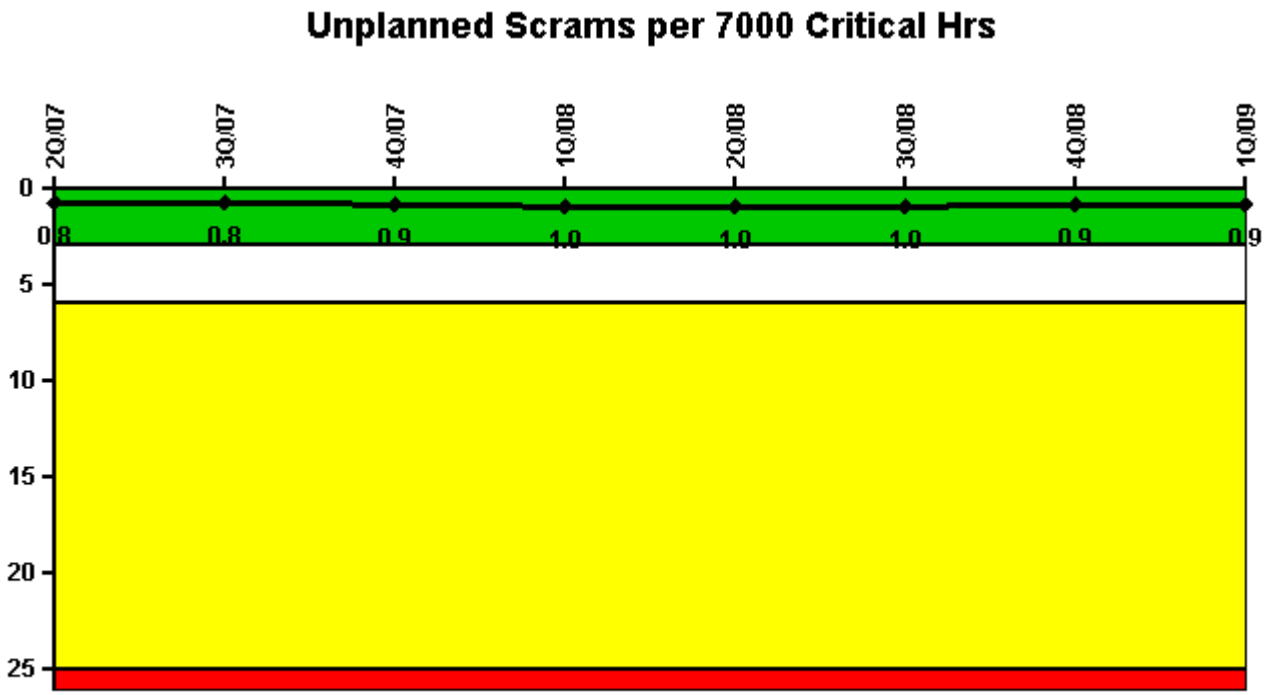
San Onofre 2

1Q/2009 Performance Indicators

Licensee's General Comments: none



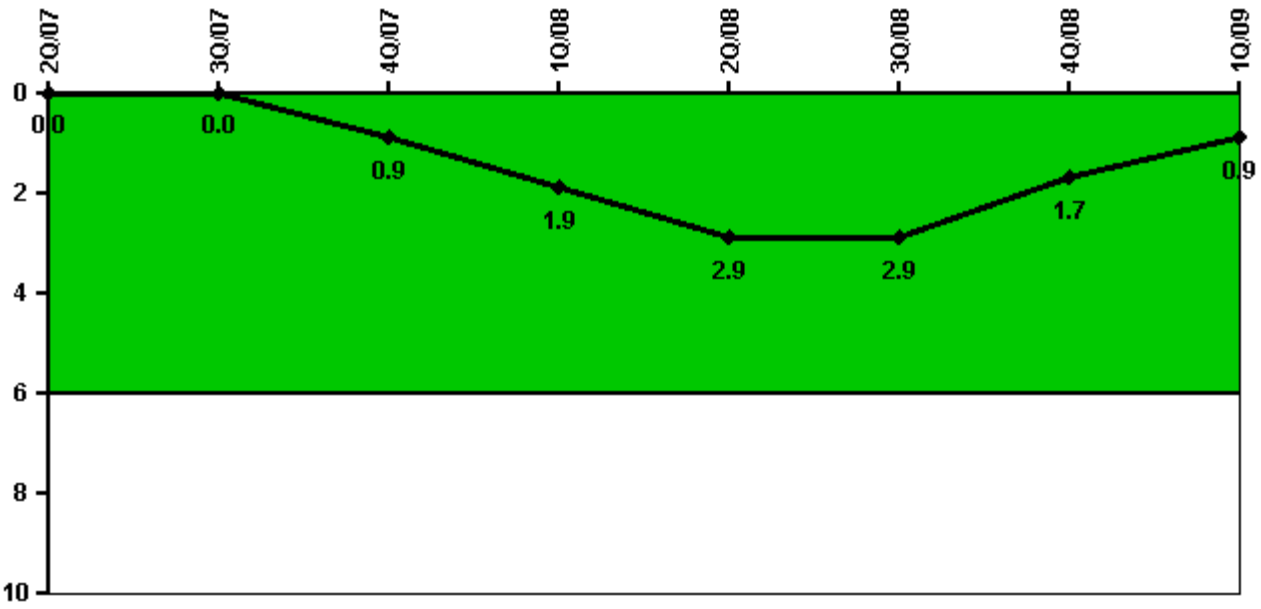
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
Unplanned scrams	1.0	0	0	0	1.0	0	0	0
Critical hours	1987.2	2208.0	1234.0	1768.6	2051.2	2208.0	2113.7	1007.7
Indicator value	**0.8**	**0.8**	**0.9**	**1.0**	**1.0**	**1.0**	**0.9**	**0.9**

