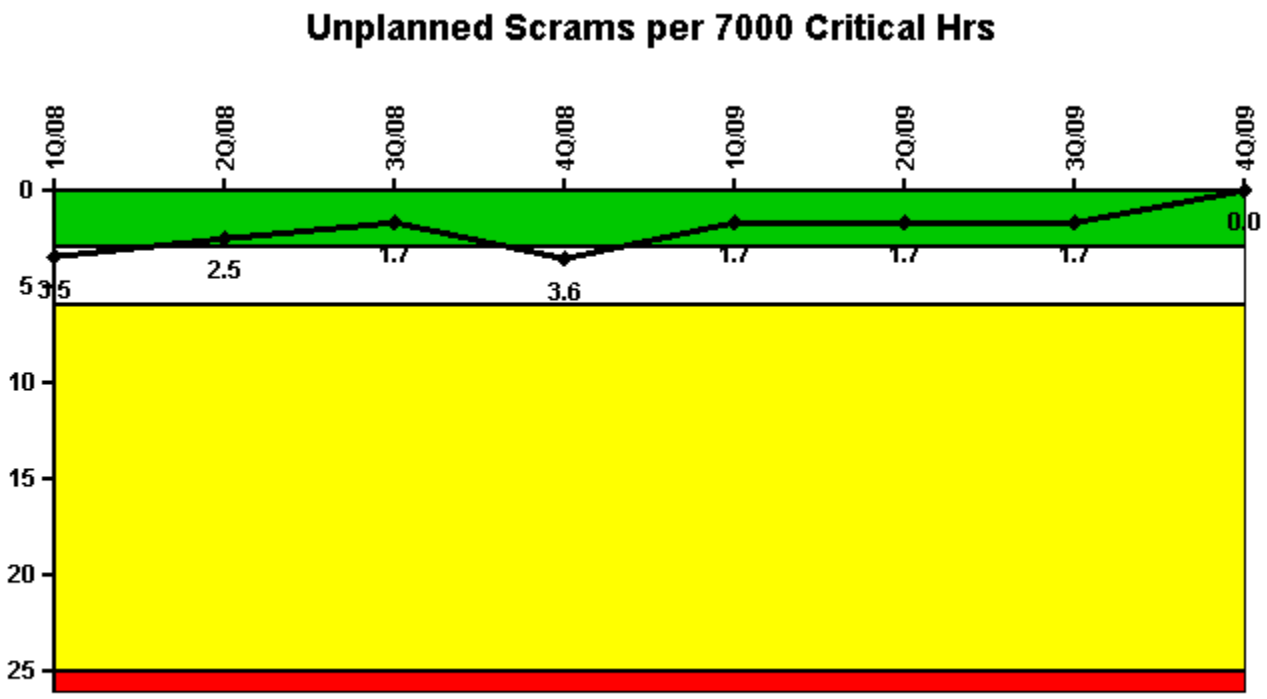
Grand Gulf 1

4Q/2009 Performance Indicators

Licensee's General Comments: none



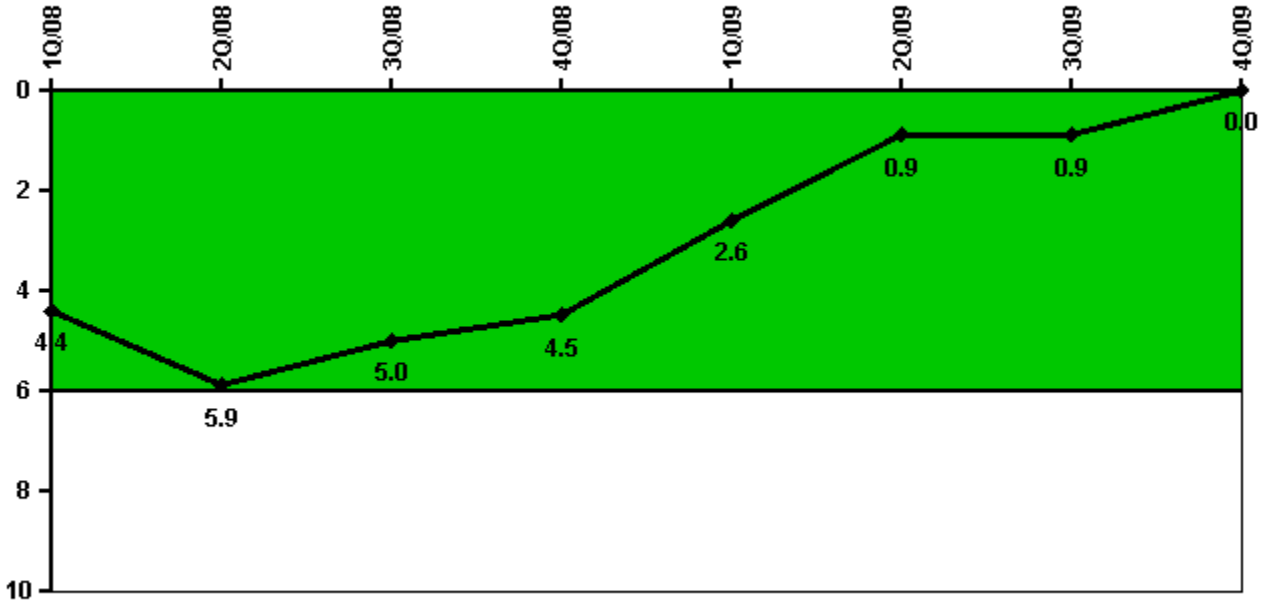
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Unplanned scrams	2.0	0	0	2.0	0	0	0	0
Critical hours	2020.5	2184.0	1988.0	1671.7	2159.0	2184.0	2208.0	2209.0
Indicator value	**3.5**	**2.5**	**1.7**	**3.6**	**1.7**	**1.7**	**1.7**	**0**

