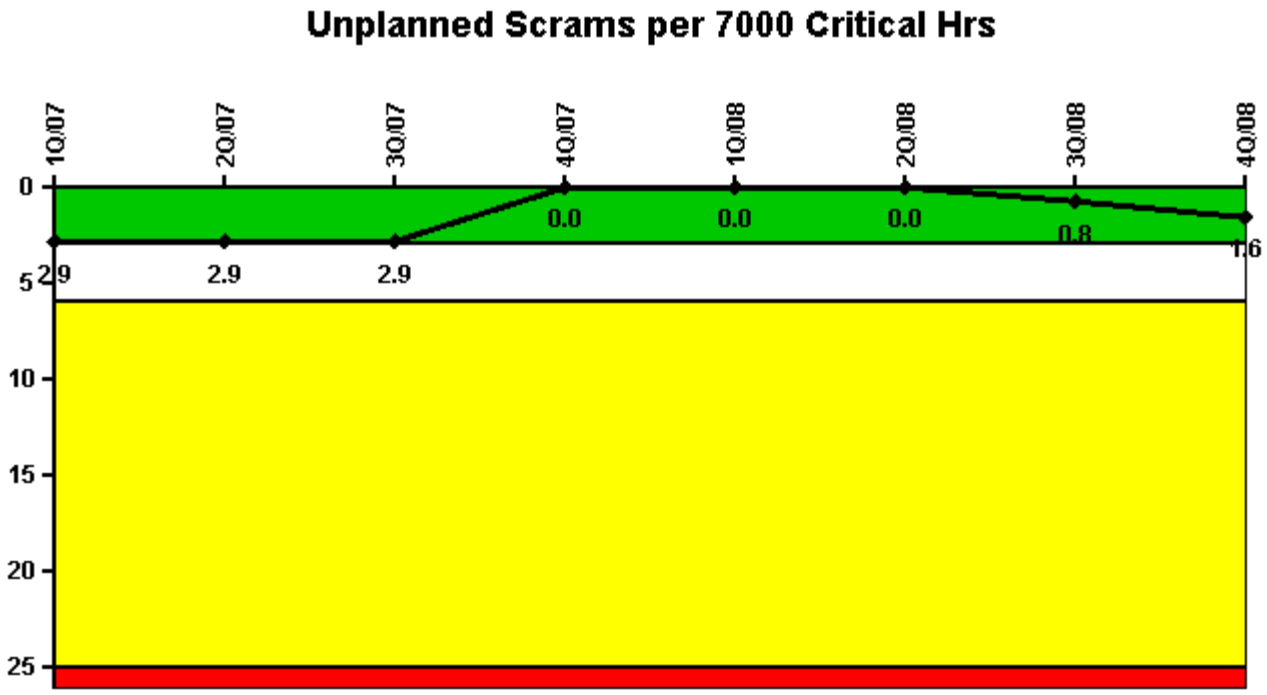
Brunswick 2

4Q/2008 Performance Indicators

Licensee's General Comments: The following revisions to previously submitted data have been made: Emergency AC Power - A failure (epix #1524) from 08/20/2007 on EDG 4 was reclassified as a start/demand failure (previously classified as not an MSPI failure). A failure on 08/15/2004 (epix # 1191) was reclassified from a Failure to start to a Failure to Load. A failure on 07/24/2003 (epix # 1058) was reclassified from a Failure to start to a Failure to Load. These changes did not affect the color of the EAC Power indicator over the stated time period. Service Water - The Unit 2 planned unavailable hours reported for September 2008 for the 2A NSW pump were increased to 45.73 hours (from 45.26 hrs). This change did not affect the color of the Service Water system indicator over the stated time period.



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

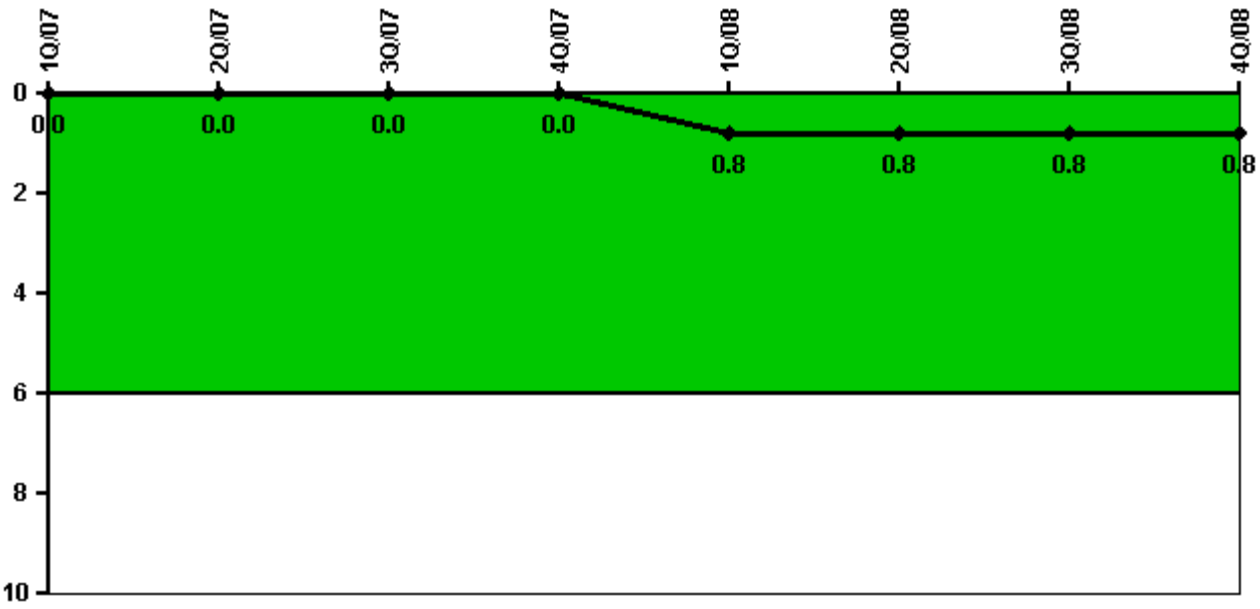
Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
Unplanned scrams	0	0	0	0	0	0	1.0	1.0
Critical hours	1464.1	1823.9	2208.0	2209.0	2183.0	2184.0	2124.5	2061.5
Indicator value	**2.9**	**2.9**	**2.9**	**0**	**0**	**0**	**0.8**	**1.6**

Licensee Comments:

4Q/08: Unit 2 scram on 11/09/2008 due to a spurious opening of a safety relief valve and rising suppression pool temperatures.

