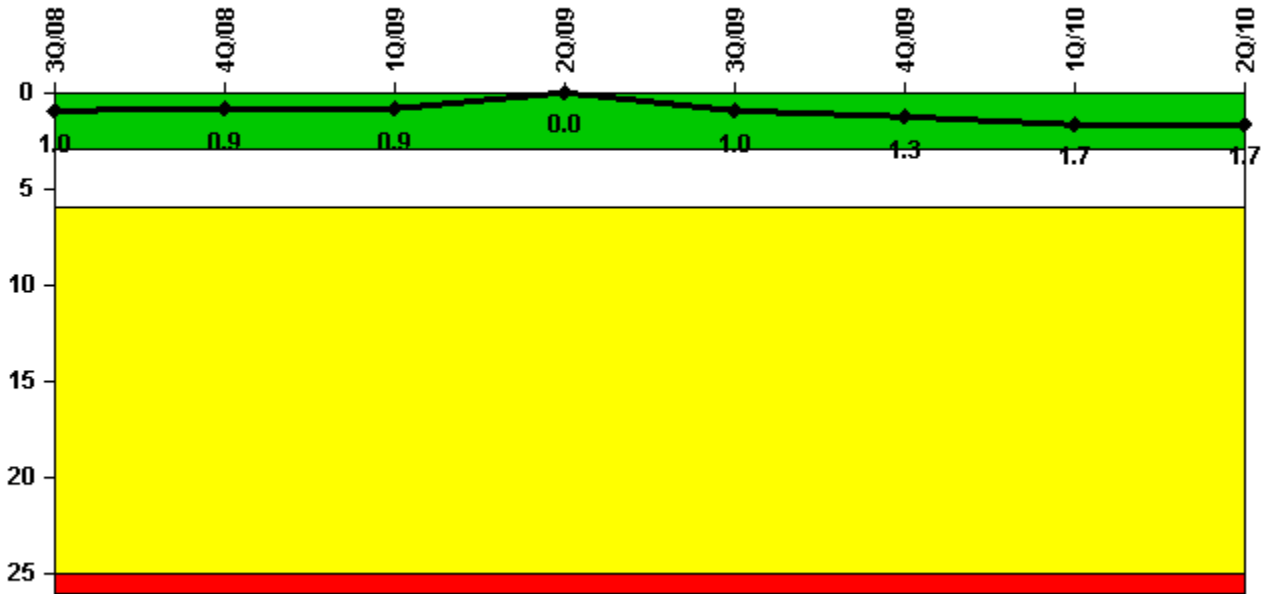


# San Onofre 2

## 2Q/2010 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



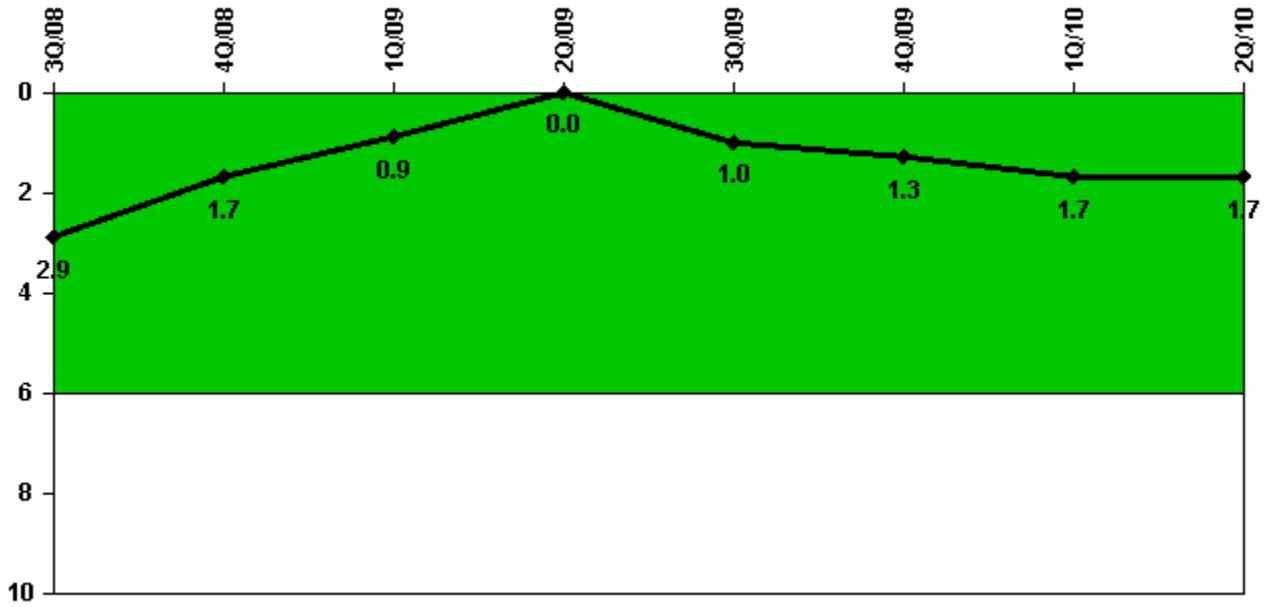
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
Unplanned scrams	0	0	0	0	1.0	0	0	0
Critical hours	2208.0	2113.7	1007.7	2184.0	2052.4	0	0	2003.8
Indicator value	1.0	0.9	0.9	0	1.0	1.3	1.7	1.7

Licensee Comments: none

## Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

### Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
Unplanned power changes	0	0	0	0	1.0	0	0	0
Critical hours	2208.0	2113.7	1007.7	2184.0	2052.4	0	0	2003.8
Indicator value	2.9	1.7	0.9	0	1.0	1.3	1.7	1.7

