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## Hatch 1 – Quarterly Performance Indicators

### 2Q/2017 Performance Indicators

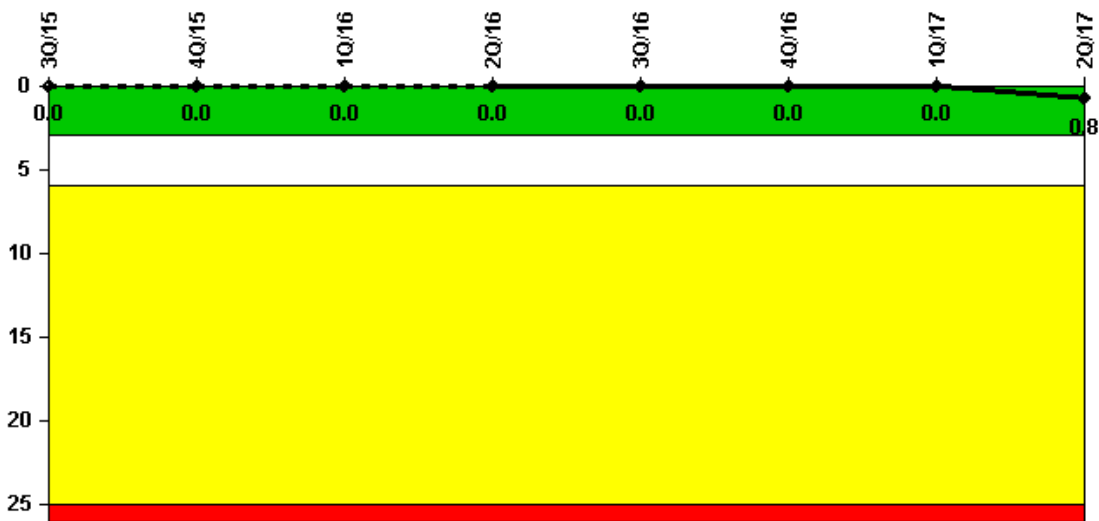
The solid trend line represents the current reporting period.

Licensee's General Comments: none

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- Unplanned Scrams with Complications (IE04)
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### Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

**Notes**

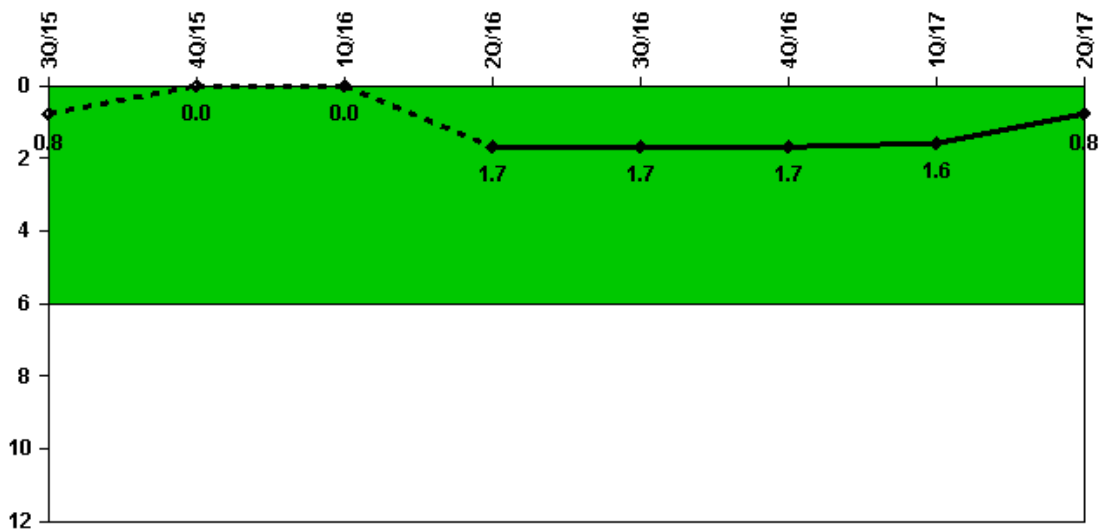
Unplanned Scrams per 7000 Critical Hrs	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
Unplanned scrams	0	0	0	0	0	0	0	1.0
Critical hours	2208.0	2209.0	1586.3	2145.6	2208.0	2209.0	2120.5	1947.3

Indicator value	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
Indicator value	0	0	0	0	0	0	0	0.8

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Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

