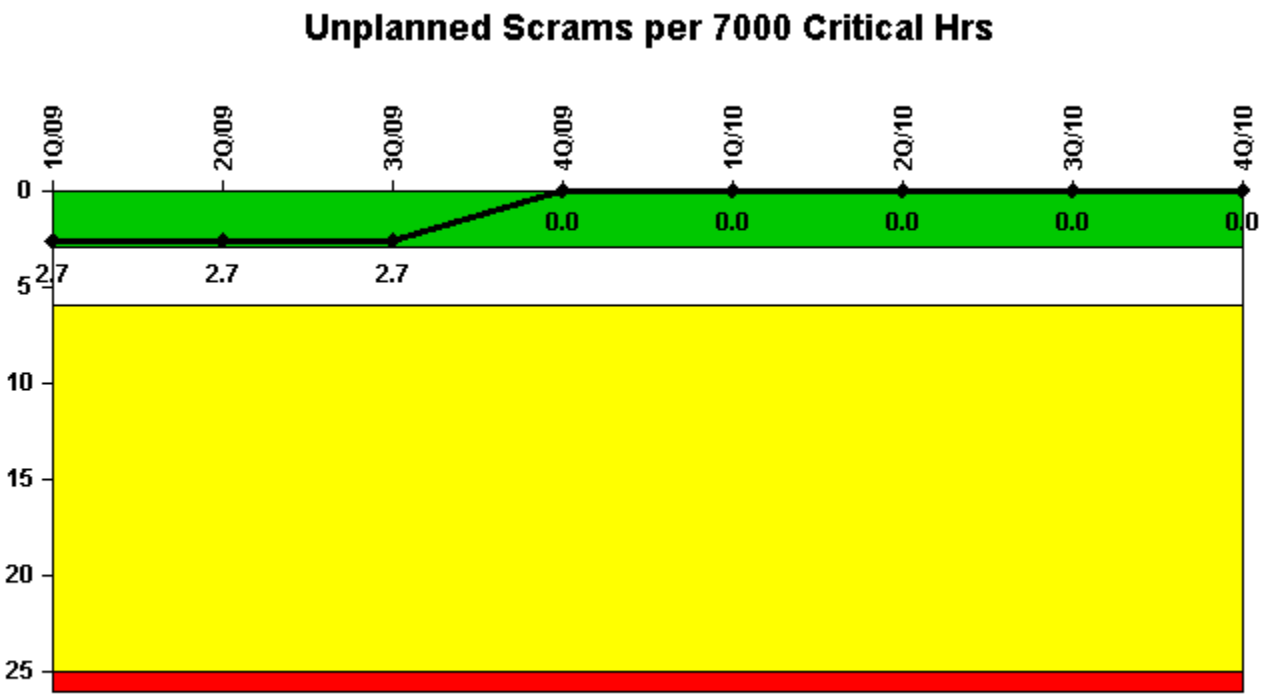
Callaway

4Q/2010 Performance Indicators

Licensee's General Comments: none



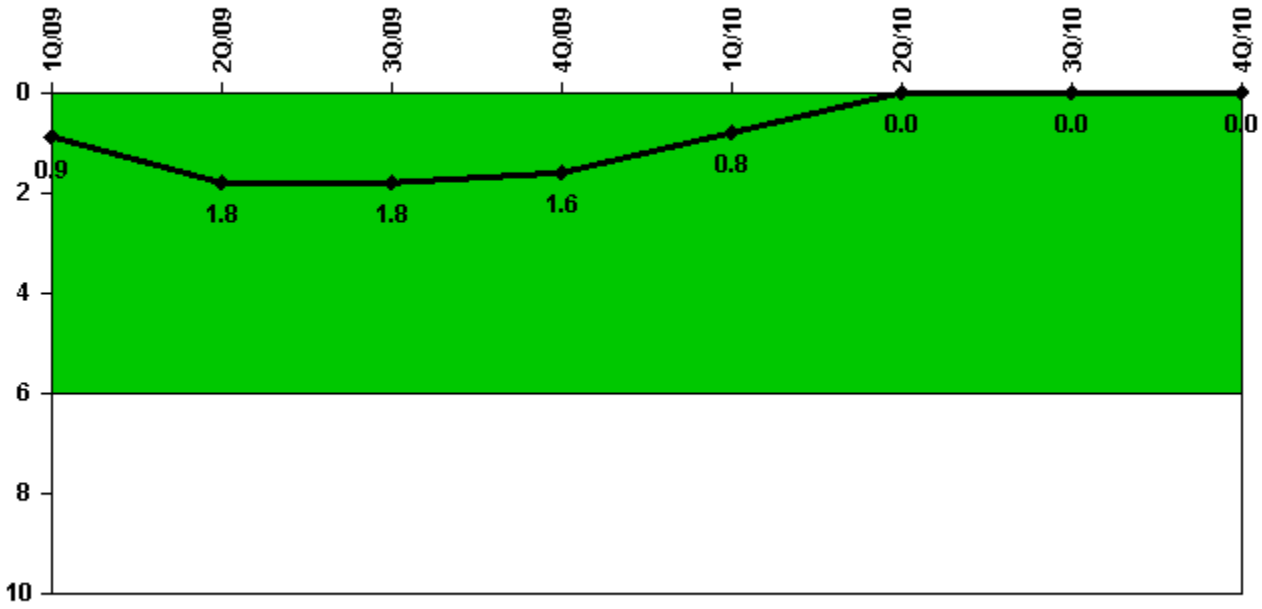
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	1950.4	2184.0	2208.0	2209.0	2159.0	849.6	2208.0	2209.0
Indicator value	**2.7**	**2.7**	**2.7**	**0**	**0**	**0**	**0**	**0**