Licensee Comments: none

# Unplanned Scrams with Complications



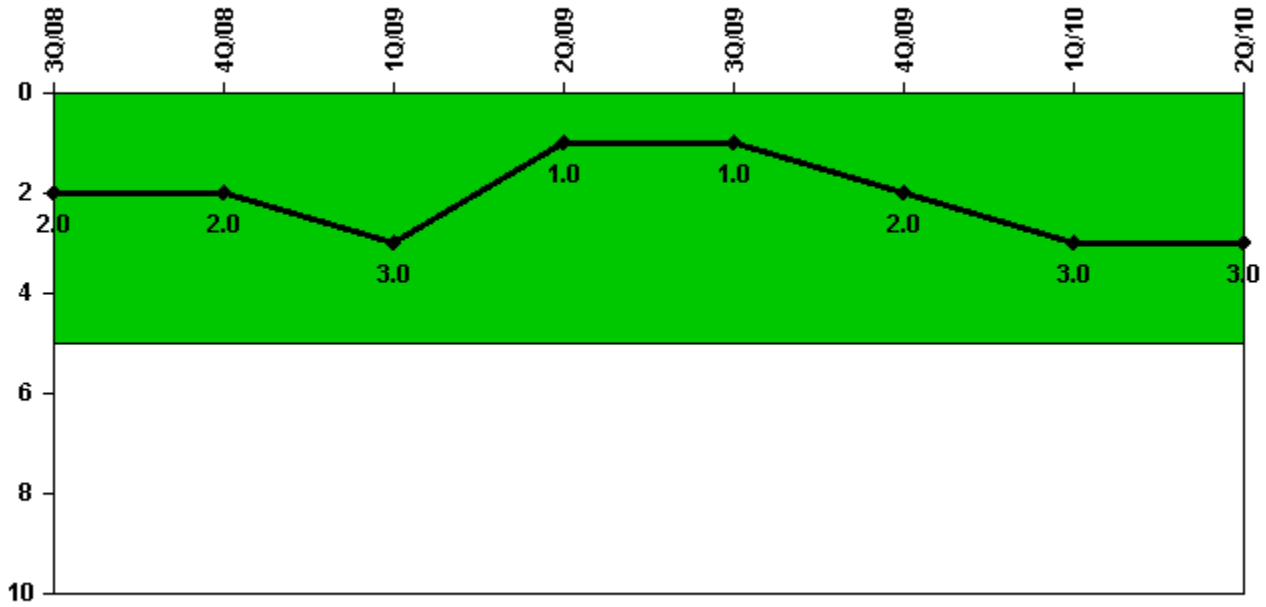
Thresholds: White > 1.0

## Notes

Unplanned Scrams with Complications	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/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)



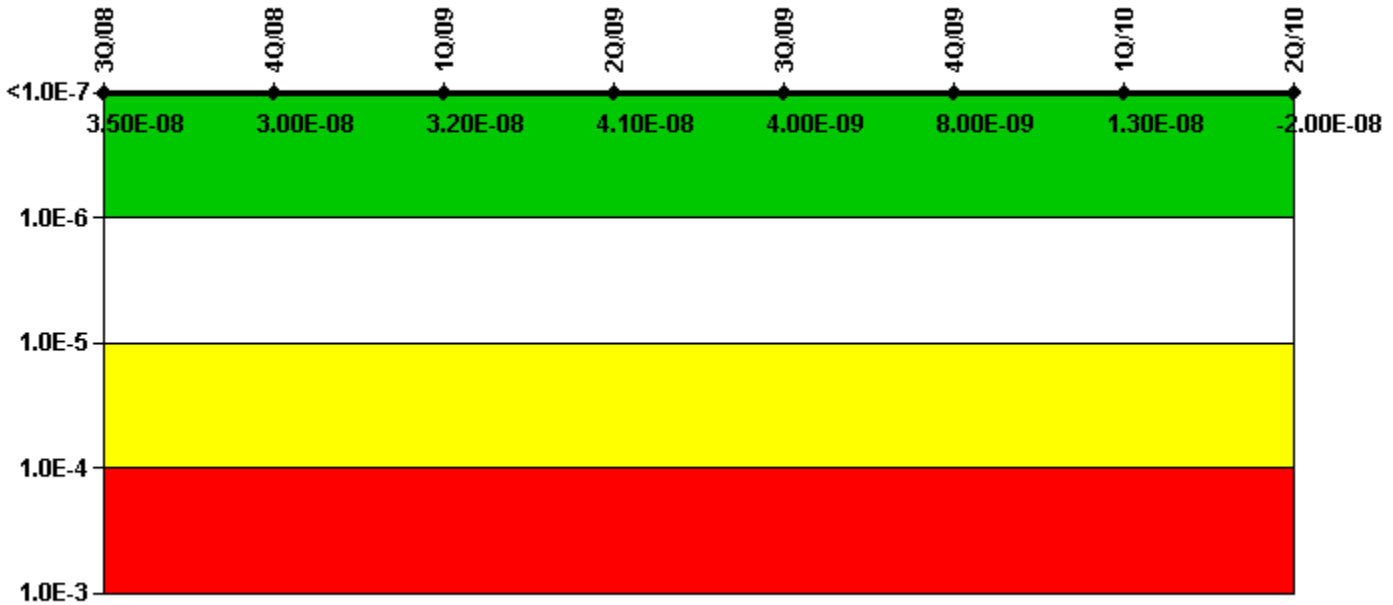
Thresholds: White > 5.0

### Notes

Safety System Functional Failures (PWR)	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
Safety System Functional Failures	0	0	1	0	0	1	2	0
Indicator value	2	2	3	1	1	2	3	3

