

# Three Mile Island 1

## 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

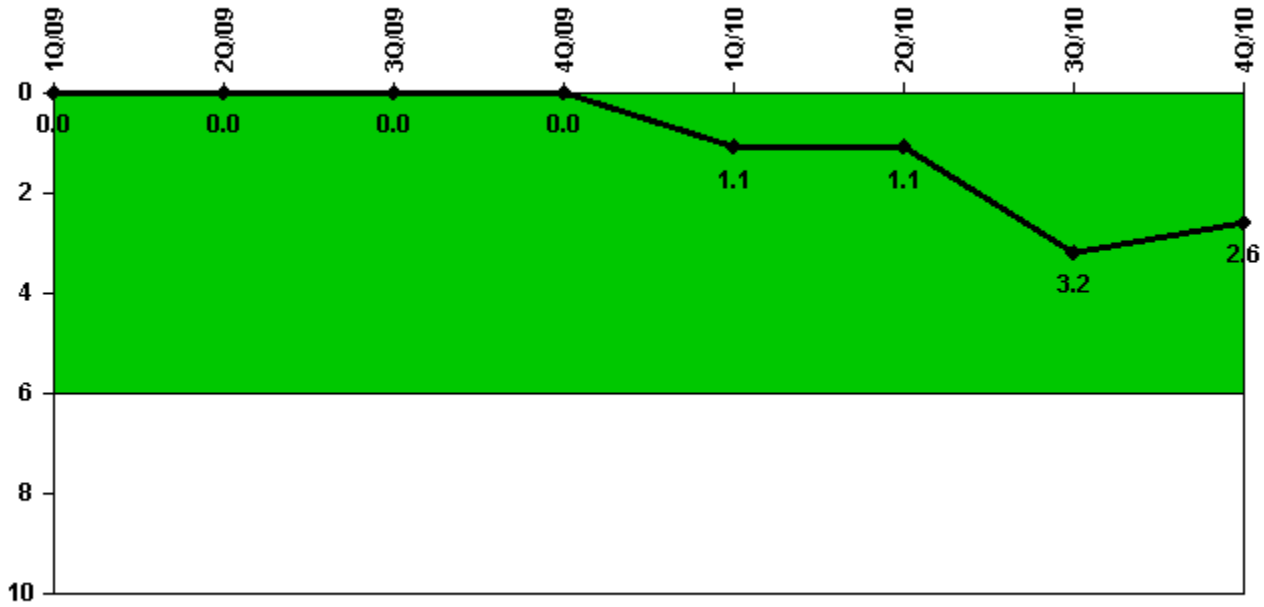
### Notes

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	2159.0	2184.0	2208.0	603.6	1595.8	2138.8	2208.0	2209.0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

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## 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	0	0	0	0	1.0	0	2.0	0
Critical hours	2159.0	2184.0	2208.0	603.6	1595.8	2138.8	2208.0	2209.0
Indicator value	0	0	0	0	1.1	1.1	3.2	2.6

