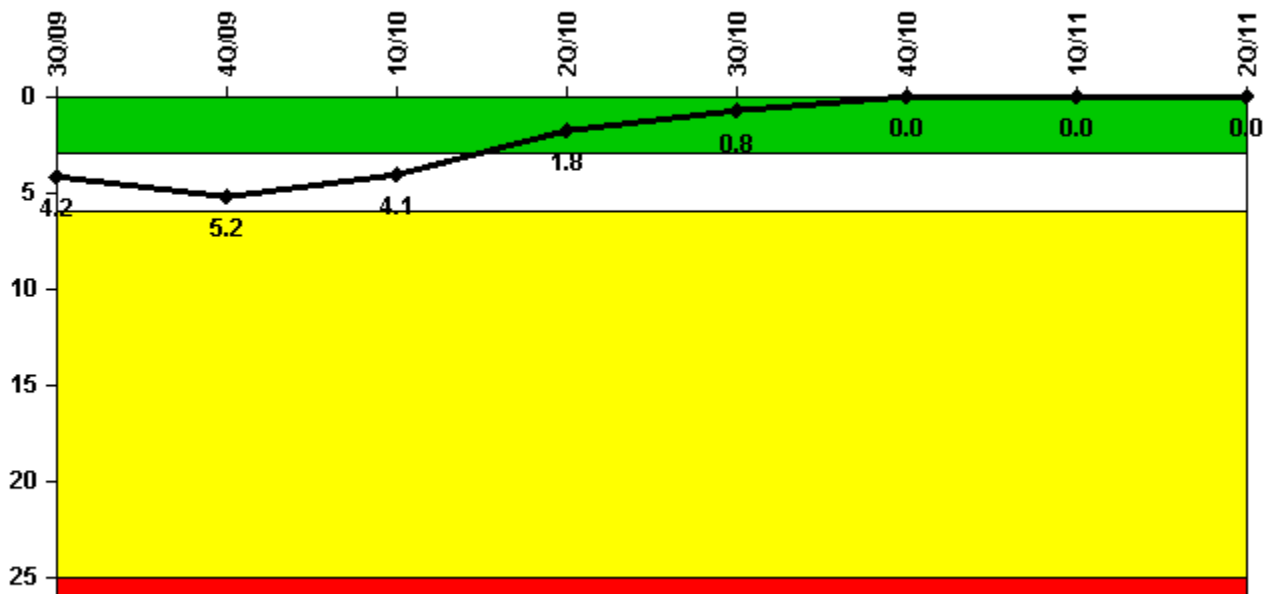


# Columbia Generating Station

## 2Q/2011 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



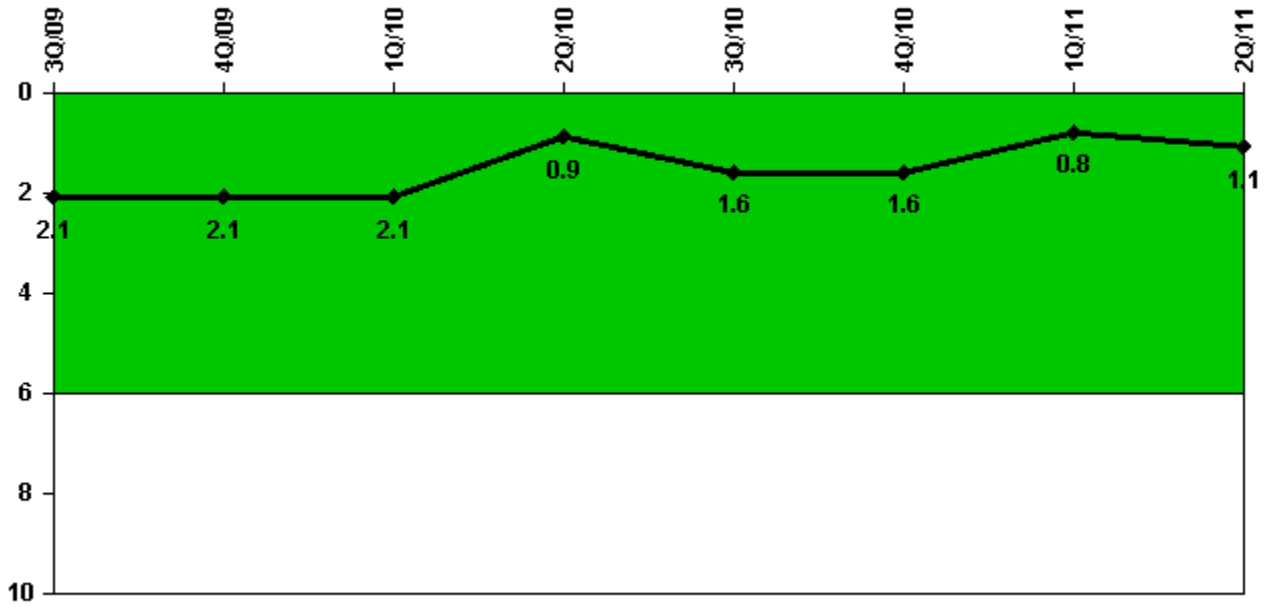
Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

### Notes

Unplanned Scrams per 7000 Critical Hrs	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Unplanned scrams	1.0	1.0	0	0	0	0	0	0
Critical hours	1518.6	2059.7	2159.0	2184.0	2208.0	2209.0	2159.0	40.6
Indicator value	4.2	5.2	4.1	1.8	0.8	0	0	0