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



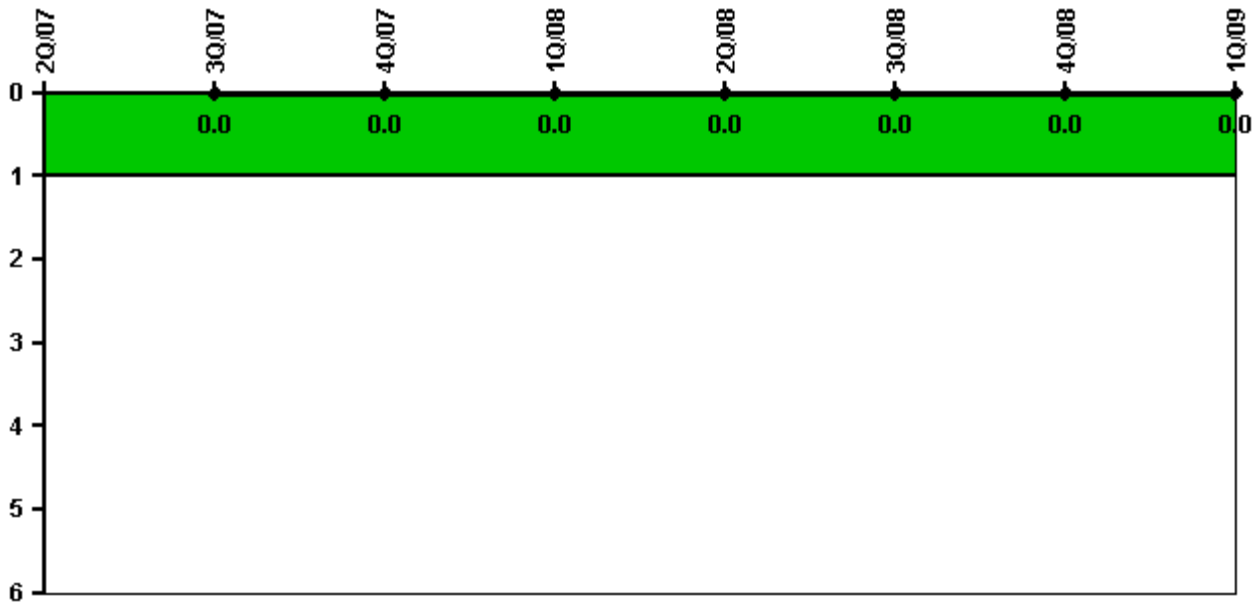
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
Unplanned power changes	0	0	1.0	1.0	1.0	0	0	0
Critical hours	1987.2	2208.0	1234.0	1768.6	2051.2	2208.0	2113.7	1007.7
Indicator value	**0**	**0**	**0.9**	**1.9**	**2.9**	**2.9**	**1.7**	**0.9**

Licensee Comments: none

Unplanned Scrams with Complications



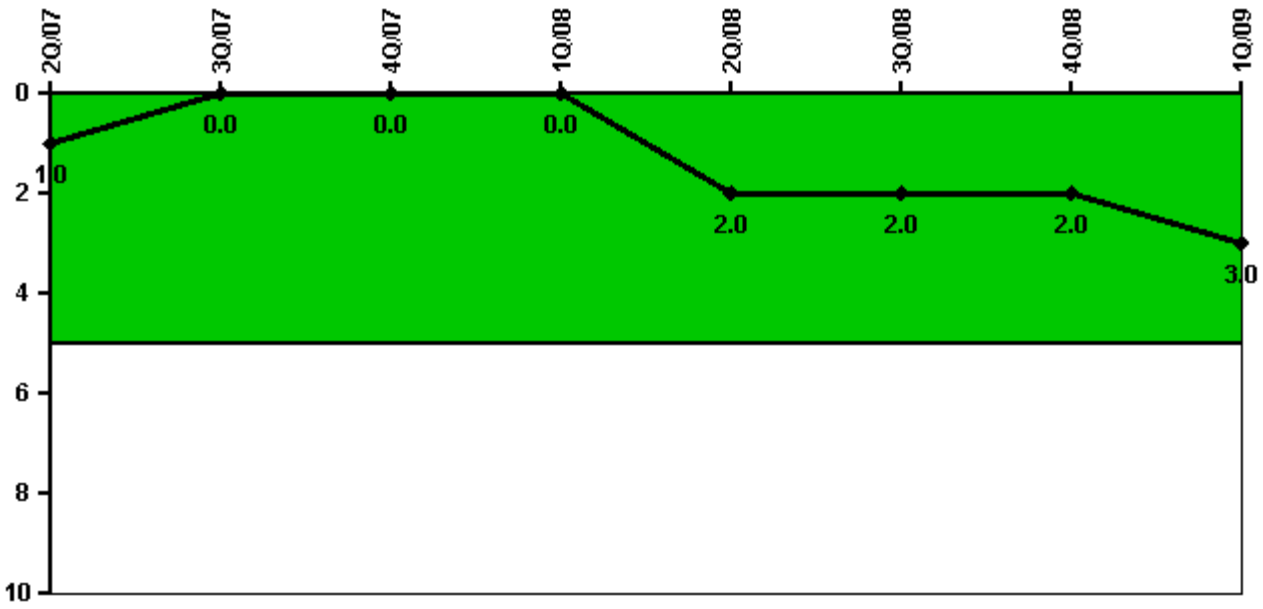
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/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**

Licensee Comments: none

Safety System Functional Failures (PWR)



Thresholds: White > 5.0

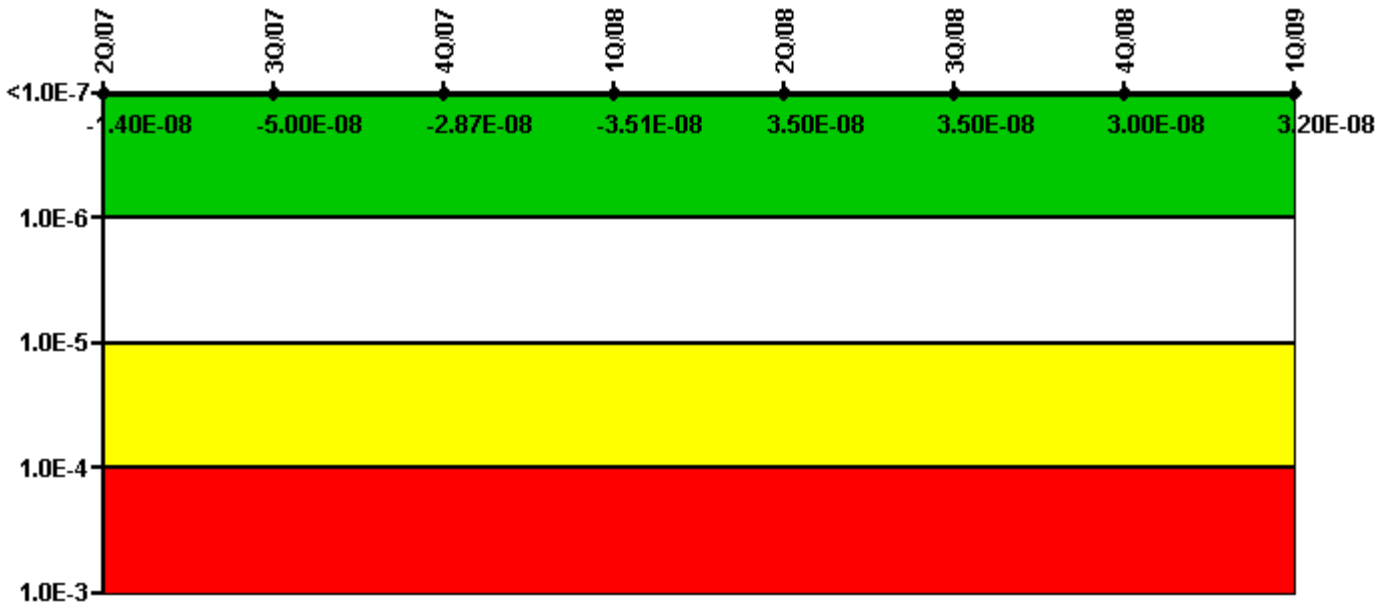
Notes

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

Licensee Comments:

1Q/09: LER 2-2007-006.