Licensee Comments: none

# Mitigating Systems Performance Index, Emergency AC Power System



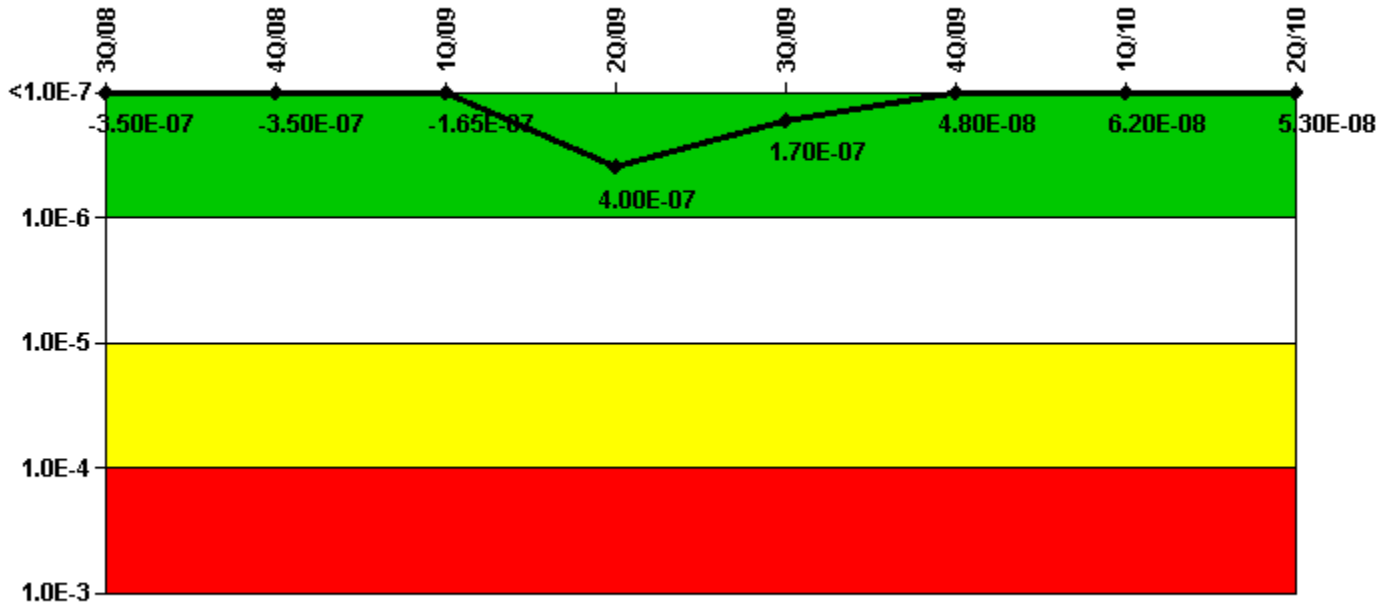
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
UAI ( $\Delta$ CDF)	2.40E-08	1.90E-08	2.10E-08	3.00E-08	3.10E-08	3.40E-08	3.89E-08	3.42E-08
URI ( $\Delta$ CDF)	1.10E-08	1.10E-08	1.10E-08	1.10E-08	-2.70E-08	-2.60E-08	-2.55E-08	-5.39E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	3.50E-08	3.00E-08	3.20E-08	4.10E-08	4.00E-09	8.00E-09	1.30E-08	-2.00E-08

Licensee Comments: none

# Mitigating Systems Performance Index, High Pressure Injection System



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

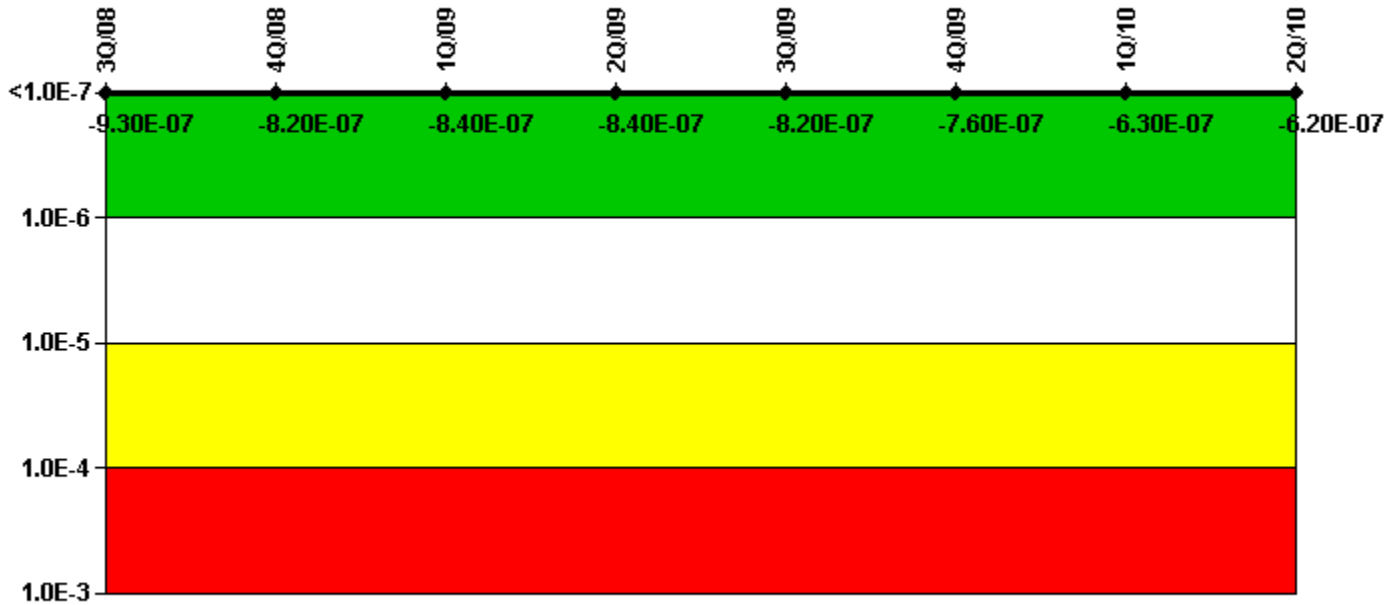
## Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
UAI ( $\Delta$ CDF)	-2.10E-07	-2.10E-07	-2.50E-08	5.40E-07	3.10E-07	9.90E-08	1.13E-07	1.07E-07
URI ( $\Delta$ CDF)	-1.40E-07	-1.40E-07	-1.40E-07	-1.40E-07	-1.40E-07	-5.10E-08	-5.04E-08	-5.43E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.50E-07	-3.50E-07	-1.65E-07	4.00E-07	1.70E-07	4.80E-08	6.20E-08	5.30E-08

