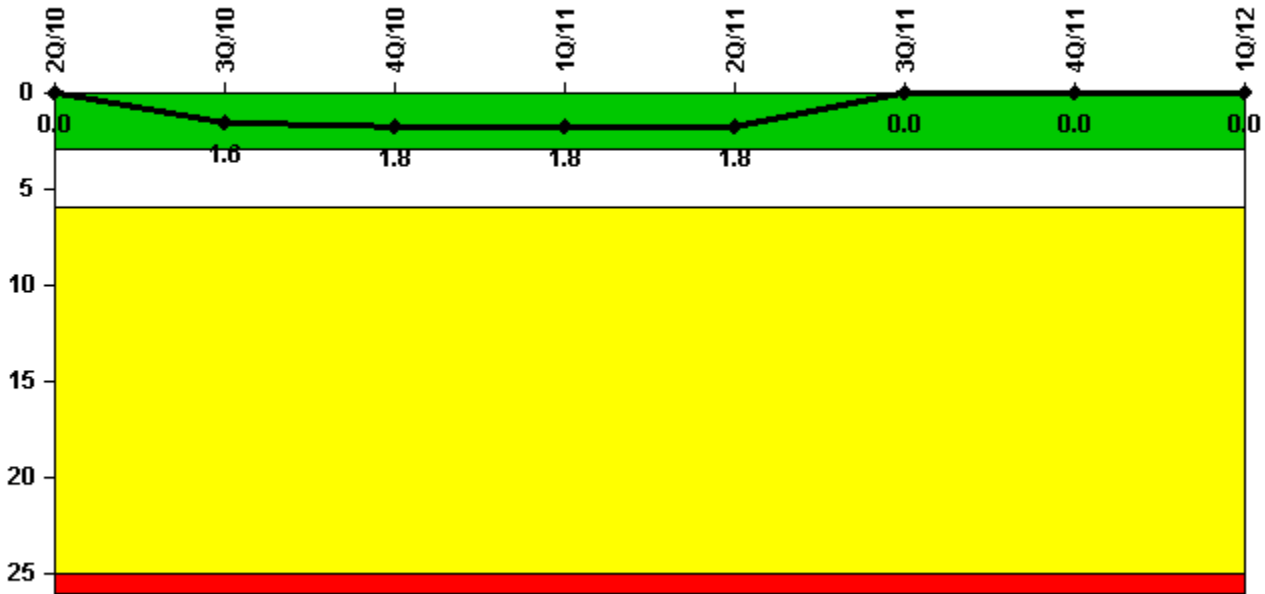


# Braidwood 1

## 1Q/2012 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



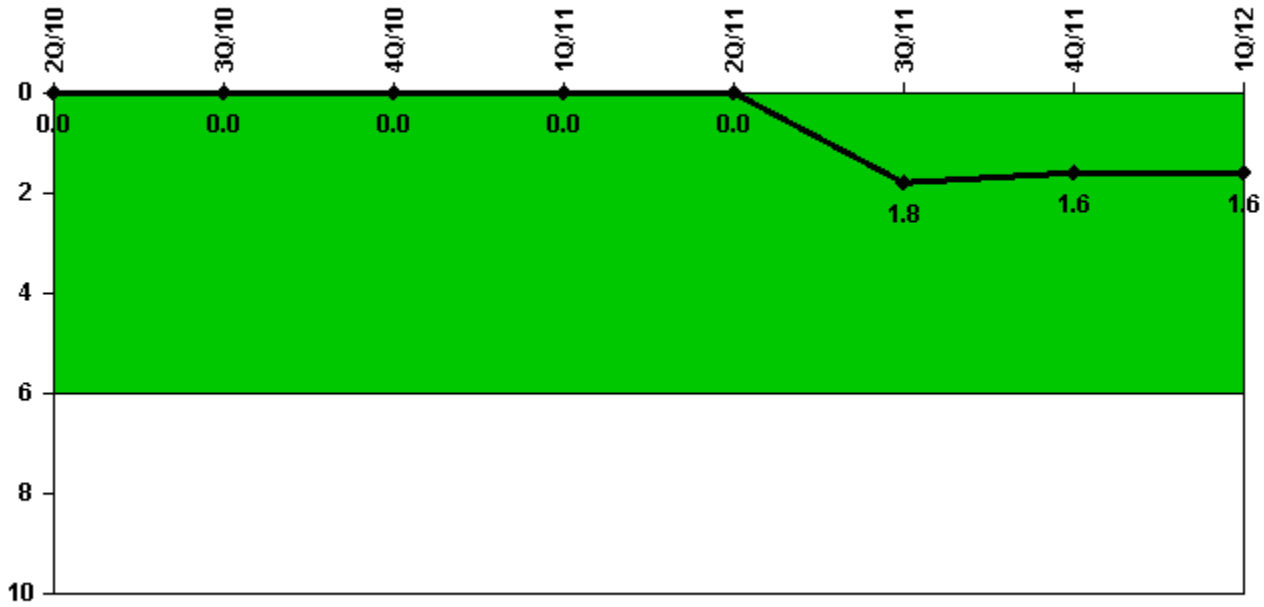
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Unplanned scrams	0	2.0	0	0	0	0	0	0
Critical hours	2184.0	2069.2	1433.2	2159.0	2184.0	2208.0	2209.0	2183.0
Indicator value	0	1.6	1.8	1.8	1.8	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	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Unplanned power changes	0	0	0	0	0	2.0	0	0
Critical hours	2184.0	2069.2	1433.2	2159.0	2184.0	2208.0	2209.0	2183.0
Indicator value	0	0	0	0	0	1.8	1.6	1.6

Licensee Comments:

3Q/11: 1 - 7/16/11 Power reduction for repairs to a pressurizer spray bypass valve; 2 - 09/02/2011 Power reduction due to throttle valve failure.

