

# Hatch 1

## 4Q/2011 Performance Indicators

Licensee's General Comments: none

### Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

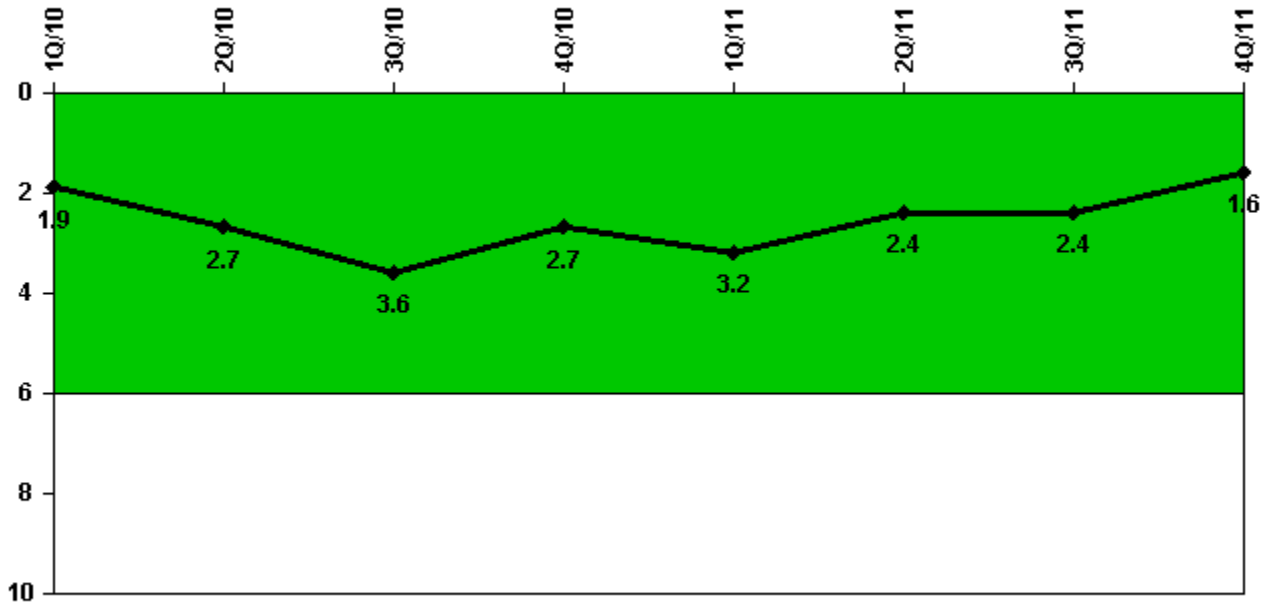
### Notes

Unplanned Scrams per 7000 Critical Hrs	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	1228.7	2184.0	2208.0	2171.4	2159.0	2184.0	2208.0	2209.0
Indicator value	0.9	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/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
Unplanned power changes	0	1.0	1.0	1.0	1.0	0	1.0	0
Critical hours	1228.7	2184.0	2208.0	2171.4	2159.0	2184.0	2208.0	2209.0
Indicator value	1.9	2.7	3.6	2.7	3.2	2.4	2.4	1.6

