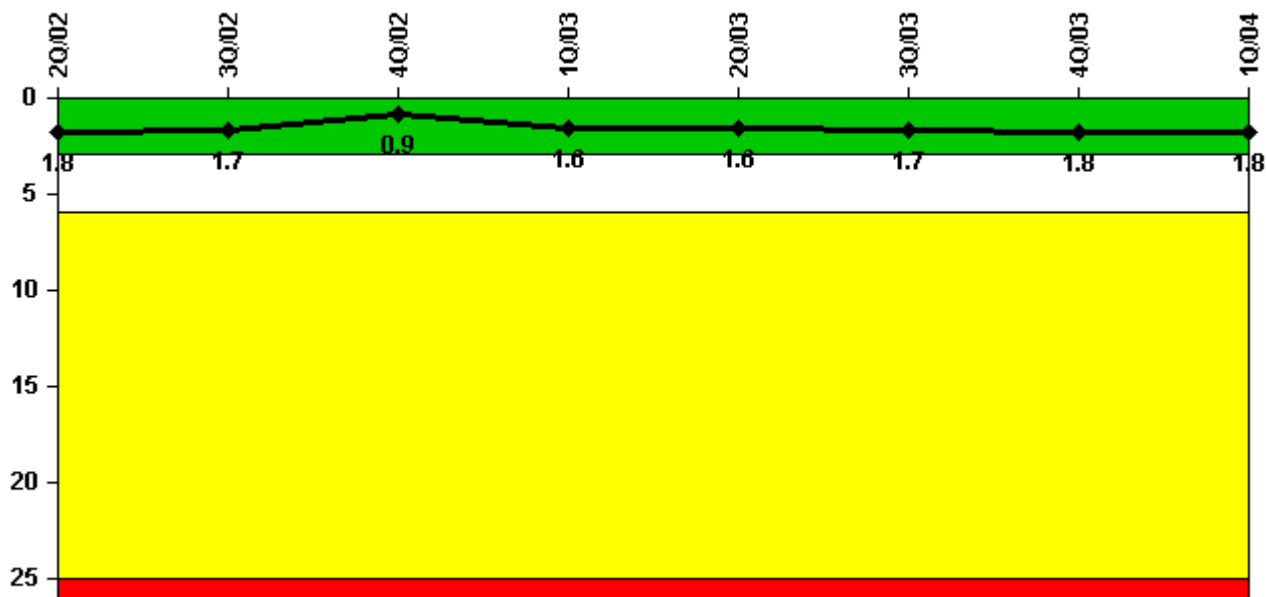


Watts Bar 1

1Q/2004 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



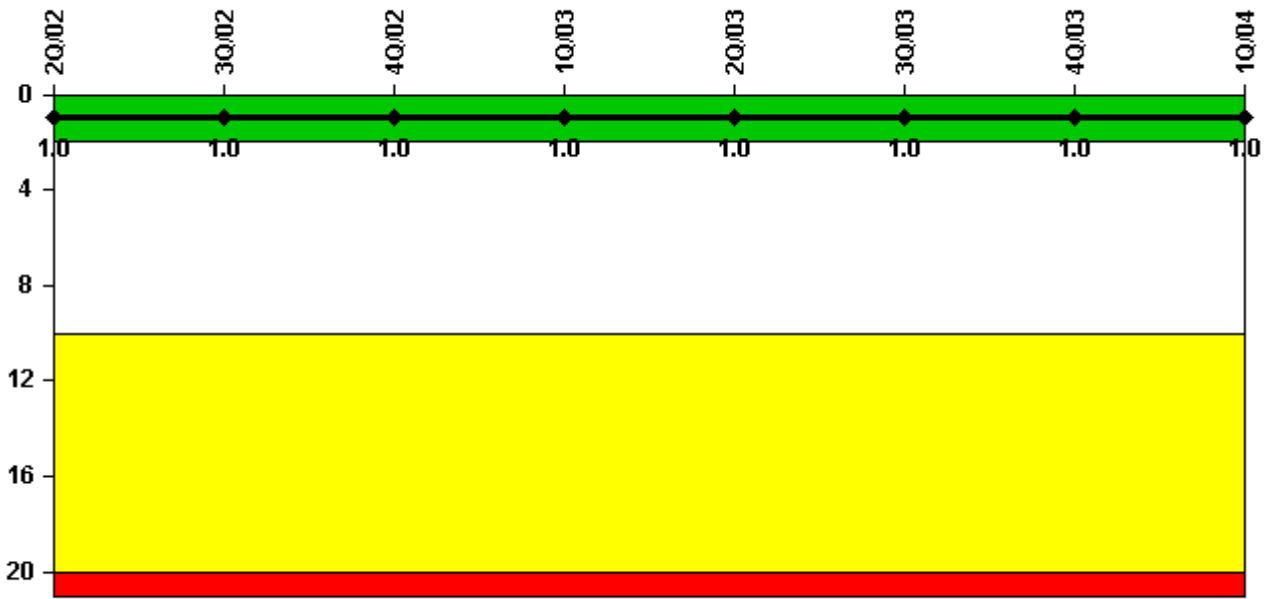
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Unplanned scrams	0	1.0	0	1.0	0	1.0	0	1.0
Critical hours	2060.8	2185.5	2209.0	2036.0	2183.0	1626.5	1752.4	2148.3
Indicator value	1.8	1.7	0.9	1.6	1.6	1.7	1.8	1.8