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



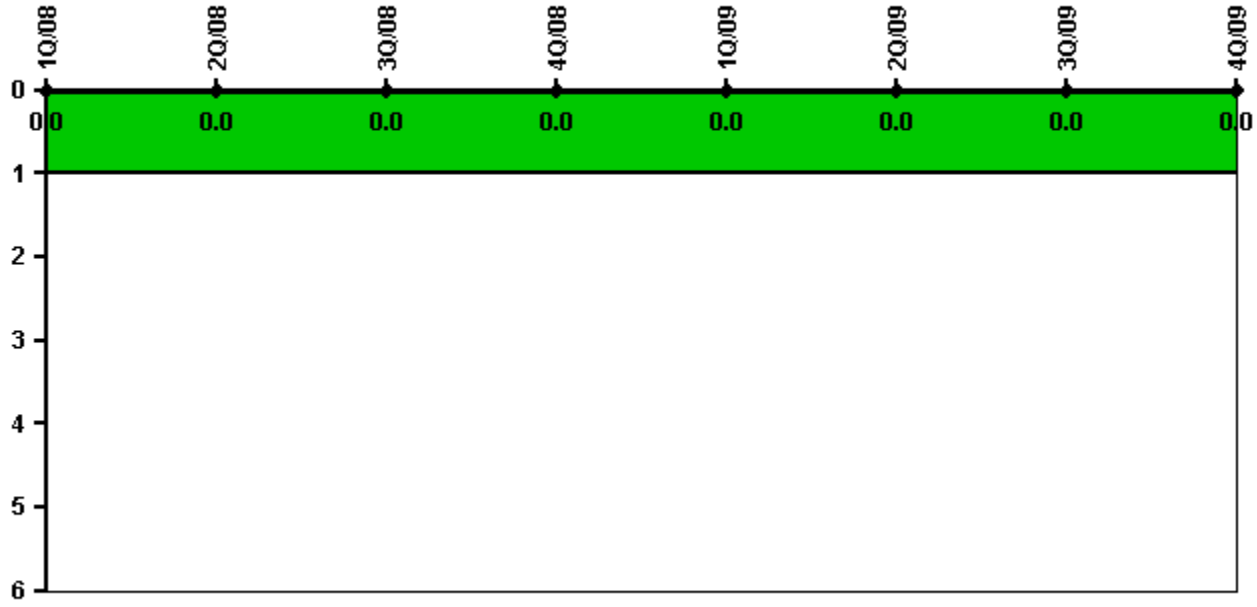
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Unplanned power changes	2.0	2.0	0	1.0	0	0	0	0
Critical hours	2020.5	2184.0	1988.0	1671.7	2159.0	2184.0	2208.0	2209.0
Indicator value	**4.4**	**5.9**	**5.0**	**4.5**	**2.6**	**0.9**	**0.9**	**0**

Licensee Comments: none

Unplanned Scrams with Complications



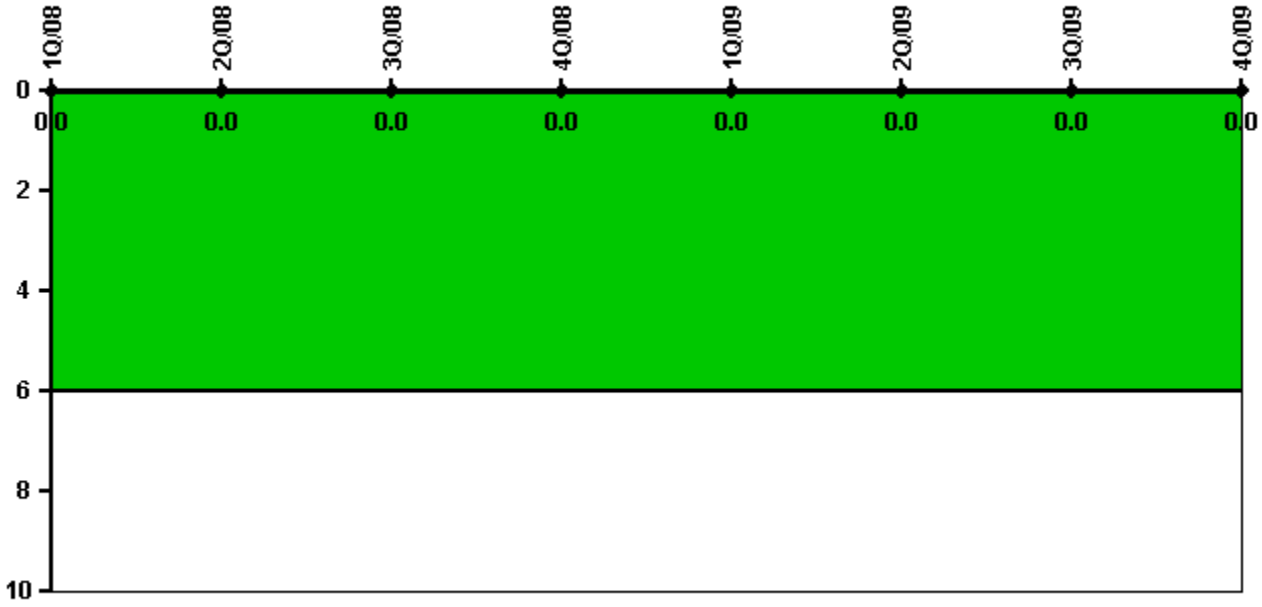
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/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 (BWR)