Licensee Comments: none

# Unplanned Scrams with Complications



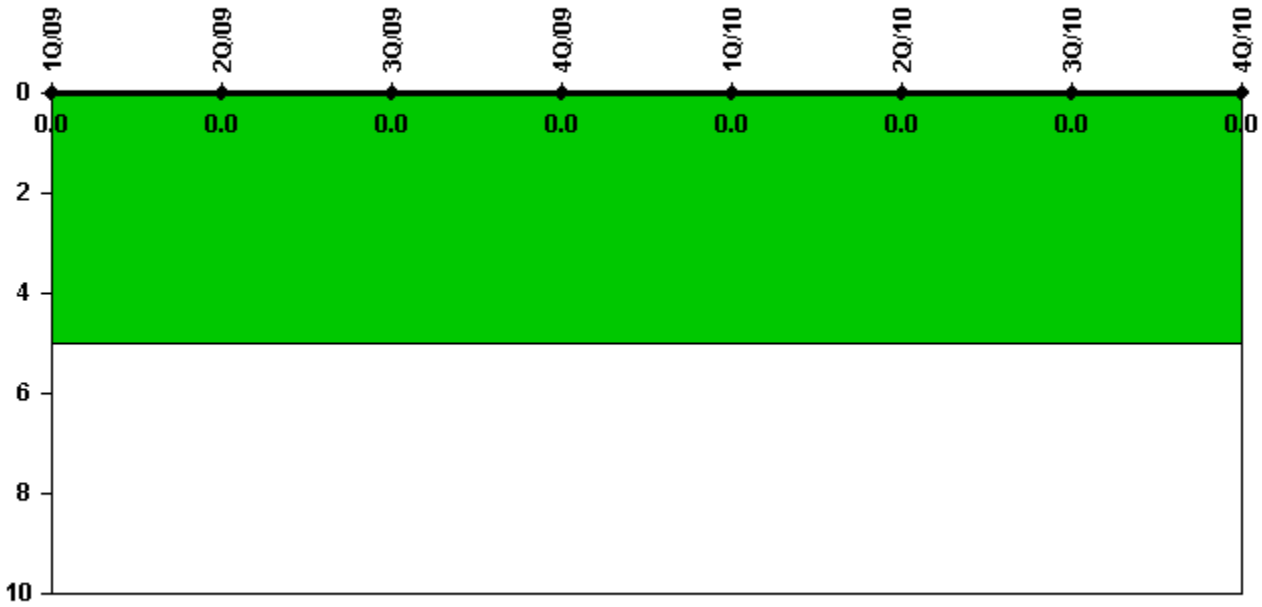
Thresholds: White > 1.0

## 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

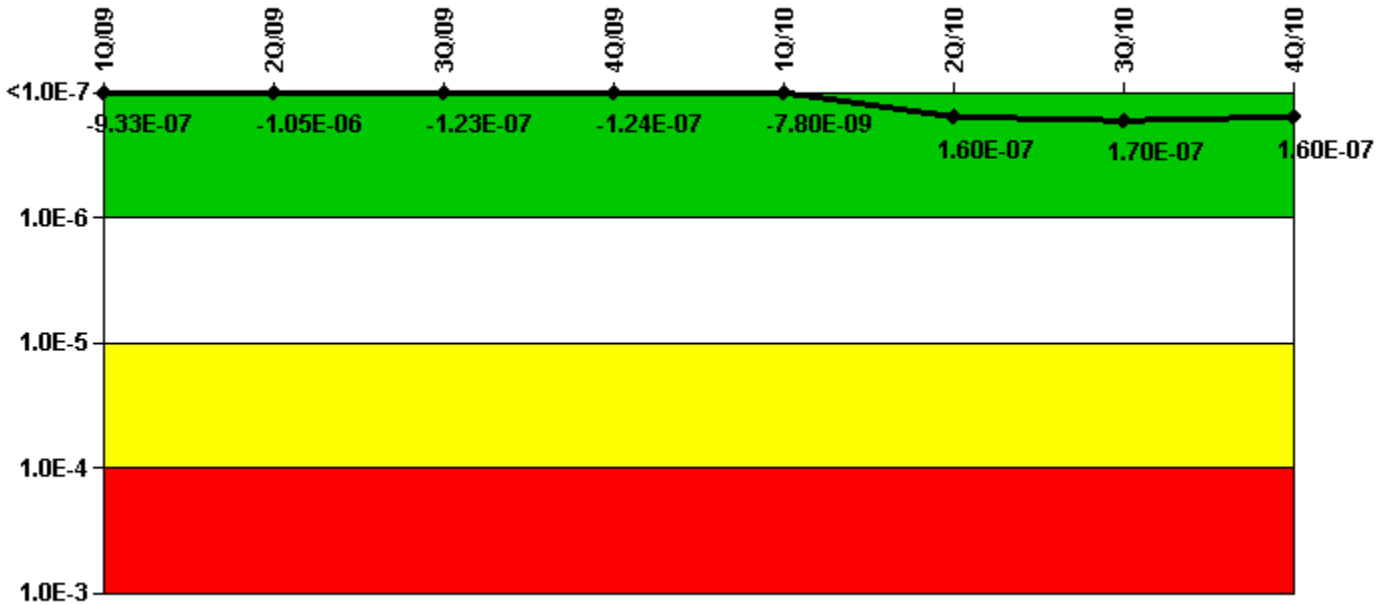
### Notes

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	0	0	0	0
Indicator value	0	0	0	0	0	0	0	0

Licensee Comments: none

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# Mitigating Systems Performance Index, Emergency AC Power System