Licensee Comments: none

## Unplanned Power Changes per 7000 Critical Hrs



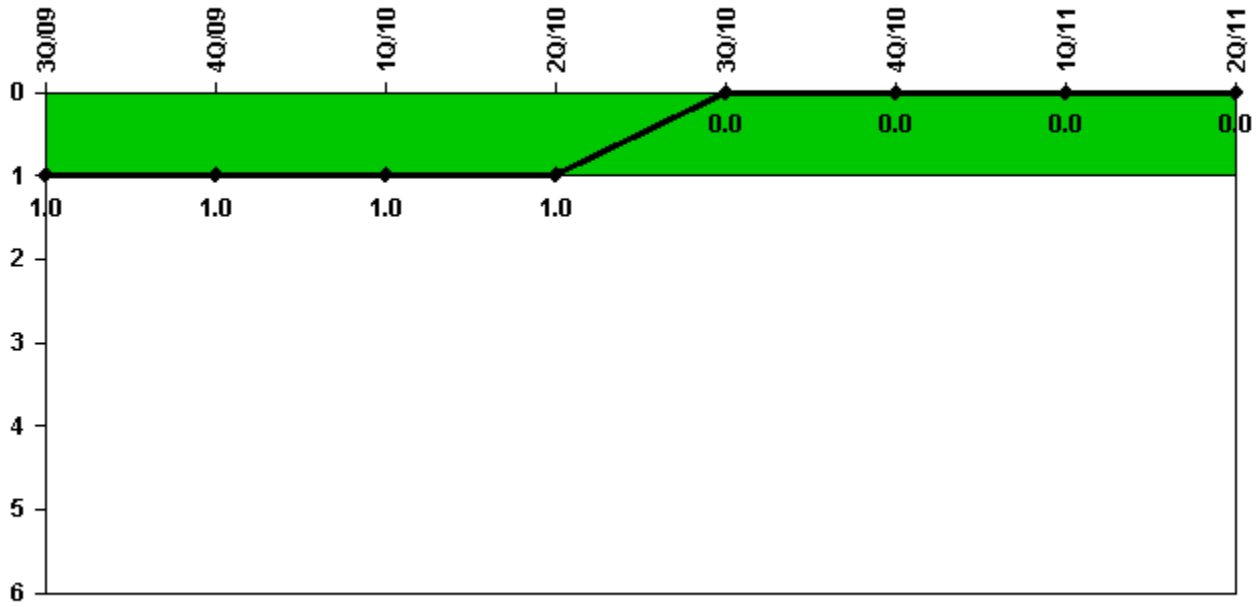
Thresholds: White > 6.0

### Notes

Unplanned Power Changes per 7000 Critical Hrs	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Unplanned power changes	0	0	1.0	0	1.0	0	0	0
Critical hours	1518.6	2059.7	2159.0	2184.0	2208.0	2209.0	2159.0	40.6
Indicator value	2.1	2.1	2.1	0.9	1.6	1.6	0.8	1.1

Licensee Comments: none

## Unplanned Scrams with Complications



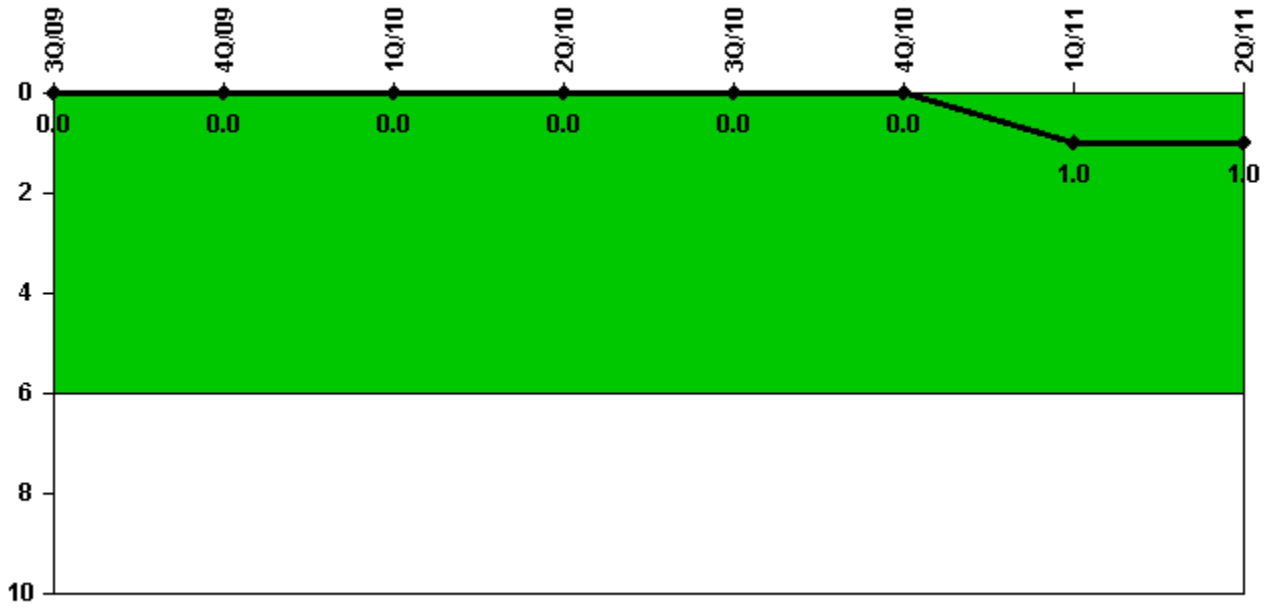
Thresholds: White > 1.0

### Notes

Unplanned Scrams with Complications	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Scrams with complications	1.0	0	0	0	0	0	0	0
Indicator value	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0