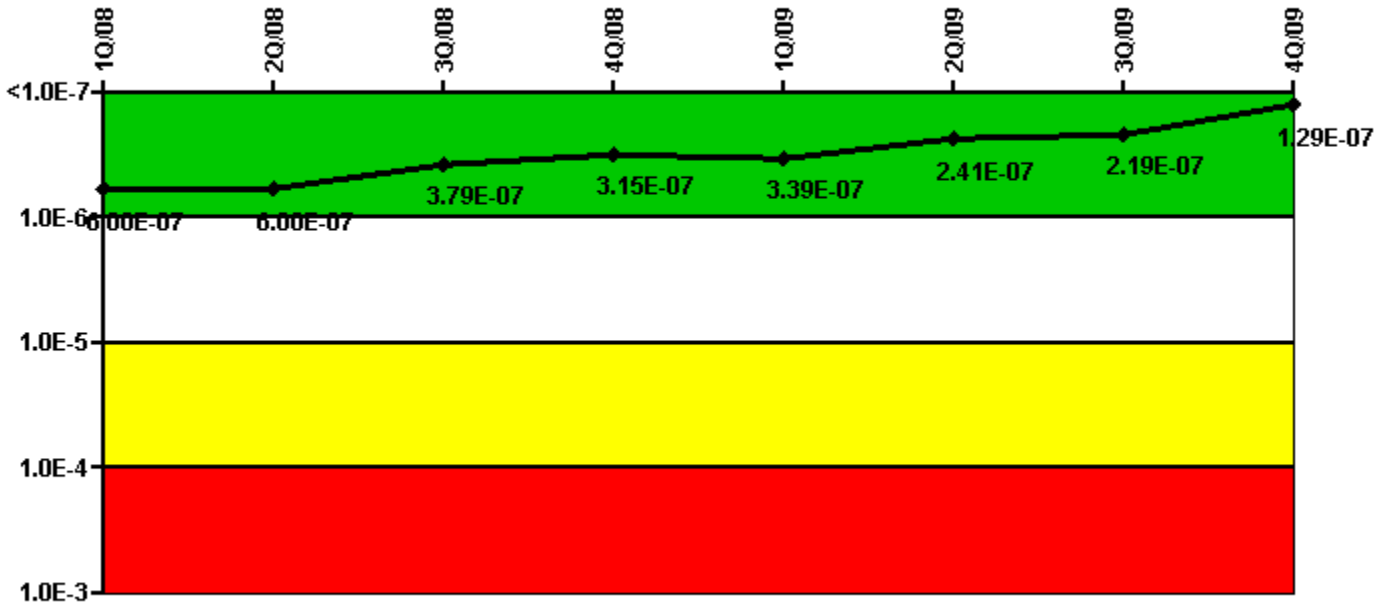
Thresholds: White > 6.0

Notes

Safety System Functional Failures (BWR)	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
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

Mitigating Systems Performance Index, Emergency AC Power System



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

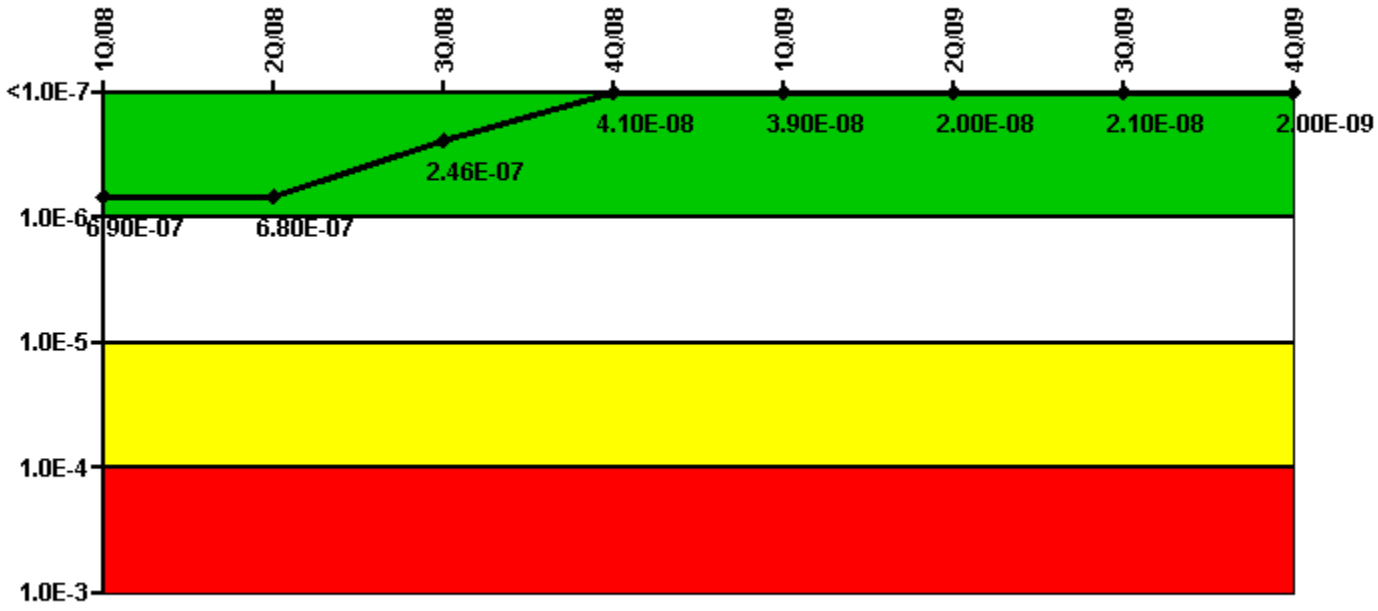
Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI (ΔCDF)	6.00E-08	6.00E-08	2.90E-08	2.50E-08	3.90E-08	2.10E-08	1.90E-08	1.90E-08
URI (ΔCDF)	5.40E-07	5.40E-07	3.50E-07	2.90E-07	3.00E-07	2.20E-07	2.00E-07	1.10E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**6.00E-07**	**6.00E-07**	**3.79E-07**	**3.15E-07**	**3.39E-07**	**2.41E-07**	**2.19E-07**	**1.29E-07**

Licensee Comments:

4Q/09: Changed PRA Parameter(s). The Basis Document has been revised to update the PRA parameters used in CDE due to a minor revision of the GGNS PRA (Revision 3a). The Revision 3a PRA included several minor changes including removal of basic events R21-CO-CB-1508-A and R21-CO-CB-1608-B from modules. This change resulted in more accurate FV values for these basic events. In addition, most other MSPI related basic events FV values changed slightly since the overall core damage frequency was reduced by a very small amount but is still rounded to the same value previously used. Also, various minor editorial changes and corrections were also made.