Licensee Comments: none

# Unplanned Scrams with Complications



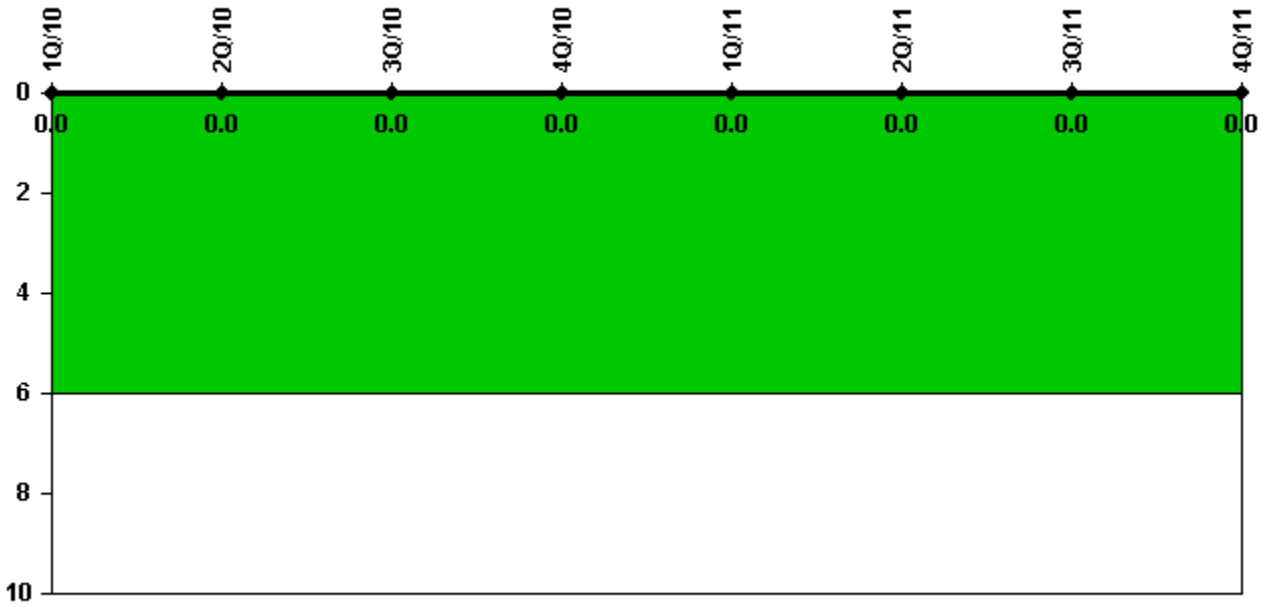
Thresholds: White > 1.0

## Notes

Unplanned Scrams with Complications	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
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 (BWR)



Thresholds: White > 6.0

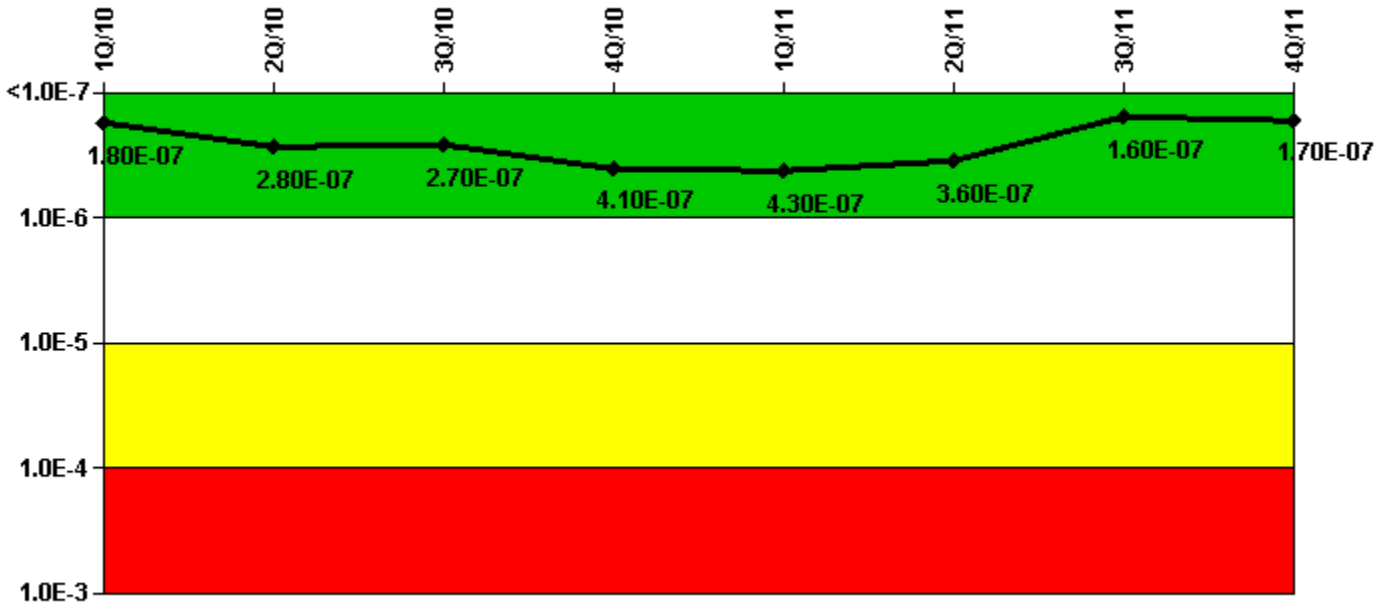
### Notes

Safety System Functional Failures (BWR)	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
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



