

Kewaunee

2Q/2009 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



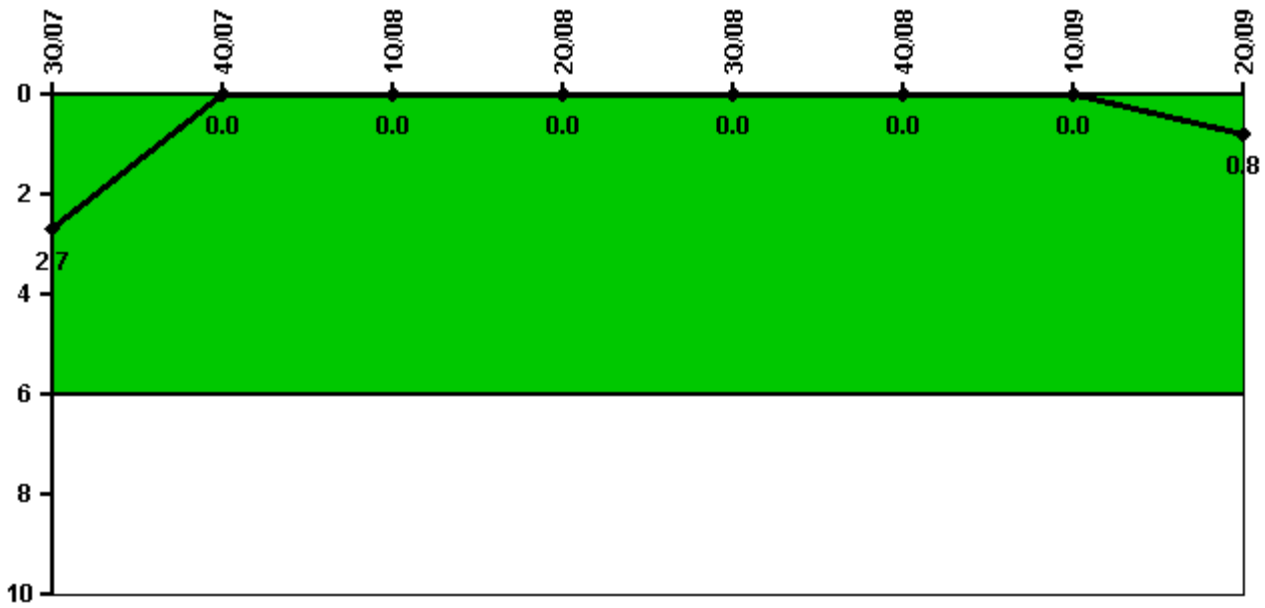
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2208.0	2025.3	2111.9	1278.5	2208.0	2209.0	2159.0	2106.7
Indicator value	3.6	1.7	0	0	0	0	0	0

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



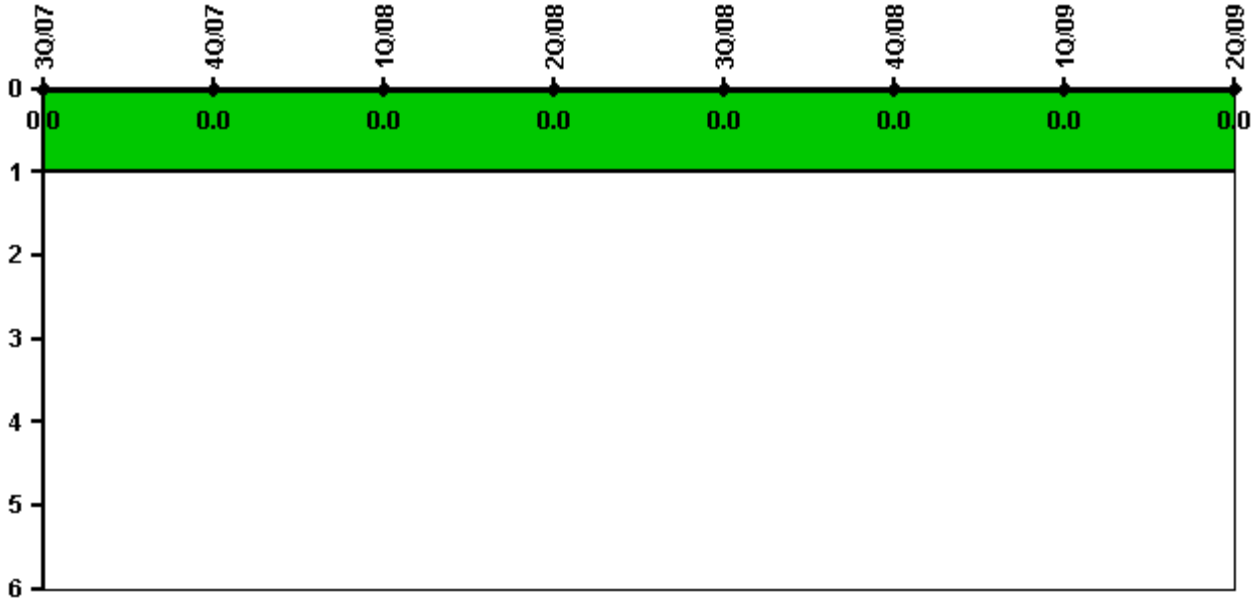
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
Unplanned power changes	0	0	0	0	0	0	0	1.0
Critical hours	2208.0	2025.3	2111.9	1278.5	2208.0	2209.0	2159.0	2106.7
Indicator value	2.7	0	0	0	0	0	0	0.8