**Notes**

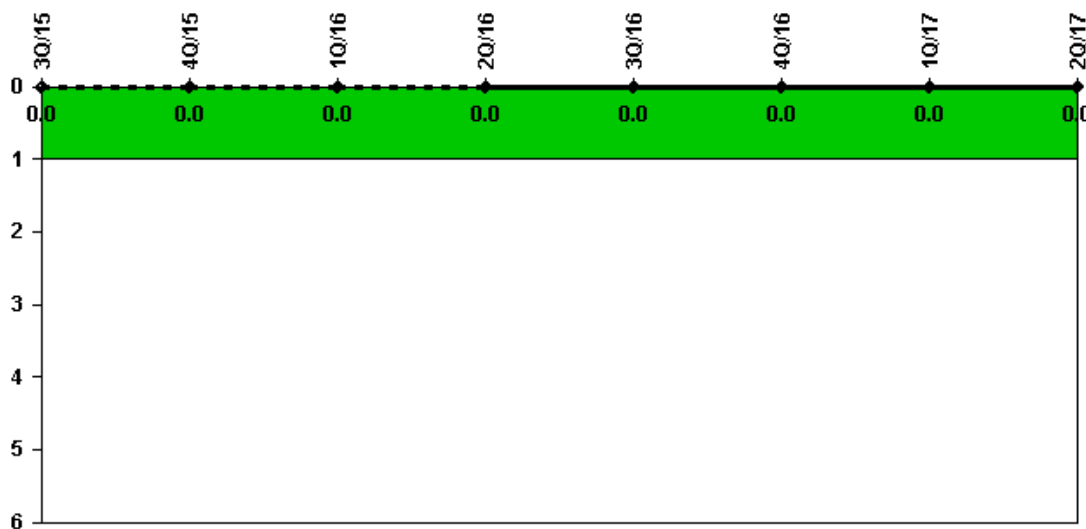
Unplanned Power Changes per 7000 Critical Hrs	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
Unplanned power changes	0	0	0	2.0	0	0	0	1.0
Critical hours	2208.0	2209.0	1586.3	2145.6	2208.0	2209.0	2120.5	1947.3

<b>Indicator value</b>	<b>0.8</b>	<b>0</b>	<b>0</b>	<b>1.7</b>	<b>1.7</b>	<b>1.7</b>	<b>1.6</b>	<b>0.8</b>
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Licensee Comments: none

**Unplanned Scrams with Complications**



Thresholds: White > 1.0

**Notes**

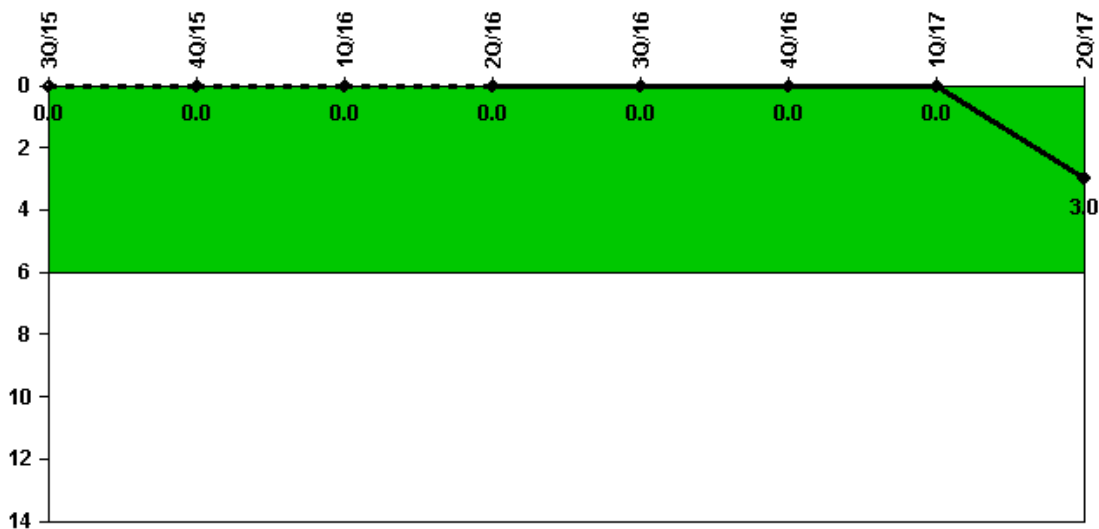
Unplanned Scrams with Complications	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
Scrams with complications	0	0	0	0	0	0	0	0

<b>Indicator value</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
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Licensee Comments: none

### Safety System Functional Failures (BWR)



Thresholds: White > 6.0

**Notes**

Safety System Functional Failures (BWR) 3Q/15 4Q/15 1Q/16 2Q/16 3Q/16 4Q/16 1Q/17 2Q/17