Mitigating Systems Performance Index, High Pressure Injection System



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

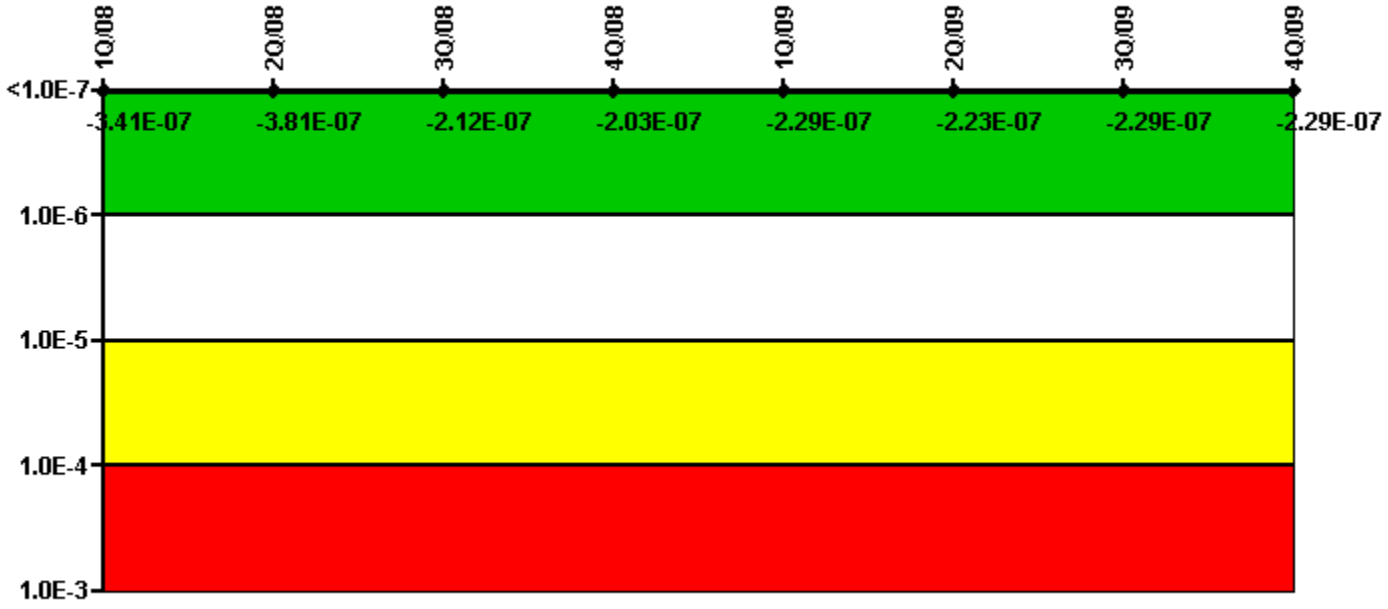
Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI (ΔCDF)	4.90E-07	4.90E-07	1.80E-07	9.30E-08	9.10E-08	6.90E-08	6.70E-08	5.20E-08
URI (ΔCDF)	2.00E-07	1.90E-07	6.60E-08	-5.20E-08	-5.20E-08	-4.90E-08	-4.60E-08	-5.00E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**6.90E-07**	**6.80E-07**	**2.46E-07**	**4.10E-08**	**3.90E-08**	**2.00E-08**	**2.10E-08**	**2.00E-09**

Licensee Comments:

4Q/09: Changed PRA Parameter(s). The Basis Document has been revised to update the PRA parameters used in CDE due to a minor revision of the GGNS PRA (Revision 3a). The Revision 3a PRA included several minor changes including removal of basic events R21-CO-CB-1508-A and R21-CO-CB-1608-B from modules. This change resulted in more accurate FV values for these basic events. In addition, most other MSPI related basic events FV values changed slightly since the overall core damage frequency was reduced by a very small amount but is still rounded to the same value previously used. Also, various minor editorial changes and corrections were also made.

Mitigating Systems Performance Index, Heat Removal System



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

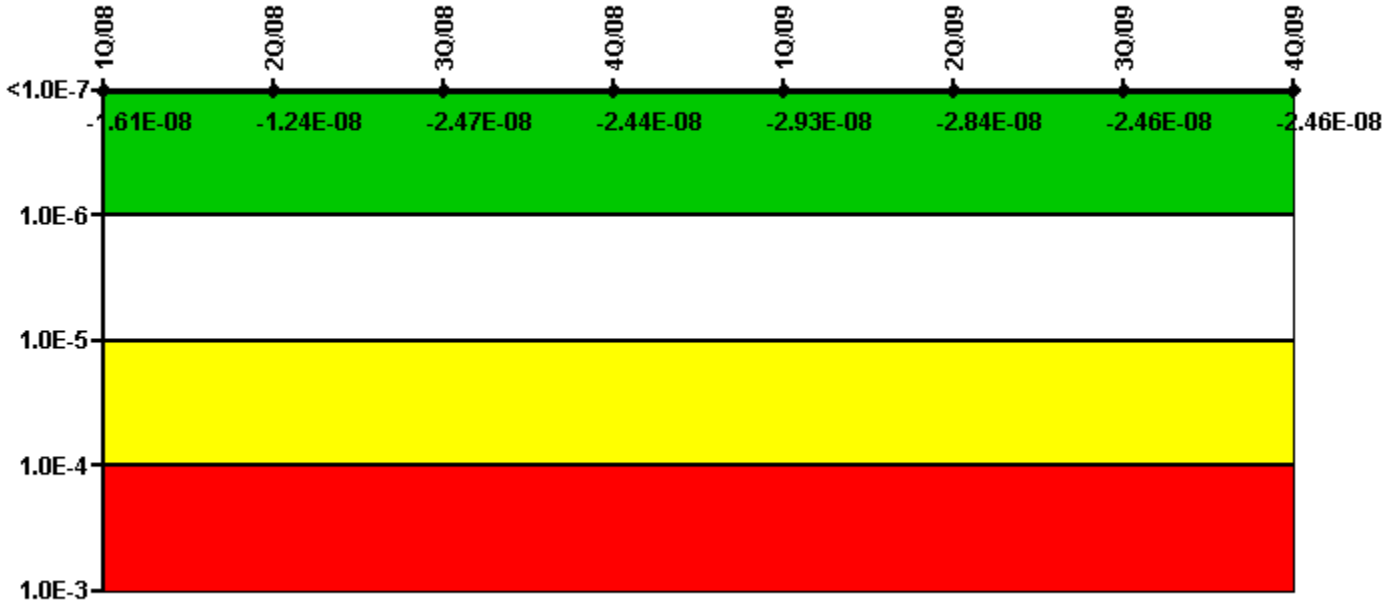
Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI (ΔCDF)	3.90E-08	8.90E-09	-1.70E-09	-2.90E-09	-1.90E-08	-1.30E-08	-1.90E-08	-1.90E-08
URI (ΔCDF)	-3.80E-07	-3.90E-07	-2.10E-07	-2.00E-07	-2.10E-07	-2.10E-07	-2.10E-07	-2.10E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-3.41E-07**	**-3.81E-07**	**-2.12E-07**	**-2.03E-07**	**-2.29E-07**	**-2.23E-07**	**-2.29E-07**	**-2.29E-07**

Licensee Comments:

4Q/09: Changed PRA Parameter(s). The Basis Document has been revised to update the PRA parameters used in CDE due to a minor revision of the GGNS PRA (Revision 3a). The Revision 3a PRA included several minor changes including removal of basic events R21-CO-CB-1508-A and R21-CO-CB-1608-B from modules. This change resulted in more accurate FV values for these basic events. In addition, most other MSPI related basic events FV values changed slightly since the overall core damage frequency was reduced by a very small amount but is still rounded to the same value previously used. Also, various minor editorial changes and corrections were also made.