# Unplanned Scrams with Complications



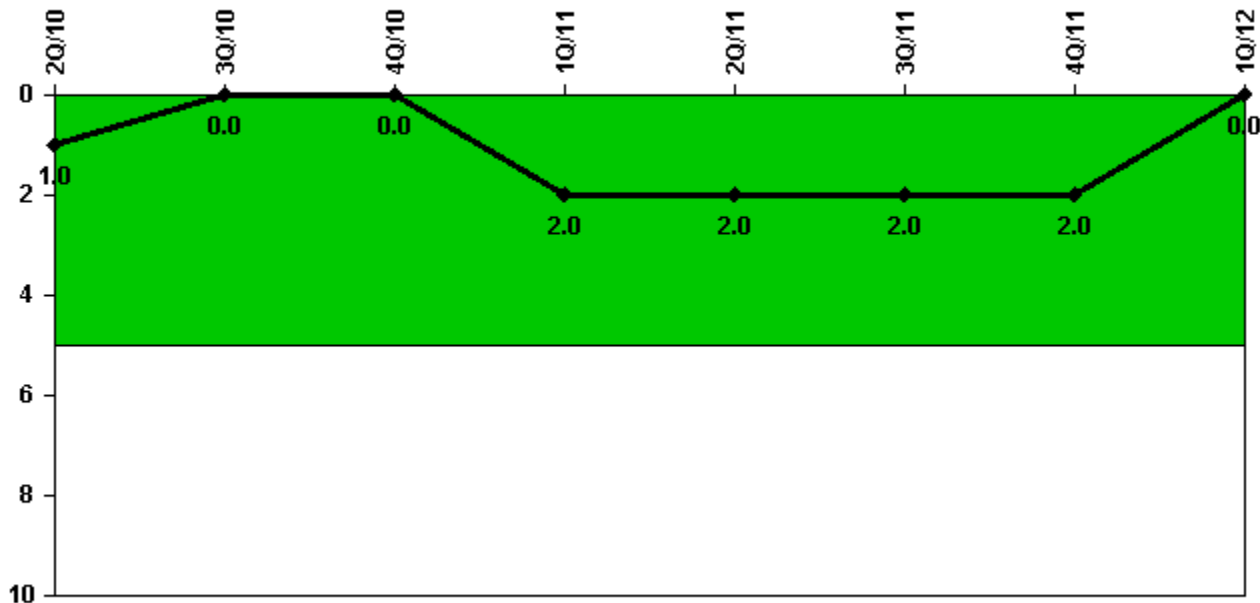
Thresholds: White > 1.0

## Notes

Unplanned Scrams with Complications	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
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)	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Safety System Functional Failures	0	0	0	2	0	0	0	0
Indicator value	1	0	0	2	2	2	2	0

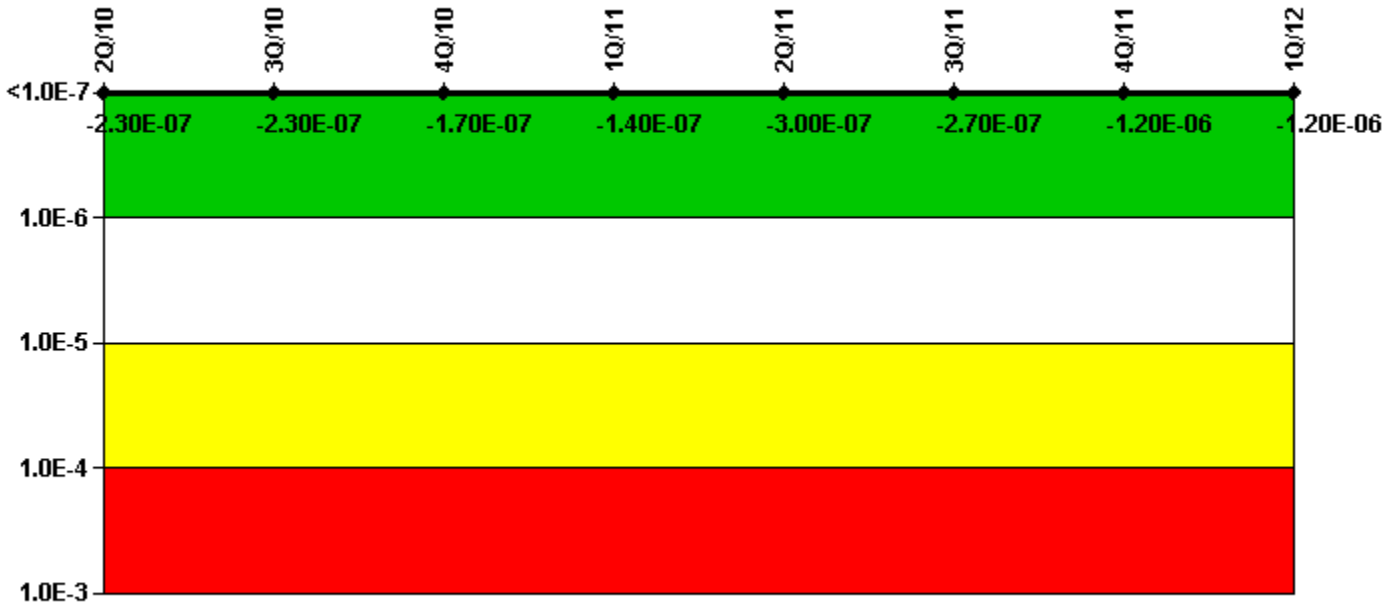
Licensee Comments:

2Q/11: Update: 10/7/11 LER 2011-003-00 withdrawn - no SSFF.

2Q/11: 1 SSFF - LER 2011-003-00, Drained Sections of Piping in Auxiliary Feedwater Suction Lines Result in system Inoperability Due to Inadequate Technical Evaluation.