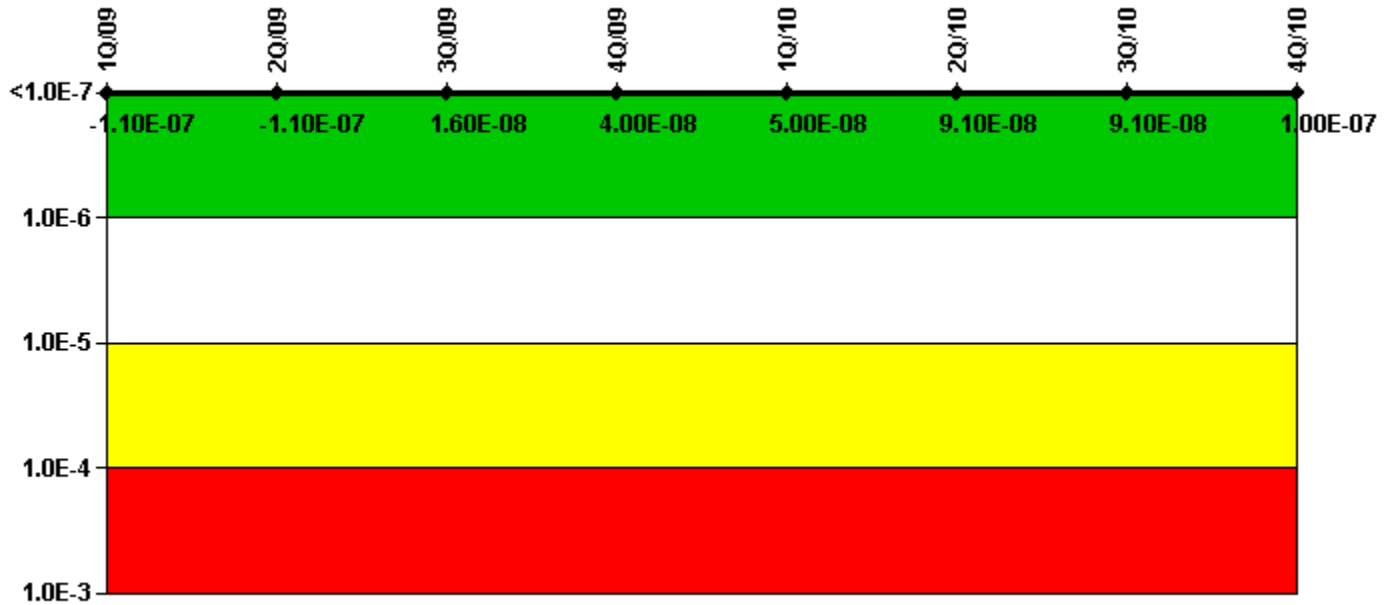
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## 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)	-2.30E-08	-1.70E-07	-2.90E-08	-2.90E-08	-2.91E-08	-1.36E-08	-4.06E-09	-8.60E-09
URI ( $\Delta$ CDF)	-9.10E-07	-8.80E-07	-9.40E-08	-9.50E-08	2.13E-08	1.73E-07	1.69E-07	1.69E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.33E-07	-1.05E-06	-1.23E-07	-1.24E-07	-7.80E-09	1.60E-07	1.70E-07	1.60E-07

Licensee Comments: none

# Mitigating Systems Performance Index, High Pressure Injection System



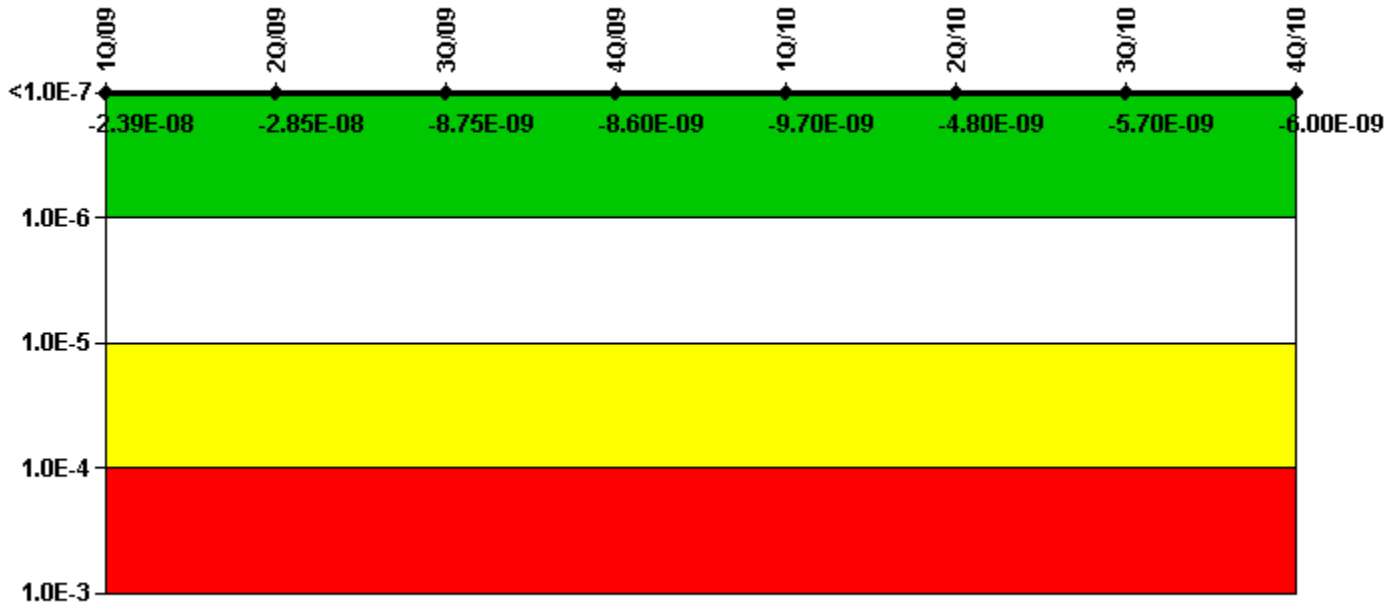
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## 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)	1.10E-07	1.10E-07	4.30E-08	6.70E-08	7.66E-08	1.18E-07	1.18E-07	1.30E-07
URI ( $\Delta$ CDF)	-2.20E-07	-2.20E-07	-2.70E-08	-2.70E-08	-2.70E-08	-2.70E-08	-2.70E-08	-2.70E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.10E-07	-1.10E-07	1.60E-08	4.00E-08	5.00E-08	9.10E-08	9.10E-08	1.00E-07