Unplanned Power Changes per 7000 Critical Hrs



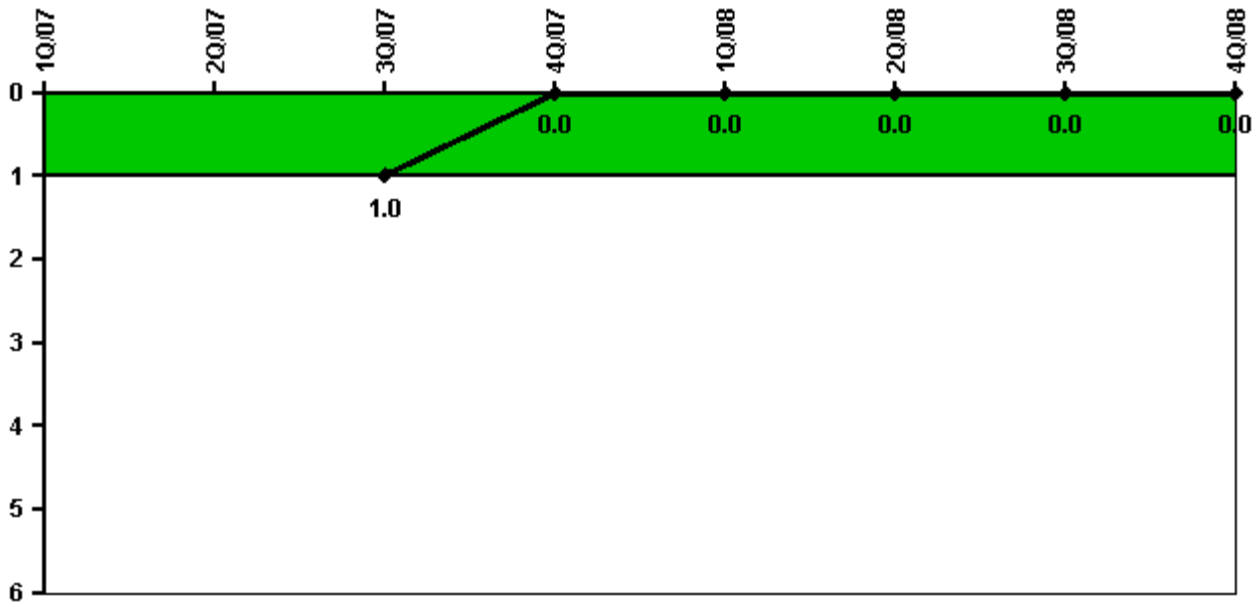
Thresholds: White > 6.0

Notes

Unplanned Power Changes per 7000 Critical Hrs	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
Unplanned power changes	0	0	0	0	1.0	0	0	0
Critical hours	1464.1	1823.9	2208.0	2209.0	2183.0	2184.0	2124.5	2061.5
Indicator value	**0**	**0**	**0**	**0**	**0.8**	**0.8**	**0.8**	**0.8**

Licensee Comments: none

Unplanned Scrams with Complications



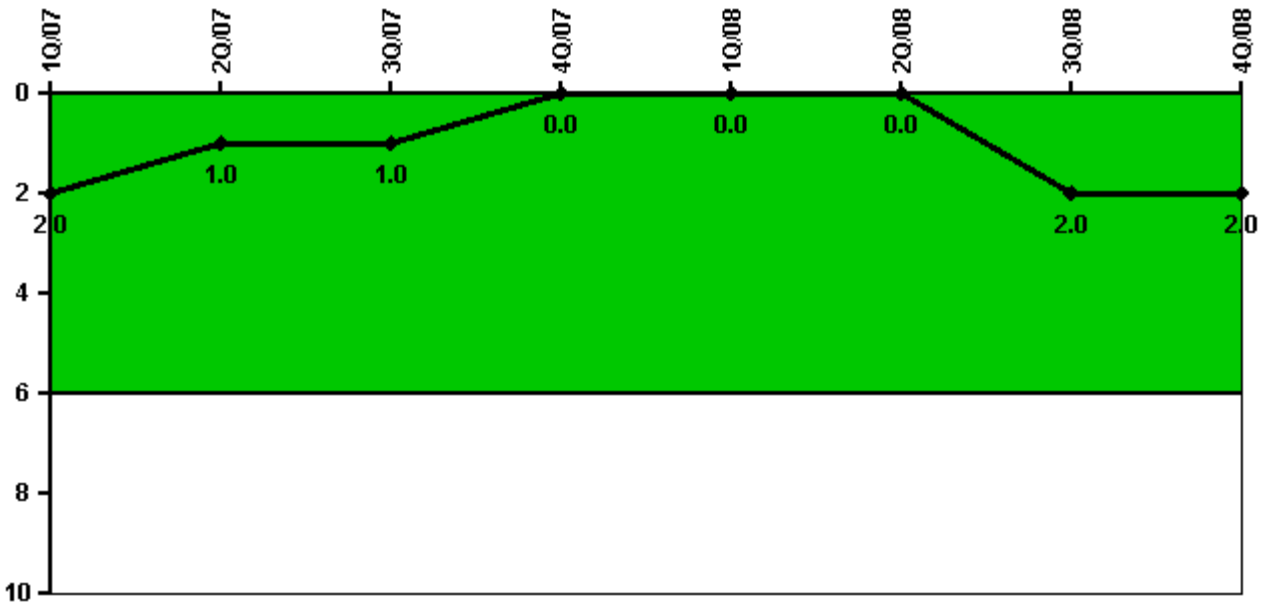
Thresholds: White > 1.0

Notes

Unplanned Scrams with Complications	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
Scrams with complications	0	0	0	0	0	0	0	0
Indicator value			**1.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Licensee Comments: none

Safety System Functional Failures (BWR)