Licensee Comments: none

Unplanned Scrams with Complications



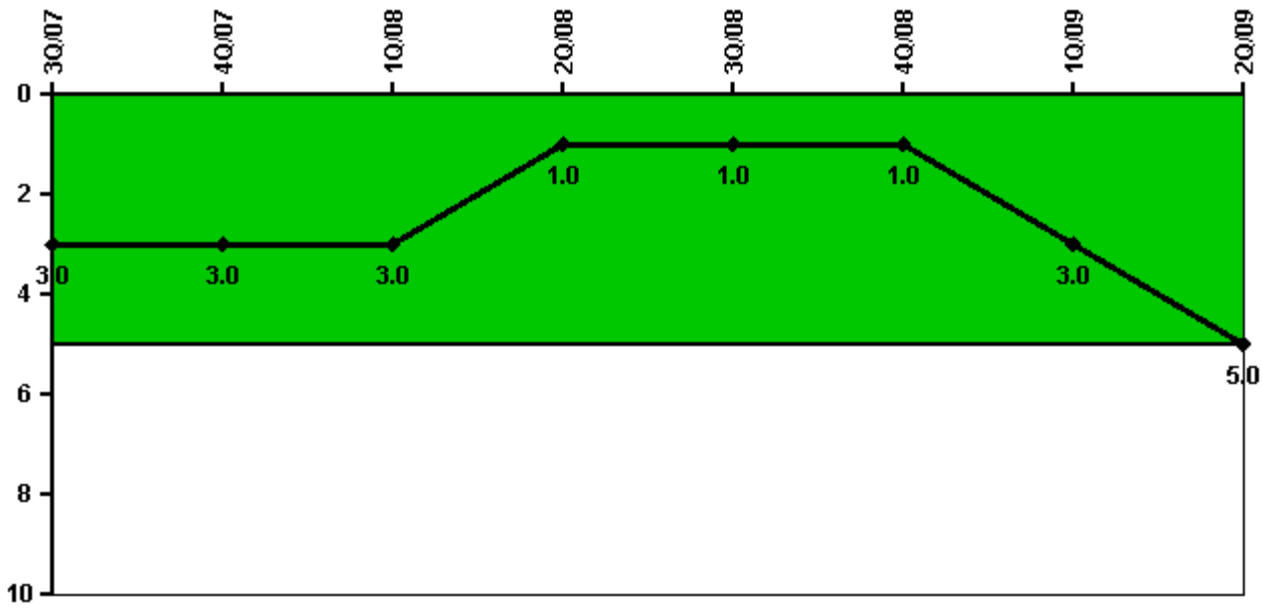
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

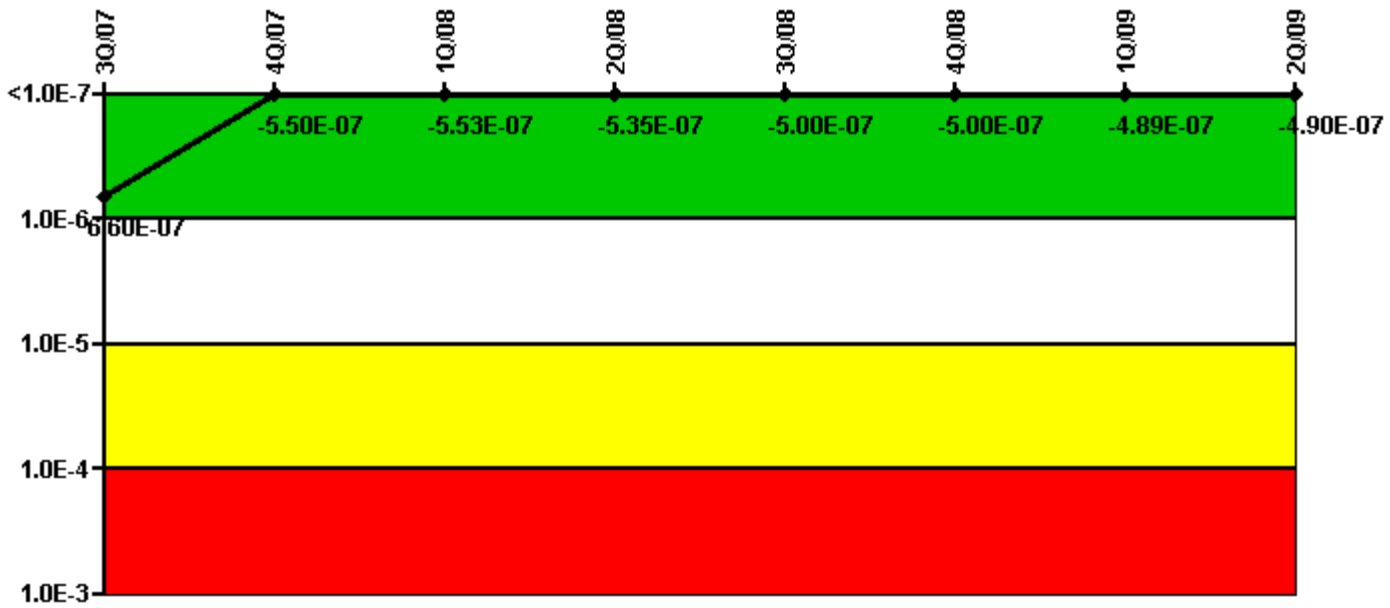
Notes

Safety System Functional Failures (PWR)	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
Safety System Functional Failures	0	1	0	0	0	1	2	2
Indicator value	3	3	3	1	1	1	3	5

Licensee Comments:

2Q/09: LER 2009-004 - Failed Backdraft Damper Renders Containment Fan Coil Unit Inoperable. LER 2009-005 - Nonfunctional Steam Exclusion Door Results in Postulated Inoperability of Safety Systems (Door 140)

