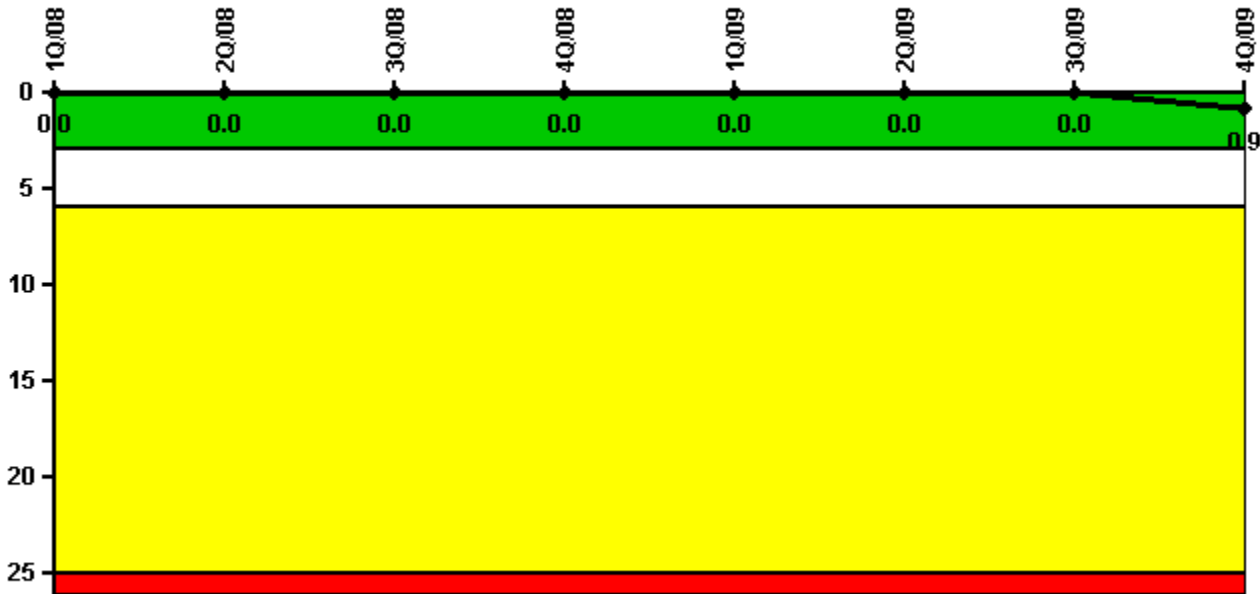


Waterford 3

4Q/2009 Performance Indicators

Licensee's General Comments: none

Unplanned Scrams per 7000 Critical Hrs



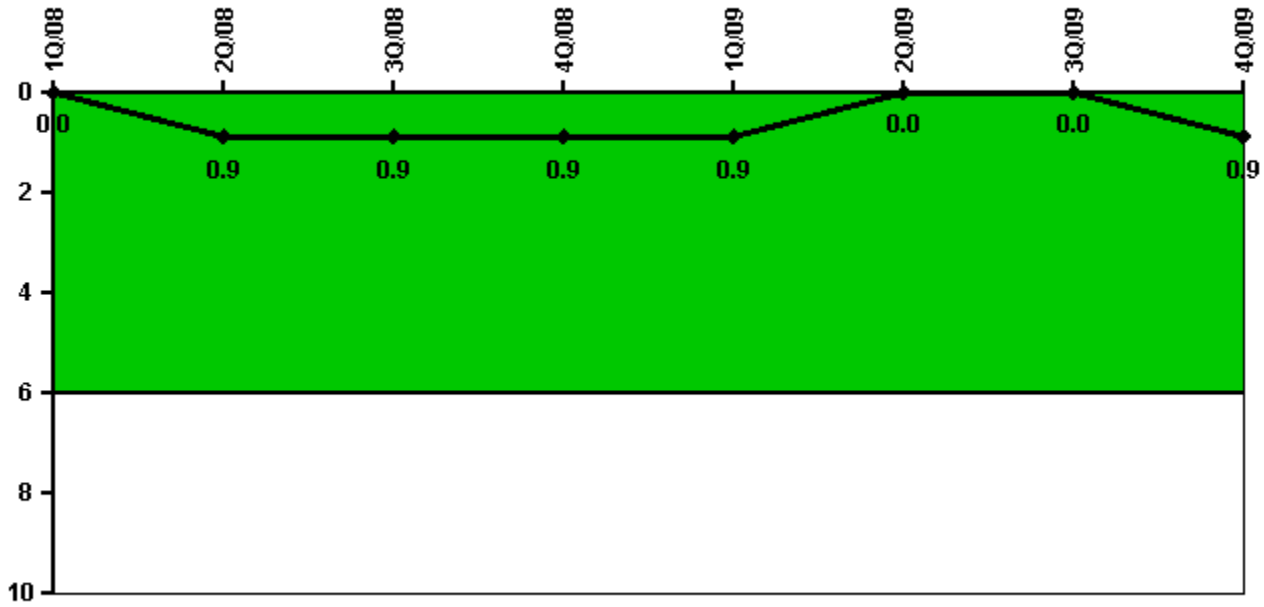
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Unplanned scrams	0	0	0	0	0	0	0	1.0
Critical hours	2183.0	1349.8	1991.0	2209.0	2159.0	2184.0	2208.0	1162.1
Indicator value	0	0	0	0	0	0	0	0.9