Mitigating Systems Performance Index, Residual Heat Removal System



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

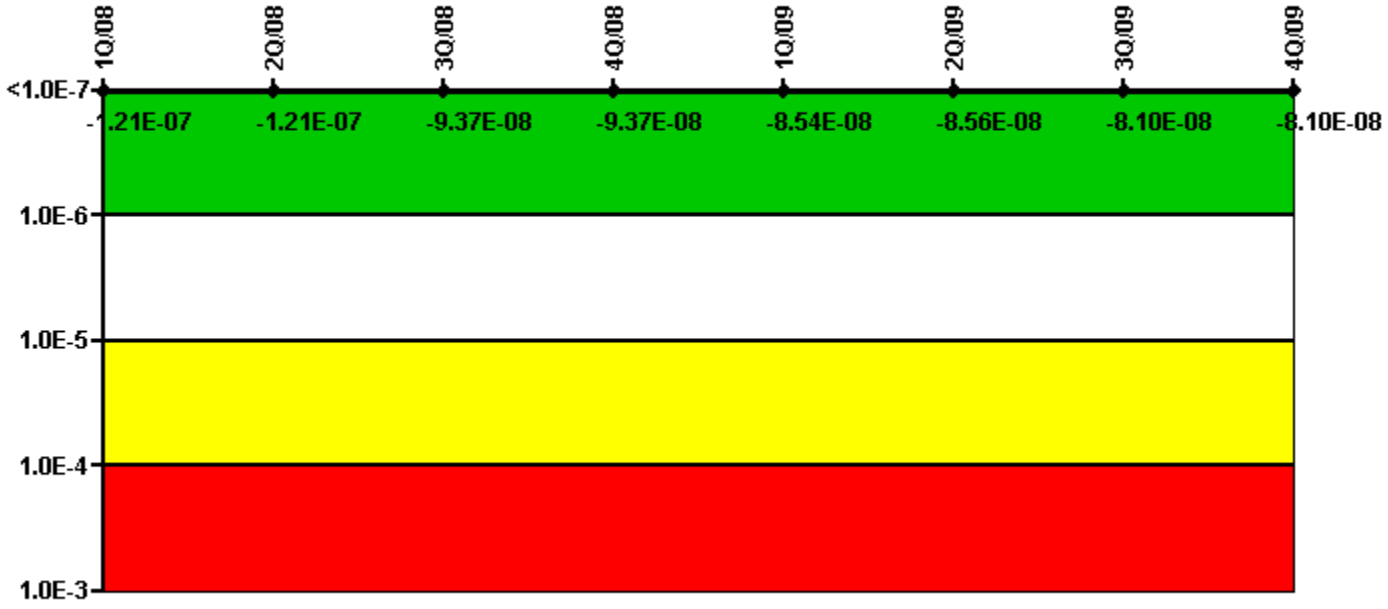
Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI (ΔCDF)	-5.10E-09	-1.40E-09	-7.10E-10	-4.40E-10	-5.30E-09	-5.40E-09	-1.60E-09	-1.60E-09
URI (ΔCDF)	-1.10E-08	-1.10E-08	-2.40E-08	-2.40E-08	-2.40E-08	-2.30E-08	-2.30E-08	-2.30E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-1.61E-08**	**-1.24E-08**	**-2.47E-08**	**-2.44E-08**	**-2.93E-08**	**-2.84E-08**	**-2.46E-08**	**-2.46E-08**

Licensee Comments:

4Q/09: Changed PRA Parameter(s). The Basis Document has been revised to update the PRA parameters used in CDE due to a minor revision of the GGNS PRA (Revision 3a). The Revision 3a PRA included several minor changes including removal of basic events R21-CO-CB-1508-A and R21-CO-CB-1608-B from modules. This change resulted in more accurate FV values for these basic events. In addition, most other MSPI related basic events FV values changed slightly since the overall core damage frequency was reduced by a very small amount but is still rounded to the same value previously used. Also, various minor editorial changes and corrections were also made.

Mitigating Systems Performance Index, Cooling Water Systems



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

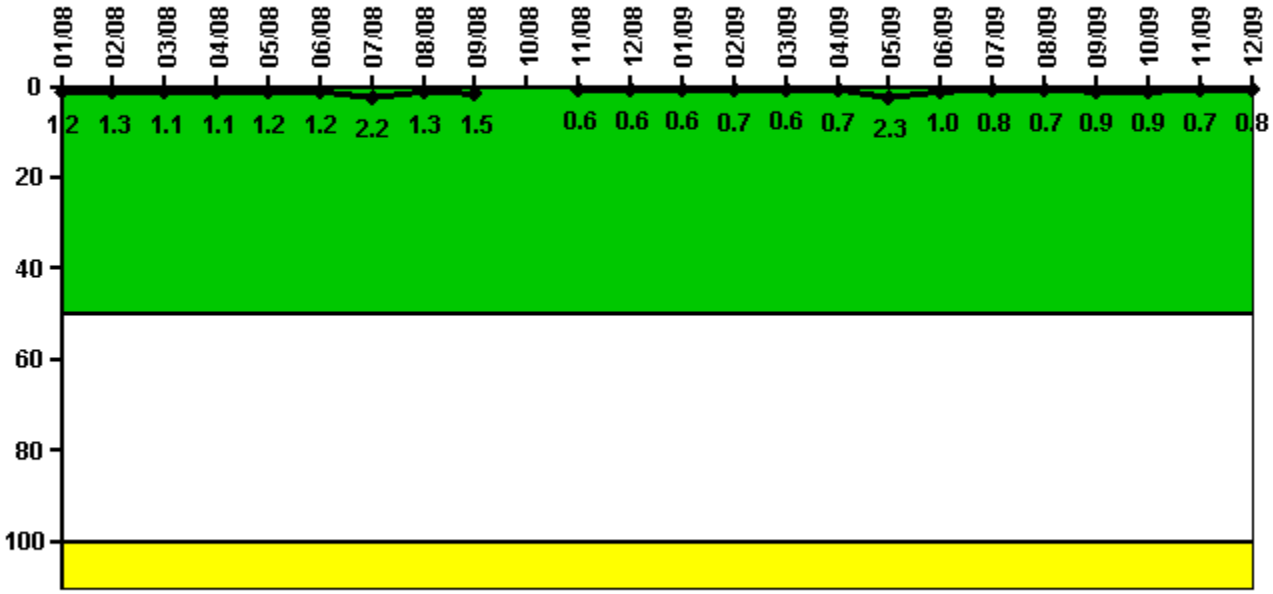
Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI (ΔCDF)	-1.40E-09	-1.40E-09	-1.70E-09	-1.70E-09	6.60E-09	6.40E-09	1.00E-08	1.00E-08
URI (ΔCDF)	-1.20E-07	-1.20E-07	-9.20E-08	-9.20E-08	-9.20E-08	-9.20E-08	-9.10E-08	-9.10E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-1.21E-07**	**-1.21E-07**	**-9.37E-08**	**-9.37E-08**	**-8.54E-08**	**-8.56E-08**	**-8.10E-08**	**-8.10E-08**

Licensee Comments:

4Q/09: Changed PRA Parameter(s). The Basis Document has been revised to update the PRA parameters used in CDE due to a minor revision of the GGNS PRA (Revision 3a). The Revision 3a PRA included several minor changes including removal of basic events R21-CO-CB-1508-A and R21-CO-CB-1608-B from modules. This change resulted in more accurate FV values for these basic events. In addition, most other MSPI related basic events FV values changed slightly since the overall core damage frequency was reduced by a very small amount but is still rounded to the same value previously used. Also, various minor editorial changes and corrections were also made.

