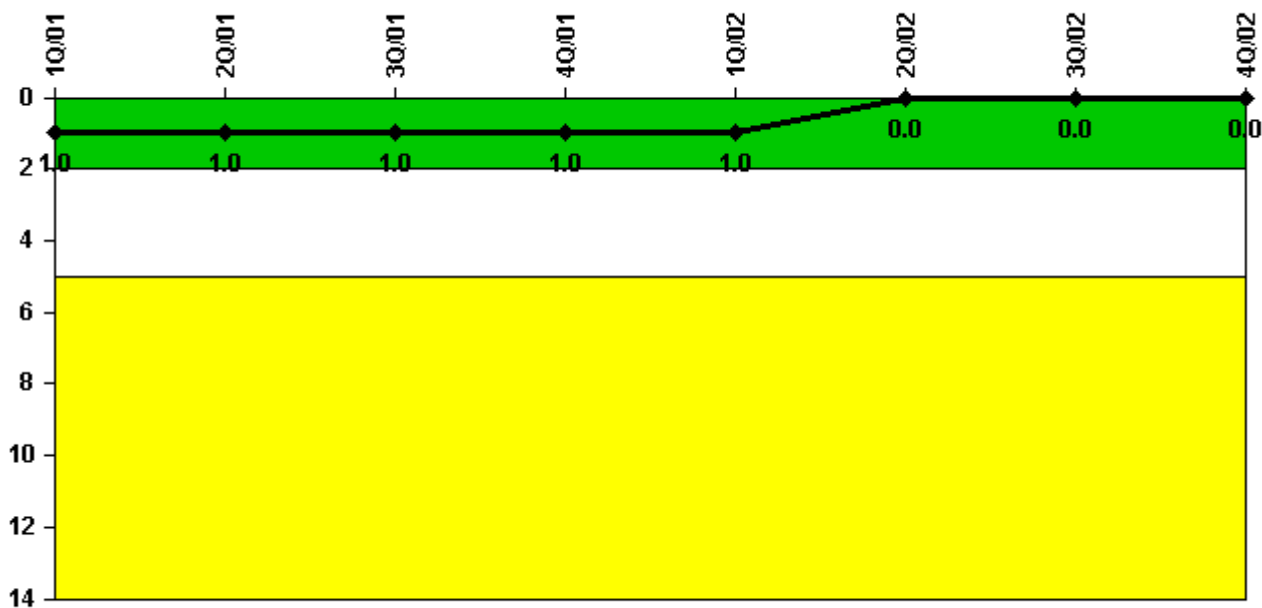
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/01	2Q/01	3Q/01	4Q/01	1Q/02	2Q/02	3Q/02	4Q/02
Successful siren-tests	382	382	375	466	390	383	351	459
Total sirens-tests	390	390	390	468	390	387	360	468
Indicator value	98.9%	98.7%	98.0%	98.0%	98.5%	98.7%	99.1%	98.6%