Licensee Comments:

2Q/10: The FV/UR ratios for HPSI pumps were calculated using Option 1 in NEI 99-02 Section F.2.3.3. For 2Q10, Option 2 is used to calculate separate FV/UR ratios for failure to start and failure to run modes.

# Mitigating Systems Performance Index, Heat Removal System



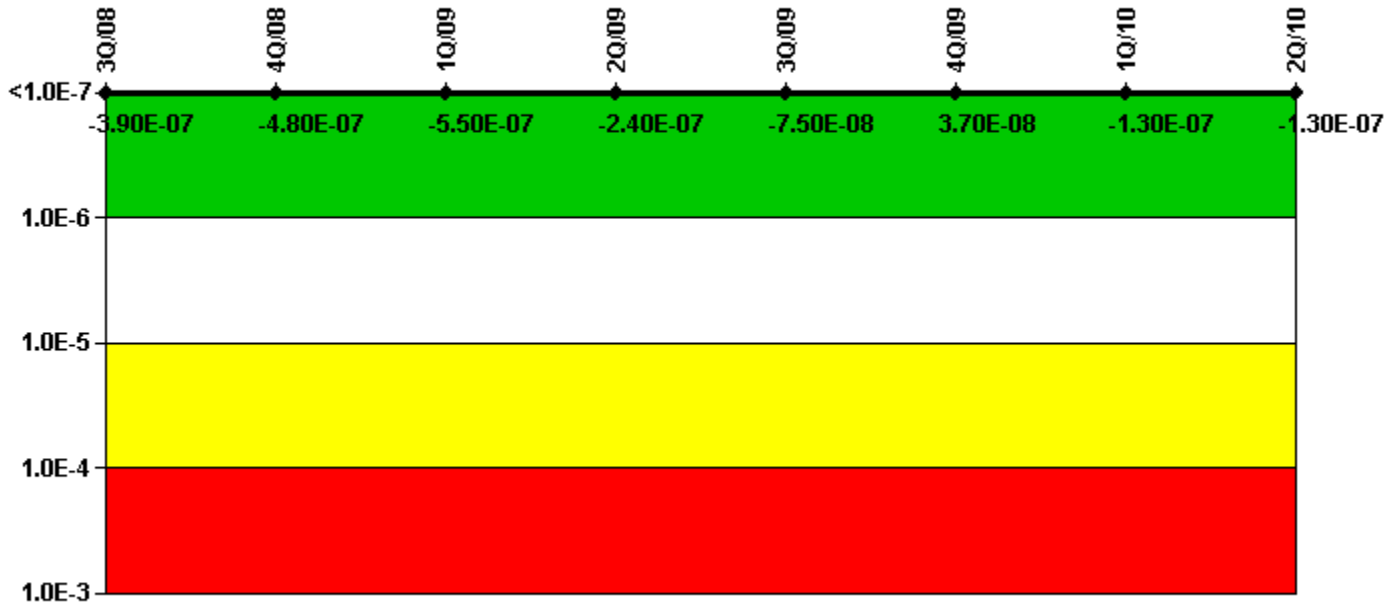
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
UAI ( $\Delta$ CDF)	-2.10E-07	-2.50E-07	-2.70E-07	-2.70E-07	-2.20E-07	-2.00E-07	-1.54E-07	-1.54E-07
URI ( $\Delta$ CDF)	-7.20E-07	-5.70E-07	-5.70E-07	-5.70E-07	-6.00E-07	-5.60E-07	-4.74E-07	-4.66E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.30E-07	-8.20E-07	-8.40E-07	-8.40E-07	-8.20E-07	-7.60E-07	-6.30E-07	-6.20E-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