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	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
UAI (ΔCDF)	2.80E-08	-8.00E-09	1.30E-09	-5.10E-09	2.20E-08	2.40E-08	1.90E-08	2.10E-08
URI (ΔCDF)	-4.20E-08	-4.20E-08	-3.00E-08	-3.00E-08	1.30E-08	1.10E-08	1.10E-08	1.10E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-1.40E-08**	**-5.00E-08**	**-2.87E-08**	**-3.51E-08**	**3.50E-08**	**3.50E-08**	**3.00E-08**	**3.20E-08**

Licensee Comments:

1Q/09: Changed PRA Parameter(s).

4Q/08: Changed PRA Parameter(s). From 2Q06 through 4Q08, MSPI coefficients were changed quarterly to be consistent with routine changes to the living Probabilistic Risk Assessment model. Analysis of the most significant changes submitted in 4Q07 indicated the changes did not affect color of the PIs. In 1Q09, data in the INPO Consolidated Data Entry (CDE) system for 3Q07 through 4Q08 were changed in error then corrected to the original values. The change file generated by the CDE for submittal to the NRC displays the MSPI values as being changed even though there was no change. These errors had no impact on color of the MSPI.

3Q/08: Changed PRA Parameter(s).

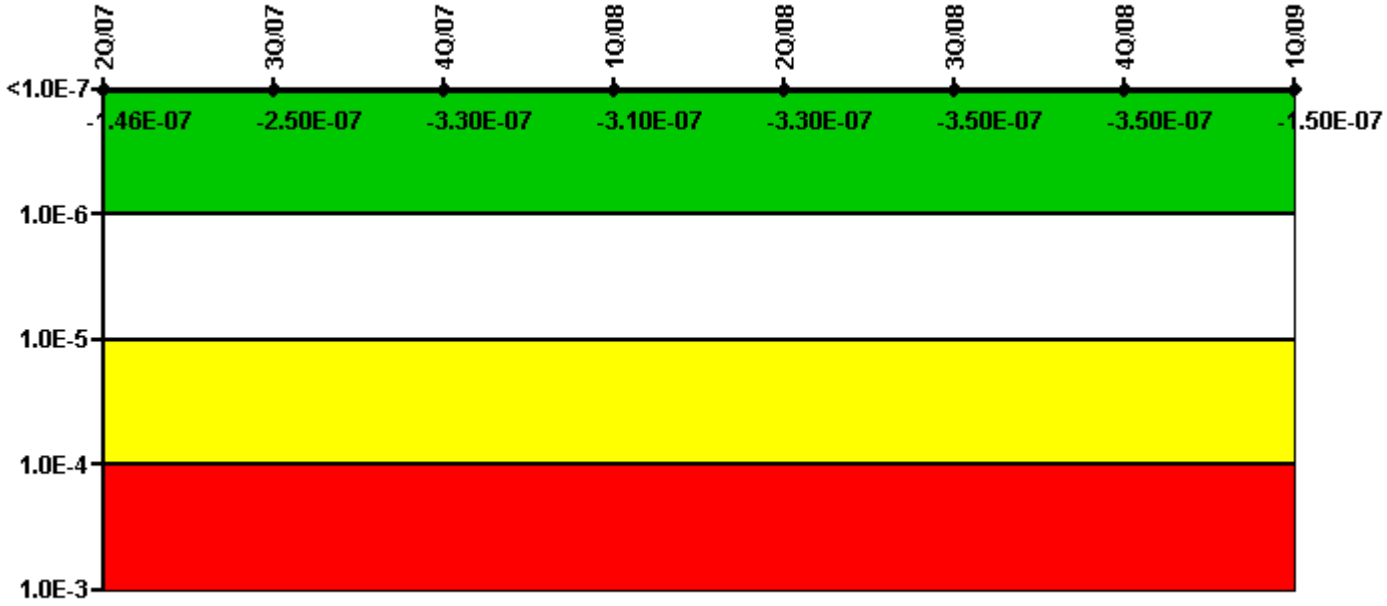
2Q/08: Changed PRA Parameter(s).

1Q/08: Changed PRA Parameter(s).

4Q/07: Changed PRA Parameter(s). PRA parameters (UR values) for emergency diesel generator used for 4Q07 MSPI MS06 were incorrect due to data entry error. Corrected value used for this change submittal is 16% higher than the incorrect value. This change did not affect the color of the MSPI.

3Q/07: Changed PRA Parameter(s).

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	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
UAI (ΔCDF)	-4.60E-08	-1.50E-07	-2.00E-07	-1.80E-07	-2.00E-07	-2.10E-07	-2.10E-07	-1.00E-08
URI (ΔCDF)	-1.00E-07	-1.00E-07	-1.30E-07	-1.30E-07	-1.30E-07	-1.40E-07	-1.40E-07	-1.40E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-1.46E-07**	**-2.50E-07**	**-3.30E-07**	**-3.10E-07**	**-3.30E-07**	**-3.50E-07**	**-3.50E-07**	**-1.50E-07**

Licensee Comments:

1Q/09: Changed PRA Parameter(s).

4Q/08: Changed PRA Parameter(s). From 2Q06 through 4Q08, MSPI coefficients were changed quarterly to be consistent with routine changes to the living Probabilistic Risk Assessment model. Analysis of the most significant changes submitted in 4Q07 indicated the changes did not affect color of the PIs. In 1Q09, data in the INPO Consolidated Data Entry (CDE) system for 3Q07 through 4Q08 were changed in error then corrected to the original values. The change file generated by the CDE for submittal to the NRC displays the MSPI values as being changed even though there was no change. These errors had no impact on color of the MSPI.

3Q/08: Changed PRA Parameter(s).