Licensee Comments: none

# Mitigating Systems Performance Index, Heat Removal System



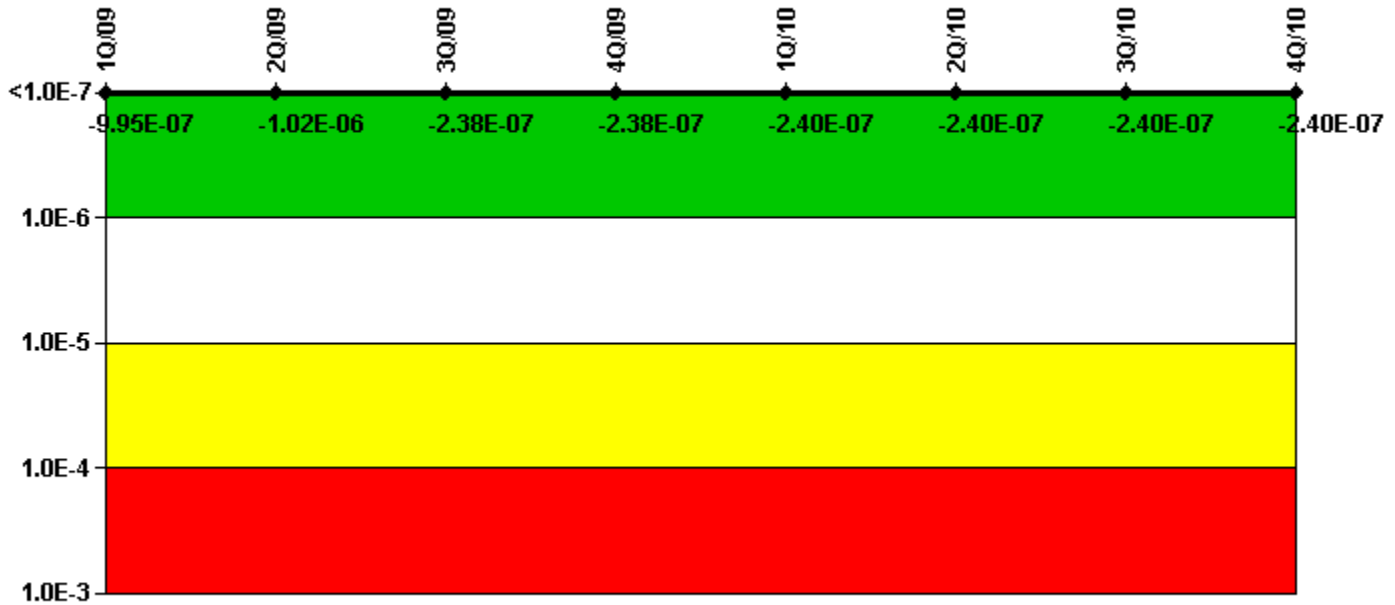
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## 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)	7.10E-09	2.50E-09	9.50E-10	1.10E-09	3.45E-11	4.90E-09	4.03E-09	3.70E-09
URI ( $\Delta$ CDF)	-3.10E-08	-3.10E-08	-9.70E-09	-9.70E-09	-9.75E-09	-9.75E-09	-9.75E-09	-9.75E-09
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.39E-08	-2.85E-08	-8.75E-09	-8.60E-09	-9.70E-09	-4.80E-09	-5.70E-09	-6.00E-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

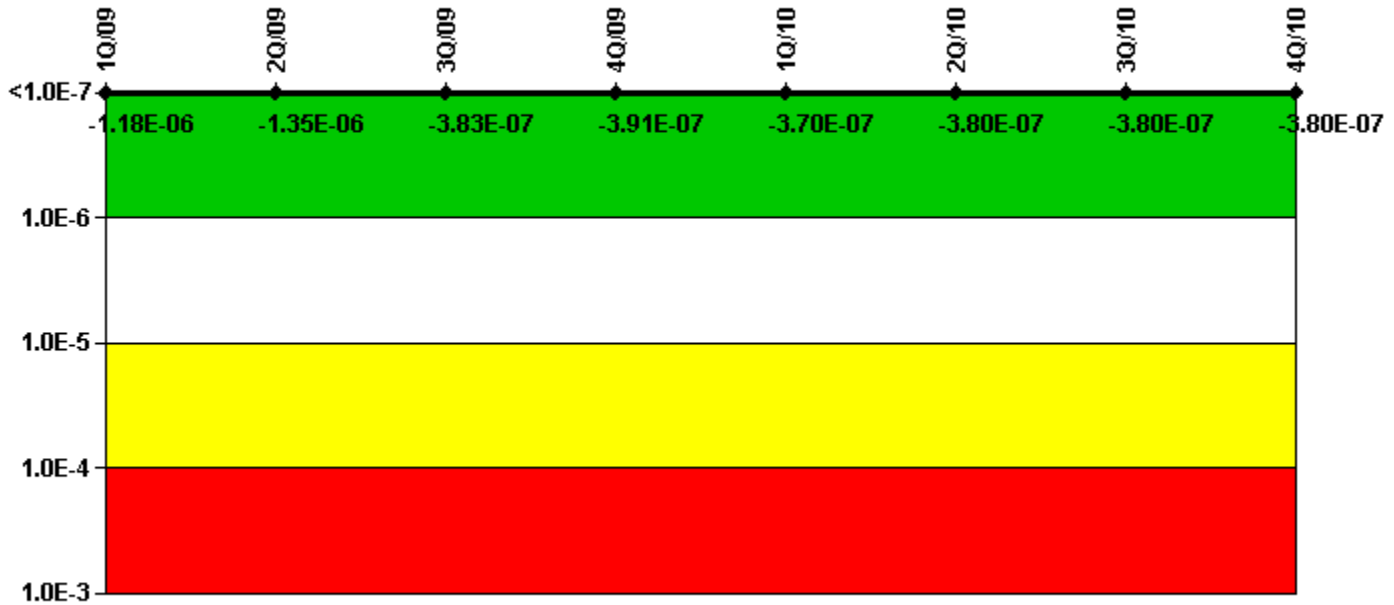
## Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
UAI ( $\Delta$ CDF)	-2.50E-08	-4.60E-08	-5.80E-08	-5.80E-08	-5.76E-08	-5.76E-08	-5.76E-08	-5.76E-08
URI ( $\Delta$ CDF)	-9.70E-07	-9.70E-07	-1.80E-07	-1.80E-07	-1.85E-07	-1.85E-07	-1.85E-07	-1.85E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.95E-07	-1.02E-06	-2.38E-07	-2.38E-07	-2.40E-07	-2.40E-07	-2.40E-07	-2.40E-07