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



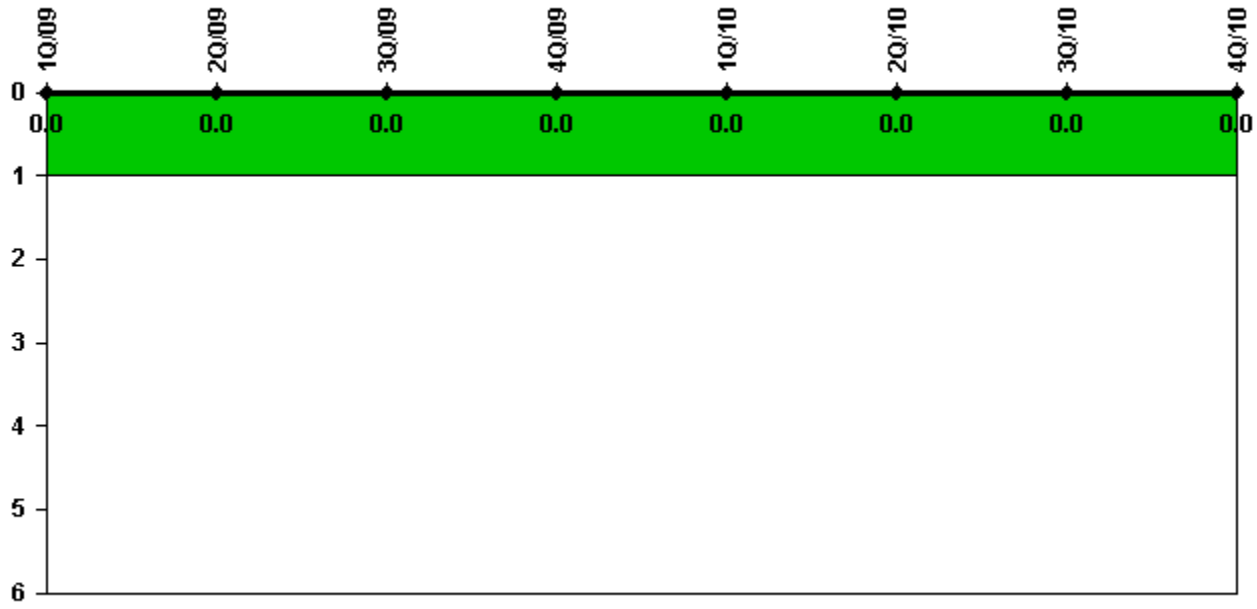
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Unplanned power changes	1.0	1.0	0	0	0	0	0	0
Critical hours	1950.4	2184.0	2208.0	2209.0	2159.0	849.6	2208.0	2209.0
Indicator value	**0.9**	**1.8**	**1.8**	**1.6**	**0.8**	**0**	**0**	**0**

Licensee Comments: none

Unplanned Scrams with Complications



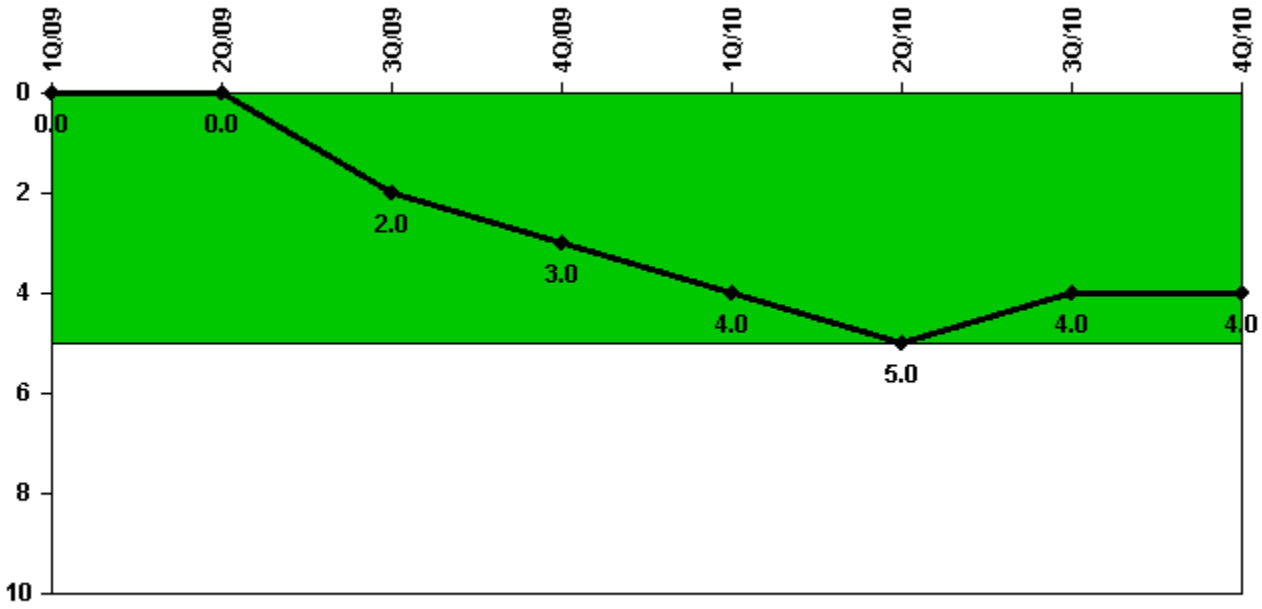
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
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

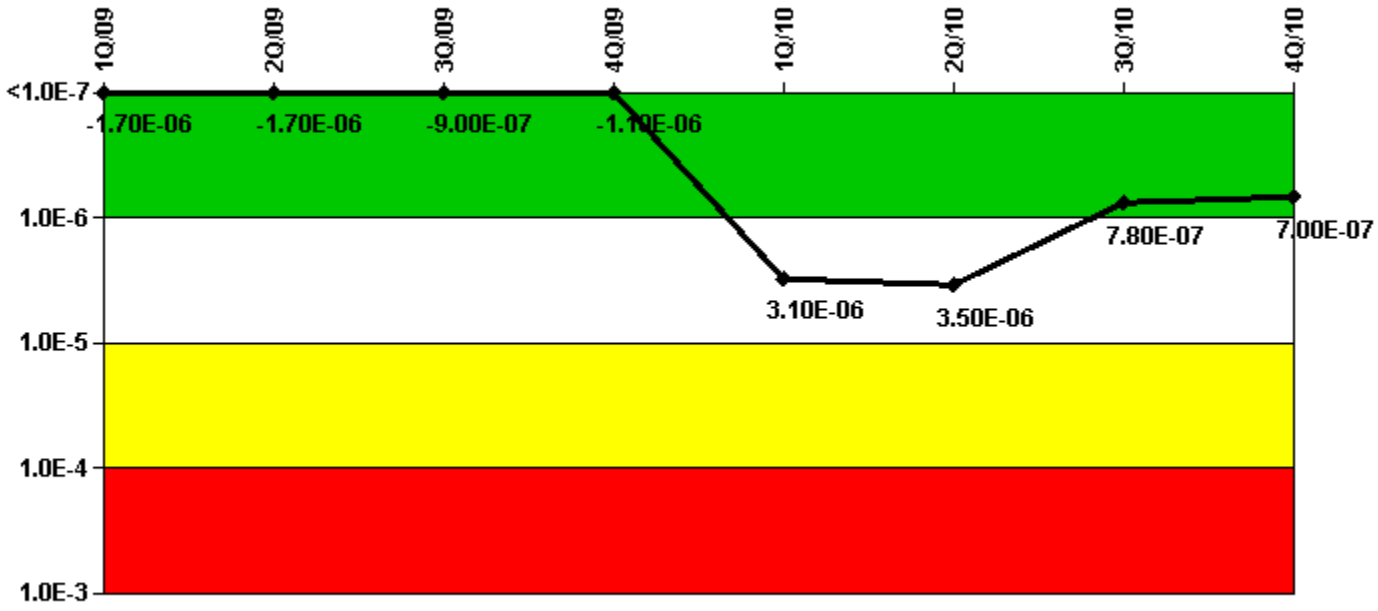
Notes

Safety System Functional Failures (PWR)	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Safety System Functional Failures	0	0	2	1	1	1	1	1
Indicator value	**0**	**0**	**2**	**3**	**4**	**5**	**4**	**4**

Licensee Comments:

4Q/10: LER 2010-008-00, Inadequate Analysis Results in a Component Cooling Water Train Declared Inoperable, was submitted 2010.11.22.

