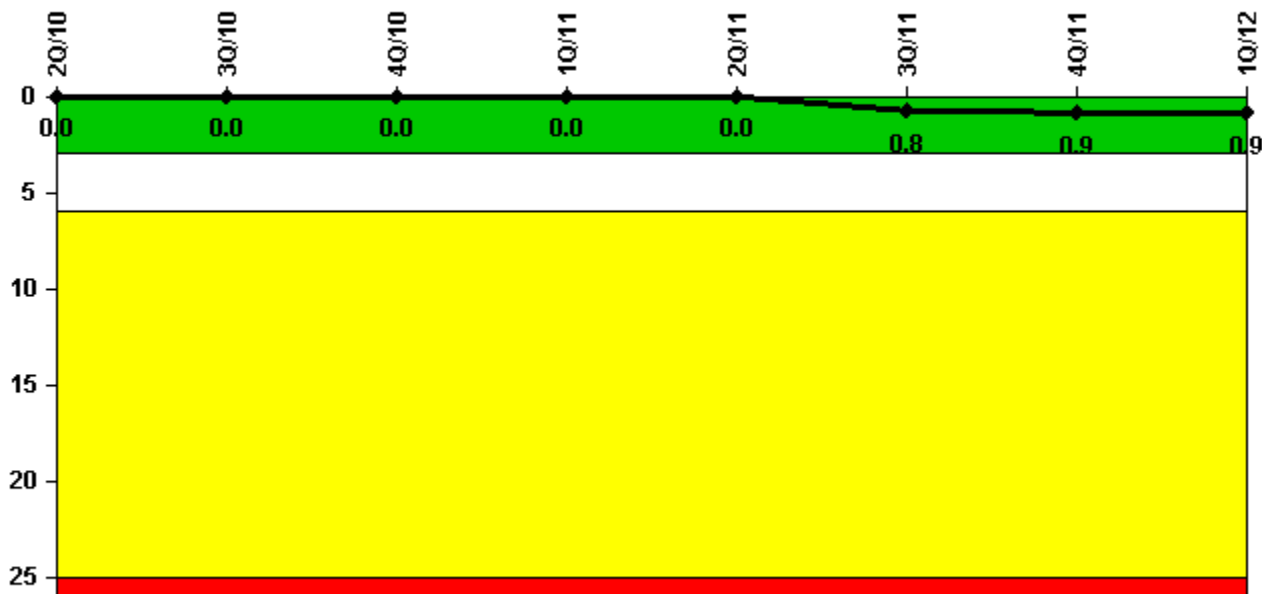


# D.C. Cook 1

## 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

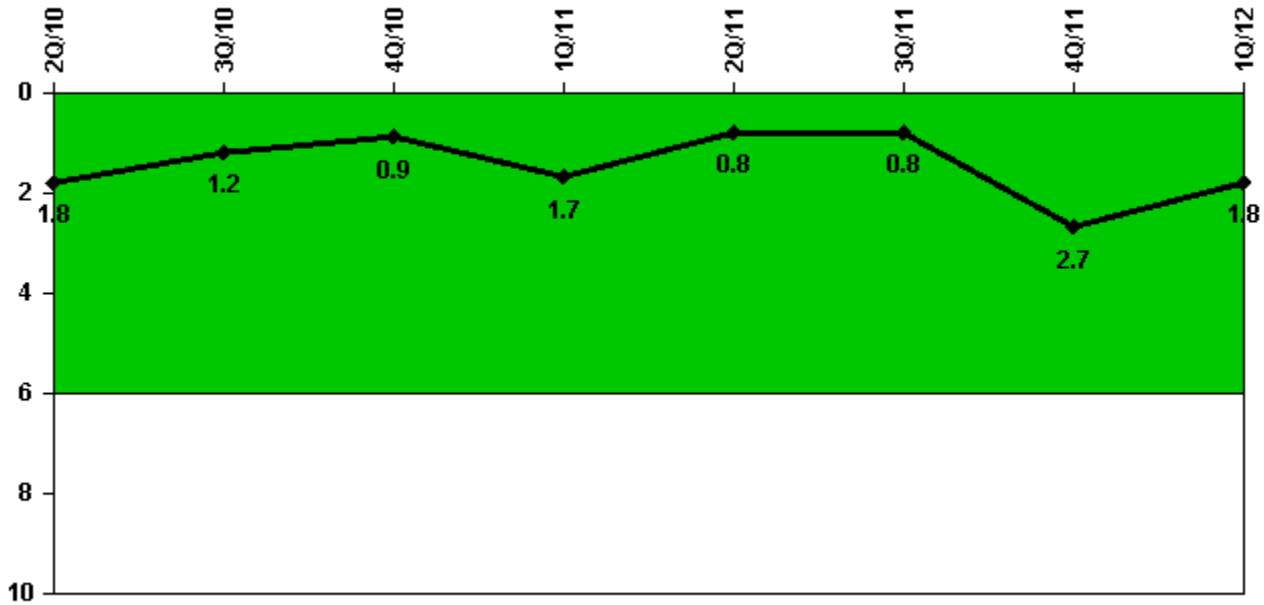
### Notes

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	0	0	0	0	1.0	0	0
Critical hours	1988.1	2208.0	2209.0	2031.6	2184.0	1916.6	1617.1	2183.0
Indicator value	0	0	0	0	0	0.8	0.9	0.9

Licensee Comments:

3Q/11: One unplanned scram: Automatic trip of Unit 1 reactor on September 7 due to a main turbine trip initiated by thrust position circuitry.

