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## Hatch 2 – Quarterly Performance Indicators

### 3Q/2017 Performance Indicators

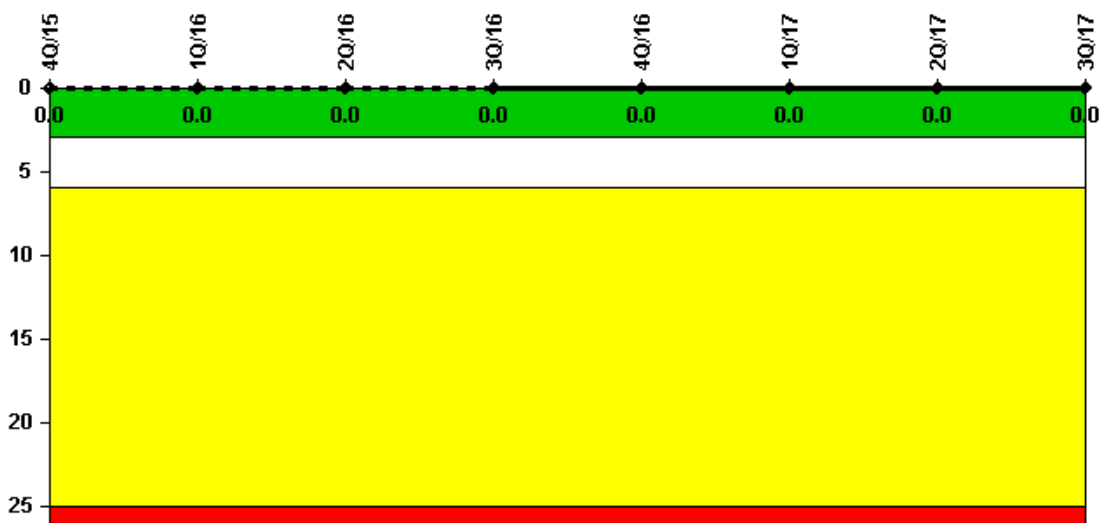
The solid trend line represents the current reporting period.

Licensee's General Comments: none

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- Unplanned Power Changes per 7000 Critical Hours (IE03)
- Unplanned Scrams with Complications (IE04)
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- Cooling Water Systems (MS10)
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### Unplanned Scrams per 7000 Critical Hrs



Thresholds: White > 3.0 Yellow > 6.0 Red > 25.0

#### Notes

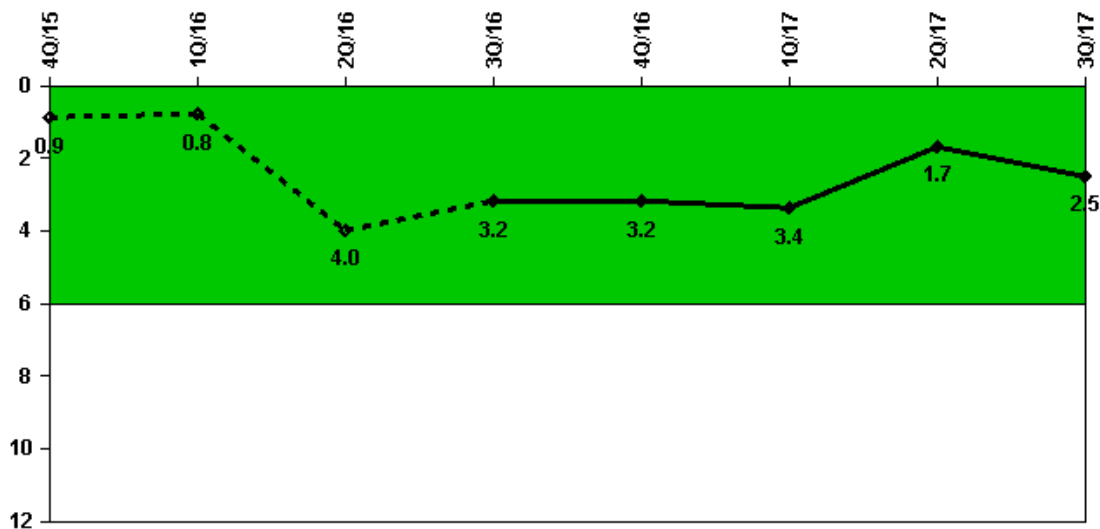
Unplanned Scrams per 7000 Critical Hrs	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
Unplanned scrams	0	0	0	0	0	0	0	0
Critical hours	2209.0	2183.0	2079.9	2208.0	2209.0	1686.9	2184.0	2208.0