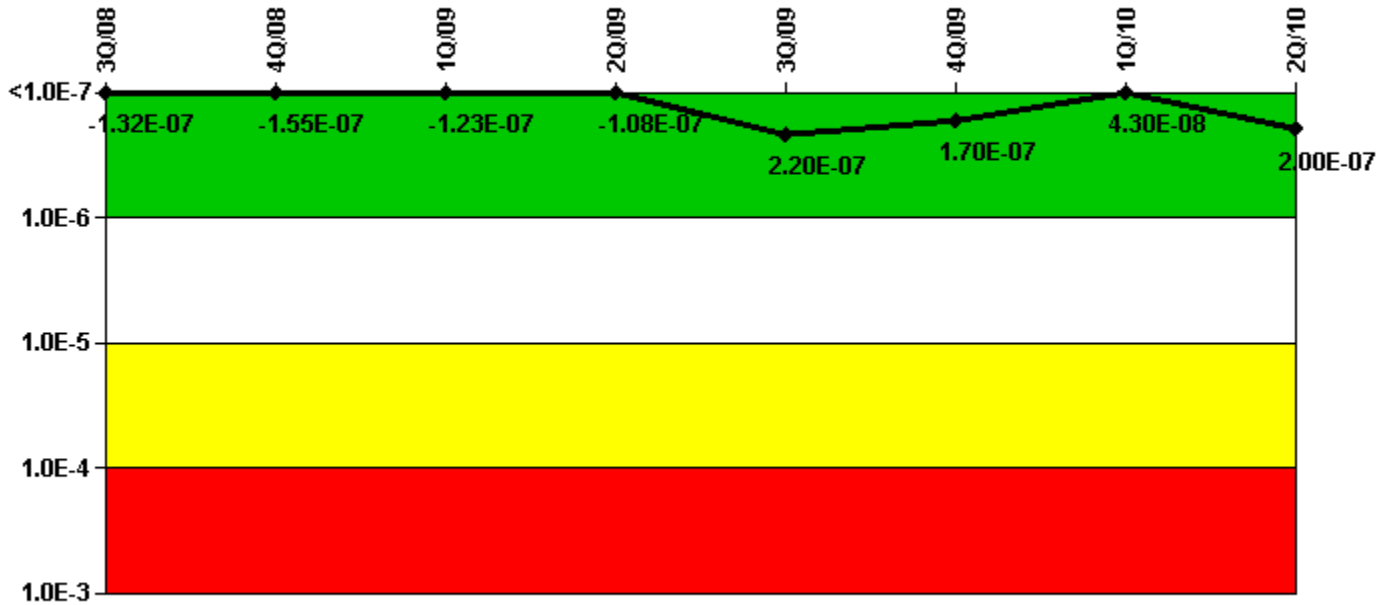
Mitigating Systems Performance Index, Residual Heat Removal System	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
UAI ( $\Delta$ CDF)	-2.80E-07	-3.70E-07	-4.40E-07	-1.30E-07	3.50E-08	6.30E-08	-1.09E-07	-1.09E-07
URI ( $\Delta$ CDF)	-1.10E-07	-1.10E-07	-1.10E-07	-1.10E-07	-1.10E-07	-2.60E-08	-2.51E-08	-2.51E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.90E-07	-4.80E-07	-5.50E-07	-2.40E-07	-7.50E-08	3.70E-08	-1.30E-07	-1.30E-07

Licensee Comments:

2Q/10: The FV/UR ratios for CS pumps were calculated using Option 1 in NEI 99-02 Section F.2.3.3. For 2Q10, Option 2 is used to calculate separate FV/UR ratios for failure to start and failure to run modes.



# Mitigating Systems Performance Index, Cooling Water Systems



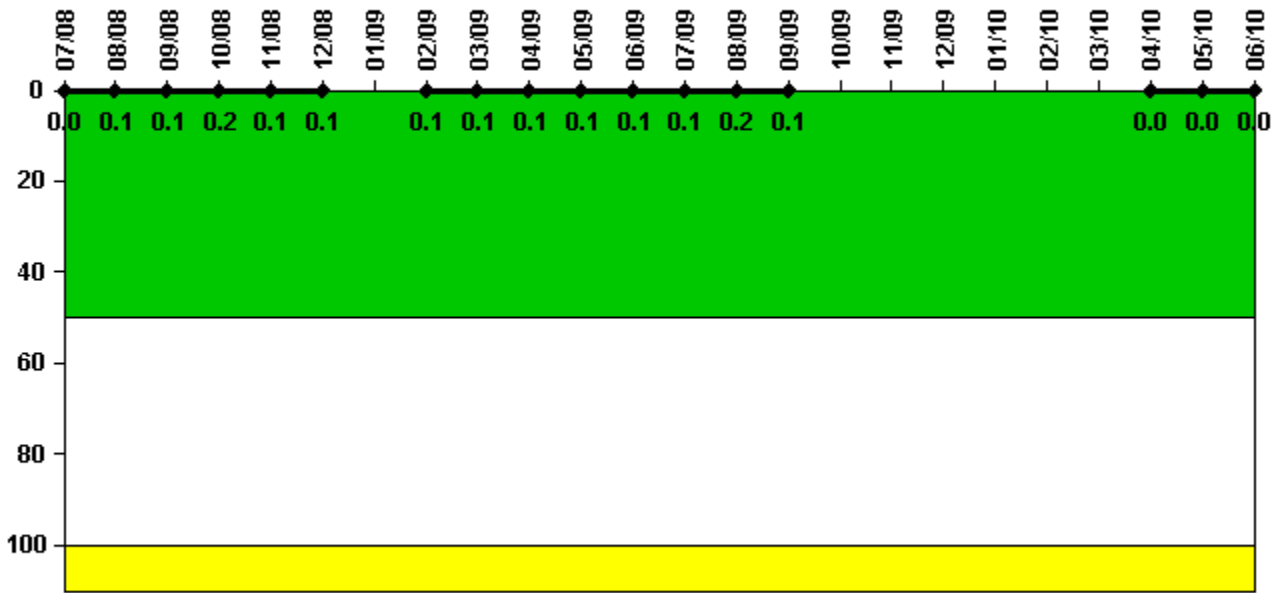
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
UAI ( $\Delta$ CDF)	3.80E-08	4.70E-09	3.70E-08	5.20E-08	3.80E-07	2.90E-07	1.63E-07	3.22E-07
URI ( $\Delta$ CDF)	-1.70E-07	-1.60E-07	-1.60E-07	-1.60E-07	-1.60E-07	-1.20E-07	-1.20E-07	-1.20E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.32E-07	-1.55E-07	-1.23E-07	-1.08E-07	2.20E-07	1.70E-07	4.30E-08	2.00E-07