Mitigating Systems Performance Index, Emergency AC Power System



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

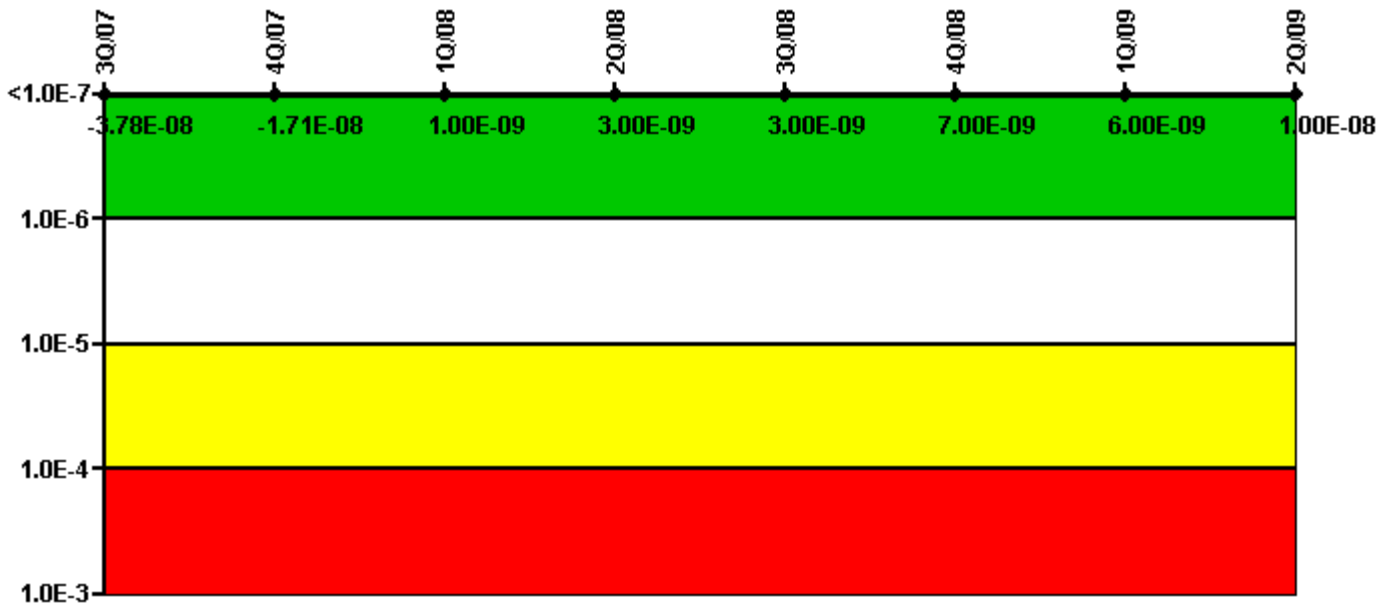
Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
UAI (ΔCDF)	1.40E-07	8.00E-08	8.70E-08	7.50E-08	1.10E-07	1.00E-07	9.10E-08	5.00E-08
URI (ΔCDF)	5.20E-07	-6.30E-07	-6.40E-07	-6.10E-07	-6.10E-07	-6.00E-07	-5.80E-07	-5.40E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	6.60E-07	-5.50E-07	-5.53E-07	-5.35E-07	-5.00E-07	-5.00E-07	-4.89E-07	-4.90E-07

Licensee Comments:

2Q/09: Risk Cap Invoked.

Mitigating Systems Performance Index, High Pressure Injection System



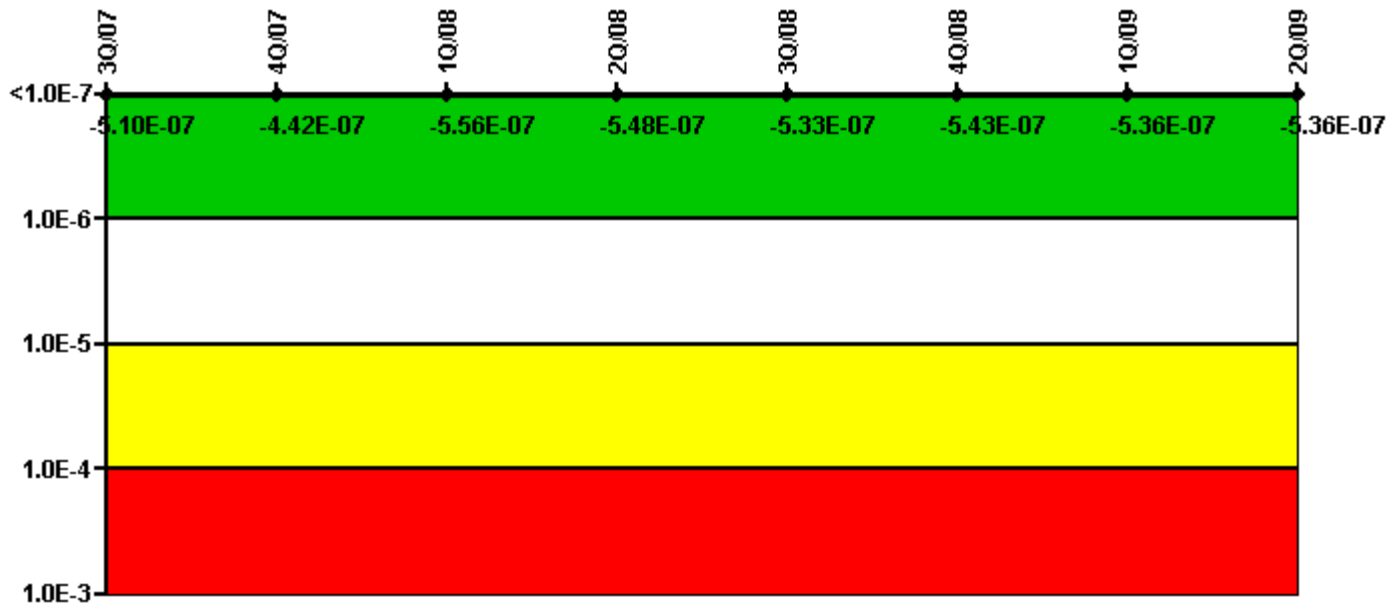
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
UAI (Δ CDF)	$-2.80E-09$	$2.90E-09$	$2.30E-08$	$2.60E-08$	$2.70E-08$	$3.00E-08$	$3.00E-08$	$3.30E-08$
URI (Δ CDF)	$-3.50E-08$	$-2.00E-08$	$-2.20E-08$	$-2.30E-08$	$-2.40E-08$	$-2.30E-08$	$-2.40E-08$	$-2.30E-08$
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	$-3.78E-08$	$-1.71E-08$	$1.00E-09$	$3.00E-09$	$3.00E-09$	$7.00E-09$	$6.00E-09$	$1.00E-08$