Licensee Comments: none

Unplanned Power Changes per 7000 Critical Hrs



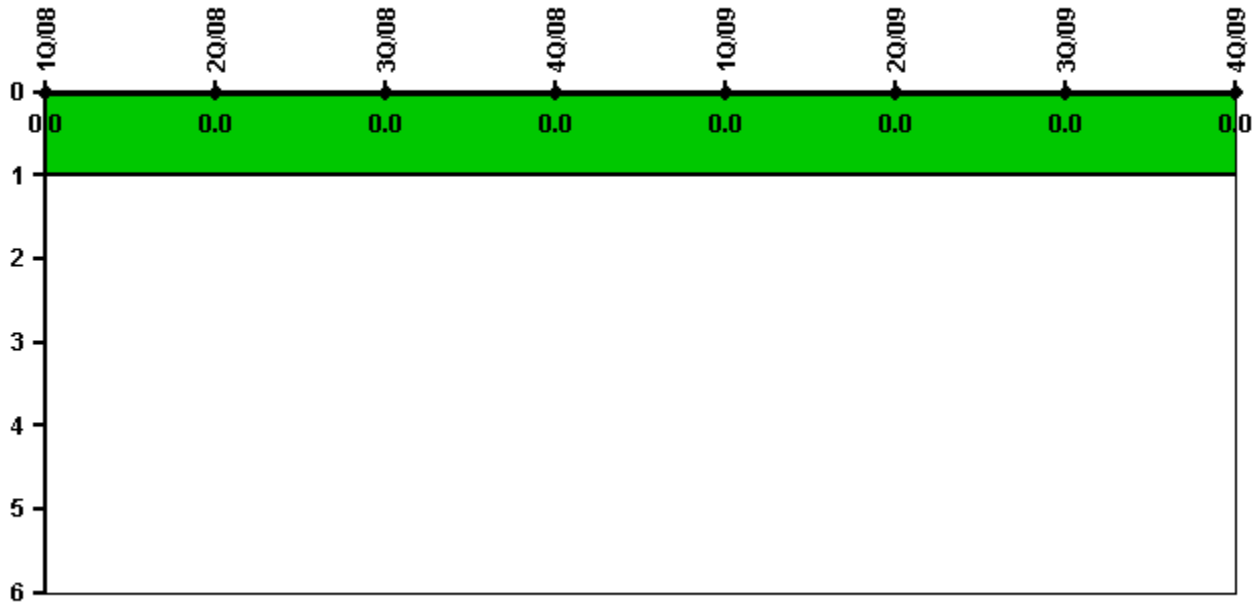
Thresholds: White > 6.0

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	0	1.0	0	0	0	0	0	1.0
Critical hours	2183.0	1349.8	1991.0	2209.0	2159.0	2184.0	2208.0	1162.1
Indicator value	0	0.9	0.9	0.9	0.9	0	0	0.9

Licensee Comments: none

Unplanned Scrams with Complications



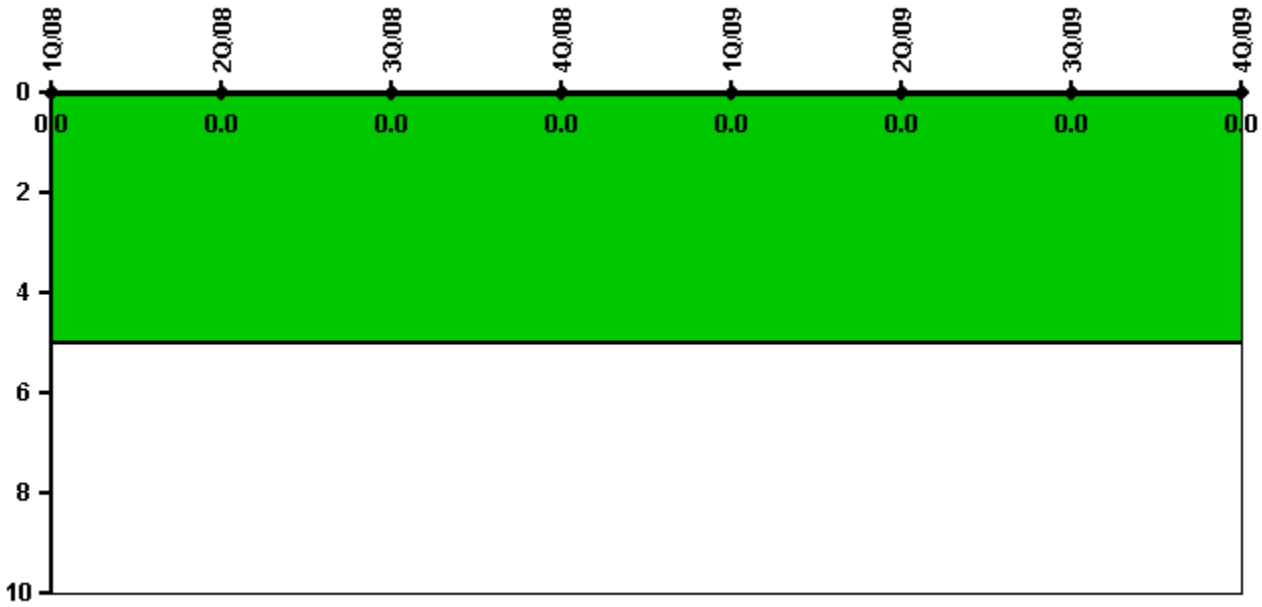
Thresholds: White > 1.0

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 (PWR)