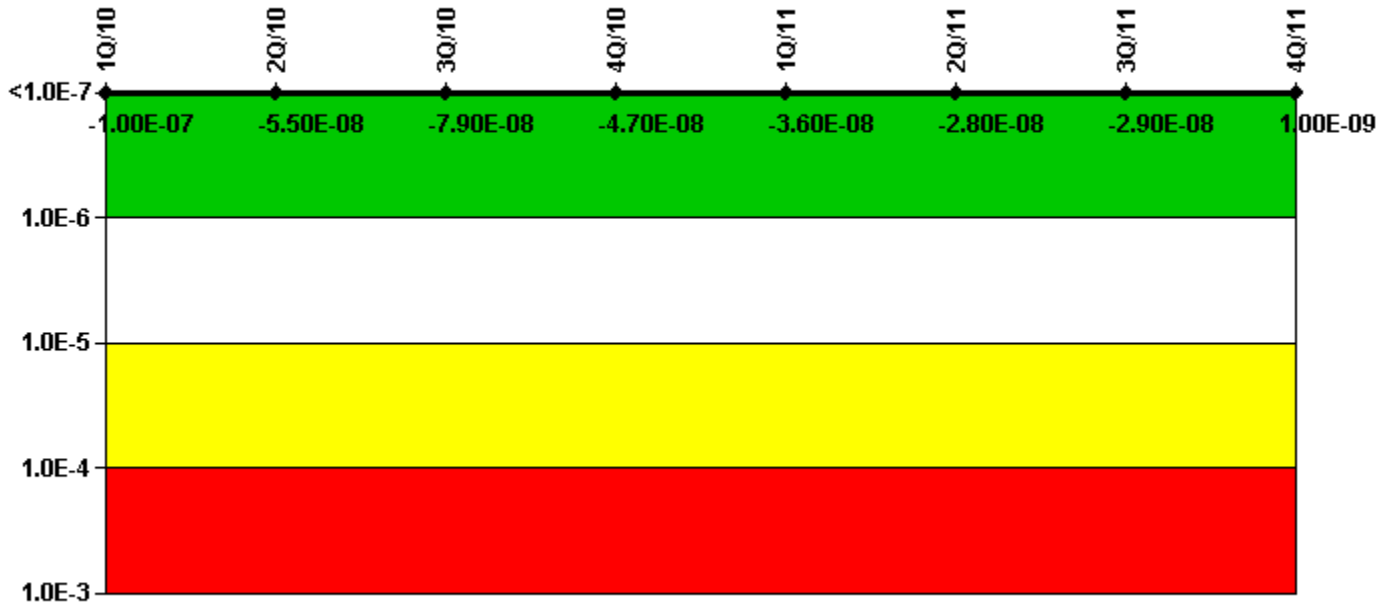
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Emergency AC Power System	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
UAI ( $\Delta$ CDF)	5.95E-08	5.57E-08	6.77E-08	1.40E-07	1.43E-07	8.35E-08	8.23E-08	8.15E-08
URI ( $\Delta$ CDF)	1.16E-07	2.25E-07	2.06E-07	2.68E-07	2.86E-07	2.81E-07	7.94E-08	8.61E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	1.80E-07	2.80E-07	2.70E-07	4.10E-07	4.30E-07	3.60E-07	1.60E-07	1.70E-07

Licensee Comments: none

# Mitigating Systems Performance Index, High Pressure Injection System



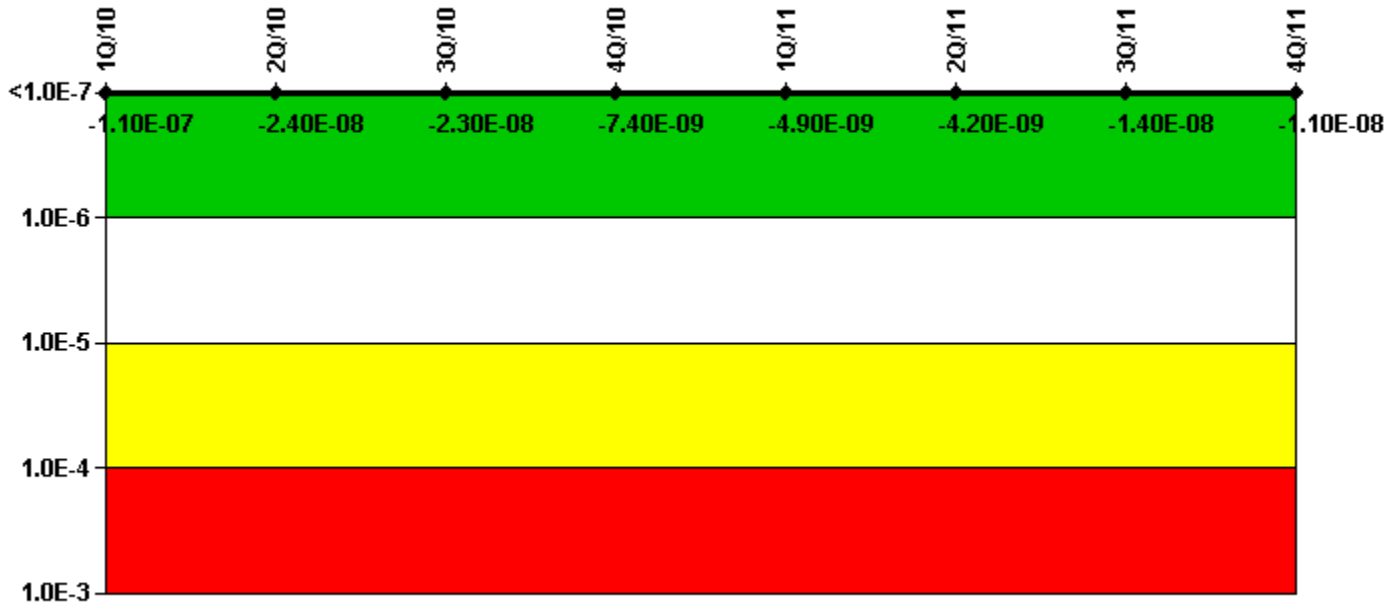
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, High Pressure Injection System	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
UAI ( $\Delta$ CDF)	-3.64E-08	1.55E-08	-1.09E-08	-6.03E-09	3.15E-09	1.09E-08	1.01E-08	3.93E-08
URI ( $\Delta$ CDF)	-6.69E-08	-7.04E-08	-6.85E-08	-4.08E-08	-3.94E-08	-3.93E-08	-3.94E-08	-3.83E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.00E-07	-5.50E-08	-7.90E-08	-4.70E-08	-3.60E-08	-2.80E-08	-2.90E-08	1.00E-09