Licensee Comments: none

Scrams with Loss of Normal Heat Removal



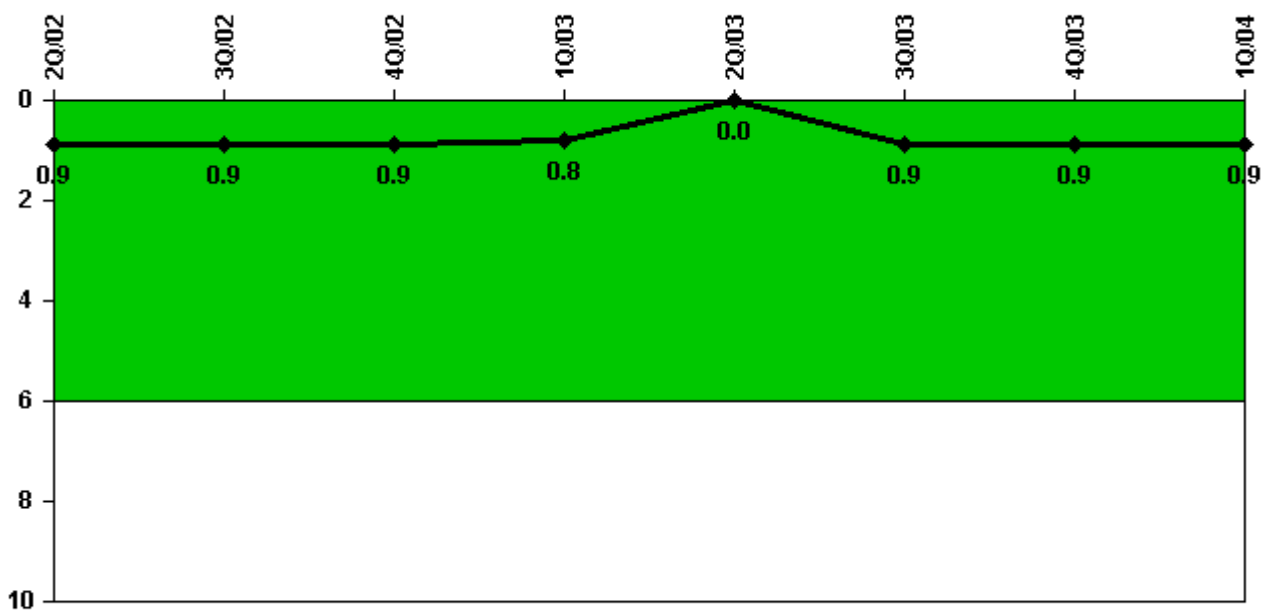
Thresholds: White > 2.0 Yellow > 10.0 Red > 20.0

Notes

Scrams with Loss of Normal Heat Removal	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Scrams	0	0	0	0	0	0	0	0
Indicator value	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



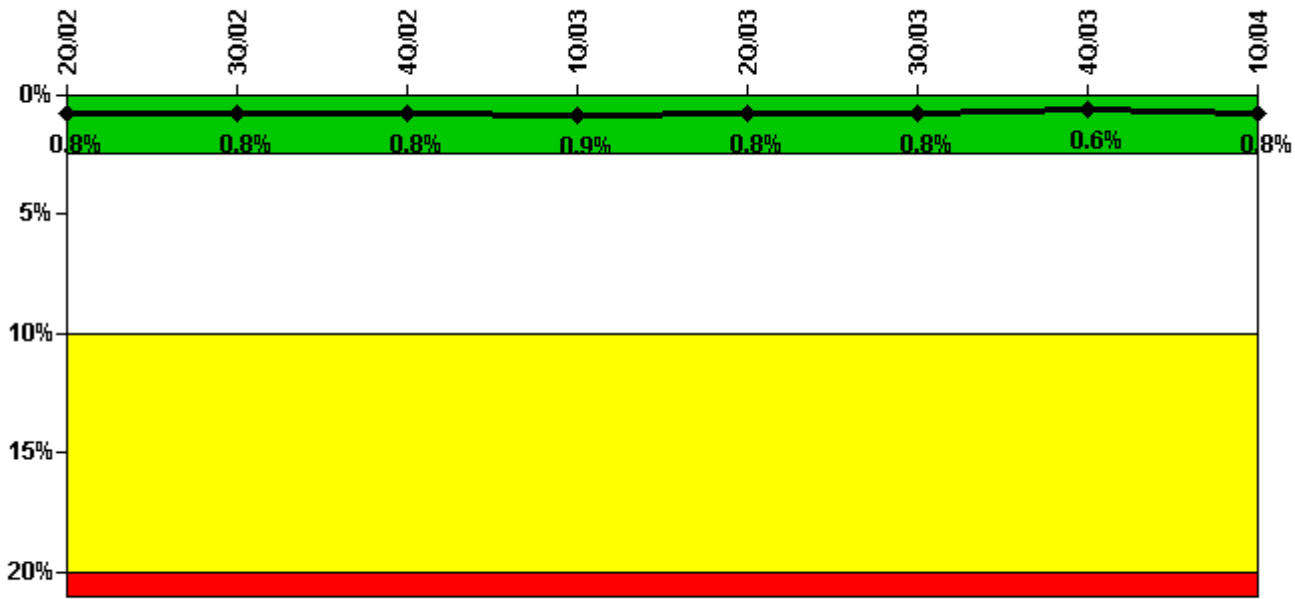
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Unplanned power changes	1.0	0	0	0	0	1.0	0	0
Critical hours	2060.8	2185.5	2209.0	2036.0	2183.0	1626.5	1752.4	2148.3
Indicator value	0.9	0.9	0.9	0.8	0	0.9	0.9	0.9

Licensee Comments: none

Safety System Unavailability, Emergency AC Power, >2EDG



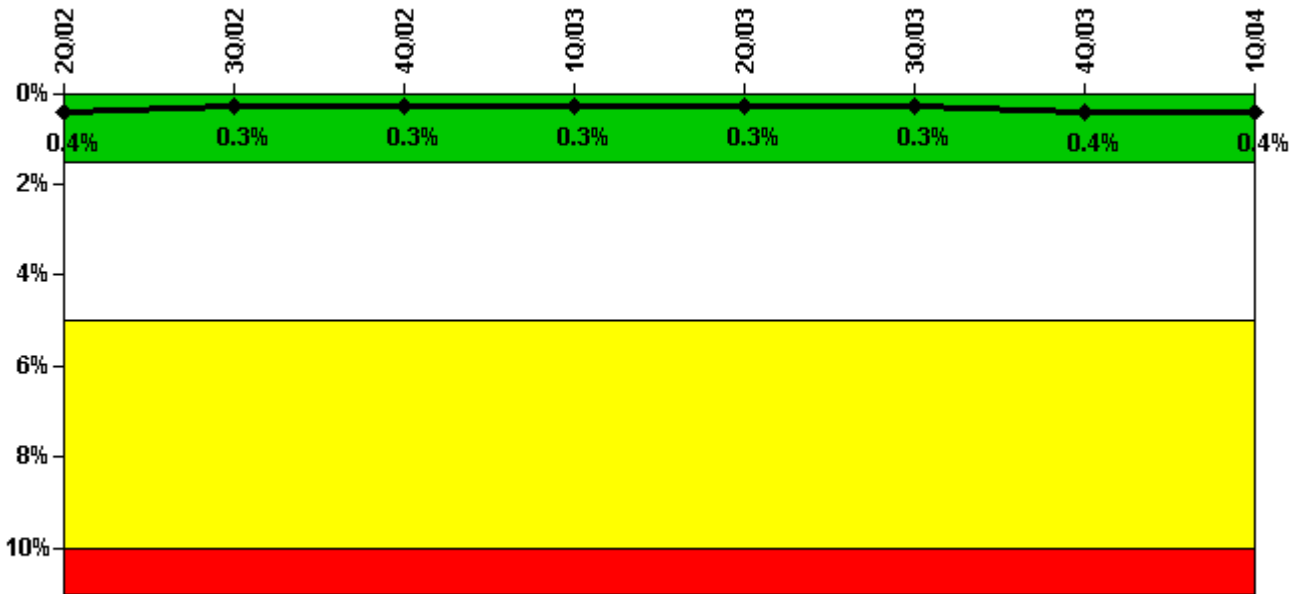
Thresholds: White > 2.5% Yellow > 10.0% Red > 20.0%