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

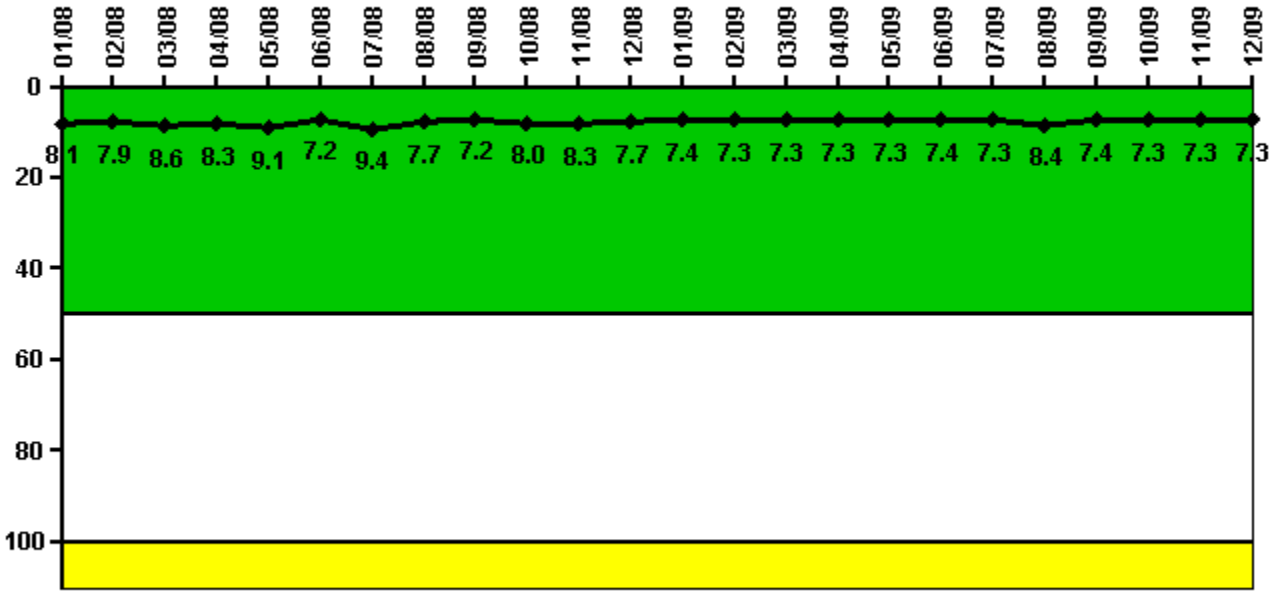
Notes

Reactor Coolant System Activity	1/08	2/08	3/08	4/08	5/08	6/08	7/08	8/08	9/08	10/08	11/08	12/08
Maximum activity	0.002370	0.002660	0.002120	0.002210	0.002420	0.002430	0.004370	0.002590	0.003030	N/A	0.001140	0.001250
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	**1.2**	**1.3**	**1.1**	**1.1**	**1.2**	**1.2**	**2.2**	**1.3**	**1.5**	**N/A**	**0.6**	**0.6**

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	0.001130	0.001420	0.001160	0.001480	0.004630	0.001950	0.001580	0.001400	0.001700	0.001740	0.001450	0.001600
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	**0.6**	**0.7**	**0.6**	**0.7**	**2.3**	**1.0**	**0.8**	**0.7**	**0.9**	**0.9**	**0.7**	**0.8**

Licensee Comments: none

Reactor Coolant System Leakage



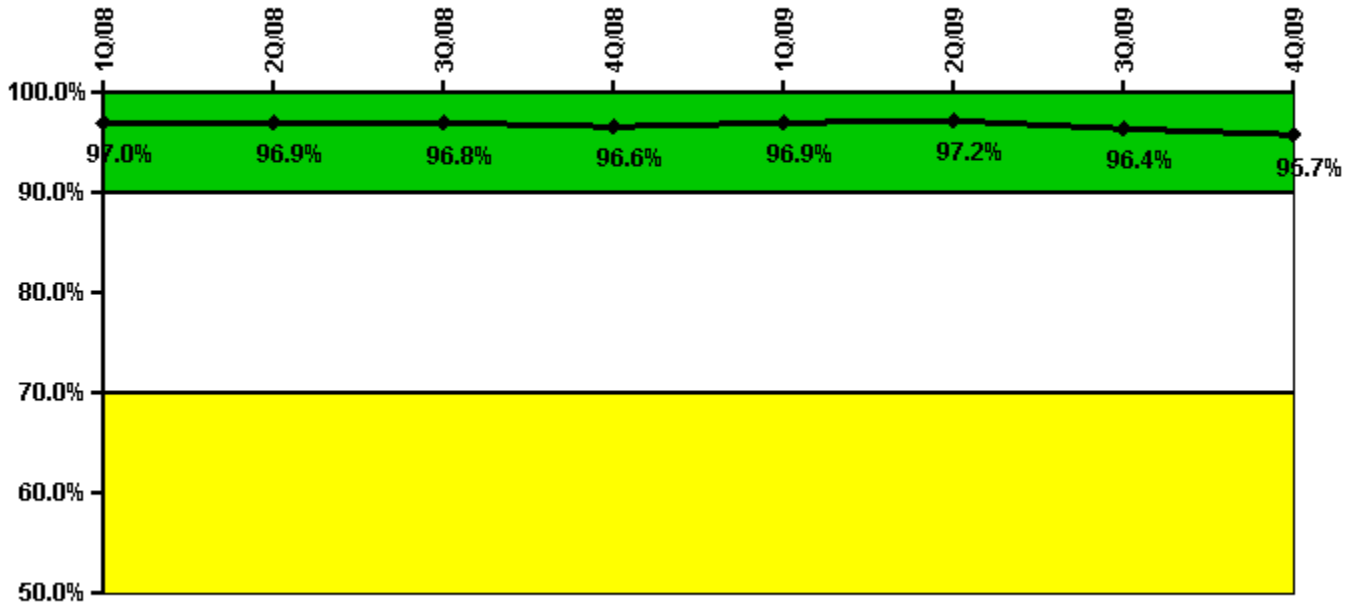
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	1/08	2/08	3/08	4/08	5/08	6/08	7/08	8/08	9/08	10/08	11/08	12/08
Maximum leakage	2.420	2.380	2.570	2.480	2.730	2.170	2.810	2.320	2.170	2.400	2.480	2.320
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Indicator value	**8.1**	**7.9**	**8.6**	**8.3**	**9.1**	**7.2**	**9.4**	**7.7**	**7.2**	**8.0**	**8.3**	**7.7**
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	2.220	2.180	2.190	2.190	2.190	2.220	2.200	2.520	2.210	2.180	2.190	2.200
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Indicator value	**7.4**	**7.3**	**7.3**	**7.3**	**7.3**	**7.4**	**7.3**	**8.4**	**7.4**	**7.3**	**7.3**	**7.3**