Licensee Comments: none

# Mitigating Systems Performance Index, Heat Removal System



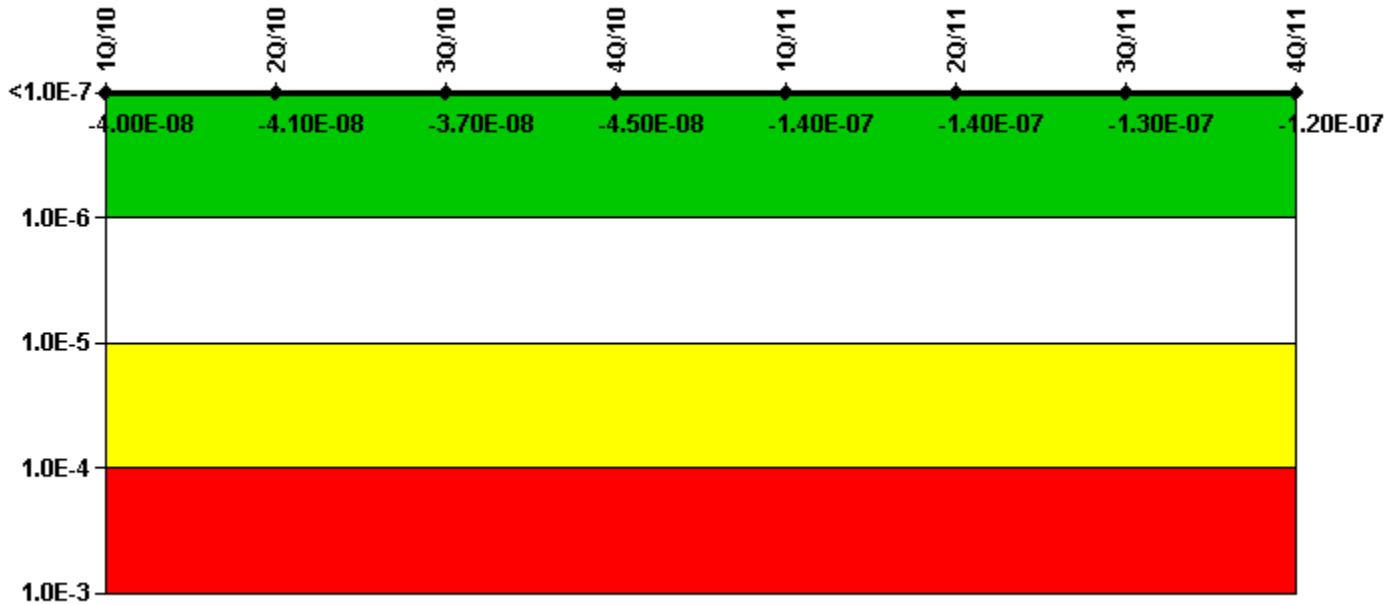
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Heat Removal System	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
UAI ( $\Delta$ CDF)	-4.02E-08	4.60E-08	4.64E-08	8.26E-09	1.01E-08	1.03E-08	3.68E-10	1.90E-09
URI ( $\Delta$ CDF)	-6.69E-08	-6.96E-08	-6.96E-08	-1.56E-08	-1.50E-08	-1.45E-08	-1.44E-08	-1.32E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-1.10E-07	-2.40E-08	-2.30E-08	-7.40E-09	-4.90E-09	-4.20E-09	-1.40E-08	-1.10E-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