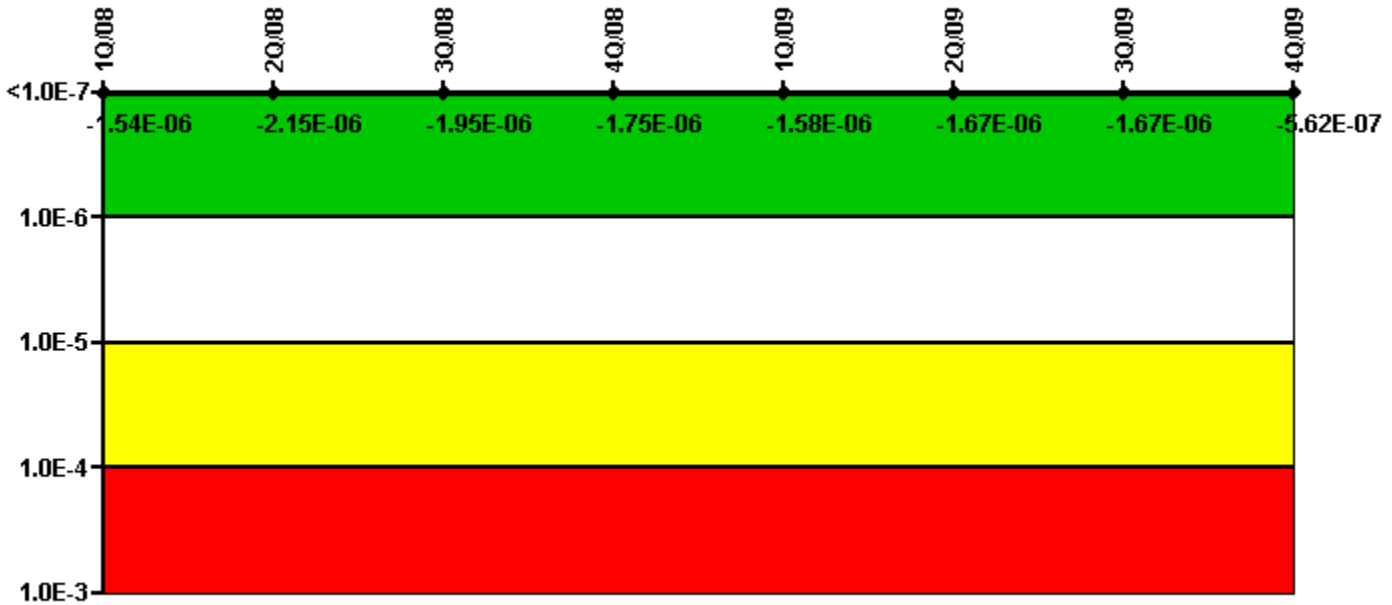
Thresholds: White > 5.0

Notes

Safety System Functional Failures (PWR)	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

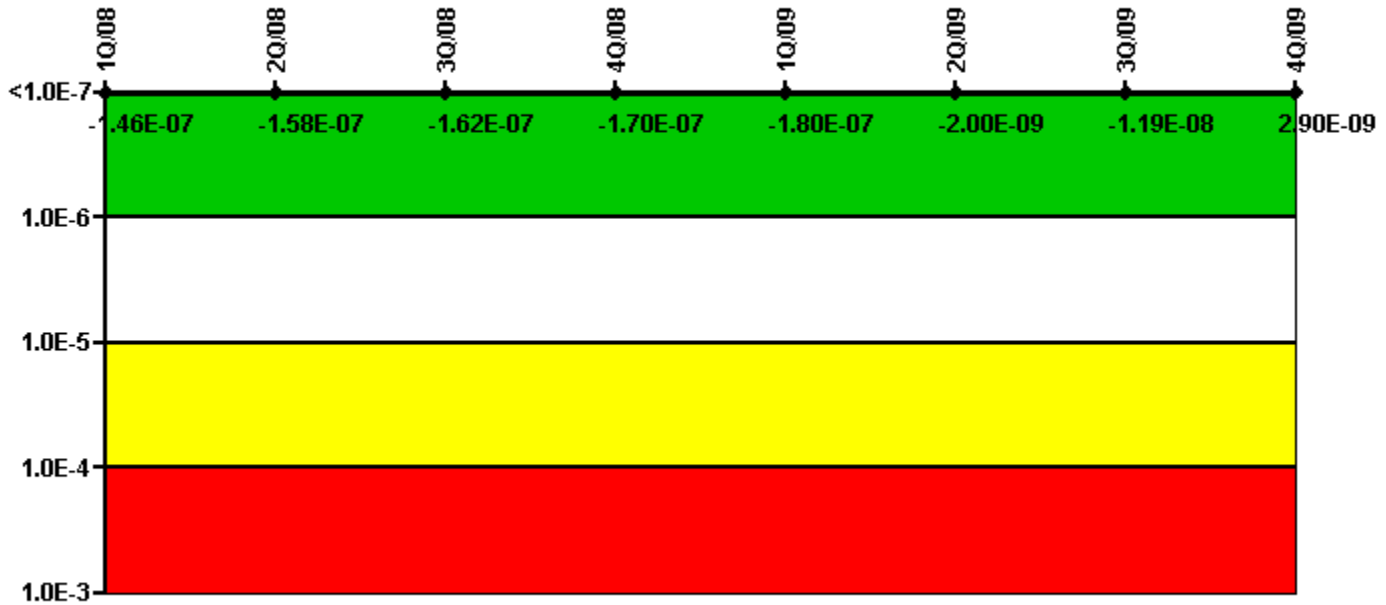
Notes

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 (Δ CDF)	-1.40E-07	-1.50E-07	-1.50E-07	-1.50E-07	2.40E-08	3.30E-08	3.30E-08	4.80E-08
URI (Δ CDF)	-1.40E-06	-2.00E-06	-1.80E-06	-1.60E-06	-1.60E-06	-1.70E-06	-1.70E-06	-6.10E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.54E-06	-2.15E-06	-1.95E-06	-1.75E-06	-1.58E-06	-1.67E-06	-1.67E-06	-5.62E-07

Licensee Comments:

4Q/09: Changed PRA Parameter(s). The Waterford 3 MSPI Basis Document was revised to reflect changes from a PRA model update. The update included improvements in the technical adequacy of the model and consistency with Regulatory Guide 1.200 as well as changes to ensure consistency with the as-built, as-operated plant. This PRA model update was also a periodic update to incorporate updated (plant-specific as appropriate) initiating events and component failure data. The failure modes for the Emergency Diesel Generators are consistent with NUREG/CR-6928.