Indicator value: 0 0 0 0 0 0 0 0 0

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Licensee Comments: none

### Unplanned Power Changes per 7000 Critical Hrs



Thresholds: White > 6.0

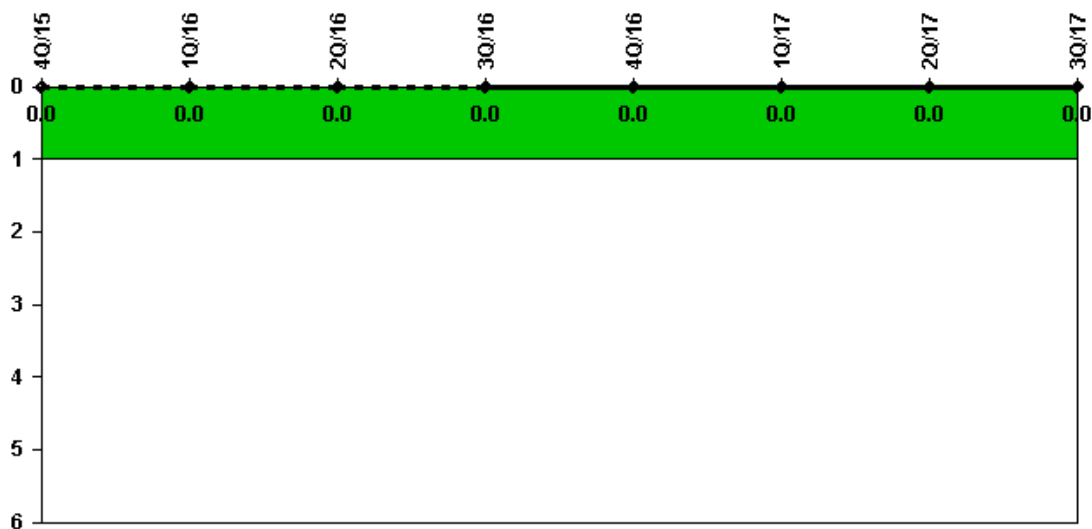
**Notes**

Unplanned Power Changes per 7000 Critical Hrs	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
Unplanned power changes	0	0	4.0	0	0	0	2.0	1.0
Critical hours	2209.0	2183.0	2079.9	2208.0	2209.0	1686.9	2184.0	2208.0
<b>Indicator value</b>	<b>0.9</b>	<b>0.8</b>	<b>4.0</b>	<b>3.2</b>	<b>3.2</b>	<b>3.4</b>	<b>1.7</b>	<b>2.5</b>