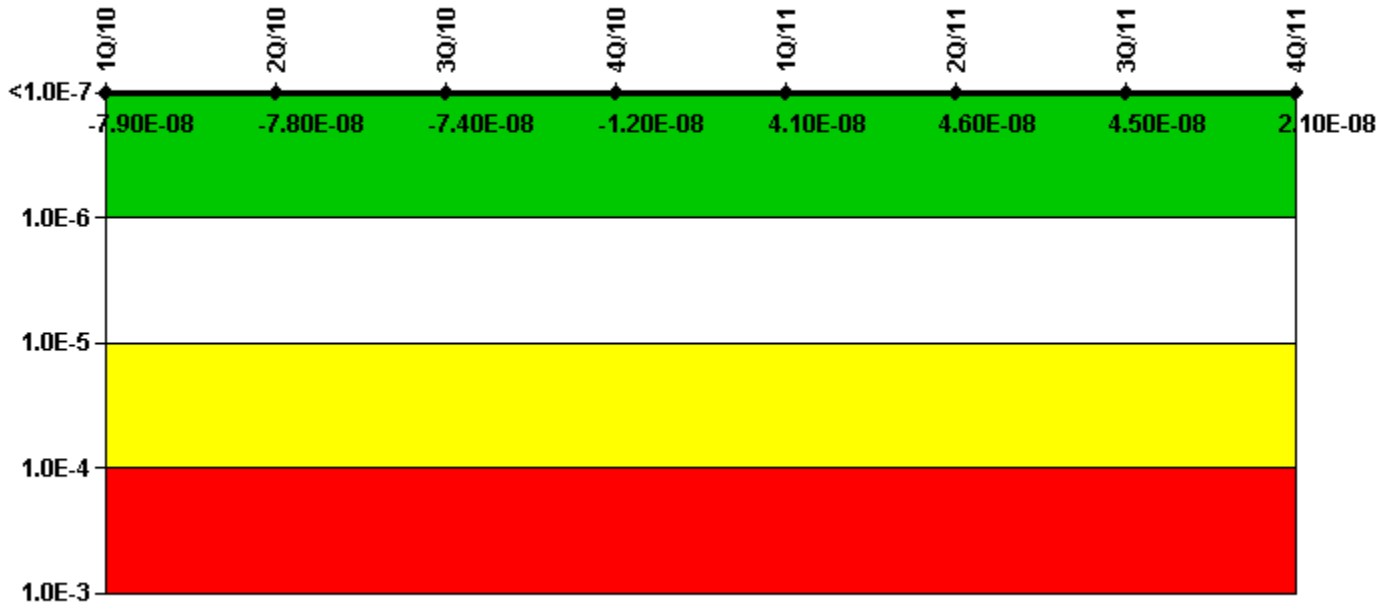
## Notes

Mitigating Systems Performance Index, Residual Heat Removal System	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
UAI ( $\Delta$ CDF)	-1.07E-08	-1.13E-08	-1.13E-08	-1.88E-08	-1.88E-08	-1.88E-08	-9.66E-09	-3.28E-09
URI ( $\Delta$ CDF)	-2.89E-08	-2.92E-08	-2.56E-08	-2.59E-08	-1.18E-07	-1.17E-07	-1.17E-07	-1.18E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-4.00E-08	-4.10E-08	-3.70E-08	-4.50E-08	-1.40E-07	-1.40E-07	-1.30E-07	-1.20E-07