Safety System Functional Failures 0 0 0 0 0 0 0 3

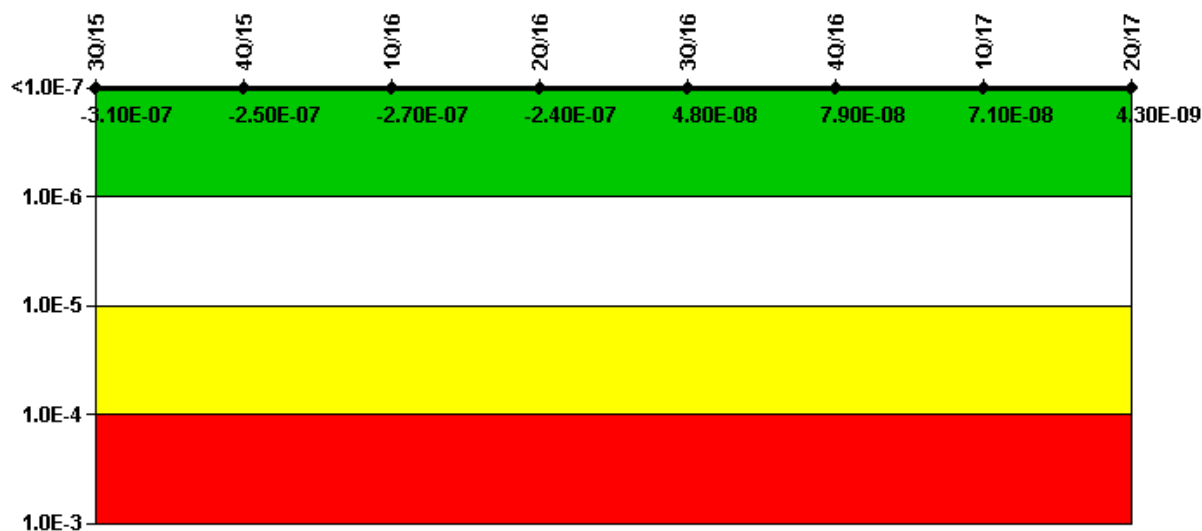
Indicator value 0 0 0 0 0 0 0 3

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Licensee Comments:

2Q/17: LER's 1-2017-002, 1-2017-003, 1-2017-004

### Mitigating Systems Performance Index, Emergency AC Power System



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

**Notes**

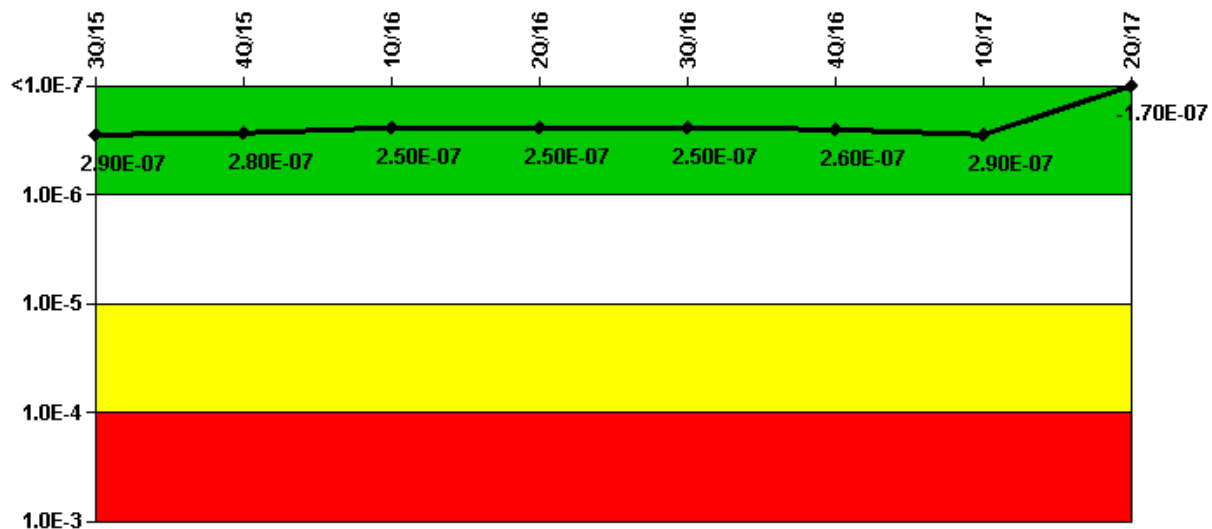
**Mitigating Systems Performance Index, Emergency AC Power System**

	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
UAI (ΔCDF)	1.26E-09	5.46E-08	5.05E-08	7.56E-08	1.05E-07	1.30E-07	1.15E-07	5.03E-08
URI (ΔCDF)	-3.07E-07	-3.08E-07	-3.22E-07	-3.14E-07	-5.72E-08	-5.12E-08	-4.38E-08	-4.60E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-3.10E-07</b>	<b>-2.50E-07</b>	<b>-2.70E-07</b>	<b>-2.40E-07</b>	<b>4.80E-08</b>	<b>7.90E-08</b>	<b>7.10E-08</b>	<b>4.30E-09</b>

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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**