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	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
UAI (ΔCDF)	7.37E-07	8.07E-07	9.57E-07	7.77E-07	1.18E-06	1.61E-06	3.41E-07	2.55E-07
URI (ΔCDF)	-2.48E-06	-2.51E-06	-1.86E-06	-1.87E-06	1.94E-06	1.89E-06	4.41E-07	4.41E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-1.70E-06**	**-1.70E-06**	**-9.00E-07**	**-1.10E-06**	**3.10E-06**	**3.50E-06**	**7.80E-07**	**7.00E-07**

Licensee Comments:

4Q/10: Risk Cap Invoked. Two accounting methods have been used historically for summing MSPI unavailability time at Callaway. When a consistent accounting method was applied to previous reporting periods, minor changes to existing data were discovered. As a result, unavailability data for some months (beginning 1Q2008) were changed to ensure consistent data reporting. These changes are small and do not result in a PI color change.

4Q/09: Risk Cap Invoked.

3Q/09: Risk Cap Invoked.

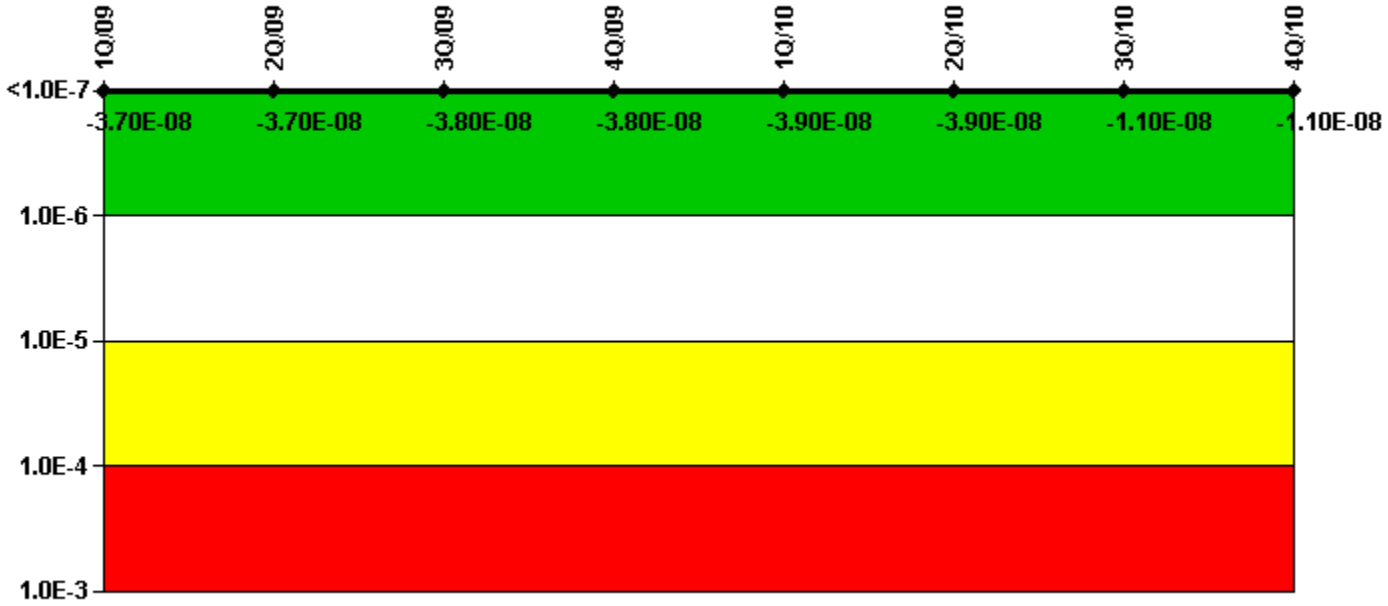
2Q/09: Risk Cap Invoked.

1Q/09: Risk Cap Invoked.

4Q/08: Risk Cap Invoked. Re-evaluated decision to recind diesel generator MSPI run time failure from December 2008. Callaway has determined that the failure was a run time failure and will report it as such to the NRC. The failure has been re-entered into CDE data.

2Q/08: Revision 002 of the Callaway Plant MSPI Basis Document was issued on June 26, 2008, reflecting revised planned baseline unavailability factors for all MSPI systems. Revised data is effective for MSPI calculations in the third quarter 2008.