Licensee Comments: none



# Mitigating Systems Performance Index, Cooling Water Systems



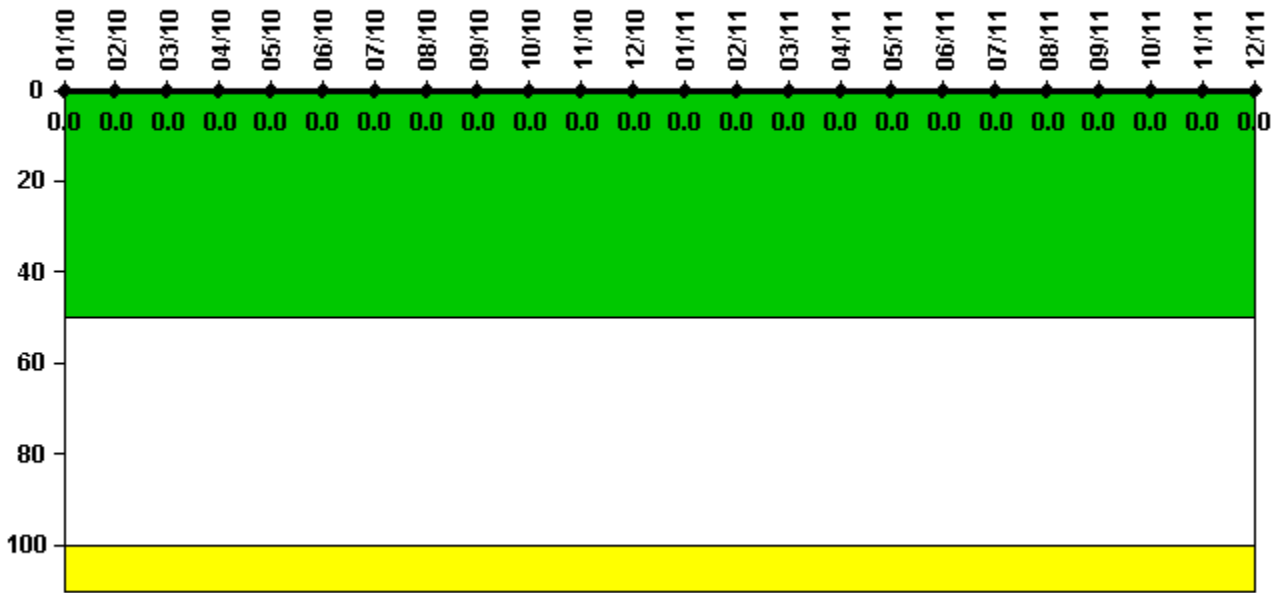
Thresholds: White > 1.00E-6 Yellow > 1.00E-5 Red > 1.00E-4

## Notes

Mitigating Systems Performance Index, Cooling Water Systems	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
UAI ( $\Delta$ CDF)	-8.29E-10	-2.40E-10	2.95E-09	5.69E-08	1.07E-07	1.07E-07	1.07E-07	9.63E-08
URI ( $\Delta$ CDF)	-7.82E-08	-7.73E-08	-7.70E-08	-6.91E-08	-6.64E-08	-6.13E-08	-6.18E-08	-7.56E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
Indicator value	-7.90E-08	-7.80E-08	-7.40E-08	-1.20E-08	4.10E-08	4.60E-08	4.50E-08	2.10E-08