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Licensee Comments: none

**Unplanned Scrams with Complications**



Thresholds: White > 1.0

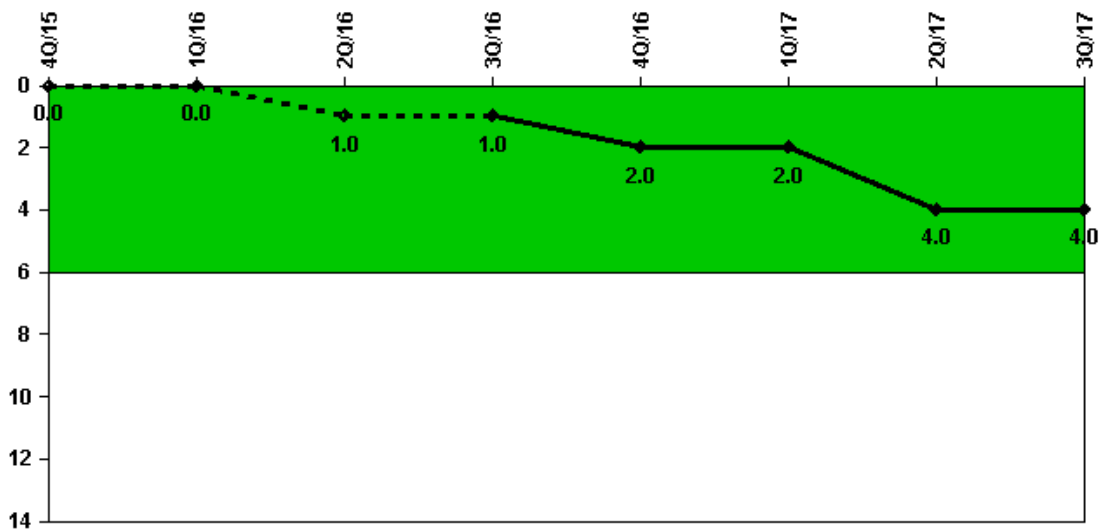
**Notes**

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

Safety System Functional Failures 0 0 1 0 1 0 3 0

Indicator value 0 0 1 1 2 2 4 4

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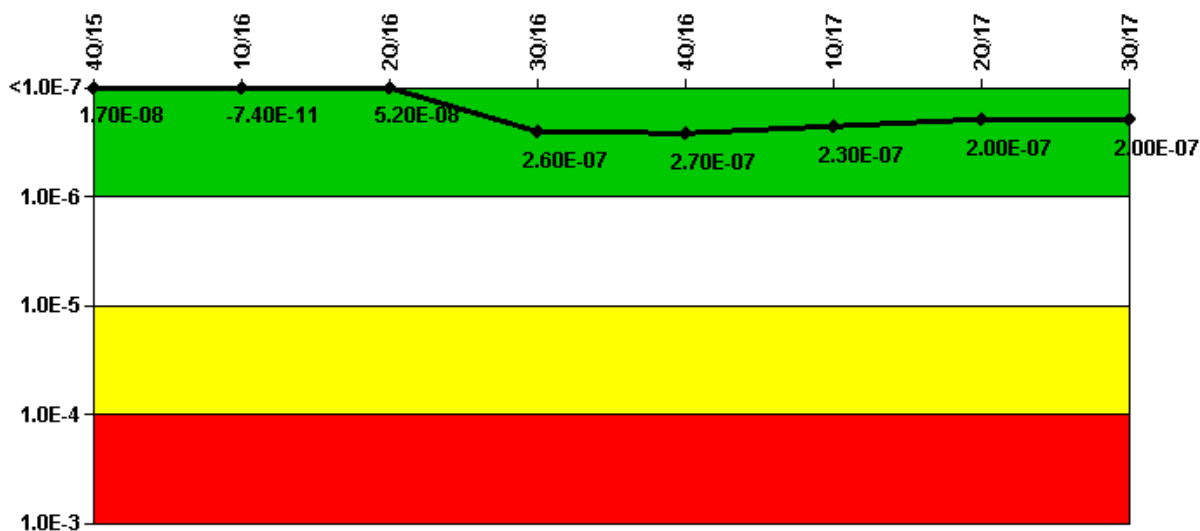
Licensee Comments:

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

4Q/16: LER 2-2016-003 "2C Emergency Diesel Generator Inoperable Due to Low Lube Oil Pressure"

2Q/16: 2016-06 - LER 2-2016-001, "2C EDG Fuel Oil Relief Valve Leakage Caused Train Inoperability"

### 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**

	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
UAI (ΔCDF)	6.75E-08	5.92E-08	9.77E-08	1.25E-07	1.31E-07	1.16E-07	5.65E-08	6.41E-08
URI (ΔCDF)	-5.05E-08	-5.92E-08	-4.61E-08	1.38E-07	1.43E-07	1.13E-07	1.40E-07	1.39E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>1.70E-08</b>	<b>-7.40E-11</b>	<b>5.20E-08</b>	<b>2.60E-07</b>	<b>2.70E-07</b>	<b>2.30E-07</b>	<b>2.00E-07</b>	<b>2.00E-07</b>

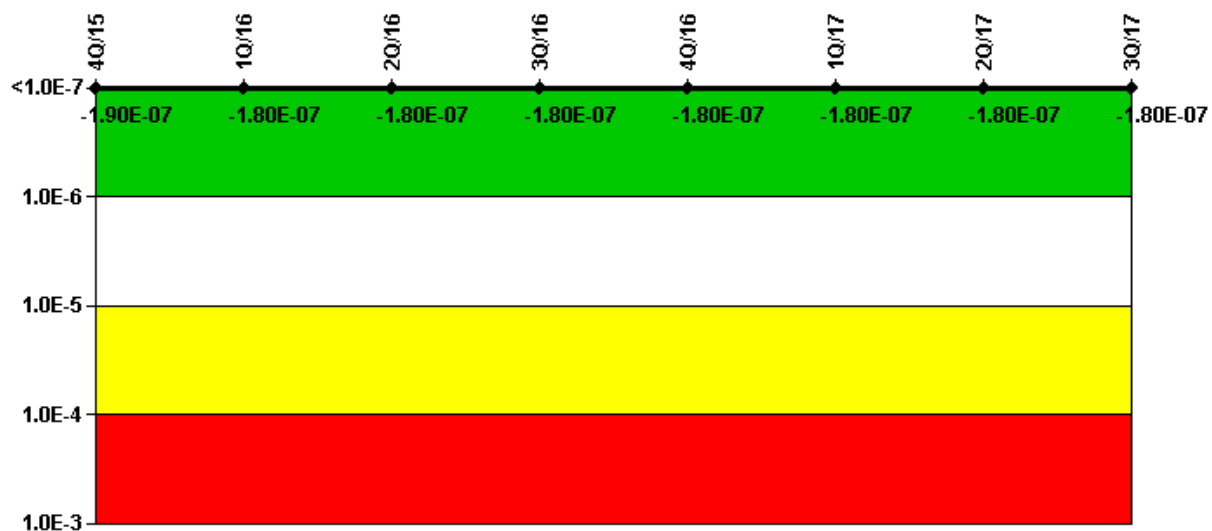
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Licensee Comments:

1Q/16: One fuel leak condition affecting the 2C diesel is under evaluation. Evaluation determined this was not an MSPI failure based on MSPI dictated main system function not affected by event.

1Q/16: One fuel leak condition affecting the 2C diesel is under evaluation.