Mitigating Systems Performance Index, High Pressure Injection System



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

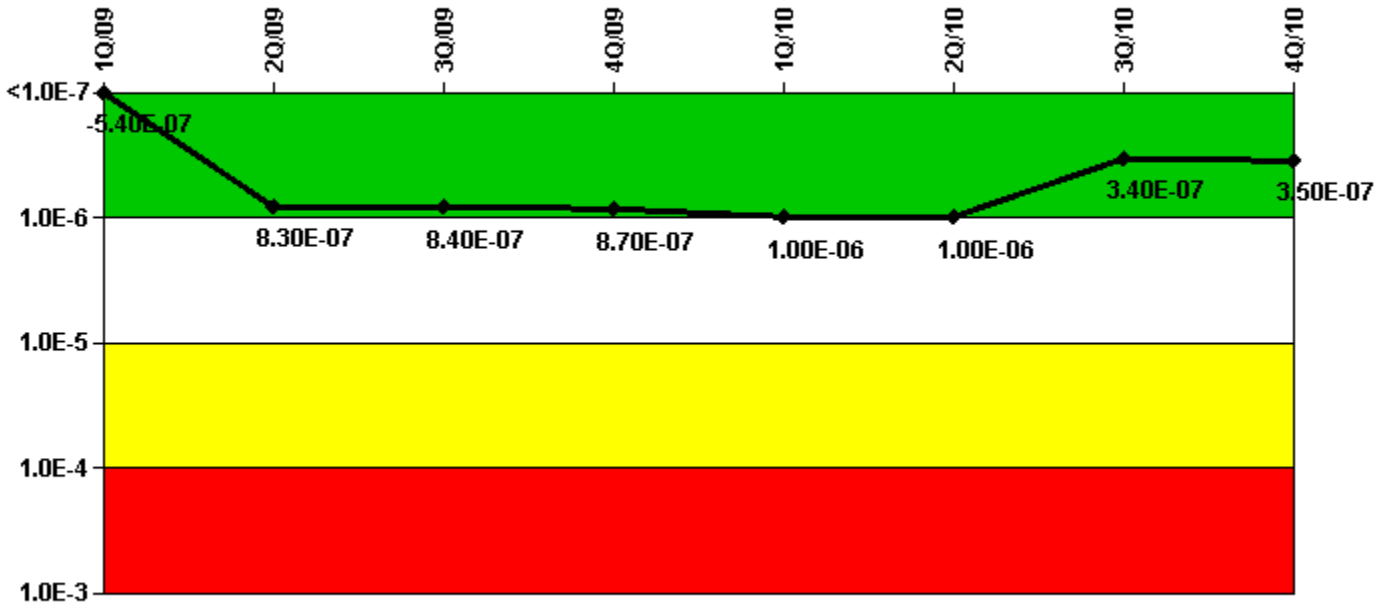
Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
UAI (ΔCDF)	-4.74E-09	-4.58E-09	-4.85E-09	-4.85E-09	-4.85E-09	-4.85E-09	-1.50E-09	-1.47E-09
URI (ΔCDF)	-3.22E-08	-3.26E-08	-3.31E-08	-3.35E-08	-3.40E-08	-3.44E-08	-9.53E-09	-9.53E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-3.70E-08**	**-3.70E-08**	**-3.80E-08**	**-3.80E-08**	**-3.90E-08**	**-3.90E-08**	**-1.10E-08**	**-1.10E-08**

Licensee Comments:

4Q/10: Two accounting methods have been used historically for summing MSPI unavailability time at Callaway. When a consistent accounting method was applied to previous reporting periods, minor changes to existing data were discovered. As a result, unavailability data for some months (beginning 1Q2008) were changed to ensure consistent data reporting. These changes are small and do not result in a PI color change.

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	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
UAI (ΔCDF)	-8.01E-08	-2.88E-08	-3.46E-08	-2.24E-08	1.09E-07	1.13E-07	7.28E-09	1.55E-08
URI (ΔCDF)	-4.56E-07	8.54E-07	8.71E-07	8.88E-07	8.88E-07	9.05E-07	3.37E-07	3.37E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-5.40E-07**	**8.30E-07**	**8.40E-07**	**8.70E-07**	**1.00E-06**	**1.00E-06**	**3.40E-07**	**3.50E-07**

Licensee Comments:

4Q/10: Two accounting methods have been used historically for summing MSPI unavailability time at Callaway. When a consistent accounting method was applied to previous reporting periods, minor changes to existing data were discovered. As a result, unavailability data for some months (beginning 3Q2007) were changed to ensure consistent data reporting. Additional minor reductions in previously reported MS08 unavailability time were made when periods of overconservatism were identified in historical data beginning 4Q2007. In these cases, unavailability time was unnecessarily counted for periods when MSPI functions remained intact. These changes are small and do not result in a PI color change.

3Q/10: A correction was made to the Sept 2007 estimated demands and hours for MS08. This update was inadverently not included in the corrections made in the 2Q2010 submittal. This data revision affects MS08 results from Sept 2007 forward but does not result in a PI color change. Additionally, an FAQ has been submitted by Callaway regarding the cascading of unavailability of a system that supports the MSPI Heat Removal System. The outcome of this FAQ may impact previously submitted data for MS08.

2Q/10: Risk Cap Invoked. A June 2010 MSPI Basis Document revision revised the estimated demands and hours for the MSPI Heat Removal System. The revised values have been applied from 4Q2007 forward to address an error made during calculation of estimated values. These corrections do not result in a PI color change.

1Q/10: Risk Cap Invoked.

4Q/09: Risk Cap Invoked.

3Q/09: Risk Cap Invoked.

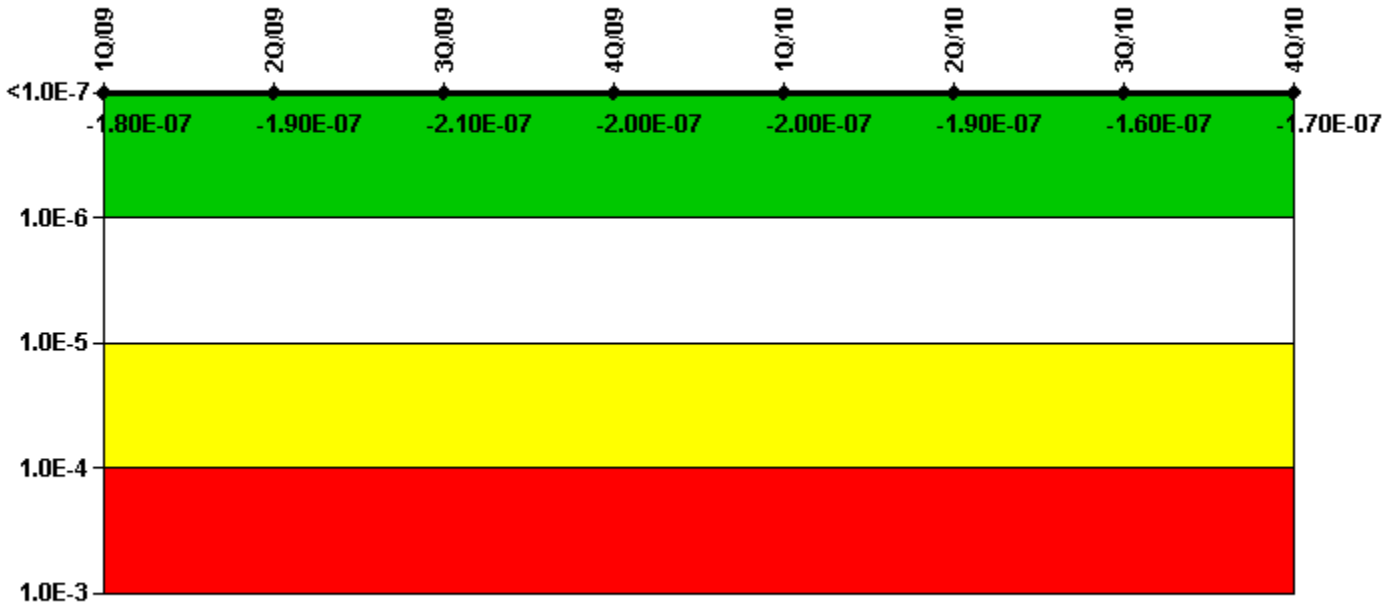
2Q/09: Risk Cap Invoked. Failure to start during surveillance. This will be reported on LER 2009-002 in 2009Q3

1Q/09: Risk Cap Invoked.

