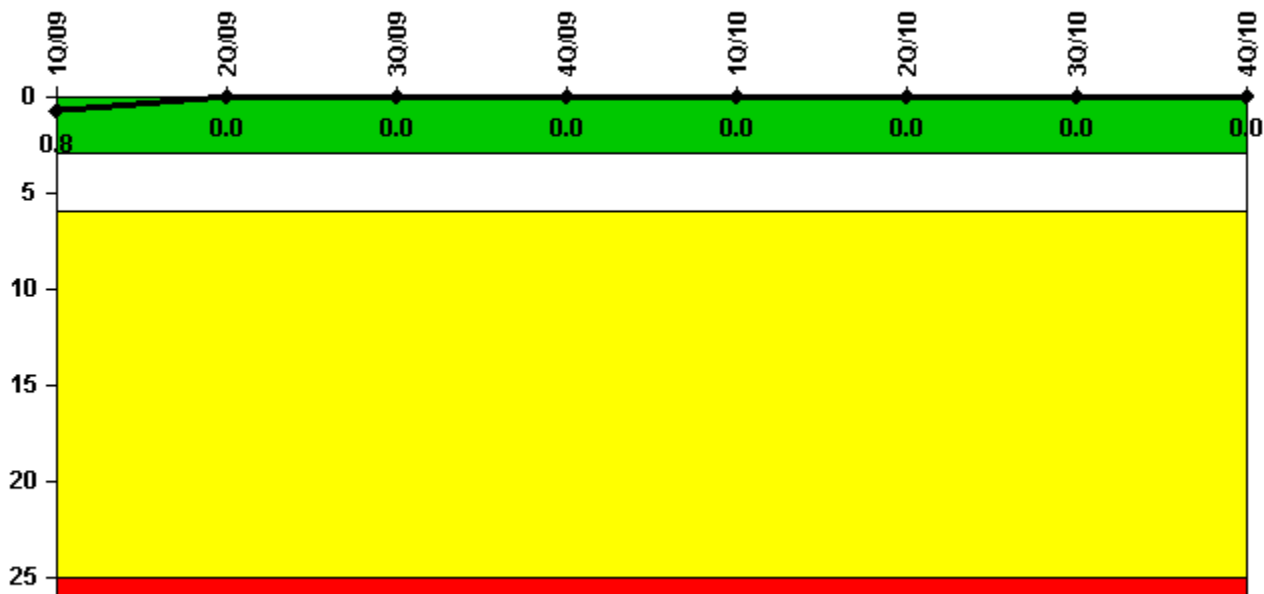


# Palisades

## 4Q/2010 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



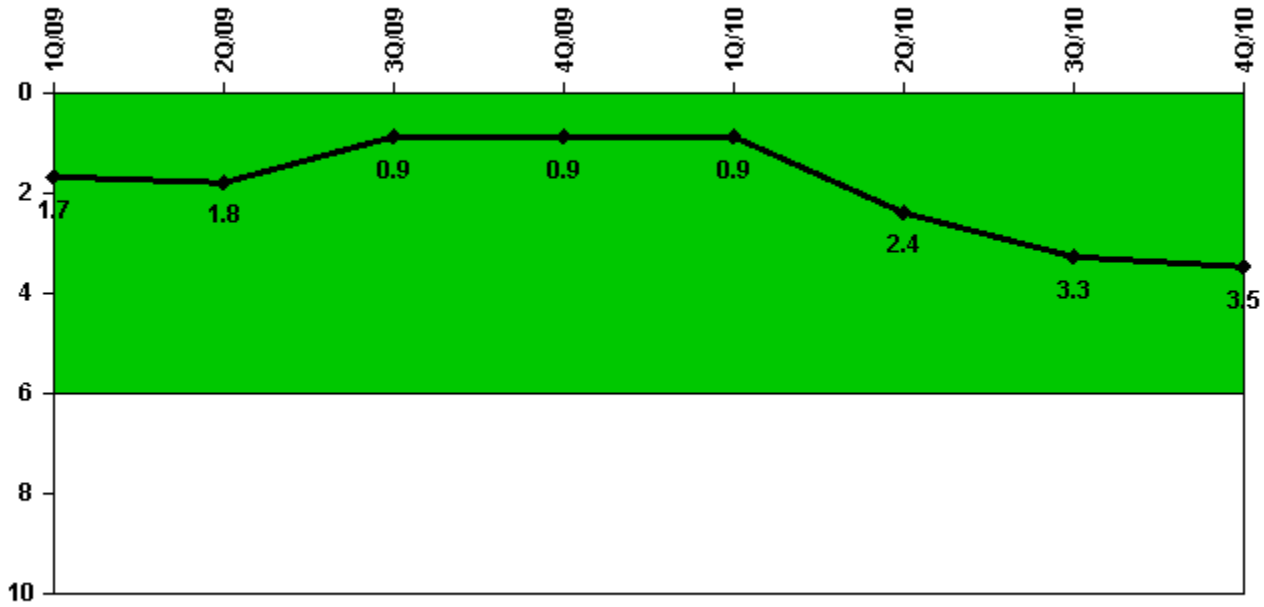
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	1853.5	1522.5	2208.0	2209.0	2159.0	2031.9	2167.6	1594.9
Indicator value	0.8	0	0	0	0	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	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Unplanned power changes	1.0	0	0	0	1.0	2.0	1.0	0
Critical hours	1853.5	1522.5	2208.0	2209.0	2159.0	2031.9	2167.6	1594.9
Indicator value	1.7	1.8	0.9	0.9	0.9	2.4	3.3	3.5