### Mitigating Systems Performance Index, High Pressure Injection System



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

**Notes**

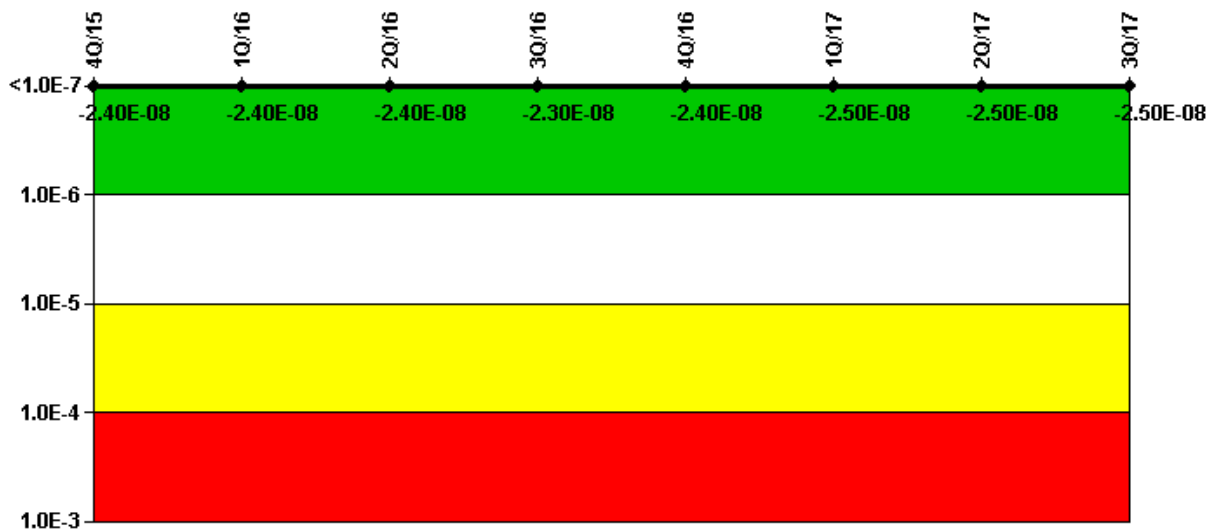
**Mitigating Systems Performance Index, High Pressure Injection System**

	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
UAI ( $\Delta$ CDF)	-7.82E-08	-7.82E-08	-7.82E-08	-7.82E-08	-7.82E-08	-7.82E-08	-7.82E-08	-7.82E-08
URI ( $\Delta$ CDF)	-1.12E-07	-1.01E-07	-1.01E-07	-1.01E-07	-1.01E-07	-1.02E-07	-1.02E-07	-1.02E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-1.90E-07</b>	<b>-1.80E-07</b>	<b>-1.80E-07</b>	<b>-1.80E-07</b>	<b>-1.80E-07</b>	<b>-1.80E-07</b>	<b>-1.80E-07</b>	<b>-1.80E-07</b>

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Licensee Comments: none

### Mitigating Systems Performance Index, Heat Removal System



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

**Notes**

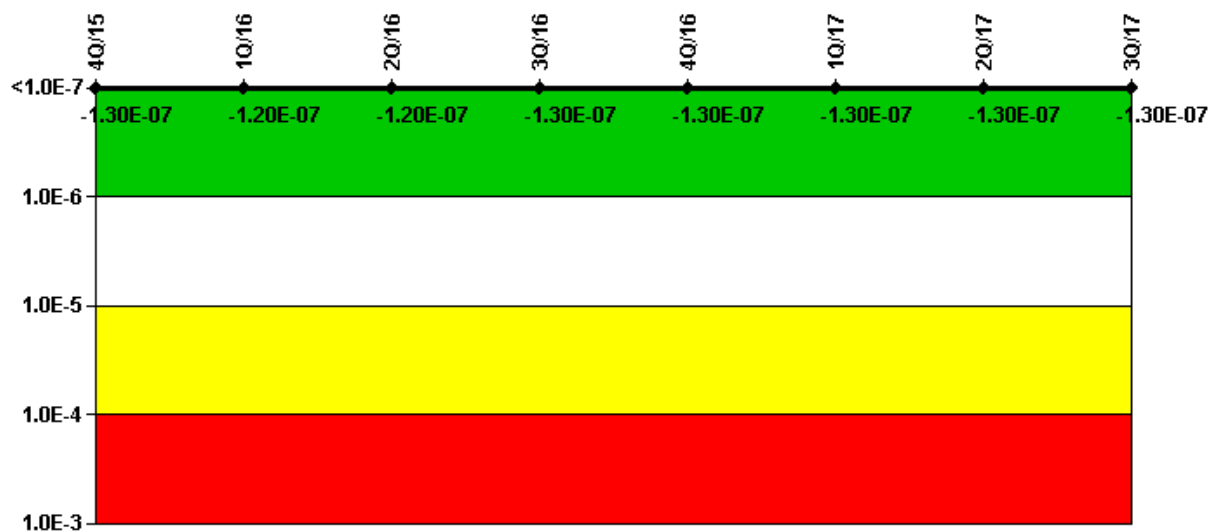
**Mitigating Systems Performance Index, Heat Removal System**

	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
UAI ( $\Delta$ CDF)	-6.69E-09	-6.69E-09	-6.69E-09	-6.69E-09	-6.69E-09	-6.69E-09	-6.69E-09	-6.69E-09
URI ( $\Delta$ CDF)	-1.76E-08	-1.68E-08	-1.68E-08	-1.68E-08	-1.68E-08	-1.84E-08	-1.84E-08	-1.84E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-2.40E-08</b>	<b>-2.40E-08</b>	<b>-2.40E-08</b>	<b>-2.30E-08</b>	<b>-2.40E-08</b>	<b>-2.50E-08</b>	<b>-2.50E-08</b>	<b>-2.50E-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**