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



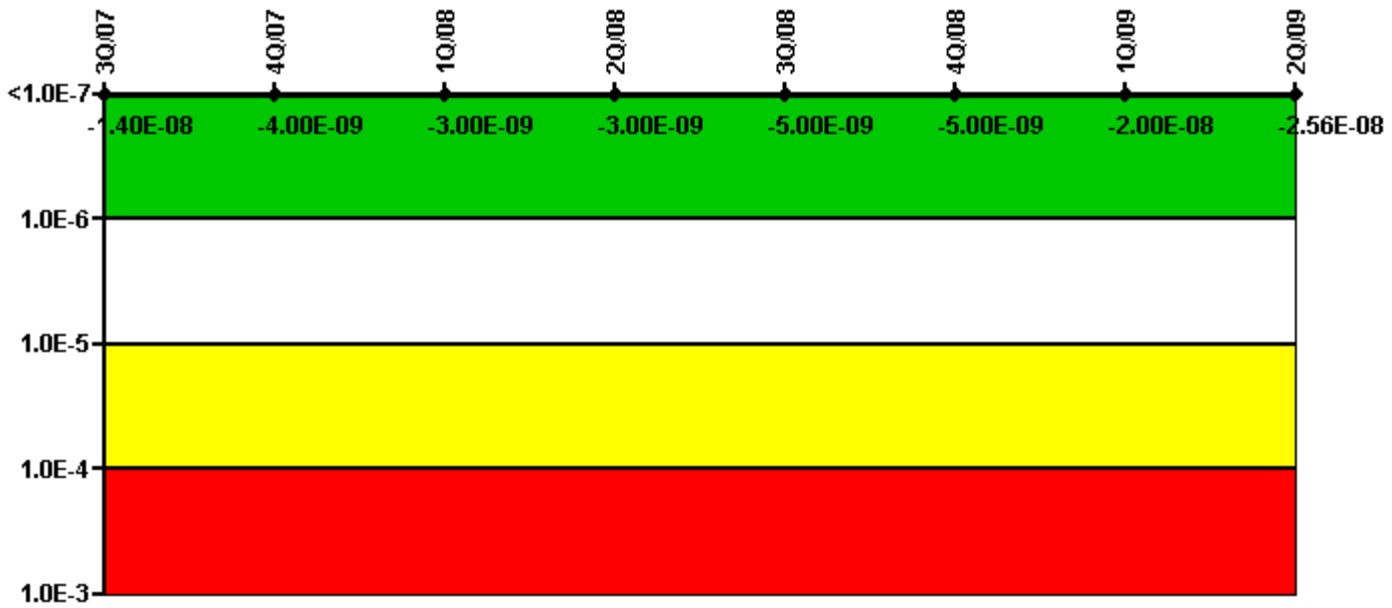
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
UAI (Δ CDF)	4.00E-08	1.80E-08	-7.60E-08	-7.80E-08	-5.30E-08	-7.30E-08	-7.60E-08	-7.60E-08
URI (Δ CDF)	-5.50E-07	-4.60E-07	-4.80E-07	-4.70E-07	-4.80E-07	-4.70E-07	-4.60E-07	-4.60E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.10E-07	-4.42E-07	-5.56E-07	-5.48E-07	-5.33E-07	-5.43E-07	-5.36E-07	-5.36E-07

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



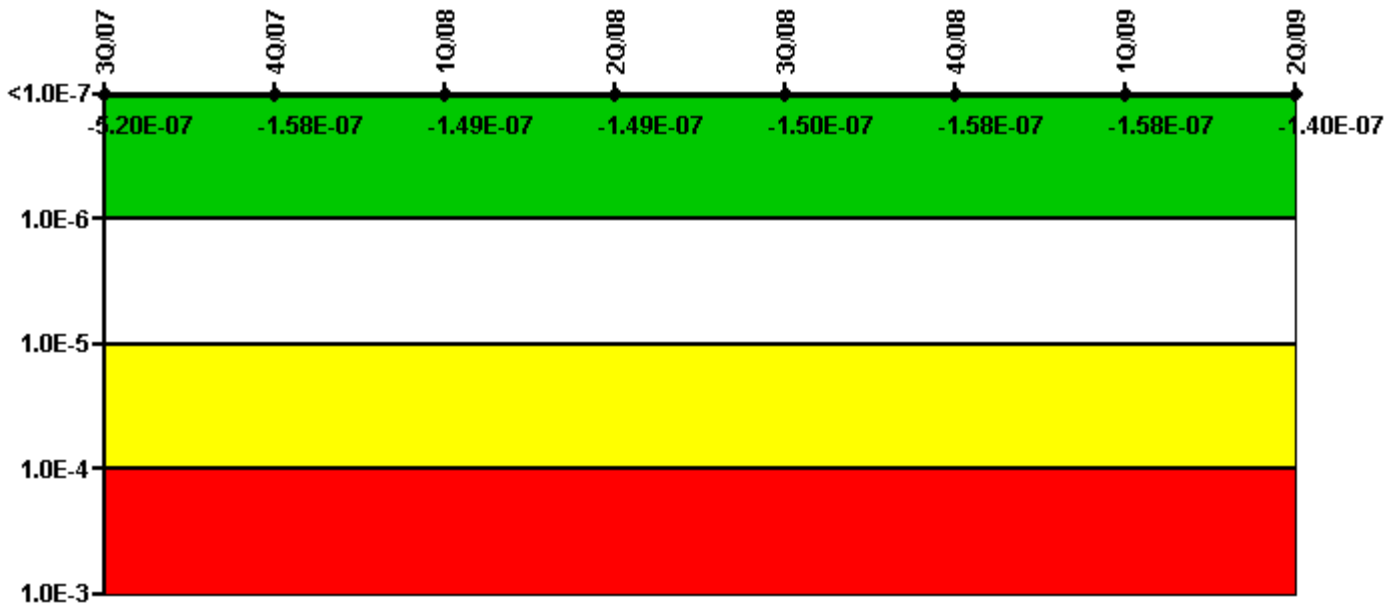
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
UAI (Δ CDF)	3.60E-08	3.10E-08	3.10E-08	2.70E-08	2.50E-08	2.60E-08	1.20E-08	4.40E-09
URI (Δ CDF)	-5.00E-08	-3.50E-08	-3.40E-08	-3.00E-08	-3.00E-08	-3.10E-08	-3.20E-08	-3.00E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.40E-08	-4.00E-09	-3.00E-09	-3.00E-09	-5.00E-09	-5.00E-09	-2.00E-08	-2.56E-08