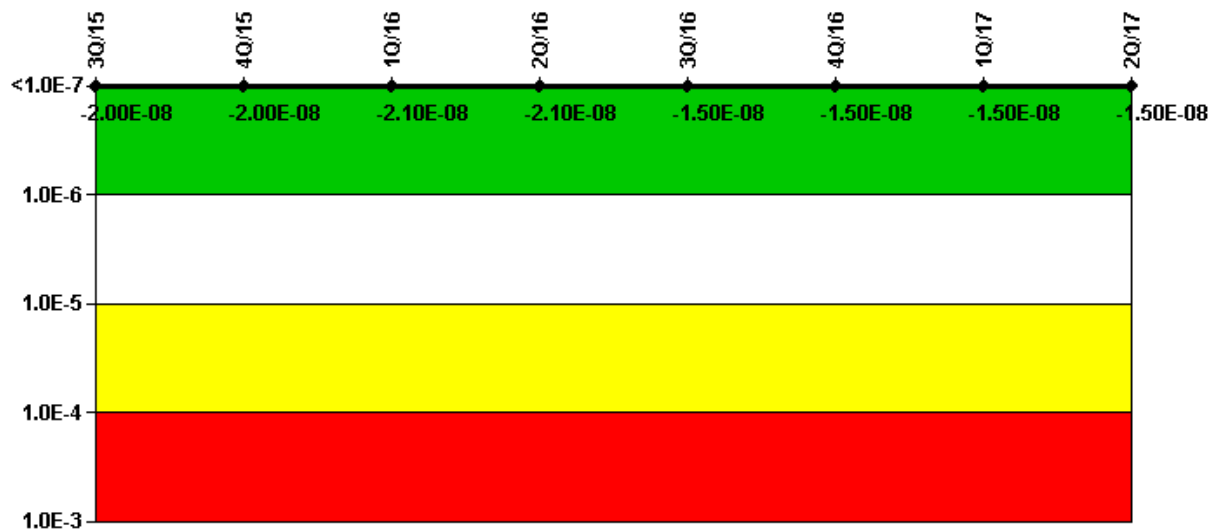
	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
UAI (ΔCDF)	-7.45E-08	-7.45E-08	-7.45E-08	-7.45E-08	-7.45E-08	-7.45E-08	-7.03E-08	-7.30E-08
URI (ΔCDF)	3.65E-07	3.51E-07	3.25E-07	3.25E-07	3.25E-07	3.38E-07	3.65E-07	-1.02E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>2.90E-07</b>	<b>2.80E-07</b>	<b>2.50E-07</b>	<b>2.50E-07</b>	<b>2.50E-07</b>	<b>2.60E-07</b>	<b>2.90E-07</b>	<b>-1.70E-07</b>

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Licensee Comments:

1Q/17: One event related to an inverter power supply failure is under evaluation.

### Mitigating Systems Performance Index, Heat Removal System



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

**Notes**

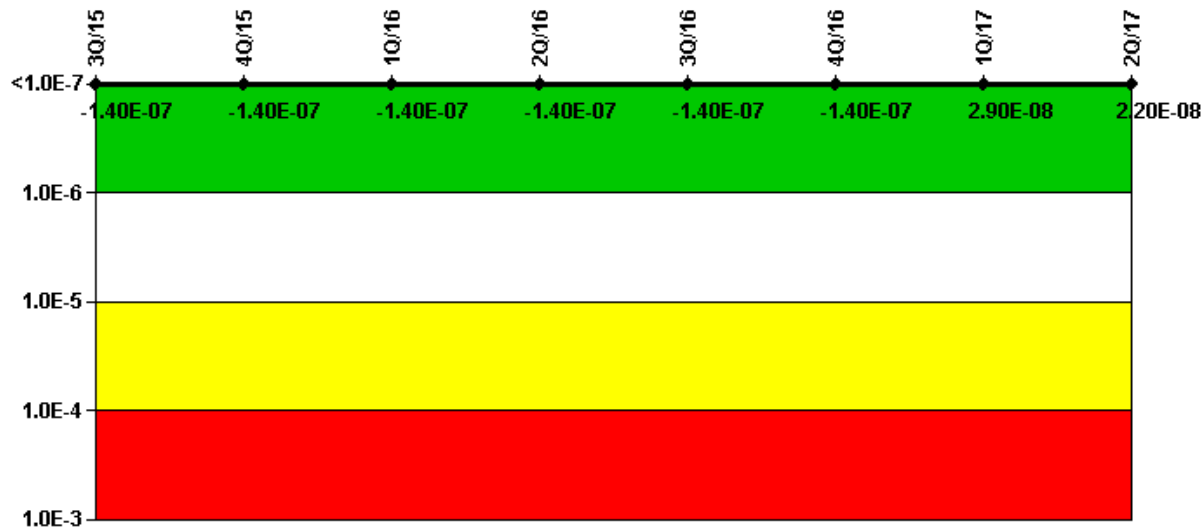
**Mitigating Systems Performance Index, Heat Removal System**

	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
UAI ( $\Delta$ CDF)	-7.00E-09	-7.00E-09	-7.00E-09	-7.00E-09	6.28E-11	-1.29E-11	-6.50E-10	-4.01E-10
URI ( $\Delta$ CDF)	-1.30E-08	-1.30E-08	-1.44E-08	-1.44E-08	-1.51E-08	-1.51E-08	-1.44E-08	-1.43E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-2.00E-08</b>	<b>-2.00E-08</b>	<b>-2.10E-08</b>	<b>-2.10E-08</b>	<b>-1.50E-08</b>	<b>-1.50E-08</b>	<b>-1.50E-08</b>	<b>-1.50E-08</b>

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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/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
UAI (ΔCDF)	-1.20E-08	-1.20E-08	-1.20E-08	-1.20E-08	-1.20E-08	-1.20E-08	-9.60E-09	-9.58E-09
URI (ΔCDF)	-1.25E-07	-1.23E-07	-1.25E-07	-1.27E-07	-1.26E-07	-1.24E-07	3.84E-08	3.19E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-1.40E-07</b>	<b>-1.40E-07</b>	<b>-1.40E-07</b>	<b>-1.40E-07</b>	<b>-1.40E-07</b>	<b>-1.40E-07</b>	<b>2.90E-08</b>	<b>2.20E-08</b>