Licensee Comments: none

Occupational Exposure Control Effectiveness



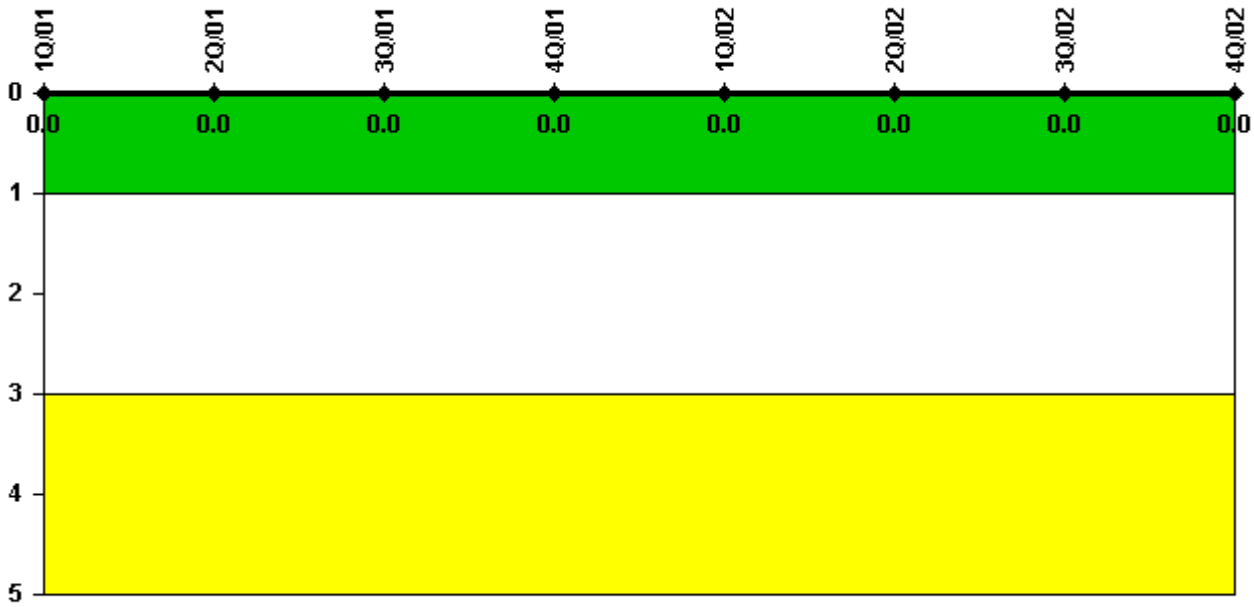
Thresholds: White > 2.0 Yellow > 5.0

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	1	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	1	1	1	1	1	0	0	0