Notes

Safety System Unavailability, Emergency AC Power, >2EDG	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Train 1								
Planned unavailable hours	4.55	1.05	7.75	37.72	27.43	7.38	0.99	47.98
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	2183.00	2208.00	2209.00	2160.00	2183.00	2143.25	1987.25	2184.00
Train 2								
Planned unavailable hours	1.37	1.16	0.67	46.23	1.60	5.87	11.20	146.23
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	2183.00	2208.00	2209.00	2160.00	2183.00	1740.92	2176.87	2184.00
Train 3								
Planned unavailable hours	1.39	1.23	1.35	54.45	2.20	1.90	1.11	32.32
Unplanned unavailable hours	0	0	0	21.93	0	12.10	0.58	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	2183.00	2208.00	2209.00	2160.00	2183.00	2143.25	1987.25	2184.00
Train 4								
Planned unavailable hours	0.62	2.48	1.00	80.63	0.68	0.97	0.65	30.73
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	2183.00	2208.00	2209.00	2160.00	2183.00	1740.92	2176.87	2184.00
Indicator value	0.8%	0.8%	0.8%	0.9%	0.8%	0.8%	0.6%	0.8%

Licensee Comments: none

Safety System Unavailability, High Pressure Injection System (HPSI)



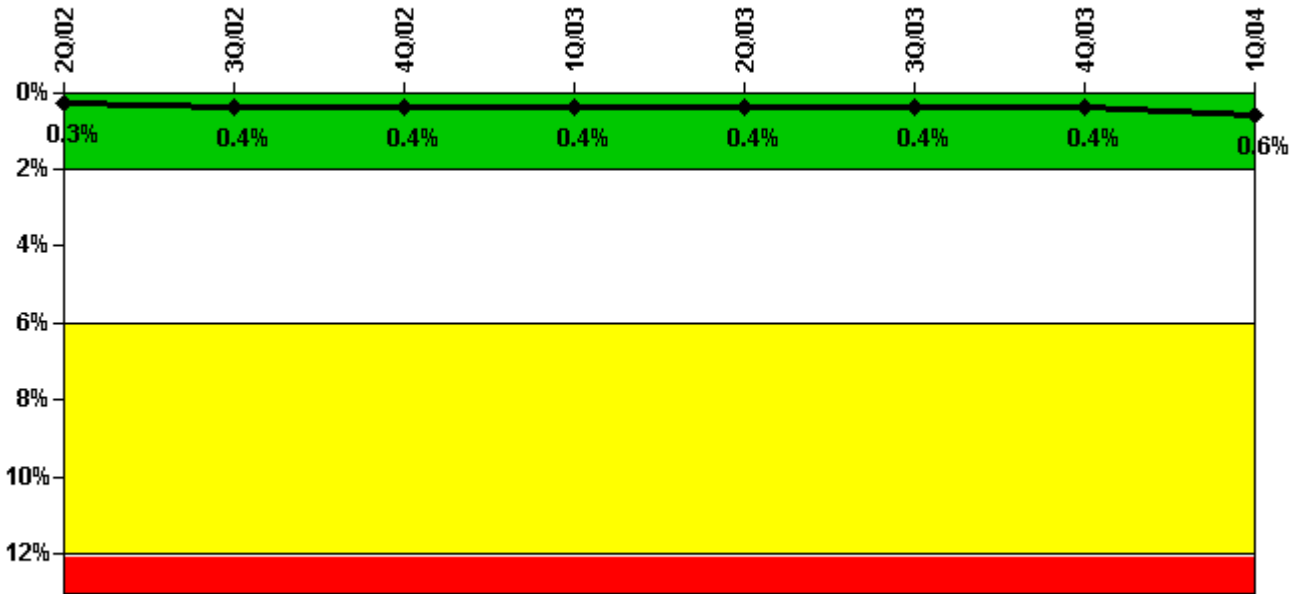
Thresholds: White > 1.5% Yellow > 5.0% Red > 10.0%

Notes

Safety System Unavailability, High Pressure Injection System (HPSI)	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Train 1								
Planned unavailable hours	8.60	2.10	14.70	5.50	2.70	12.90	42.20	4.65
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	2099.70	2208.00	2209.00	2160.00	2183.00	1674.40	1806.20	2184.00
Train 2								
Planned unavailable hours	0.10	3.10	3.70	1.90	34.00	2.00	2.10	5.40
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	2087.30	2208.00	2209.00	2160.00	2183.00	1666.30	1825.20	2184.00
Train 3								
Planned unavailable hours	12.50	2.20	4.00	22.80	3.60	2.20	7.90	4.83
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	2087.30	2208.00	2209.00	2160.00	2183.00	1666.30	1806.20	2184.00
Train 4								
Planned unavailable hours	0.80	5.00	3.90	23.60	19.10	17.50	7.10	8.77
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	2087.30	2208.00	2209.00	2160.00	2183.00	1666.30	1806.20	2184.00
Indicator value	0.4%	0.3%	0.3%	0.3%	0.3%	0.3%	0.4%	0.4%

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)	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Train 1								
Planned unavailable hours	8.97	1.90	3.18	12.55	31.59	2.08	3.45	4.10
Unplanned unavailable hours	0	0	0	0	0	0	0	30.18
Fault exposure hours	0	0	0	0	0	0	0	0
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2099.70	2208.00	2209.00	2160.00	2183.00	1674.40	1825.20	2184.00
Train 2								
Planned unavailable hours	0	11.20	3.44	8.18	5.76	2.55	9.65	11.92
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	2099.70	2208.00	2209.00	2160.00	2183.00	1674.40	1825.20	2184.00
Train 3								
Planned unavailable hours	0.03	11.80	0.65	13.82	28.17	0.83	11.32	1.58
Unplanned unavailable hours	0	0	0	0	0	0	13.58	46.56
Fault exposure hours	0	0	0	0	0	0	15.17	55.62
Effective Reset hours	0	0	0	0	0	0	0	0
Required hours	2087.30	2208.00	2209.00	2160.00	2183.00	1666.30	1806.20	2184.00
Indicator value	0.3%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.6%