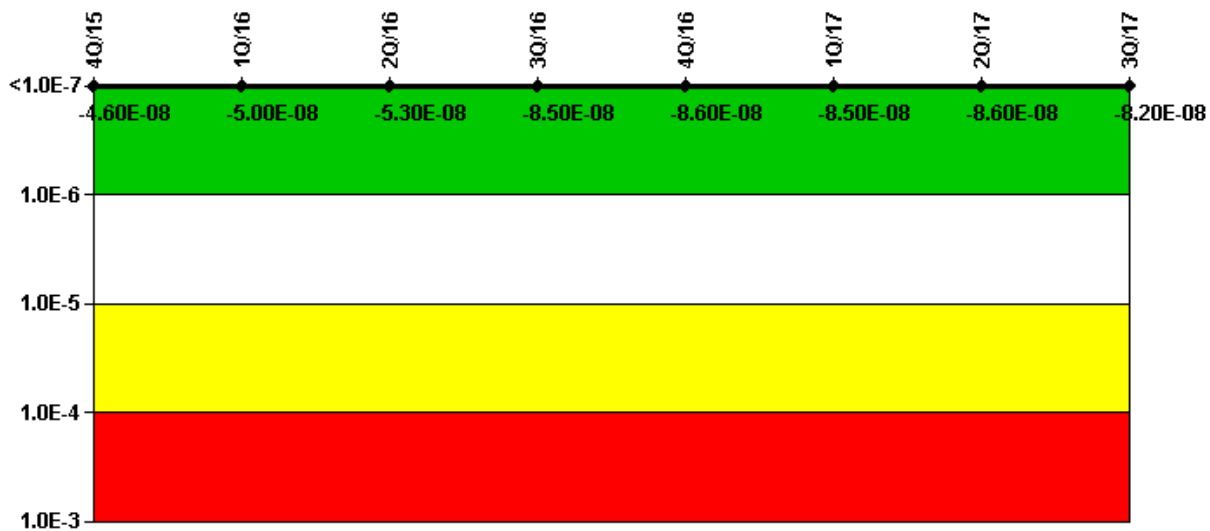
	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
UAI ( $\Delta$ CDF)	-1.18E-08	-1.18E-08	-1.18E-08	-1.18E-08	-9.71E-09	-8.23E-09	-8.23E-09	-8.28E-09
URI ( $\Delta$ CDF)	-1.14E-07	-1.11E-07	-1.13E-07	-1.14E-07	-1.15E-07	-1.20E-07	-1.21E-07	-1.18E-07
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-1.30E-07</b>	<b>-1.20E-07</b>	<b>-1.20E-07</b>	<b>-1.30E-07</b>	<b>-1.30E-07</b>	<b>-1.30E-07</b>	<b>-1.30E-07</b>	<b>-1.30E-07</b>

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Licensee Comments: none



### Mitigating Systems Performance Index, Cooling Water Systems



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

**Notes**

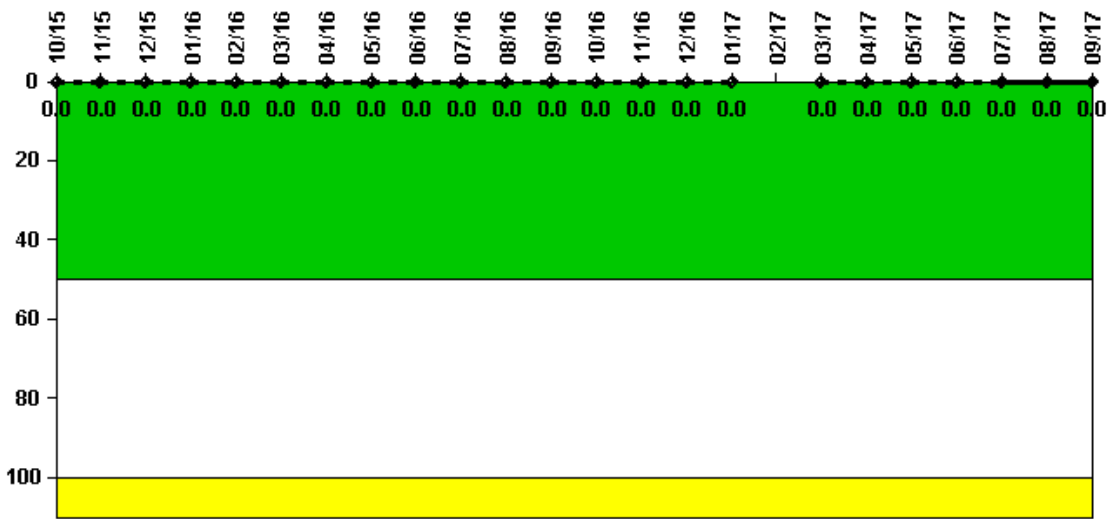
**Mitigating Systems Performance Index, Cooling Water Systems**