Licensee Comments: none



# Mitigating Systems Performance Index, Cooling Water Systems



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

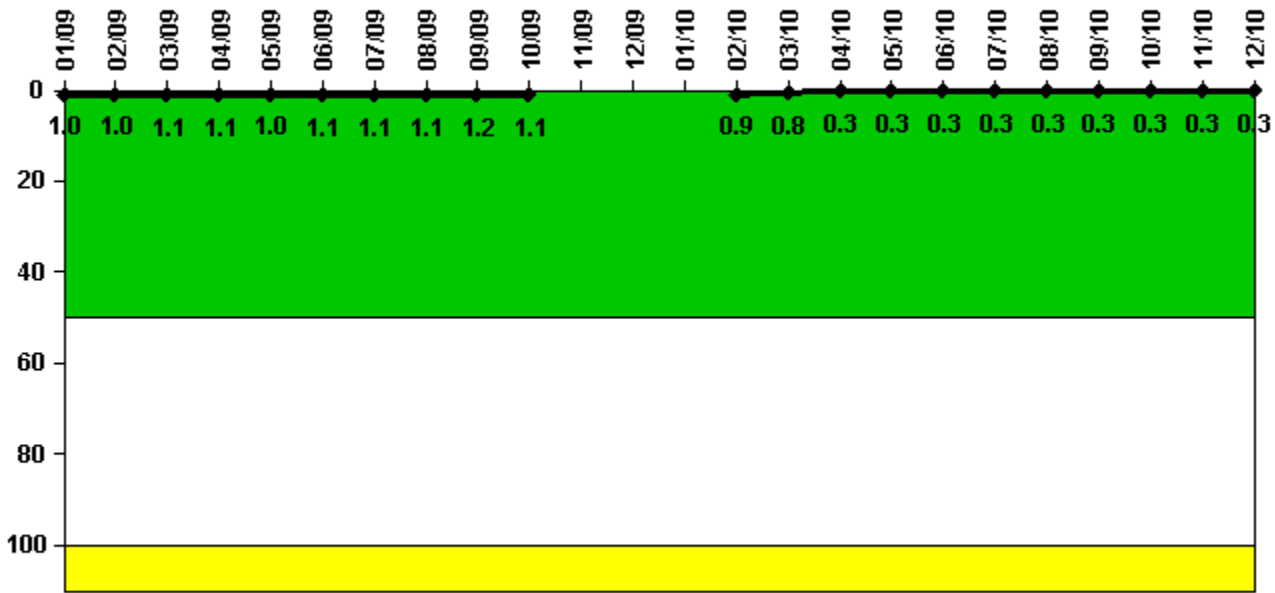
## Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
UAI ( $\Delta$ CDF)	4.20E-07	2.50E-07	3.70E-08	2.90E-08	4.52E-08	3.60E-08	3.60E-08	3.63E-08
URI ( $\Delta$ CDF)	-1.60E-06	-1.60E-06	-4.20E-07	-4.20E-07	-4.19E-07	-4.19E-07	-4.19E-07	-4.19E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.18E-06	-1.35E-06	-3.83E-07	-3.91E-07	-3.70E-07	-3.80E-07	-3.80E-07	-3.80E-07

Licensee Comments:

4Q/10: NR-P-1A unavailability corrected by 21.0 hours in July 2010 that hadn't previously been recognized. No impact to system color, which remains Green.

# Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

## Notes

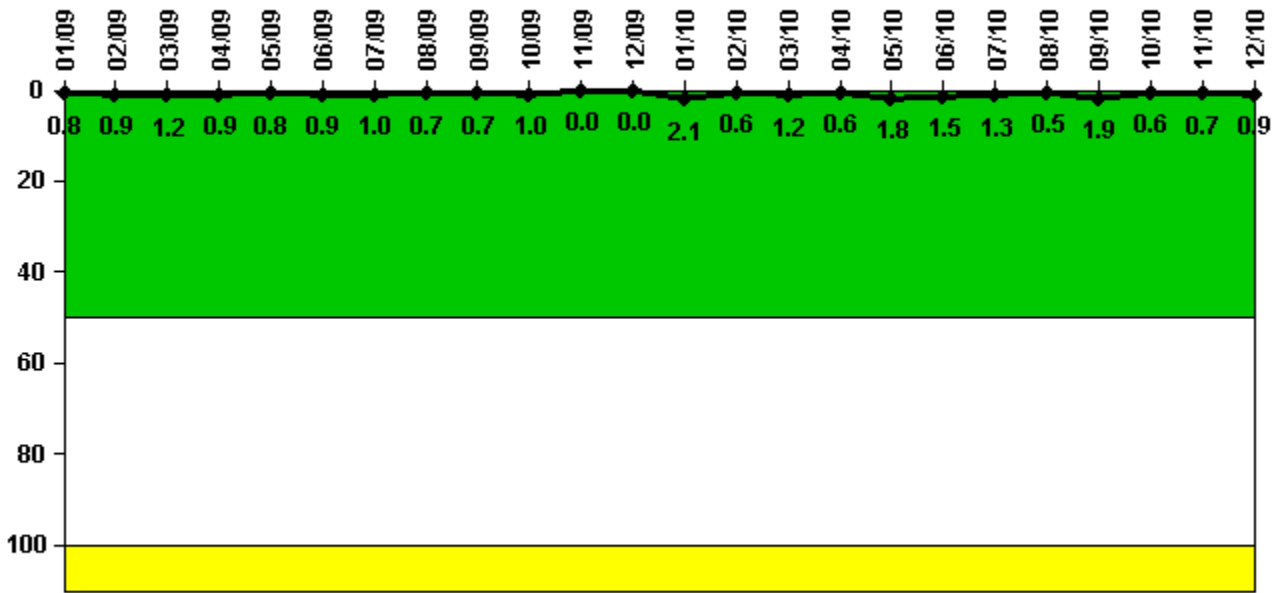
Reactor Coolant System Activity	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09
Maximum activity	0.003390	0.003490	0.003690	0.003730	0.003610	0.003880	0.003930	0.003990	0.004160	0.003950	N/A	N/A
Technical specification limit	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Indicator value	1.0	1.0	1.1	1.1	1.0	1.1	1.1	1.1	1.2	1.1	N/A	N/A

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	N/A	0.003270	0.002790	0.001160	0.001010	0.000996	0.000946	0.000902	0.001030	0.001090	0.001090	0.001020
Technical specification limit	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Indicator value	N/A	0.9	0.8	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