4Q/08: Risk Cap Invoked. Failure to start of the TDAFP has been added on 1/18/10 due to Remote Servo FCFV0313 silver oxide corrosion issue / PART 21 notification.

2Q/08: Revision 002 of the Callaway Plant MSPI Basis Document was issued on June 26, 2008, reflecting revised planned baseline unavailability factors for all MSPI systems. Revised data is effective for MSPI calculations in the third quarter 2008.

Mitigating Systems Performance Index, Residual Heat Removal System



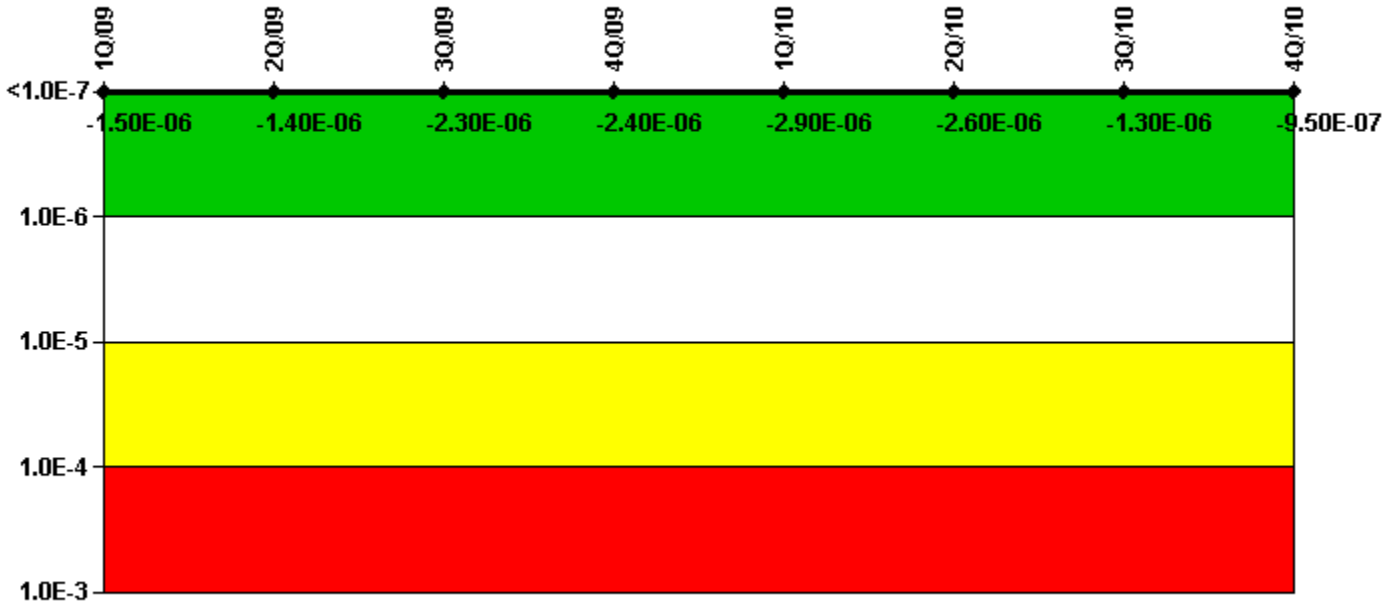
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
UAI (ΔCDF)	2.57E-08	1.43E-08	-7.50E-09	-7.26E-09	-5.28E-09	-1.22E-10	-6.10E-09	-1.88E-08
URI (ΔCDF)	-2.04E-07	-2.01E-07	-1.98E-07	-1.95E-07	-1.92E-07	-1.88E-07	-1.55E-07	-1.55E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-1.80E-07**	**-1.90E-07**	**-2.10E-07**	**-2.00E-07**	**-2.00E-07**	**-1.90E-07**	**-1.60E-07**	**-1.70E-07**

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



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

Notes

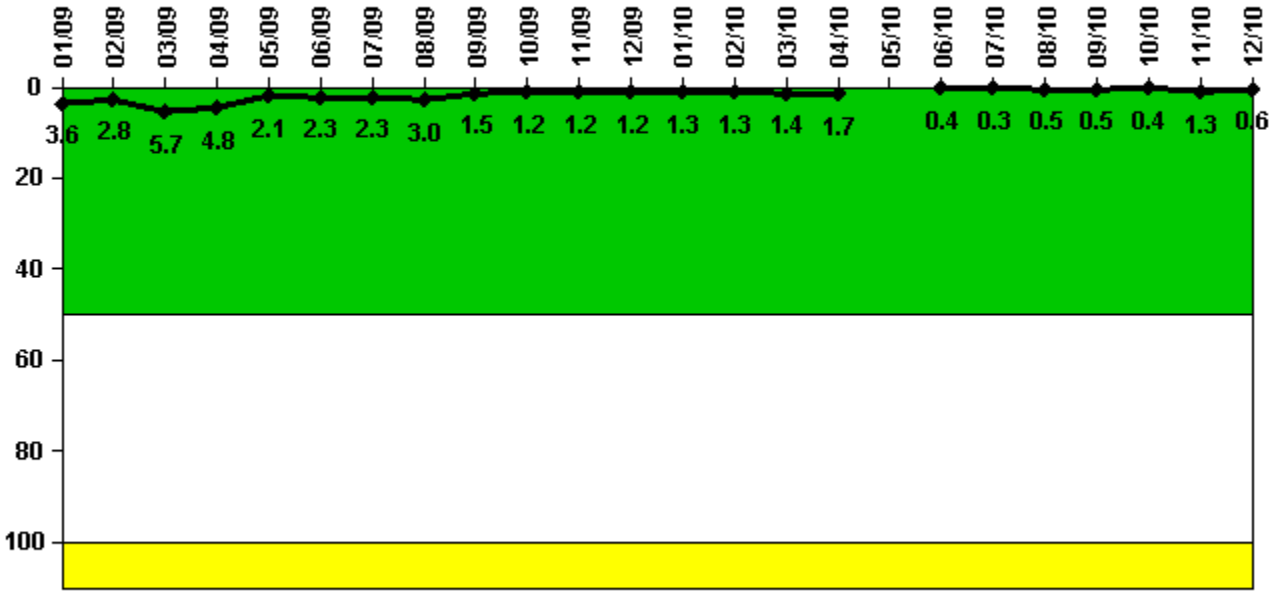
Mitigating Systems Performance Index, Cooling Water Systems	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
UAI (ΔCDF)	-3.58E-07	-1.84E-07	-1.14E-06	-1.19E-06	-1.67E-06	-1.46E-06	-5.59E-07	-2.25E-07
URI (ΔCDF)	-1.17E-06	-1.18E-06	-1.18E-06	-1.18E-06	-1.19E-06	-1.19E-06	-7.21E-07	-7.21E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-1.50E-06**	**-1.40E-06**	**-2.30E-06**	**-2.40E-06**	**-2.90E-06**	**-2.60E-06**	**-1.30E-06**	**-9.50E-07**