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
UAI (Δ CDF)	-1.30E-07	-1.10E-07	-1.00E-07	-9.90E-08	-1.00E-07	-1.10E-07	-1.10E-07	-8.90E-08
URI (Δ CDF)	-3.90E-07	-4.80E-08	-4.90E-08	-5.00E-08	-5.00E-08	-4.80E-08	-4.80E-08	-5.10E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-5.20E-07	-1.58E-07	-1.49E-07	-1.49E-07	-1.50E-07	-1.58E-07	-1.58E-07	-1.40E-07

Licensee Comments:

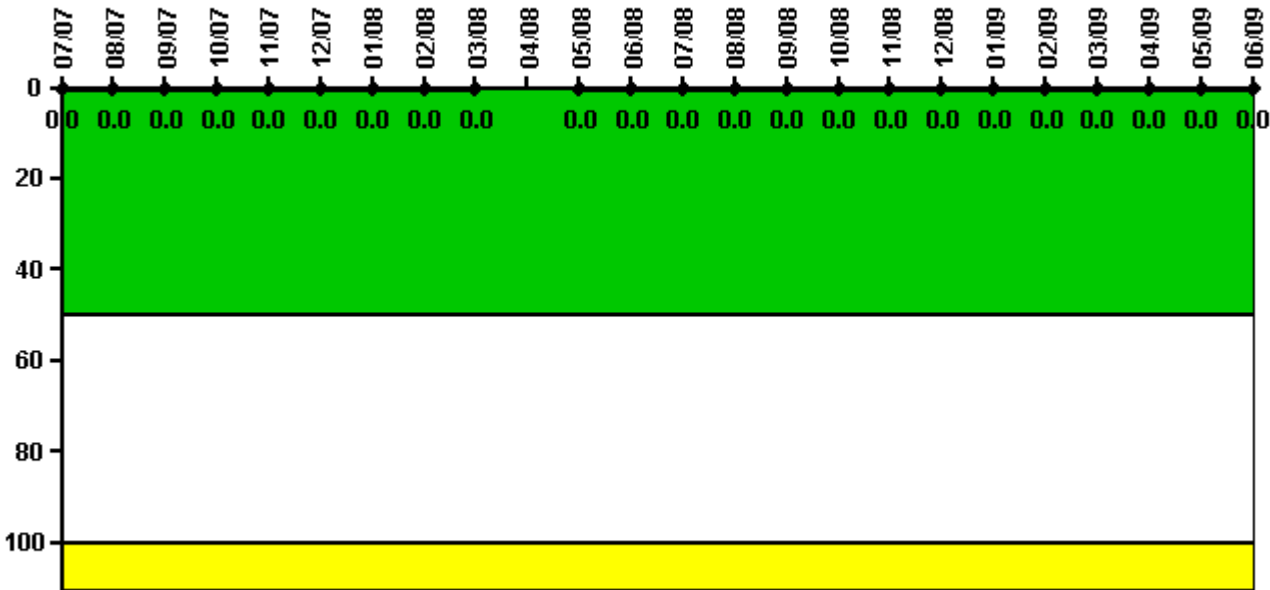
1Q/09: Failure number 856 from 10/15/07 for service water valve SW-4B was inadvertently entered against two MSPI components, SW-4B and SW pump 1B2 (145-443). This error was identified and corrected during 2nd quarter 2009. The failure was removed from the SW pump. This had minor impact on calculated MSPI values from 4th quarter 2007 through 1st quarter 2009. The cooling water system MSPI indicator color was GREEN before and after the change was made.

4Q/08: PRA data for MSPI systems and components have been updated for use in the first quarter of 2009 to reflect PRA changes made under model K107Aa that was issued for use on November 12, 2008.

2Q/08: Revised unavailable hours for May 2008 (added 2 hours) for Service Water Train A. This change does not challenge the green/white thresholds. Indicator continues to be green.

4Q/07: The PRA coefficients for all functions and devices have been updated for the Fourth Quarter 2007 to reflect revised PRA model K107A. The effective date of PRA revision is August 29, 2007. The PRA change did not result in any MSPI values exceeding the Green/White threshold. The PRA revision resulted in the addition of two monitored components to the Cooling Water System due to their Birnbaum importance is now greater than 1E-06. The MSPI value for the Cooling Water System reflects the addition of these two components. The new components are turbine building service water isolation valves SW-4A and SW-4B.