Mitigating Systems Performance Index, High Pressure Injection System



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

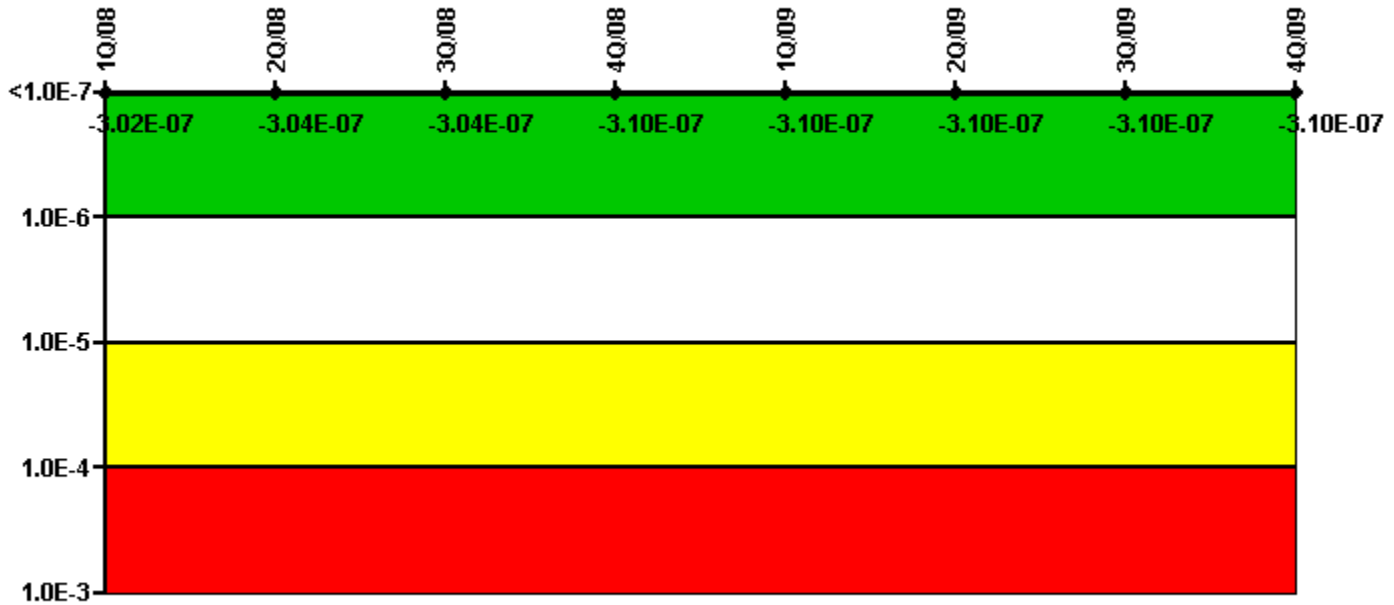
Notes

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 (Δ CDF)	-6.30E-09	-8.00E-09	-1.20E-08	-2.00E-08	-2.00E-08	-1.40E-08	-1.70E-08	-8.10E-09
URI (Δ CDF)	-1.40E-07	-1.50E-07	-1.50E-07	-1.50E-07	-1.60E-07	1.20E-08	5.10E-09	1.10E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.46E-07	-1.58E-07	-1.62E-07	-1.70E-07	-1.80E-07	-2.00E-09	-1.19E-08	2.90E-09

Licensee Comments:

4Q/09: Changed PRA Parameter(s). The Waterford 3 MSPI Basis Document was revised to reflect changes from a PRA model update. The update included improvements in the technical adequacy of the model and consistency with Regulatory Guide 1.200 as well as changes to ensure consistency with the as-built, as-operated plant. This PRA model update was also a periodic update to incorporate updated (plant-specific as appropriate) initiating events and component failure data.

Mitigating Systems Performance Index, Heat Removal System



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

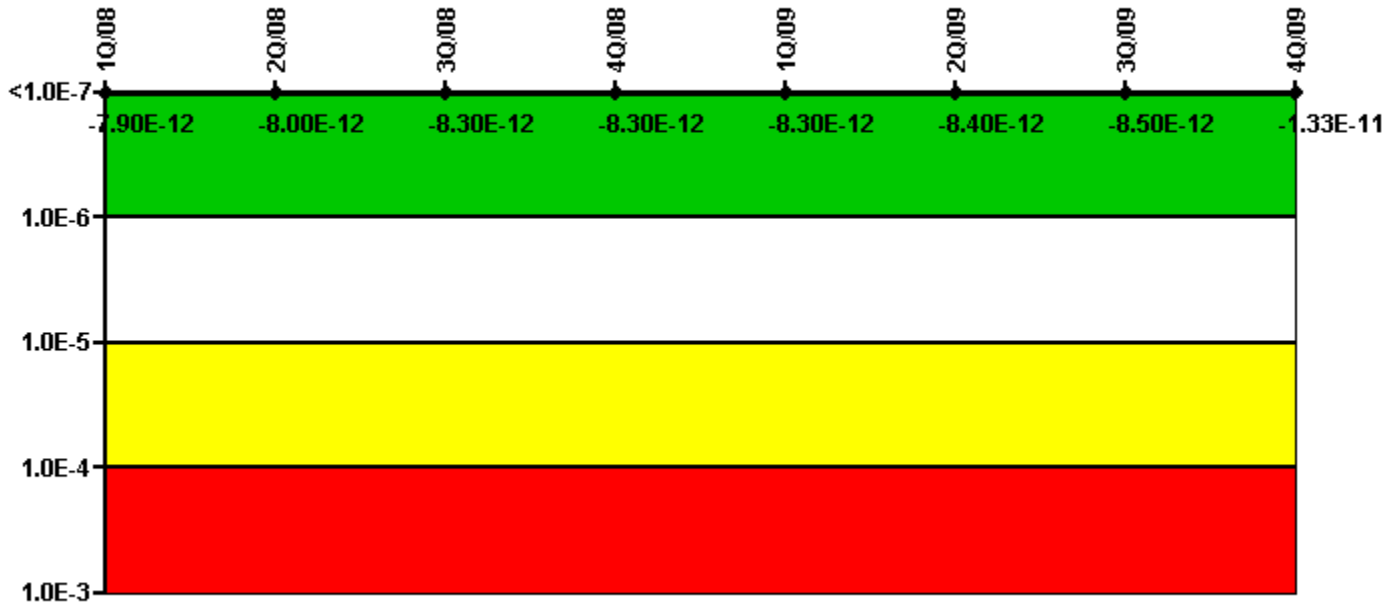
Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI (Δ CDF)	-2.20E-08	-2.40E-08	-2.40E-08	-3.00E-08	-3.00E-08	-3.00E-08	-3.00E-08	-1.00E-08
URI (Δ CDF)	-2.80E-07	-2.80E-07	-2.80E-07	-2.80E-07	-2.80E-07	-2.80E-07	-2.80E-07	-3.00E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.02E-07	-3.04E-07	-3.04E-07	-3.10E-07	-3.10E-07	-3.10E-07	-3.10E-07	-3.10E-07

Licensee Comments:

4Q/09: Changed PRA Parameter(s). The Waterford 3 MSPI Basis Document was revised to reflect changes from a PRA model update. The update included improvements in the technical adequacy of the model and consistency with Regulatory Guide 1.200 as well as changes to ensure consistency with the as-built, as-operated plant. This PRA model update was also a periodic update to incorporate updated (plant-specific as appropriate) initiating events and component failure data.