Licensee Comments:

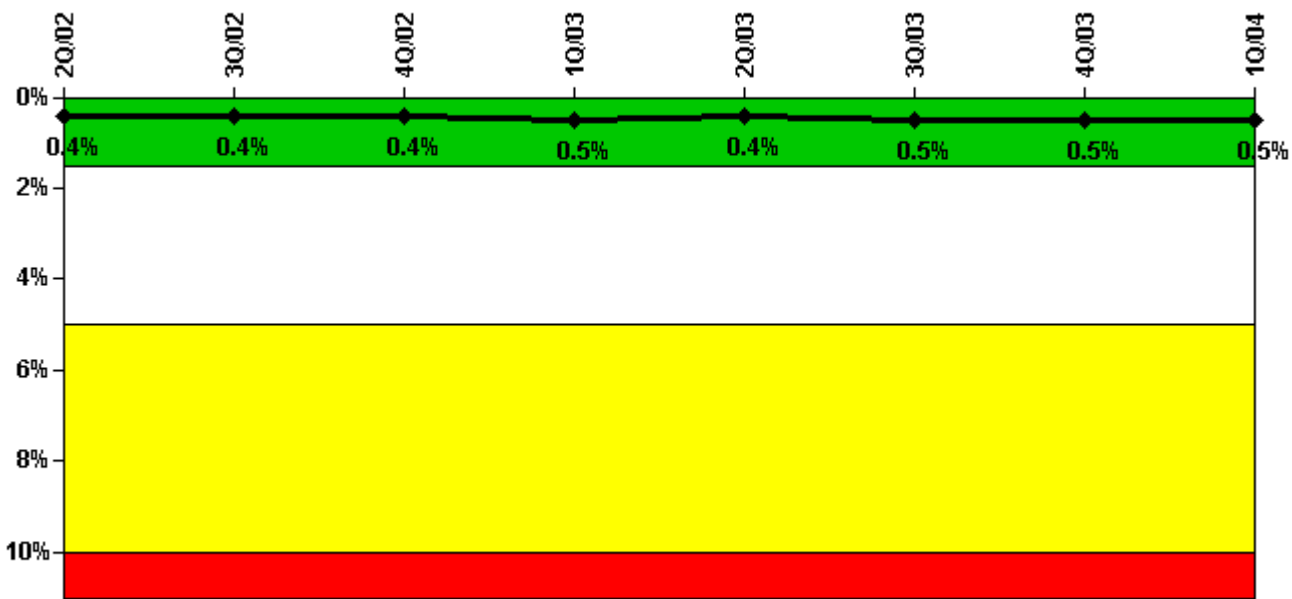
1Q/04: Feb. 2004 - Train 3 - The Turbine driven train of AFW has a t/2 fault exposure conservatively reported as 8514 hrs.

Clam relics were discovered in the ERCW train A header down in the TDAFW pump room. It is inconclusive as to when the clam relics came to rest inside the ERCW train A header. This condition is only applicable coincident with the loss of tech spec required condensate storage tank. Investigation identifies a work order where the pipe is clear on 3/17/02. There are also evaluations ongoing as to the functionality of the system and pump. The probability of cooling water flow with unacceptable blockage is low and the turbine vendor is assessing the impacts of potentially reduced cooling water flow. (The "t" interval is 3/17/02 2205 to 2/25/04 0952). Note: This t/2 time encompasses two other instances of t/2 fault exposure. 1) There was a DC fan failure for the TDAFW pump room that had a t/2 of 505 hrs. (the "t" interval is 12/19/03 0212 to 01/30/04 0420); 2) There was an ERCW train B spill during RFO5 which resulted in clam relics being discovered. This resulted in a t/2 of 493 hrs. (the "t" interval is 7/29/03 0800 to 9/18/03 1018).

4Q/03: Train 3 - Change to comment previously submitted. Remove t/2 fault exposure time of 739.1 hrs previously reported. Further engineering evaluation has determined that the water found in the oil sample from the Turbine driven pump outboard bearing was NOT detrimental to the operation of the pump. The pump was functional.

3Q/03: Sept. 2003 - Train 2 - The motor driven train B of AFW t/2 fault exposure is 493 hrs. Clam relics were discovered in the ERCW train B header to the MDAFW pump B when ERCW was spilled during RFO5. It is inconclusive as to when the clam relics came to rest inside the ERCW train B header. This condition is only applicable coincident with the loss of tech spec required condensate storage tank. (The "t" interval is 7/29/03 0800 to 9/8/03 1018). Note: This is a revision to data for Sept. 2003. Engineering evaluation has determined that the amount of clam relics found may be detrimental to the function of the pump train.