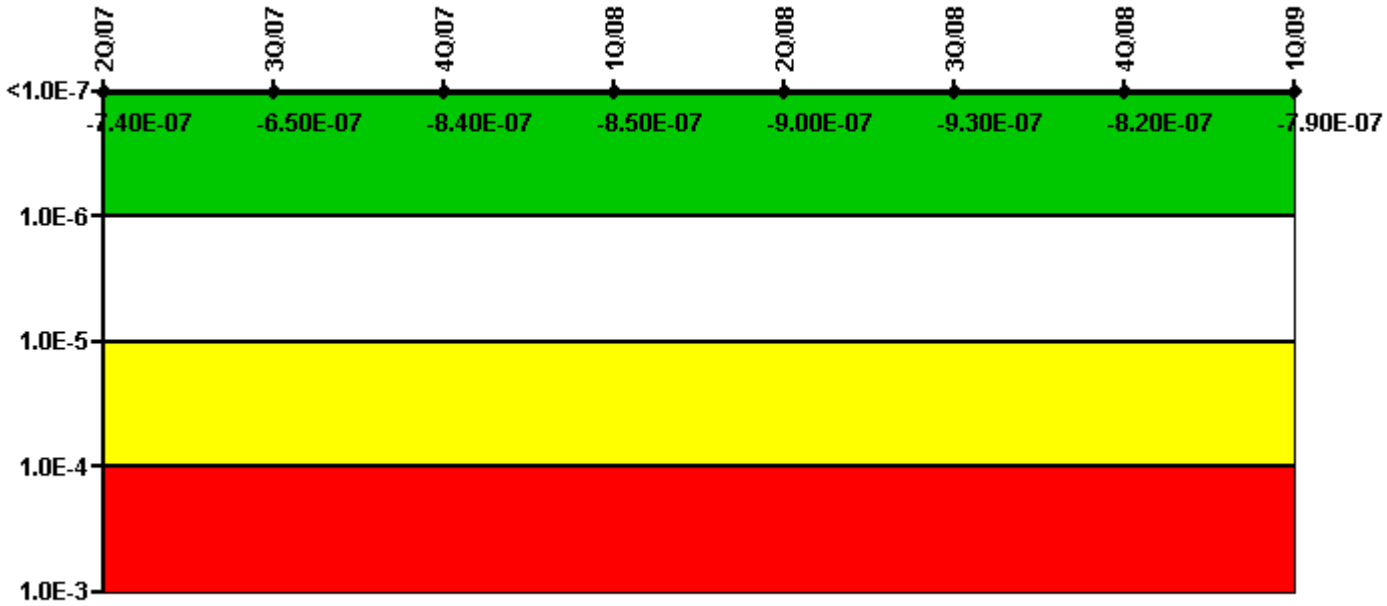
2Q/08: Changed PRA Parameter(s).

1Q/08: Changed PRA Parameter(s).

4Q/07: Changed PRA Parameter(s).

3Q/07: Changed PRA Parameter(s).

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	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
UAI (ΔCDF)	-2.20E-07	-1.30E-07	-2.10E-07	-2.40E-07	-2.80E-07	-2.10E-07	-2.50E-07	-2.20E-07
URI (ΔCDF)	-5.20E-07	-5.20E-07	-6.30E-07	-6.10E-07	-6.20E-07	-7.20E-07	-5.70E-07	-5.70E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-7.40E-07**	**-6.50E-07**	**-8.40E-07**	**-8.50E-07**	**-9.00E-07**	**-9.30E-07**	**-8.20E-07**	**-7.90E-07**

Licensee Comments:

1Q/09: Changed PRA Parameter(s).

4Q/08: Changed PRA Parameter(s). From 2Q06 through 4Q08, MSPI coefficients were changed quarterly to be consistent with routine changes to the living Probabilistic Risk Assessment model. Analysis of the most significant changes submitted in 4Q07 indicated the changes did not affect color of the PIs. In 1Q09, data in the INPO Consolidated Data Entry (CDE) system for 3Q07 through 4Q08 were changed in error then corrected to the original values. The change file generated by the CDE for submittal to the NRC displays the MSPI values as being changed even though there was no change. These errors had no impact on color of the MSPI.

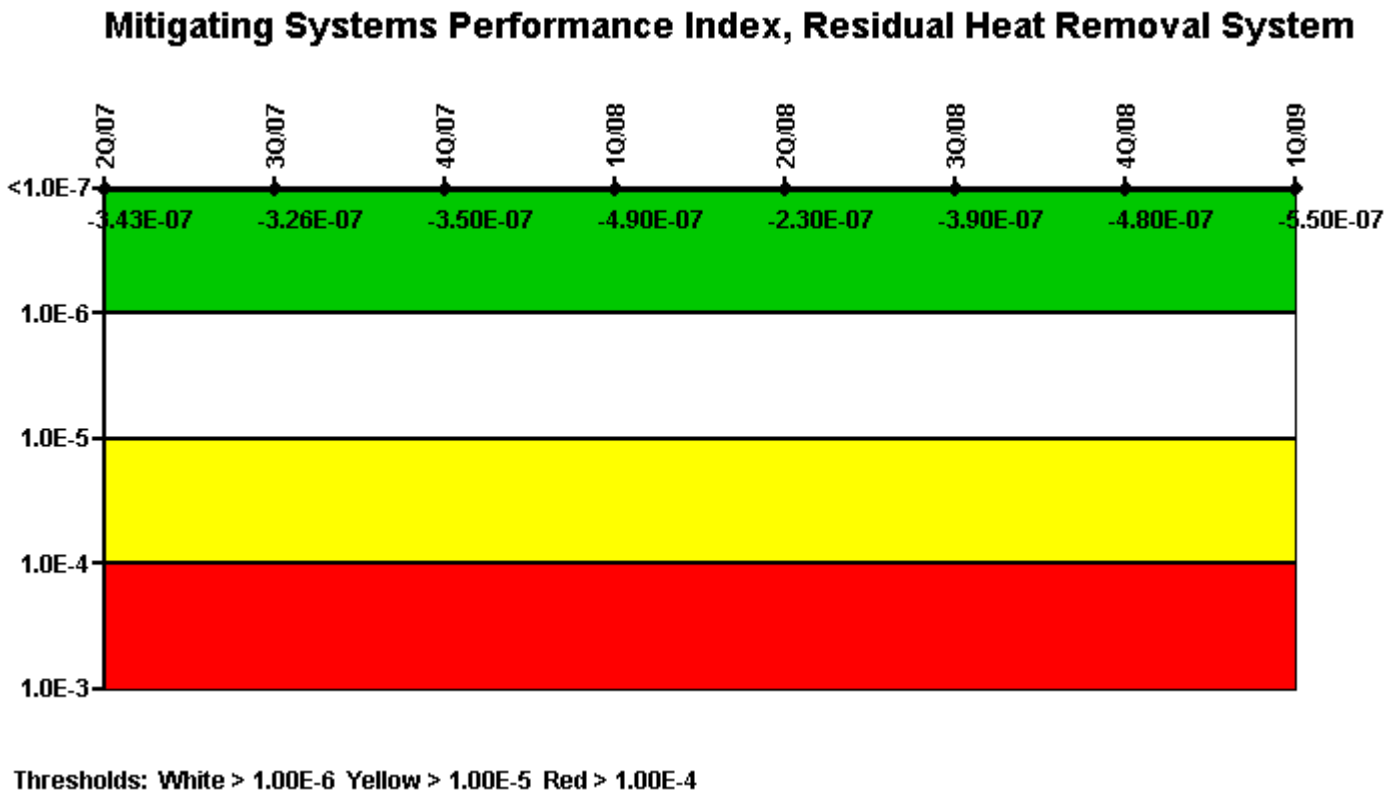
3Q/08: Changed PRA Parameter(s).

2Q/08: Changed PRA Parameter(s).

1Q/08: Changed PRA Parameter(s).

4Q/07: Changed PRA Parameter(s).

3Q/07: Changed PRA Parameter(s).



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

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
UAI (ΔCDF)	-2.60E-07	-2.80E-07	-2.50E-07	-3.90E-07	-1.30E-07	-2.80E-07	-3.70E-07	-4.40E-07
URI (ΔCDF)	-8.30E-08	-4.60E-08	-1.00E-07	-1.00E-07	-1.00E-07	-1.10E-07	-1.10E-07	-1.10E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-3.43E-07**	**-3.26E-07**	**-3.50E-07**	**-4.90E-07**	**-2.30E-07**	**-3.90E-07**	**-4.80E-07**	**-5.50E-07**

Licensee Comments:

1Q/09: Changed PRA Parameter(s).