Licensee Comments:

4Q/10: Two accounting methods have been used historically for summing MSPI unavailability time at Callaway. When a consistent accounting method was applied to previous reporting periods, minor changes to existing data were discovered. As a result, unavailability data for some months (beginning 2Q2008) were changed to ensure consistent data reporting. Also, a total of 2.3 hours of planned unavailabilty have been added to MS10 for September 2010. These hours had been indavertently omitted in the 3Q2010 data submittal. These changes are small and do not result in a PI color change.

3Q/10: One engineering evaluation of a degraded component within the scope of MS10 remains outstanding for 3Q2010. Regardless of the final determination, however, the results of this evaluation will not cause a color change of this indicator.

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

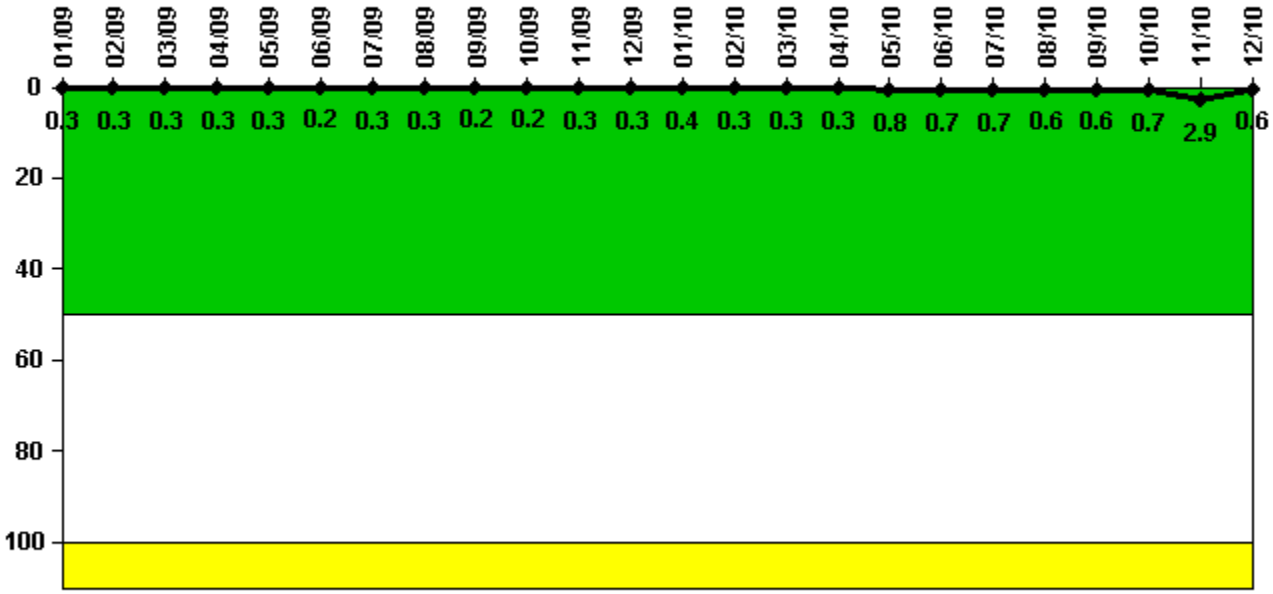
Notes

Reactor Coolant System Activity	**1/09**	**2/09**	**3/09**	**4/09**	**5/09**	**6/09**	**7/09**	**8/09**	**9/09**	**10/09**	**11/09**	**12/09**
Maximum activity	0.035500	0.027900	0.056800	0.048000	0.020600	0.022500	0.023000	0.030000	0.015000	0.012000	0.011700	0.012300
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	**3.6**	**2.8**	**5.7**	**4.8**	**2.1**	**2.3**	**2.3**	**3.0**	**1.5**	**1.2**	**1.2**	**1.2**

Reactor Coolant System Activity	**1/10**	**2/10**	**3/10**	**4/10**	**5/10**	**6/10**	**7/10**	**8/10**	**9/10**	**10/10**	**11/10**	**12/10**
Maximum activity	0.012600	0.012800	0.013600	0.016800	N/A	0.003680	0.003410	0.004570	0.004640	0.003980	0.012500	0.005750
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	**1.3**	**1.3**	**1.4**	**1.7**	**N/A**	**0.4**	**0.3**	**0.5**	**0.5**	**0.4**	**1.3**	**0.6**