Licensee Comments: none

## Safety System Functional Failures (BWR)



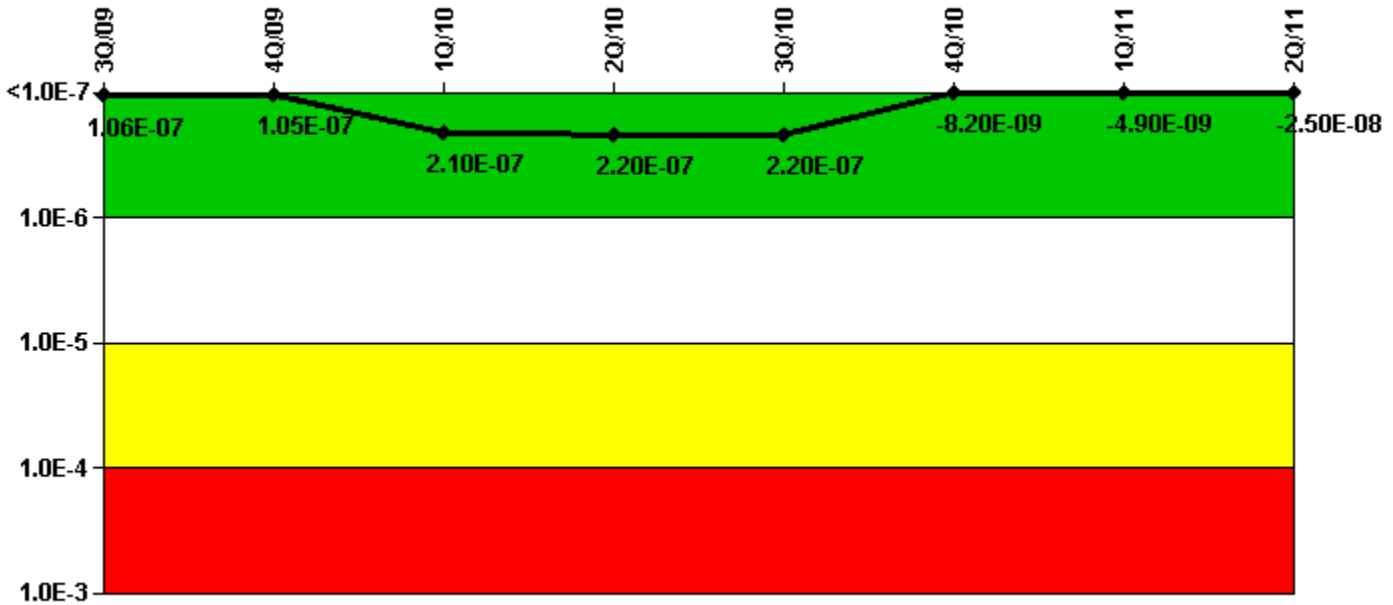
Thresholds: White > 6.0

### Notes

Safety System Functional Failures (BWR)	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Safety System Functional Failures	0	0	0	0	0	0	1	0
Indicator value	0	0	0	0	0	0	1	1

Licensee Comments: none

# Mitigating Systems Performance Index, Emergency AC Power System



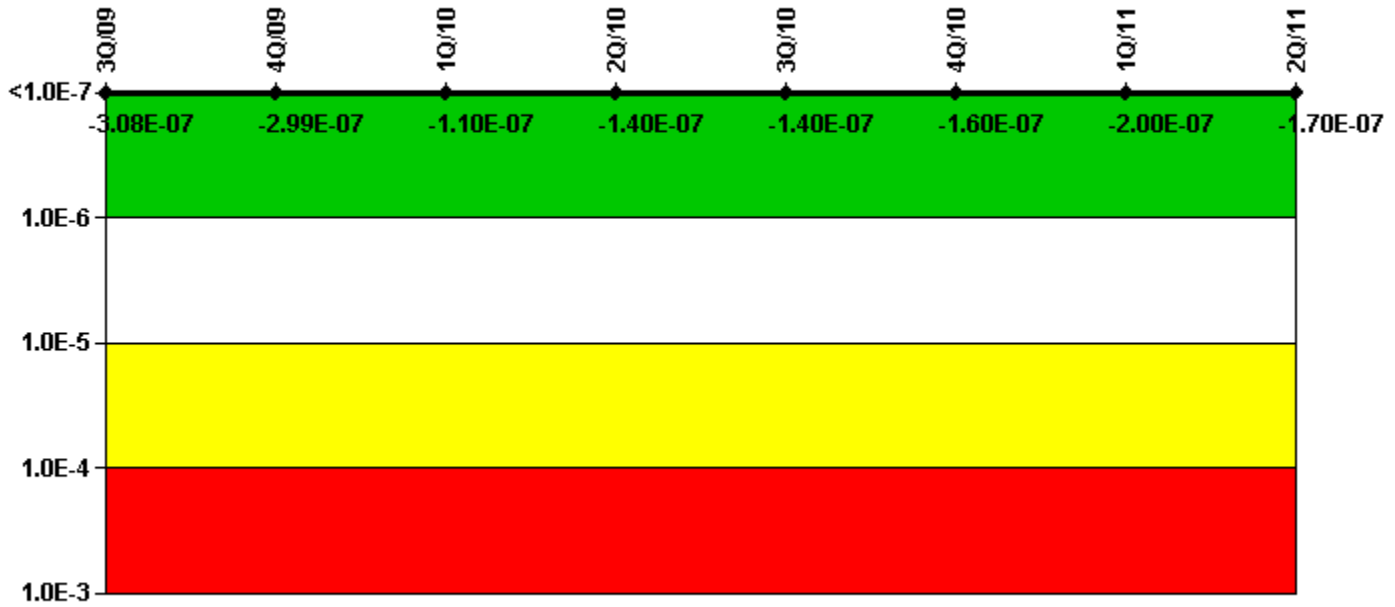
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Emergency AC Power System	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI ( $\Delta$ CDF)	-4.50E-09	-4.60E-09	7.67E-08	9.20E-08	8.90E-08	2.31E-08	2.96E-08	1.30E-08
URI ( $\Delta$ CDF)	1.10E-07	1.10E-07	1.33E-07	1.30E-07	1.26E-07	-3.12E-08	-3.45E-08	-3.76E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.06E-07	1.05E-07	2.10E-07	2.20E-07	2.20E-07	-8.20E-09	-4.90E-09	-2.50E-08