Licensee Comments: none

RETS/ODCM Radiological Effluent



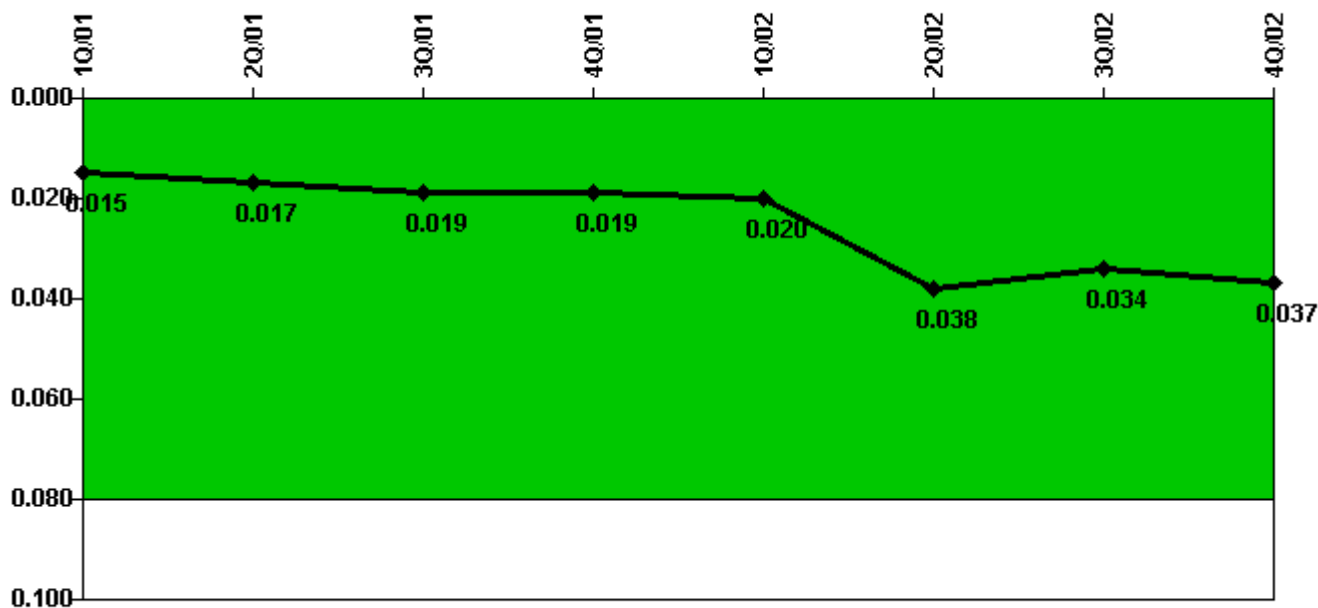
Thresholds: White > 1.0 Yellow > 3.0

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



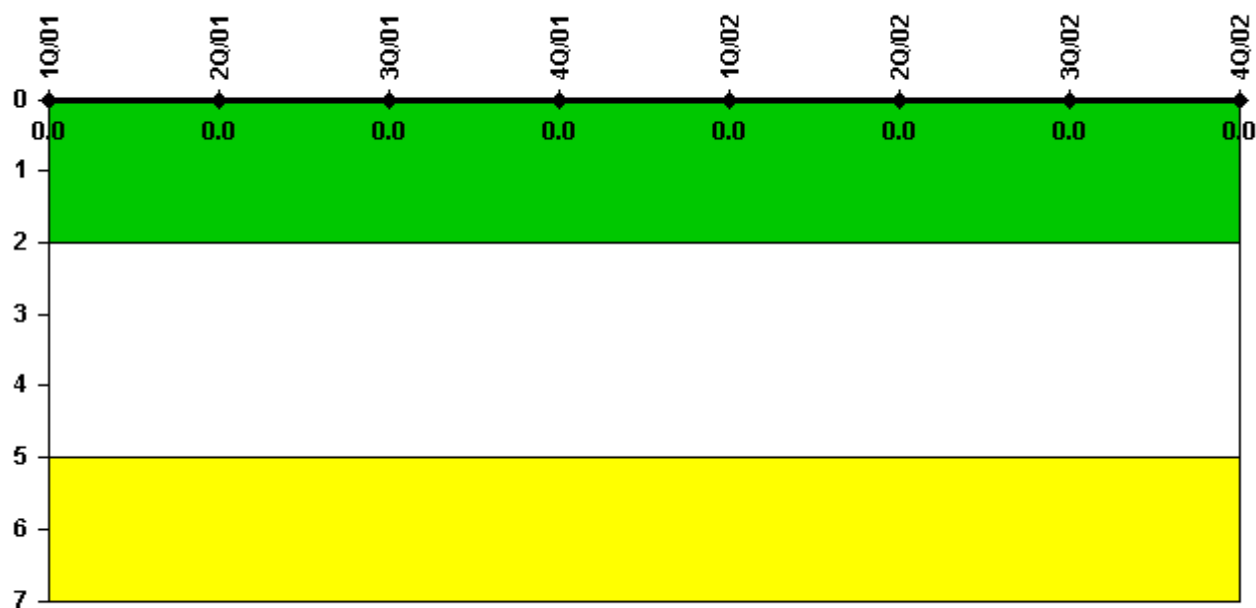
Thresholds: White > 0.080

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	71.50	109.90	71.00	65.30	87.00	804.00	92.60	86.90
CCTV compensatory hours	19.8	82.6	69.5	14.6	39.4	0	34.1	58.4
IDS normalization factor	1.85	1.85	1.85	1.85	1.85	1.85	2.00	2.00
CCTV normalization factor	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Index Value	0.015	0.017	0.019	0.019	0.020	0.038	0.034	0.037

Licensee Comments: none

Personnel Screening Program



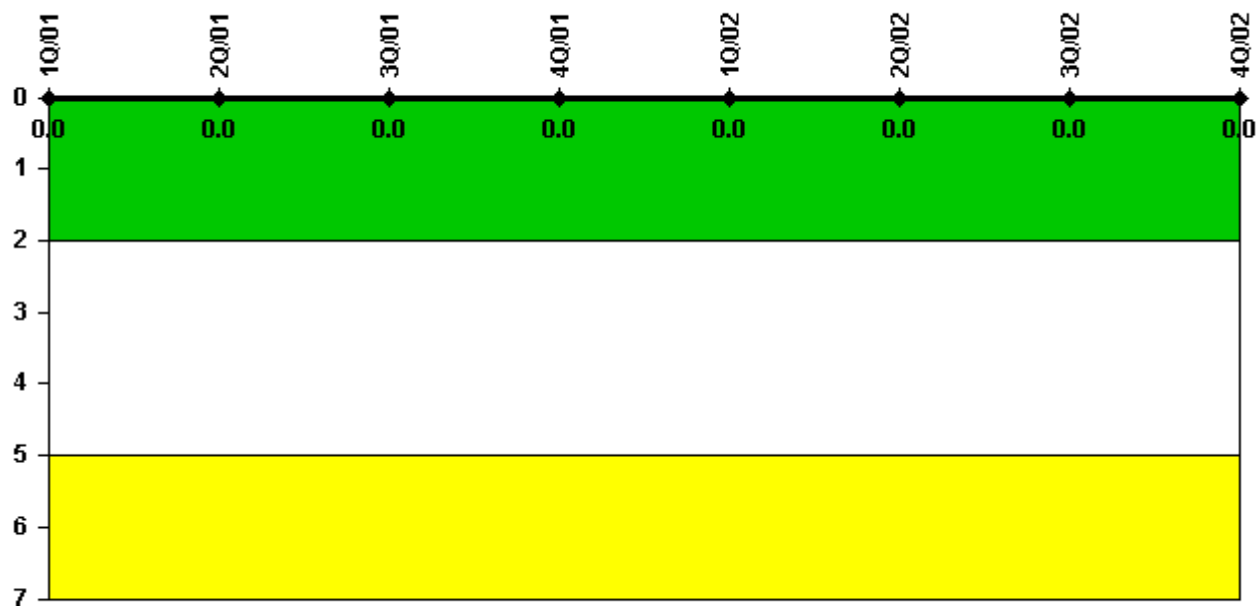
Thresholds: White > 2.0 Yellow > 5.0

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

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Last Modified: January 30, 2003