Safety System Unavailability, Residual Heat Removal System



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

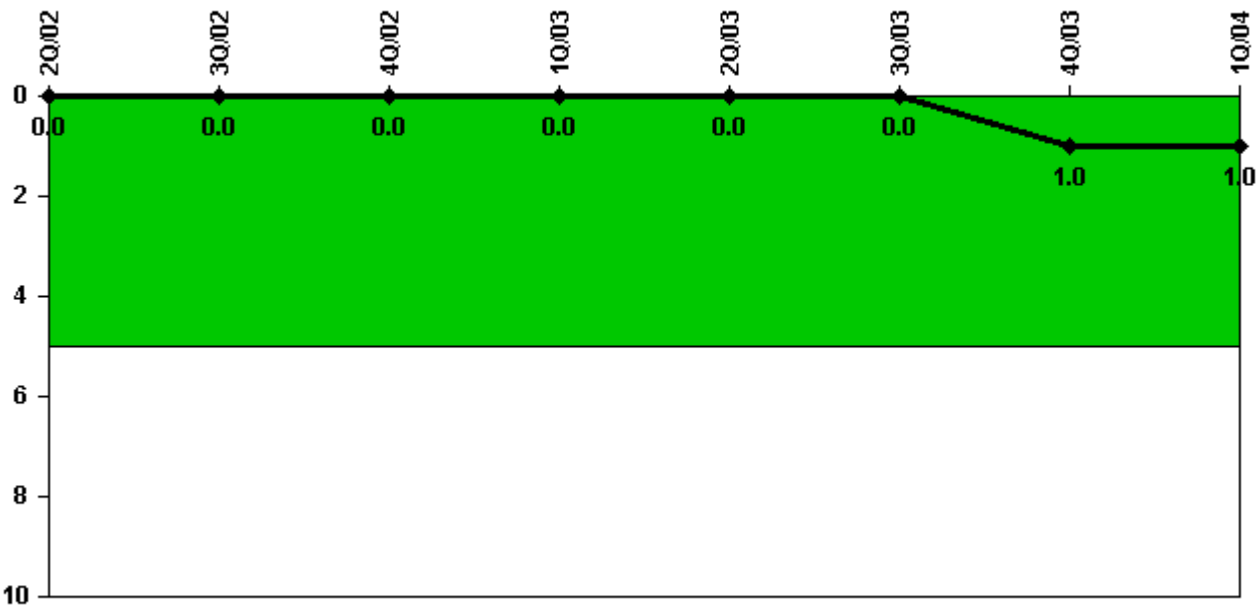
Notes

Safety System Unavailability, Residual Heat Removal System	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Train 1								
Planned unavailable hours	10.49	3.43	5.67	50.35	7.32	14.48	4.90	7.65
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	2183.00	2208.00	2209.00	2160.00	2183.00	1926.30	2208.00	2184.00
Train 2								
Planned unavailable hours	9.95	8.32	5.90	4.14	21.00	5.97	4.60	7.90

Unplanned unavailable hours	0	0	0	0	0	0.22	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	2183.00	2208.00	2209.00	2160.00	2183.00	1926.30	2208.00	2184.00
Indicator value	0.4%	0.4%	0.4%	0.5%	0.4%	0.5%	0.5%	0.5%

Licensee Comments: none

Safety System Functional Failures (PWR)



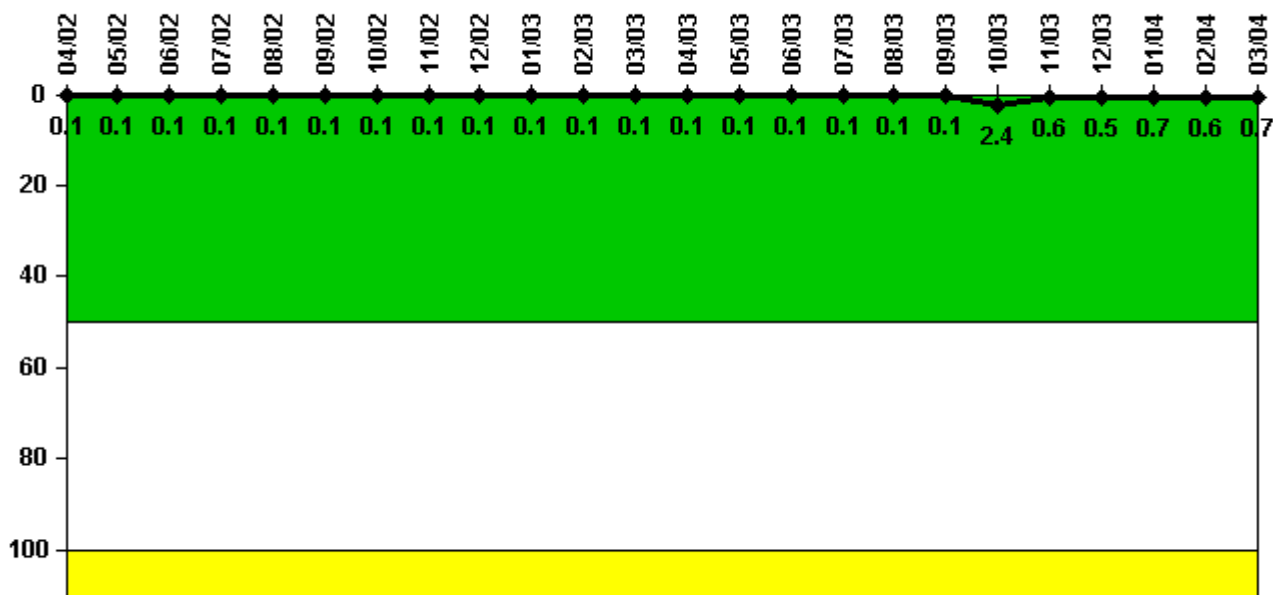
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Safety System Functional Failures	0	0	0	0	0	0	1	0
Indicator value	0	0	0	0	0	0	1	1