Licensee Comments: none

# Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

## Notes

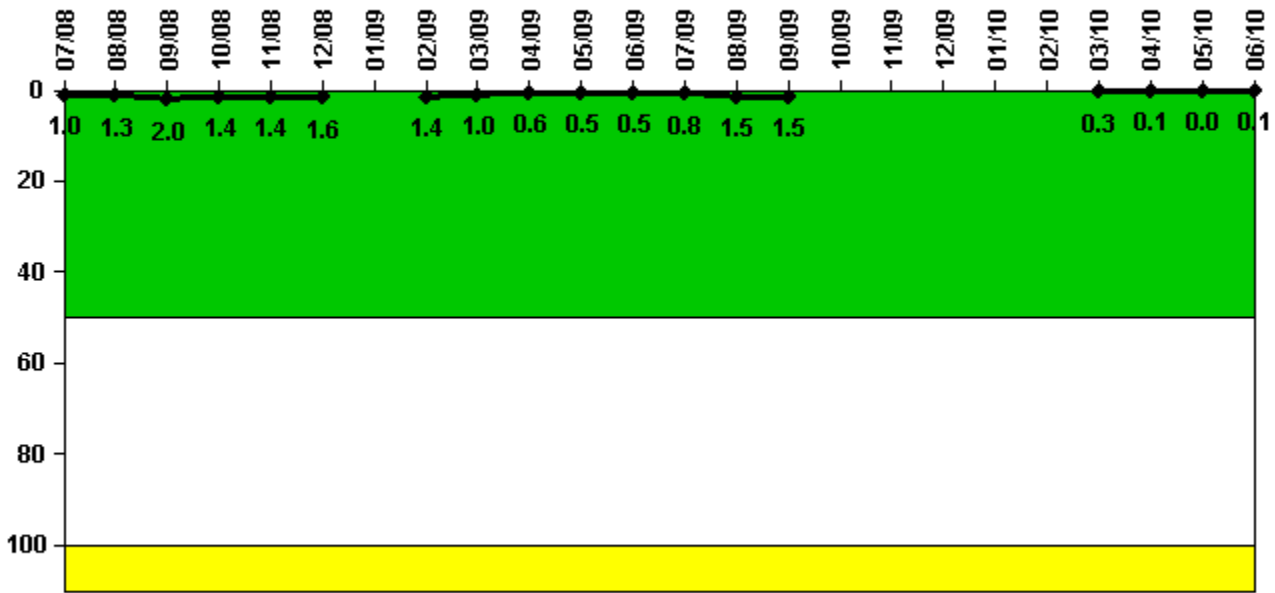
Reactor Coolant System Activity	7/08	8/08	9/08	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09
Maximum activity	0.000434	0.000919	0.001010	0.001550	0.001260	0.001320	N/A	0.000655	0.000748	0.001260	0.001290	0.001330
Technical specification limit	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Indicator value	0	0.1	0.1	0.2	0.1	0.1	N/A	0.1	0.1	0.1	0.1	0.1

Reactor Coolant System Activity	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10
Maximum activity	0.001300	0.001530	0.001420	N/A	N/A	N/A	N/A	N/A	N/A	0.000112	0.000110	0.000301
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	0.1	0.2	0.1	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0