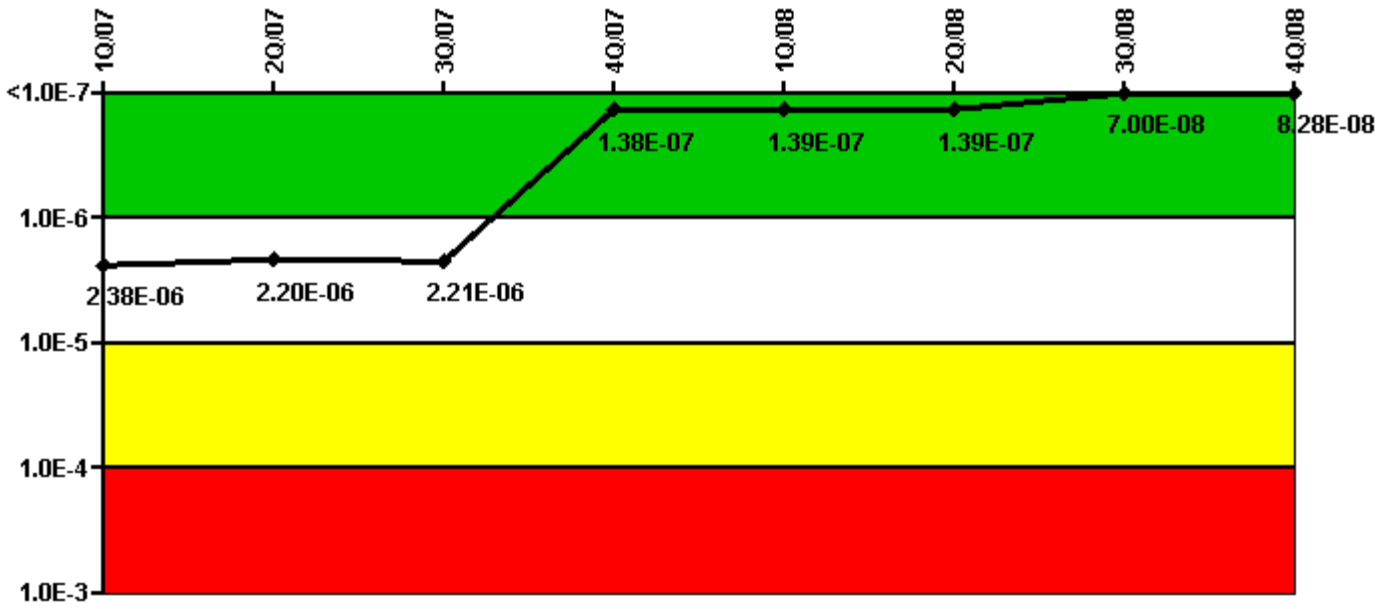
Thresholds: White > 6.0

Notes

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

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/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
UAI (ΔCDF)	3.80E-07	7.00E-07	5.10E-07	8.40E-09	8.80E-09	8.90E-09	-1.00E-08	3.80E-09
URI (ΔCDF)	2.00E-06	1.50E-06	1.70E-06	1.30E-07	1.30E-07	1.30E-07	8.00E-08	7.90E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**2.38E-06**	**2.20E-06**	**2.21E-06**	**1.38E-07**	**1.39E-07**	**1.39E-07**	**7.00E-08**	**8.28E-08**

Licensee Comments:

4Q/08: See the change file for revised input to previously submitted EAC Power system data. These changes did not affect the color of the EAC Power indicator over the stated time period.

2Q/08: A Change File will be submitted for the re-classification of a failure on 08/14/2004 that affected the Emergency AC Power system MSPI for the period August 2004 through July 2007. The change did not affect the color of the indicator. See Change File for details.

4Q/07: The baseline planned unavailability was revised in the 3rd quarter of 2007 to reflect current maintenance practices, and became effective in the 4th quarter 2007.

3Q/07: Risk Cap Invoked. WHITE threshold exceeded since 2Q2006 due to multiple failures on EDGs and asssociated Unavailability. Due to unique plant configuration, failure on any of the four EDGs adversely impacts the MSPI of both Units.

2Q/07: Risk Cap Invoked. Added four trains/segments that include emergency bus cross-tie breakers that were previously inadvertently omitted. Unreliability data for the new segments is complete and entered, Unavailability data is not entered pending required changes to INPOs CDE software. PI color was unaffected and remains WHITE. WHITE threshold exceeded since inception of MSPI in 2Q2006 due to multiple failures and corresponding unavailability. Due to unique plant configuration, failures and unavailable hours of each diesel contribute to both Units 1 & 2.

1Q/07: Risk Cap Invoked. New PRA values were entered beginning 1st Quarter 2007 based on Revision 6 to the BNP

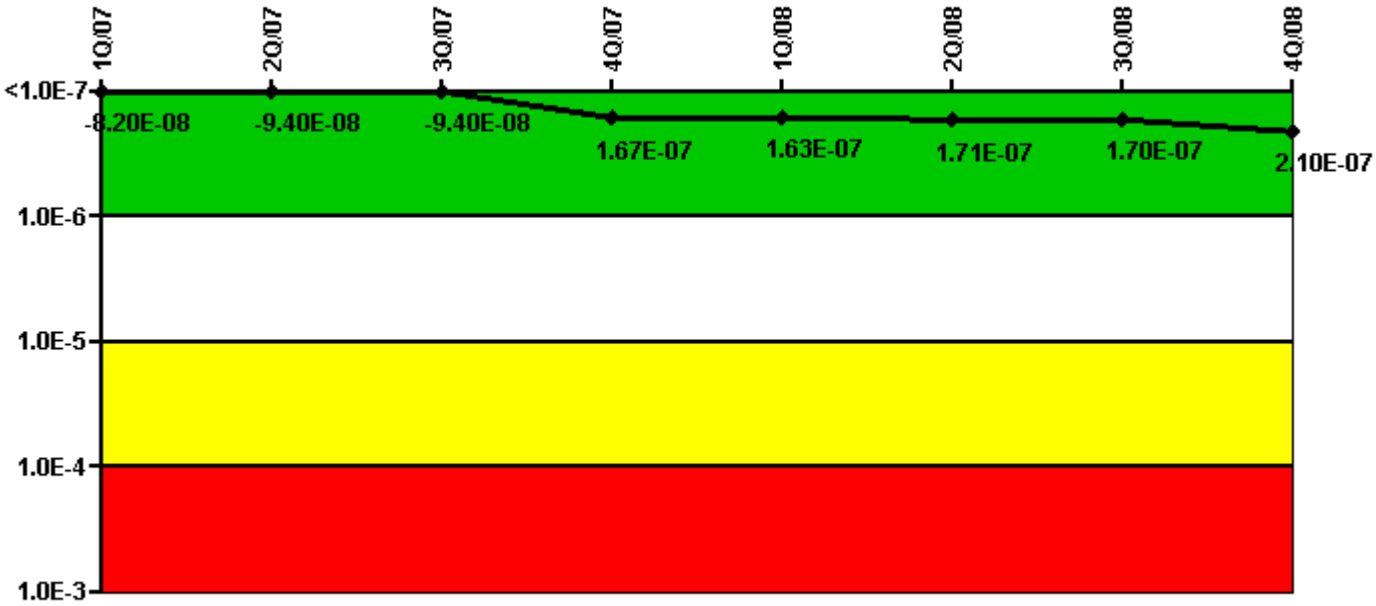
Basis Document. EDG2 had a fail to start on 02/19/2007 due to a failed LPSCR relay. Also, an evaluation is pending for a potential MSPI failure to the Emergency AC Power system due to an E-bus cross-tie breaker found misaligned. This evaluation shall be complete prior to the end of the 2nd Quarter 2007. The MSPI for Unit 2 Emergency AC Power system remains WHITE since the 2nd Quarter of 2006.