Licensee Comments: none

## Unplanned Scrams with Complications



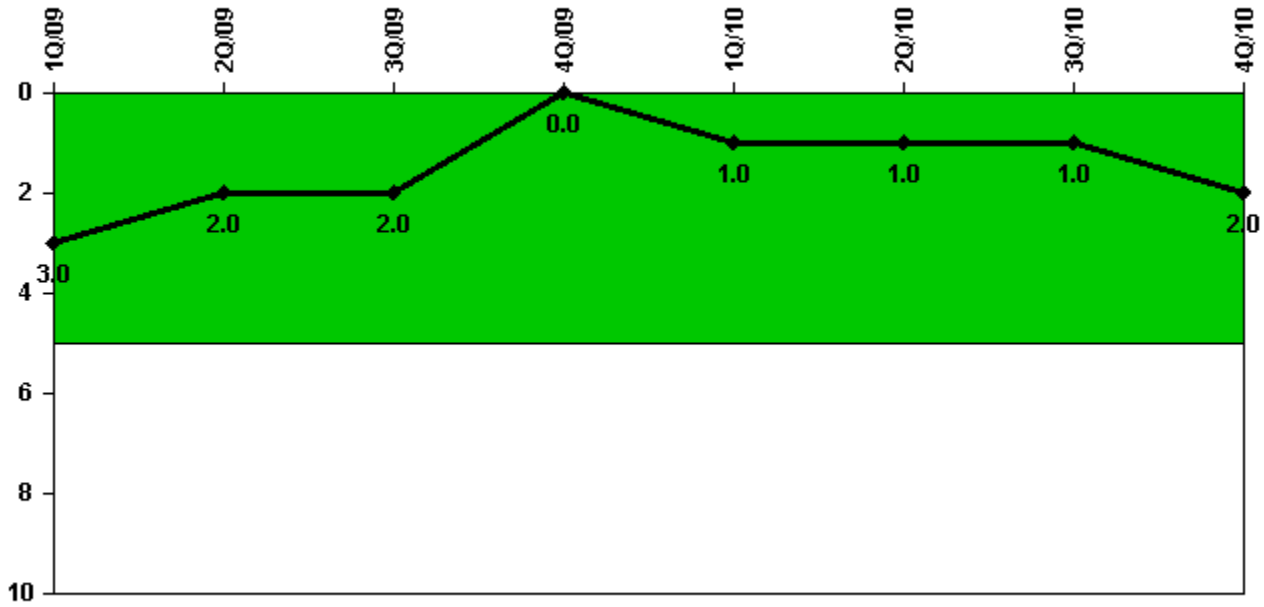
Thresholds: White > 1.0

### Notes

Unplanned Scrams with Complications	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
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

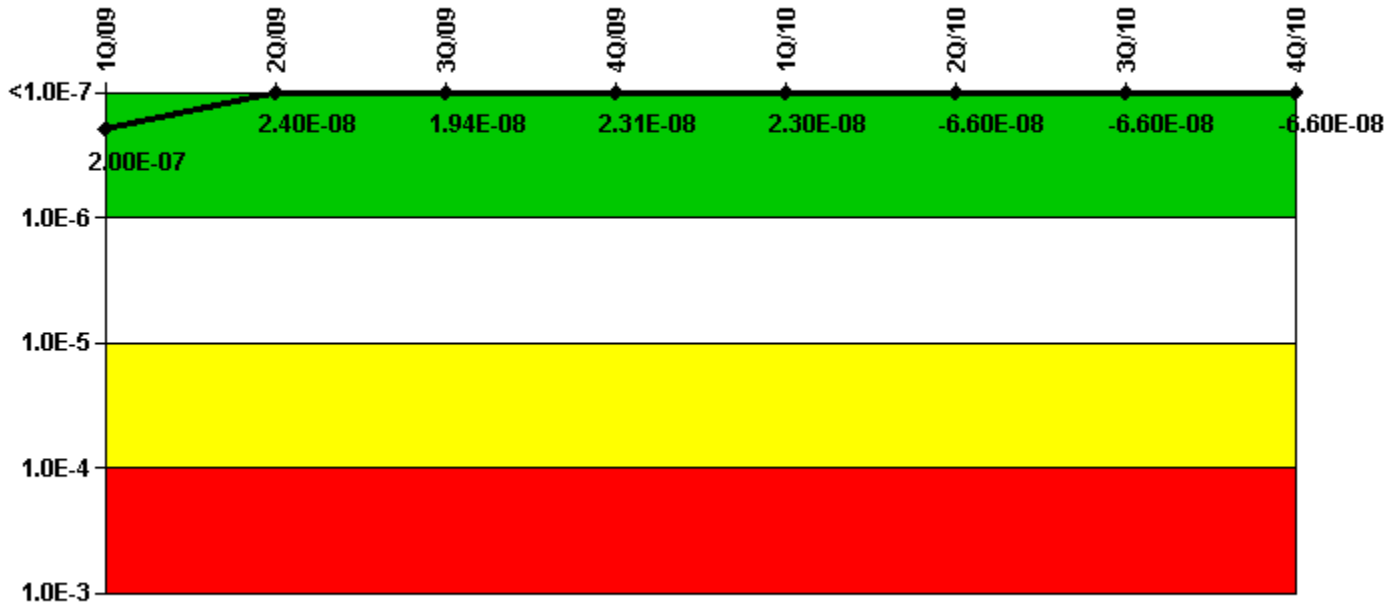
### Notes

Safety System Functional Failures (PWR)	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Safety System Functional Failures	0	0	0	0	1	0	0	1
Indicator value	3	2	2	0	1	1	1	2

Licensee Comments: none

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# Mitigating Systems Performance Index, Emergency AC Power System