Licensee Comments: none

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

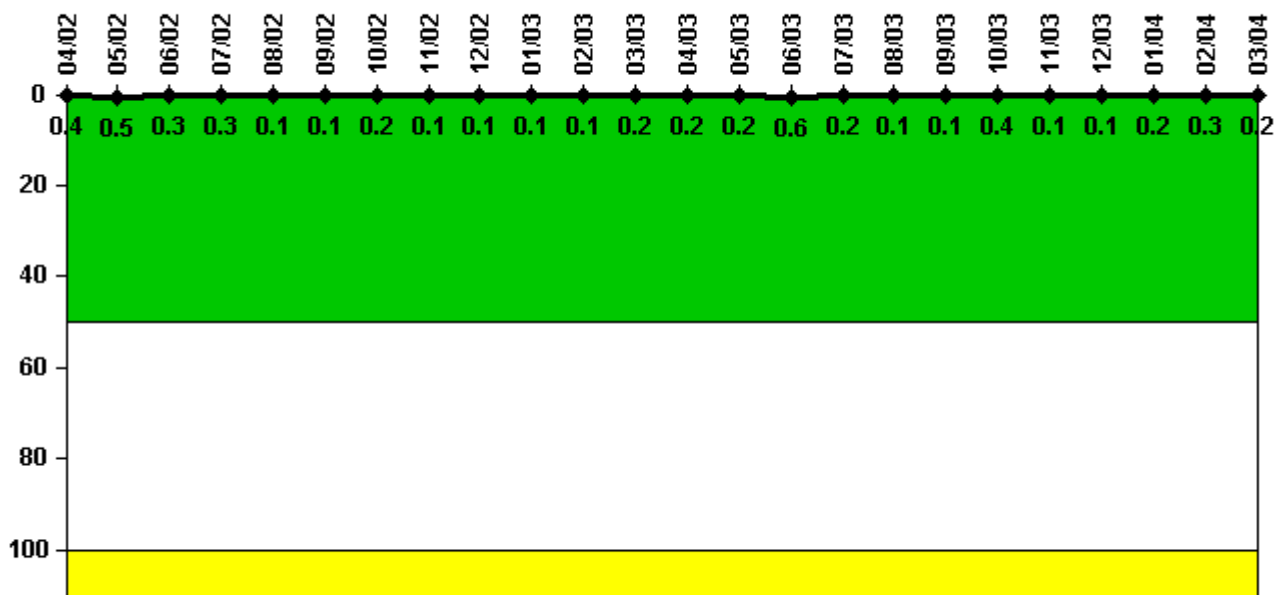
Notes

Reactor Coolant System Activity	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03
Maximum activity	0.000150	0.000136	0.000135	0.000148	0.000149	0.000150	0.000151	0.000156	0.000163	0.000162	0.000193	0.000166
Technical specification limit	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
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	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03	1/04	2/04	3/04
Maximum activity	0.000177	0.000167	0.000170	0.000175	0.000179	0.000242	0.006284	0.001529	0.001340	0.001790	0.001710	0.001880
Technical specification limit	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Indicator value	0.1	0.1	0.1	0.1	0.1	0.1	2.4	0.6	0.5	0.7	0.6	0.7

Licensee Comments: none

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

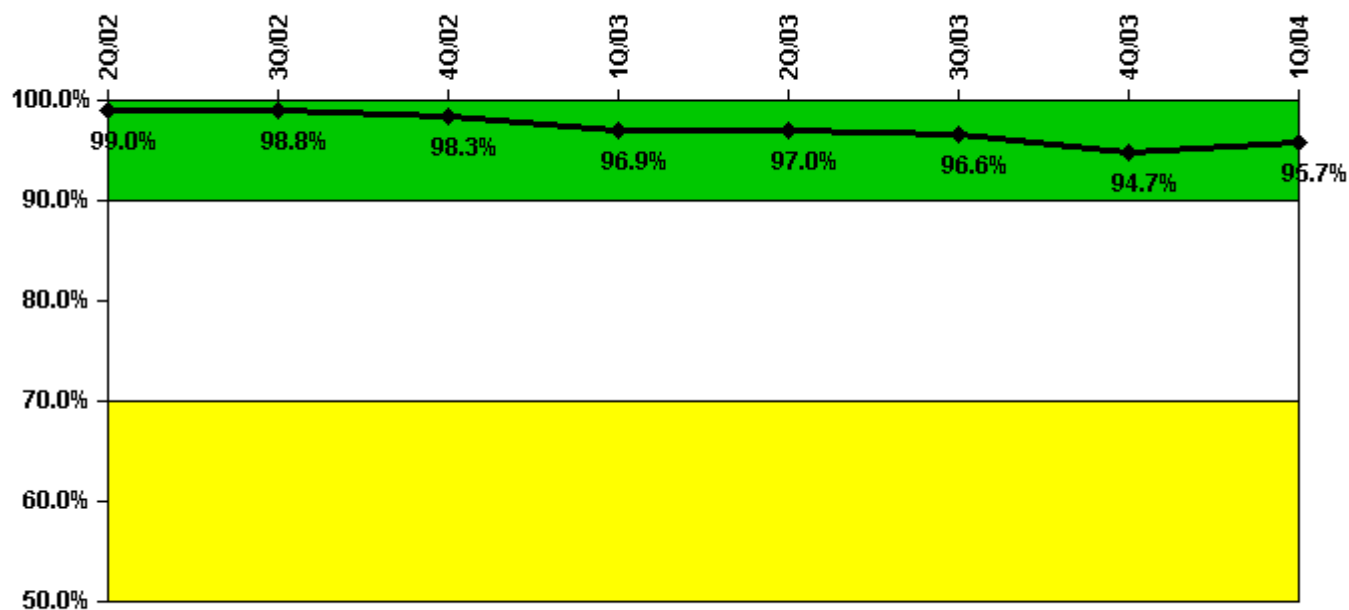
Notes

Reactor Coolant System Leakage	4/02	5/02	6/02	7/02	8/02	9/02	10/02	11/02	12/02	1/03	2/03	3/03
Maximum leakage	0.040	0.050	0.030	0.030	0.010	0.010	0.020	0.010	0.010	0.010	0.010	0.020
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	0.4	0.5	0.3	0.3	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2

Reactor Coolant System Leakage	4/03	5/03	6/03	7/03	8/03	9/03	10/03	11/03	12/03	1/04	2/04	3/04
Maximum leakage	0.020	0.020	0.060	0.020	0.010	0.010	0.040	0.010	0.010	0.020	0.030	0.020
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	0.2	0.2	0.6	0.2	0.1	0.1	0.4	0.1	0.1	0.2	0.3	0.2

Licensee Comments: none

Drill/Exercise Performance



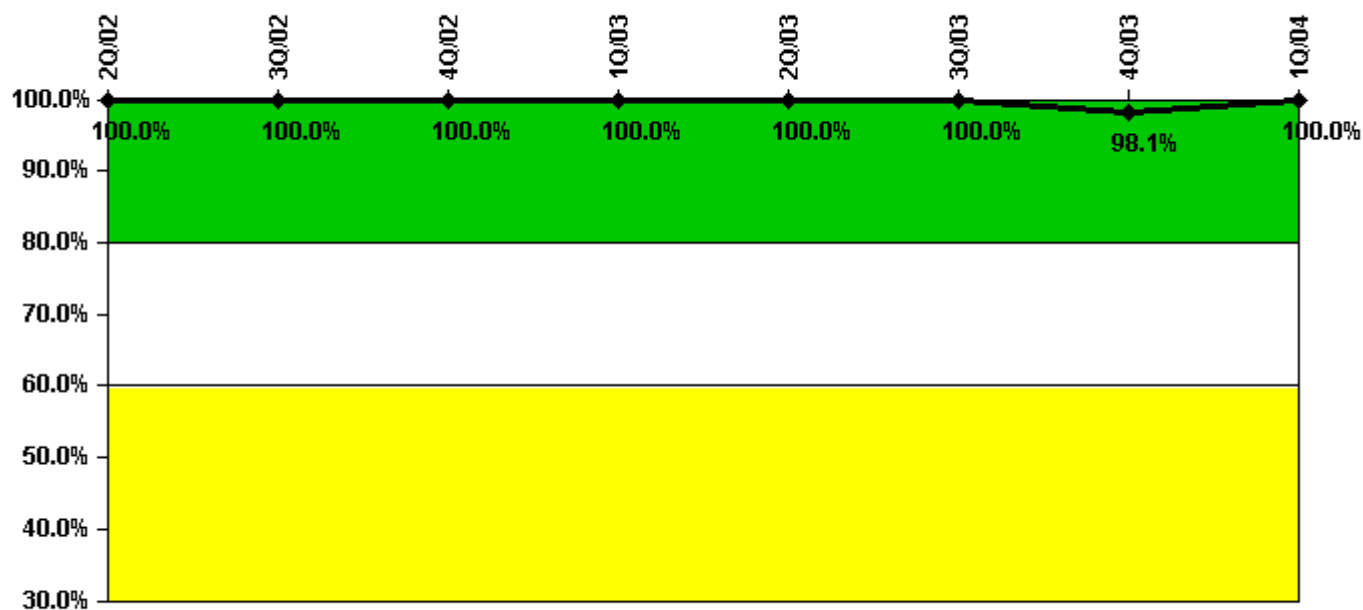
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Successful opportunities	6.0	8.0	45.0	8.0	6.0	47.0	23.0	34.0
Total opportunities	6.0	8.0	46.0	10.0	6.0	49.0	26.0	34.0
Indicator value	99.0%	98.8%	98.3%	96.9%	97.0%	96.6%	94.7%	95.7%