4Q/06: Risk Cap Invoked. Emergency AC power MSPI for Unit 2 remains WHITE from the previous quarter. White threshold exceeded due to increased unreliability factor of Emergency Diesel Generators (EDGs). There are currently seven MSPI failures between the four EDGs during the previous 36 months. Due to unique system configuration, failure on any one of four EDGs affects both Units.

3Q/06: Risk Cap Invoked. MS06: White threshold exceeded due to increased unreliability factor of Emergency Diesel Generators (EDGs). Six MSPI failures between the four DGs during the previous 36 months. Due to unique system configuration, failure on any one of four EDGs is counted against both Units. Revision to previously submitted data: Changed two MSPI failures from Start Demands to Load Run Demands, #1164 on 06/06/2004 and #1215 on 11/10/2004. Revised the Estimated Start and Load Run Demands in baseline. Indicator color unaffected. Change File created.

2Q/06: Risk Cap Invoked.

Mitigating Systems Performance Index, High Pressure Injection System



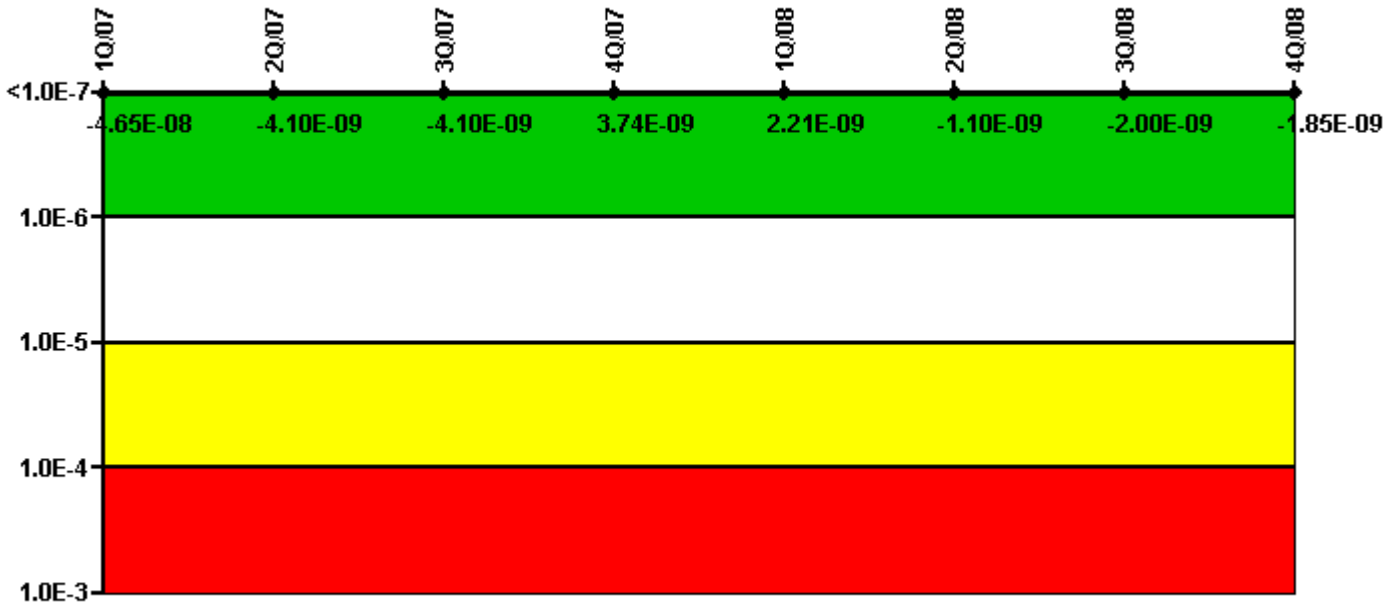
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
UAI (ΔCDF)	-1.70E-08	-2.90E-08	-2.90E-08	9.60E-08	9.20E-08	1.00E-07	1.00E-07	1.40E-07
URI (ΔCDF)	-6.50E-08	-6.50E-08	-6.50E-08	7.10E-08	7.10E-08	7.10E-08	7.00E-08	7.00E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-8.20E-08**	**-9.40E-08**	**-9.40E-08**	**1.67E-07**	**1.63E-07**	**1.71E-07**	**1.70E-07**	**2.10E-07**

Licensee Comments: none

Mitigating Systems Performance Index, Heat Removal System



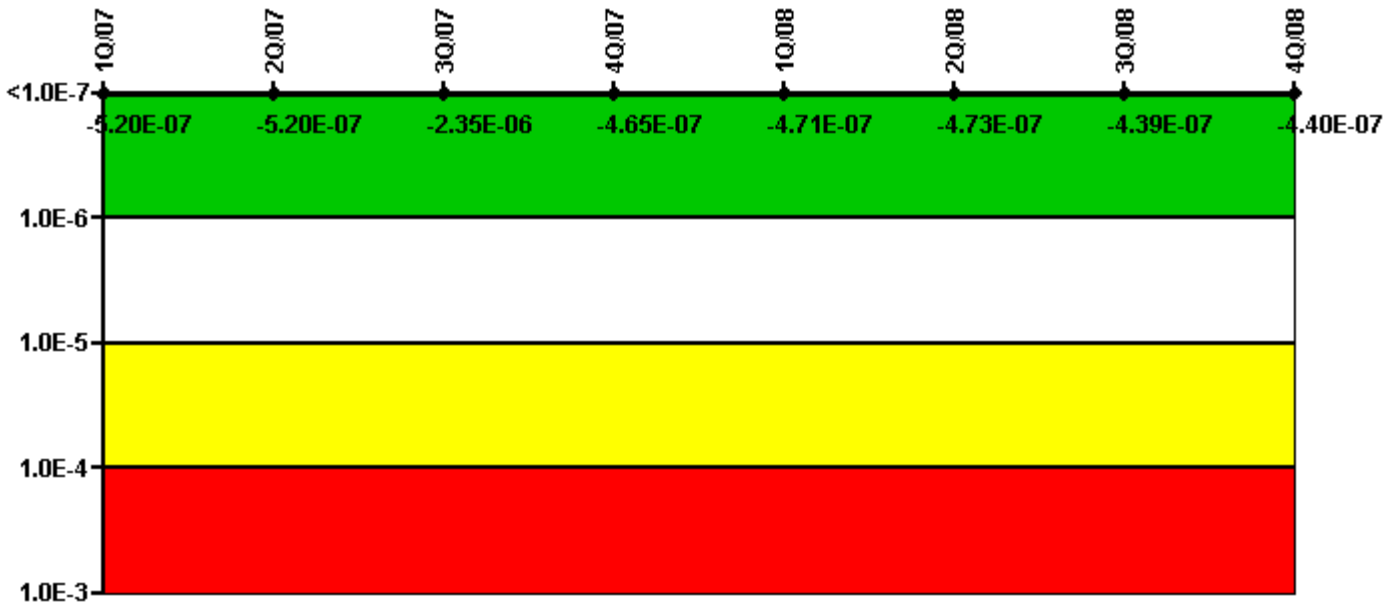
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
UAI (ΔCDF)	-9.50E-09	-1.00E-08	-1.00E-08	-3.60E-10	-9.90E-10	-3.40E-09	-3.40E-09	-2.40E-09
URI (ΔCDF)	-3.70E-08	5.90E-09	5.90E-09	4.10E-09	3.20E-09	2.30E-09	1.40E-09	5.50E-10
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-4.65E-08**	**-4.10E-09**	**-4.10E-09**	**3.74E-09**	**2.21E-09**	**-1.10E-09**	**-2.00E-09**	**-1.85E-09**