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

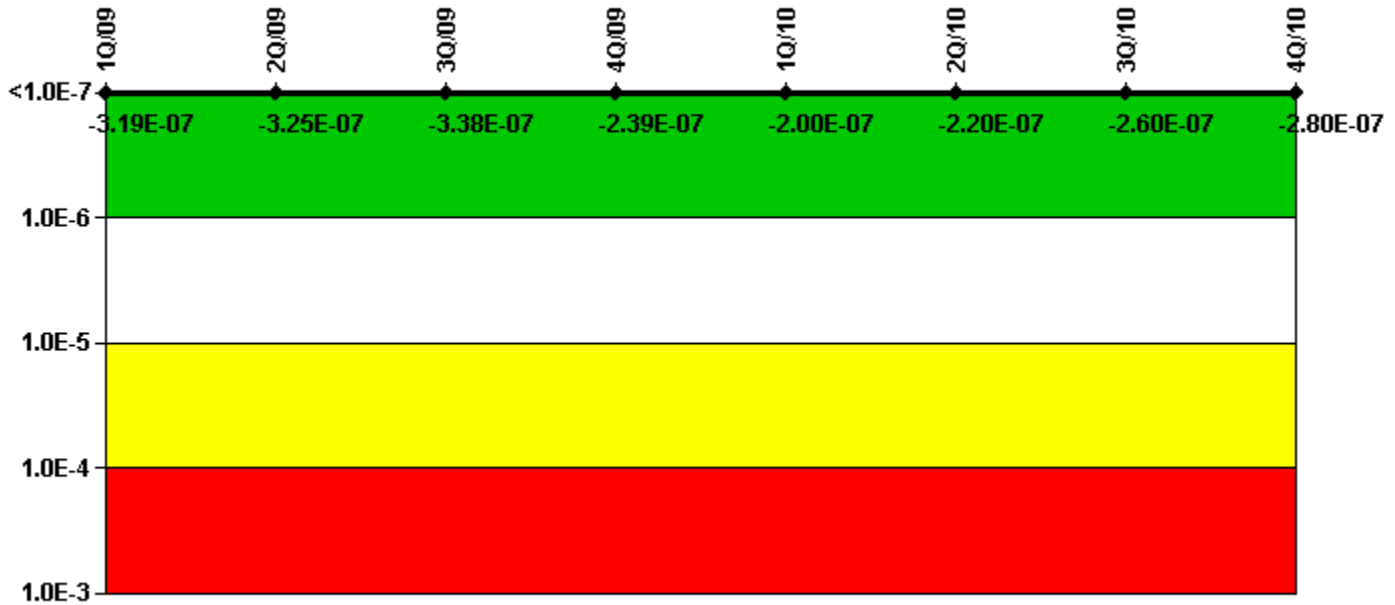
## Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
UAI ( $\Delta$ CDF)	4.38E-08	3.09E-08	2.60E-08	2.90E-08	2.82E-08	-2.35E-08	-2.36E-08	-2.36E-08
URI ( $\Delta$ CDF)	1.54E-07	-7.19E-09	-6.60E-09	-5.90E-09	-5.21E-09	-4.25E-08	-4.25E-08	-4.25E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	2.00E-07	2.40E-08	1.94E-08	2.31E-08	2.30E-08	-6.60E-08	-6.60E-08	-6.60E-08

Licensee Comments:

4Q/10: Evaluation is pending on Emergency Diesel Generator K-6AG turbocharger support cracking identified in November 2010. (Reference CR-PLP-2010-05859)

# Mitigating Systems Performance Index, High Pressure Injection System



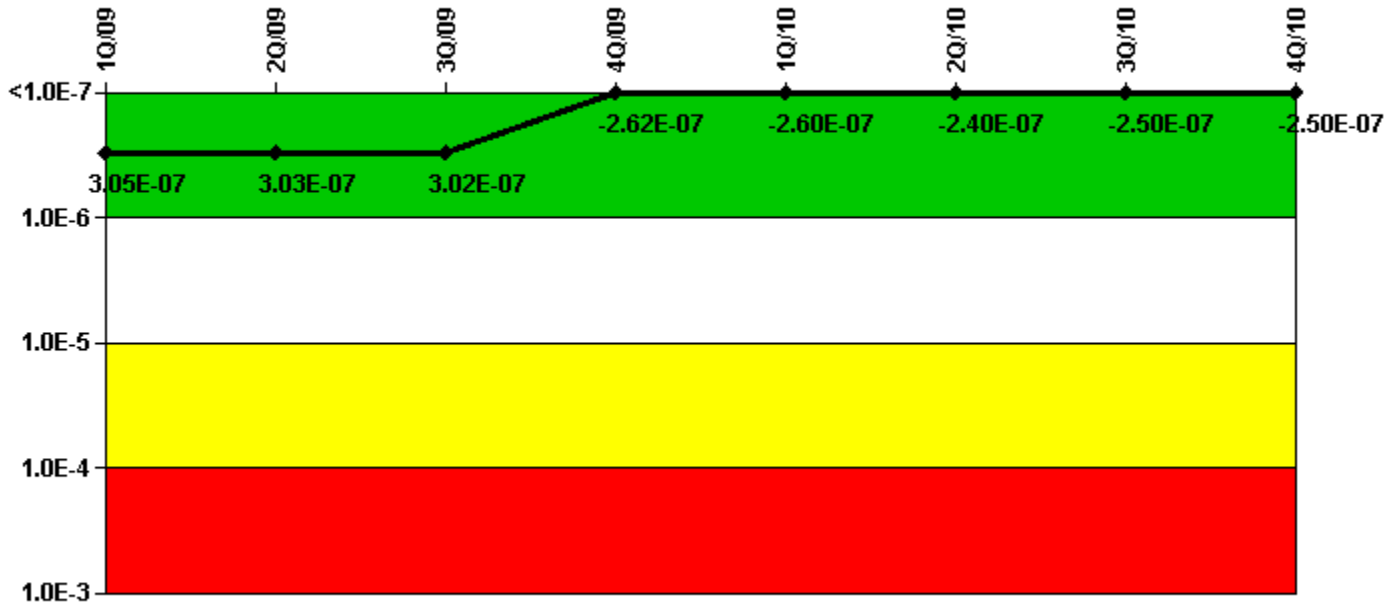
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
UAI ( $\Delta$ CDF)	-4.90E-08	-5.50E-08	-6.80E-08	3.10E-08	6.09E-08	4.11E-08	8.73E-09	-1.38E-08
URI ( $\Delta$ CDF)	-2.70E-07	-2.70E-07	-2.70E-07	-2.70E-07	-2.65E-07	-2.65E-07	-2.65E-07	-2.65E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.19E-07	-3.25E-07	-3.38E-07	-2.39E-07	-2.00E-07	-2.20E-07	-2.60E-07	-2.80E-07