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

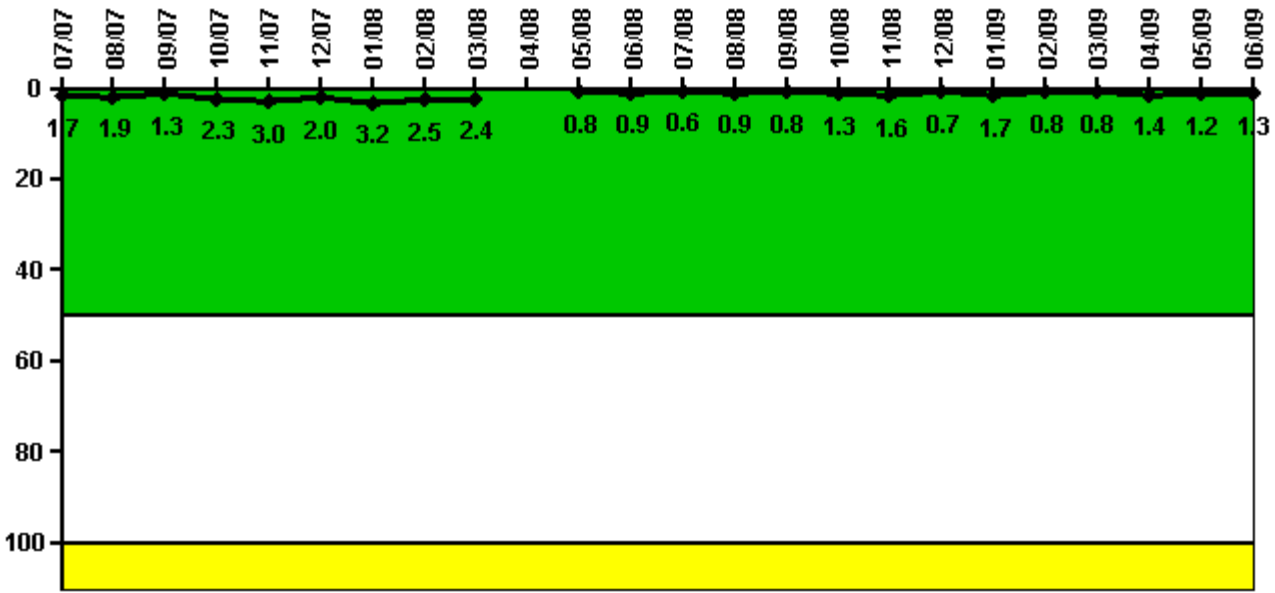
Notes

Reactor Coolant System Activity	7/07	8/07	9/07	10/07	11/07	12/07	1/08	2/08	3/08	4/08	5/08	6/08
Maximum activity	0.000098	0.000103	0.000107	0.000105	0.000111	0.000112	0.000114	0.000121	0.000122	N/A	0.000021	0.000093
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	0	0	0	0	0	0	0	0	N/A	0	0

Reactor Coolant System Activity	7/08	8/08	9/08	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09
Maximum activity	0.000099	0.000115	0.000118	0.000123	0.000135	0.000132	0.000134	0.000137	0.000167	0.000157	0.000136	0.000156
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	0	0	0	0	0	0	0	0	0	0	0

Licensee Comments: none

Reactor Coolant System Leakage



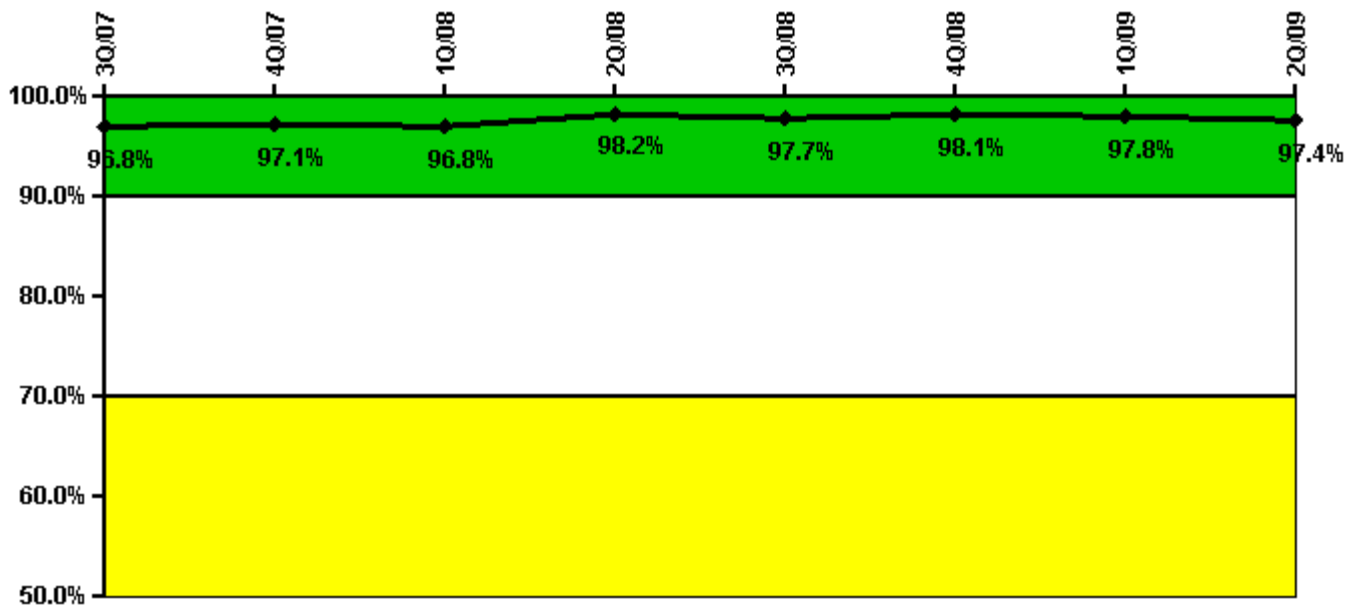
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	7/07	8/07	9/07	10/07	11/07	12/07	1/08	2/08	3/08	4/08	5/08	6/08
Maximum leakage	0.166	0.187	0.134	0.231	0.295	0.198	0.316	0.250	0.239	N/A	0.076	0.085
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	1.7	1.9	1.3	2.3	3.0	2.0	3.2	2.5	2.4	N/A	0.8	0.9
Reactor Coolant System Leakage	7/08	8/08	9/08	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09
Maximum leakage	0.059	0.088	0.084	0.132	0.158	0.069	0.167	0.082	0.084	0.139	0.117	0.134
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	0.6	0.9	0.8	1.3	1.6	0.7	1.7	0.8	0.8	1.4	1.2	1.3