Mitigating Systems Performance Index, Residual Heat Removal System



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

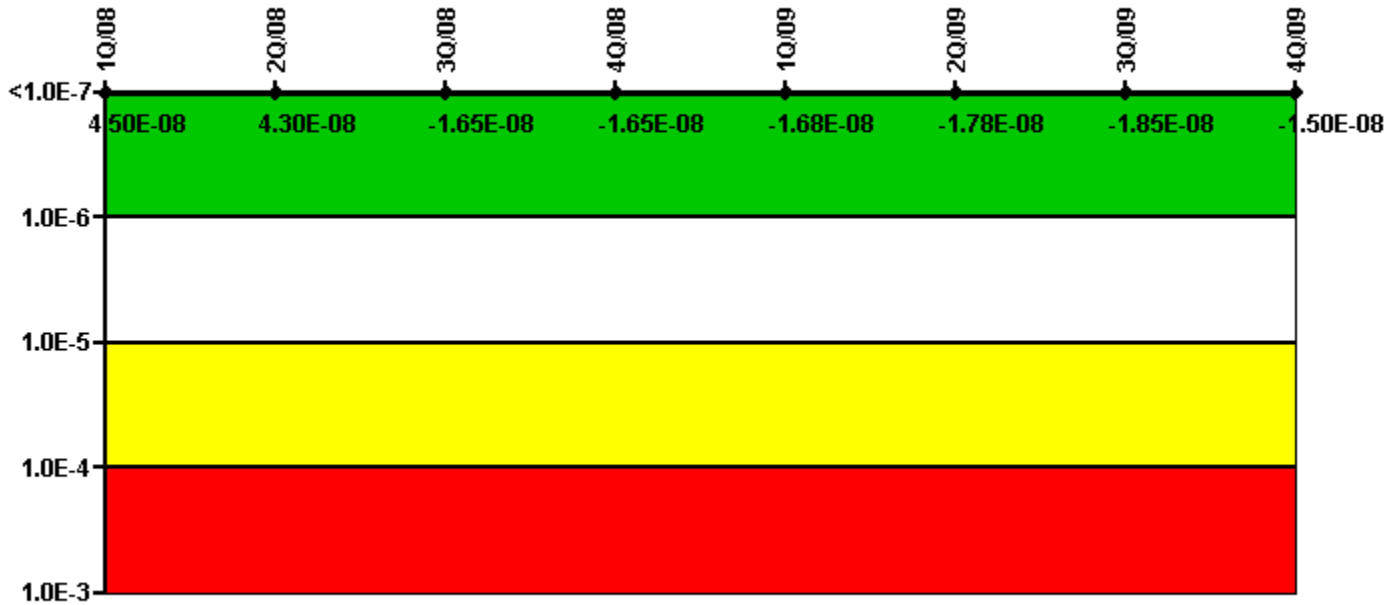
Notes

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 (Δ CDF)	-2.80E-12	-2.80E-12	-2.80E-12	-2.80E-12	-2.80E-12	-2.80E-12	-3.00E-12	-1.30E-12
URI (Δ CDF)	-5.10E-12	-5.20E-12	-5.50E-12	-5.50E-12	-5.50E-12	-5.60E-12	-5.50E-12	-1.20E-11
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-7.90E-12	-8.00E-12	-8.30E-12	-8.30E-12	-8.30E-12	-8.40E-12	-8.50E-12	-1.33E-11

Licensee Comments:

4Q/09: Changed PRA Parameter(s). The Waterford 3 MSPI Basis Document was revised to reflect changes from a PRA model update. The update included improvements in the technical adequacy of the model and consistency with Regulatory Guide 1.200 as well as changes to ensure consistency with the as-built, as-operated plant. This PRA model update was also a periodic update to incorporate updated (plant-specific as appropriate) initiating events and component failure data.

Mitigating Systems Performance Index, Cooling Water Systems



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

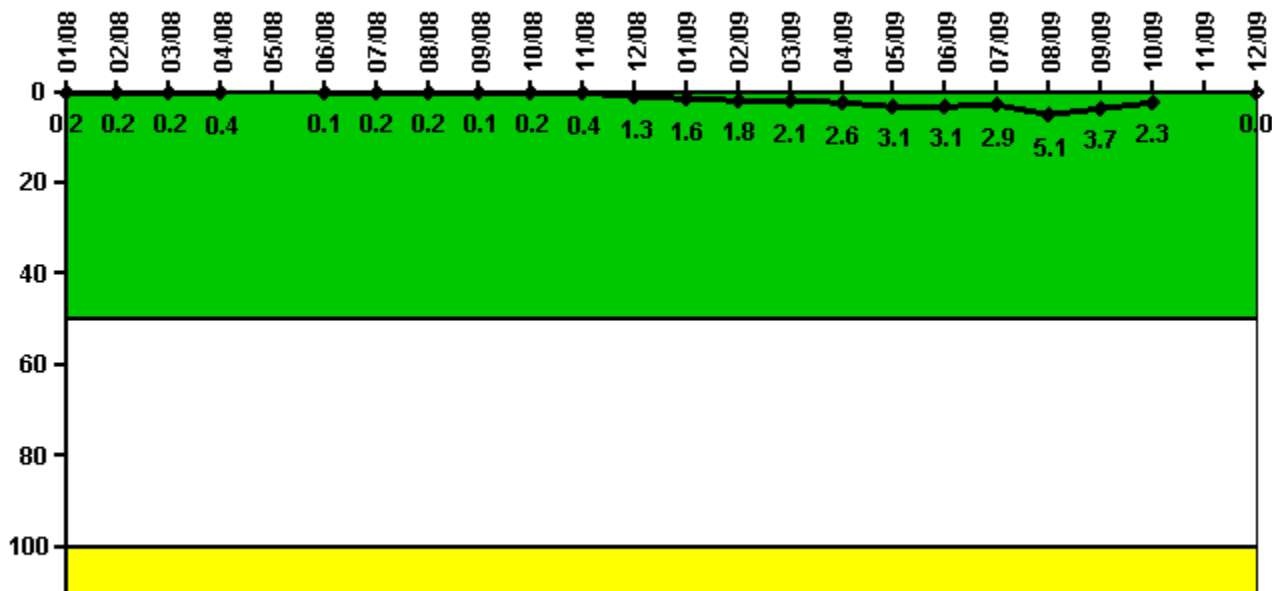
Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
UAI (Δ CDF)	6.50E-08	6.40E-08	2.50E-09	2.50E-09	3.20E-09	3.20E-09	1.50E-09	2.00E-09
URI (Δ CDF)	-2.00E-08	-2.10E-08	-1.90E-08	-1.90E-08	-2.00E-08	-2.10E-08	-2.00E-08	-1.70E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	4.50E-08	4.30E-08	-1.65E-08	-1.65E-08	-1.68E-08	-1.78E-08	-1.85E-08	-1.50E-08

Licensee Comments:

4Q/09: Changed PRA Parameter(s). The Waterford 3 MSPI Basis Document was revised to reflect changes from a PRA model update. The update included improvements in the technical adequacy of the model and consistency with Regulatory Guide 1.200 as well as changes to ensure consistency with the as-built, as-operated plant. This PRA model update was also a periodic update to incorporate updated (plant-specific as appropriate) initiating events and component failure data.

Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

Notes

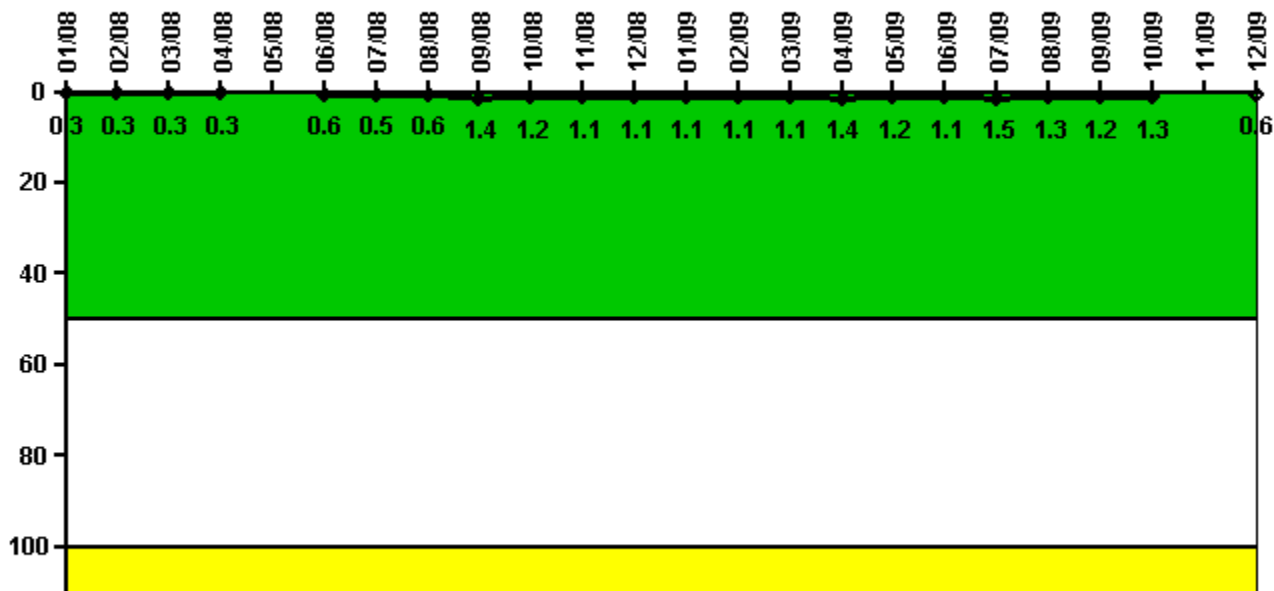
Reactor Coolant System Activity	1/08	2/08	3/08	4/08	5/08	6/08	7/08	8/08	9/08	10/08	11/08	12/08
Maximum activity	0.002460	0.002220	0.001910	0.004460	N/A	0.000925	0.001530	0.001860	0.001340	0.001840	0.004060	0.012800
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0.2	0.2	0.2	0.4	N/A	0.1	0.2	0.2	0.1	0.2	0.4	1.3

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	0.015700	0.017900	0.021400	0.025800	0.030800	0.030900	0.028700	0.051100	0.037000	0.022700	N/A	0.000289
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	1.6	1.8	2.1	2.6	3.1	3.1	2.9	5.1	3.7	2.3	N/A	0

Licensee Comments:

12/09: RCS Activity data for this PI was not required to be taken in November 2009 because Waterford 3 was shutdown for Refueling Outage 16.

Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

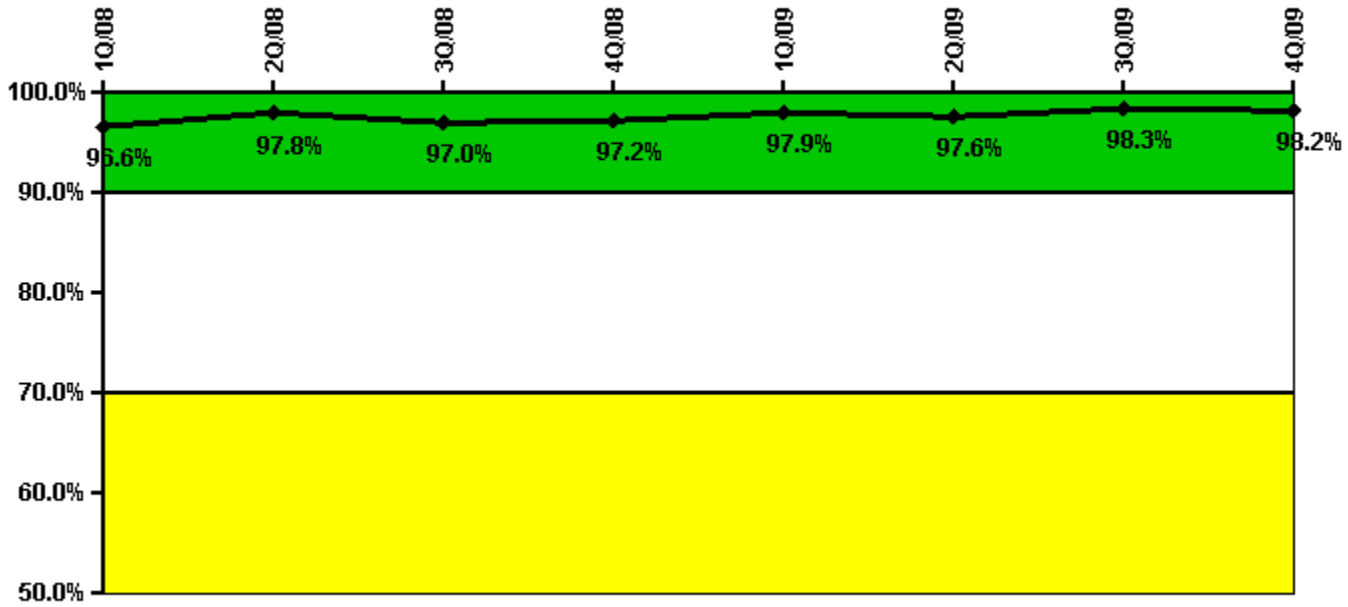
Notes

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	0.030	0.030	0.030	0.030	N/A	0.060	0.050	0.060	0.140	0.120	0.110	0.110
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	N/A	0.6	0.5	0.6	1.4	1.2	1.1	1.1
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	0.110	0.110	0.110	0.140	0.120	0.110	0.150	0.130	0.120	0.130	N/A	0.060
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	1.1	1.1	1.1	1.4	1.2	1.1	1.5	1.3	1.2	1.3	N/A	0.6

Licensee Comments:

12/09: RCS leak rate was not required to be taken in November 2009 because Waterford 3 was shutdown for Refueling Outage 16.