Licensee Comments: none

# Mitigating Systems Performance Index, Heat Removal System



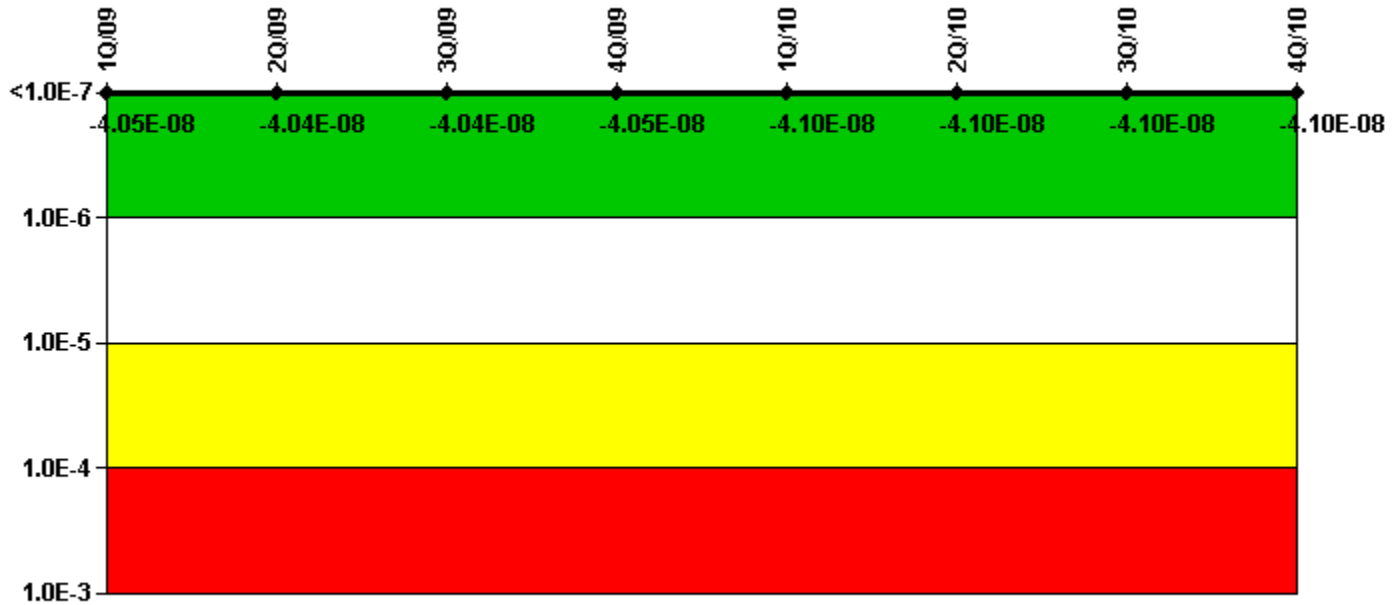
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
UAI ( $\Delta$ CDF)	2.50E-08	2.30E-08	2.20E-08	1.80E-08	2.03E-08	3.36E-08	3.15E-08	3.05E-08
URI ( $\Delta$ CDF)	2.80E-07	2.80E-07	2.80E-07	-2.80E-07	-2.77E-07	-2.77E-07	-2.77E-07	-2.77E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	3.05E-07	3.03E-07	3.02E-07	-2.62E-07	-2.60E-07	-2.40E-07	-2.50E-07	-2.50E-07