Licensee Comments: none

Drill/Exercise Performance



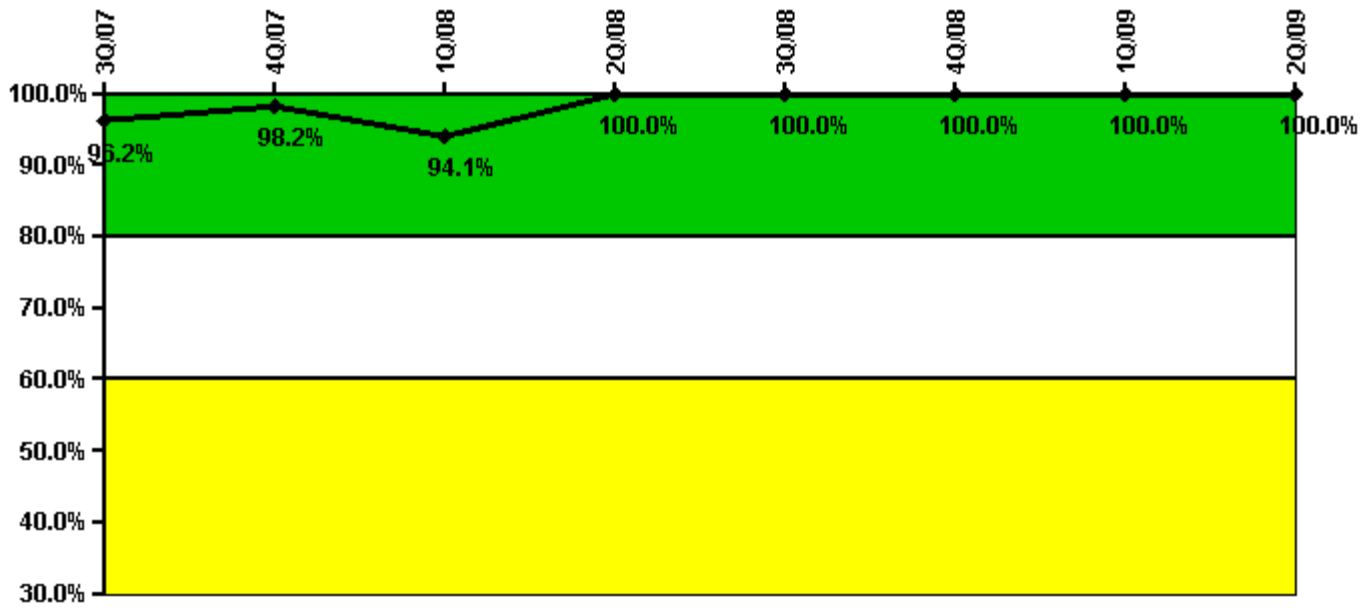
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
Successful opportunities	53.0	15.0	32.0	44.0	16.0	55.0	58.0	32.0
Total opportunities	54.0	16.0	33.0	44.0	18.0	55.0	59.0	34.0
Indicator value	96.8%	97.1%	96.8%	98.2%	97.7%	98.1%	97.8%	97.4%

Licensee Comments: none

ERO Drill Participation



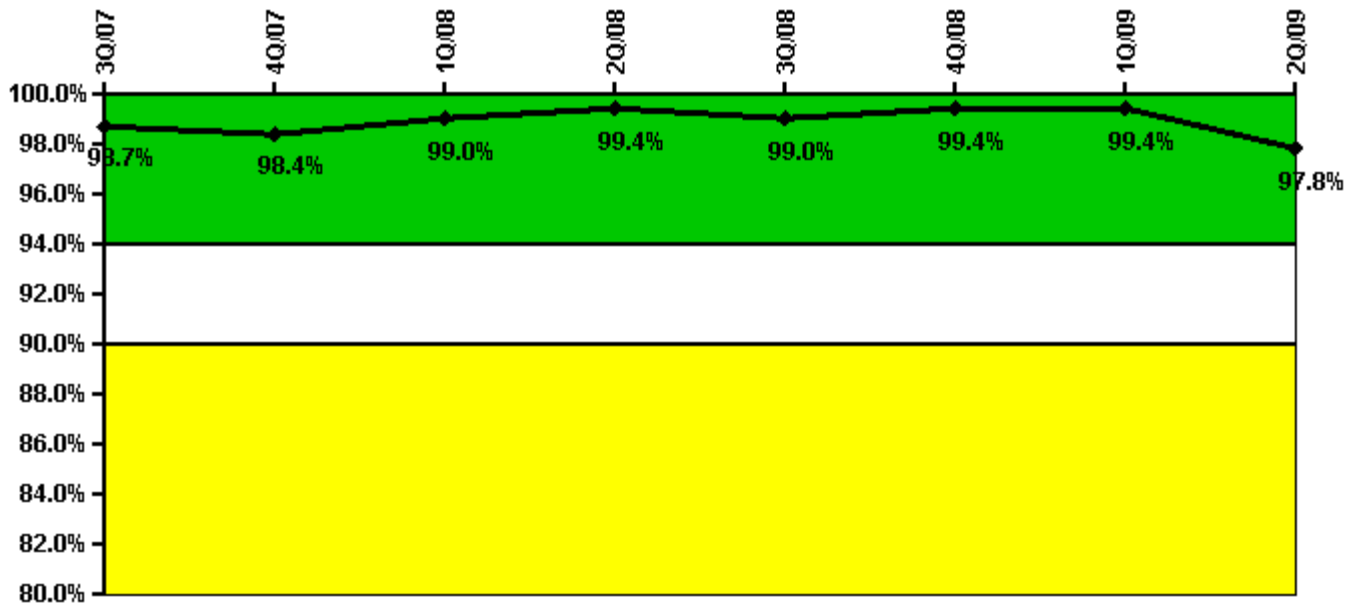
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
Participating Key personnel	51.0	54.0	48.0	52.0	52.0	57.0	59.0	59.0
Total Key personnel	53.0	55.0	51.0	52.0	52.0	57.0	59.0	59.0
Indicator value	96.2%	98.2%	94.1%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