Licensee Comments: none

ERO Drill Participation



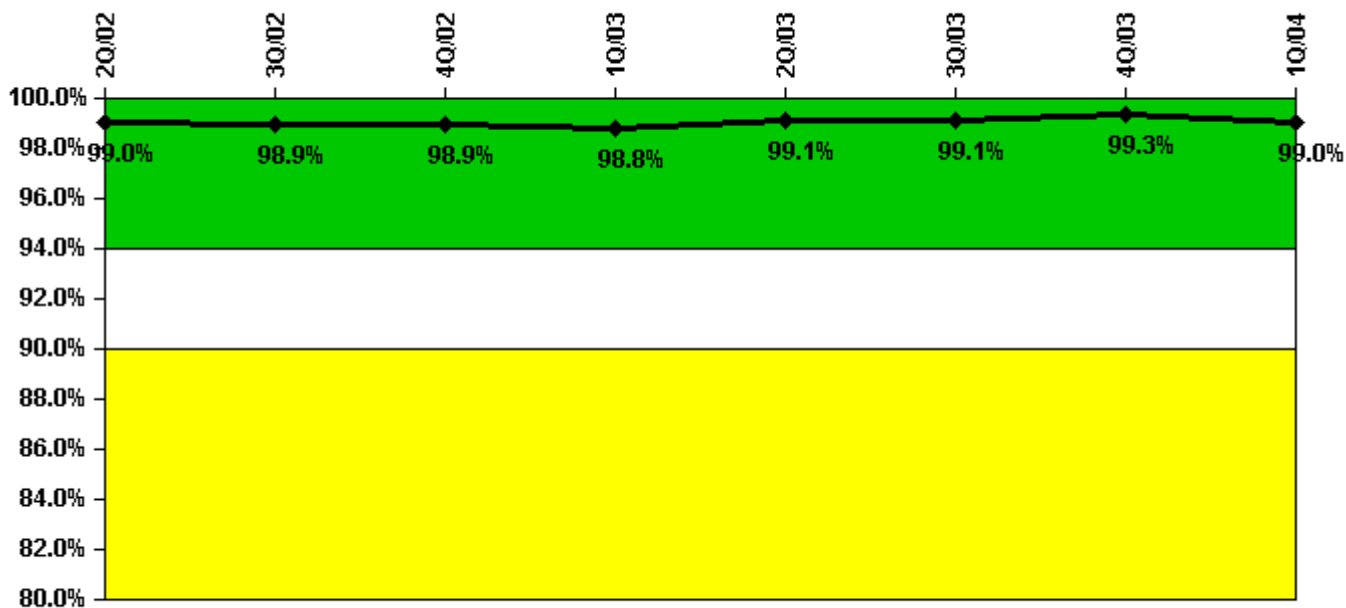
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Participating Key personnel	54.0	54.0	56.0	56.0	57.0	55.0	52.0	50.0
Total Key personnel	54.0	54.0	56.0	56.0	57.0	55.0	53.0	50.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.1%	100.0%

Licensee Comments: none

Alert & Notification System



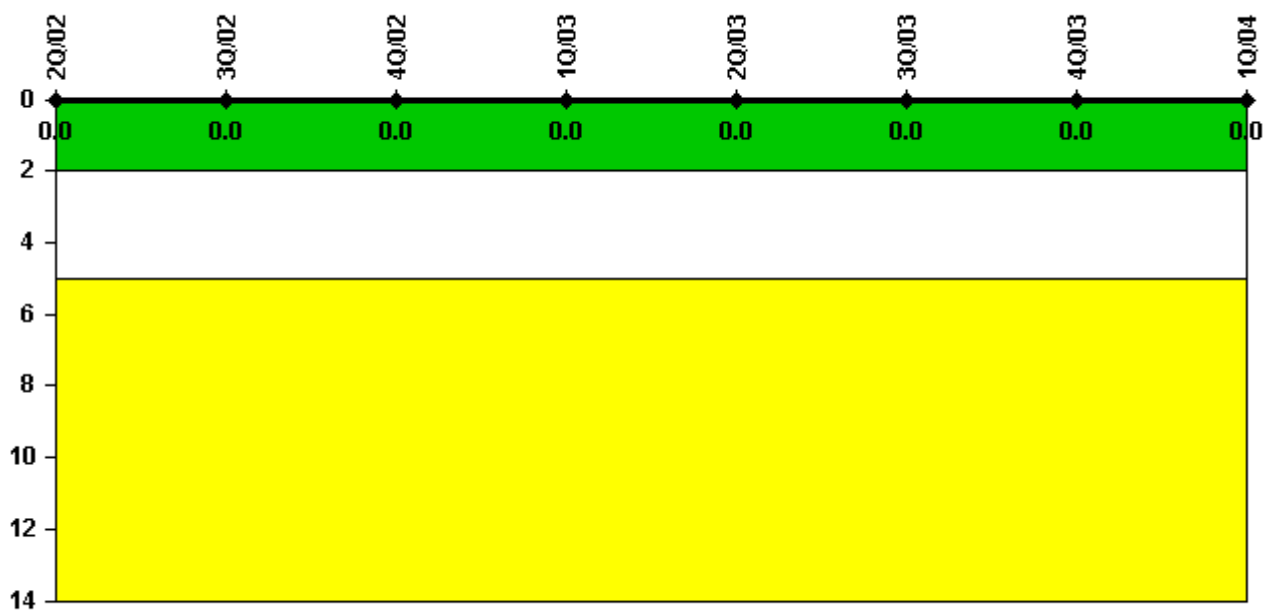
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
Successful siren-tests	777	785	882	686	885	786	886	677
Total sirens-tests	792	792	891	693	891	792	891	693
Indicator value	99.0%	98.9%	98.9%	98.8%	99.1%	99.1%	99.3%	99.0%