Licensee Comments: none

# Mitigating Systems Performance Index, Residual Heat Removal System



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

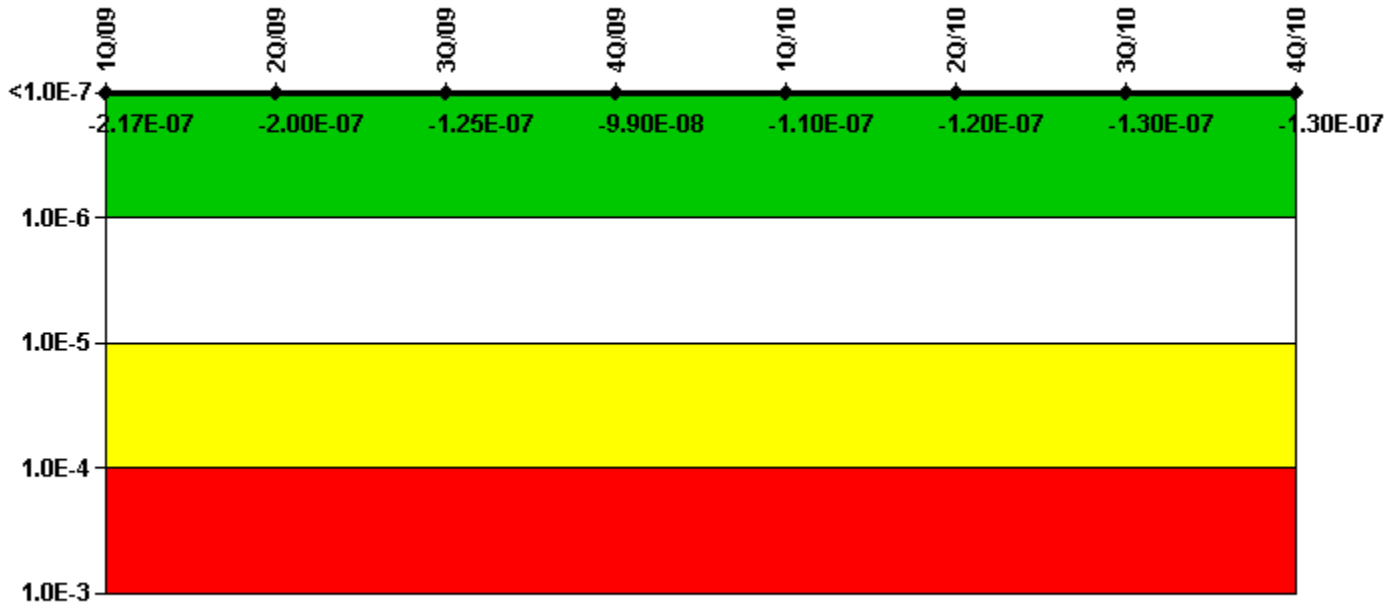
## Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
UAI ( $\Delta$ CDF)	-4.80E-10	-3.60E-10	-4.10E-10	-4.80E-10	-3.39E-10	-3.02E-10	-3.51E-10	-4.08E-10
URI ( $\Delta$ CDF)	-4.00E-08	-4.00E-08	-4.00E-08	-4.00E-08	-4.04E-08	-4.04E-08	-4.04E-08	-4.04E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.05E-08	-4.04E-08	-4.04E-08	-4.05E-08	-4.10E-08	-4.10E-08	-4.10E-08	-4.10E-08

Licensee Comments: none



# Mitigating Systems Performance Index, Cooling Water Systems



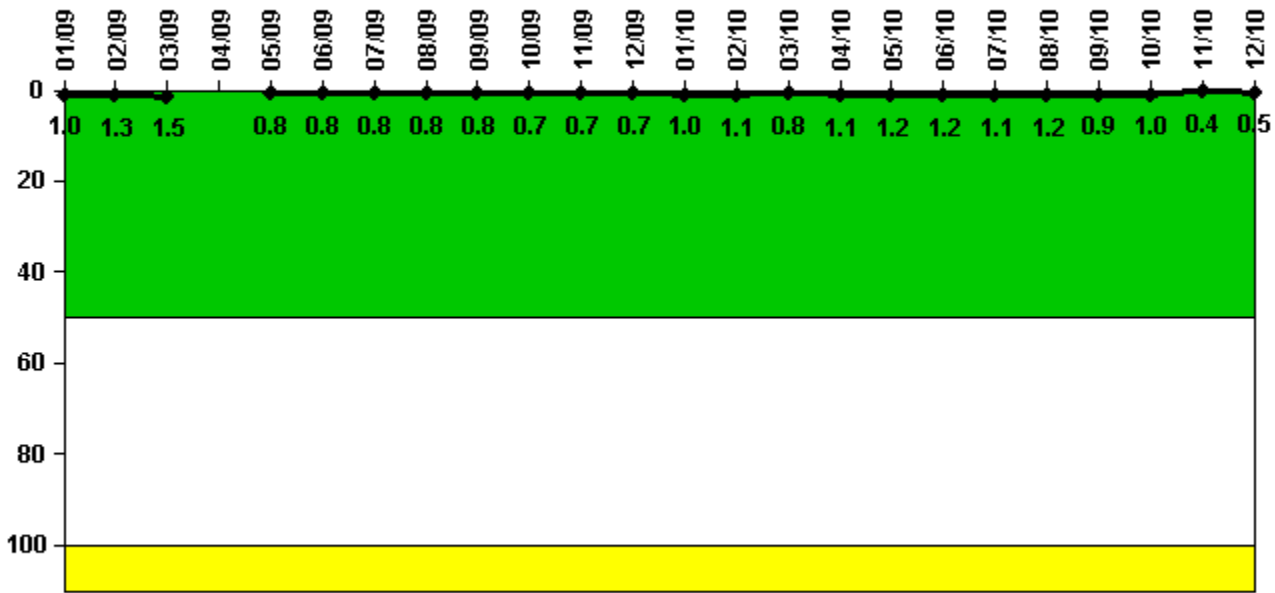
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
UAI ( $\Delta$ CDF)	1.30E-08	3.00E-08	5.50E-08	8.10E-08	7.05E-08	6.84E-08	5.75E-08	5.98E-08
URI ( $\Delta$ CDF)	-2.30E-07	-2.30E-07	-1.80E-07	-1.80E-07	-1.84E-07	-1.87E-07	-1.87E-07	-1.87E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.17E-07	-2.00E-07	-1.25E-07	-9.90E-08	-1.10E-07	-1.20E-07	-1.30E-07	-1.30E-07