Alert & Notification System



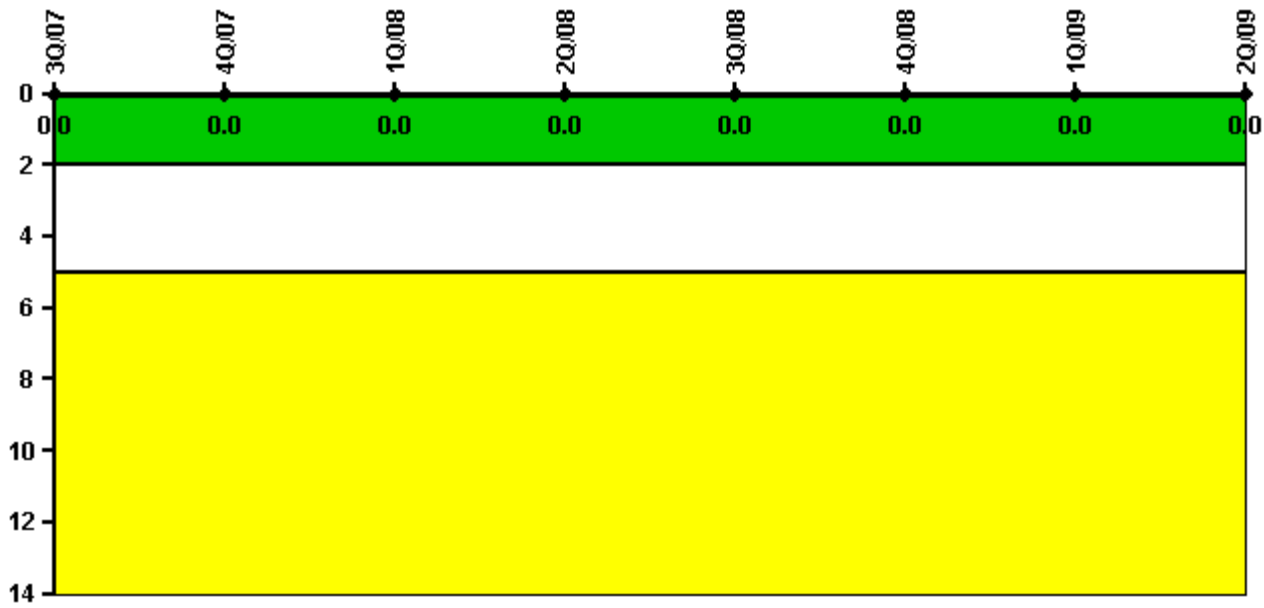
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
Successful siren-tests	78	77	78	77	77	78	78	72
Total sirens-tests	78	78	78	78	78	78	78	78
Indicator value	98.7%	98.4%	99.0%	99.4%	99.0%	99.4%	99.4%	97.8%

Licensee Comments: none

Occupational Exposure Control Effectiveness



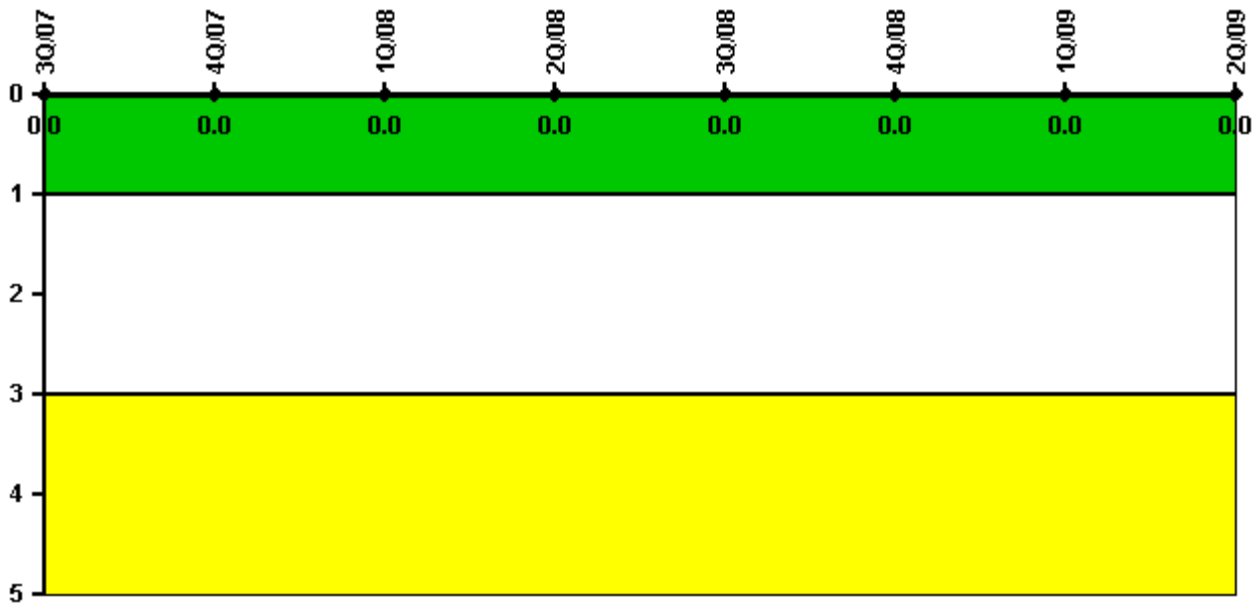
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
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	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09
RETS/ODCM occurrences	0	0	0	0	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

[Security](#) information not publicly available.