1Q/11: 2 SSFFs - 1) LER 2010-006-00, Technical Specifications Allowed Outage Time Extension Request for Component Cooling System Contained Inaccurate Design Information that Significantly Impacted the Technical Justification; and 2) LER 2010-007-00, Potential Loss of Residual Heat Removal System Safety Function in Mode 4 When aligned for Shutdown Cooling due to Potential for Flashing or Voiding of Coolant During a Shutdown Loss of Coolant Accident.

# Mitigating Systems Performance Index, Emergency AC Power System



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

## Notes

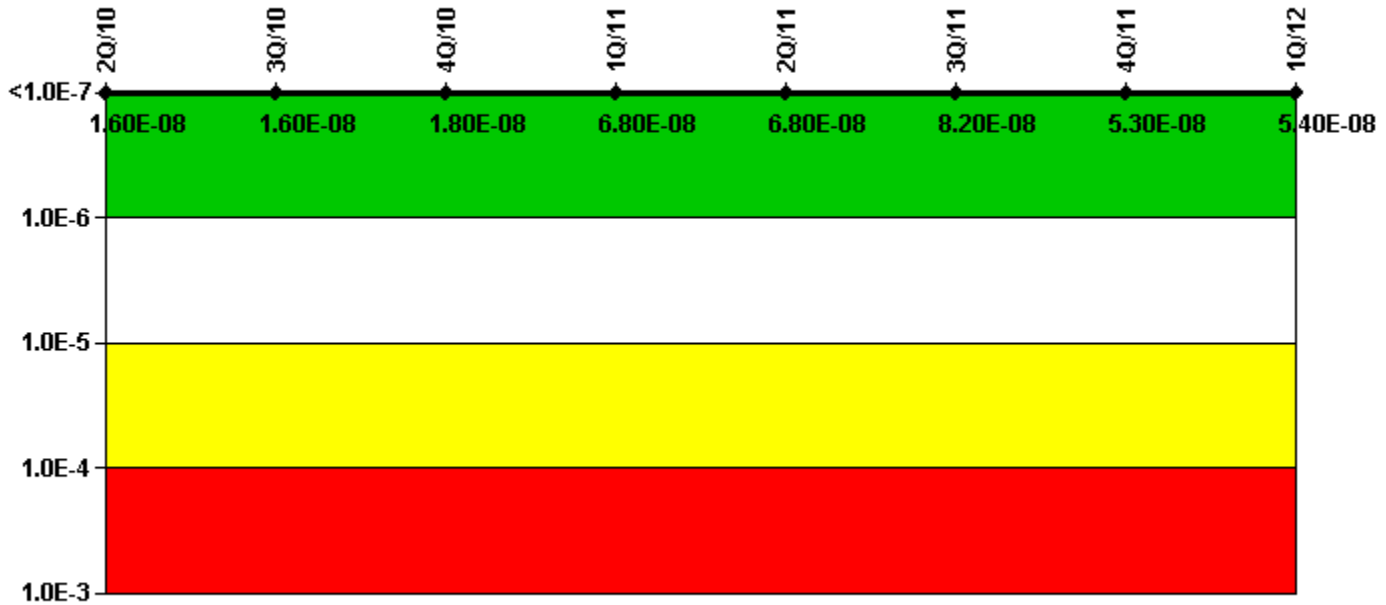
Mitigating Systems Performance Index, Emergency AC Power System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	1.95E-08	1.74E-08	1.66E-08	4.30E-08	3.72E-09	2.73E-08	8.19E-08	1.22E-07
URI ( $\Delta$ CDF)	-2.46E-07	-2.46E-07	-1.84E-07	-1.80E-07	-3.03E-07	-3.00E-07	-1.29E-06	-1.28E-06
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.30E-07	-2.30E-07	-1.70E-07	-1.40E-07	-3.00E-07	-2.70E-07	-1.20E-06	-1.20E-06

Licensee Comments:

1Q/12: Risk Cap Invoked. Changed PRA Parameter(s).

4Q/11: Risk Cap Invoked. Changed PRA Parameter(s). Braidwood PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study. Additionally, the RH8716 valves were removed from MSPI scope due to a sufficiently low Birnbaum value.

# 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/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	1.93E-08	1.95E-08	2.15E-08	7.18E-08	7.18E-08	8.53E-08	5.50E-08	5.61E-08
URI ( $\Delta$ CDF)	-3.38E-09	-3.38E-09	-3.36E-09	-3.35E-09	-3.36E-09	-3.33E-09	-2.27E-09	-2.25E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.60E-08	1.60E-08	1.80E-08	6.80E-08	6.80E-08	8.20E-08	5.30E-08	5.40E-08