Licensee Comments: none

# Reactor Coolant System Activity



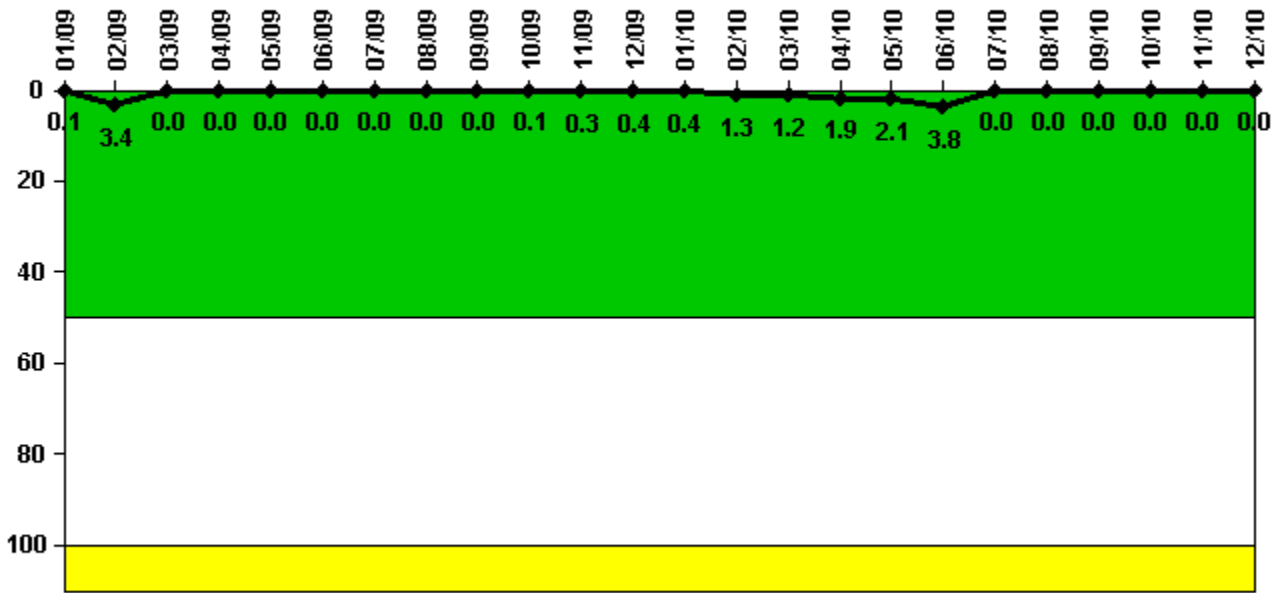
Thresholds: White > 50.0 Yellow > 100.0

## Notes

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	0.010400	0.013200	0.014800	N/A	0.007570	0.007680	0.008310	0.008260	0.008190	0.007360	0.007120	0.007170
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	1.0	1.3	1.5	N/A	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7
Reactor Coolant System Activity	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10
Maximum activity	0.010300	0.011000	0.007520	0.010600	0.011600	0.012100	0.010500	0.012300	0.009200	0.010100	0.004300	0.005100
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	1.0	1.1	0.8	1.1	1.2	1.2	1.1	1.2	0.9	1.0	0.4	0.5

Licensee Comments: none

## Reactor Coolant System Leakage



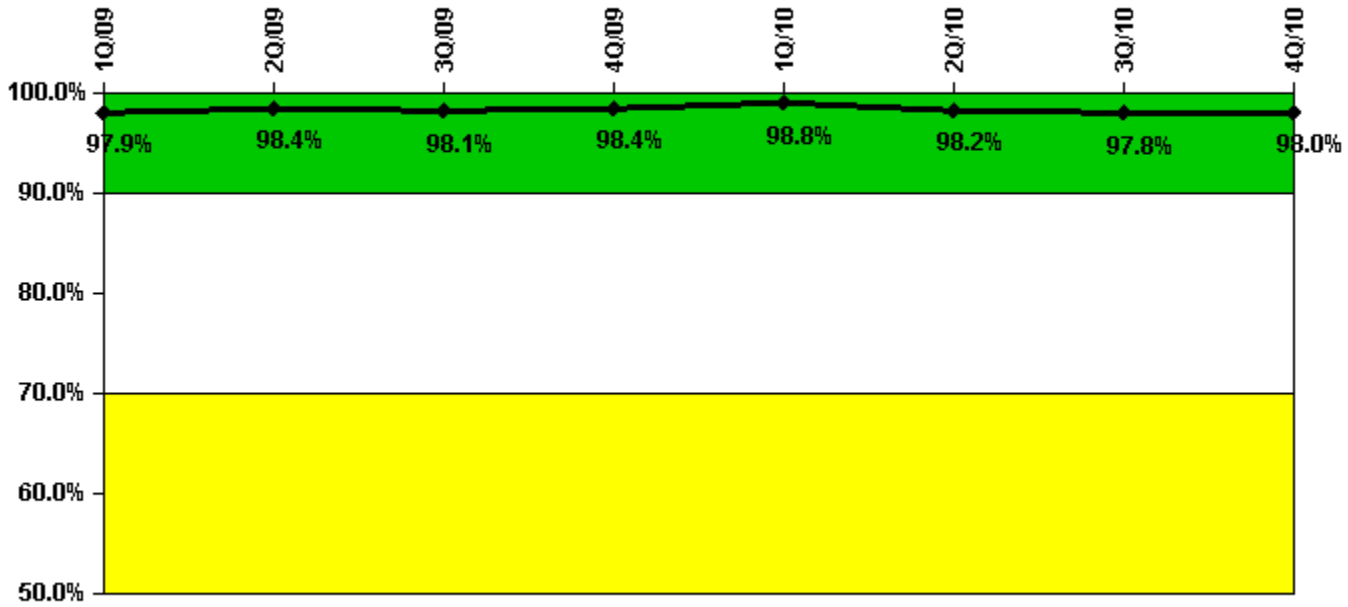
Thresholds: White > 50.0 Yellow > 100.0

### Notes

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	0.013	0.341	0.001	0	0.003	0.003	0.003	0.004	0.003	0.013	0.026	0.037
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	0.1	3.4	0	0	0	0	0	0	0	0.1	0.3	0.4
Reactor Coolant System Leakage	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	10/10	11/10	12/10
Maximum leakage	0.037	0.132	0.119	0.185	0.211	0.383	0.003	0.001	0.001	0.001	0.001	0.002
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	0.4	1.3	1.2	1.9	2.1	3.8	0	0	0	0	0	0