Licensee Comments: none

# Reactor Coolant System Activity



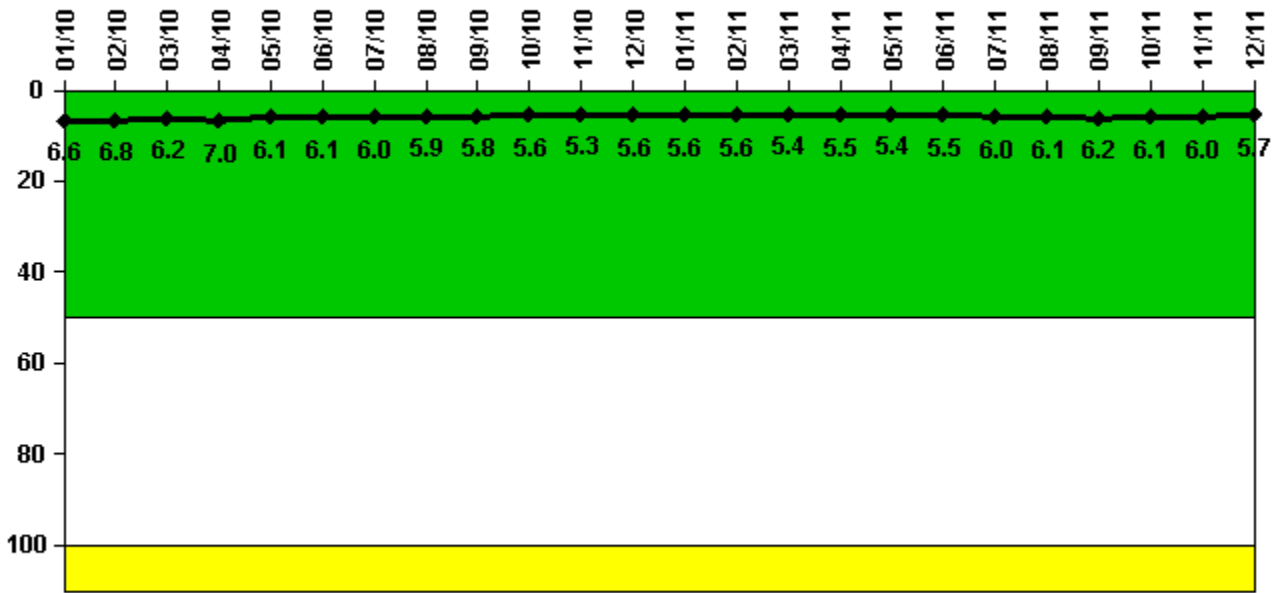
Thresholds: White > 50.0 Yellow > 100.0

## Notes

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	0.000009	0.000007	0.000002	0.000003	0.000005	0.000005	0.000006	0.000004	0.000005	0.000003	0.000005	0.000006
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	1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11	9/11	10/11	11/11	12/11
Maximum activity	0.000009	0.000005	0.000007	0.000008	0.000011	0.000008	0.000007	0.000010	0.000007	0.000007	0.000006	0.000007
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

Licensee Comments: none

## Reactor Coolant System Leakage



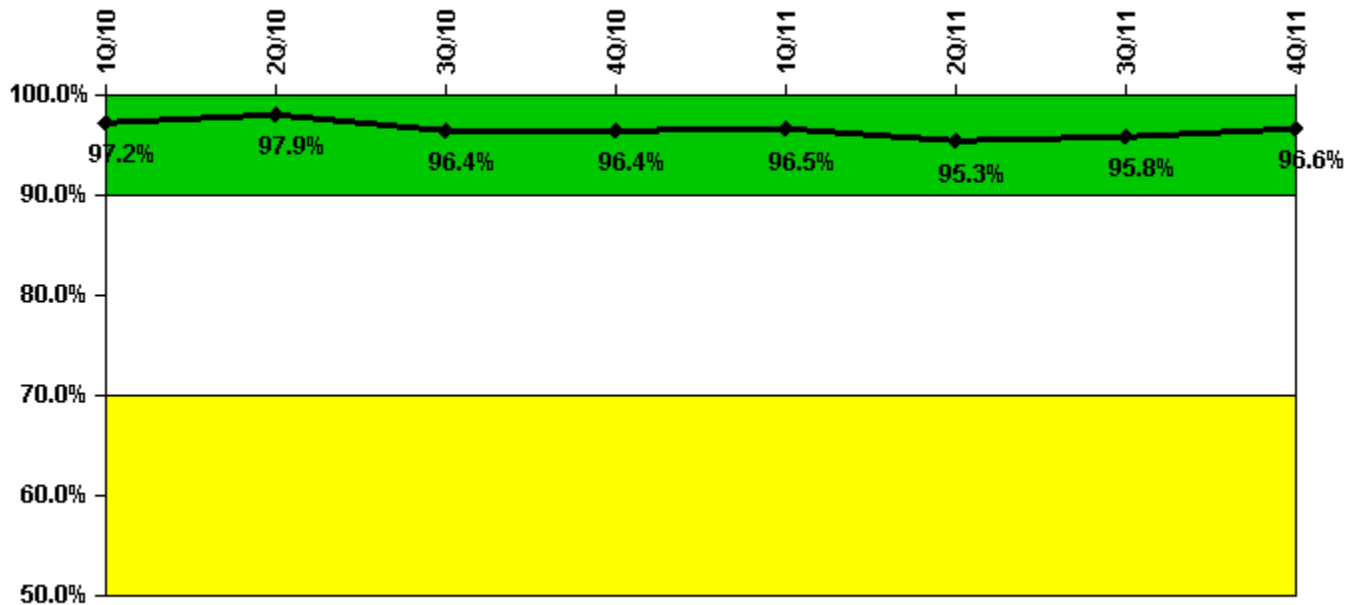
Thresholds: White > 50.0 Yellow > 100.0

### Notes

<b>Reactor Coolant System Leakage</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>	<b>7/10</b>	<b>8/10</b>	<b>9/10</b>	<b>10/10</b>	<b>11/10</b>	<b>12/10</b>
Maximum leakage	1.970	2.040	1.850	2.090	1.820	1.840	1.790	1.780	1.740	1.670	1.600	1.680
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Indicator value	6.6	6.8	6.2	7.0	6.1	6.1	6.0	5.9	5.8	5.6	5.3	5.6
<b>Reactor Coolant System Leakage</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>	<b>7/11</b>	<b>8/11</b>	<b>9/11</b>	<b>10/11</b>	<b>11/11</b>	<b>12/11</b>
Maximum leakage	1.690	1.680	1.630	1.640	1.630	1.640	1.810	1.840	1.870	1.840	1.800	1.710
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Indicator value	5.6	5.6	5.4	5.5	5.4	5.5	6.0	6.1	6.2	6.1	6.0	5.7