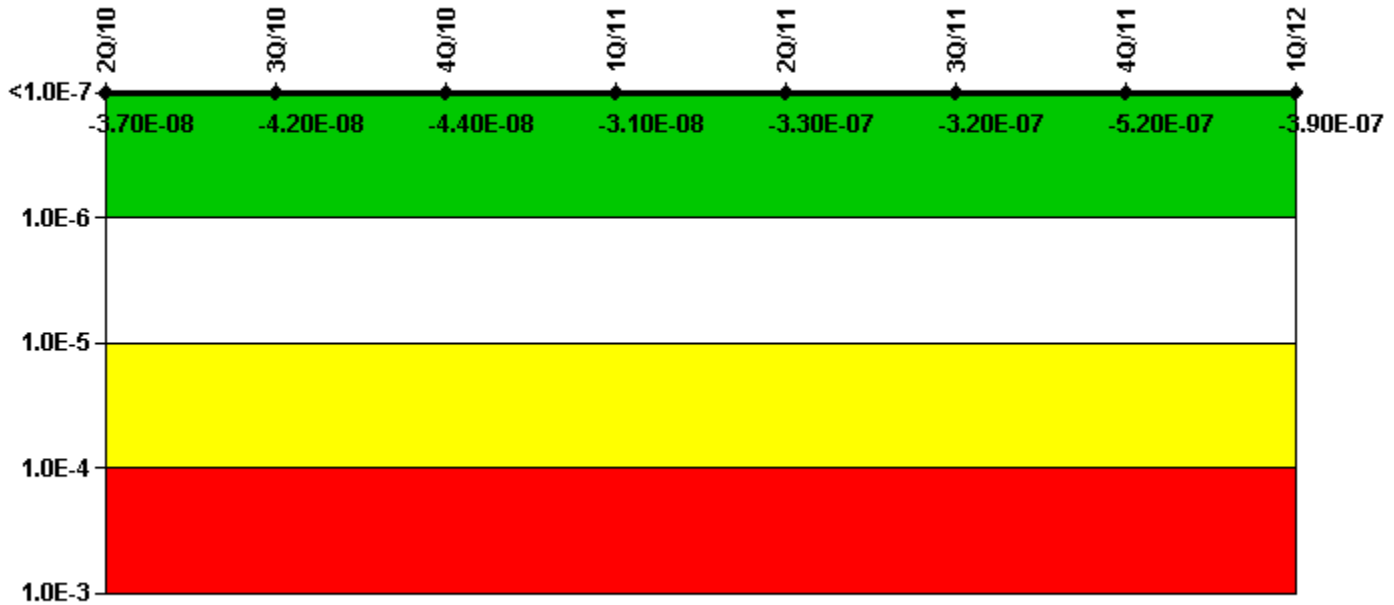
Licensee Comments:

1Q/12: Changed PRA Parameter(s).

4Q/11: Changed PRA Parameter(s). Braidwood PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study. Additionally, the RH8716 valves were removed from MSPI scope due to a sufficiently low Birnbaum value.

1Q/11: Unit 1 revised unplanned unavailability on 1A safety injection pump from 82.7 to 77.5 hours, based on correction to LCO entry time.

# Mitigating Systems Performance Index, Heat Removal System



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

## Notes

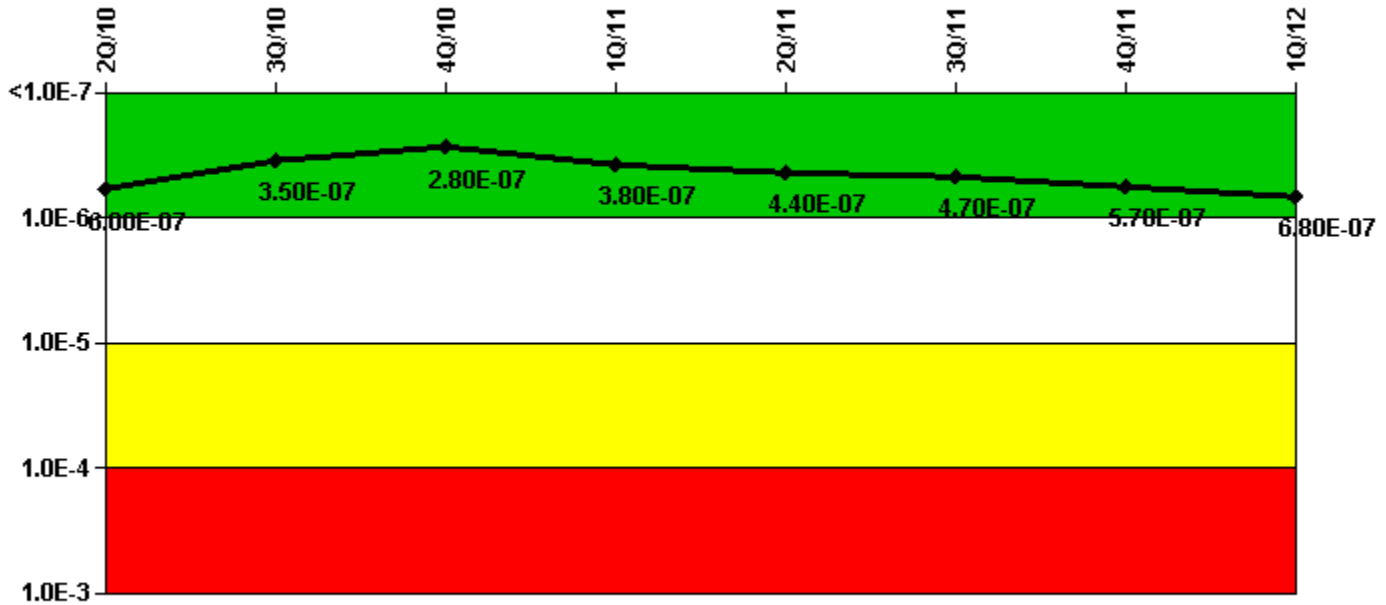
Mitigating Systems Performance Index, Heat Removal System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	-5.05E-08	-5.00E-08	-4.94E-08	-3.56E-08	-4.92E-08	-4.92E-08	1.43E-08	1.36E-07
URI ( $\Delta$ CDF)	1.36E-08	7.92E-09	5.20E-09	5.07E-09	-2.80E-07	-2.74E-07	-5.30E-07	-5.25E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.70E-08	-4.20E-08	-4.40E-08	-3.10E-08	-3.30E-07	-3.20E-07	-5.20E-07	-3.90E-07

Licensee Comments:

1Q/12: Changed PRA Parameter(s).

4Q/11: Changed PRA Parameter(s). Braidwood PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study. Additionally, the RH8716 valves were remove from MSPI scope due to a sufficiently low Birnbaum value.