Licensee Comments: none

## Drill/Exercise Performance



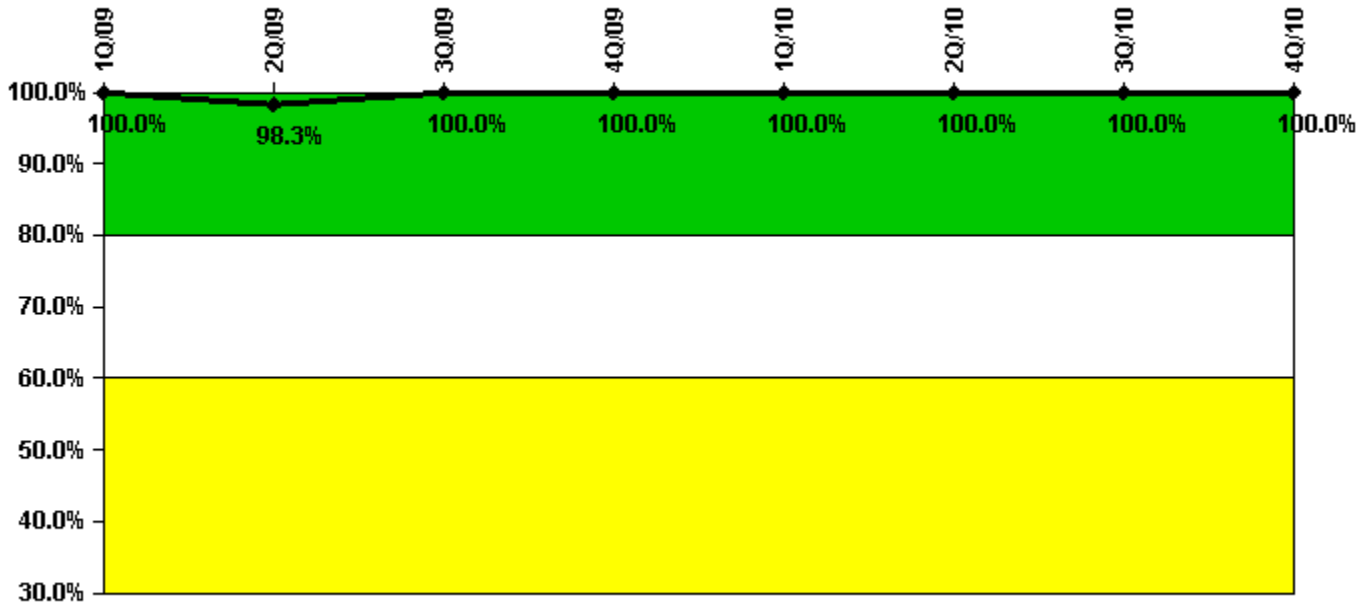
Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Successful opportunities	65.0	12.0	23.0	22.0	89.0	28.0	23.0	32.0
Total opportunities	66.0	12.0	24.0	22.0	90.0	30.0	24.0	32.0
Indicator value	97.9%	98.4%	98.1%	98.4%	98.8%	98.2%	97.8%	98.0%

Licensee Comments: none

# ERO Drill Participation



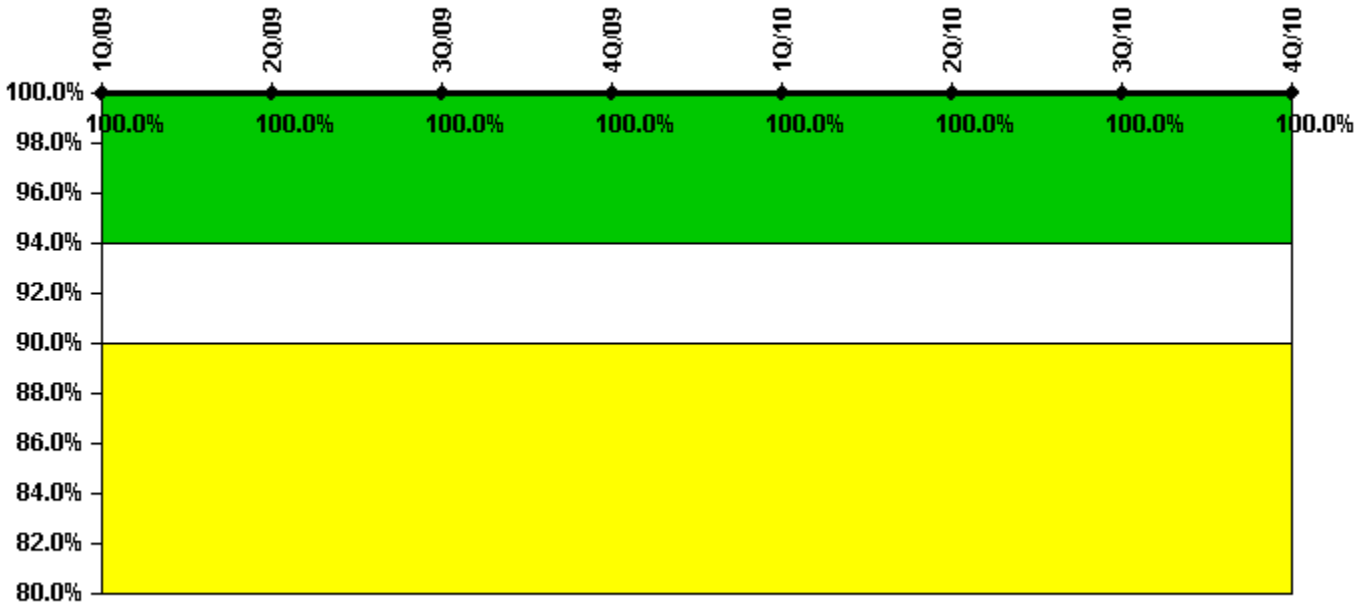
Thresholds: White < 80.0% Yellow < 60.0%