Licensee Comments: none

Reactor Coolant System Leakage



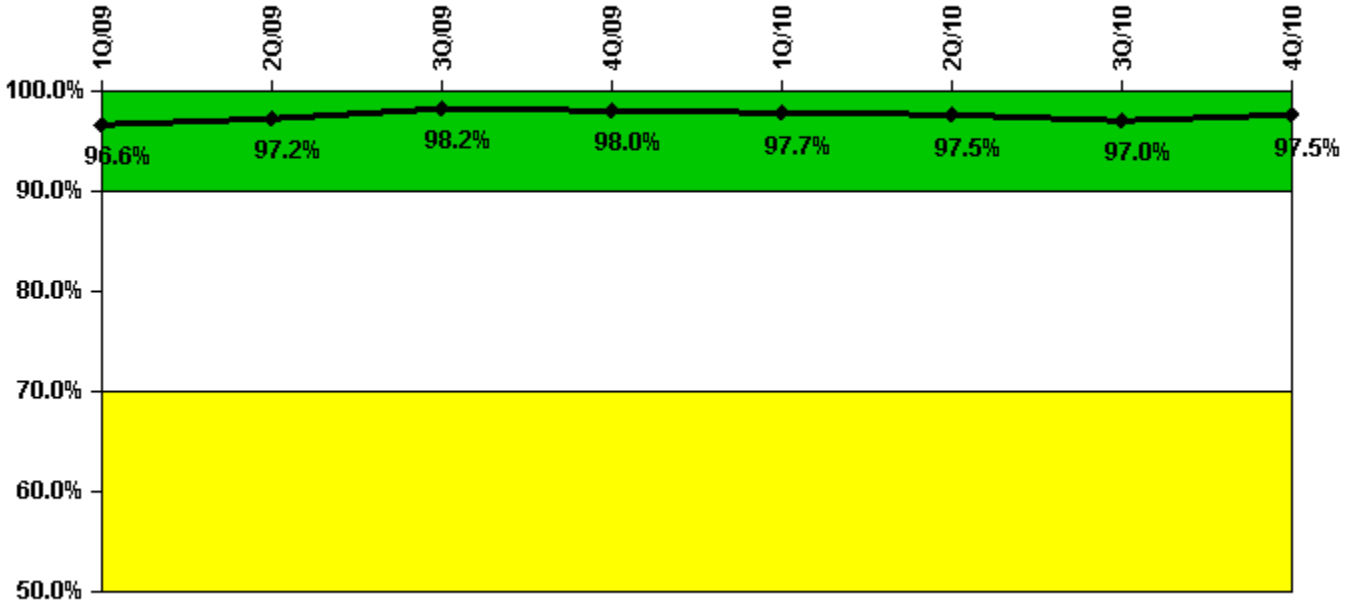
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09
Maximum leakage	0.026	0.031	0.026	0.025	0.032	0.024	0.034	0.031	0.023	0.023	0.027	0.032
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	**0.3**	**0.3**	**0.3**	**0.3**	**0.3**	**0.2**	**0.3**	**0.3**	**0.2**	**0.2**	**0.3**	**0.3**
Reactor Coolant System Leakage	**1/10**	**2/10**	**3/10**	**4/10**	**5/10**	**6/10**	**7/10**	**8/10**	**9/10**	**10/10**	**11/10**	**12/10**
Maximum leakage	0.039	0.025	0.031	0.034	0.076	0.066	0.068	0.058	0.058	0.072	0.294	0.062
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**	**0.3**	**0.3**	**0.3**	**0.8**	**0.7**	**0.7**	**0.6**	**0.6**	**0.7**	**2.9**	**0.6**

Licensee Comments: none

Drill/Exercise Performance



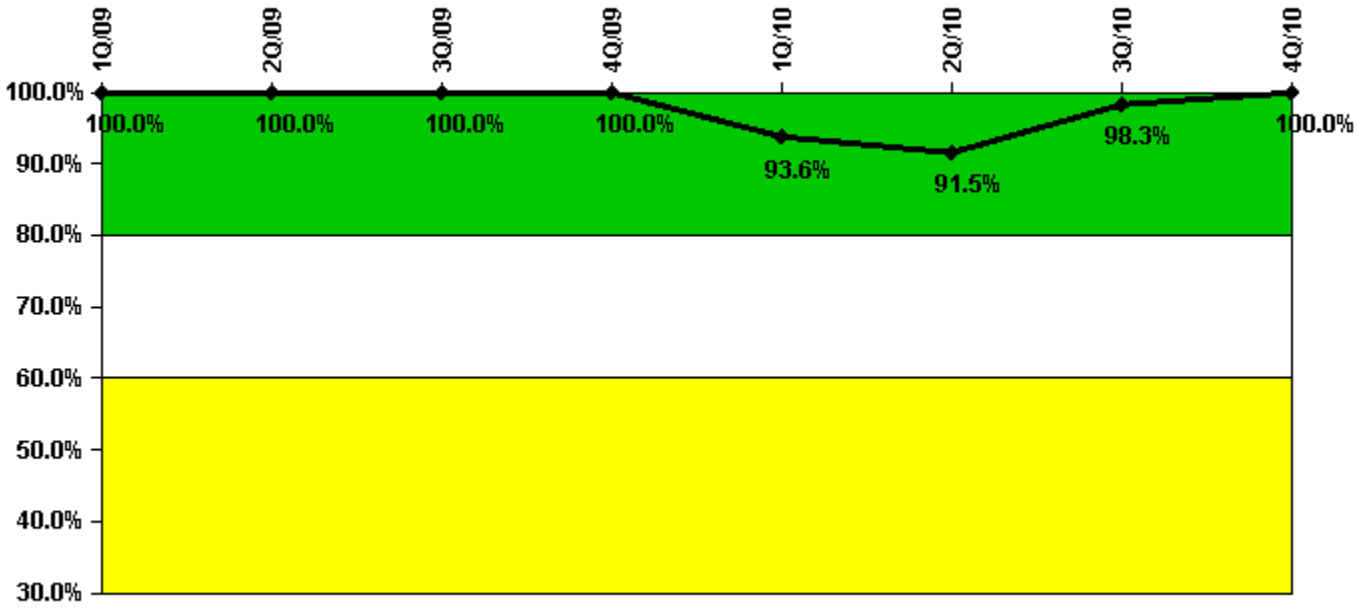
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Successful opportunities	58.0	68.0	25.0	45.0	6.0	0	37.0	31.0
Total opportunities	58.0	68.0	26.0	47.0	6.0	1.0	39.0	32.0
Indicator value	**96.6%**	**97.2%**	**98.2%**	**98.0%**	**97.7%**	**97.5%**	**97.0%**	**97.5%**

Licensee Comments: none

ERO Drill Participation



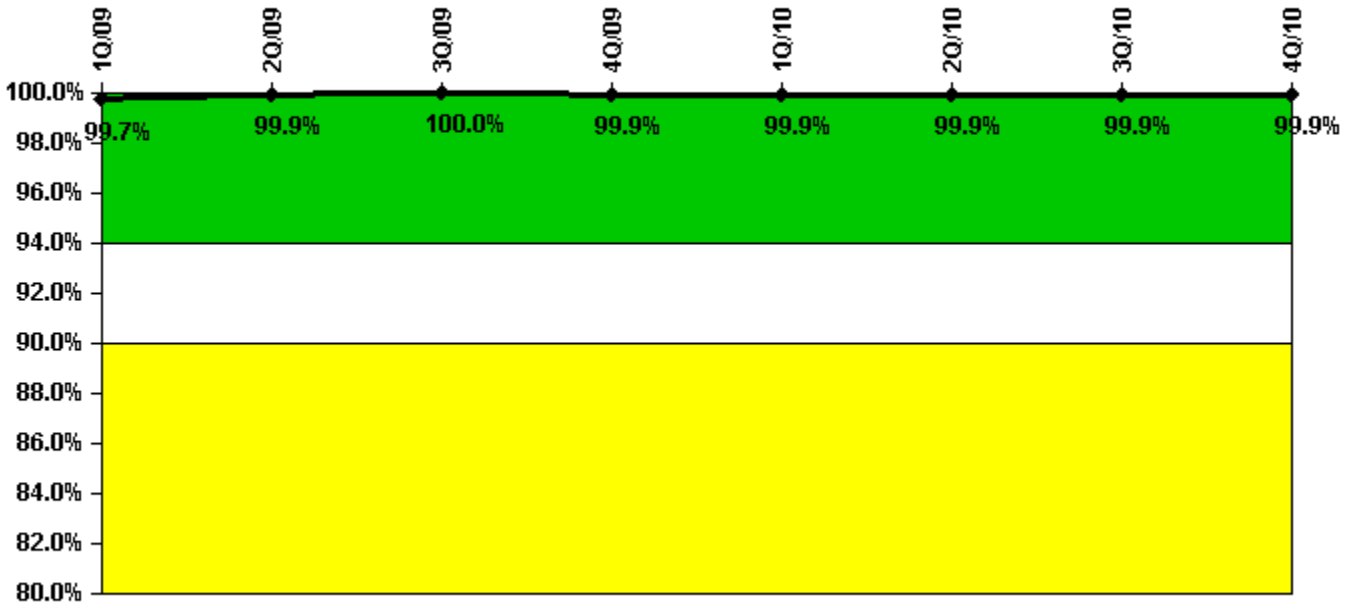
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Participating Key personnel	100.0	103.0	106.0	105.0	102.0	97.0	116.0	113.0
Total Key personnel	100.0	103.0	106.0	105.0	109.0	106.0	118.0	113.0
Indicator value	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**93.6%**	**91.5%**	**98.3%**	**100.0%**