## 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	1.0	0	0	1.0	0	0	2.0	0
Critical hours	1988.1	2208.0	2209.0	2031.6	2184.0	1916.6	1617.1	2183.0
Indicator value	1.8	1.2	0.9	1.7	0.8	0.8	2.7	1.8

Licensee Comments:

4Q/11: Two unplanned power changes: November 25 - power reduced to approximately 54% due to East Main Feedwater Pump high vibrations (turbine shaft failure). December 21 - power reduced to approximately 57% due to EHC fluid leak on West Main Feedwater Pump.

1Q/11: Data reflects unplanned power reduction from 100% to approximately 48% on February 17 for repair of steam leak on bleed steam system check valve

# Unplanned Scrams with Complications



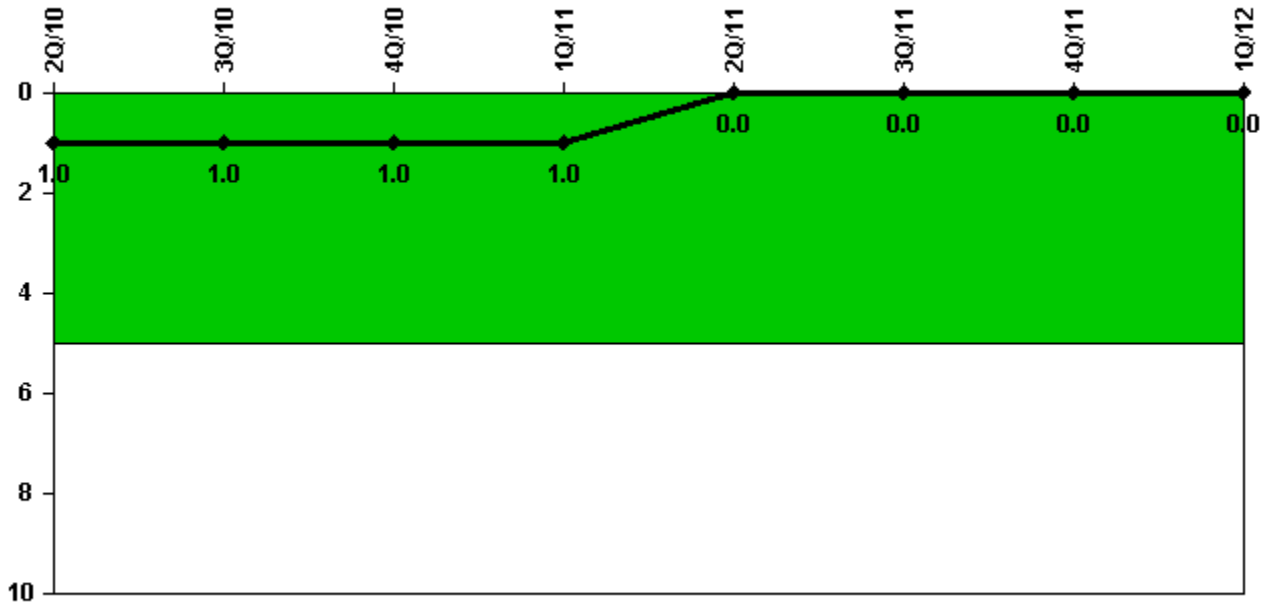
Thresholds: White > 1.0

## 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

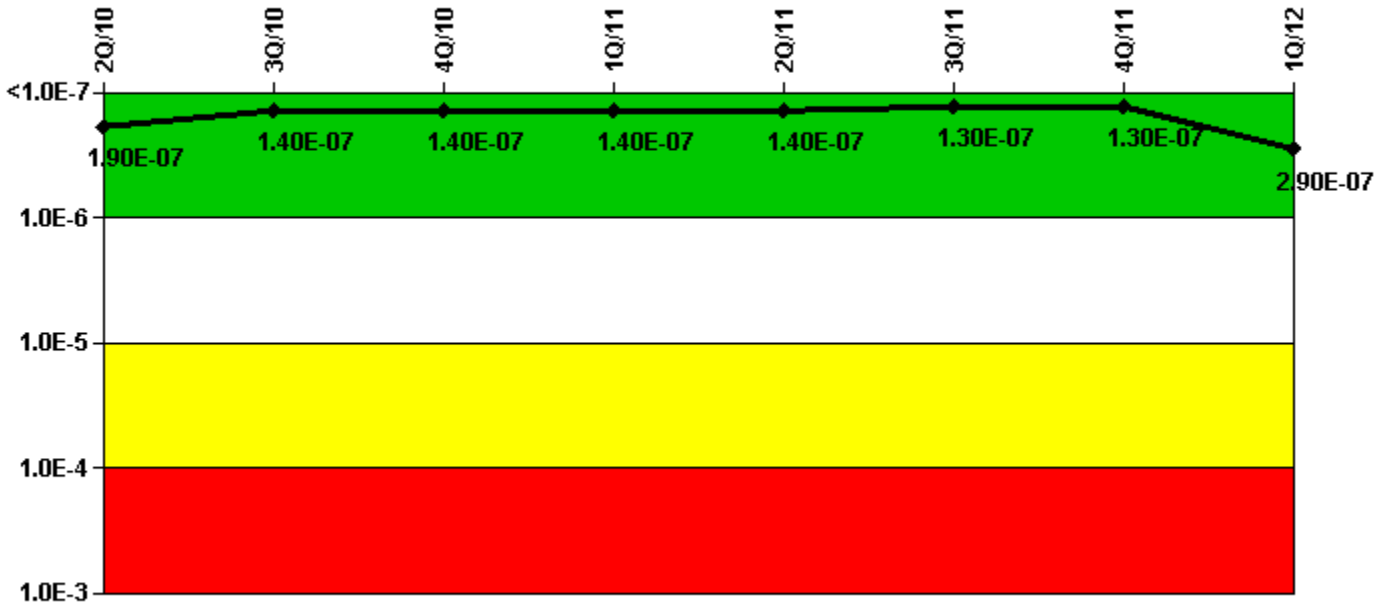
Safety System Functional Failures (PWR)	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Safety System Functional Failures	1	0	0	0	0	0	0	0
Indicator value	1	1	1	1	0	0	0	0