# 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	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	2.89E-07	3.51E-08	-2.46E-08	6.52E-08	1.24E-07	1.52E-07	1.32E-07	2.35E-07
URI ( $\Delta$ CDF)	3.15E-07	3.19E-07	3.09E-07	3.15E-07	3.17E-07	3.19E-07	4.42E-07	4.47E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	6.00E-07	3.50E-07	2.80E-07	3.80E-07	4.40E-07	4.70E-07	5.70E-07	6.80E-07

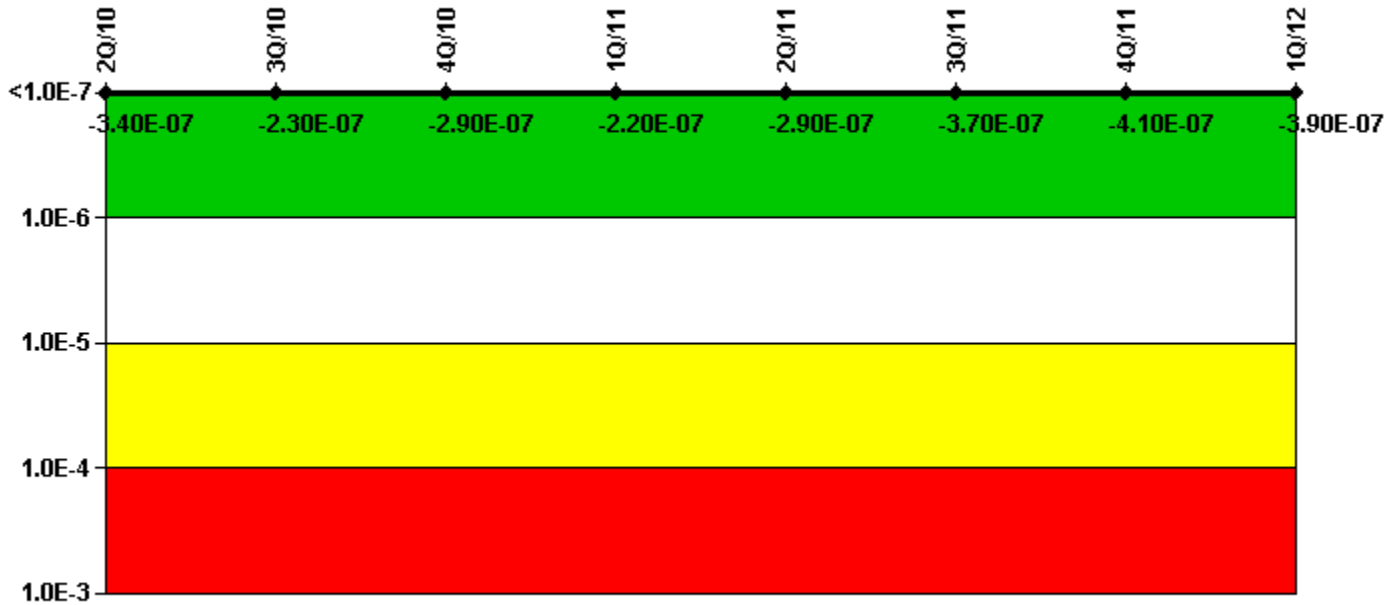
Licensee Comments:

1Q/12: Changed PRA Parameter(s).

4Q/11: Changed PRA Parameter(s). Braidwood PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study. Additionally, the RH8716 valves were remove from MSPI scope due to a sufficiently low Birnbaum value.



# Mitigating Systems Performance Index, Cooling Water Systems



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

## Notes

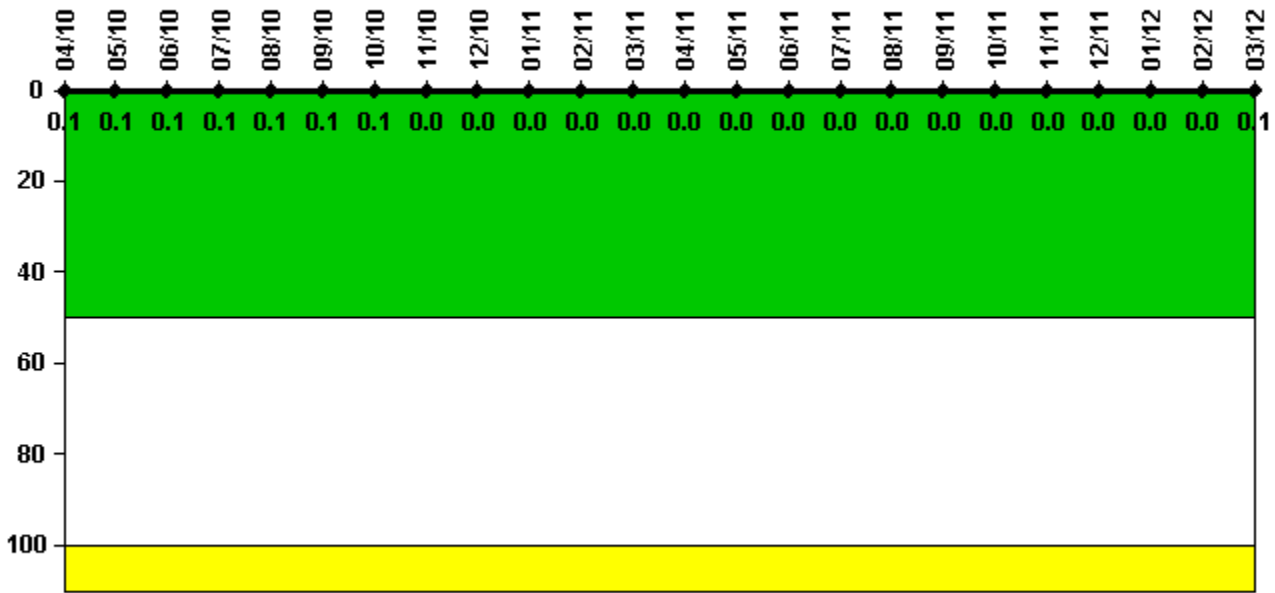
Mitigating Systems Performance Index, Cooling Water Systems	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	2.41E-07	3.53E-07	3.02E-07	3.69E-07	2.97E-07	2.20E-07	1.87E-07	1.98E-07
URI ( $\Delta$ CDF)	-5.81E-07	-5.88E-07	-5.87E-07	-5.87E-07	-5.90E-07	-5.92E-07	-5.93E-07	-5.88E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.40E-07	-2.30E-07	-2.90E-07	-2.20E-07	-2.90E-07	-3.70E-07	-4.10E-07	-3.90E-07