Licensee Comments: none

Mitigating Systems Performance Index, Residual Heat Removal System



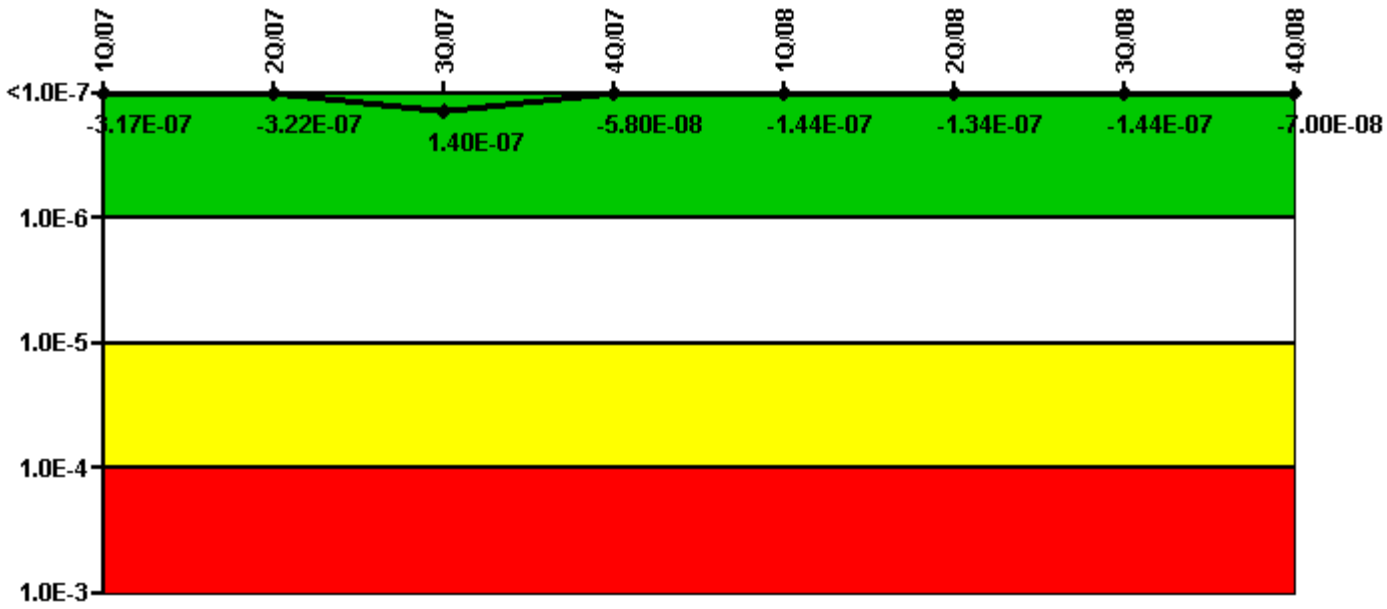
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
UAI (ΔCDF)	-4.10E-07	-4.10E-07	-4.50E-07	-2.50E-08	-3.10E-08	-3.30E-08	-8.70E-09	-1.00E-08
URI (ΔCDF)	-1.10E-07	-1.10E-07	-1.90E-06	-4.40E-07	-4.40E-07	-4.40E-07	-4.30E-07	-4.30E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-5.20E-07**	**-5.20E-07**	**-2.35E-06**	**-4.65E-07**	**-4.71E-07**	**-4.73E-07**	**-4.39E-07**	**-4.40E-07**

Licensee Comments: none

Mitigating Systems Performance Index, Cooling Water Systems



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

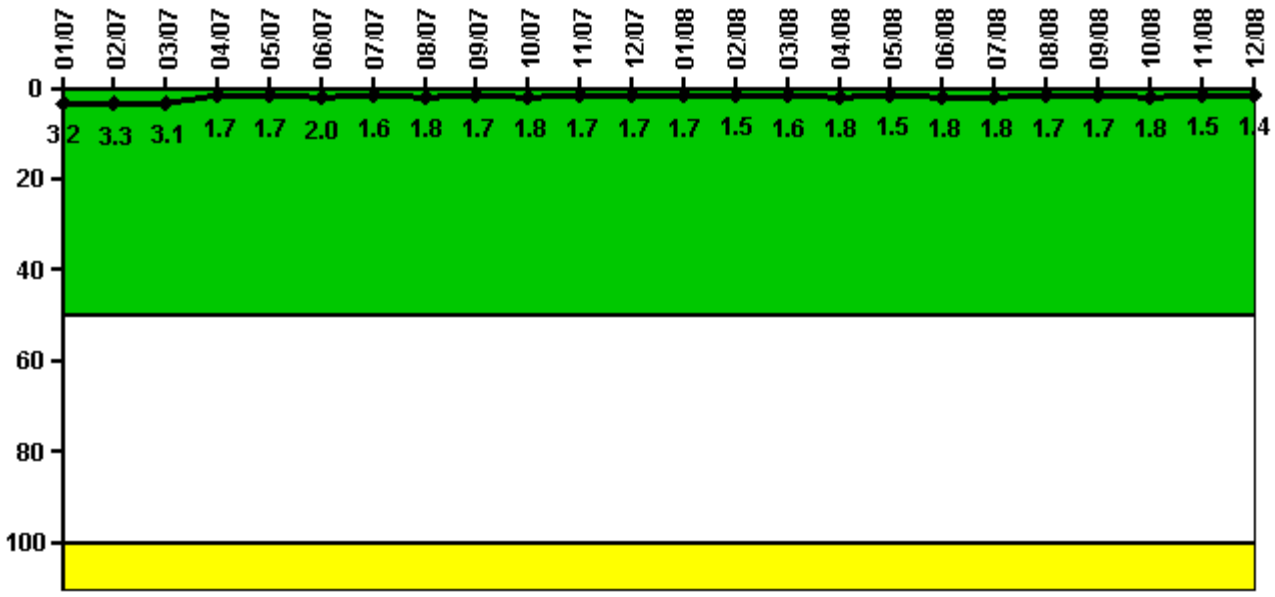
Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
UAI (ΔCDF)	3.30E-08	2.80E-08	4.90E-07	-4.40E-08	-1.30E-07	-1.20E-07	-1.30E-07	-5.60E-08
URI (ΔCDF)	-3.50E-07	-3.50E-07	-3.50E-07	-1.40E-08	-1.40E-08	-1.40E-08	-1.40E-08	-1.40E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	**-3.17E-07**	**-3.22E-07**	**1.40E-07**	**-5.80E-08**	**-1.44E-07**	**-1.34E-07**	**-1.44E-07**	**-7.00E-08**