Licensee Comments:

2Q/10: One SSFF Reported in June: LER 05000315 2010-001-00

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# Mitigating Systems Performance Index, Emergency AC Power System



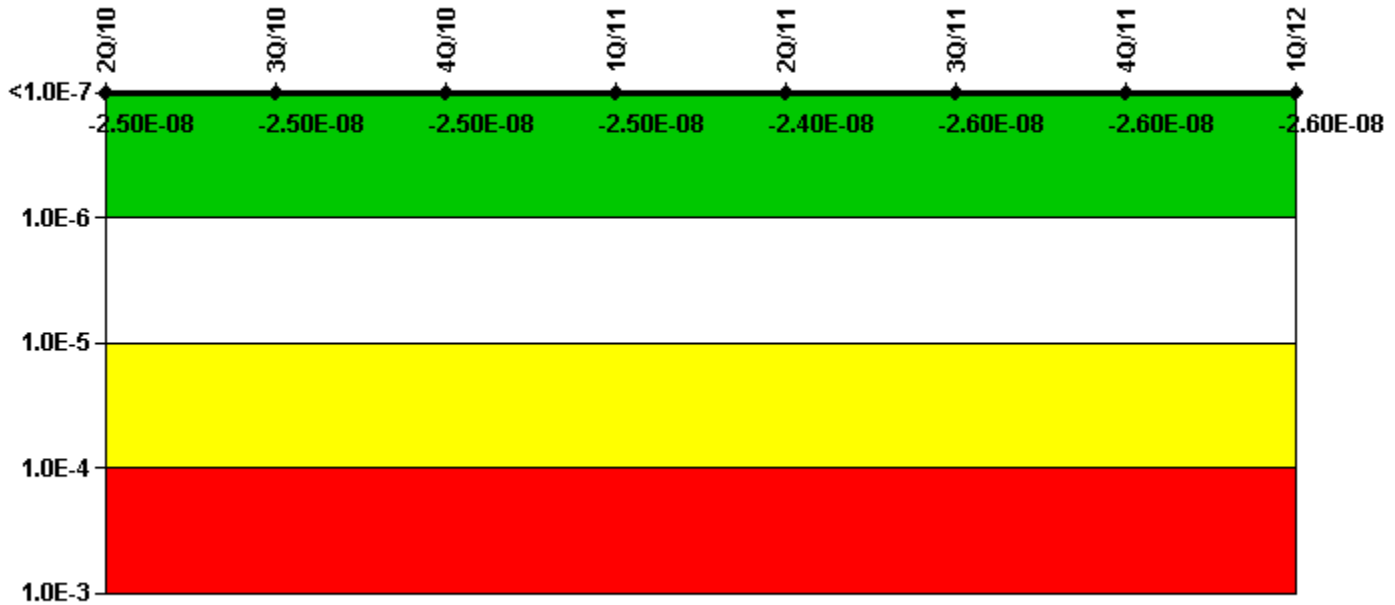
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Emergency AC Power System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	6.93E-10	6.21E-10	6.21E-10	6.19E-10	5.74E-10	5.80E-10	4.86E-10	4.87E-10
URI ( $\Delta$ CDF)	1.90E-07	1.35E-07	1.35E-07	1.35E-07	1.35E-07	1.33E-07	1.33E-07	2.85E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.90E-07	1.40E-07	1.40E-07	1.40E-07	1.40E-07	1.30E-07	1.30E-07	2.90E-07

Licensee Comments: none

# Mitigating Systems Performance Index, High Pressure Injection System



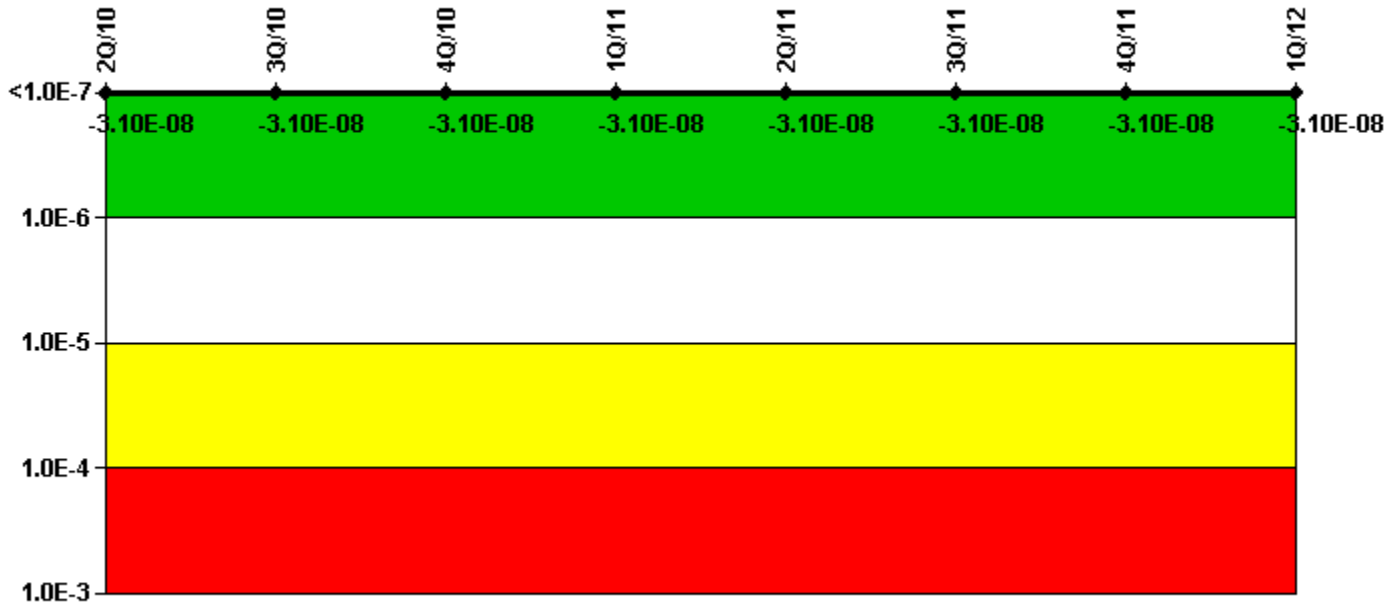
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, High Pressure Injection System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	-2.67E-11	-2.67E-11	-2.67E-11	-2.67E-11	-3.65E-12	-2.30E-12	-5.56E-12	-8.42E-12
URI ( $\Delta$ CDF)	-2.51E-08	-2.51E-08	-2.51E-08	-2.51E-08	-2.41E-08	-2.58E-08	-2.58E-08	-2.58E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-2.50E-08	-2.50E-08	-2.50E-08	-2.50E-08	-2.40E-08	-2.60E-08	-2.60E-08	-2.60E-08