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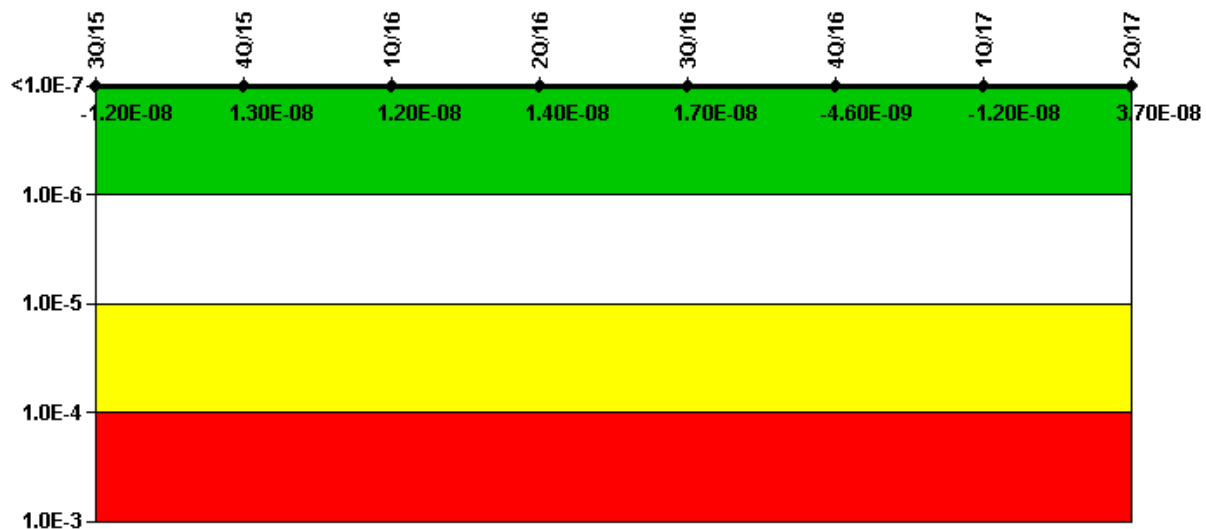
Licensee Comments:

1Q/17: Engineering evaluation determined one valve demand failure for March 2017 but no additional failures.

1Q/17: Subsequent failures of the minimum flow valve are under evaluation as potential additional failures.



### Mitigating Systems Performance Index, Cooling Water Systems



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

**Notes**

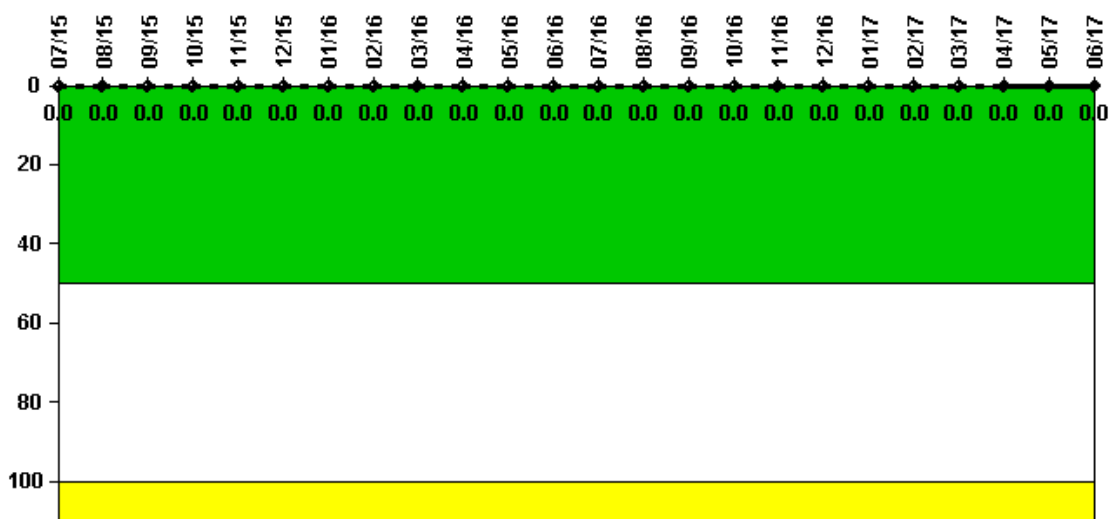
**Mitigating Systems Performance Index, Cooling Water Systems**

	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
UAI (ΔCDF)	7.27E-08	9.78E-08	9.93E-08	1.01E-07	1.06E-07	8.29E-08	7.97E-08	1.27E-07
URI (ΔCDF)	-8.44E-08	-8.48E-08	-8.68E-08	-8.77E-08	-8.92E-08	-8.75E-08	-9.14E-08	-8.98E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-1.20E-08</b>	<b>1.30E-08</b>	<b>1.20E-08</b>	<b>1.40E-08</b>	<b>1.70E-08</b>	<b>-4.60E-09</b>	<b>-1.20E-08</b>	<b>3.70E-08</b>