Licensee Comments: none

## Reactor Coolant System Leakage



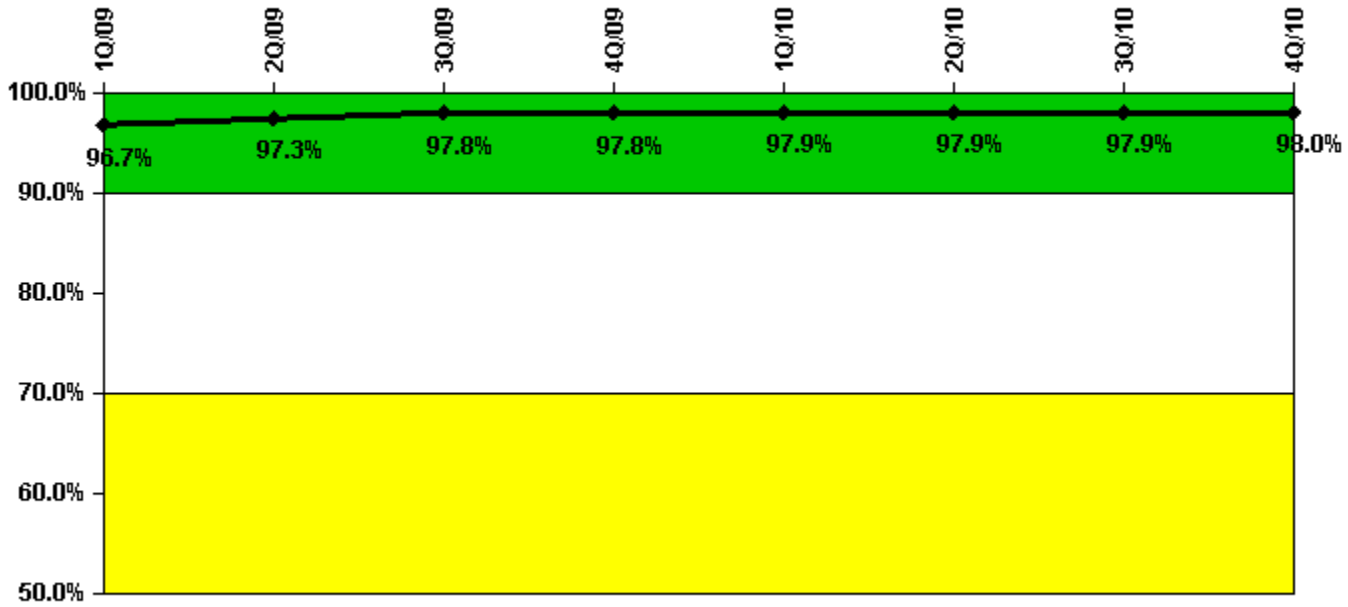
Thresholds: White > 50.0 Yellow > 100.0

### 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	0.082	0.089	0.120	0.090	0.076	0.091	0.098	0.073	0.068	0.098	0	0
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	0.9	1.2	0.9	0.8	0.9	1.0	0.7	0.7	1.0	0	0
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	0.210	0.058	0.119	0.059	0.177	0.149	0.131	0.048	0.194	0.062	0.069	0.085
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	2.1	0.6	1.2	0.6	1.8	1.5	1.3	0.5	1.9	0.6	0.7	0.9

Licensee Comments: none

## Drill/Exercise Performance



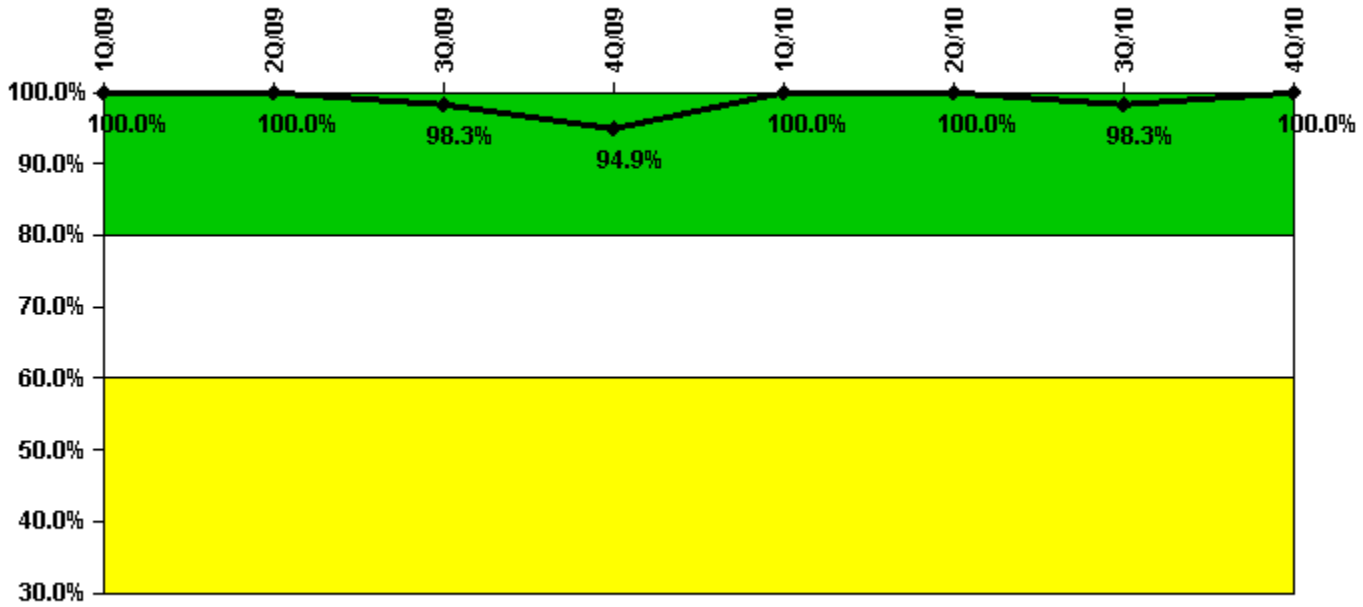
Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Successful opportunities	61.0	61.0	43.0	3.0	27.0	29.0	23.0	52.0
Total opportunities	65.0	61.0	43.0	4.0	27.0	30.0	23.0	52.0
Indicator value	96.7%	97.3%	97.8%	97.8%	97.9%	97.9%	97.9%	98.0%