Licensee Comments: none

# Mitigating Systems Performance Index, Heat Removal System



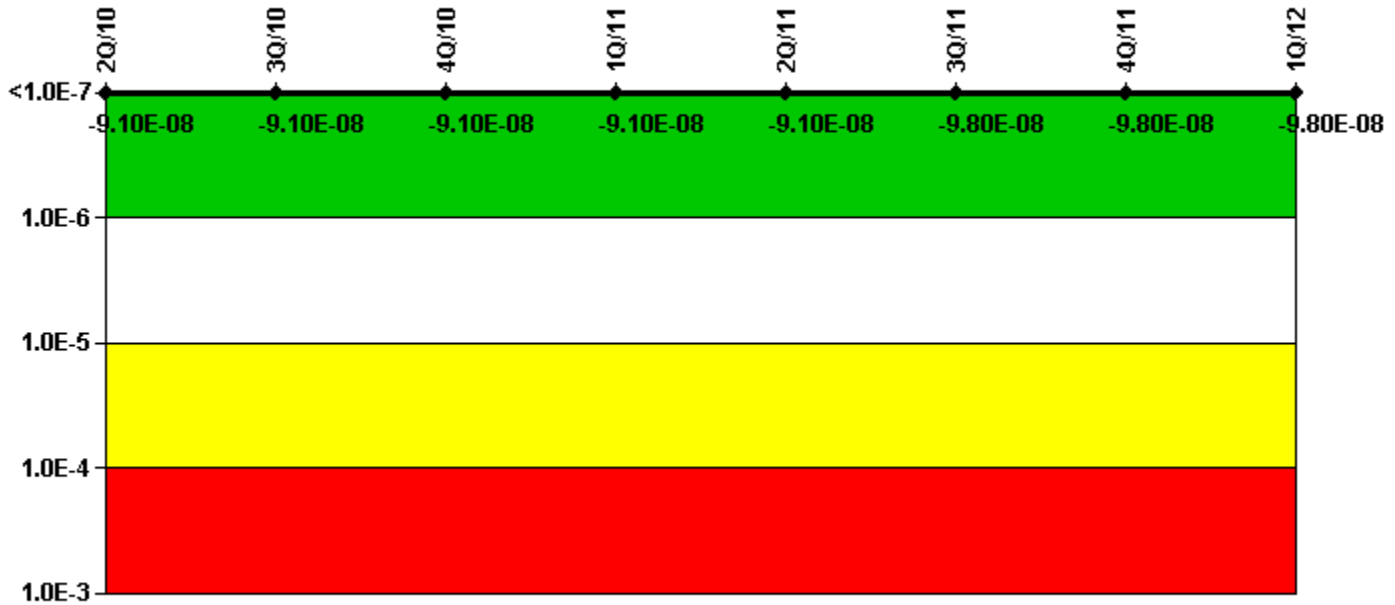
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Heat Removal System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	-2.86E-11	-2.86E-11	-2.86E-11	-2.86E-11	-2.15E-11	-2.01E-11	-2.37E-11	-2.47E-11
URI ( $\Delta$ CDF)	-3.06E-08	-3.06E-08	-3.06E-08	-3.06E-08	-3.06E-08	-3.15E-08	-3.15E-08	-3.15E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.10E-08	-3.10E-08	-3.10E-08	-3.10E-08	-3.10E-08	-3.10E-08	-3.10E-08	-3.10E-08