Licensee Comments: none

## Reactor Coolant System Leakage



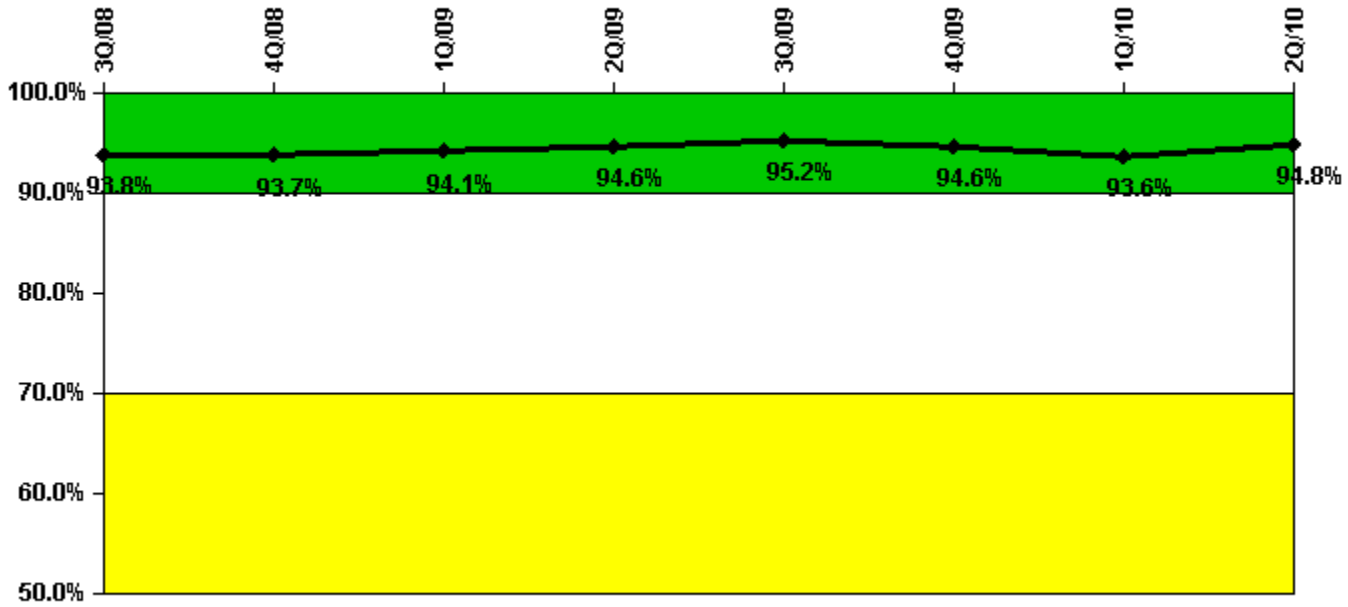
Thresholds: White > 50.0 Yellow > 100.0

### Notes

Reactor Coolant System Leakage	7/08	8/08	9/08	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09
Maximum leakage	0.100	0.130	0.200	0.140	0.140	0.160	N/A	0.140	0.100	0.060	0.050	0.050
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	1.0	1.3	2.0	1.4	1.4	1.6	N/A	1.4	1.0	0.6	0.5	0.5
Reactor Coolant System Leakage	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10
Maximum leakage	0.080	0.150	0.150	N/A	N/A	N/A	N/A	N/A	0.030	0.010	0	0.010
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	1.5	1.5	N/A	N/A	N/A	N/A	N/A	0.3	0.1	0	0.1

Licensee Comments: none

## Drill/Exercise Performance



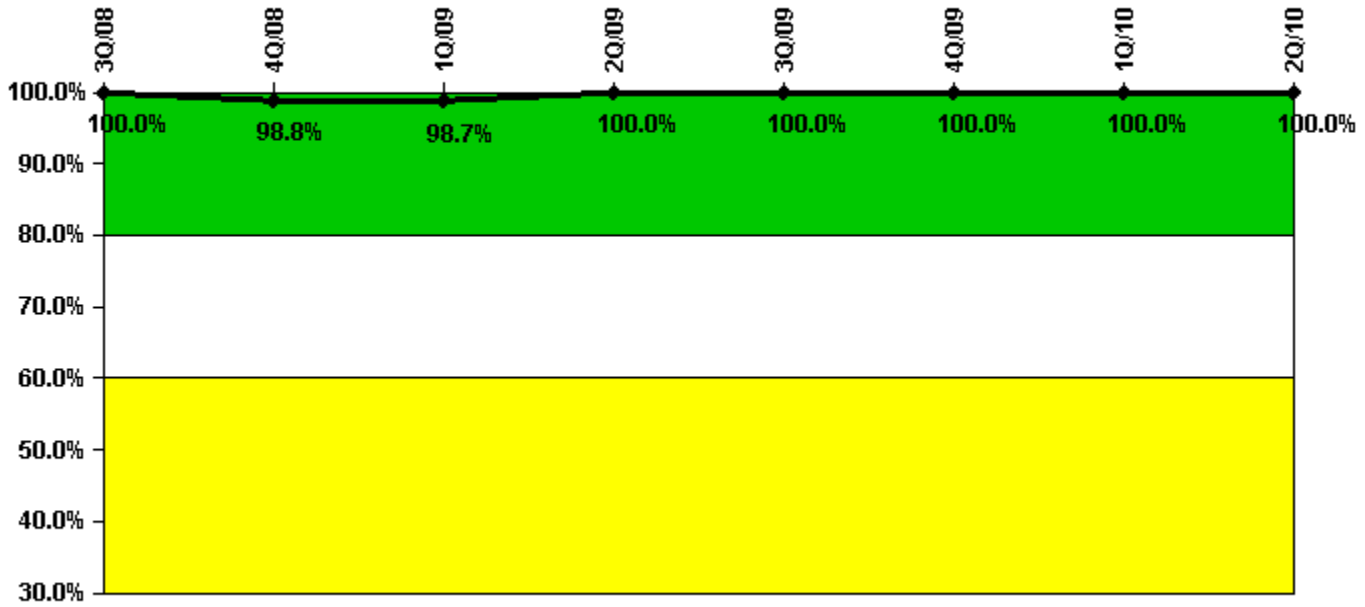
Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
Successful opportunities	28.0	60.0	15.0	89.0	33.0	24.0	11.0	53.0
Total opportunities	29.0	63.0	15.0	93.0	38.0	24.0	15.0	53.0
Indicator value	93.8%	93.7%	94.1%	94.6%	95.2%	94.6%	93.6%	94.8%