	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
UAI (ΔCDF)	4.48E-08	3.91E-08	3.79E-08	3.68E-09	3.64E-09	3.81E-09	3.81E-09	3.77E-09
URI (ΔCDF)	-9.07E-08	-8.93E-08	-9.11E-08	-8.85E-08	-8.94E-08	-8.90E-08	-8.93E-08	-8.61E-08
PLE	NO	NO	NO	NO	NO	NO	NO	NO
<b>Indicator value</b>	<b>-4.60E-08</b>	<b>-5.00E-08</b>	<b>-5.30E-08</b>	<b>-8.50E-08</b>	<b>-8.60E-08</b>	<b>-8.50E-08</b>	<b>-8.60E-08</b>	<b>-8.20E-08</b>

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Licensee Comments: none

### Reactor Coolant System Activity



Thresholds: White > 50.0 Yellow > 100.0

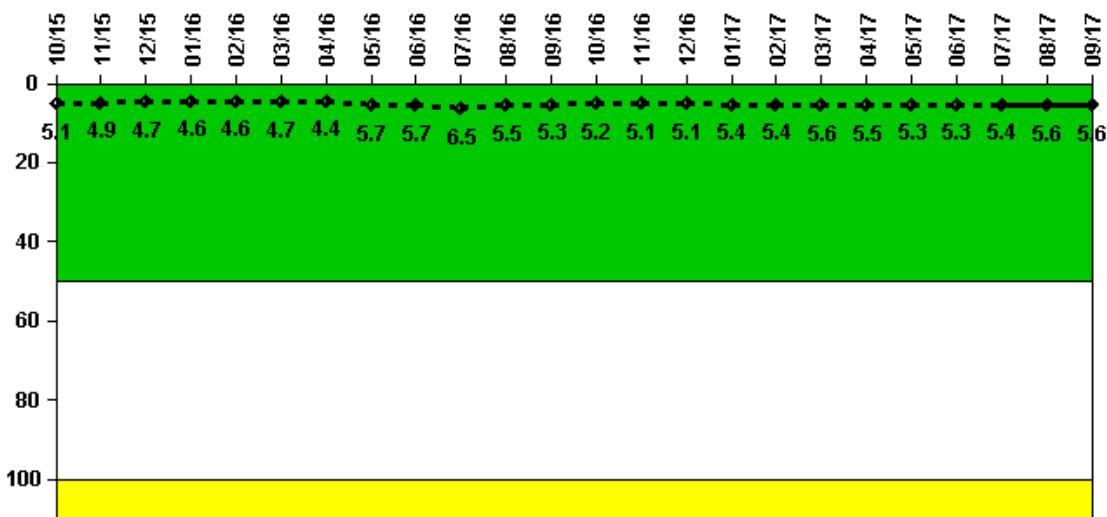
**Notes**

Reactor Coolant System Activity	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16
Maximum activity	0.000013	0.000010	0.000005	0.000010	0.000008	0.000007	0.000012	0.000030	0.000017	0.000017	0.000013	0.000017
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	10/16	11/16	12/16	1/17	2/17	3/17	4/17	5/17	6/17	7/17	8/17	9/17
Maximum activity	0.000018	0.000021	0.000018	0.000014	N/A	0.000005	0.000009	0.000005	0.000006	0.000008	0.000007	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	N/A	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	10/15	11/15	12/15	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16
Maximum leakage	1.540	1.470	1.420	1.380	1.370	1.400	1.330	1.720	1.700	1.950	1.640	1.600
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

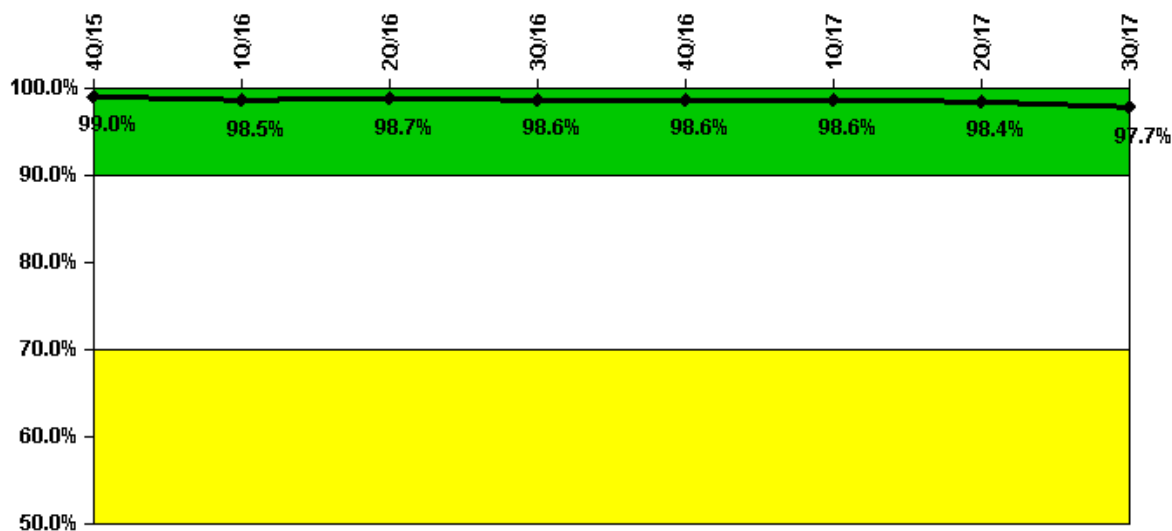
Indicator value	5.1	4.9	4.7	4.6	4.6	4.7	4.4	5.7	5.7	6.5	5.5	5.3
Reactor Coolant System Leakage	10/16	11/16	12/16	1/17	2/17	3/17	4/17	5/17	6/17	7/17	8/17	9/17
Maximum leakage	1.570	1.540	1.520	1.610	1.620	1.690	1.660	1.600	1.580	1.630	1.670	1.670
Technical specification limit	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0