Licensee Comments: none

# Mitigating Systems Performance Index, High Pressure Injection System



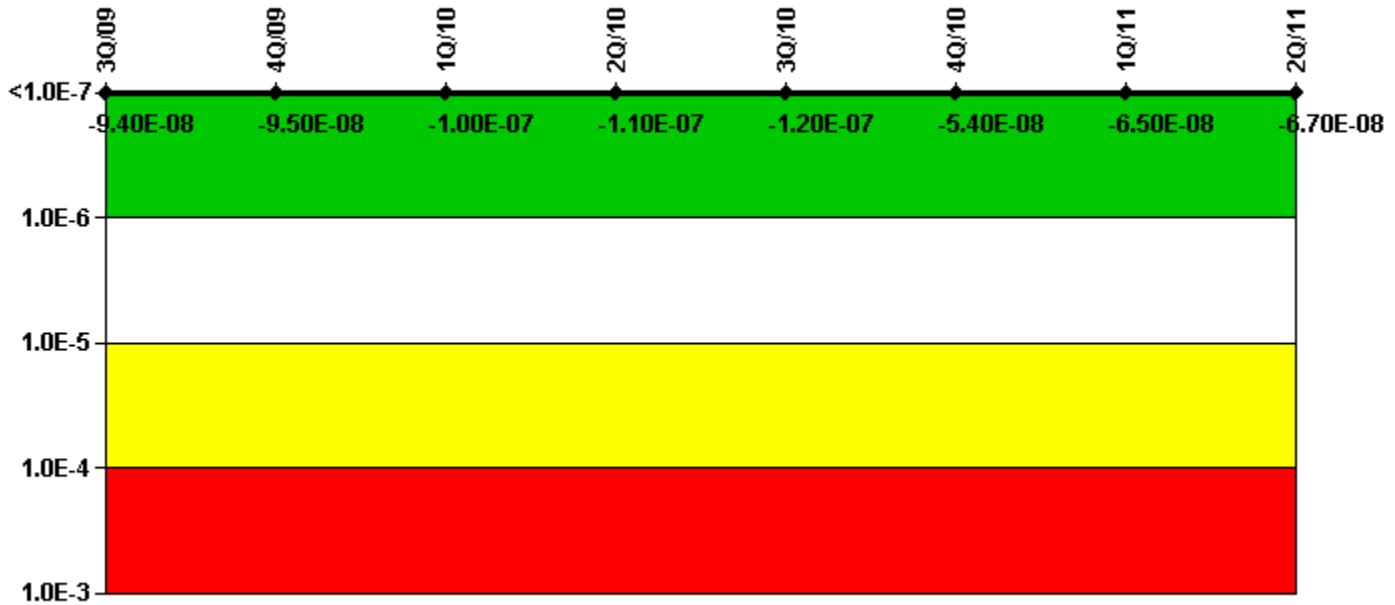
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, High Pressure Injection System	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI ( $\Delta$ CDF)	2.20E-09	1.10E-08	1.26E-07	9.21E-08	8.87E-08	7.41E-08	3.55E-08	7.10E-08
URI ( $\Delta$ CDF)	-3.10E-07	-3.10E-07	-2.33E-07	-2.32E-07	-2.34E-07	-2.35E-07	-2.36E-07	-2.38E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.08E-07	-2.99E-07	-1.10E-07	-1.40E-07	-1.40E-07	-1.60E-07	-2.00E-07	-1.70E-07