Licensee Comments: none

# Mitigating Systems Performance Index, Residual Heat Removal System



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

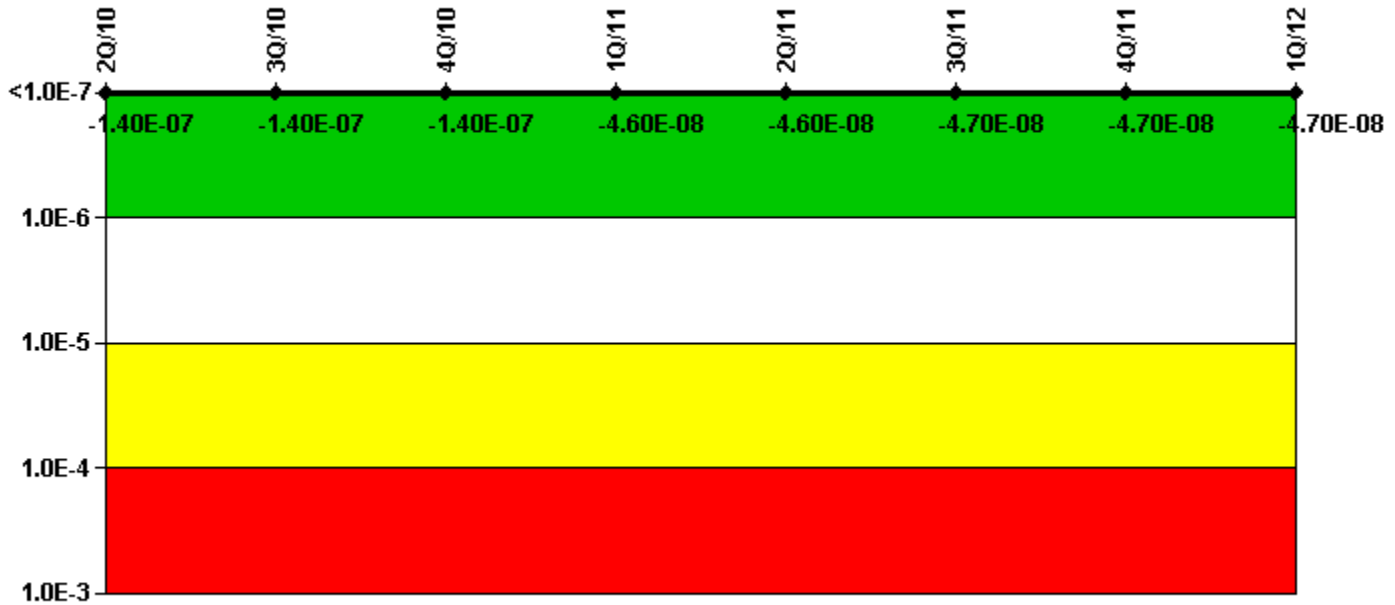
## Notes

Mitigating Systems Performance Index, Residual Heat Removal System	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	-2.00E-13	-3.23E-13	-3.23E-13	-3.23E-13	-3.23E-13	-2.18E-13	-3.05E-13	-3.23E-13
URI ( $\Delta$ CDF)	-9.13E-08	-9.13E-08	-9.13E-08	-9.13E-08	-9.13E-08	-9.76E-08	-9.76E-08	-9.76E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.10E-08	-9.10E-08	-9.10E-08	-9.10E-08	-9.10E-08	-9.80E-08	-9.80E-08	-9.80E-08

Licensee Comments: none



# Mitigating Systems Performance Index, Cooling Water Systems



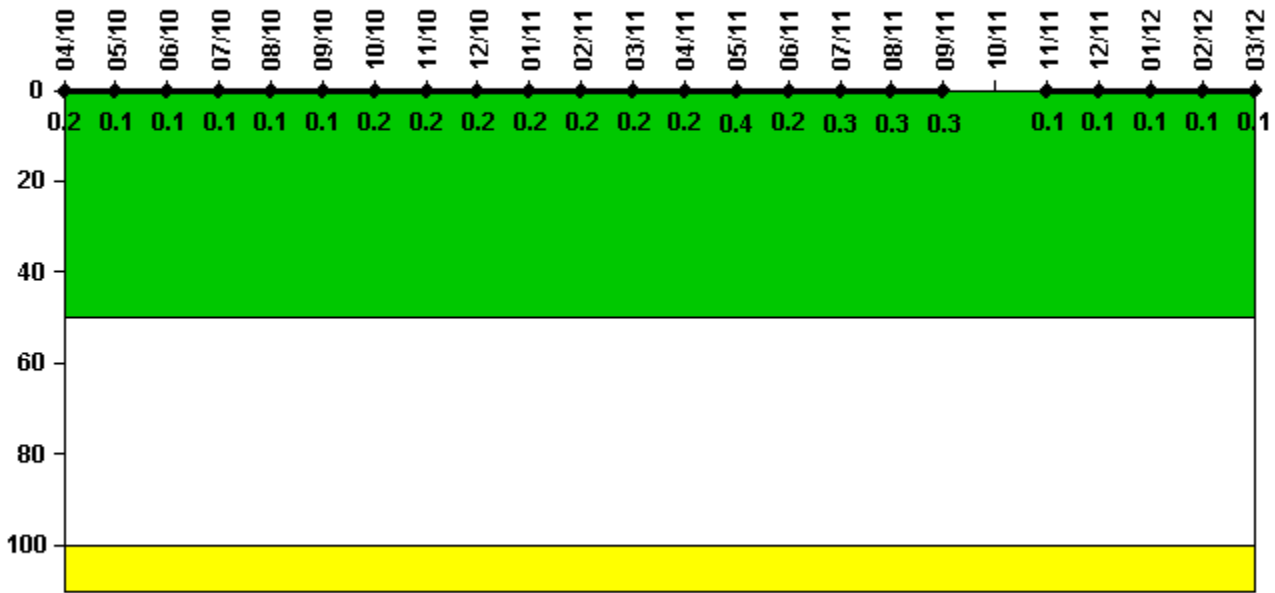
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Cooling Water Systems	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
UAI ( $\Delta$ CDF)	2.27E-11	-3.23E-12	-3.23E-12	3.95E-11	6.25E-11	6.36E-11	4.62E-11	4.25E-11
URI ( $\Delta$ CDF)	-1.42E-07	-1.42E-07	-1.42E-07	-4.58E-08	-4.58E-08	-4.69E-08	-4.69E-08	-4.69E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.40E-07	-1.40E-07	-1.40E-07	-4.60E-08	-4.60E-08	-4.70E-08	-4.70E-08	-4.70E-08