Licensee Comments:

1Q/12: Changed PRA Parameter(s).

4Q/11: Changed PRA Parameter(s). Braidwood PRA Model Revision No: 6F approved September 29, 2011, revised Unit 1 and Unit 2 PRA inputs due to a change in the plant operations which calls for preemptively splitting CC trains Post-LOCA and the addition of a revised internal flooding study. Additionally, the RH8716 valves were remove from MSPI scope due to a sufficiently low Birnbaum value.

# Reactor Coolant System Activity



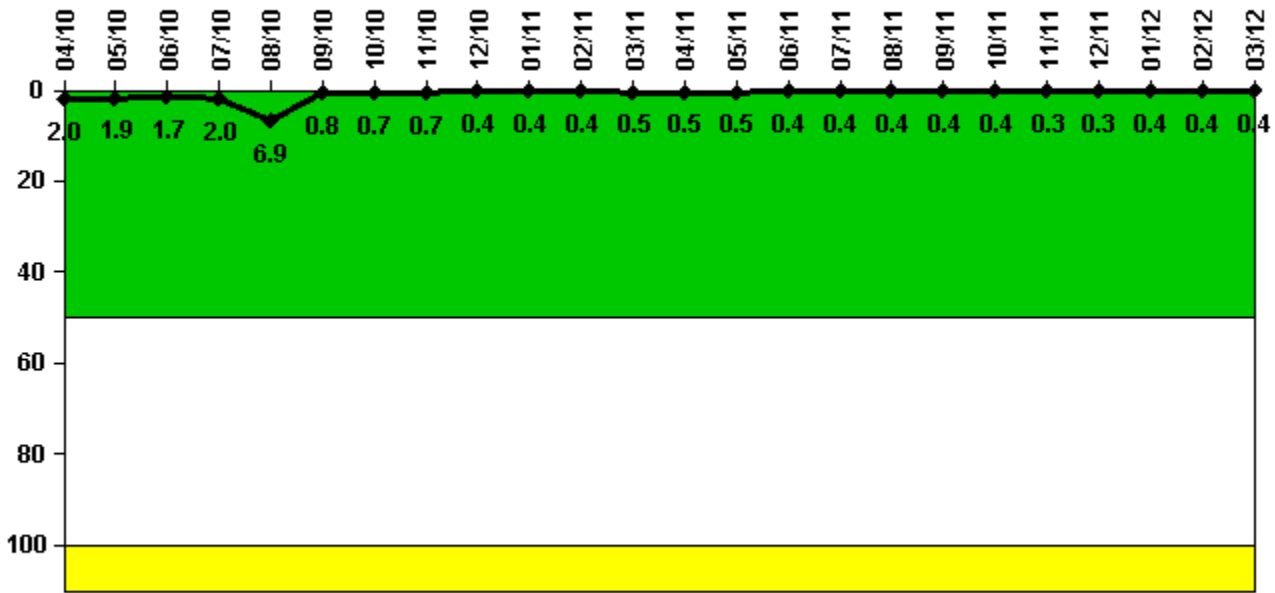
Thresholds: White > 50.0 Yellow > 100.0

## Notes

<b>Reactor Coolant System Activity</b>	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11
Maximum activity	0.000694	0.000738	0.000750	0.000768	0.000870	0.000829	0.000784	0.000265	0.000268	0.000288	0.000292	0.000325
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
<b>Indicator value</b>	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0
<b>Reactor Coolant System Activity</b>	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12
Maximum activity	0.000333	0.000345	0.000345	0.000372	0.000391	0.000407	0.000415	0.000478	0.000473	0.000474	0.000483	0.000505
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
<b>Indicator value</b>	0	0	0	0	0	0	0	0	0	0	0	0.1