Licensee Comments: none

# Mitigating Systems Performance Index, Heat Removal System



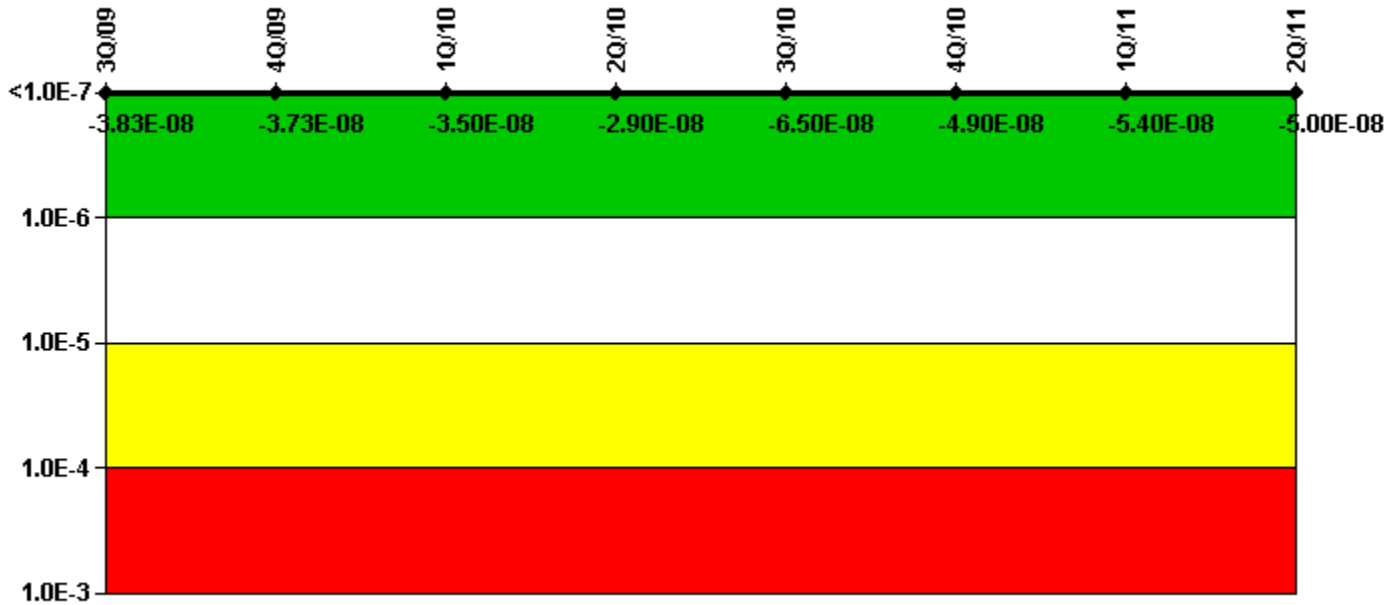
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Heat Removal System	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI ( $\Delta$ CDF)	2.60E-08	2.50E-08	1.61E-08	8.56E-09	-9.37E-10	6.27E-08	5.15E-08	5.02E-08
URI ( $\Delta$ CDF)	-1.20E-07	-1.20E-07	-1.18E-07	-1.15E-07	-1.16E-07	-1.17E-07	-1.17E-07	-1.17E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-9.40E-08	-9.50E-08	-1.00E-07	-1.10E-07	-1.20E-07	-5.40E-08	-6.50E-08	-6.70E-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

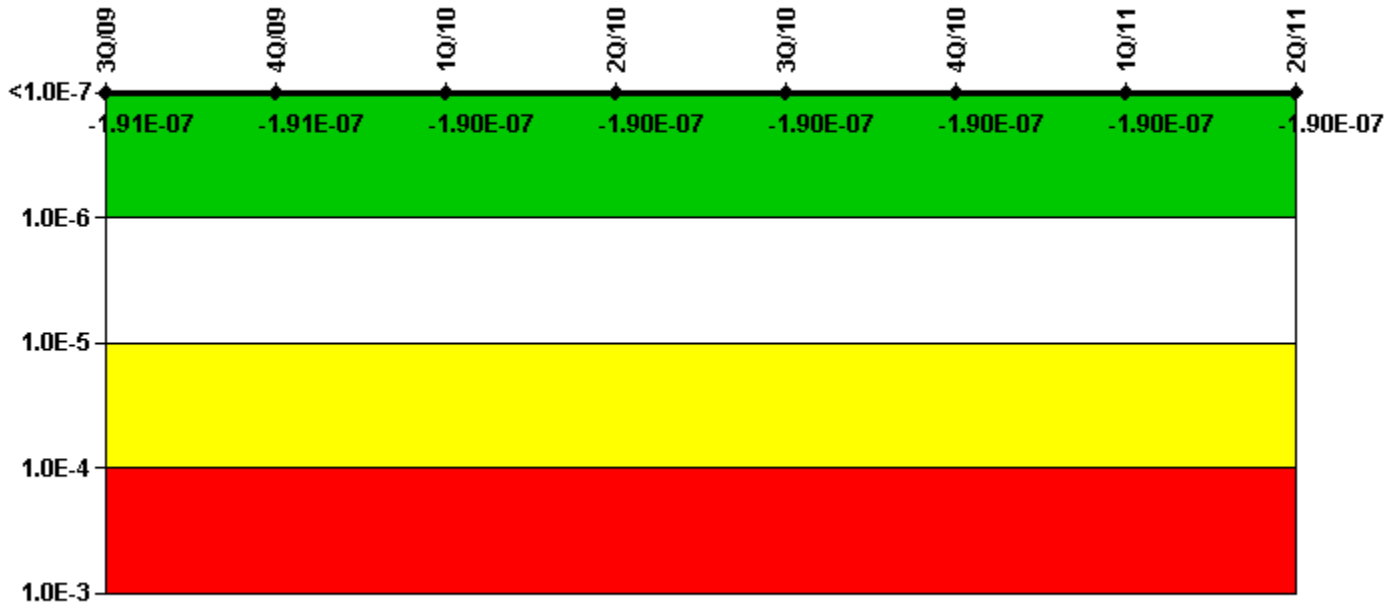
## Notes

Mitigating Systems Performance Index, Residual Heat Removal System	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI ( $\Delta$ CDF)	-2.30E-09	-1.30E-09	8.99E-10	6.30E-09	4.78E-09	2.13E-08	1.66E-08	2.02E-08
URI ( $\Delta$ CDF)	-3.60E-08	-3.60E-08	-3.58E-08	-3.58E-08	-7.03E-08	-7.03E-08	-7.03E-08	-7.03E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-3.83E-08	-3.73E-08	-3.50E-08	-2.90E-08	-6.50E-08	-4.90E-08	-5.40E-08	-5.00E-08