Licensee Comments:

4Q/08: See the change file for revised input to previously submitted Service Water system data. These changes did not affect the color of the Service Water indicator over the stated time period.

Reactor Coolant System Activity



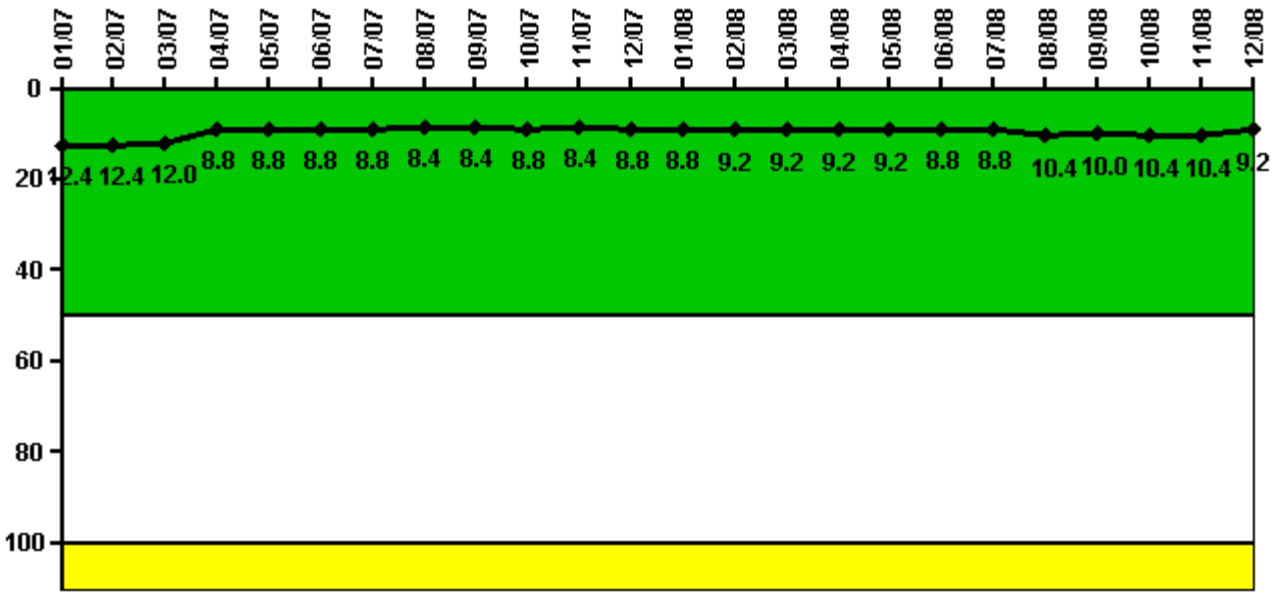
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Activity	**1/07**	**2/07**	**3/07**	**4/07**	**5/07**	**6/07**	**7/07**	**8/07**	**9/07**	**10/07**	**11/07**	**12/07**
Maximum activity	0.006493	0.006559	0.006114	0.003335	0.003376	0.003926	0.003281	0.003647	0.003445	0.003577	0.003372	0.003388
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	**3.2**	**3.3**	**3.1**	**1.7**	**1.7**	**2.0**	**1.6**	**1.8**	**1.7**	**1.8**	**1.7**	**1.7**
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	0.003301	0.002949	0.003297	0.003530	0.003078	0.003591	0.003575	0.003353	0.003459	0.003693	0.003056	0.002813
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	**1.7**	**1.5**	**1.6**	**1.8**	**1.5**	**1.8**	**1.8**	**1.7**	**1.7**	**1.8**	**1.5**	**1.4**