Licensee Comments: none

Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
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



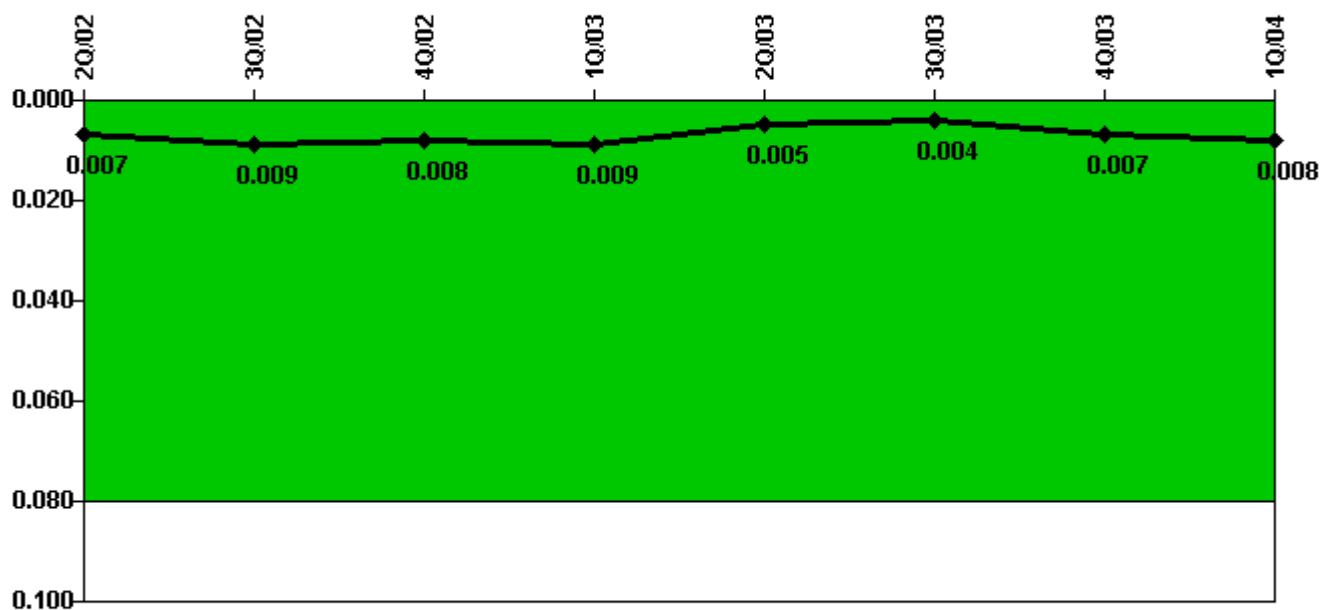
Thresholds: White > 1.0 Yellow > 3.0

Notes

RETS/ODCM Radiological Effluent	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
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	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
IDS compensatory hours	46.70	62.30	14.10	40.10	76.60	3.30	101.40	108.60
CCTV compensatory hours	151.7	6.4	0.4	15.2	0	21.6	14.0	0
IDS normalization factor	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40
CCTV normalization factor	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Index Value	0.007	0.009	0.008	0.009	0.005	0.004	0.007	0.008

Licensee Comments: none

Personnel Screening Program



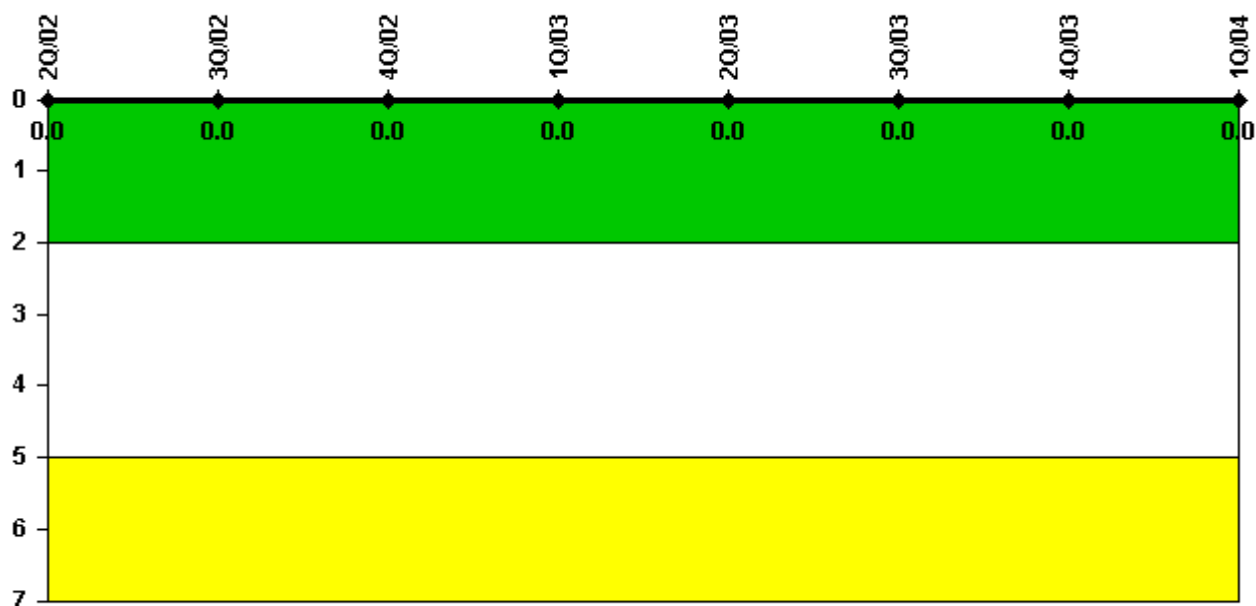
Thresholds: White > 2.0 Yellow > 5.0

Notes

Personnel Screening Program	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
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	2Q/02	3Q/02	4Q/02	1Q/03	2Q/03	3Q/03	4Q/03	1Q/04
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: April 22, 2004