4Q/08: Changed PRA Parameter(s). From 2Q06 through 4Q08, MSPI coefficients were changed quarterly to be consistent with routine changes to the living Probabilistic Risk Assessment model. Analysis of the most significant changes submitted in 4Q07 indicated the changes did not affect color of the PIs. In 1Q09, data in the INPO Consolidated Data Entry (CDE) system for 3Q07 through 4Q08 were changed in error then corrected to the original values. The change file generated by the CDE for submittal to the NRC displays the MSPI values as being changed

even though there was no change. These errors had no impact on color of the MSPI.

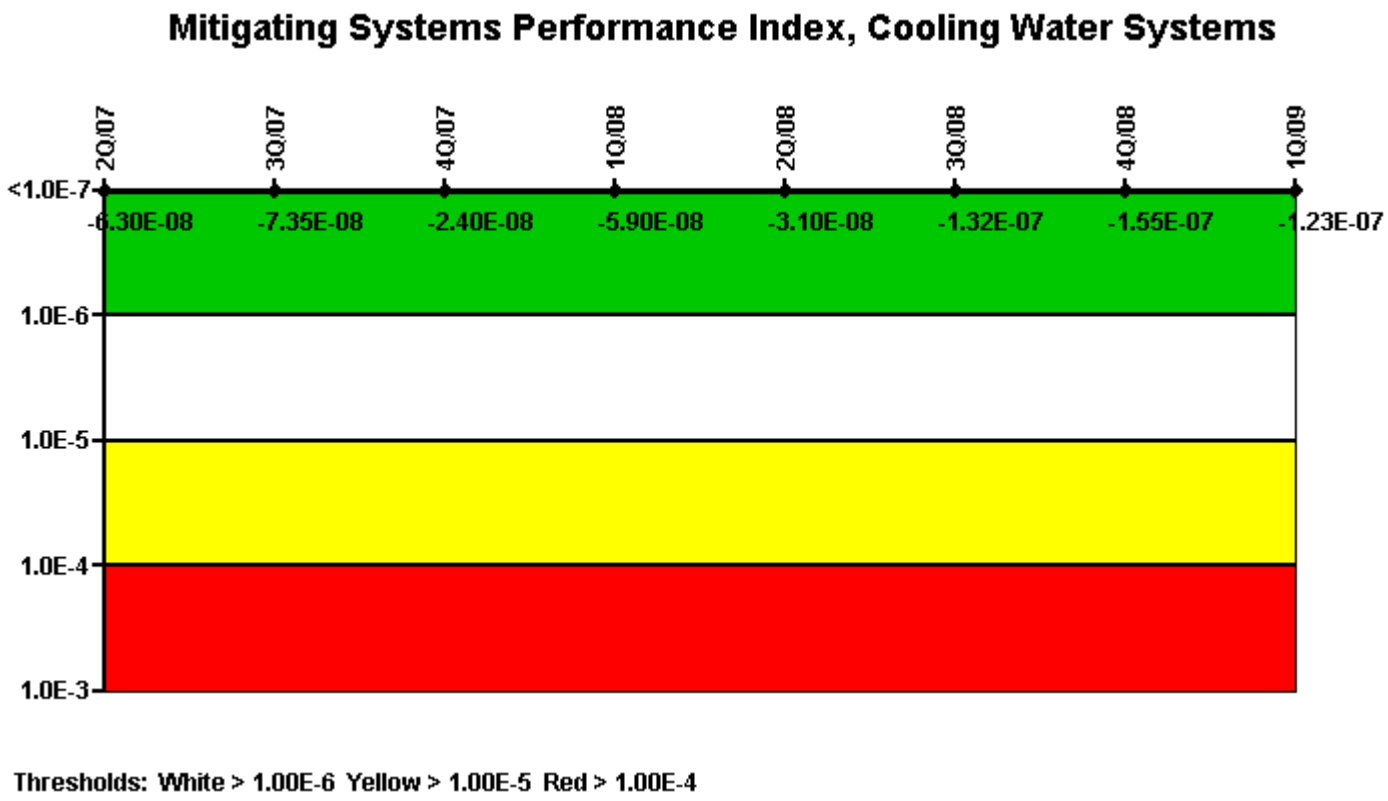
3Q/08: Changed PRA Parameter(s).

2Q/08: Changed PRA Parameter(s).

1Q/08: Changed PRA Parameter(s).

4Q/07: Changed PRA Parameter(s).

3Q/07: Changed PRA Parameter(s).



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

Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
UAI (ΔCDF)	1.60E-08	6.50E-09	5.60E-08	3.40E-08	6.20E-08	3.80E-08	4.70E-09	3.70E-08
URI (ΔCDF)	-7.90E-08	-8.00E-08	-8.00E-08	-9.30E-08	-9.30E-08	-1.70E-07	-1.60E-07	-1.60E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-6.30E-08**	**-7.35E-08**	**-2.40E-08**	**-5.90E-08**	**-3.10E-08**	**-1.32E-07**	**-1.55E-07**	**-1.23E-07**

Licensee Comments:

1Q/09: Changed PRA Parameter(s).

4Q/08: Changed PRA Parameter(s). From 2Q06 through 4Q08, MSPI coefficients were changed quarterly to be consistent with routine changes to the living Probabilistic Risk Assessment model. Analysis of the most significant

changes submitted in 4Q07 indicated the changes did not affect color of the PIs. In 1Q09, data in the INPO Consolidated Data Entry (CDE) system for 3Q07 through 4Q08 were changed in error then corrected to the original values. The change file generated by the CDE for submittal to the NRC displays the MSPI values as being changed even though there was no change. These errors had no impact on color of the MSPI.

3Q/08: Changed PRA Parameter(s).