Licensee Comments: none

Reactor Coolant System Leakage



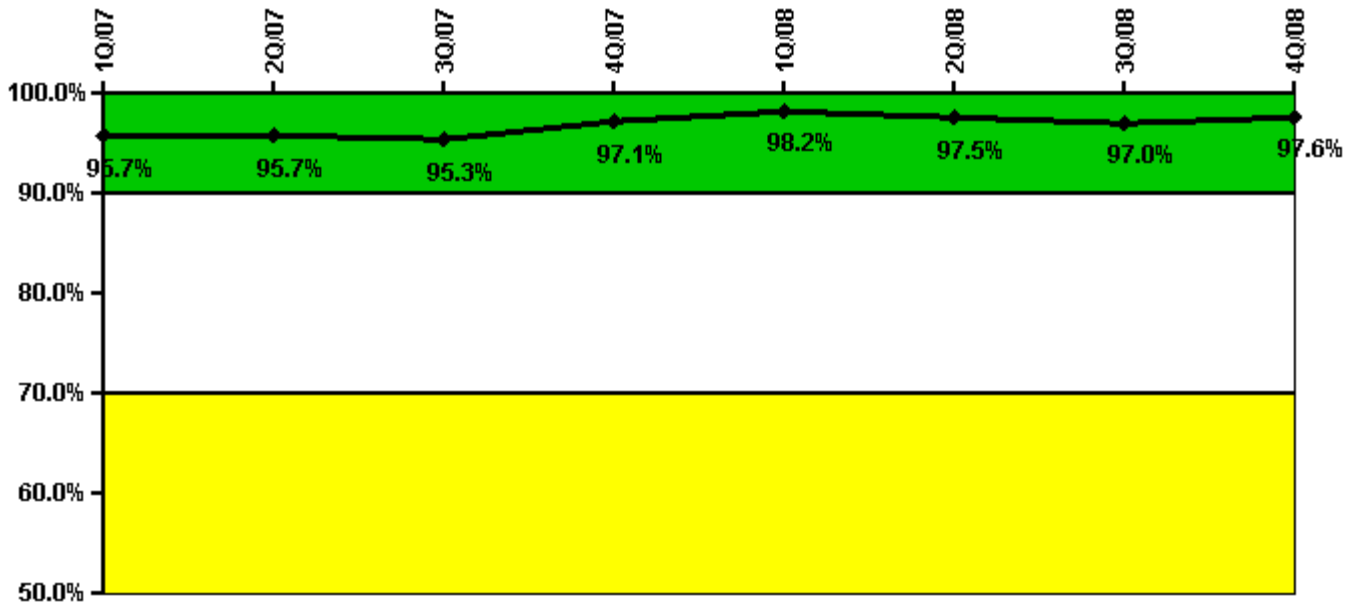
Thresholds: White > 50.0 Yellow > 100.0

Notes

Reactor Coolant System Leakage	1/07	2/07	3/07	4/07	5/07	6/07	7/07	8/07	9/07	10/07	11/07	12/07
Maximum leakage	3.100	3.100	3.000	2.200	2.200	2.200	2.200	2.100	2.100	2.200	2.100	2.200
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	**12.4**	**12.4**	**12.0**	**8.8**	**8.8**	**8.8**	**8.8**	**8.4**	**8.4**	**8.8**	**8.4**	**8.8**
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	2.200	2.300	2.300	2.300	2.300	2.200	2.200	2.600	2.500	2.600	2.600	2.300
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	**8.8**	**9.2**	**9.2**	**9.2**	**9.2**	**8.8**	**8.8**	**10.4**	**10.0**	**10.4**	**10.4**	**9.2**

Licensee Comments: none

Drill/Exercise Performance



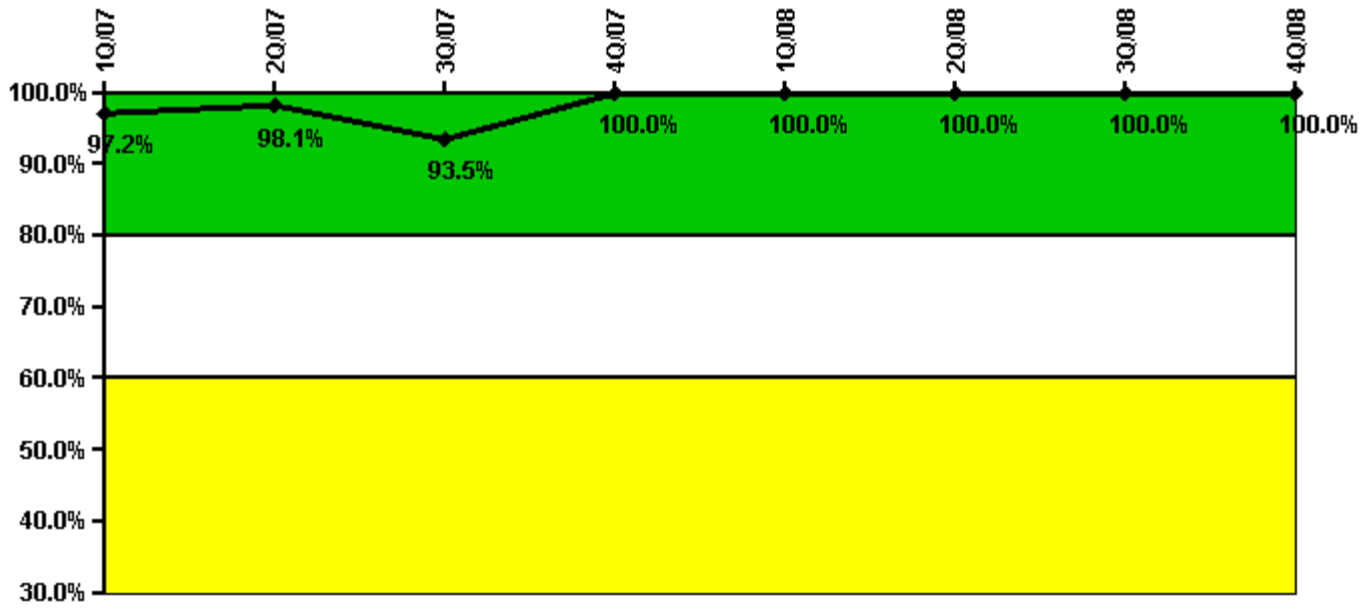
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
Successful opportunities	0	13.0	18.0	38.0	0	13.0	21.0	58.0
Total opportunities	0	13.0	18.0	38.0	0	14.0	22.0	60.0
Indicator value	**95.7%**	**95.7%**	**95.3%**	**97.1%**	**98.2%**	**97.5%**	**97.0%**	**97.6%**

Licensee Comments: none

ERO Drill Participation



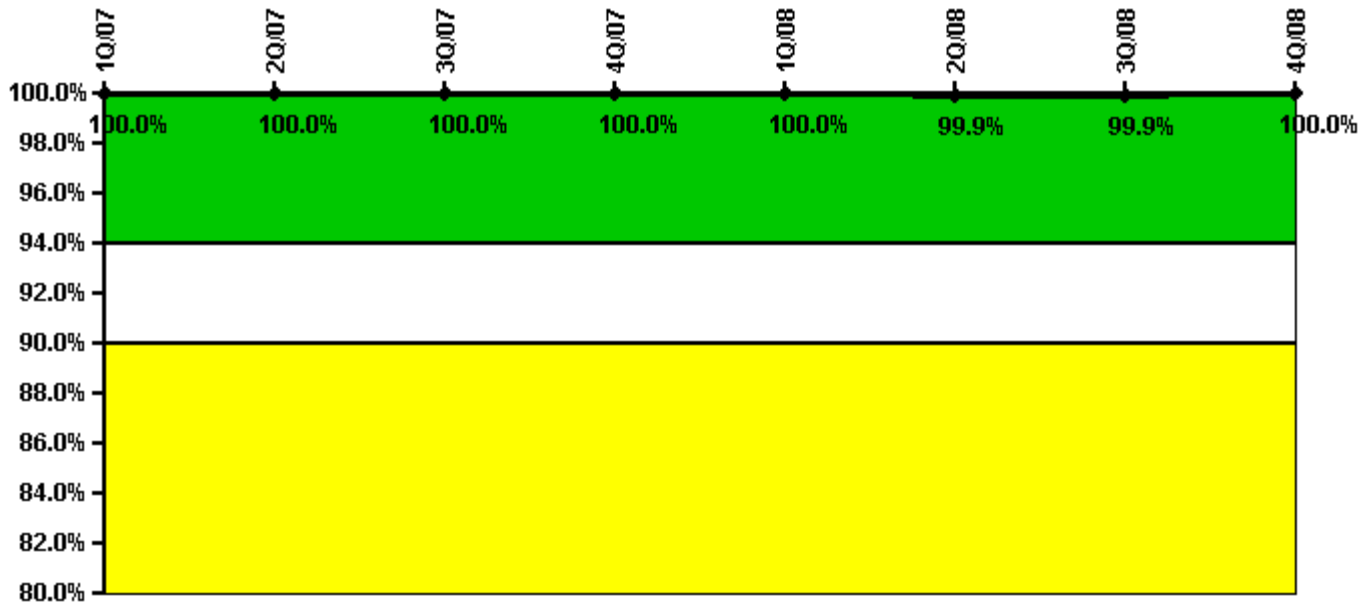
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
Participating Key personnel	104.0	105.0	101.0	102.0	97.0	95.0	93.0	95.0
Total Key personnel	107.0	107.0	108.0	102.0	97.0	95.0	93.0	95.0
Indicator value	**97.2%**	**98.1%**	**93.5%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Licensee Comments: none