License Comments: none

# ERO Drill Participation



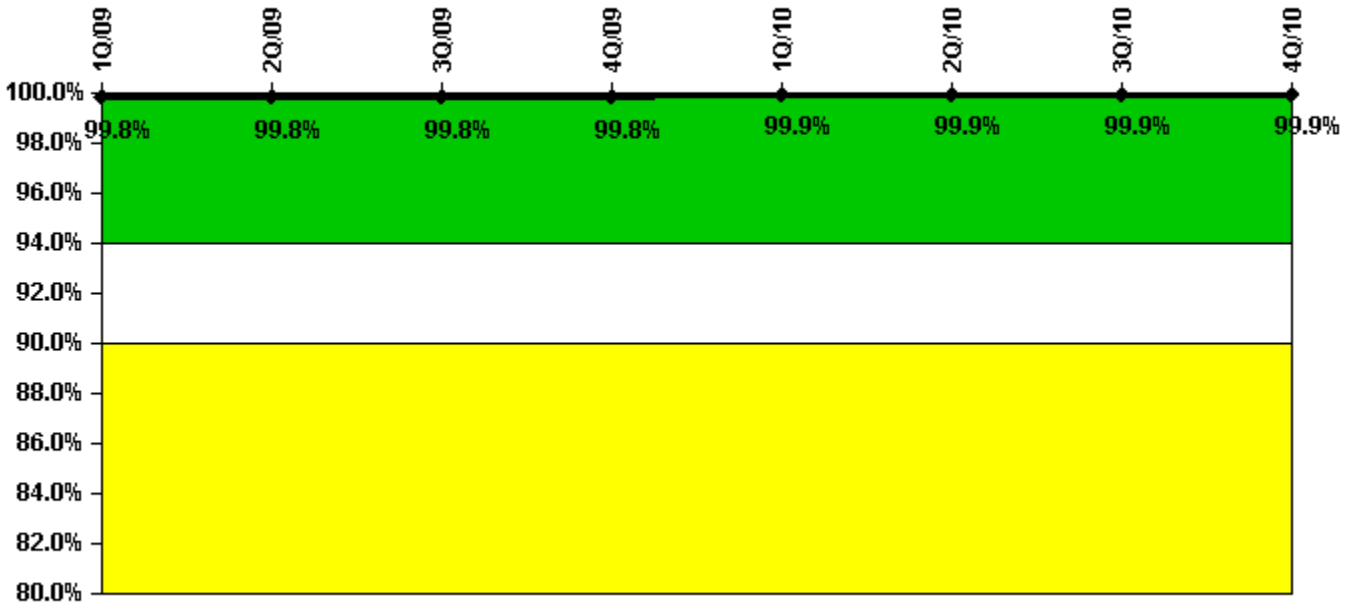
Thresholds: White < 80.0% Yellow < 60.0%

## Notes

ERO Drill Participation	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10
Participating Key personnel	58.0	60.0	57.0	56.0	60.0	58.0	59.0	62.0
Total Key personnel	58.0	60.0	58.0	59.0	60.0	58.0	60.0	62.0
Indicator value	100.0%	100.0%	98.3%	94.9%	100.0%	100.0%	98.3%	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	1244	1246	1247	1343	1150	1247	1343	1247
Total sirens-tests	1248	1248	1248	1344	1152	1248	1344	1248
Indicator value	99.8%	99.8%	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

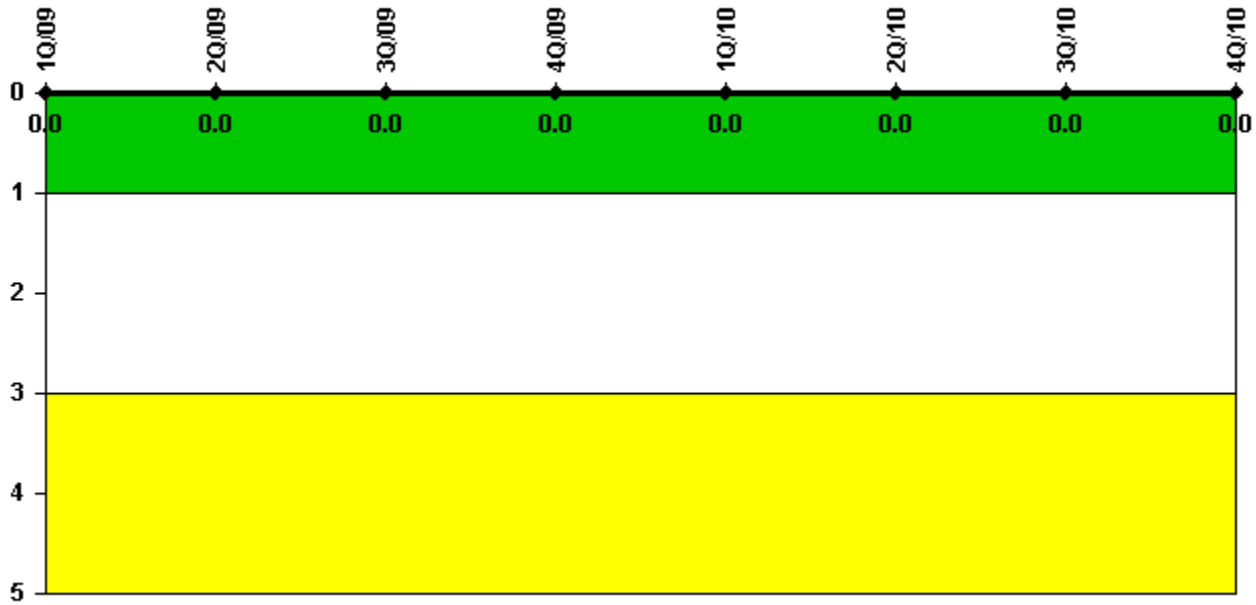
## Notes

Occupational Exposure Control Effectiveness	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	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

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## 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.