Indicator value	5.2	5.1	5.1	5.4	5.4	5.6	5.5	5.3	5.3	5.4	5.6	5.6
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Licensee Comments: none

### Drill/Exercise Performance



Thresholds: White < 90.0% Yellow < 70.0%

#### Notes

Drill/Exercise Performance	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
Successful opportunities	41.0	22.0	55.0	53.0	36.0	24.0	27.0	41.0
Total opportunities	42.0	24.0	55.0	53.0	36.0	24.0	29.0	43.0

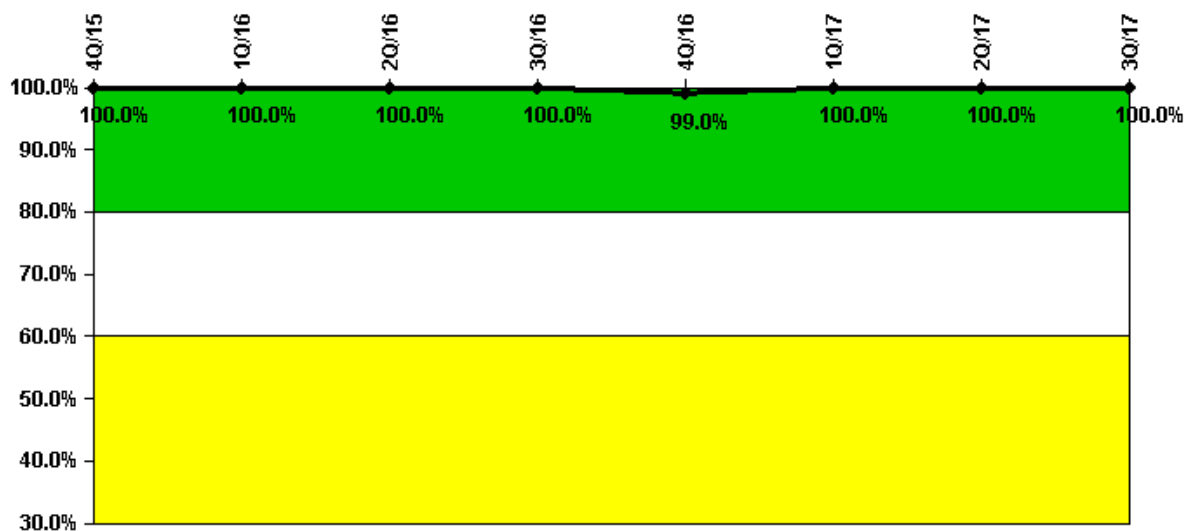
**Indicator value**                    **99.0% 98.5% 98.7% 98.6% 98.6% 98.6% 98.4% 97.7%**

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#### Licensee Comments:

1Q/17: The value for March 2017 was 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	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
Participating Key personnel	105.0	99.0	85.0	85.0	95.0	97.0	86.0	88.0
Total Key personnel	105.0	99.0	85.0	85.0	96.0	97.0	86.0	88.0

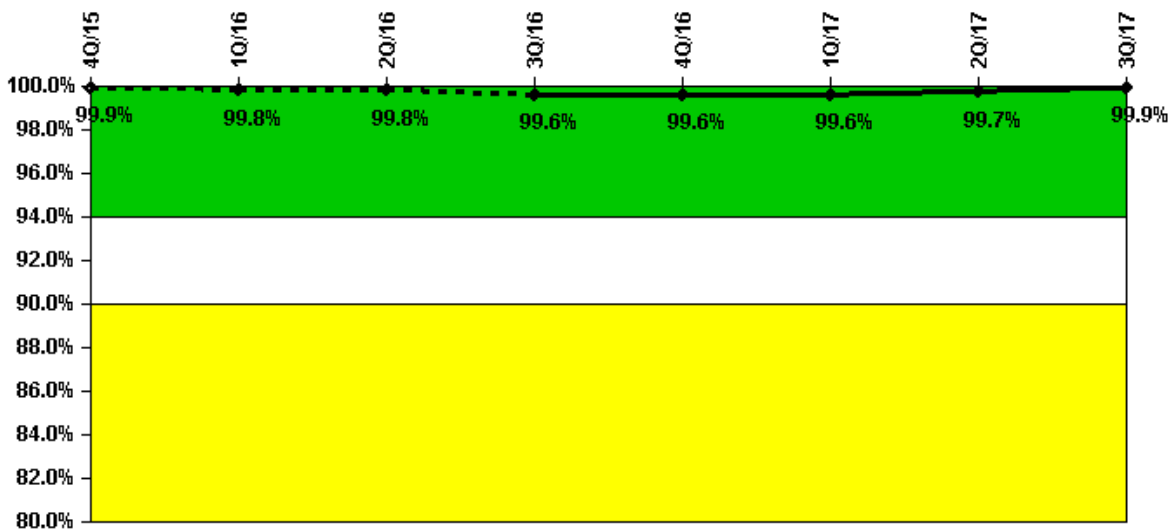
**Indicator value**                    **100.0% 100.0% 100.0% 100.0% 99.0% 100.0% 100.0% 100.0%**