Licensee Comments: none

## Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

### Notes

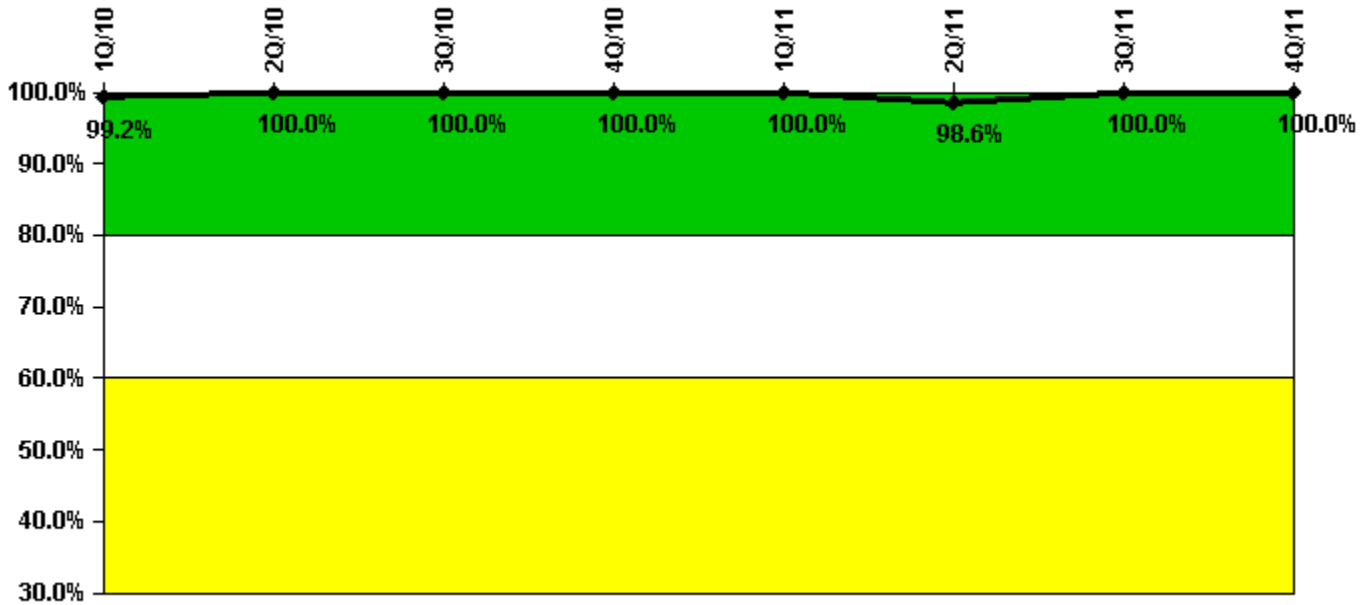
Drill/Exercise Performance	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
Successful opportunities	12.0	27.0	38.0	8.0	6.0	30.0	27.0	20.0
Total opportunities	12.0	28.0	40.0	8.0	6.0	32.0	27.0	21.0
Indicator value	97.2%	97.9%	96.4%	96.4%	96.5%	95.3%	95.8%	96.6%

Licensee Comments:

3Q/11: During NRC EP Inspection, 10/31/11, did not have supporting documentation for drill DEP Opportunity, had to remove ERO participation credit for individuals involved and opportunities.

1Q/11: During NRC EP Inspection, 10/31/11, did not have supporting documentation for drill DEP Opportunity, had to remove ERO participation credit for individuals involved and opportunities.

## ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

### Notes

ERO Drill Participation	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
Participating Key personnel	129.0	135.0	136.0	138.0	134.0	141.0	145.0	150.0
Total Key personnel	130.0	135.0	136.0	138.0	134.0	143.0	145.0	150.0
Indicator value	99.2%	100.0%	100.0%	100.0%	100.0%	98.6%	100.0%	100.0%

Licensee Comments:

2Q/11: During NRC EP Inspection, 10/31/11, did not have supporting documentation for drill DEP Opportunity, had to remove ERO Participation credit for individuals involved and opportunities.

1Q/11: During NRC EP Inspection, 10/31/11, did not have supporting documentation for drill DEP Opportunity, had to remove ERO participation credit for individuals involved and opportunities.

## Alert & Notification System

**Not applicable due to  
unique design  
characteristics.  
Performance in this area  
will be assessed through  
focused NRC inspection  
efforts.**

### Notes

Alert & Notification System	1Q/10	2Q/10	3Q/10	4Q/10	1Q/11	2Q/11	3Q/11	4Q/11
Successful siren-tests								
Total sirens-tests								
Indicator value								

Licensee Comments:

4Q/11: Plant Hatch does not use sirens as an emergency notification system.

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# Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

## Notes

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

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## RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

### Notes

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