Licensee Comments: none

## ERO Drill Participation



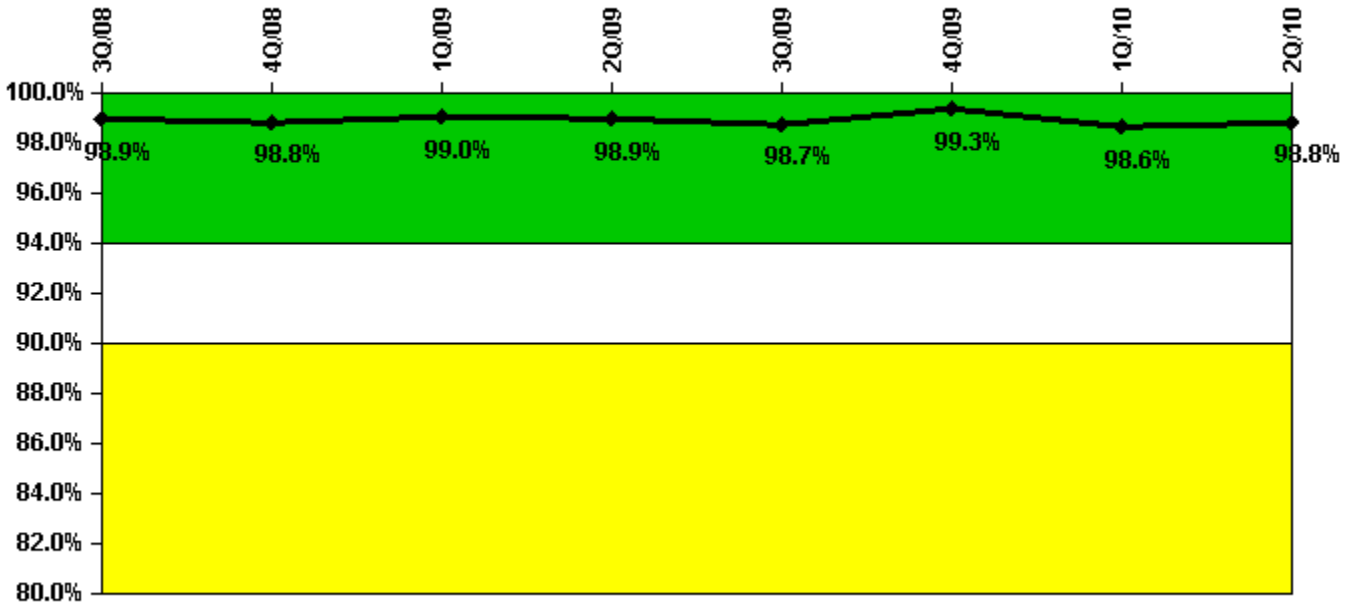
Thresholds: White < 80.0% Yellow < 60.0%

### Notes

ERO Drill Participation	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
Participating Key personnel	77.0	80.0	76.0	74.0	74.0	79.0	72.0	74.0
Total Key personnel	77.0	81.0	77.0	74.0	74.0	79.0	72.0	74.0
Indicator value	100.0%	98.8%	98.7%	100.0%	100.0%	100.0%	100.0%	100.0%

Licensee Comments: none

# Alert & Notification System



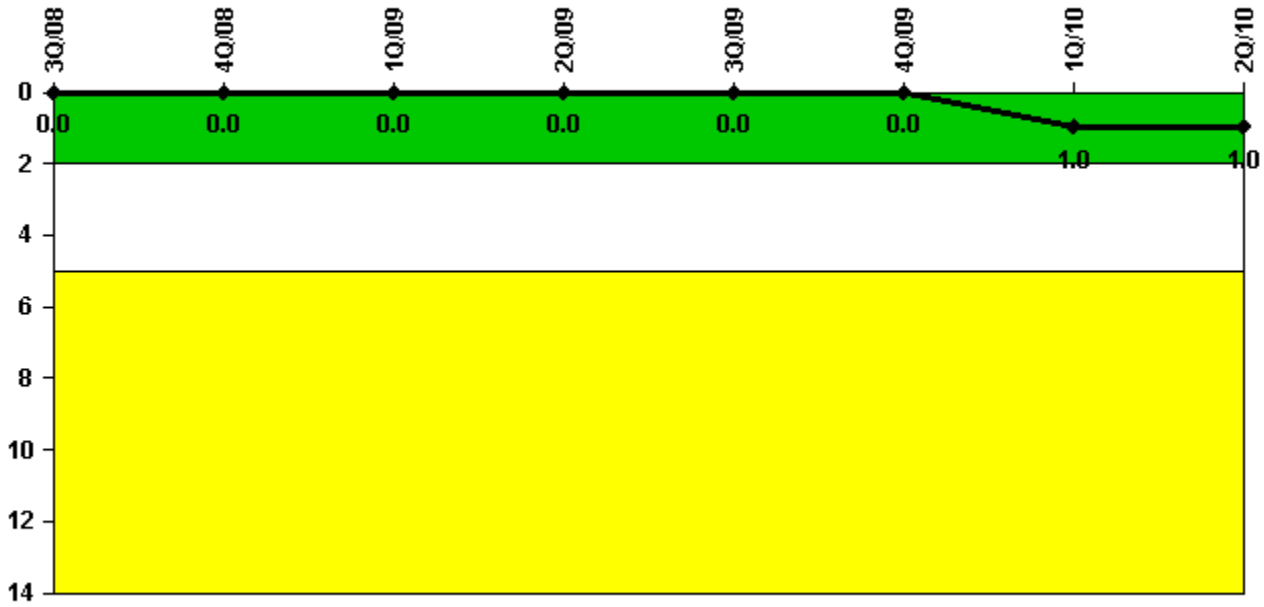
Thresholds: White < 94.0% Yellow < 90.0%

## Notes

Alert & Notification System	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
Successful siren-tests	413	457	415	360	359	519	350	405
Total sirens-tests	416	468	416	364	364	520	362	406
Indicator value	98.9%	98.8%	99.0%	98.9%	98.7%	99.3%	98.6%	98.8%

Licensee Comments: none

## Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

### Notes

Occupational Exposure Control Effectiveness	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/10
High radiation area occurrences	0	0	0	0	0	0	1	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>1</b>	<b>1</b>

Licensee Comments:

1Q/10: The 1Q10 Occupational Radiation Safety Cornerstone was updated to reflect a single Technical Specification High Radiation Area Occurrence in March 2010, which was identified in the NRC Inspection Report (2010-002) dated May 4, 2010.

# RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

## Notes

RETS/ODCM Radiological Effluent	3Q/08	4Q/08	1Q/09	2Q/09	3Q/09	4Q/09	1Q/10	2Q/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.