## Notes

ERO Drill Participation	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Participating Key personnel	120.0	113.0	122.0	123.0	75.0	80.0	82.0	81.0
Total Key personnel	120.0	115.0	122.0	123.0	75.0	80.0	82.0	81.0
Indicator value	100.0%	98.3%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

# Alert & Notification System



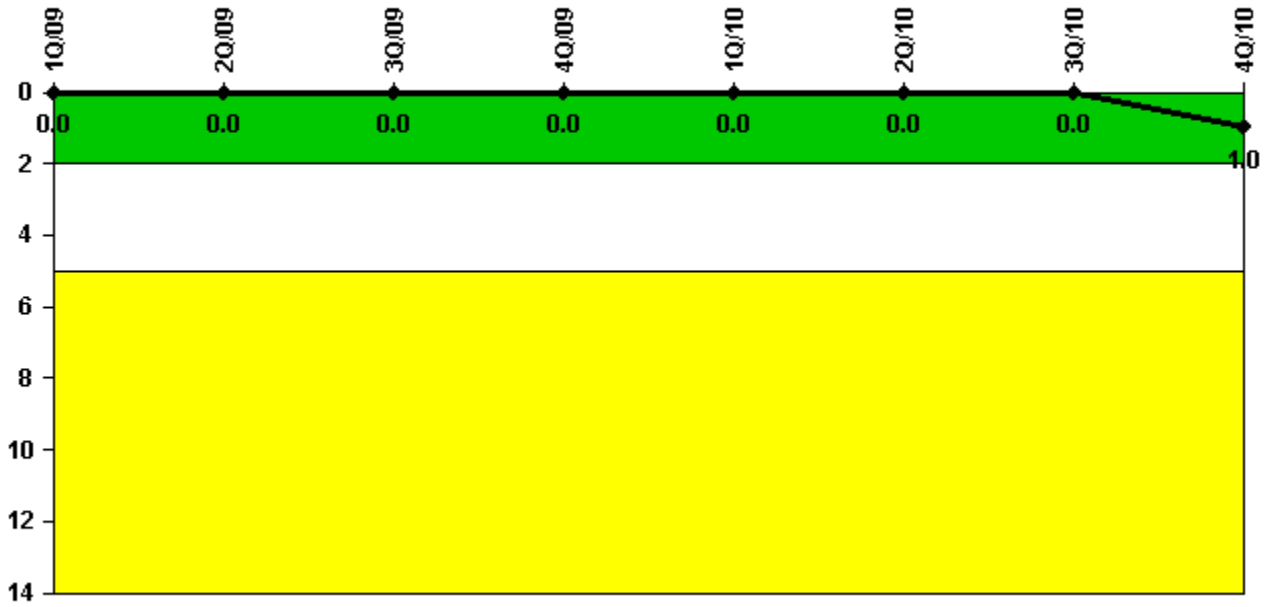
Thresholds: White < 94.0% Yellow < 90.0%

## Notes

Alert & Notification System	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Successful siren-tests	183	183	183	183	183	183	183	183
Total sirens-tests	183	183	183	183	183	183	183	183
Indicator value	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

# Occupational Exposure Control Effectiveness



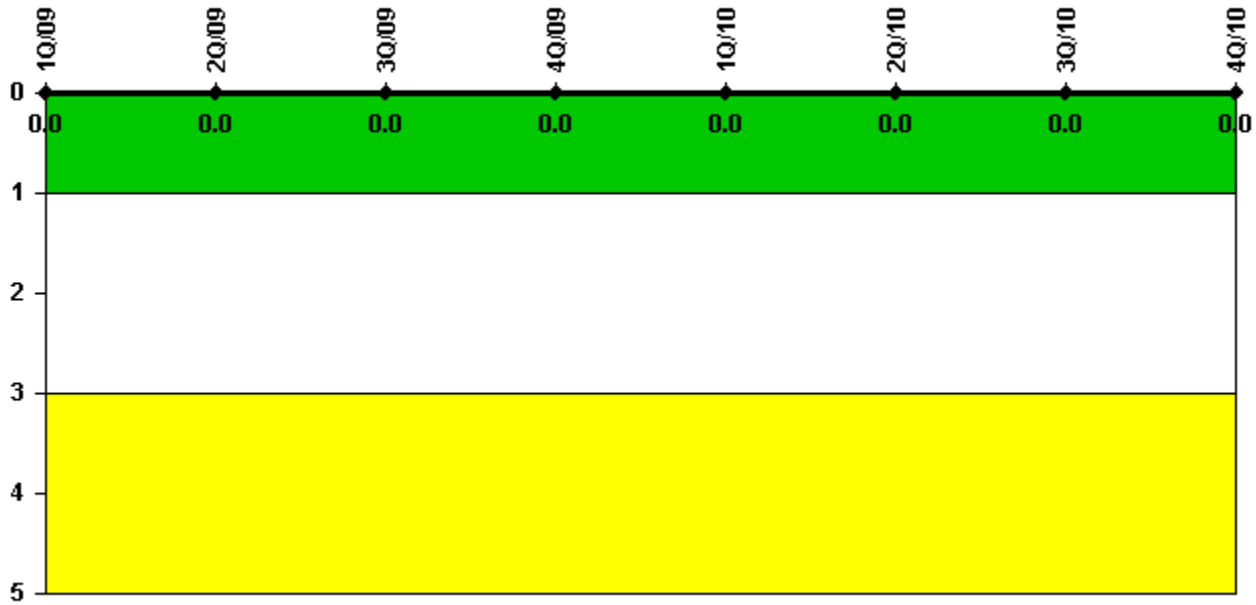
Thresholds: White > 2.0 Yellow > 5.0

## Notes

Occupational Exposure Control Effectiveness	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
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	1
<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>1</b>

Licensee Comments: none

# RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

## Notes

RETS/ODCM Radiological Effluent	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
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.