Licensee Comments: none

## Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

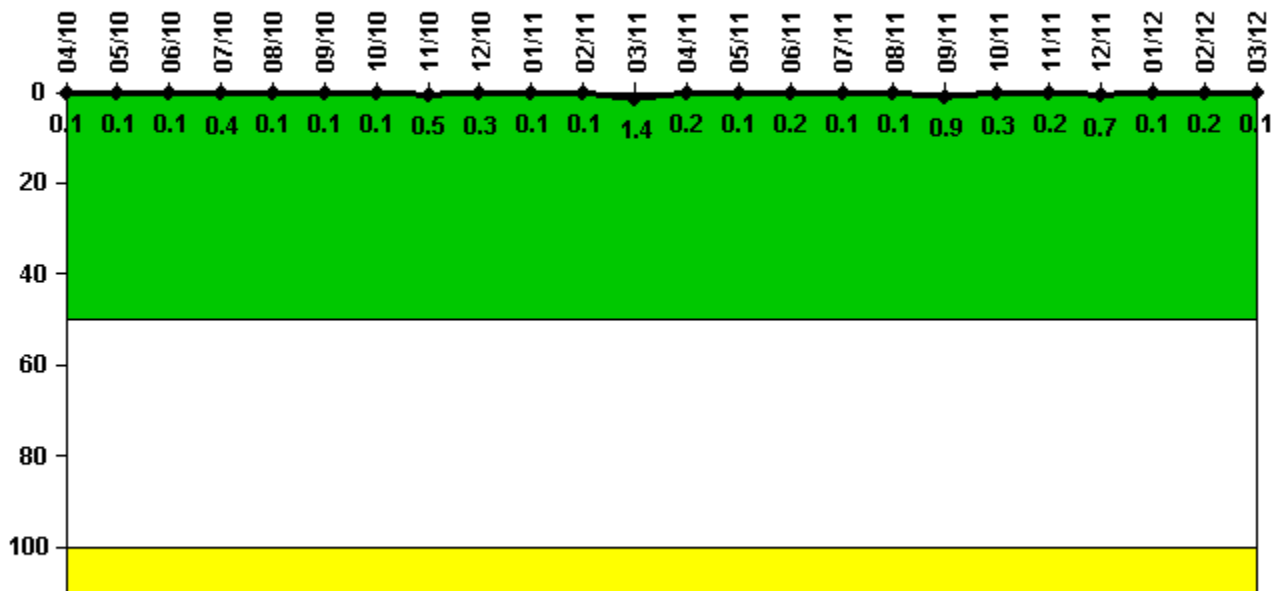
### Notes

Reactor Coolant System Activity	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	0.001590	0.001170	0.001240	0.001330	0.001360	0.001420	0.001580	0.001560	0.001610	0.001680	0.001750	0.001760
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	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Reactor Coolant System Activity	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	0.002300	0.003800	0.002470	0.002560	0.002610	0.003030	N/A	0.000843	0.000793	0.000850	0.000885	0.000932
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	0.4	0.2	0.3	0.3	0.3	N/A	0.1	0.1	0.1	0.1	0.1

Licensee Comments:

12/11: Due to a refueling outage followed by power escalation, RCS Activity data is not available for the month of October.