Licensee Comments: none

## Reactor Coolant System Leakage



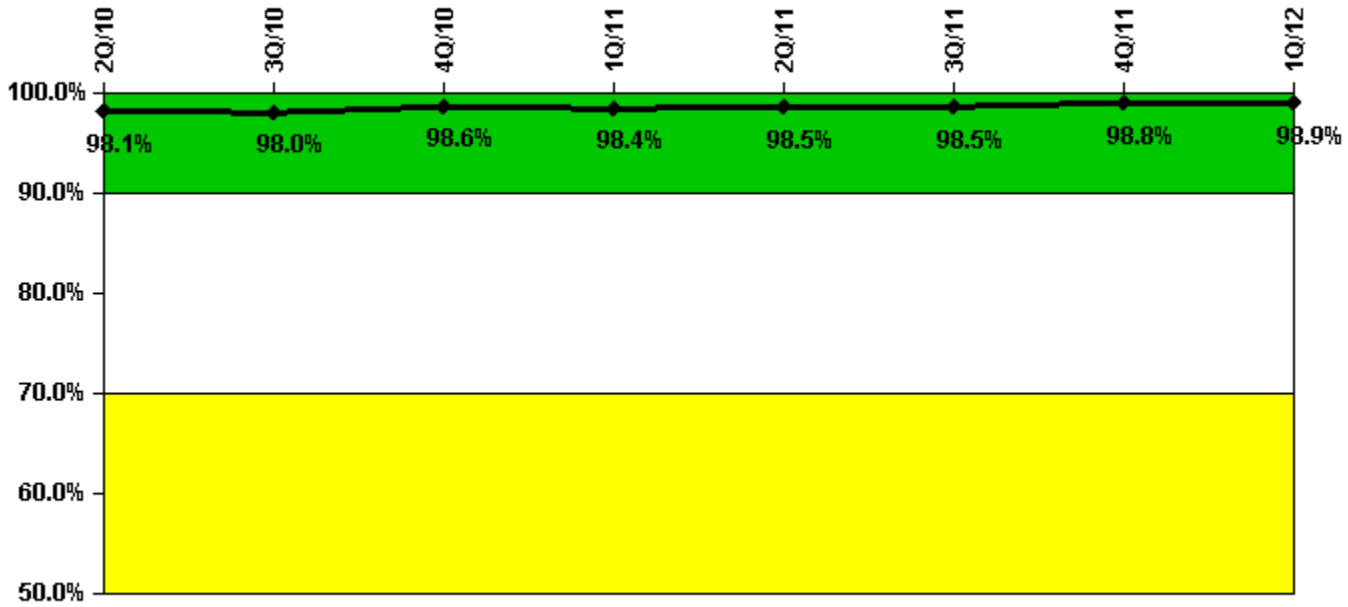
Thresholds: White > 50.0 Yellow > 100.0

### Notes

Reactor Coolant System Leakage	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11
Maximum leakage	0.201	0.194	0.168	0.196	0.688	0.078	0.069	0.066	0.042	0.039	0.041	0.047
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	2.0	1.9	1.7	2.0	6.9	0.8	0.7	0.7	0.4	0.4	0.4	0.5
Reactor Coolant System Leakage	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11	1/12	2/12	3/12
Maximum leakage	0.048	0.045	0.042	0.043	0.043	0.037	0.039	0.034	0.033	0.038	0.040	0.038
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	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4

Licensee Comments: none

## Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

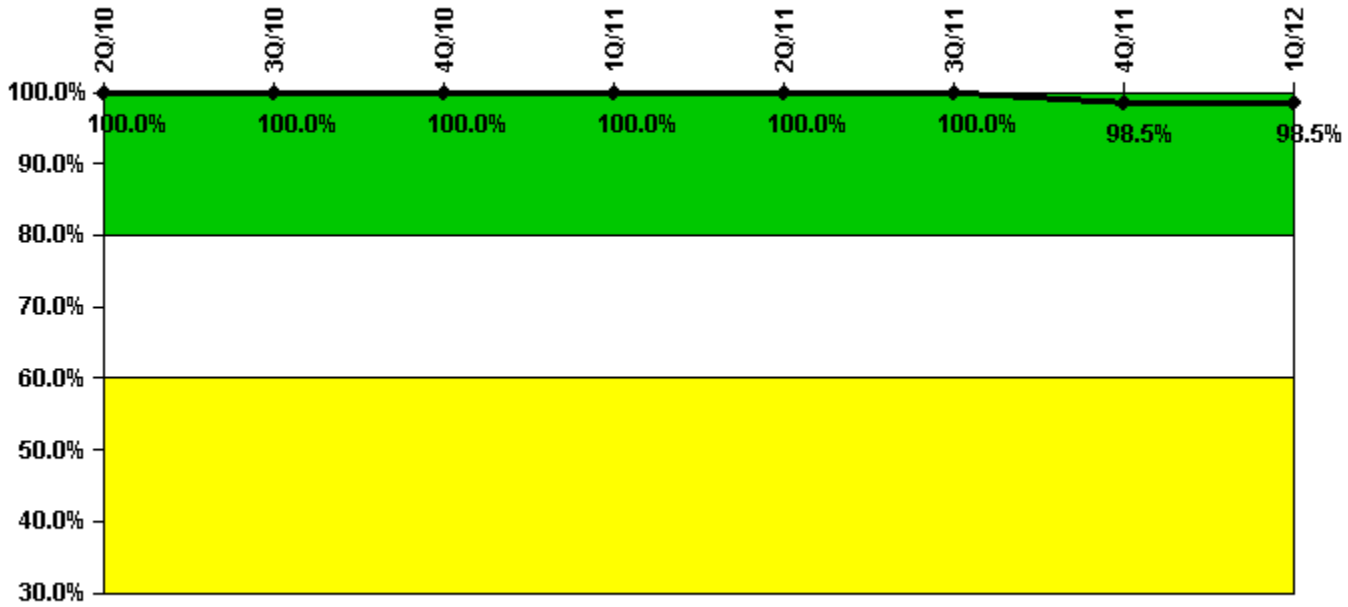
### Notes

Drill/Exercise Performance	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Successful opportunities	27.0	55.0	114.0	39.0	16.0	56.0	78.0	67.0
Total opportunities	28.0	56.0	114.0	40.0	16.0	56.0	78.0	69.0
Indicator value	98.1%	98.0%	98.6%	98.4%	98.5%	98.5%	98.8%	98.9%

Licensee Comments:

1Q/11: March data revised to reflect a failed DEP for an actual event for late declaraton.