Alert & Notification System



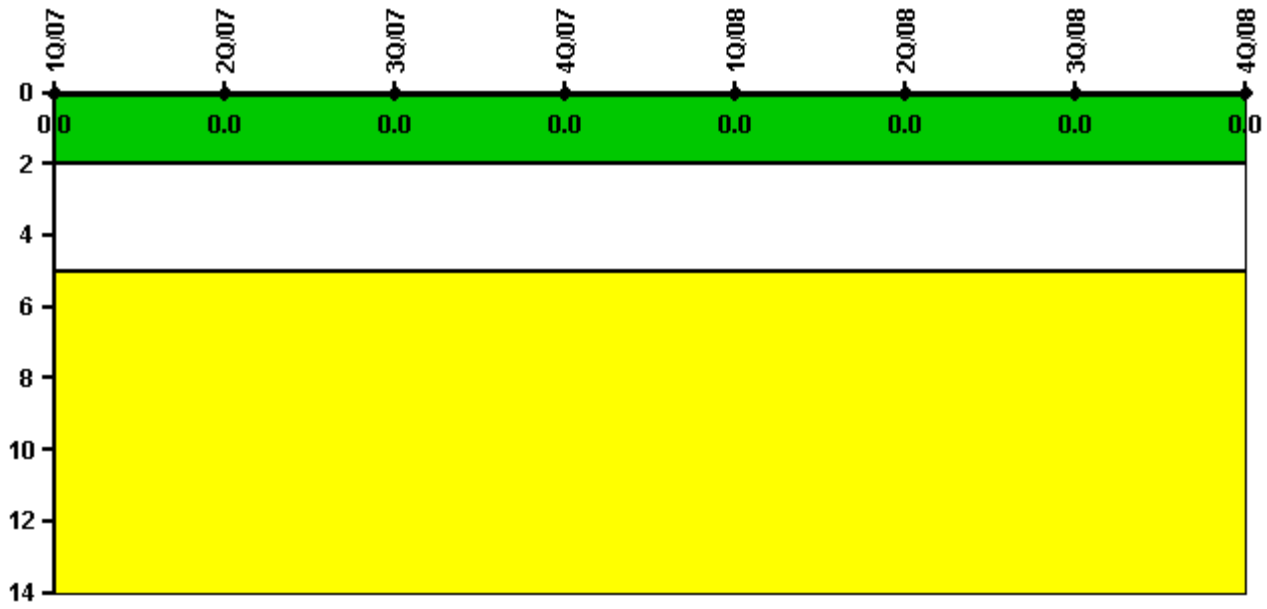
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08	4Q/08
Successful siren-tests	532	532	532	569	532	531	570	570
Total sirens-tests	532	532	532	570	532	532	570	570
Indicator value	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**99.9%**	**99.9%**	**100.0%**

Licensee Comments: none

Occupational Exposure Control Effectiveness



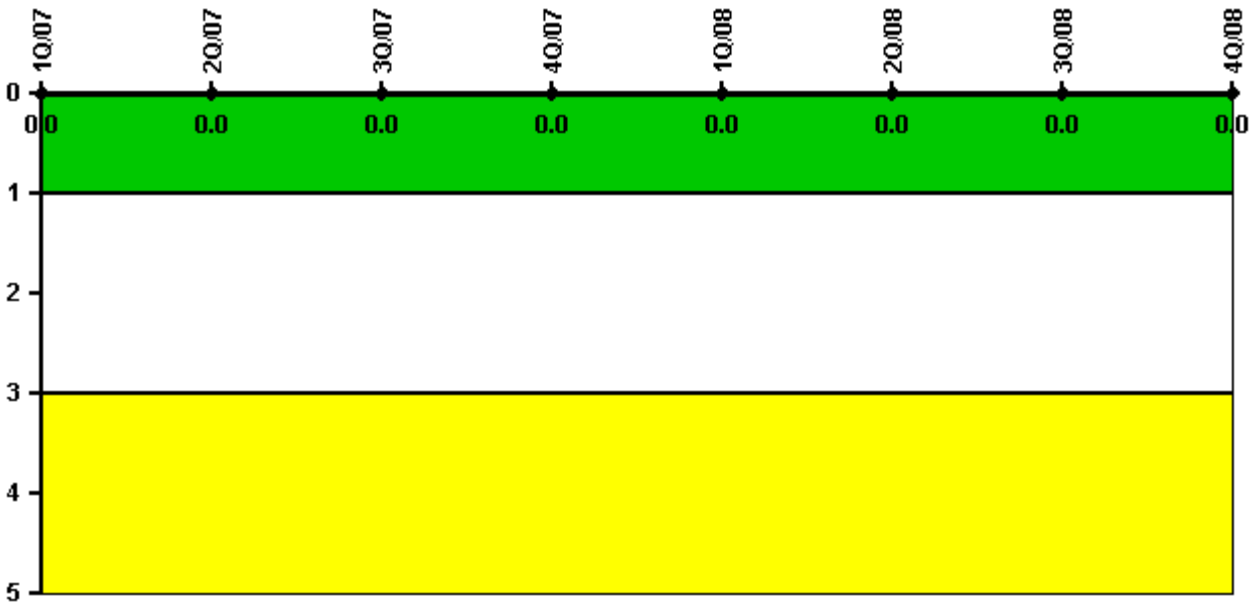
Thresholds: White > 2.0 Yellow > 5.0

Notes

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