Licensee Comments: none



# Mitigating Systems Performance Index, Cooling Water Systems



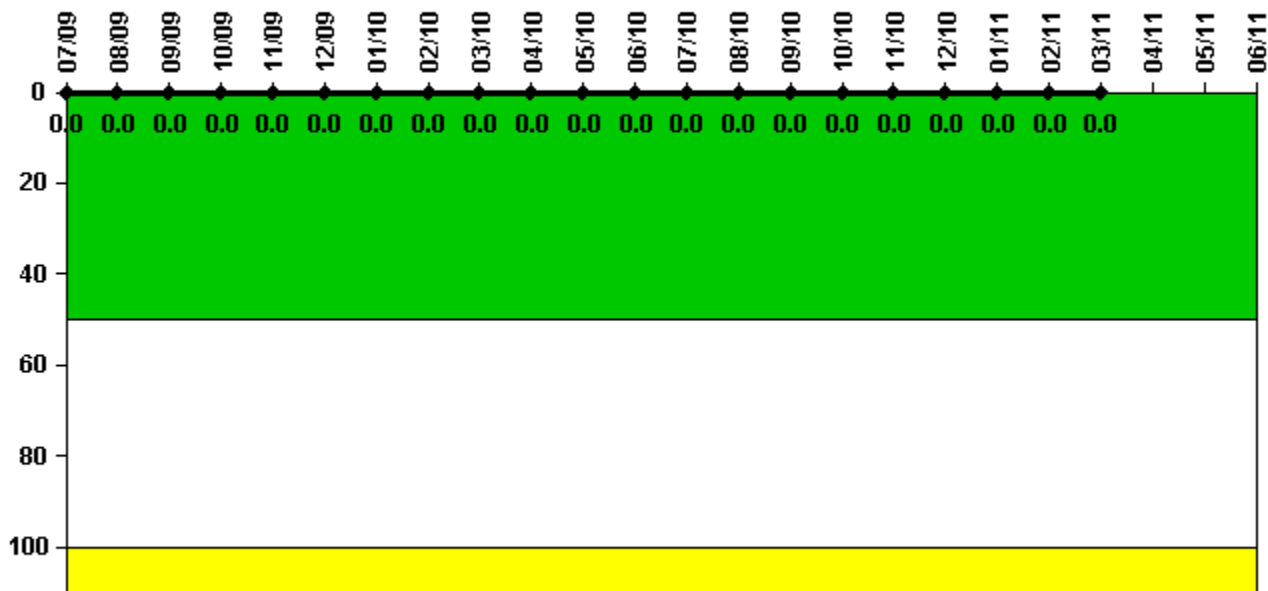
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Cooling Water Systems	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
UAI ( $\Delta$ CDF)	-3.10E-08	-3.10E-08	-3.12E-08	-3.12E-08	-3.12E-08	-3.12E-08	-3.12E-08	-3.12E-08
URI ( $\Delta$ CDF)	-1.60E-07	-1.60E-07	-1.63E-07	-1.63E-07	-1.63E-07	-1.63E-07	-1.63E-07	-1.63E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.91E-07	-1.91E-07	-1.90E-07	-1.90E-07	-1.90E-07	-1.90E-07	-1.90E-07	-1.90E-07

Licensee Comments: none

# Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

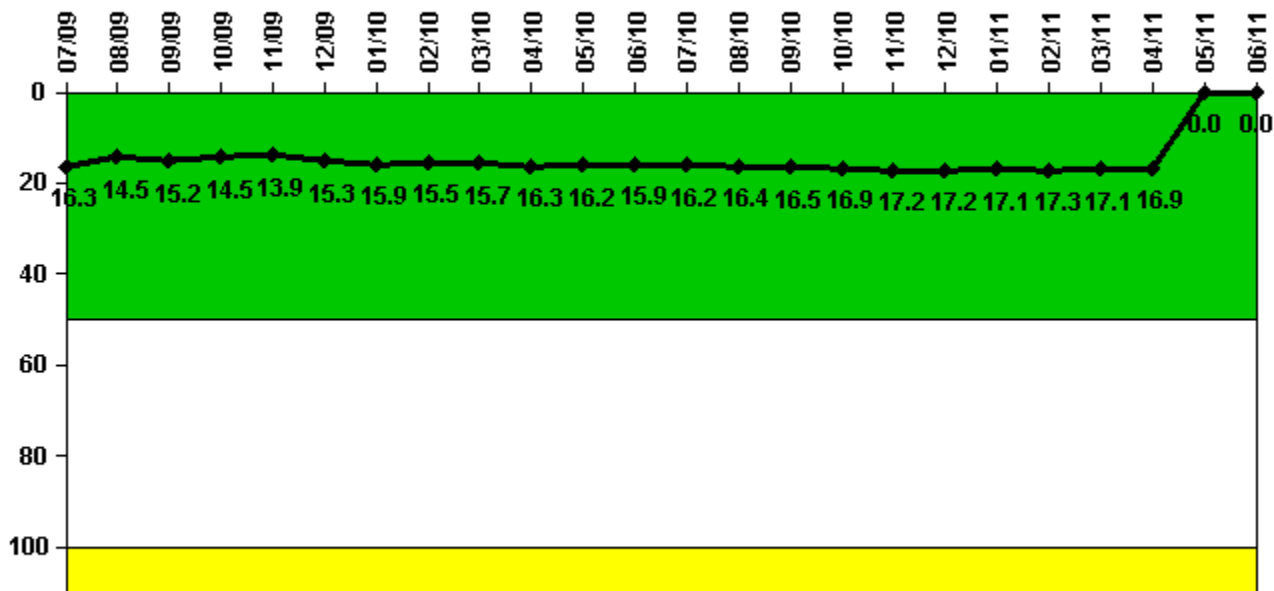
## Notes

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	0.000004	0.000002	0.000004	0.000005	0.000003	0.000002	0.000003	0.000002	0.000004	0.000003	0.000003	0.000003
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	0	0	0	0	0	0	0	0	0	0
Reactor Coolant System Activity	7/10	8/10	9/10	10/10	11/10	12/10	1/11	2/11	3/11	4/11	5/11	6/11
Maximum activity	0.000004	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.000003	N/A	N/A	N/A
Technical specification limit	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indicator value	0	0	0	0	0	0	0	0	0	N/A	N/A	N/A

Licensee Comments:

6/11: CGS is in refueling outage R-20.

## Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

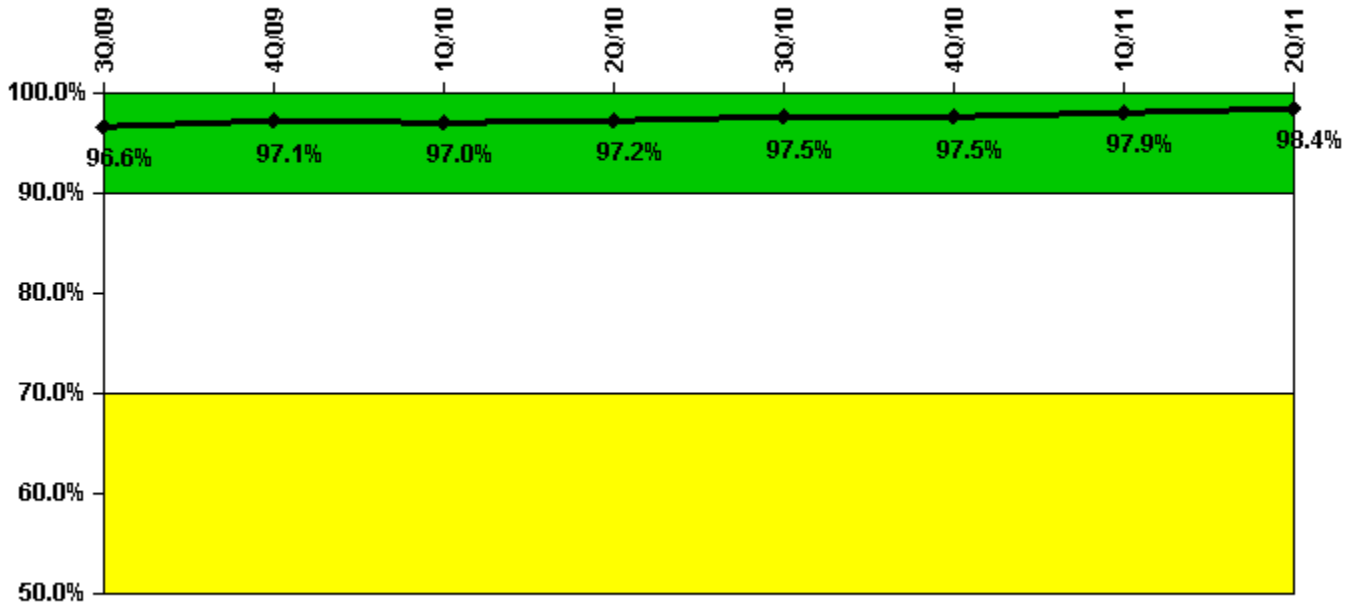
### Notes

<b>Reactor Coolant System Leakage</b>	<b>7/09</b>	<b>8/09</b>	<b>9/09</b>	<b>10/09</b>	<b>11/09</b>	<b>12/09</b>	<b>1/10</b>	<b>2/10</b>	<b>3/10</b>	<b>4/10</b>	<b>5/10</b>	<b>6/10</b>
Maximum leakage	4.080	3.620	3.810	3.620	3.480	3.830	3.970	3.880	3.920	4.070	4.060	3.970
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	16.3	14.5	15.2	14.5	13.9	15.3	15.9	15.5	15.7	16.3	16.2	15.9
<b>Reactor Coolant System Leakage</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>	<b>4/11</b>	<b>5/11</b>	<b>6/11</b>
Maximum leakage	4.040	4.090	4.130	4.230	4.310	4.310	4.280	4.320	4.270	4.230	0	0
Technical specification limit	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Indicator value	16.2	16.4	16.5	16.9	17.2	17.2	17.1	17.3	17.1	16.9	0	0

Licensee Comments:

6/11: CGS is in refueling outage R-20.