Licensee Comments: none

Drill/Exercise Performance



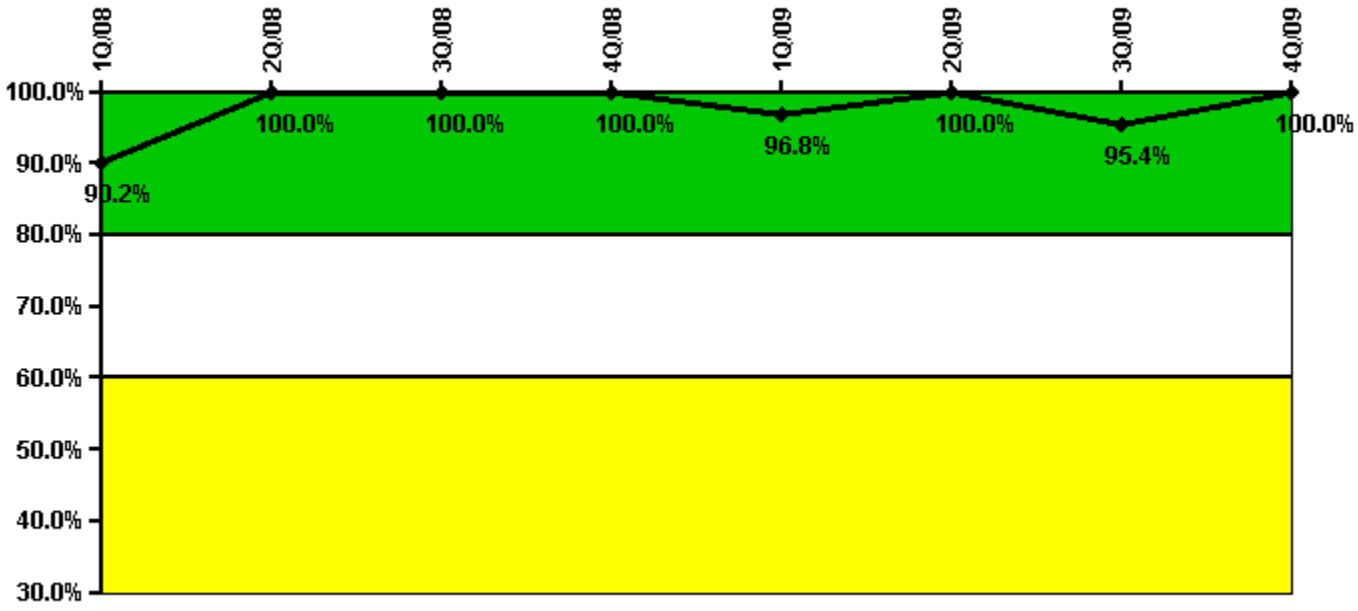
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Successful opportunities	20.0	55.0	10.0	1.0	2.0	18.0	32.0	18.0
Total opportunities	22.0	57.0	10.0	2.0	2.0	18.0	34.0	18.0
Indicator value	**97.0%**	**96.9%**	**96.8%**	**96.6%**	**96.9%**	**97.2%**	**96.4%**	**95.7%**

Licensee Comments: none

ERO Drill Participation



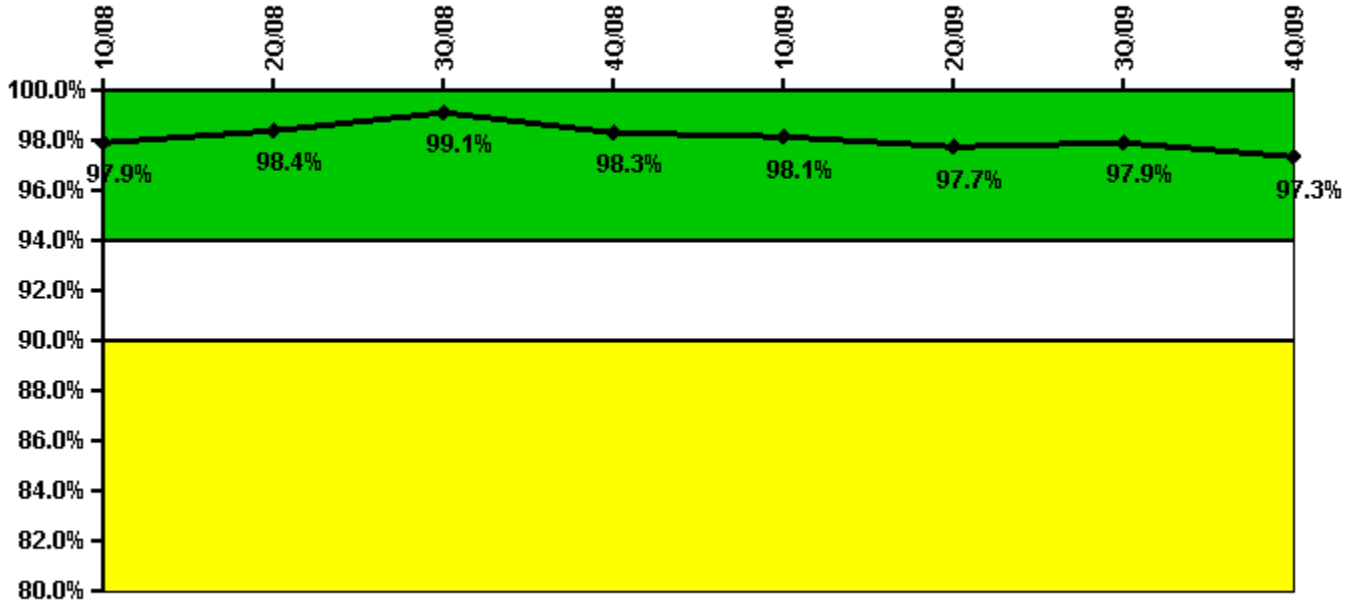
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Participating Key personnel	74.0	80.0	84.0	81.0	61.0	61.0	62.0	64.0
Total Key personnel	82.0	80.0	84.0	81.0	63.0	61.0	65.0	64.0
Indicator value	**90.2%**	**100.0%**	**100.0%**	**100.0%**	**96.8%**	**100.0%**	**95.4%**	**100.0%**