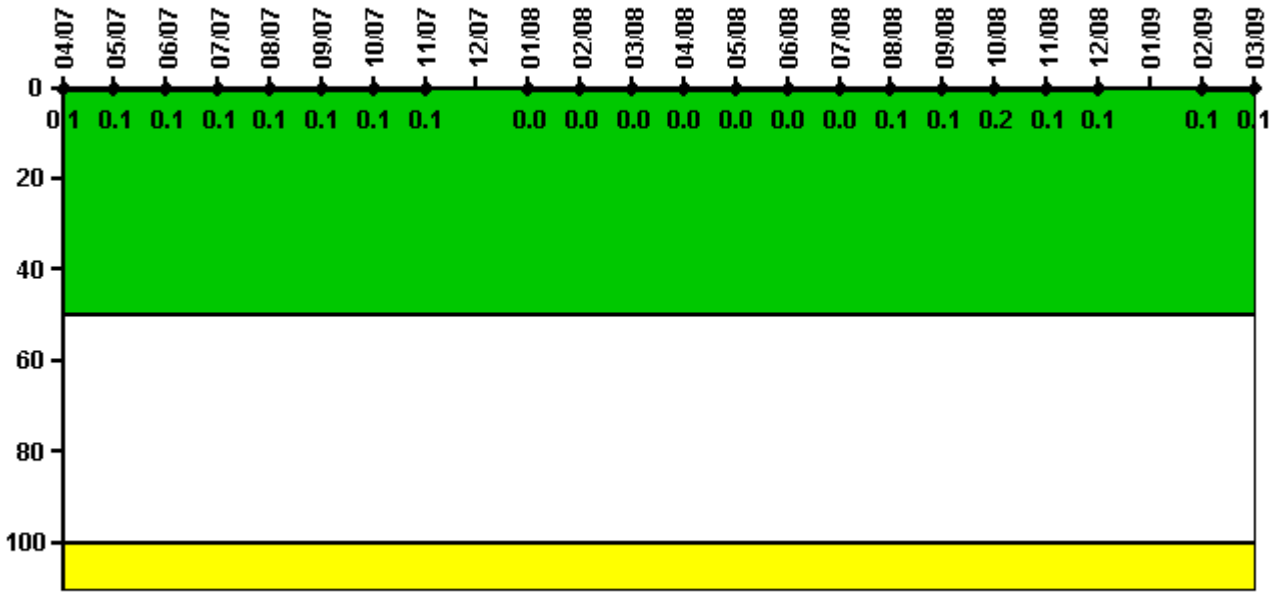
2Q/08: Changed PRA Parameter(s). PRA parameters used for 2Q08 MSPI MS10 were incorrect due to data entry error. This change did not affect the color of the MSPI.

1Q/08: Changed PRA Parameter(s). Salt water cooling pumps PRA parameters used for 1Q08 MSPI were corrected in 1Q09. Incorrect values used SWC pump failure-to-run probabilities, which were a factor of two times higher than their baseline value due to missed surveillance tests. Revised values are based on baseline probabilities. These changes did not affect the color of the MSPI.

4Q/07: Changed PRA Parameter(s). PRA parameters (Fussell Vesely (FV) values for salt water cooling and component cooling water pumps) used for 4Q07 MSPI MS10 were incorrect due to data entry error. Corrected values used for this change submittal range from 10 to 15% higher than the incorrect FV values. This change did not affect the color of the MSPI.

3Q/07: Changed PRA Parameter(s).

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

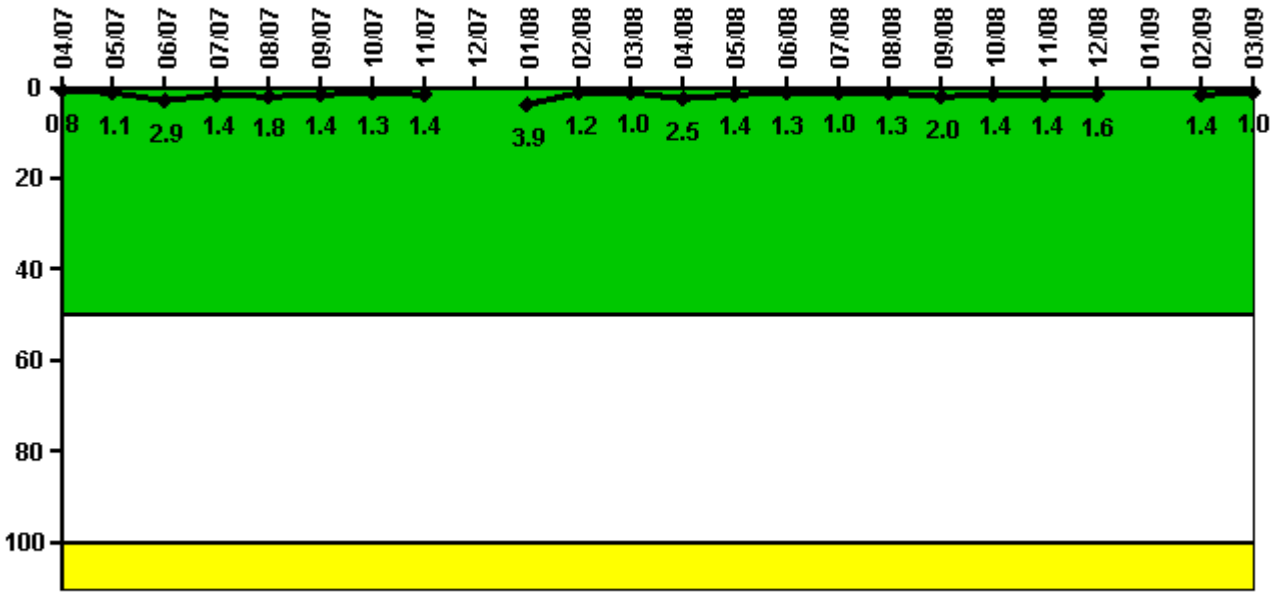
Notes

Reactor Coolant System Activity	4/07	5/07	6/07	7/07	8/07	9/07	10/07	11/07	12/07	1/08	2/08	3/08
Maximum activity	0.000564	0.000901	0.000532	0.000536	0.000708	0.000686	0.000634	0.000632	N/A	0.000270	0.000255	0.000338
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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	N/A	0	0	0
Reactor Coolant System Activity	**4/08**	**5/08**	**6/08**	**7/08**	**8/08**	**9/08**	**10/08**	**11/08**	**12/08**	**1/09**	**2/09**	**3/09**
Maximum activity	0.000354	0.000335	0.000486	0.000434	0.000919	0.001010	0.001550	0.001260	0.001320	N/A	0.000655	0.000748
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**	**0.1**	**0.1**	**0.2**	**0.1**	**0.1**	**N/A**	**0.1**	**0.1**