Drill/Exercise Performance



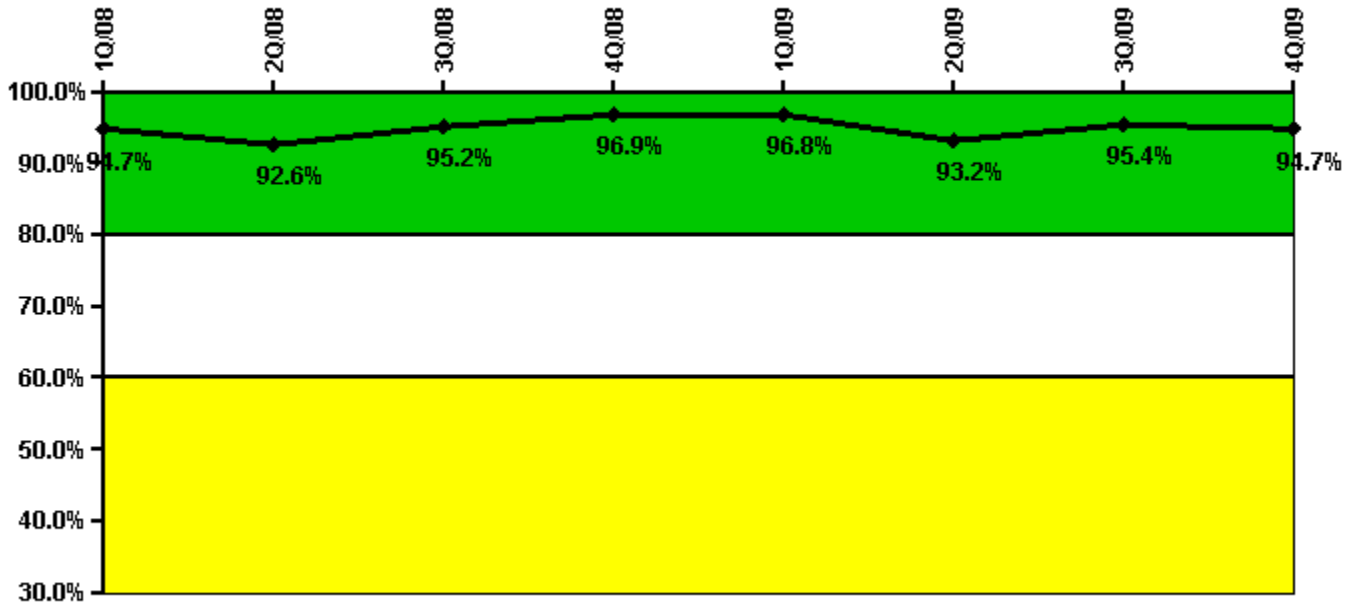
Thresholds: White < 90.0% Yellow < 70.0%

Notes

Drill/Exercise Performance	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Successful opportunities	37.0	8.0	38.0	28.0	44.0	41.0	18.0	4.0
Total opportunities	38.0	8.0	40.0	28.0	44.0	42.0	18.0	4.0
Indicator value	96.6%	97.8%	97.0%	97.2%	97.9%	97.6%	98.3%	98.2%

Licensee Comments: none

ERO Drill Participation



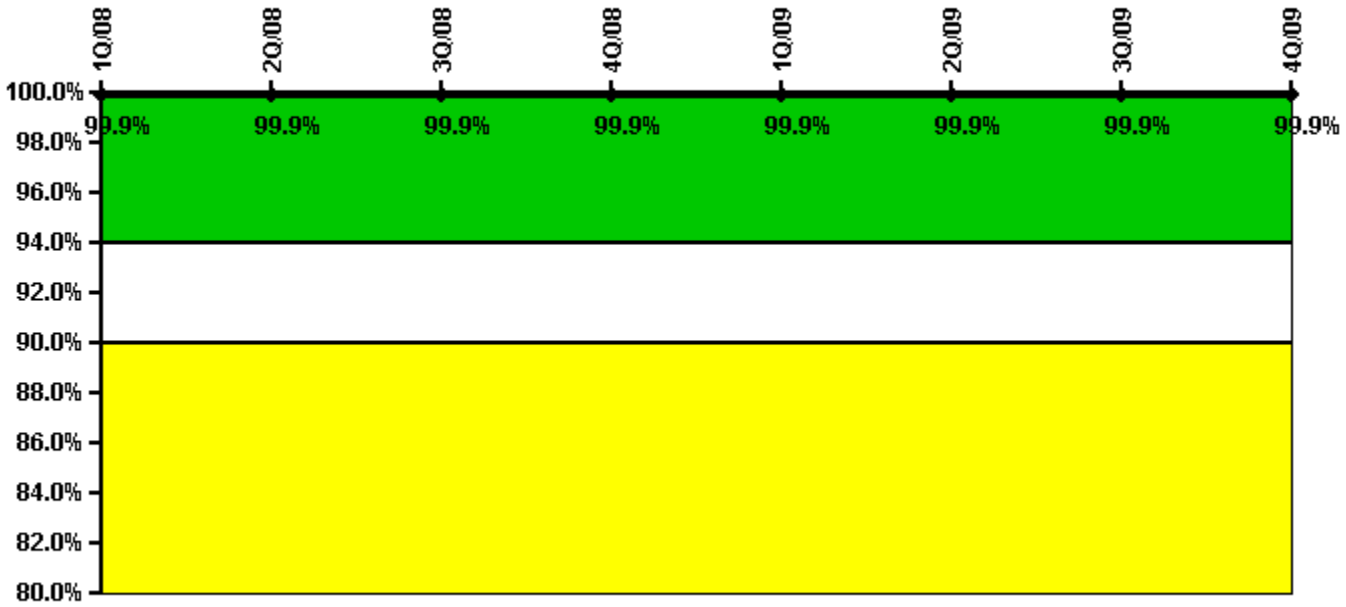
Thresholds: White < 80.0% Yellow < 60.0%