Licensee Comments: none

Alert & Notification System



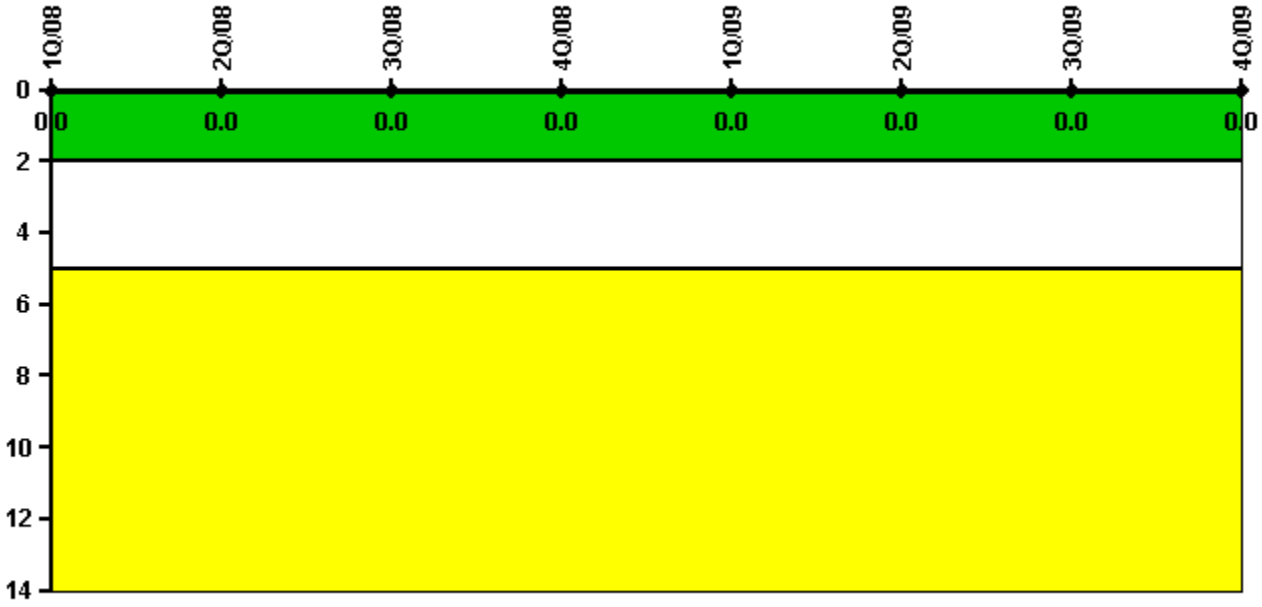
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Successful siren-tests	127	125	82	125	126	127	127	122
Total sirens-tests	129	125	84	129	129	129	129	129
Indicator value	**97.9%**	**98.4%**	**99.1%**	**98.3%**	**98.1%**	**97.7%**	**97.9%**	**97.3%**

Licensee Comments: none

Occupational Exposure Control Effectiveness



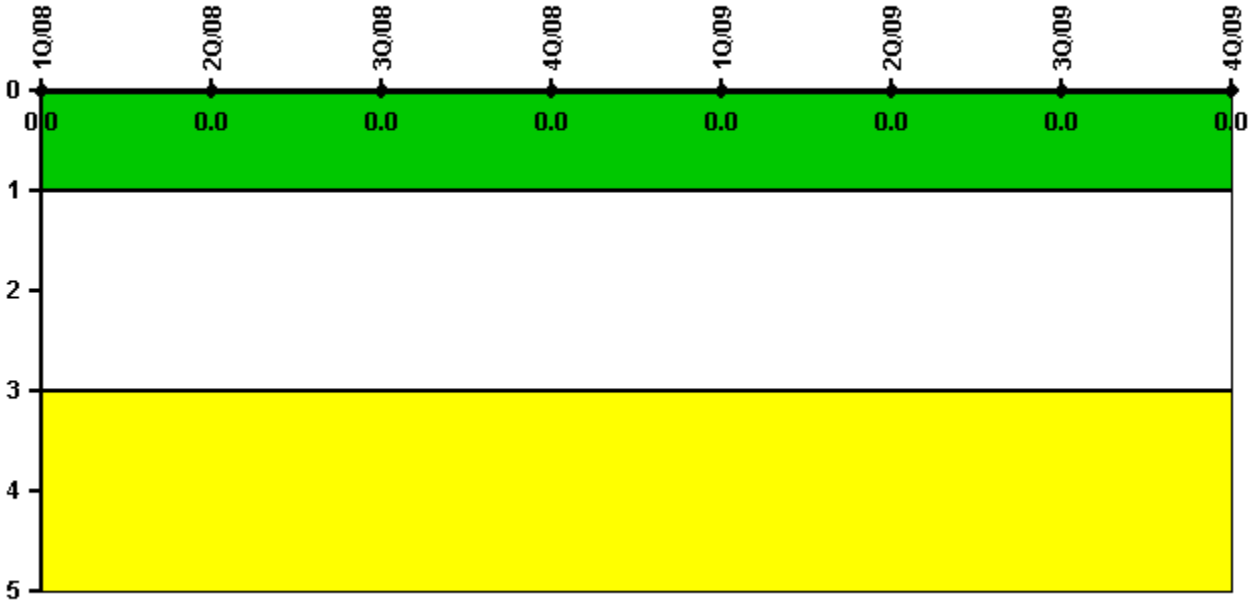
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/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	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/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.

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

Last Modified: January 22, 2010