## Drill/Exercise Performance



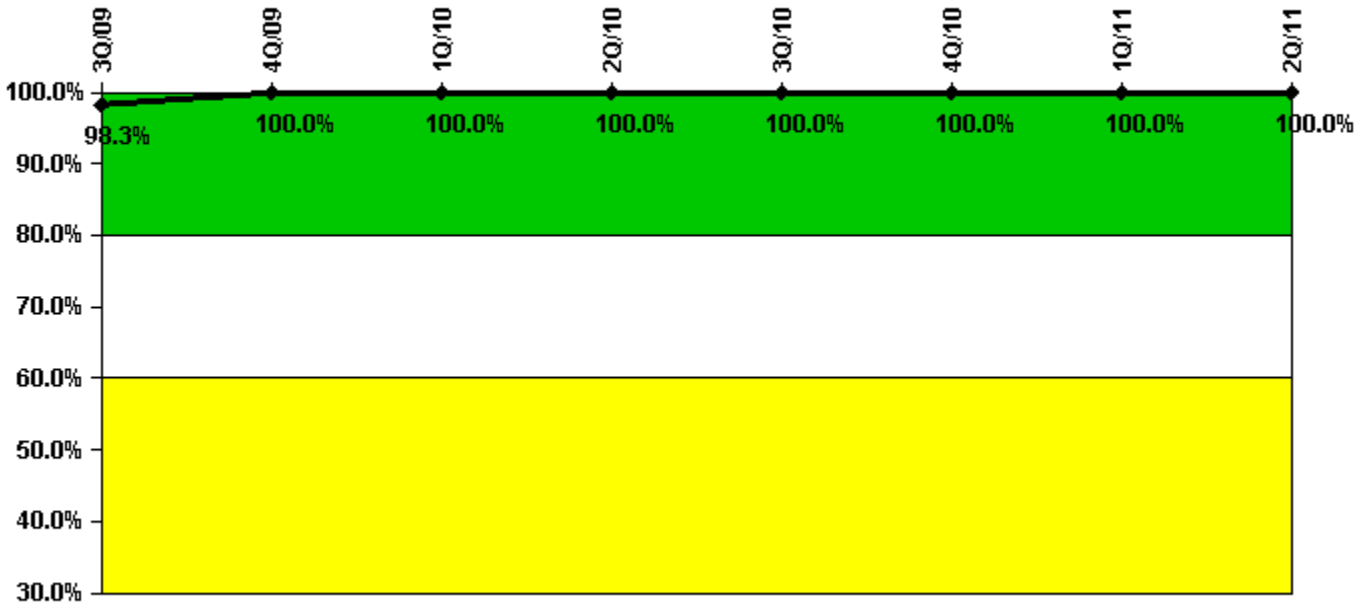
Thresholds: White < 90.0% Yellow < 70.0%

### Notes

Drill/Exercise Performance	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Successful opportunities	55.0	81.0	24.0	39.0	35.0	57.0	19.0	5.0
Total opportunities	58.0	81.0	24.0	40.0	36.0	57.0	19.0	5.0
Indicator value	96.6%	97.1%	97.0%	97.2%	97.5%	97.5%	97.9%	98.4%

Licensee Comments: none

# ERO Drill Participation



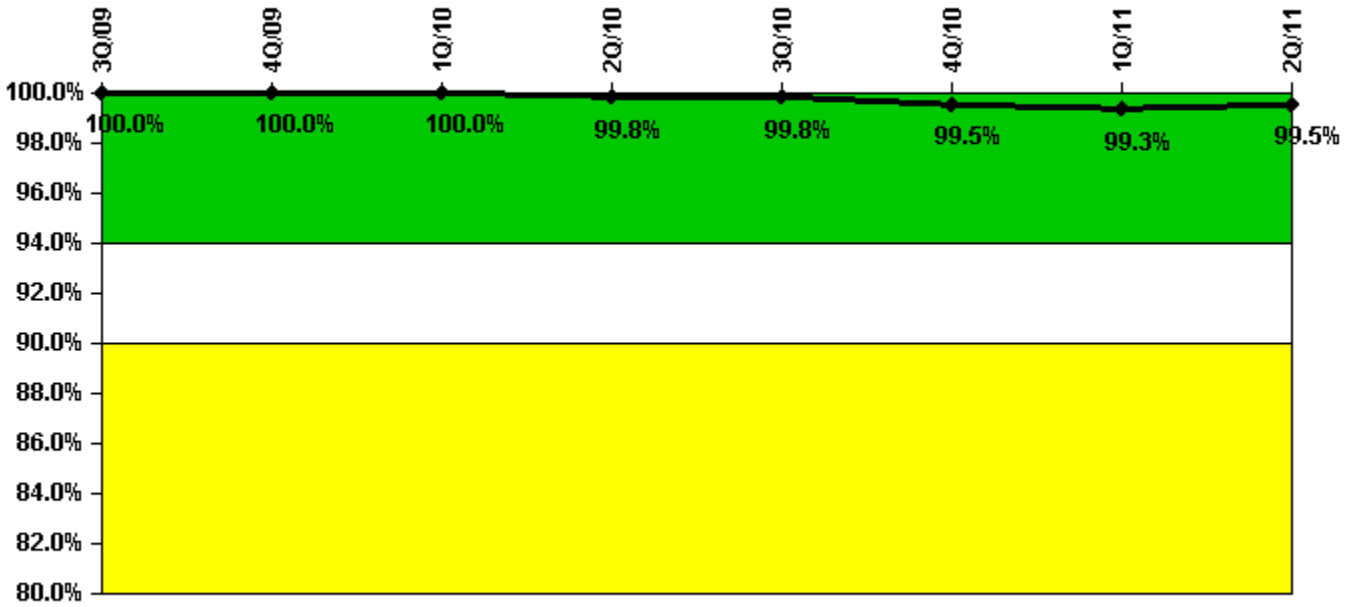
Thresholds: White < 80.0% Yellow < 60.0%

## Notes

ERO Drill Participation	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Participating Key personnel	59.0	63.0	61.0	60.0	55.0	56.0	57.0	55.0
Total Key personnel	60.0	63.0	61.0	60.0	55.0	56.0	57.0	55.0
Indicator value	98.3%	100.0%	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	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
Successful siren-tests	154	154	143	142	143	152	140	143
Total sirens-tests	154	154	143	143	143	154	141	143
Indicator value	100.0%	100.0%	100.0%	99.8%	99.8%	99.5%	99.3%	99.5%

Licensee Comments: none

# Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

## Notes

Occupational Exposure Control Effectiveness	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
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

## RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

### Notes

RETS/ODCM Radiological Effluent	3Q/09	4Q/09	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11
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.