Licensee Comments: none

Alert & Notification System



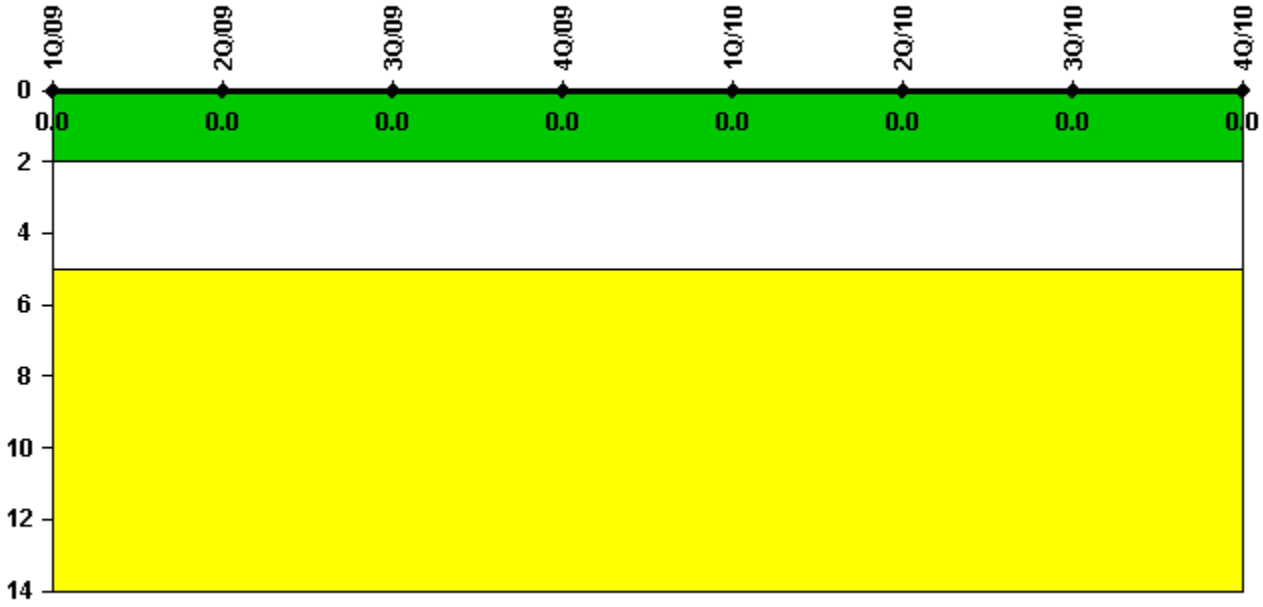
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Successful siren-tests	377	377	377	376	377	377	377	376
Total sirens-tests	377	377	377	377	377	377	377	377
Indicator value	**99.7%**	**99.9%**	**100.0%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**	**99.9%**

Licensee Comments: none

Occupational Exposure Control Effectiveness



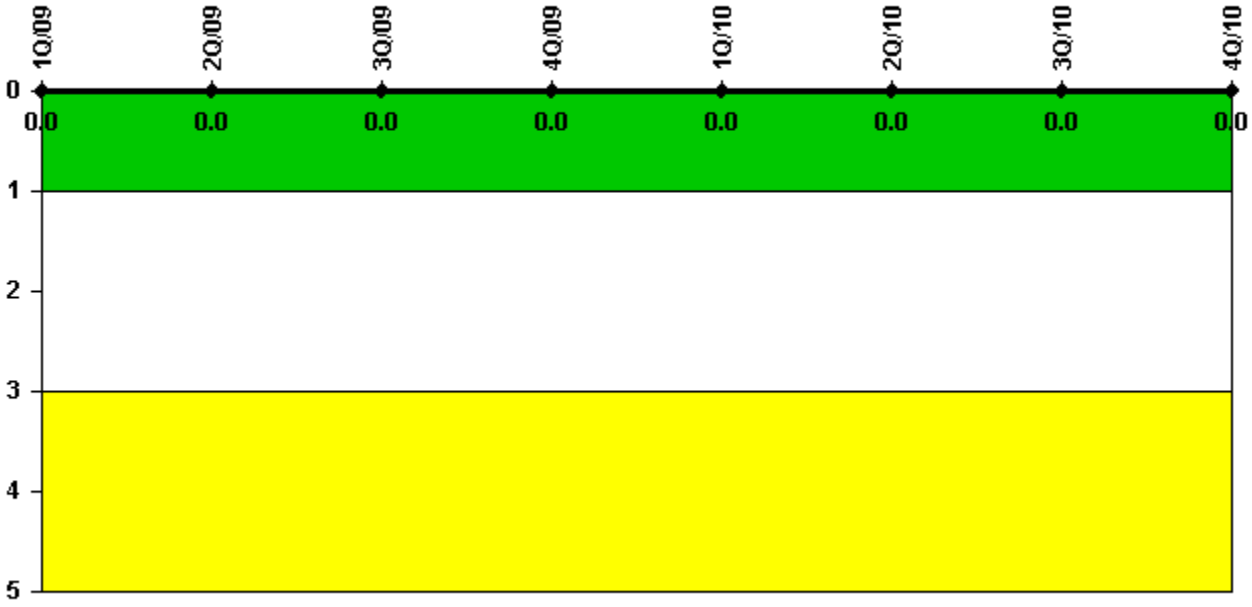
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
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/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
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.

Action Matrix Summary | Inspection Findings Summary | PI Summary | Reactor Oversight Process

Last Modified: January 24, 2011