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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**

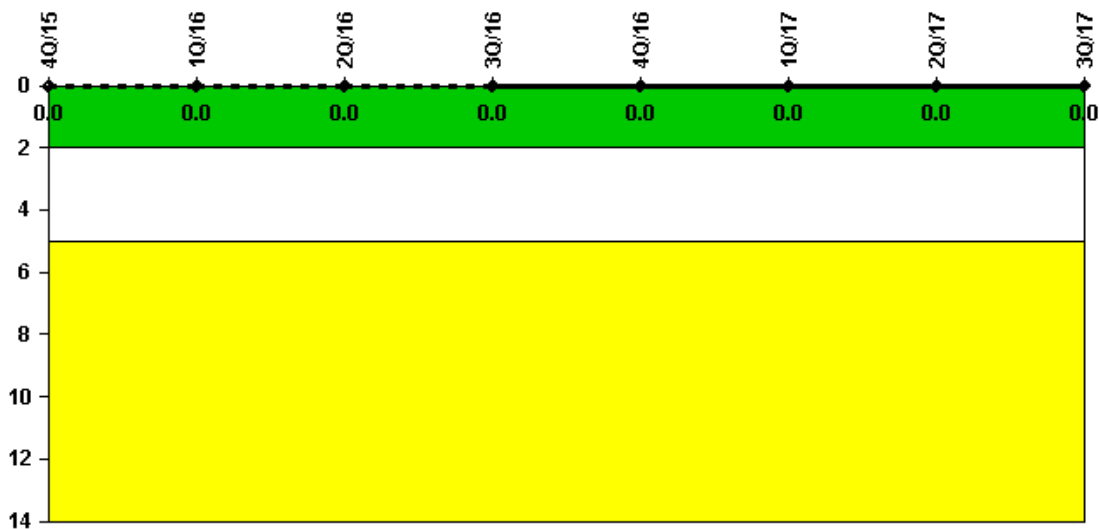
Alert & Notification System	4Q/15	1Q/16	2Q/16	3Q/16	4Q/16	1Q/17	2Q/17	3Q/17
Successful siren-tests	1039	1038	1036	1032	1117	1039	1039	1039
Total sirens-tests	1040	1040	1040	1040	1120	1040	1040	1040

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

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Licensee Comments: none

### Occupational Exposure Control Effectiveness



Thresholds: White > 2.0 Yellow > 5.0

**Notes**

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

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>

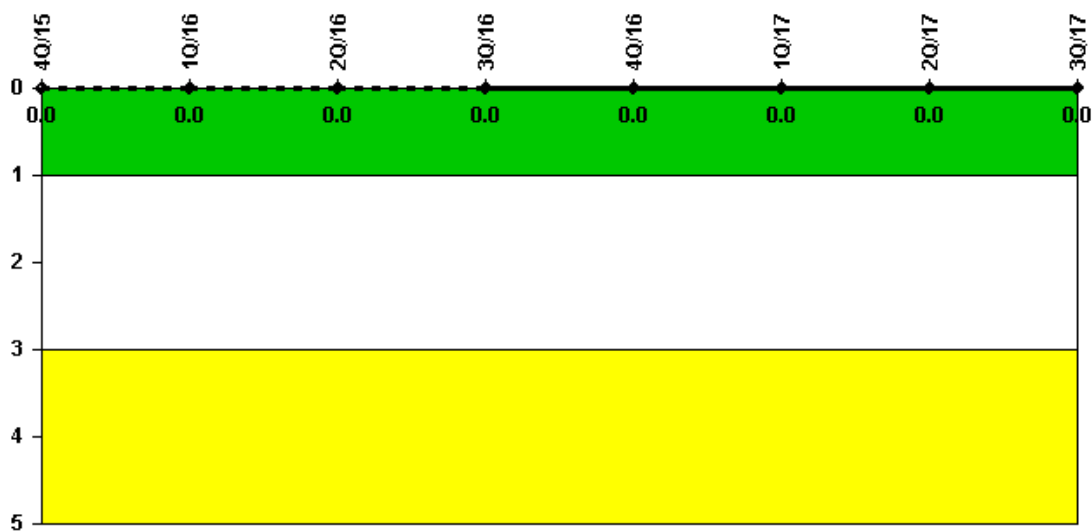
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Licensee Comments:

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. Update 09/20/2017, changed value from 1 to 0. Dose rate was < 1 rem/hr. Change does not affect color.

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** 4Q/15 1Q/16 2Q/16 3Q/16 4Q/16 1Q/17 2Q/17 3Q/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: October 31, 2017*

*Page Last Reviewed/Updated Monday, November 06, 2017*