## ERO Drill Participation



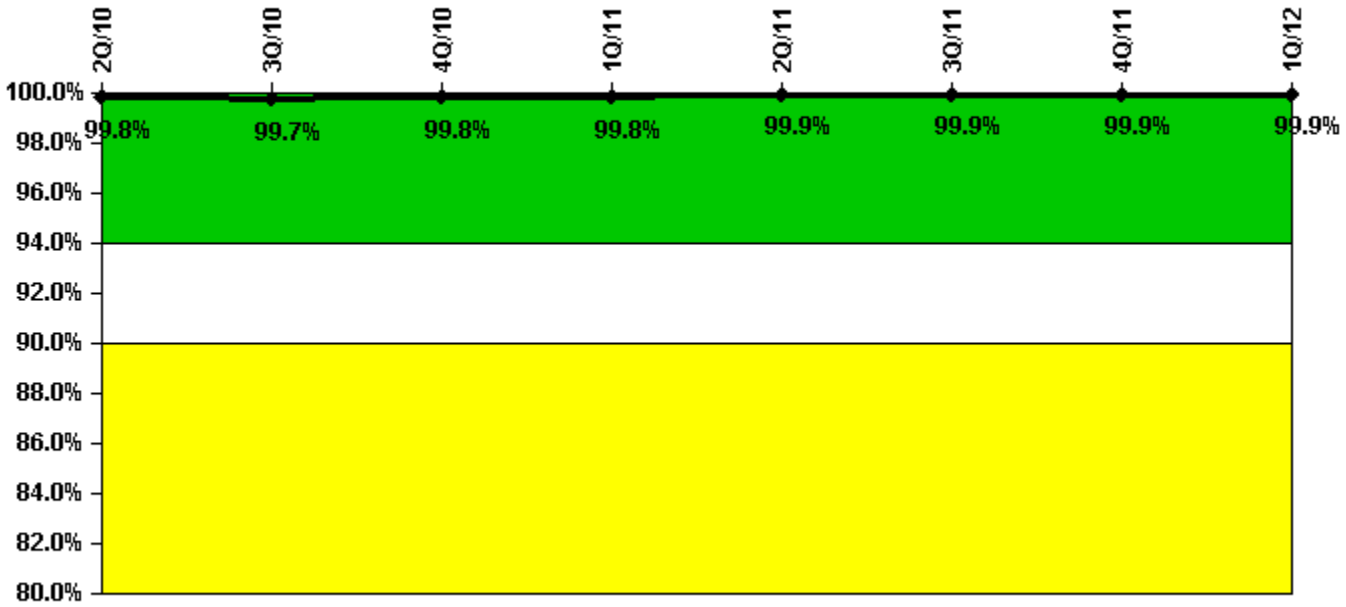
Thresholds: White < 80.0% Yellow < 60.0%

### Notes

ERO Drill Participation	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Participating Key personnel	70.0	72.0	67.0	64.0	62.0	65.0	65.0	67.0
Total Key personnel	70.0	72.0	67.0	64.0	62.0	65.0	66.0	68.0
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.5%	98.5%

Licensee Comments: none

# Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

## Notes

Alert & Notification System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Successful siren-tests	3058	3116	3119	3068	3065	3070	3071	3117
Total sirens-tests	3072	3120	3120	3072	3072	3072	3072	3120
Indicator value	99.8%	99.7%	99.8%	99.8%	99.9%	99.9%	99.9%	99.9%

Licensee Comments: none

# Occupational Exposure Control Effectiveness



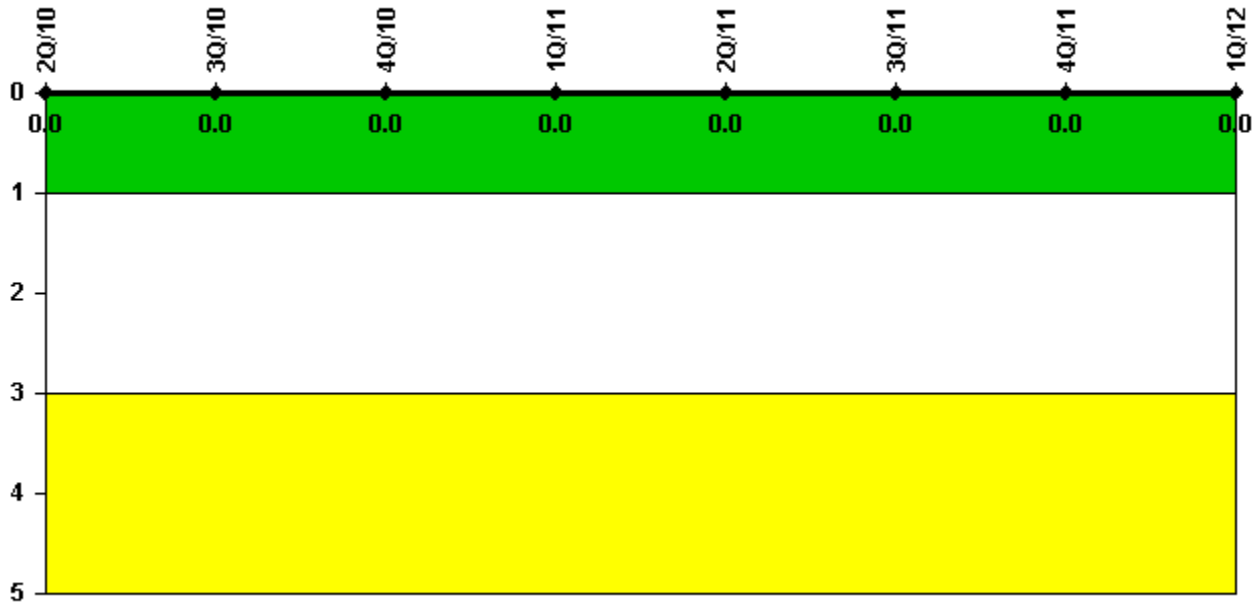
**Thresholds: White > 2.0 Yellow > 5.0**

## Notes

Occupational Exposure Control Effectiveness	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
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
<b>Indicator value</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Licensee Comments: none

# RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

## Notes

RETS/ODCM Radiological Effluent	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
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.