Licensee Comments: none

Reactor Coolant System Leakage



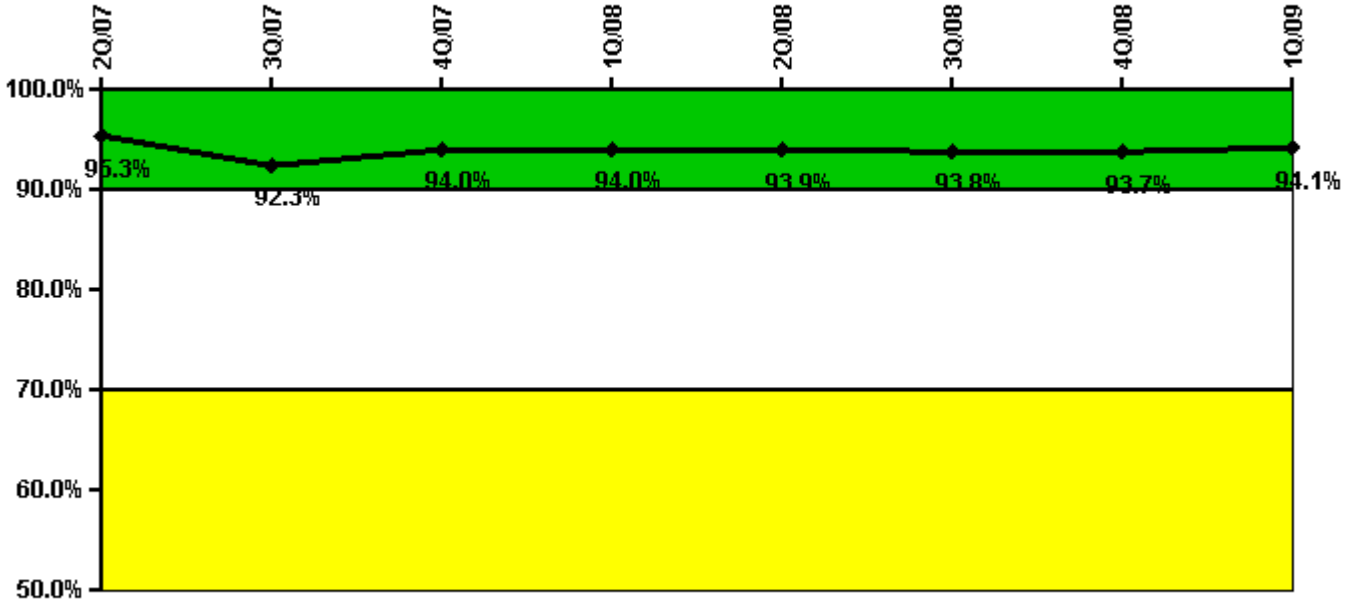
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	4/07	5/07	6/07	7/07	8/07	9/07	10/07	11/07	12/07	1/08	2/08	3/08
Maximum leakage	0.080	0.110	0.290	0.140	0.180	0.140	0.130	0.140	N/A	0.390	0.120	0.100
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	**0.8**	**1.1**	**2.9**	**1.4**	**1.8**	**1.4**	**1.3**	**1.4**	**N/A**	**3.9**	**1.2**	**1.0**
Reactor Coolant System Leakage	**4/08**	**5/08**	**6/08**	**7/08**	**8/08**	**9/08**	**10/08**	**11/08**	**12/08**	**1/09**	**2/09**	**3/09**
Maximum leakage	0.250	0.140	0.130	0.100	0.130	0.200	0.140	0.140	0.160	N/A	0.140	0.100
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	**2.5**	**1.4**	**1.3**	**1.0**	**1.3**	**2.0**	**1.4**	**1.4**	**1.6**	**N/A**	**1.4**	**1.0**

Licensee Comments: none

Drill/Exercise Performance



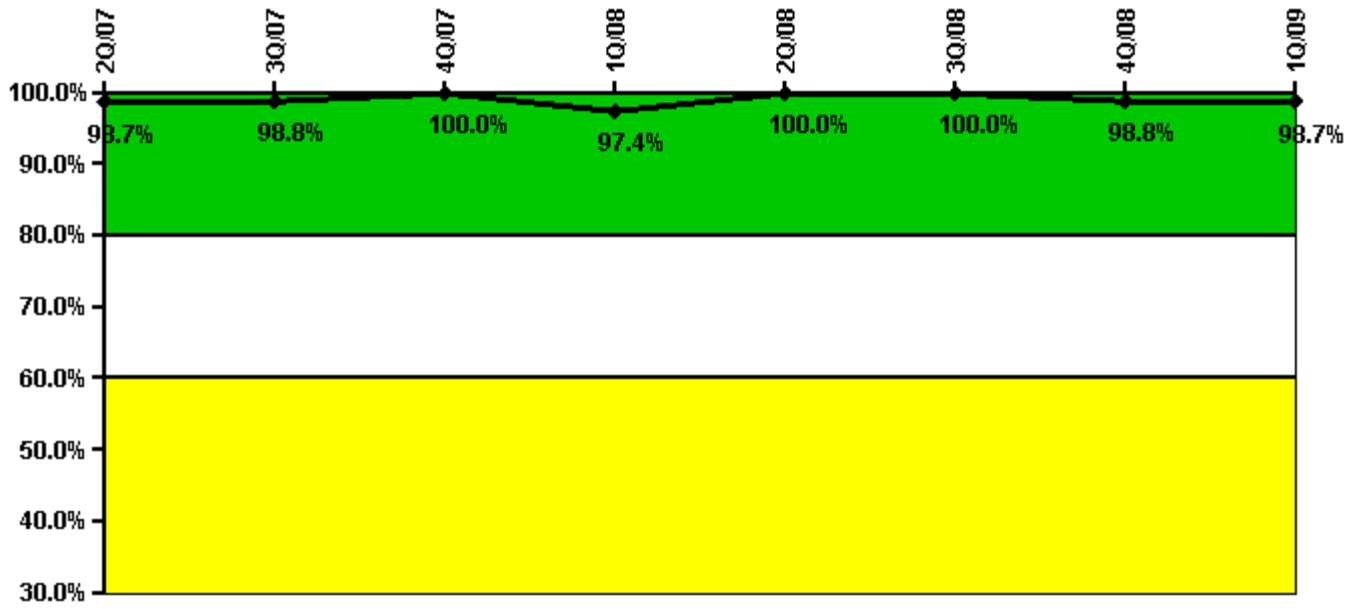
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
Successful opportunities	8.0	51.0	78.0	0	31.0	28.0	60.0	15.0
Total opportunities	9.0	59.0	79.0	0	34.0	29.0	63.0	15.0
Indicator value	**95.3%**	**92.3%**	**94.0%**	**94.0%**	**93.9%**	**93.8%**	**93.7%**	**94.1%**