## Reactor Coolant System Leakage



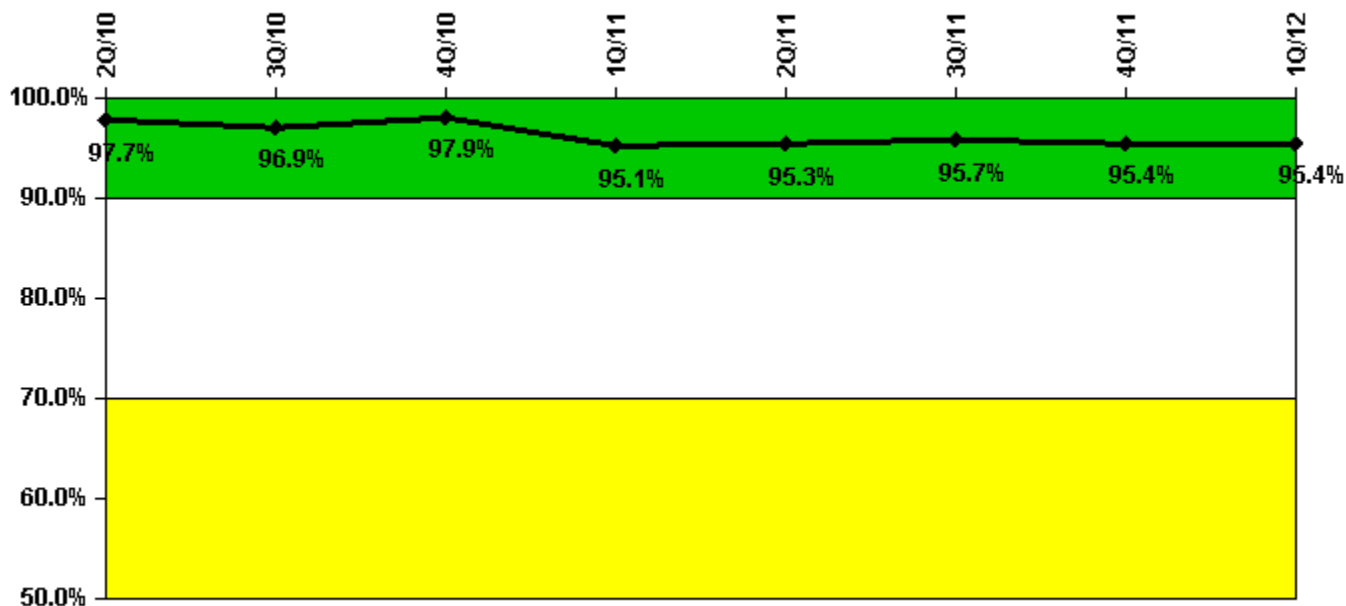
Thresholds: White > 50.0 Yellow > 100.0

### Notes

<b>Reactor Coolant System Leakage</b>	<b>4/10</b>	<b>5/10</b>	<b>6/10</b>	<b>7/10</b>	<b>8/10</b>	<b>9/10</b>	<b>10/10</b>	<b>11/10</b>	<b>12/10</b>	<b>1/11</b>	<b>2/11</b>	<b>3/11</b>
Maximum leakage	0.012	0.014	0.016	0.047	0.006	0.009	0.013	0.057	0.028	0.011	0.015	0.150
Technical specification limit	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
Indicator value	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.5	0.3	0.1	0.1	1.4
<b>Reactor Coolant System Leakage</b>	<b>4/11</b>	<b>5/11</b>	<b>6/11</b>	<b>7/11</b>	<b>8/11</b>	<b>9/11</b>	<b>10/11</b>	<b>11/11</b>	<b>12/11</b>	<b>1/12</b>	<b>2/12</b>	<b>3/12</b>
Maximum leakage	0.026	0.015	0.024	0.012	0.009	0.094	0.036	0.020	0.075	0.009	0.017	0.012
Technical specification limit	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
Indicator value	0.2	0.1	0.2	0.1	0.1	0.9	0.3	0.2	0.7	0.1	0.2	0.1

Licensee Comments: none

## Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

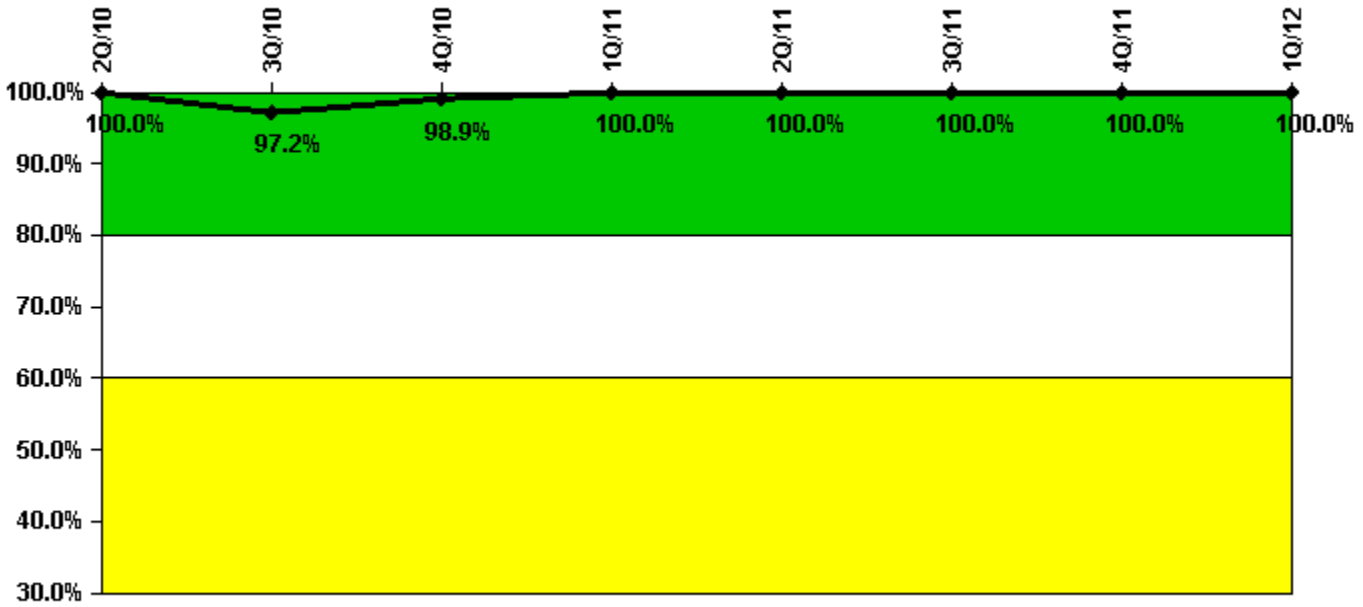
### Notes

Drill/Exercise Performance	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Successful opportunities	26.0	29.0	19.0	43.0	16.0	41.0	0	34.0
Total opportunities	28.0	29.0	19.0	50.0	16.0	41.0	0	35.0
Indicator value	97.7%	96.9%	97.9%	95.1%	95.3%	95.7%	95.4%	95.4%

Licensee Comments:

1Q/11: Previously submitted data for February 2011 was revised to correct an error in grading drill results. Data was changed from "19 of 21 successful" to "18 of 21 successful". This changes the first quarter 2011 total from "44 of 50 successful" to "43 of 50 successful". This change has no impact on performance indicator color.