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Licensee Comments: none

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

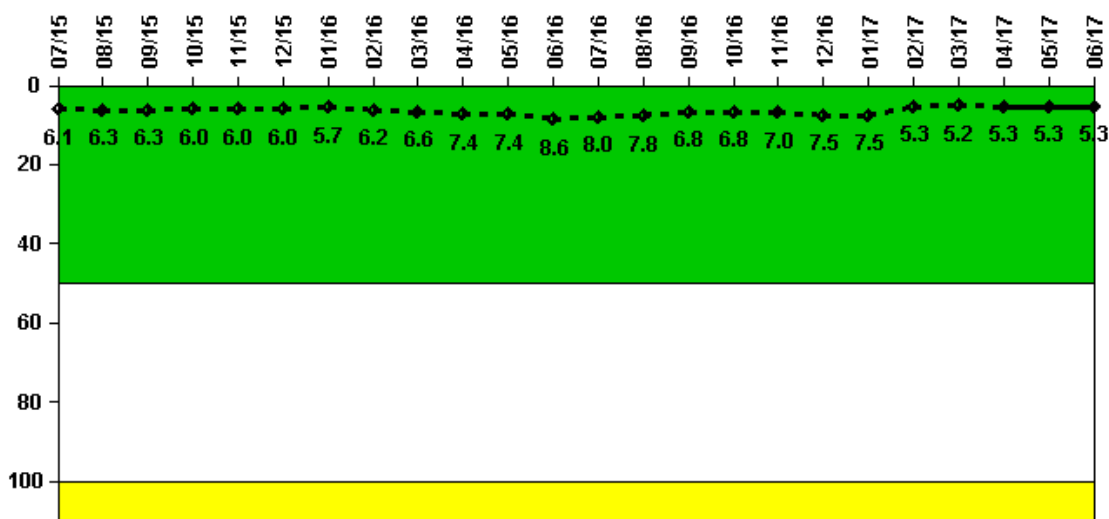
**Notes**

Reactor Coolant System Activity	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16
Maximum activity	0.000008	0.000004	0.000005	0.000004	0.000004	0.000003	0.000005	0.000003	0.000002	0.000004	0.000004	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	7/16	8/16	9/16	10/16	11/16	12/16	1/17	2/17	3/17	4/17	5/17	6/17
Maximum activity	0.000003	0.000006	0.000005	0.000004	0.000005	0.000007	0.000004	0.000003	0.000003	0.000004	0.000008	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

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Licensee Comments: none

### Reactor Coolant System Leakage



Thresholds: White > 50.0 Yellow > 100.0

**Notes**

Reactor Coolant System Leakage	7/15	8/15	9/15	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16
Maximum leakage	1.840	1.880	1.890	1.800	1.800	1.800	1.720	1.850	1.990	2.220	2.230	2.580
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

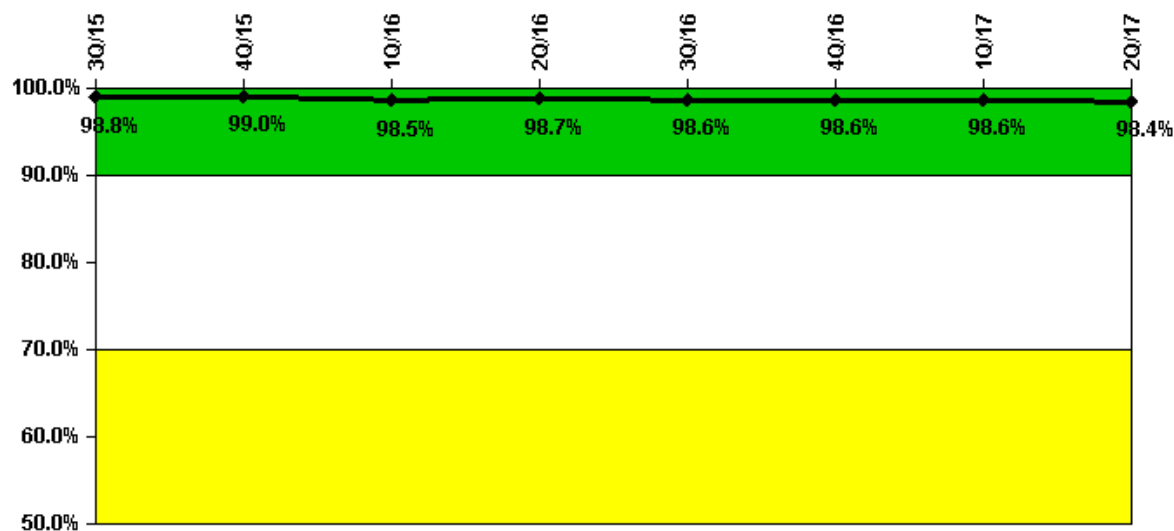
Indicator value	6.1	6.3	6.3	6.0	6.0	6.0	5.7	6.2	6.6	7.4	7.4	8.6
Reactor Coolant System Leakage	7/16	8/16	9/16	10/16	11/16	12/16	1/17	2/17	3/17	4/17	5/17	6/17
Maximum leakage	2.400	2.350	2.050	2.050	2.100	2.260	2.260	1.580	1.550	1.580	1.580	1.590
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0

Indicator value	8.0	7.8	6.8	6.8	7.0	7.5	7.5	5.3	5.2	5.3	5.3	5.3
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Licensee Comments: none

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
Successful opportunities	58.0	41.0	22.0	55.0	53.0	36.0	24.0	27.0
Total opportunities	58.0	42.0	24.0	55.0	53.0	36.0	24.0	29.0