Licensee Comments: none

ERO Drill Participation



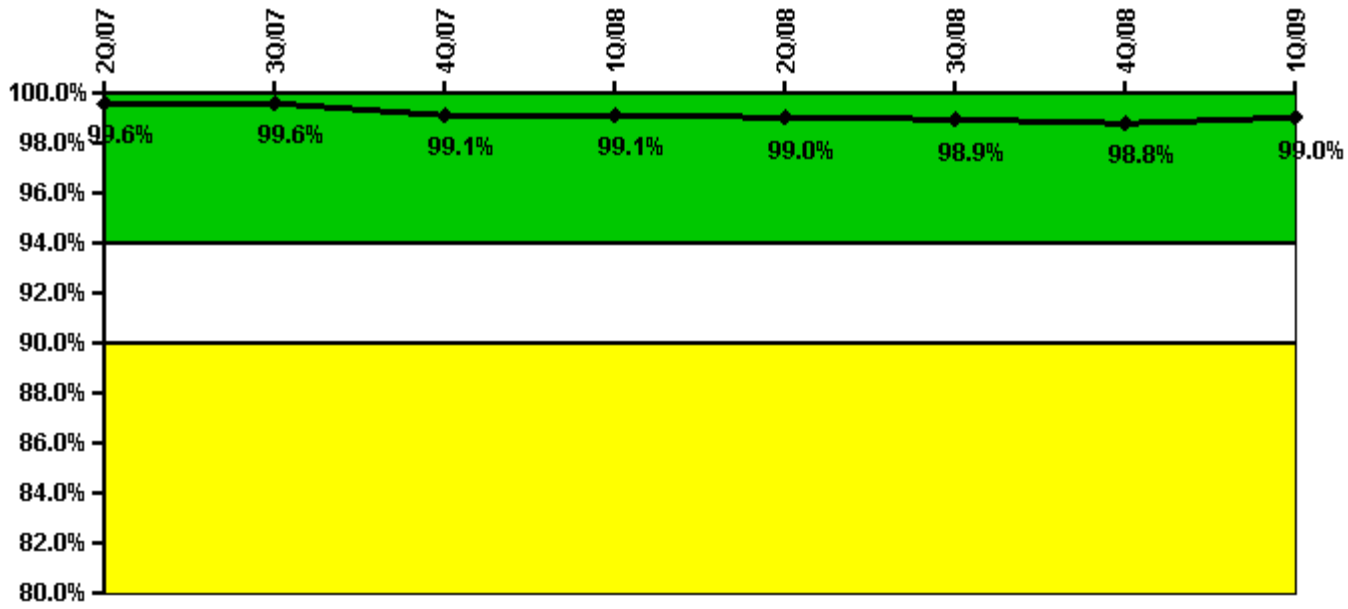
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
Participating Key personnel	78.0	82.0	76.0	74.0	77.0	77.0	80.0	76.0
Total Key personnel	79.0	83.0	76.0	76.0	77.0	77.0	81.0	77.0
Indicator value	**98.7%**	**98.8%**	**100.0%**	**97.4%**	**100.0%**	**100.0%**	**98.8%**	**98.7%**

Licensee Comments: none

Alert & Notification System



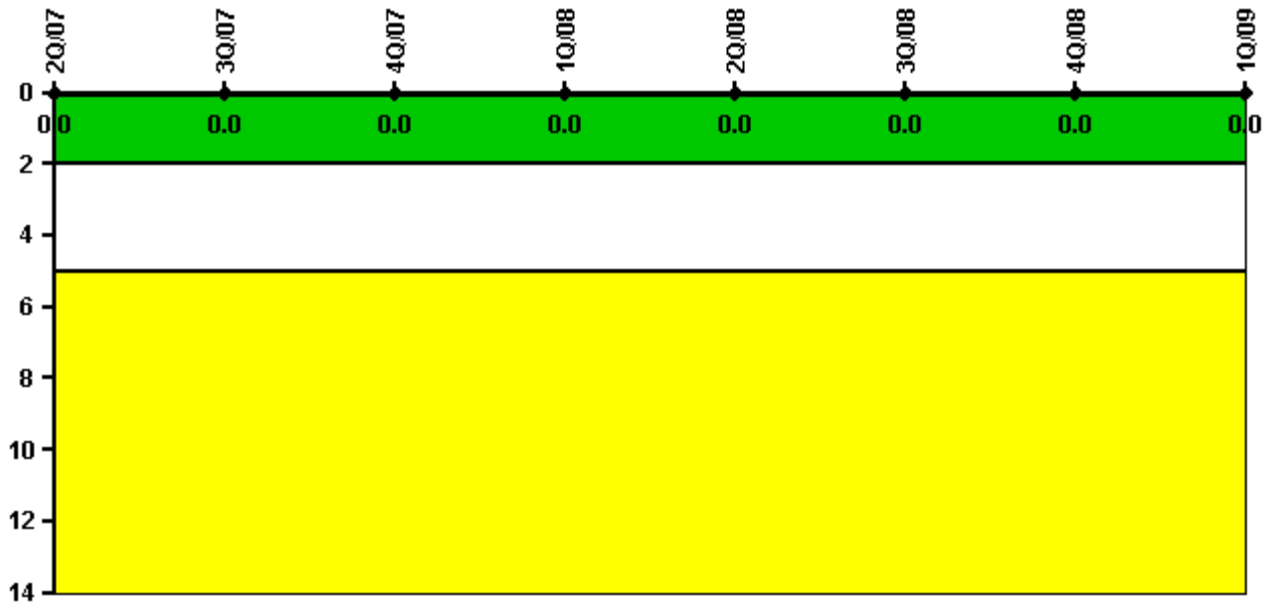
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09
Successful siren-tests	407	356	451	404	414	413	457	415
Total sirens-tests	408	357	459	409	416	416	468	416
Indicator value	**99.6%**	**99.6%**	**99.1%**	**99.1%**	**99.0%**	**98.9%**	**98.8%**	**99.0%**

Licensee Comments: none

Occupational Exposure Control Effectiveness



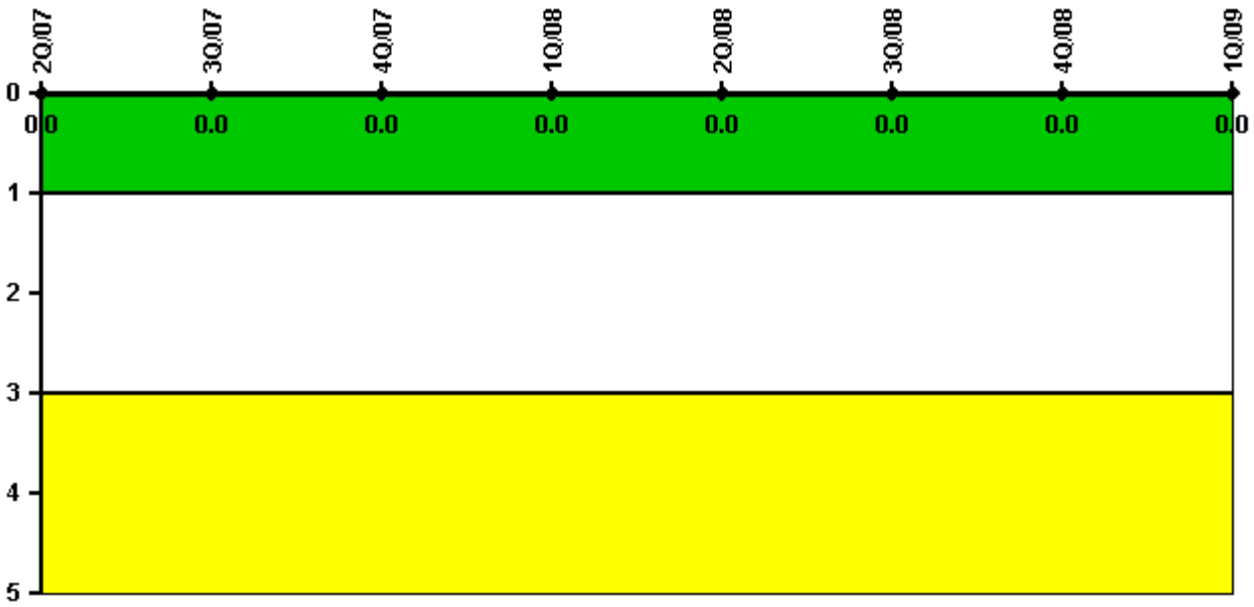
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/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	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08	1Q/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: May 1, 2009