## ERO Drill Participation



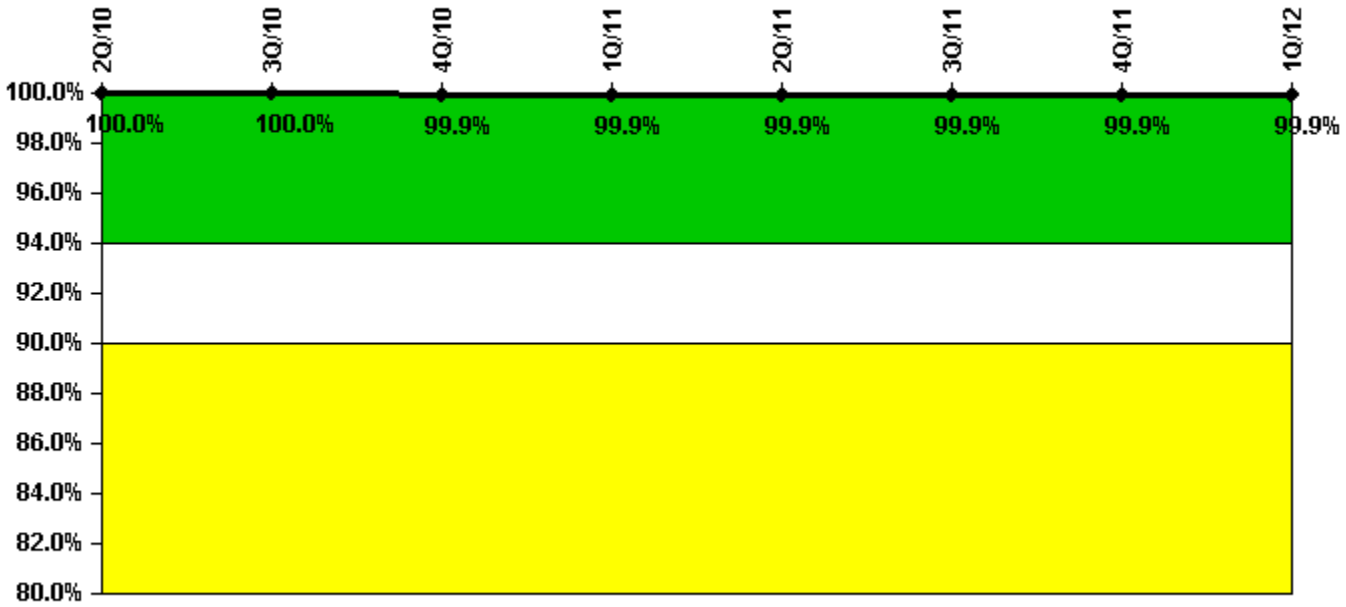
Thresholds: White < 80.0% Yellow < 60.0%

### Notes

ERO Drill Participation	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Participating Key personnel	96.0	103.0	94.0	92.0	92.0	91.0	91.0	91.0
Total Key personnel	96.0	106.0	95.0	92.0	92.0	91.0	91.0	91.0
Indicator value	100.0%	97.2%	98.9%	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	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11	1Q/12
Successful siren-tests	1119	1118	1118	1119	1117	1120	1120	1118
Total sirens-tests	1119	1119	1120	1120	1119	1120	1120	1120
Indicator value	100.0%	100.0%	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**

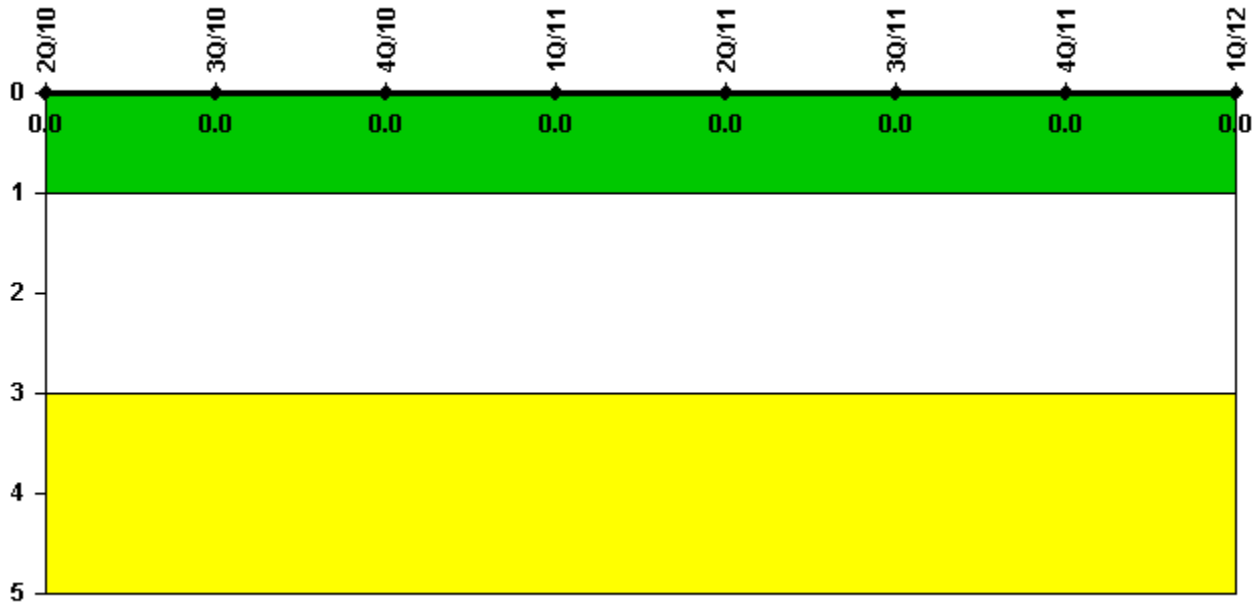
## Notes

Occupational Exposure Control Effectiveness	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

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## 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.