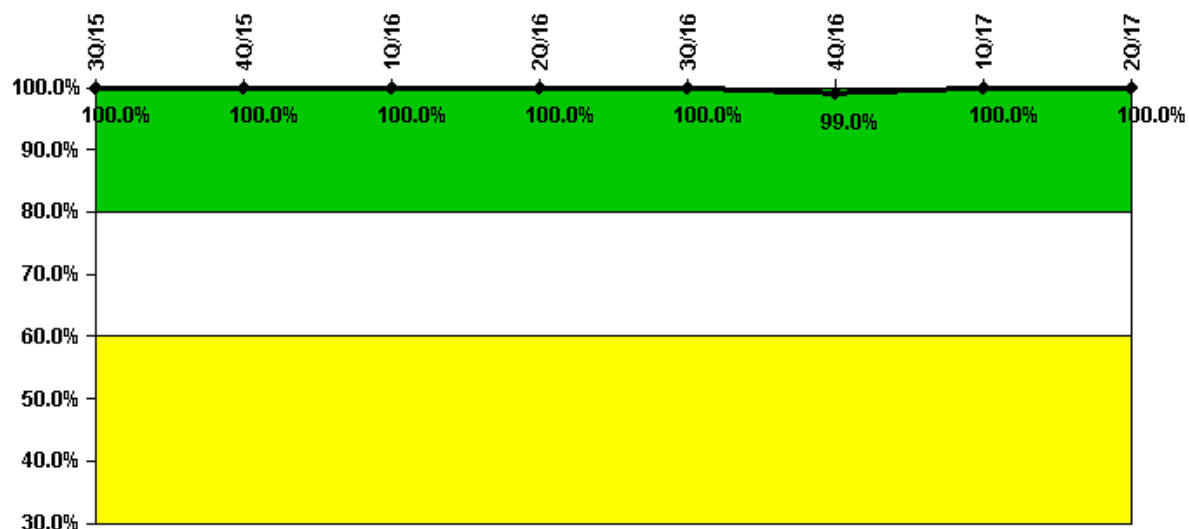
Indicator value                    98.8% 99.0% 98.5% 98.7% 98.6% 98.6% 98.6% 98.4%

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#### Licensee Comments:

1Q/17: The values for March 2017 were changed to correct previously reported data to include an additional 10 opportunities. The change did not affect the color of the indicator.

### ERO Drill Participation



Thresholds: White < 80.0% Yellow < 60.0%

#### Notes

ERO Drill Participation	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
Participating Key personnel	101.0	105.0	99.0	85.0	85.0	95.0	97.0	86.0
Total Key personnel	101.0	105.0	99.0	85.0	85.0	96.0	97.0	86.0

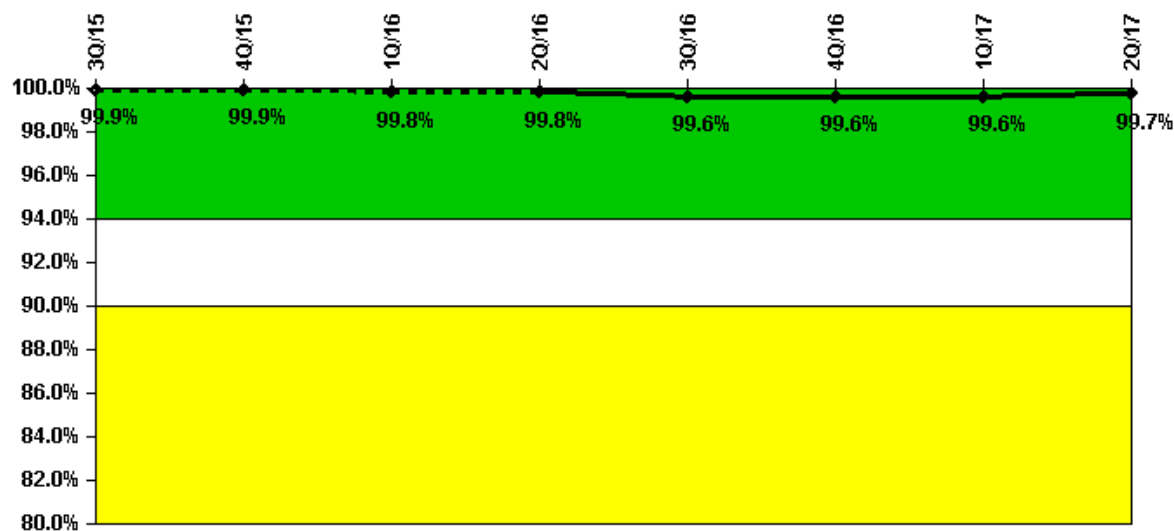
**Indicator value**                    **100.0% 100.0% 100.0% 100.0% 100.0% 99.0% 100.0% 100.0%**

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#### Licensee Comments:

4Q/15: November and December values revised due to a failure to remove an individual that no longer required to be tracked in the Control Room ENN Communicator position