Notes

ERO Drill Participation	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Participating Key personnel	126.0	112.0	120.0	124.0	120.0	123.0	125.0	124.0
Total Key personnel	133.0	121.0	126.0	128.0	124.0	132.0	131.0	131.0
Indicator value	94.7%	92.6%	95.2%	96.9%	96.8%	93.2%	95.4%	94.7%

Licensee Comments: none

Alert & Notification System



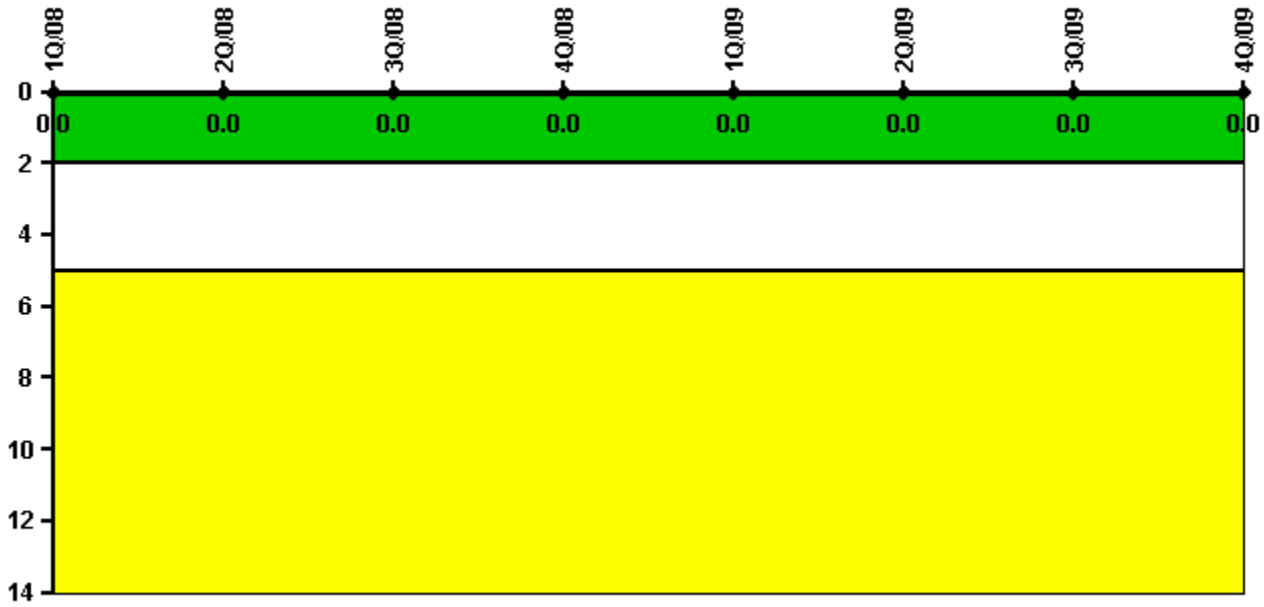
Thresholds: White < 94.0% Yellow < 90.0%

Notes

Alert & Notification System	1Q/08	2Q/08	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09
Successful siren-tests	432	431	432	431	432	437	438	438
Total sirens-tests	432	432	432	432	432	438	438	438
Indicator value	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%

Licensee Comments: none

Occupational Exposure Control Effectiveness



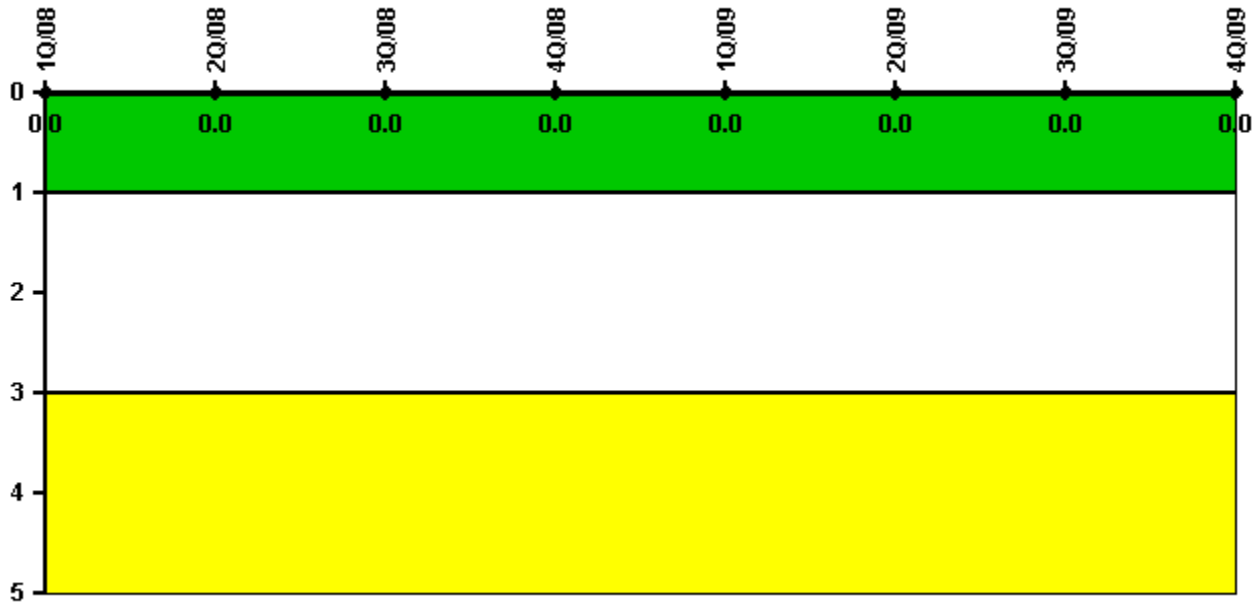
Thresholds: White > 2.0 Yellow > 5.0

Notes

Occupational Exposure Control Effectiveness	1Q/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.