### Alert & Notification System



Thresholds: White < 94.0% Yellow < 90.0%

#### Notes

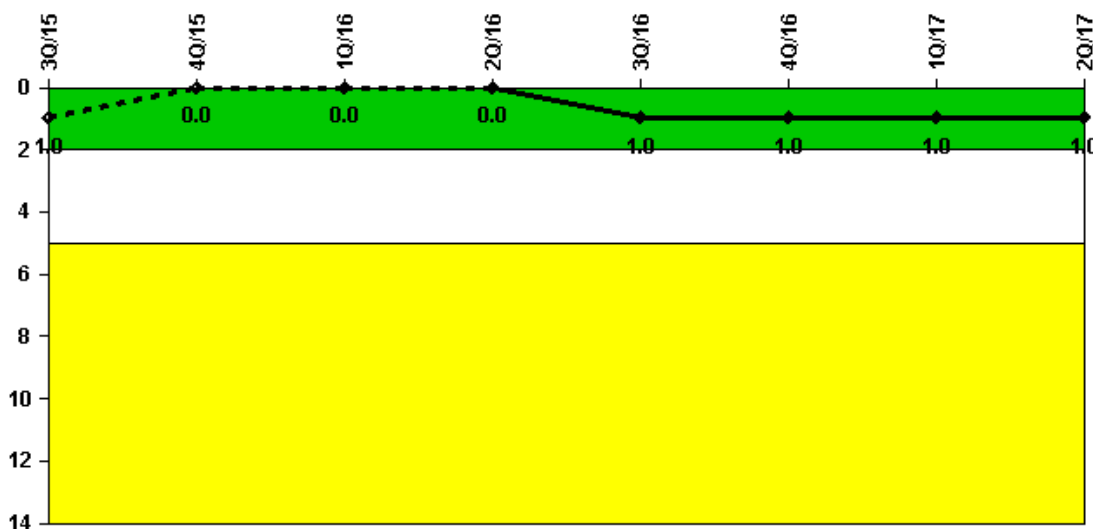
Alert & Notification System	3Q/15	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17
Successful siren-tests	1117	1039	1038	1036	1032	1117	1039	1039
Total sirens-tests	1120	1040	1040	1040	1040	1120	1040	1040

**Indicator value**                    **99.9%** **99.9%** **99.8%** **99.8%** **99.6%** **99.6%** **99.6%** **99.7%**

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Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

**Notes**

**Occupational Exposure Control Effectiveness** 3Q/15 4Q/15 1Q/16 2Q/16 3Q/16 4Q/16 1Q/17 2Q/17

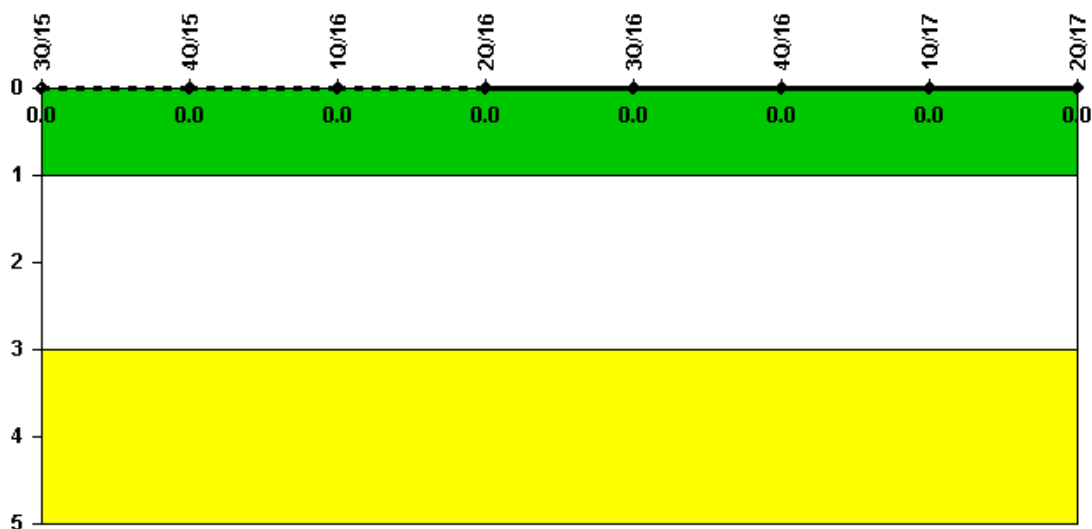
High radiation area occurrences	0	0	0	0	1	0	0	0
Very high radiation area occurrences	0	0	0	0	0	0	0	0
Unintended exposure occurrences	0	0	0	0	0	0	0	0
<b>Indicator value</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>

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Licensee Comments:

3Q/16: The number of high radiation area occurrences was changed value from 0 to 1 for the month of September 2016 to include a previously omitted occurrence. The change does not affect the color of the indicator.

### RETS/ODCM Radiological Effluent



Thresholds: White > 1.0 Yellow > 3.0

**Notes**

**RETS/ODCM Radiological Effluent** 3Q/15 4Q/15 1Q/16 2Q/16 3Q/16 4Q/16 1Q/17 2Q/17

RETS/ODCM occurrences                    0    0    0    0    0    0    0    0

**Indicator value**                            0    0    0    0    0    0    0    0

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Licensee Comments: none

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page.

*Current data as of: July 26, 2017*

*Page Last Reviewed/Updated Wednesday, June 07, 2017*